UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE
UNITED NATIONS CHILDREN'S FUND IN UZBEKISTAN

Road Safety Performance Review

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The analysis presented in the Review reflects information and data collected with a cut-off date of April 2023.

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United Nations Economic Commission for Europe

The United Nations Economic Commission for Europe (UNECE) is one of the five United Nations regional commissions. 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.

Since the early 1990s, the organization has focused on assisting the countries of Central and Eastern Europe, the Caucasus and Central Asia with their transition process and their integration into the global economy.

Today, UNECE supports its 56 member States in Europe, Central Asia and North America in the implementation of the 2030 Agenda for Sustainable Development with its Sustainable Development Goals (SDG). 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.

Offering practical tools to improve people's everyday lives in the areas of environment, transport, trade, statistics, energy, forestry, housing and land management, many of the norms, standards and conventions developed in UNECE are used worldwide, and a number of countries from outside the region participate in UNECE's work.

The multisectoral approach of UNECE 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

The UNECE Sustainable Transport Division is the secretariat of the Inland Transport Committee (ITC) and the ECOSOC Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals. The ITC and its 20 working parties, as well as the ECOSOC Committee and its sub-committees are intergovernmental decision-making bodies that work to improve the daily lives of people and businesses around the world, in measurable ways and with concrete actions, to enhance traffic safety, environmental performance, energy efficiency and the competitiveness of the transport sector.

The ECOSOC Committee was set up in 1953 by the Secretary-General of the United Nations at the request of the Economic and Social Council to elaborate recommendations on the transport of dangerous goods. Its mandate was extended to the global (multi-sectoral) harmonization of systems of classification and labelling of chemicals in 1999. It is composed of experts from countries which possess the relevant expertise and experience in the international trade and transport of dangerous goods and chemicals. Its membership is restricted to reflect a proper geographical balance among all regions of the world and to ensure adequate participation of developing countries. Although the Committee is a subsidiary body of ECOSOC, the Secretary-General decided in 1963 that the secretariat services would be provided by the UNECE Transport Division.

ITC is a United Nations centre providing a comprehensive platform for consideration of all aspects of inland transport development and cooperation, with special attention to interregional and intraregional regulatory governance through the United Nations transport conventions and other means. It was set up in 1947 to support the reconstruction of transport connections in post-war Europe. Over the years, it has specialized in facilitating the harmonized and sustainable development of inland modes of transport. The main results of this persevering and ongoing work are reflected, among other things, (i) in 60 United Nations legal instruments and many more technical regulations which are updated on a regular basis and provide an international legal framework for the sustainable development of national and international road, rail, inland water and intermodal transport, including the transport of dangerous goods, as well as the construction and inspection of road motor vehicles; (ii) in the Trans-European North-South Motorway, Trans-European Railway and the Euro-Asia Transport Links projects, that facilitate multi-country coordination of transport infrastructure investment programmes; (iii) in road safety, ITC provides all relevant conventions to build, improve and develop national road safety systems as described in its comprehensive ITC Recommendation for Enhancing National Road Safety Systems; (iv) in the tool called For Future Inland Transport Systems (ForFITS), which can assist national and local governments to monitor carbon dioxide (CO2) emissions coming from inland transport modes and to select and design climate change mitigation policies, based on their impact and adapted to local conditions; (v) in transport statistics – methods and data – that are internationally agreed on; (vi) in studies and reports that help transport policy development by addressing timely issues, based on cutting-edge research and analysis. ITC also devotes special attention to Intelligent Transport Services (ITS), sustainable urban mobility and city logistics, as well as to increasing the resilience of transport networks and services in response to climate change adaptation and security challenges.

In addition, the UNECE Sustainable Transport and Environment Divisions, together with the World Health Organization (WHO) – Europe, co-service the Transport Health and Environment Pan-European Programme (THE PEP).

Finally, since 2015, the UNECE has hosted the secretariats for the Secretary General's Special Envoy for Road Safety and the UN Road Safety Fund.

Contents

List of Figures

List of Tables

Acronyms and Abbreviations

ABII	The Asian Infrastructure Investment Bank
ADB	Asian Development Bank
CAREC	Central Asian Regional Economic Cooperation Program
EASST	The Eastern Alliance for Safe and Sustainable Transport
MIA	Ministry of Internal Affairs
SSC	State Statistics Committee
UN	United Nations
UNECE	United Nations Economic Commission for Europe
YOURS	Youth for Road Safety

Executive summary

One of the first steps in building national road safety system capacities is to assess the road safety situation and state-of-the-art of road safety system. It can be done through the Road Safety Performance Review – a review based on the available documents, local legislation and statistics in the country, prepared by international and national consultants and UNECE staff in cooperation with national road safety stakeholders (Government, academia, NGO and private sector representatives, regional and international organizations and local and international experts).

The Road Safety Performance Review in Uzbekistan identified the most critical aspects for the development of the national road safety system and offered recommendations for its improvement. The project team used a multipronged approach to assess the current road safety situation in Uzbekistan. It included analyses of the following topics: the legal and institutional framework for road safety, the current road safety situation and trends, limitations in capacities, financial and human resources, gaps in the national legal and regulatory framework, compliance of Uzbekistan legislation with United Nations road safety-related legal instruments, and coordination among road safety stakeholders. The Review also highlights good practices in road safety and emphasizes the importance of accession to and implementation of key United Nations road safety related legal instruments, as an effective means for improving road safety system at the national level and local levels. The discussion of findings of the Review was conducted at national and international capacity development workshops. The workshops were attended by representatives of national institutions which are members of the Republican Special Commission for Road Safety, as well as representatives of international financial institutions, academia, NGOs and the private sector.

In Uzbekistan, the number of road accidents and fatalities remains very high, more than 45% above EU average. Such figures bring huge economic costs, and depending on the sources of data for Uzbekistan, different estimates of socio-economic costs range from 2.6% to 3.8% of GDP. With a rate of almost two fatal accidents per day, traffic accidents are firmly placed in the top five causes of death in Uzbekistan, and they are the leading cause of death of inhabitants aged from 5 to 29 years.

In terms of improvement of institutional framework, Uzbekistan needs to empower the Republican Special Commission for Road Safety to deal with strategic issues and monitoring of results. To achieve this new framework should give the Commission a clear mandate, responsibilities, and authority to develop, implement, and monitor the road safety strategy and action plan, ensure that the Commission has the necessary resources to perform its functions effectively and establish a system for regular reporting and accountability to the Government on the progress of the road safety strategy and action plan. Uzbekistan needs to set concrete and measurable targets in road safety strategy and action plan, develop sustainable, domestic funding sources for road safety and encourage knowledge-sharing and collaboration among road safety stakeholders at local, national and international levels. At this stage, it is important to develop road safety performance indicators and use them to monitor progress and evaluate the impact of enforcement efforts. For improving vertical and horizontal coordination between actions taken by designated authorities, it is important to create clear mechanisms among road safety stakeholders at different levels (national, regional, local) to ensure consistency and alignment in road safety policies and programs.

In Uzbekistan, the road infrastructure has traditionally maximized economic efficiency at the expense of safety. Now the paradigm is changing to optimize the movement of people and goods with road safety in mind. Infrastructure that meets the needs of vulnerable road users such as cyclists, motorcyclists, pedestrians, children and the disabled is particularly important in Uzbekistan, as approximately 50% of fatalities and injuries are pedestrians. Uzbekistan has to adopt unified national road design standards and road infrastructure safety management regulations. The Review has identified several key areas that can make a positive impact to ensure safer roads: separation of different road users, elimination of interaction between high-speed traffic and vulnerable road users, auditing/inspecting existing road infrastructure regularly and promoting more sustainable modes of transport, including public transport, walking and cycling. Develop functional classification of roads and streets of Uzbekistan in line with requirements of modern, safe and sustainable transport system which will be supported by appropriate road design elements is in urgent need.

In Uzbekistan, excessive speeding is a main factor to fatal outcome in most crashes. The Review focuses particularly on the speed limits set for urban roads, with a high concentration of vulnerable road users. It is obvious that speeding is the cause of 30% of fatal accidents and this requires adjusting speed limits, particularly in urban areas, to the best international practice. The existing general speed limit of 60 km/h in urban areas should be reduced to 50 km/h for better road safety.

Effective speed management requires that local authorities should have the legal authority to reduce limits, so they can manage local speeds according to the specificities of individual roads. Enforcement of existing speed limits is also a critical issue. Therefore, the country needs to further develop the capacity of the Traffic Safety Service to increase the application of modern technologies in enforcement. As well as speed, other key behavioural risk factors can be mitigated by effective enforcement of drink driving and non-use of helmets, safety belts and child restraints. To allow this, Uzbekistan should introduce comprehensive laws in place concerning the use of safety belts for rear-seat occupants and child restraint systems.

Based on the Safe System approach, Uzbekistan could advance road safety management by further increasing coordination between key road safety stakeholders and strengthening human capacity at the national and local levels. Another priority is to improve road safety data collection, analysis and dissemination. Data collection forms on road crashes should be refined based on the CADaS (Common Accident Data Set) standard and the Ministry of Internal Affairs, Ministry of Health and insurance companies' records on road accidents should be cross checked and stored in a single database. Capacity building amongst all road safety stakeholders has to remain a priority; a train-the-trainers model could be developed in order to speed up the sharing of knowledge in all sectors. The efficient implementation of United Nations Regulations for safer vehicles and protective equipment would also enhance road safety. Deployment and use of Intelligent Transport System (ITS) could improve traffic management and road safety. In the last years, cameras were installed at the main intersections of the city of Tashkent, but for now, these cameras are only used to detect violations. Uzbekistan has to embrace technology for better traffic management and deploy contemporary traffic management centres on national road network and in urban areas to allow better use of existing transport infrastructure and prioritize public transport. This could allow centralized traffic management and improve speed management on the roads.

In the last decades, Uzbek cities have experienced rapid socio-economic transformation, but also severe setbacks of public transport services in cities. Too often, transport infrastructure and services fail to keep up with the mobility needs of the growing population. The lack of streets with adequate traffic capacity hindered operation of public transport and accessibility to many areas of the city and was sometimes a potential cause of road accidents; The occupation of roadsides is one of the major causes of traffic jams with a reduced level of service and slowing traffic flows. Moreover, the lack of integration between land-use and transport policies has led to the development of new passenger car-dependent urban areas within cities, particularly, in the outskirts. These changes have increasingly fostered demand for more efficient transport infrastructures, as well as integrated plans for urban development and traffic management in bigger cities. Uzbekistan needs to prioritise public transport and active travel by developing comprehensive urban mobility strategies and plans at national and local levels. It is critically important, to control and coordinate land-use and integrate urban and transport planning and gradually define and implement stricter requirements in terms of energy efficiency and GHG emissions standards. It is necessary to strengthen the role of municipalities, update the legal and regulatory framework to clarify the role of local authority's role in urban planning, transportation and mobilize financial resources to support implementing urban mobility strategies and plans.

Global road safety strategic framework developments were considered in the preparation of the Review. While keeping the United Nations Second Decade of Action for Road Safety 2021-2030 and Sustainable Development Goals (SDG) 3 and 11 in mind, Uzbekistan has to tailor future road safety strategies and good practice manuals to the local context.

Given the rapid motorization and growing economic activity in Uzbekistan there is a critical need to address the road safety situation in a holistic way. It is clear, as motorized traffic increases, exposure to risk will also increase and government policy to prioritize road safety is warranted. Only by implementing targeted actions at all levels, the number of fatalities and injuries will be reduced, along with the related human, social, and economic costs and the burden on the health sector. In Uzbekistan, the political will to improve road safety is a strong basis for further improvements and it is hoped that implementation of the recommendations provided in the Review will help in improving the road safety system in Uzbekistan. The findings of the Review should be used to design an effective road safety strategy, actions and interventions in the future. The results could also be used to improve road safety behaviour, strengthen the local knowledge and research and development capacity, promote road safety ownership and accountability, and raise public awareness of the benefits of improving road safety in Uzbekistan.

1. COUNTRY SNAPSHOT (TRENDS)

1.1. Population and demographic

The most recent estimations show that the Uzbekistan population reached 35.16 million (2023). Country is ranked the 43th by population in the world.

Most of the population lives in the eastern half of the country. The fertile Fergana Valley in the extreme east, the most populous area in Central Asia, supports both old and new cities and towns and traditional rural settlements. Much of Karkalpakstan, in the west, is under threat of depopulation caused by the environmental problems related to the Aral Sea area. The cities of Samarkand, Bukhara, and Tashkent have histories that extend back to ancient times. Andijon, Khiva, and Qŭqon also have served the region as cultural, political, and trade centres for centuries. Roughly half of the population of Uzbekistan lives in urban areas[1]. According to 2023 estimations, 2.6 million inhabitants live in capital city of Tashkent.

Uzbekistan's population remains youthful in comparison with those of the western parts of the former Soviet Union, though the population aged slightly and steadily over the decades following its independence. Around 23% of the population is in the age range of 0-14 and more than seventy in the range 16-64 years.

1.2. Economic

Uzbekistan has rich natural resources, including natural gas, oil, and cotton, which have contributed to its economic growth.

Over the last 15 years, Uzbekistan's GDP has been growing at a steady pace. According to World Bank data, the country's GDP has grown from USD 15.5 billion in 2007 to USD 69.2 billion in 2021. This represents a fourfold increase in the country's GDP over the period. However, the growth rate of Uzbekistan's GDP has been somewhat volatile. Between 2007 and 2016, the country's GDP growth averaged around 8% per year. In 2017, the country's GDP growth slowed down to 5.3%, partly due to a decline in cotton exports, which are a significant contributor to the country's economy. In 2018, the country's GDP growth bounced back to 5.1%. In 2019, the growth rate was 5.6%, and in 2020, it was 1.6%, mainly due to the COVID-19 pandemic. The IMF expects that the country's GDP will continue to grow in the coming years due to a favourable global economic outlook, rising investment, and structural reforms.

In 2021, the country's GDP per capita was USD 3,328, which is significant increase from USD 2,753 in 2015. However, despite this growth, Uzbekistan remains a lower middle-income country[2], with a GDP per capita below the world average. Uzbekistan's unemployment rate has been relatively stable over the past few years. According to the official statistics, the country's unemployment rate was 7.16% in 2021. Diaspora remittances are an important source of income for many Uzbek households. According to the World Bank, Uzbekistan received USD 7.4 billion in remittances in 2020. These remittances represent more than 10% of the country's GDP, making them a significant contributor to the economy.

The automotive industry is an essential contributor to Uzbekistan's GDP. According to national statistics[3], the automotive industry accounted for around 5.6% of the country's GDP in 2020. This industry has been growing rapidly in recent years due to government policies that have encouraged foreign investment in the sector. Uzbekistan is one of the few countries in the region that has its own car manufacturing industry. The country's largest car manufacturer is GM Uzbekistan, which is a joint venture between General Motors and Uzbekistan's government. In addition to GM Uzbekistan, other foreign car manufacturers have established operations in Uzbekistan, including South Korea's Daewoo and China's Changan. The automotive industry's contribution to Uzbekistan's GDP is likely to continue to grow in the coming years as the country's government continues to implement policies to attract foreign investment in the sector. In 2021, the Uzbek government announced plans to establish a new car manufacturing cluster in the Tashkent region, which is expected to attract more foreign investment to the industry.

From 2014 Uzbekistan is a member of the Commonwealth of Independent States (CIS) Free Trade Area, which promotes trade and economic cooperation among its member countries.

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1 https://www.britannica.com/place/Uzbekistan. Retrieved 24/04/2023.

2 https://www.worldbank.org/en/country/uzbekistan/overview. Retrieved 25/10/2023.

3 https://stat.uz/images/uploads/docs/vvp_dek_2020_en.pdf

1.3. Topography, climate and geography

Uzbekistan, officially the Republic of Uzbekistan, is a doubly landlocked country located in Central Asia. It is surrounded by five landlocked countries: Kazakhstan to the north; Kyrgyzstan to the northeast; Tajikistan to the southeast; Afghanistan to the south; and Turkmenistan to the southwest. Its capital and largest city is Tashkent. Uzbekistan has an area of 447,400 square kilometres and it is the 59th largest country in the world by area[4].

Terrain is mostly flat-to-rolling with sandy desert with dunes. Less than 10% of Uzbekistan territory is intensively cultivated irrigated land along course of Amu Darya, Syr Darya and Zaravshan rivers and Fergana Valley, and formerly in the Aral Sea which has largely desiccated. The rest is the vast Kyzylkum Desert and mountains. The highest point in Uzbekistan is Khazret Sultan at 4,643 m. The climate in Uzbekistan is continental, with little precipitation expected annually (100-200 millimetres). The average summer high temperature tends to be 40 °C, while the average winter low temperature is around –23 °C[5].

Figure 1
Map of Uzbekistan

[4] https://www.cia.gov/the-world-factbook/countries/uzbekistan/#introduction. Retrieved 24/04/2023.

[5] Climate Archived 22 September 2008 at the Wayback Machine, Uzbekistan: Country Studies – Federal Research Division, Library of Congress.

1.4. Energy (consumed in transport)

Transportation is one of the largest energy-consuming sectors in Uzbekistan and is responsible for a sizeable portion of the country's greenhouse gas emissions. According to the International Energy Agency (IEA), the transport sector in Uzbekistan consumed approximately 146,000 barrels of oil equivalent (BOE) per day in 2019. This is equivalent to about 3.3% of the country's total energy consumption. According to the IEA, the transport sector's energy consumption in Uzbekistan has increased by approximately 35% between 2000 and 2019. Road transport, which includes cars, buses, and trucks, accounts for most energy consumption in the sector, followed by aviation and rail transport. Despite heavy duty vehicles only representing about 7% of the fleet, they represent almost 25% of the energy used by road motorized vehicles.

In Uzbekistan, the transport sector is responsible for approximately 19% of the country's total CO2 emissions, according to the IEA. The sector is also a significant source of other air pollutants, such as nitrogen oxides (NOx), sulphur dioxide (SO2), and particulate matter (PM), which can have negative impacts on human health and the environment.

UNECE, 3rd Environmental Performance Review of Uzbekistan, October 2020

According to official statistics on SO2 emissions, the "transport and storage" category accounted for 21,900 tons of emissions in 2016, about 7% of the total. In terms of NOx, transport is the highest emitter with 156,900 tons emitted in 2016, 63% of the total and a 33% increase on the 2009 value. PM 10 and PM2.5 data for transport are not available; however, the "transport and storage" category accounted for 15,800 tons of total suspended particles in 2016.

According to the Third National Communication under the UNFCCC (TNC), transport accounted for 12.4% of GHG emissions from fuel combustion in 2012, emitting 12,355 Gg of CO2 -eq. (or 6.6% of total emissions without LUCF). In 2012, the largest contributors to CO2 emissions were road (mainly petrol-fuelled) vehicles (63%) and pipeline transport (33%).

The TNC also states that, between 1990 and 2012, GHG emissions from transport decreased by 25.1% thanks primarily to the renewal of the road vehicle fleet and investments in oil and gas transmission. Measures aimed at reducing energy consumption in road transport have so far focused on both technical (e.g., renewal of road fleet) and institutional (e.g., introduction of CO2 emission standards) initiatives.

Integral part of the EPR was implementation of the For Future Inland Transport Systems (ForFITS) tool which provides projections of transport sector CO2 emissions for Uzbekistan. ForFITS model conclusions: The transport sector is expected to grow dramatically in the coming decades as the Uzbekistan economy develops further. As set out above, traffic activity in the Reference Scenario is expected to increase significantly in the years ahead. All CO2 mitigation scenarios will only slow down the expected growth in emissions and emissions are not likely to revert to present levels. However, decoupling of economic growth and CO2 emissions from transport under the Combined Scenario is an important achievement that Uzbekistan should embrace to meet its (I)NDC target submitted in the framework of the Paris Agreement under UNFCCC.

2. ROAD SAFETY TRENDS 2015-2021

Road safety was always under special attention of the Uzbek Government. Since 1991 when Uzbekistan became independent, it was adopted more than 100 laws and by-laws related with road safety, traffic rules, training and education, vehicle inspection, insurance etc. It should be recognized that general legal framework, road design standards, vehicle construction specifications and basic road safety management is in place. As in many countries, there is a question whether legislation, guidelines, and standards do meet modern standards and how these legislations are implemented in practice.

2.1. Road infrastructure

In Article 8 of the Law on Motorways [02/10/2007][6] roads are classified as:

- Public Roads
- City streets and other residential areas
- Company owned or farm roads.

Public Roads are categorized as:

- International Roads
- State Roads
- Local Roads

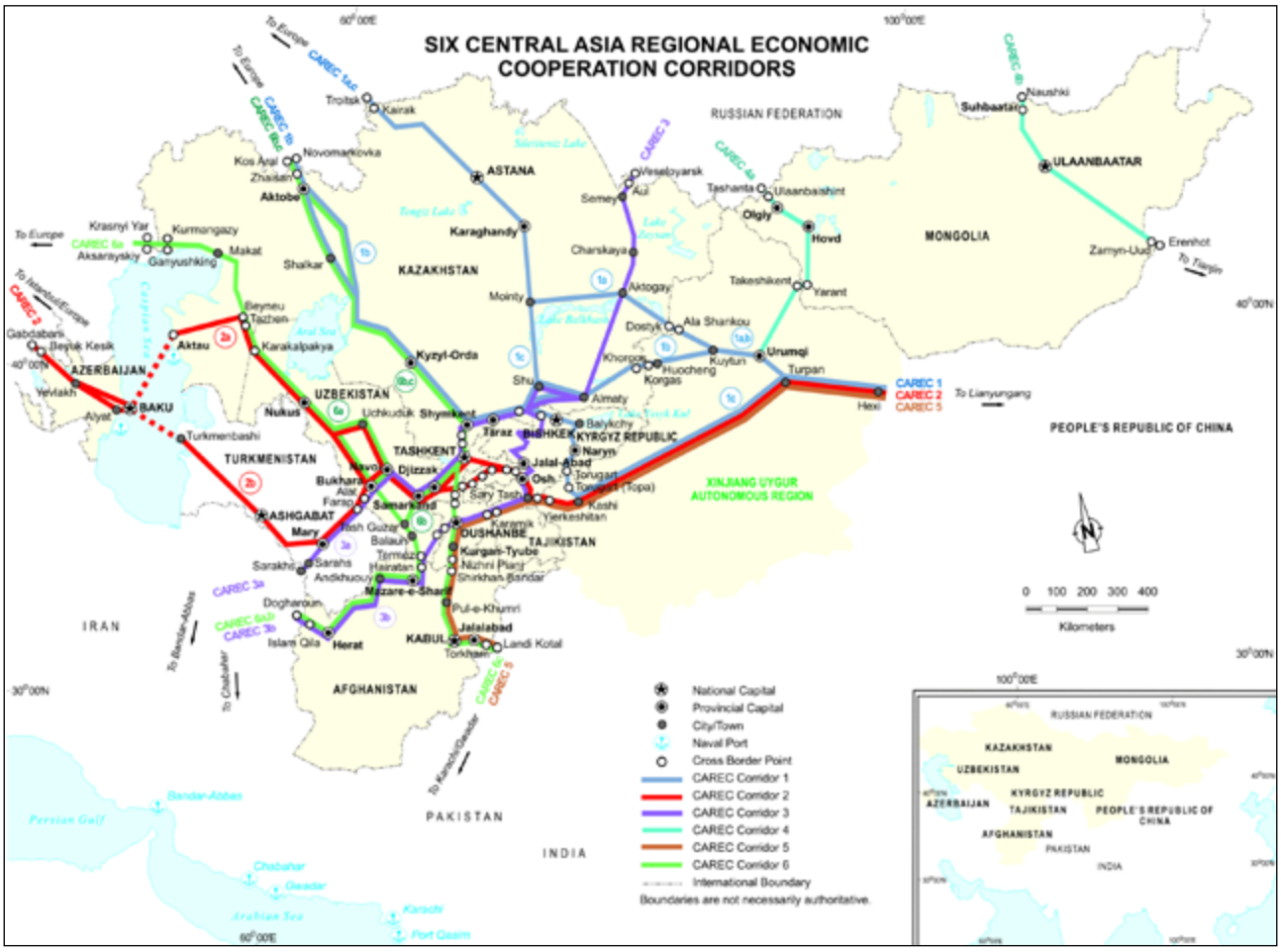
International roads are those which are included into the international road network in accordance with international agreement on the Asian Highway Network[7] adopted on 4 July 2005. Many of them (M34, M37, M39, M41, A373, A376, A377, A378, A379, A380) is a part of the Central Asian Regional Economic Cooperation Program (CAREC) corridors[8].

[6] lex.uz/ru/docs/1254492

[7] https://lex.uz/ru/docs/1313478#1313811

[8] https://www.un.org/ru/documents/decl_conv/conventions/pdf/asian_highwaynetwork.pdf

Figure 2
International Transport corridors of Uzbekistan



Source: https://www.logistika.uz/en/atlas/1604/

State roads provide motor transport links between the administrative centres of regions and districts, cities, cultural and industrial centres, airports, railway stations, ports, as well as with neighbouring countries. Local Roads include roads connecting the administrative centres of districts with settlements, villages, as well as with International and State roads. All these public roads are operated by the Road Committee.

The List of Public Roads has been approved by the Governmental Decree No. 169 [05/08/2010][9]. Uzbekistan has total of 227,620 km of roads and 448,900[10] km^2 of territory. Road density is 51 km/100 km^2 [11] which ranks Uzbekistan 88 globally. Kazakhstan's road density is 4 km/100 km^2, Georgia's is 29 km/100 km^2 and Azerbaijan has 90 km/100 km^2.

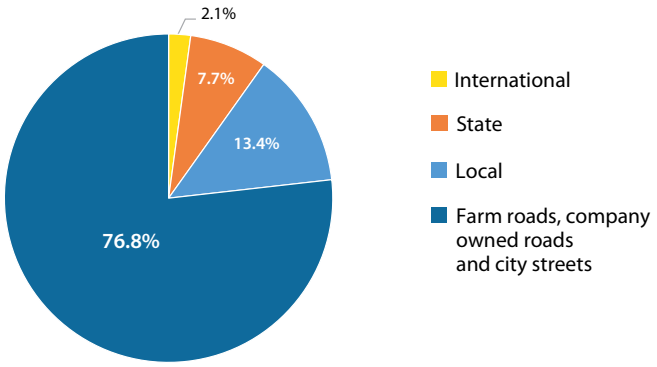
Table 1
List of public roads of the Republic of Uzbekistan

	Public road type*				Farm roads, company owned roads, and city streets**
	Sub-total	International	State	Local	
Length, km	42,869	3,993	14,203	24,673	141,882
Quantity, each	2,045	11	231	1,803	

Source : https://lex.uz/uz/docs/1664887 *
Ministry of Internal Affairs, 2022 **

[9] https://lex.uz/uz/docs/1664887
[10] https://miit.uz/en/menu/ob-uzbekistane
[11] https://www.econstats.com/wdi/wdiv_574.htm

Figure 3
Road types of Uzbekistan

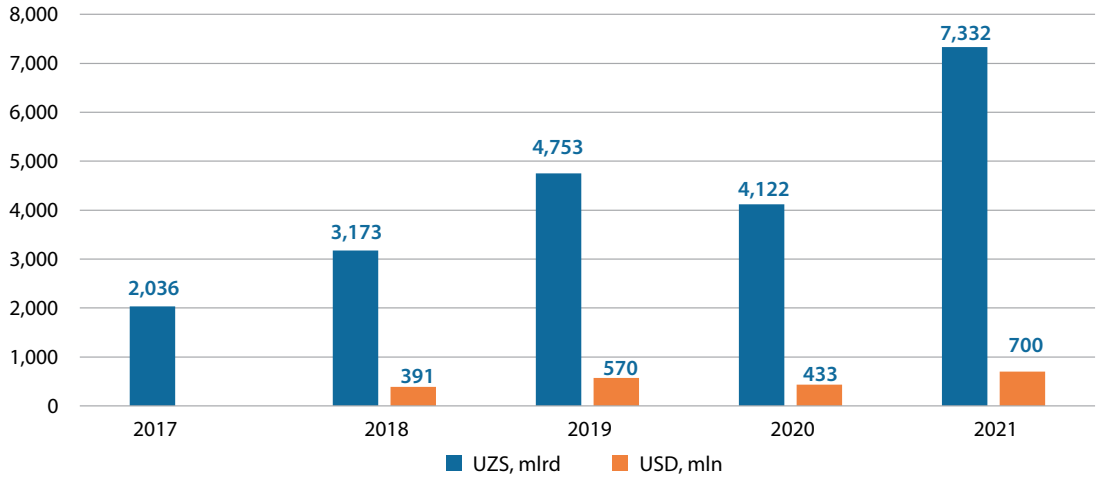


The information provided in Article 10 of the aforementioned Decree does not provide a clear definition of roads. - "The streets of cities and other settlements are located within cities, urban settlements, villages and auls, except for the sections included in the List of Public Roads of the Republic of Uzbekistan". Another words all roads located within cities and other settlements can be considered as streets if they are not in the list mentioned in the Governmental Decree 169 [05/08/2010]. This is critical because of funding and design approaches.

Another key point is financing of construction and maintenance. Public roads are the responsibility of a specially authorised body, which finances construction and maintenance from the central budget (Republican Road Fund). The streets of cities and other settlements are under the jurisdiction of local government bodies and financed by local budgets. In April 2022 under the Traffic Safety Service of the Ministry of Internal Affairs was established the Republican Fund "Safe Road and Safe Pedestrian". From this Fund resources can be used for procurement of technical means for organizing traffic, their spare parts, structures and materials, for financing of road markings, road signs and traffic lights etc. in cities and other settlements only.

According to Article 4 of the Governmental Decree No. 342[12] on measures to ensure and organize safety on roads in the territory of the Republic of Uzbekistan [26/12/2011], the Road Committee is responsible for the development and improvement of public roads, ensuring uniform technical conditions. The local state authorities (Khokimiyats, Municipalities) are responsible for the development, and compliance with design norms and standards of urban roads and other residential settlements. In Article 5 of above-mentioned Decree city streets are divided into city and district streets and arterial main streets.

Figure 4
Annual Expenditures of the Committee of Roads



Source: calculated based on https://www.uzavtoyul.uz/ru/category/byudjet-ochiqligini-taminlash[13]

[12] https://lex.uz/ru/docs/1923902

[13] https://www.uzavtoyul.uz/cy/post/20172018-yillar-yakuniga-kora-avtomobil-yollari-davlat-qomitasining-asosiy-aoliyati-boyicgj-korsatkichlari-togrisida.html
https://www.uzavtoyul.uz/ru/post/2019-yil-yakuniga-kora-avtomobil-yollari-qomitasining-asosiy-faoliyat-kosatkichlari-togrisida-malumot.html
https://www.uzavtoyul.uz/ru/post/2020-yil-yakuniga-kora-avtomobil-yollari-qomitasining-asosiy-faoliyat-korsatkichlari-togrisida-taxliliy-malumot.html
https://www.uzavtoyul.uz/ru/post/20202021-yil-yakunlariga-kora-avtomobil-yollari-qomitasining__km__-asosiy-faoliyat-korsatkichlari-togrisida-taxlil-iy-malumot.html

In addition to its own financial resources, Uzbekistan uses various types of foreign resources, such as bilateral loans from countries and international development banks and institutions, to finance road infrastructure. In the last years, Government authorities tries to attract direct foreign investments to infrastructural projects on the Private Public Partnerships base as well. Main agency for communication with Foreign Investors and International Development agencies is the Ministry of Investments, Industry and Trade of the Republic of Uzbekistan. Pursuant to the Decree of the President of the Republic of Uzbekistan No. 5643 [28/01/2019] its main task is management of work to attract foreign investment, implementation of effective interaction with international economic and financial institutions, foreign governmental financial organizations bilaterally and multilaterally.

Several road infrastructure improvement projects are currently underway, supported by various international development agencies. Data on road infrastructure financed by international financial organizations in Uzbekistan in 2017-2022 are presented in the Table 2.

Table 2

Data on objects financed by international financial organizations in Uzbekistan in 2017-2022

International financial institutions and projects	Road length km	2017 year	2018 year	2019 year	2020 year	2021 year	2022 year	TOTAL amount, million US dollars
Total:	**1,302**	**86.2**	**60.6**	**29.7**	**94.6**	**146.4**	**102.6**	**519.9**
including:								
Asian Development Bank	**489**	**69.9**	**15.9**	**5.8**	**20.5**	**78.4**	**86.0**	**276,3**
Reconstruction of 315-440 km of Highway A-380 Guzor-Bukhara-Nukus-Beyneu	85	29.5						29.5
Reconstruction of 116-190 km of the Tashkent-Osh Highway A-373 (Kamchik pass)	74	40.4	15.8	5.6				61.8
Reconstruction of 173-176 km of the Tashkent-Osh Highway A-373 (Kamchik pass)	3				8.8	3.5		12.2
Reconstruction of the 228-315 km section of the A-380 Guzor-Bukhara-Nukus-Beyneu Highway	87		0.1	0.2	11.7	40.3	33.2	85.4
Reconstruction of the 964-1204 km section of the A-380 Guzor-Bukhara-Nukus-Beyneu Highway	240					34.6	52.8	87.4
Islamic Development Bank	**121**	**12.5**	**41.5**	**3.9**	**9.5**	**18.0**	**7.2**	**92.6**
Reconstruction of 100 km of the M-39 Tashkent-Termez Highway	100	12.5	41.5	3.9				57.9
Reconstruction of sections of the M-39 Tashkent-Termez Highway 1395-1400 km and 1410-1426 km	21				9.5	18.0	7.2	34.7
World Bank	**579**	**0.0**	**0.5**	**13.0**	**48.5**	**35.0**	**3.4**	**100.4**
Regional roads Development Project	579		0.5	13.0	48.5	35.0	3.4	100.4
Saudi Development Fund and Kuwait Arab Economic Development Fund	**35**	**3.8**	**2.7**	**7.0**	**16.1**	**15.0**	**4.0**	**48.6**
4R87 Reconstruction of 35 km of the Highway Guzor-Chim-Kukdala	35	3.8	2.7	7.0	16.1	15.0	4.0	48.6
Asian Infrastructure Investment Bank	**78**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2.0**	**2.0**
Reconstruction of 150-228 km of the A-380 Highway Guzor-Bukhara-Nukus-Beyneu	78						2.0	2.0

In international projects, construction and reconstruction work is done based on FIDIC norms. The specifications are developed based on the current regulatory requirements of the Republic of Uzbekistan. Other standards may be applied if they have technical indicators not lower than those provided for by the standards of the Republic of Uzbekistan and are registered in the territory of the Republic in accordance with the established procedure.

Uzbekistan plans to build two new toll tunnels, as well as three toll expressways. The first tunnel is planned to be built at the Kamchik Pass. The road through this pass is the only road connecting the most populous part of Uzbekistan – the Fergana Valley with the rest of the Republic. Over twenty one thousand cars pass through the Kamchik Pass per day. The project will be financed by the World Bank.

Another tunnel is planned to be built through the Takhtakaracha Pass. The shortest way between the ancient cities of Samarkand and Shakhrisabz lies through the western spurs of the Zeravshan ridge, through the Takhtakaracha pass, which is sometimes also called Aman-Kutan, in honour of the village nearby. It is a narrow winding road that rises to an altitude of 1,650 meters. It can be dangerous, and therefore buses and minivans are forbidden to travel here. The project will be financed by the European Bank for Reconstruction and Development.

As for toll roads, these are sections: "Tashkent – Samarkand", "Tashkent – Andijan" and "Syrdarya – Bakht"[14].

In 2021 construction and reconstruction works on 2,735.8 kilometres of public roads and 10,114.5 kilometres of internal roads and city streets were carried out according to "Obod Qishloq", "Obod Mahalla" and other programs.

There are several projects under consideration:

- The Asian Infrastructure Investment Bank (ABII) considers financing reconstruction of 157 km of the M 37 "Samarkand-Bukhara-Turkmanbashi" road with project cost USD 300 million.
- The Indian Export-Import Bank (India EXIM Bank) has negotiations with Uzbek Government on construction of new 198 km Road 4P60 "Uchkuduk-border of the Republic of Kazakhstan" with approximately project cost USD 257.4 million.
- Feasibility Study is in the final stage for the reconstruction of 60 km M-39 "Almaty-Bishkek-Toshkent-Shakhrisabz-Termiz" Road (1255-1315 km) with project cost USD 165 million which will be financed by the IDB.

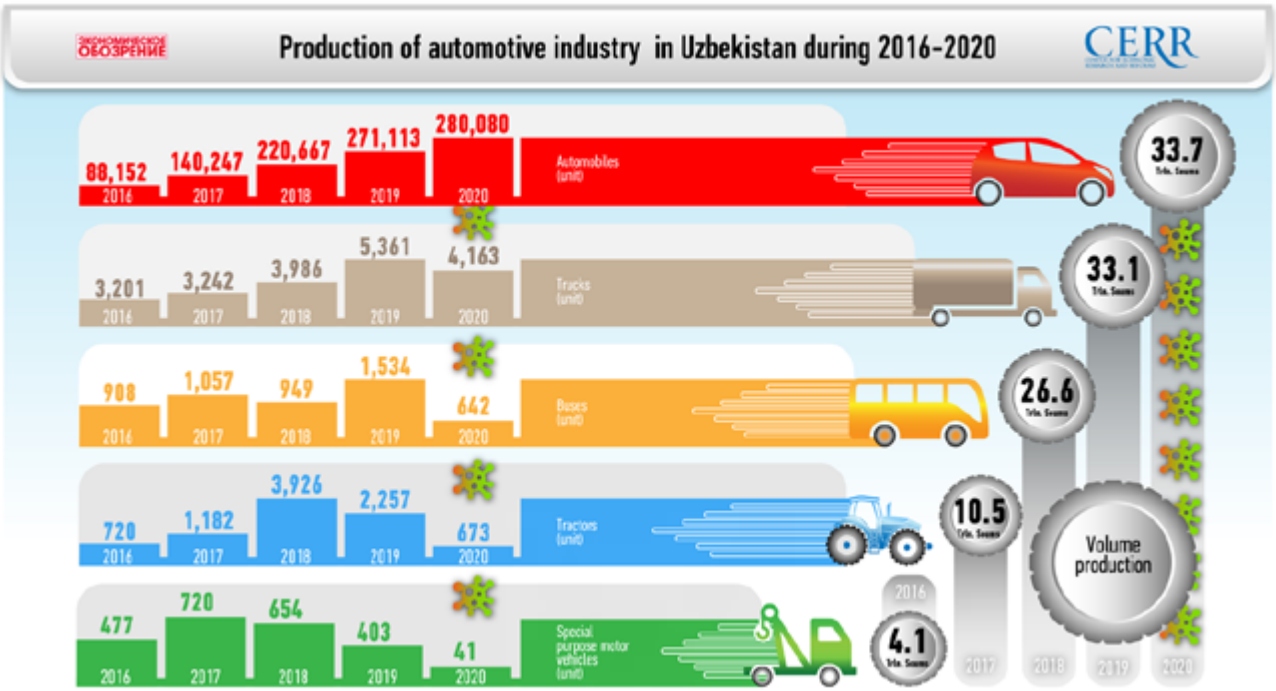
2.2. Road vehicle fleet

Uzbekistan did not have automotive industry in the Soviet period. The first automotive production factory was established in 1996. Currently there are three main automotive companies producing vehicles: GM Uzbekistan (passenger vehicles), MAN Auto-Uzbekistan (trucks and special purpose heavy vehicles), SamKochAvto (buses, trucks and special purpose heavy vehicles). Also, Government considers production of electrical passenger vehicles and buses as well.

[14] The Road Committee press conference - Projects to be implemented in the field of road construction and repair in 2021 and their quality control.

Figure 5

Production of automotive industry in Uzbekistan during 2016-2020



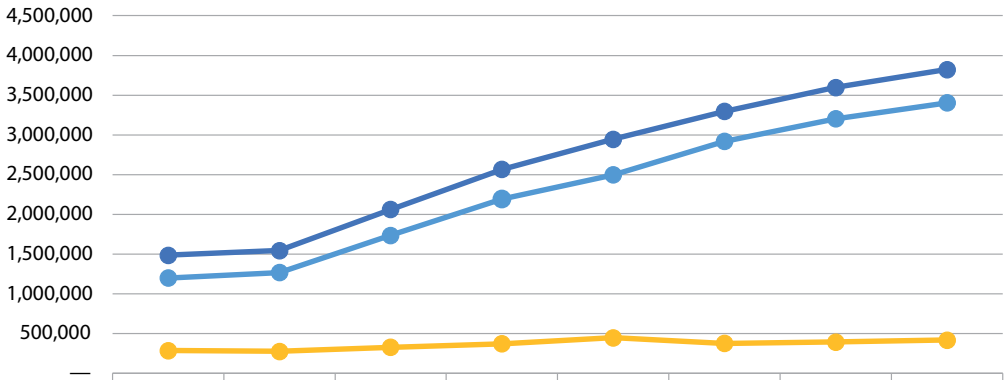
Source: https://review.uz/en/post/obzor-centra-ekonomicheskix-issledovaniy-i-reform-razvitie-avtomobilnoy-promshlennosti-uzbekistana-za-5-let

Uzbekistan joined the Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be fitted and / or be used on Wheeled Vehicles, of 25 June 1998 in 2018 and the Convention on Road Traffic, of 8 November 1968 in 1995. Vehicle categorizations meet UN legal instruments requirements. According to the "Law on Traffic Safety" Ministry of Internal Affairs is a responsible agency for registering vehicles and keeping the register of the fleet.

By 1 January 2022, Uzbekistan has total of 4,136,793 registered vehicles. Its number increased by 250% during the period from 2001 to 2021 (see Figure 6). Annual mean growth for the fleet in this period is around 5.2%. Since 2019 it is 8.4%.

Figure 6

Number of registered vehicles

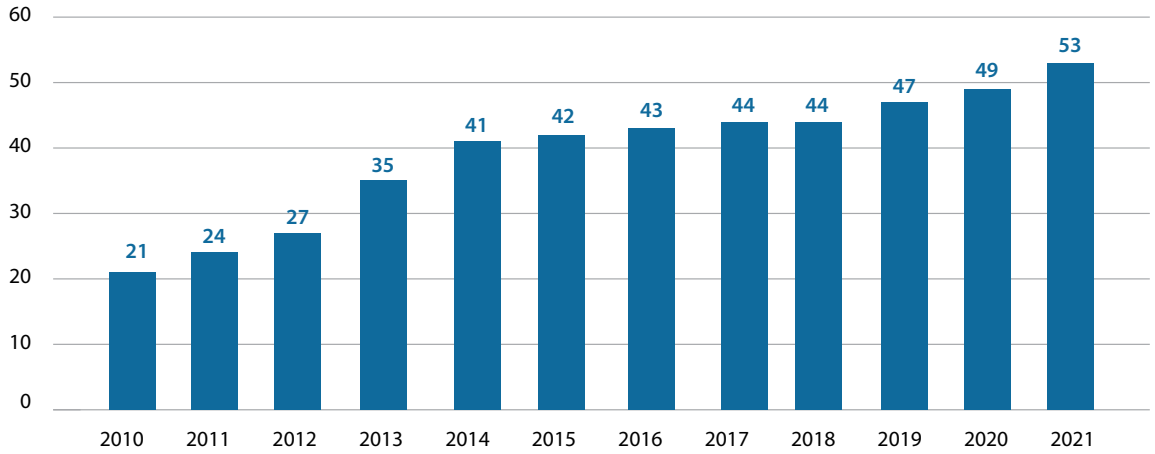


	2001	2005	2010	2015	2018	2019	2020	2021
Personal	1,199,982	1,269,115	1,734,788	2,193,812	2,498,394	2,919,869	3,202,695	3,403,419
Commercial	286,794	276,321	326,723	372,713	447,575	376,166	394,705	418,450
Total	1,486,776	1,545,436	2,061,511	2,566,525	2,945,969	3,296,035	3,597,400	3,821,869

Source: MIA, 2022

In the meantime, number of households which own car is still lower than in some neighbouring countries and consists 53 of 100 (see Figure 7). Number of motor vehicles per 1,000 persons in Uzbekistan is 91 when its neighbour Kazakhstan it is around 210[15]. Since Uzbekistan has good macroeconomic indicators and living standards are continuously increasing, it is estimated growth of commercial and passenger vehicles in the future.

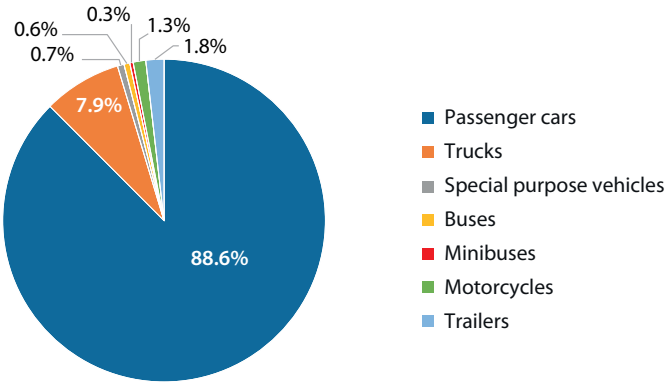
Figure 7
Number of vehicles per 100 households



Source: https://stat.uz/ru/ofitsialnaya-statistika/living-standards

The 88.6% of the total vehicles are passenger cars. Significantly low percentage of buses (0.6%) and minibuses (0.3%). For example, in Georgia their share is 5%. Main trend is constant increase of number of passenger vehicles. Following the trends of last five years, experts' estimation is that by 2030 number of vehicles can reach more than six million motor vehicles.

Figure 8
Registered vehicle types (01/01/2022)

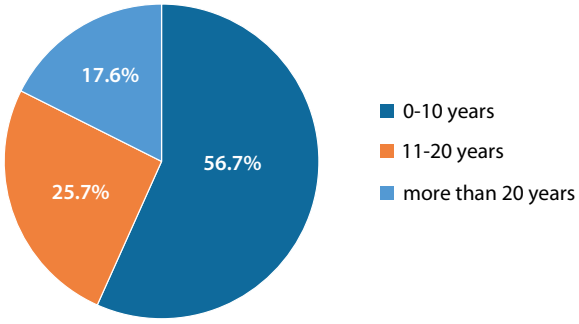


Source: MIA, 2023

More than half (56.7%) of the fleet is less than 10 years old (2023 data). Uzbekistan has own vehicle production industry and taxes for importing of second-hand vehicles are extremely high. These conditions provided to keep high volumes of new cars in the total volume.

[15] https://w3.unece.org/PXWeb/en/Table?IndicatorCode=44

Figure 9
Age of vehicle fleet



Source: MIA, 2023

Number of electrically powered vehicles is low, but it is continuously increasing. Government has started stimulating electric powered and hybrid vehicles import and manufacture. In the Presidential Decree No. 443 on Measures for the State support of the organization of the production electric vehicles [19/12/2022] the following measures have been prescribed:

- considering of production of electric vehicles and buses
- procurement by 2025 of 3,863 electric vehicles for the governmental agencies
- power charging network improvement
- compensation of some part of bank interests of individuals' car loans if electric vehicle manufactured locally, etc.

2.3. Road Safety Indicators

The Governmental Decree No. 303 on improving the system for recording road accidents [15/11/2011][16] describes following definitions for traffic accidents and casualties:

- Road traffic accident - an event that occurred during the moving of vehicle on the road and caused the death or injury any human, damage to vehicles, structures, cargo or other property[17].
- Killed person - a person who died as a result of a traffic accident at the scene of the accident or as a result of it within 30 days.
- Injured person - a person who has been admitted to a hospital for first aid treatment and staying for more than one day due to a traffic accident or is being treated on an outpatient basis after receiving first aid.

Registration road accidents should be carried out by

- regional bodies of the Ministry of Internal Affairs
- medical institutions where victims have been delivered
- legal entities whose vehicles involved in traffic accident
- owners of public roads and streets

According to the Governmental Decree No. 303 as a road crash will be considered only event in which persons were killed or injured as a result of road traffic accidents. Minor incidents where there are no injured persons will be not registered by any agency. This kind of incidents can be reported to insurance company for future claim.

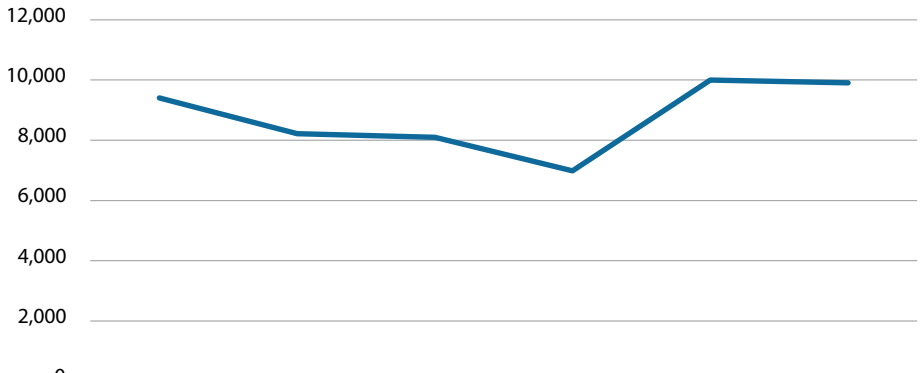
According to the data provided by MIA numbers of registered road accidents, injured and killed have being gradually decreasing up to pandemic 2020. In 2021 all these numbers are started raising.

[16] https://lex.uz/docs/1899292

[17] https://lex.uz/docs/2153413

The number of registered road accidents in period 2017 - 2020 was in constant decline. This figure bounced back in 2021 for 43% and reached 10,001. Such increase can be explained by raising of mobility of people and economic activity after pandemic. In 2022 number of accidents stabilized at 9,902.

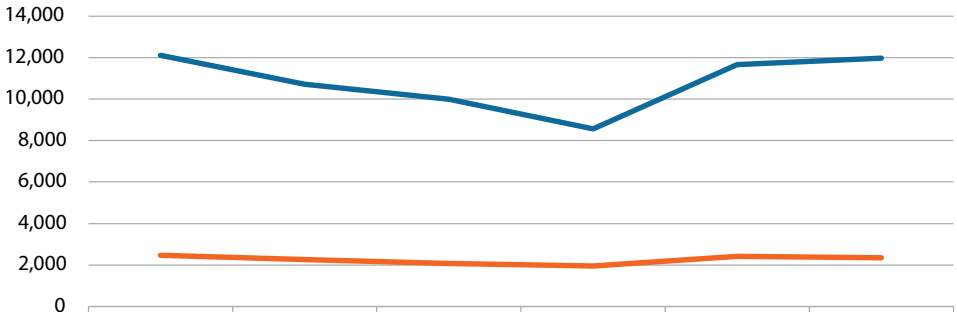
Figure 10
Number of road accidents



	2017	2018	2019	2020	2021	2022
Accidents	9,404	8,219	8,092	6,982	10,001	9,902

Almost same trends can be seen in the number of fatalities and injuries (See Figure 11). Number of killed was decreasing from 2,473 to 1,957 in period 2017-2020. In 2021 it was increased to 2,426 and in 2022 slightly reduced to 2,356. Number of injured in 2017-2020 was decreased for 46% from 9,637 to 6,598. In 2021 sharply number of injured increased for almost 40% and in 2022 returned to 2017 level.

Figure 11
Number of killed and injured in road accidents

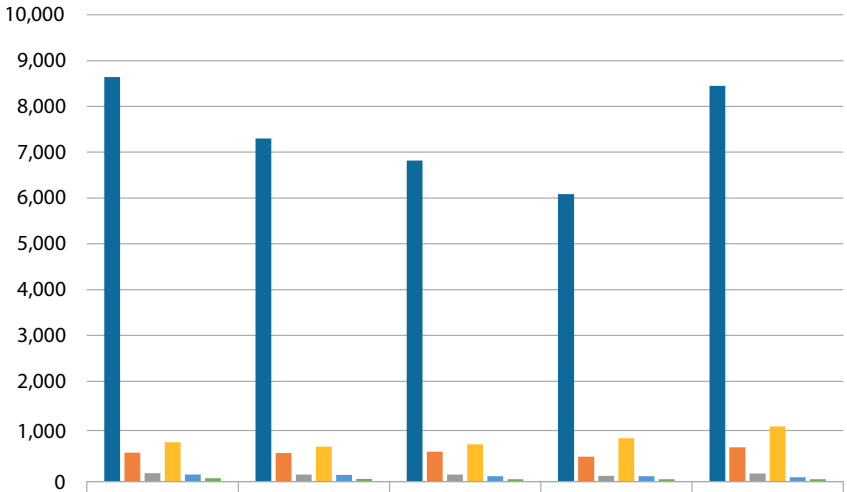


	2017	2018	2019	2020	2021	2022
Injured	9,637	8,458	7,924	6,598	9,230	9,606
Killed	2,473	2,262	2,067	1,957	2,426	2,356

Source: MIA, 2022

According to relative road safety indicators – 63.5 killed/100,000 vehicles (2021) and 6.7 killed/100,000 inhabitants (2022) Uzbekistan is among mid-performing countries globally. Looking at number of accidents by type of vehicles, it could be noted that the highest number of vehicles involved in road accidents are passenger cars. Number of accidents involving passenger's cars gradually decreased from 2017 to 2020, but in 2021 its number rose sharply and reached 8,451. In the second place are bicycles. Unfortunately, number of bicycles involved in road crashes is continuously increasing and in 2021 reached 1,078. More detailed analyse on bicyclists and motorcyclists will be provided below in the chapter 3.4 on vulnerable road users. Number of accidents with heavy goods vehicles involved is in the third place. The number of agricultural vehicles involved in accidents comparing 2017 and 2021 declined – number decreased from 64 to 42.

Figure 12
Number of road accidents by type of vehicles



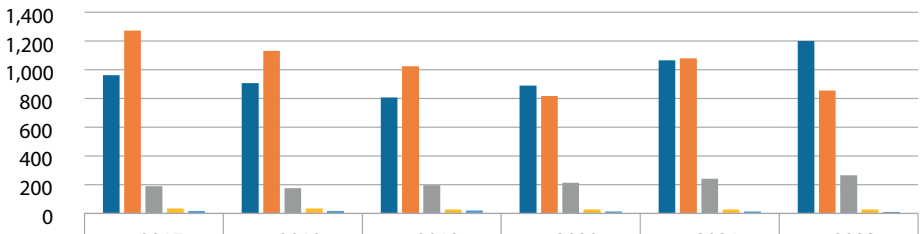
	2017	2018	2019	2020	2021
Passenger cars	8,638	7,298	6,819	6,084	8,451
Trucks	563	561	587	488	673
Buses	160	136	139	109	153
Bicyclists	768	682	731	849	1,078
Motorcyclists	133	132	103	105	81
Agricultural vehicles	64	48	47	41	42

Source: MIA, 2022

When analysing fatalities among road users, the highest number of killed and injured can be noted among pedestrians. More detailed analyse of deaths and injuries of pedestrians, bicyclists and motorcyclists will be provided below in the chapter 3.4 on vulnerable road users.

Number of fatalities among vehicle occupants remaining stable - killed around 900 and injured 3,050. (See below Figure 13 and 14)

Figure 13
Number of killed in road accidents by category of road users

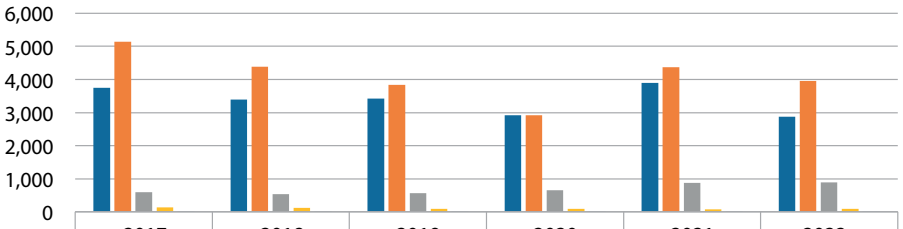


	2017	2018	2019	2020	2021	2022
Drivers and passengers	963	906	807	889	1,067	1,200
Pedestrians	1,273	1,130	1,023	817	1,080	856
Bicyclists	190	176	194	212	240	263
Motorciclysts	32	33	25	25	25	27
Others	15	17	18	14	14	10

Source: MIA, 2022

Figure 14

Number of injured in road accidents by category of road users



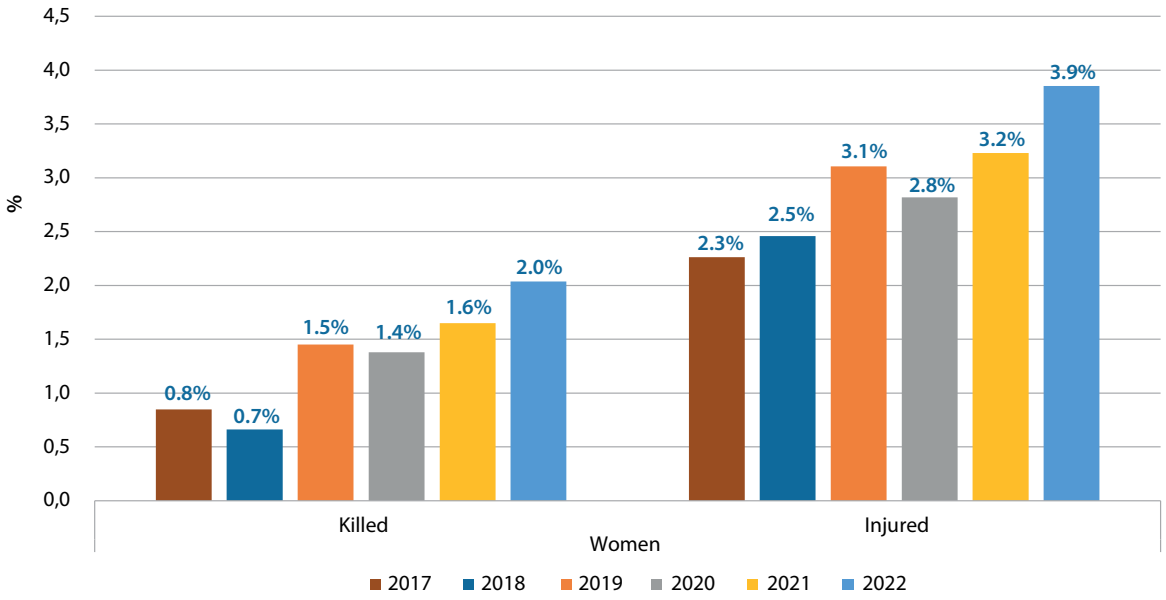
	2017	2018	2019	2020	2021	2022
Drivers and passengers	3,745	3,389	3,418	2,916	3,894	2,870
Pedestrians	5,141	4,389	3,839	2,918	4,363	3,954
Bicyclists	598	531	560	660	883	891
Motorciclysts	132	126	87	90	72	86
Others	21	23	20	21	18	15

Source: MIA, 2022

In the last five years unfortunately both number of killed and injured women were increased. So, from 2017 to 2022 share of female fatalities has been more than doubled from 0.85% to 2.04% and injuries increased by 40% and reached 3.85% of total number of injured.

Figure 15

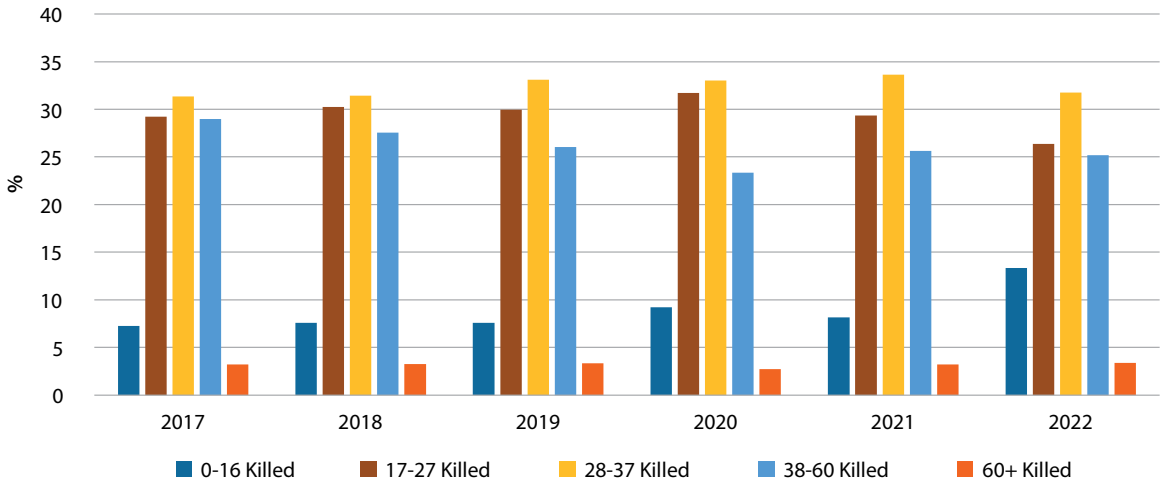
Share of killed and injured women in road accidents



Source: Calculated based on data provided by MIA, 2022

Number of fatalities in different age clusters is presented in Figure 16. Number of killed in economic active people between (17-60 years old) cluster is almost 90%. Especially high death rates are observed in clusters between 28-37 (almost third) and 17-27 (around 30%).

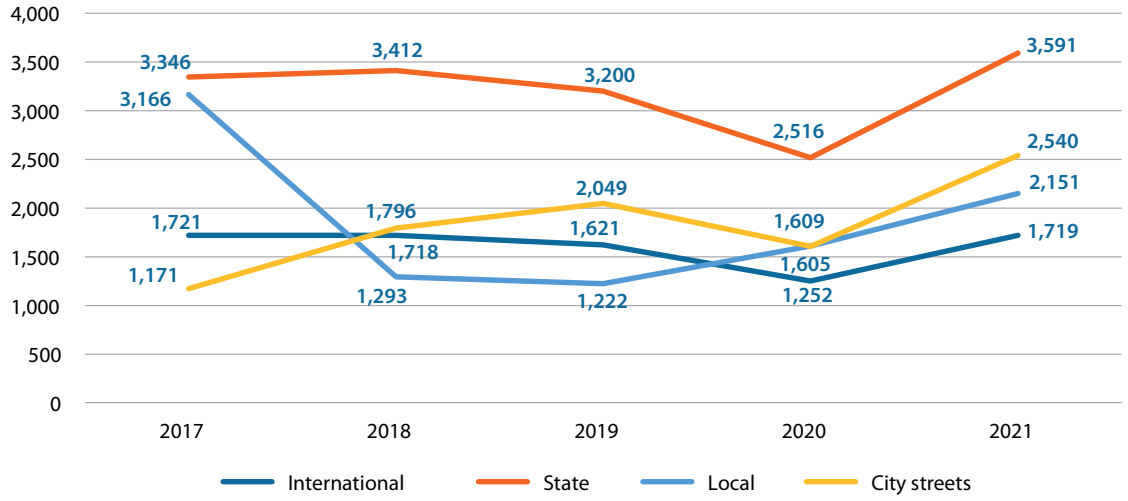
Figure 16
Killed in road accidents by age group



Source: MIA, 2022

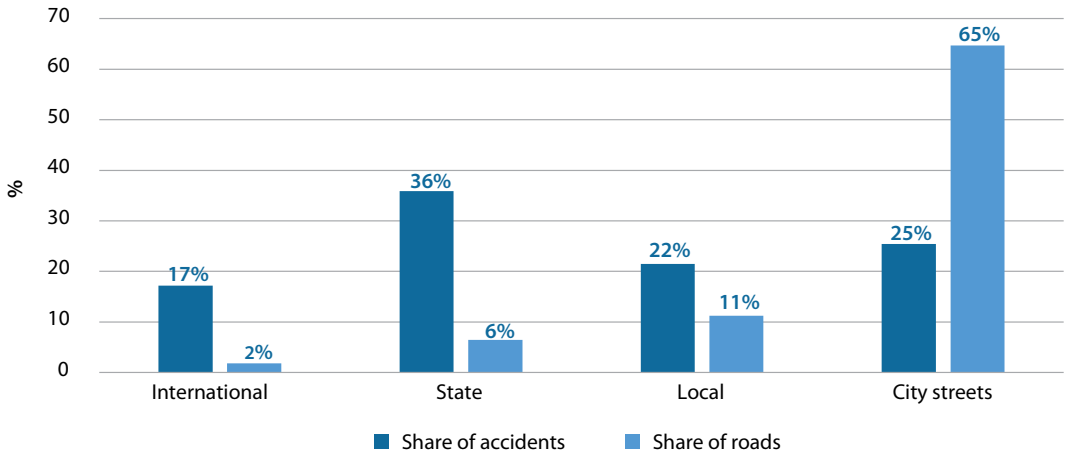
One of important points of analysis is where these accidents occurred. Functionality, allowed speed, quality of roads, intensity and the level of mixing of traffic play a big role in severity and frequency of traffic accidents. It should be noted that category internal roads includes city streets and rural roads. The highest number of road accidents occurs on national roads and the lowest on international roads. Putting number of accidents on these roads in correlation with their length, state roads are the most dangerous. Its share is 6% only, but here is happening 36% of all accidents.

Figure 17
Number of accidents by road types



Source: MIA, 2022

Figure 18
Share of road accidents by road types

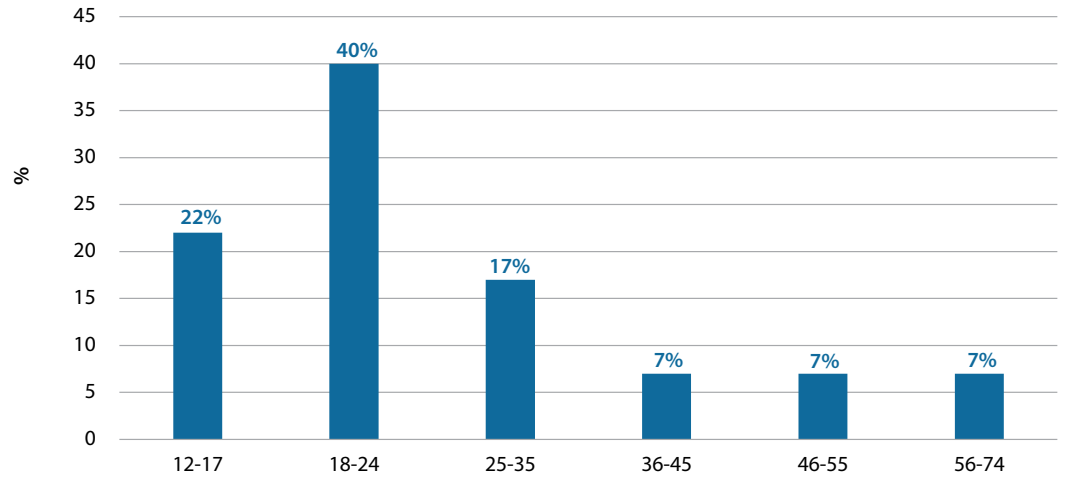


Source: MIA, 2022

According to the WHO Report on the Status of Road Safety in the European Region (2019), economic losses from road accidents range from 0.4% to 4.1% of gross domestic product (GDP) in the region. Depending on the sources of data for Uzbekistan, different estimates of socio-economic costs range from 2.6% to 3.8% of GDP. In research paper "Economic assessment of road traffic incidents in Uzbekistan" prepared by WHO and Centre for Economic Research and Reform costs of traffic accidents in Uzbekistan in 2021 was USD 1,891 million or 2.8% of GDP.

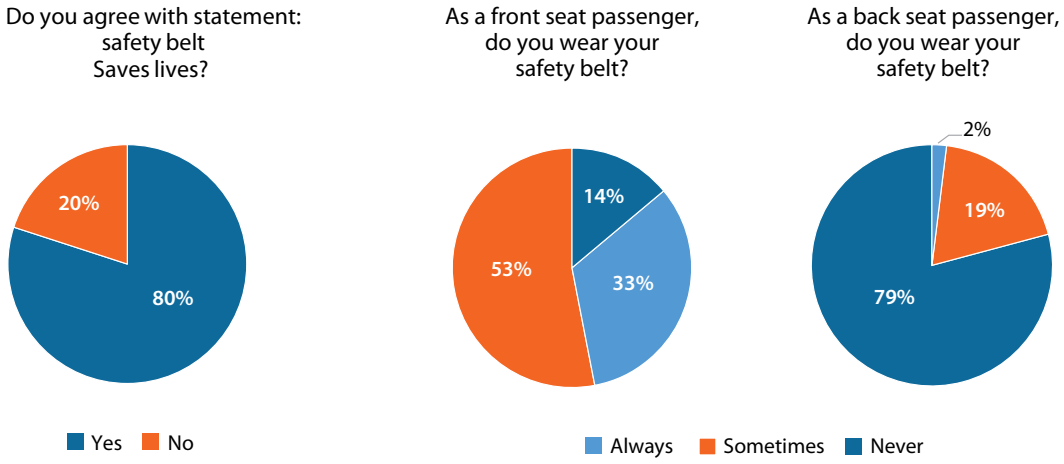
Part of RSPR was on-line survey on safety belt use conducted in 2022. It was received total of 103 responds. Age group of respondents is indicated in Figure 19.

Figure 19
Age group of respondents to the online Safety belt use questionnaire



Eighty per cent of respondents believe that safety belts can save lives, but only 33% of front seat occupants and 2% of rear seat occupants always wear them.

Figure 20
Results of questionnaire conducted on Safety belt



Another survey included vulnerable road users with 220 people interviewed, most of whom travel on foot every day. Most respondents believe that drivers do not respect pedestrians and that the speed limit in urban areas is high. Eighty per cent of respondents think that the speed should be 50 km/h in the city, and 30 km/h near school zones.

3. ROAD SAFETY SYSTEM AREAS

3.1. Road Safety Management

Uzbekistan needs effective road safety system to prevent accidents, protect people involved in accidents if prevention fails, rescue people after accidents, and learn from the accidents how to improve road safety system. The foundational principle of the road safety system concept is that all the elements of the system – pillars (management, safe user, safe vehicle, safe road and effective post-crash response) and areas (legislation, enforcement, education, technology) – should be in place and function in an integrated way. They are interconnected and support each other. This integrated approach allows for improving one or more elements but always within the big picture of the system and for promoting systemic long-term solutions.[18]

Figure 21
Road Safety Management, ITC Recommendations for Enhancing National Road Safety Systems

Source: UNECE, 2020

3.1.1. Transposition of international legal instruments and agreements

The development of national legislation has been a continuous process in Uzbekistan since the country proclaimed independence in 1991. Last years, the President and the Government of Uzbekistan have carried out measures to promote a transport and logistics development policy and increase road safety. Consequently, work was conducted in the road transport sector to create the legislative framework and further develop the institutional set-up.

The Constitution of the Republic of Uzbekistan[19] as a supreme law, outlines the following provisions that are directly linked to mobility and ecological regulation:

- Any citizen of the Republic of Uzbekistan shall have the right to freedom of movement on the territory of the Republic, as well as a free entry to and exit from it, except in the events specified by law.
- All citizens shall protect the environment.
- An owner shall possess, use and dispose of his property. The use of any property must not be harmful to the ecological environment, nor shall it infringe on the rights and legally protected interests of citizens, juridical entities or the state.

[18] https://unece.org/sites/default/files/2022-01/ITC%20Recommendations%20for%20Enhancing%20National%20Road%20Safety%20Systems.pdf

[19] https://lex.uz/en/docs/6451070

Right for a safe road to every citizen is a facet of the fundamental rights of free movement and the right to live under the Constitution.

In Uzbekistan the Law on normative legal acts [24/11/2021] defines the concept, types, establish the legal force and correlation of normative legal acts.[20] According to the Article 6 of this Law, pyramid of strength of the legislation is as following:

- Constitution of the Republic of Uzbekistan
- Laws of the Republic of Uzbekistan
- Resolutions of the chambers of the Oliy Majlis of the Republic of Uzbekistan
- Decrees and resolutions of the President of the Republic of Uzbekistan
- Resolutions of the Cabinet of Ministers of the Republic of Uzbekistan
- Orders and resolutions of ministries and departments
- Decisions of local government authorities

The UN legal instruments serve as a foundation for Member States to build national legal frameworks. There are 60 UN legal instruments in the area of inland transport which are administered by the UNECE. The UN General Assembly resolution on "Improving Global Road Safety"[21] encouraged all Member States to accede to the seven "Core" road safety conventions and agreements. So far, Uzbekistan acceded the following:

- The Convention on Road Traffic, 1968, was ratified by Uzbekistan on 17 January 1995
- The Convention on Road Signs and Signals, 1968, was ratified by Uzbekistan on 17 January 1995.
- The European Agreement concerning the Work of Crews of Vehicles engaged in International Road Transport, 1970, was ratified by Uzbekistan on 22 October 1998.
- The Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles, 1998, was ratified by Uzbekistan on 4 May 2018.
- The Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), 1957, was ratified by Uzbekistan on 24 January 2020, and its additional Protocol of October 1993 was ratified by Uzbekistan in 2020.

Uzbekistan went further by joining other UN conventions and agreements:

- The Convention on the Contract for the International Carriage of Goods by Road, 1956, was ratified by Uzbekistan on 28 September 1995, and its additional Protocol of July 1978 was ratified by Uzbekistan on 27 November 1996, and its additional Protocol concerning the electronic consignment note (e-CMR) was ratified by Uzbekistan in 2020
- The Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention), 1975, was ratified by Uzbekistan on 28 September 1995.
- The Customs Convention on the Temporary Importation of Commercial Road Vehicles, 1956, was ratified by Uzbekistan on 11 January 1999.
- The Customs Convention on Containers, 1972, was ratified by Uzbekistan on 27 November 1996.
- The International Convention on the Harmonization of Frontier Controls of Goods, 1982, was ratified by Uzbekistan on 27 November 1996.
- The Convention on the Taxation of Road Vehicles engaged in International Goods Transport, 1956, was ratified by Uzbekistan on 22 October 1998.
- The Convention on Customs Treatment of Pool Containers Used in International Transport, 1994, was ratified by Uzbekistan on 27 November 1996.
- The Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for Such Carriage, 1970, was ratified by Uzbekistan on 11 January 1999.
- The Intergovernmental Agreement on the Asian Highway Network (UNESCAP), 2003, was ratified by Uzbekistan on 26 April 2004.[22]

[20] https://lex.uz/docs/5695915

[21] https://undocs.org/Home/Mobile?FinalSymbol=A%2FRES%2F74%2F299&Language=E&DeviceType=Desktop&LangRequested=False

[22] https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-B-34&chapter=11&clang=_en

Now, Uzbekistan is not contracting party of two "core" road safety legal documents:

- The Agreement concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations, 1958.
- The Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles, 1997.

The EAEU is a regional economic union that includes Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia, as well as Uzbekistan as an observer state. In December 2020, Uzbekistan was granted the status of the EAEU observer state. On 30 April 2021 in Kazan, the parties signed the Memorandum of Interaction between the EEC and the Government of the Republic of Uzbekistan and approved the Joint Action Plan of the EEC and the Government of the Republic of Uzbekistan for 2021–2023. The working group was established in accordance with the memorandum. As an observer state, Uzbekistan has expressed interest in deepening its economic ties with the EAEU member states and has participated in negotiations on several key issues, including trade and investment, energy cooperation, and transportation infrastructure development.[23]

3.1.2. Institutional set-up for road safety and coordination

Road sector reforms have progressed significantly 2000s, with the result that the sector is more functional and rational, with improvements in areas of competence and responsibilities. The Government has made a coordinated effort for improving road safety.

Many national Ministries/Departments share responsibility for road safety – Internal Affairs, Transport, Health, Justice, Education, Investment and Foreign Trade, Work, Environment, Finance – but unless special arrangements are put in place, achieving accountability, appropriate coordination and realising the full potential of individual sectoral responsibilities is difficult. Problems in different road safety system components are diverse. Therefore, meaningful institutional collaboration within Government needs to take place to adopt a system-wide strategy and achieve programme integration of the (sometimes competing) development, environment, accessibility, equity and safety objectives of national/regional governments.[24]

In Uzbekistan, relations in the field of road safety are regulated by the Law on road safety [10/04/2013] to ensure the protection of the life and health of citizens, the protection of their rights and legitimate interests, the property of legal entities and individuals, as well as the environment.[25] According to the Article 5 of the Law state administration in the field of road safety is carried out by:

- the Cabinet of Ministers of the Republic of Uzbekistan, which is the executive branch of power and Prime Minister, Deputy Prime Ministers, the ministries and state committees
- local government authorities
- specially authorized state bodies which are
    1) Traffic Safety Service[26]
    2) Ministry of Transport[27]
    3) Road Committee[28]

The Cabinet of Ministers of the Republic of Uzbekistan

- approves state programs to ensure road safety and monitors their implementation
- approves the Traffic Rules and other regulatory legal acts on the issues of ensuring safety and organization of traffic
- coordinates the activities of ministries, state committees, departments, local government bodies in the field of ensuring road safety, as well as compliance with environmental safety requirements

[23] https://eec.eaeunion.org/en/news/eaes-uzbekistan-sotrudnichestvo-v-tselyakh-narashchivaniya-torgovo-ekonomicheskikh-svyazey/

[24] https://road-safety.transport.ec.europa.eu/system/files/2021-07/ersosynthesis2018-roadsafetymanagement.pdf

[25] https://lex.uz/docs/2153413

[26] https://yhxx.uz/

[27] https://mintrans.uz/en/

[28] https://www.uzavtoyul.uz/en/

- establishes requirements for the technical condition of vehicles and roads, traffic safety on roads and railway crossings
- establishes general requirements for the training of drivers of vehicles, as well as training the population in the rules of safe behaviour on the roads
- approves a unified system for recording drivers, vehicles, violations of traffic rules, traffic accidents and other indicators
- may exercise other powers in accordance with the Law

The Regional, District and Municipal Hokimiyats

- implement State programs to ensure road safety
- approve regional programs to ensure road safety and control over their implementation
- organize medical support for road safety, as well as the provision of medical care to victims of road traffic accidents
- take measures to prevent road traffic accidents, educate the population on the rules of safe behaviour on the roads, promote road safety and comply with environmental safety requirements
- ensure the arrangement and maintenance in good condition of streets, sidewalks and means of traffic control in cities, towns and rural settlements, as well as urban electric transport routes.

Traffic Safety Service

- participates in the development and implementation of state programs to ensure road safety
- develops regulatory documents in the field of road safety
- controls observance of road traffic rules and legislative acts by road users for ensuring road safety
- takes part in determining the routes of vehicles carrying heavy, bulky, dangerous and special cargo
- gives consent to projects for the construction, reconstruction and repair of roads, road structures, railway crossings, road facilities located along the roads and streets
- controls technical condition of vehicles in operation, a mandatory technical inspection of vehicles
- controls maintenance of roads and railway crossings, equipping them with traffic control devices
- prohibits the operation of roads and railway crossings that do not meet the requirements of regulatory documents in the field of road safety
- keeps records and registration of vehicles, violations of traffic rules and traffic accident

The Ministry of Transport

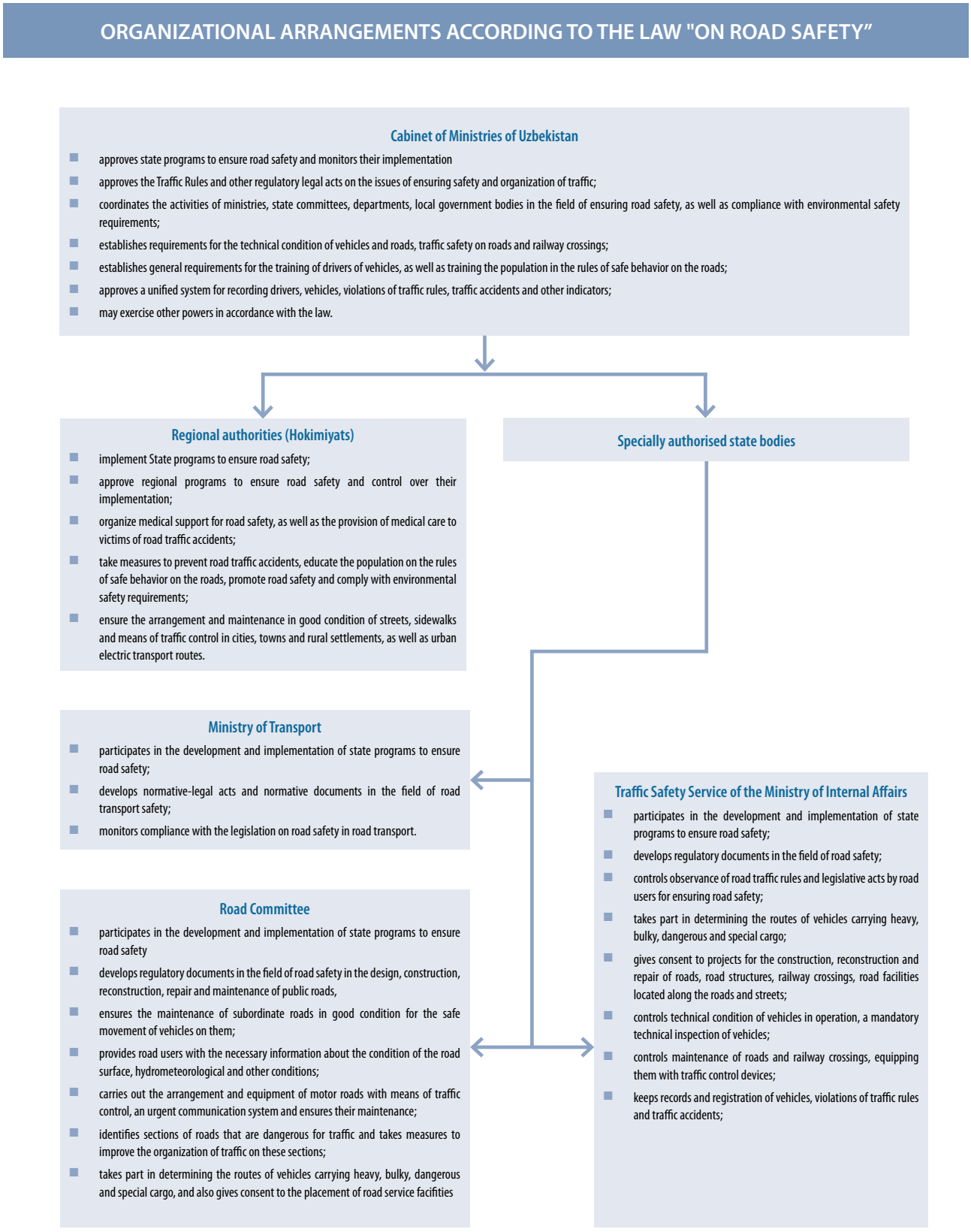
- participates in the development and implementation of state programs to ensure road safety
- develops normative-legal acts and normative documents in the field of road transport safety
- monitors compliance with the legislation on road safety in road transport.

The Road Committee under the Ministry of Transport

- participates in the development and implementation of state programs to ensure road safety
- develops regulatory documents in the field of road safety in the design, construction, reconstruction, repair and maintenance of public roads
- ensures the maintenance of subordinate roads in good condition for the safe movement of vehicles on them
- provides road users with the necessary information about the condition of the road surface, hydro meteorological and other conditions
- carries out the arrangement and equipment of motor roads with means of traffic control, an urgent communication system and ensures their maintenance
- identifies sections of roads that are dangerous for traffic and takes measures to improve the organization of traffic on these sections
- takes part in determining the routes of vehicles carrying heavy, bulky, dangerous and special cargo, and gives permits for road facilities and rest areas

Figure 22

Organizational arrangements according to the Law on Road Safety



In recent years, a large-scale organizational and practical work has been carried out in the country in the field of improving road safety system. At the same time, despite the measures taken, the number of fatal road traffic accidents remains high, which shows the need for a systemic approach in updating road safety system. It is required to improve coordination and cooperation of road safety stakeholders, give executive power to the Republican Special Commission for Road Safety, mobilize additional resources (human and material) and increase level of investments in road safety system.

Along with laws there are by - laws adopted by President, Government and other authorities. One of the basic by-laws related to road safety is the Presidential Resolution No. 190 on Measures for Reliable Ensuring of Human Security and Sharp Reduction of Death on Roads [04/04/2022] that is developed in accordance with the Strategy for the Development of the Public Safety System in the Republic of Uzbekistan in 2022-2025, and to guarantee protection against any incidents of human life and health on roads. The Resolution proposed the following actions: (i) the granting the Minister of the Internal Affairs the right to attract, at the expense of extrabudgetary funds, to the activities of road safety units qualified foreign specialists as advisers on a contractual basis; (ii) formation of the Road Infrastructure Control Department within the Road Traffic Safety Service of the Ministry of Internal Affairs, and within the territorial traffic safety departments; (iii) creation of the Republican Fund "Safe Road and Safe Pedestrian" under the Road Traffic Safety Service of the Ministry of Internal Affairs and (iv) establishing the Republican and Regional Special Commission for Road Safety.

Members of the Republican Special Commission for Road Safety that was established in April 2022 are key persons from different Governmental bodies and institutions. Composition of the Commission is as follows: Prime Minister of the Republic of Uzbekistan (Chairman of the Commission); Minister of Internal Affairs (Deputy Chairman of the Commission); Minister of Transport (Deputy Chairman of the Commission); Minister of Emergency Situations; Minister of Justice; Minister of Higher Education, Science and Innovation; Minister of Preschool and School Education; First Deputy Chief Prosecutor; First Deputy Minister of Economy and Finance; First Deputy Minister of Health; First Deputy Minister of Public Education; Deputy Minister of Internal Affairs - Head of the Department of Public Security; Deputy Minister of Digital Technologies; First Deputy Minister of Construction and Housing and Communal Services; Minister of Ecology, Environmental Protection and Climate Change; Chairman of the State Committee for Ecology and Environmental Protection; Chairman of the Road Committee; Director of the Anti-Corruption Agency; Rector of Tashkent State Transport University; Chairman of the National Television and Radio Company of Uzbekistan; Head of the Traffic Safety Service of the Ministry of Internal Affairs (secretary of the commission).

Republican and Regional Special Commissions have the following main tasks:

- reliable protection of life and health of citizens in the field of road safety, ensuring full compliance of road infrastructure with safety requirements
- assessment of the state of efficiency of the organization of traffic in the regions on an ongoing basis, control over the targeted activities of state bodies and local Khokimiyats in this area
- study of the causes of road accidents, creation of a system for preparing scientifically based proposals for the prevention of accidents by approving a list of dangerous emergency sections of roads
- determination of measures for the introduction of modern information technologies in the field of road safety, popularization of automated control systems that exclude the human factor and corruption
- organizing the development and coordination of draft programs to improve the road infrastructure, reduce the number of road accidents in the regions

In accordance with the tasks assigned to it, the Republican Special Commission should organize the monitoring of road safety indicators on roads (the number of road accidents, deaths and injuries), analyse the implementation of legislation, control the organization of preventive and explanatory work in educational institutions and settlements, evaluate the state of road infrastructure and compliance with traffic rules in the Republic of Karakalpakstan, the City of Tashkent and regions at the end of each quarter according to the index indicators, study the work carried out by research institutes, special authorized state bodies, local government bodies, as well as responsible ministries and departments in the field of road safety, and also discuss the shortcomings, ensures the widespread introduction of automated traffic control systems in the cities of Tashkent, Nukus, regional centres and the most important areas. It is noteworthy that areas, based on the state of traffic organization are divided into "green", "yellow" and "red" categories. The programs of comprehensive measures will be developed and implemented to improve the state of compliance with traffic rules in areas, which, are included in the "yellow" and "red" categories.[29] The Cabinet of Ministers will ensure the development and approval of the methodology for conducting the index, involving leading scientific organizations, scientists and experts.

[29] https://lex.uz/docs/5937577#5943087

Achieving road safety results requires long-term ownership, leadership and political will by the Government, agencies/organizations and other stakeholders. The Government of Uzbekistan should commit to ensuring an effective road safety management system, to result-focused institutional management arrangements and to resolve any capacity weaknesses, which will inhibit implementation of effective action. This focus requires clear identification and empowering of a lead agency/department, provision of sufficient resources, the accountable involvement of a core group of government agencies with defined roles and responsibilities, definition of stepwise road safety targets towards this and transparent reporting of results.

3.1.3. Strategic framework

In recent years, a wide range of measures have been implemented in Uzbekistan aimed at developing transport sector, ensuring an elevated level of road transport safety, improving the management system in the field of transport, and training qualified specialists in this field.

The modern trends of economic development and the ongoing reforms show that, considering the geographical location of the Republic, the formation and implementation of a single transport policy aimed at ensuring the quality and popularity of transport services, as well as the introduction of modern technologies and intelligent transport systems are of particular importance. In accordance with the Decision of the President of the Republic of Uzbekistan No. 3127 on measures to further improve the system of road safety [11/07/2017], significant work was carried out in the field of road safety. Among other things, a qualitatively new procedure for organizing the work of internal affairs bodies was established to ensure traffic safety, improve the system of prevention of traffic accidents, expand the automated traffic control system that ensures high control efficiency, timely detection and elimination of crimes.

In recent years, Uzbekistan has passed several legal instruments to improve road safety management. However, effective enforcement and monitoring of these measures remain a challenge. One key obstacle is the timely delivery and implementation of decisions made at the central level to the local level. To address this issue, it is crucial to clarify the responsibilities of both central and local authorities, to prevent duplication and avoid shirking of responsibilities. It is also important to refine and systematize existing legal instruments to streamline decision-making processes and enable quick responses to emerging challenges. By doing so, the relevant agencies can better coordinate and collaborate, leading to more effective road safety management across Uzbekistan.

To further improve the road safety system, radically improve the road infrastructure, increase the quality of roads, as well as create the necessary conditions for the safe movement of all road users, the Cabinet of Ministers approved the concept of ensuring road safety in the Republic of Uzbekistan in 2018-2022. Heads of relevant ministries, departments and other organizations were given personal responsibility for the timely, high-quality and effective implementation of the main directions of the Concept and the measures envisaged in the Road Map, that is divided into three categories: improving the regulatory framework in the field of road safety; improving the road infrastructure, the quality of roads, creating reliable conditions for the safe movement of vehicles and passengers; increasing the legal culture and necessary skills of all road traffic participants and included activities, implementation mechanisms, implementation periods and responsible bodies[30]. It is important to mention that the concept didn't include monitoring of the implementation of road safety activities and performance of road safety stakeholders.

In the Development Strategy of the New Uzbekistan for 2022-2026[31], the creation of an effective system for ensuring public security, the timely identification and elimination of traffic offenses is defined as one of the target areas.

Decision of the President of the Republic of Uzbekistan No. 316 on Approval of the National Program "Safe and Smooth Road" [12/07/2022] aims to improve the road infrastructure and create safe driving conditions, to dramatically reduce accidents and deaths on the roads, to ensure broad participation of the public in the work in this field. The plan is intended to be implemented in the territory of the Republic during the years 2022-2026. It is divided into five categories: Complex improvement of road infrastructure; Digitization of the traffic management system on roads; Development and digitization of public transport; Strengthening the campaign to ensure traffic safety, starting practical training of traffic rules for children; Improving the system of training and retraining of drivers and strengthening control over the technical condition of motor vehicles. Specific, measurable, achievable, relevant, and time-bound indicators for activities are noteworthy.[32]

[30] https://lex.uz/docs/3743453

[31] Decree of the President of the Republic of Uzbekistan dated 28.01.2022 DP-60 "On the Development Strategy of the New Uzbekistan for 2022-2026". https://lex.uz/ru/docs/5841077

[32] https://lex.uz/docs/6106551

In addition, the national goals and objectives of Uzbekistan in the field of sustainable development for the period up to 2030 noted that Uzbekistan will strive to achieve a halving of the number of road accidents by 2025 (Target 3.6), in order to ensure a healthy lifestyle and promote the well-being of people of all ages (SDG 3)[33].

Also, the goal for ensuring the openness, safety and environmental sustainability of cities and human settlements (SDG 11) includes a target to improve road safety by 2030, by increasing access to public transport so that everyone has access to safe, affordable, convenient and environmentally friendly vehicles, paying special attention to the needs of vulnerable groups (Target 11.2).

The Decree of the President of the Republic of Uzbekistan No. 5647 on the radical improvement of the system of public administration in the field of transport[34] was adopted to radically improve the system of public administration in the field of transport and ensure the strategic development and sustainable functioning of transport communications. The Ministry of Transport of the Republic of Uzbekistan was established as a successor of the Road Transport Agency of Uzbekistan. Development of a unified state transport policy, encouraging the development of the market of transport and logistics services, development of international transport corridors, development of proposals and implementation of measures to improve the logistics system, effective use of the country's transport potential, development of public-private partnership in the field of transport and road management and increasing the investment attractiveness of the country are among main functions of the Ministry of Transport.

Also, the draft "Strategy for the development of the transport system of Uzbekistan until 2035" has been developed[35]. It highlights that road safety is the most important indicator of the effectiveness of a country's transport policy.

At the same time, two Resolutions of the Cabinet of Ministers of the Republic of Uzbekistan No. 425 and No. 975 provided grounds for the development of the "Strategy for the development of road construction of the Republic of Uzbekistan for the long term"[36] and approved the "Regulations on the procedure for regulating the relationship of road patrol officers with road users and the use of special means"[37].

3.1.4. Funding and resource allocation

Road safety financing has been identified as one of the areas which may need improvement. The Road Fund was established under the Cabinet of Ministers and provided financing for road maintenance and construction of the public roads until 2018. Sources of financing included corporate taxes, fees to register vehicles, and loans and grants from IFIs. With the abolition of the corporate tax in 2018, the Road Fund lost its main earmarked income and was integrated within the Road Committee in December 2018 in line with the Presidential Decree No. 5647 on measures to fundamentally improve the public administration system in the field of transport [01/02/2019]. The Uzyulloyiha (State Design Enterprise) is responsible for the preparation of feasibility studies, cost estimates, and designs for reconstruction and construction of public road sector assets.[38] A sustainable stream of financing is key to address recurrent road sector needs. Notwithstanding the existence of the Road Fund and significant achievements in road network quality, funds have not been sufficient for the Government of Uzbekistan to meet critical requirements, particularly pertaining to maintenance, road safety, and climate change resilience.

Overall, the trends in road safety funding and investments in Uzbekistan have been focused on improving road infrastructure, education and awareness programs, and increasing public safety. One of the main challenges is ensuring effective and efficient use of the allocated funds. While the government has committed significant resources to road safety, there is a need to ensure that these funds are being used in the most cost-effective and impactful way. This requires effective planning, monitoring, and evaluation of road safety initiatives, as well as transparency and accountability in the use of funds.

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[33] Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 83 on additional measures to accelerate the implementation of national goals and objectives in the field of sustainable development for the period up to 2030 [21/02/2022]. https://lex.uz/docs/5870397

[34] Decree of the President of the Republic of No. 5647 on measures to radically improve the system of public administration in the field of transport [01/02/2019]. https://lex.uz/docs/4194115

[35] Draft regulatory legal act "On approval of the Strategy for the development of the transport system of the Republic of Uzbekistan until 2035". ID-3867. https://regulation.gov.uz/ru/document/3867

[36] Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 425 on measures to organize the development of a strategy for the development of road construction in the Republic of Uzbekistan for the long term [22/05/2019]. https://lex.uz/docs/4349291

[37] Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No.975 on measures to organize the development of a strategy for the development of road construction in the Republic of Uzbekistan for the long term [01/12/2018]. https://lex.uz/docs/4089922

[38] Presidential Decree No. 5890 "On measures to deeply reform the road management system of the Republic of Uzbekistan" (9 December 2019) and Resolution of the President No. 4545 "On measures to further improve the road management system" (9 December 2019). https://openknowledge.worldbank.org/bitstream/handle/10986/34160/Uzbekistan-Building-Blocks-for-Integrated-Transport-and-Logistics-Development-Policy-Paper.pdf?sequence=4&isAllowed=y

Another challenge is the need for sustainable funding models to support ongoing road safety initiatives. While there are significant investments in road safety in recent years, it is important to ensure that these investments are sustained over the long-term to achieve lasting impact. This requires innovative financing mechanisms and partnerships between government, private sector, and civil society actors to ensure that road safety remains a priority for years to come.

In Uzbekistan road safety funds is needed to cover all the costs once activities move down to individual municipalities. It can allow sufficient horizontal and vertical coordination activities, cross sector and road safety promotion activities at National and local levels and to implement a few demonstration and pilot projects to stimulate road safety activities at all administrative levels within the country.

According to the Decree of the President of the Republic of Uzbekistan No. 190 on Measures for Reliable Ensuring of Human Security and Sharp Reduction of Death on Roads [04/04/2022] from 5 April 2022 the Republican Fund "Safe Road and Safe Pedestrian" was established under the Road Traffic Safety Service of the Ministry of Internal Affairs. The proposed sources of the Fund's resources are fines, fees and payments collected in the field of traffic management; funds allocated annually from the budget for individual activities for the operational and installation units on the basis of programs; income from placing temporarily free funds of the Fund on deposits in commercial banks; grants allocated by state, foreign and international organizations; sponsorship and charitable funds of individuals and legal entities; loans provided by international financial institutions and banks; other means not prohibited by legislative acts. According to the Decree it should be determined that the funds are used in a targeted manner exclusively for:

- acquisition of technical means of traffic management, their spare parts, structures and building materials intended for installation, as well as special paints
- financing the application of road markings in cities and other settlements, the installation, replacement, storage, dismantling of technical means for traffic management and providing them with maintenance
- strengthening the material and technical base of operational and installation units, including providing modern special technical equipment, introducing additional staff for a certain period, based on the scope of work, as well as attracting specialists on a contractual basis, introducing a system of monthly and one-time material incentives for their employees, workers and employees
- study of advanced foreign experience in the field of road safety, financing of projects in the direction of road infrastructure development
- financing measures to create material, technical and educational bases aimed at developing basic knowledge of the rules of the road among pupils of preschool educational organizations and students of general secondary educational institutions subordinate to the Ministry of Preschool Education and the Ministry of Public Education, respectively, as well as the establishment of road signs and road markings at sites for practical training of children in the rules of the road in mahallas.[39]

One of the recent developments is that city authorities are given the right to install special automated photo and video software-technical devices that record violations of traffic rules on roads on their territories. Thirty per cent of the amount of the fines for the violations recorded through these software and technical means will be directly transferred to the local budget, and these funds will be spent on digitalization of traffic management, development of road infrastructure, as well as additional staff of road patrol service personnel.[40]

In Uzbekistan, funding for road safety initiatives and activities is insufficient. While road safety is articulated as a priority issue, in practice, the safety aspects of road and transport projects are often forgotten when roads are being reconstructed and designed and when budget proposals are being compiled. In Uzbekistan, where the road safety management capacity requires further improvement, new funding schemes should be established to implement road safety action plans. Separate road safety budget lines are uncommon but should be introduced. Several types of user fees could provide a regular and dedicated funding source for road safety, such as charges for services like road-worthiness testing, driver training and testing, driving permits and heavy goods vehicle operator certificates. Some countries levy a fee on vehicle insurance premiums to fund road safety programs. This could be an additional source of funding, as the number of motor vehicles steadily growing.

The Government should encourage increased funding to road safety and better use of existing resources, including through ensuring a road safety component within international multi development bank-financed road infrastructure projects.

[39] https://lex.uz/en/docs/5937577

[40] https://uza.uz/ru/posts/o-merax-po-nadezhnomu-obespecheniyu-bezopasnosti-cheloveka-i-rezkomu-sokrascheniyu-sluchaev-smertnosti-na-avto-mobilnyx-dorogax_361200

3.1.5. Research and development and knowledge transfer

The research, technical support and knowledge transfer underpin the road safety performance and ensure that this sector is well-supported. This vital institutional management function has guided the design and implementation of national strategies that have sustained reductions in road deaths and injuries, in the face of growing mobility and exposure to risk.[41] It aims to produce a cadre of international, national and local professionals who can contribute research-based approaches and knowledge to road safety policy, programs and public debate. Decree of the President of the Republic of Uzbekistan No. 5647 "On measures to radically improve the system of public administration in the field of transport" [01/02/2019] includes the establishment of a centre for the study of transport and logistics development problems under the Ministry of Transport of the Republic of Uzbekistan, with a total limited number of 15 employees, financed from the state budget; and provides the list of research institutes and educational institutions and other organizations under the control of the Ministry of Transport of the Republic of Uzbekistan including: The Research and production centre "Uzavtotranstehnika"; The Institute of Advanced Training and Retraining of Motor Transport Workers; Nukus Automobile-Road and Service Vocational College; Andijan Transport and Service Vocational College; Samarkand Automobile and Road Vocational College; Specialized organizations that provide passenger transportation (including international) and cargo transportation services in cars, as well as transport-logistics, construction, restoration and repair of bus stops (13 units in total).[42]

Up to 100 students graduate annually from the Tashkent State Transport University, which was founded in 2020 and headquartered in Tashkent. The university includes 39 departments and nine faculties, including the Faculty of Highway Engineering, the Faculty of Motor Transport Engineering, the Faculty of Transport Systems Management and the Faculty of Civil Engineering.[43]

The Kimyo International University in Tashkent trains highly qualified bachelors and masters. About 20 students are expected to graduate in 2022. It offers to students and potential students the bachelor's program of Traffic Management.[44]

During the preparation of this Review, it was noticed that academic research and development projects on road safety are scarce. Further strengthening of national capacities requires more regularly research projects, seminars and workshops, and training actions to be implemented.

Several capacity building actions related to road safety have been implemented in the framework of international projects. For example, in April 2019 the workshop that was a part of the CAREC Road Safety Engineering Workshop series was designed to assist road agencies in providing safer roads. The interactive workshop featured practical trainings in blackspot investigation and road safety audit.[45]

In August 2022 the workshop on road safety governance, planning and management to support the National Road Safety Council (NRSC) was organized by ADB for ministries and agencies involved in road safety.[46]

In December 2021, ADB worked with EASST and the National Automobile Club of Uzbekistan (NACU) to deliver a webinar in Tashkent – with an emphasis on designing safe infrastructure for all road users. The webinar, which was based on the EBRD Road Safety Engineering e-learning course, was targeted at local road designers and other relevant stakeholders.[47]

Back in 2020 the World Bank financed "Regional Roads Development" project, with the Republican Road Fund of Uzbekistan as a beneficiary, delivered priority institutional strengthening activities for road sector, among others. A multidisciplinary team of local and international specialists from the partner companies have been providing technical assistance to the Republican Road Fund.[48]

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41 https://road-safety.transport.ec.europa.eu/statistics-and-analysis/statistics-and-analysis-archive/road-safety-management/research-and-development-and-knowledge-transfer_en

42 Decree of the President of the Republic of Uzbekistan dated 1 February 2019, NoUP-5647 "On measures to radically improve the system of public administration in the field of transport". https://lex.uz/docs/4194115

43 https://tstu.uz/?page_id=43382&lang=en

44 https://kiut.uz/en/programs/bachelors-programs/faculty-directions/Traffic-management/

45 https://www.carecprogram.org/?event=road-safety-workshop-uzb-apr-2019

46 http://tashkenttimes.uz/finances/9513-adb-improves-governance-of-the-road-safety-in-uzbekistan

47 https://www.easst.co.uk/building-road-safety-engineering-capacity-in-tashkent/?fbclid=IwAR3ZiXAcokZZ6jGb3KdK4oN9Ii0AcBUXY9HM1M-2lQn-vY9-izhDtWNzfyLM

48 https://irdeng.com/2022/06/08/ird-engineering-provides-capacity-building-activities-on-road-safety-in-the-republic-of-uzbekistan/

The EASST Road Safety Education Pack was translated in Uzbek language. It is a free, global teaching resource that provides stimulating and engaging activities to introduce road safety messages and behaviours to kids. It has been specifically tailored to reflect the risks, challenges, and conditions in low and middle-income countries in an age-appropriate way.[49]

The general lack of specialized training from road safety stakeholders' staff implies the necessary continuation of capacity building and knowledge transfer. The Government should support the establishment of a road safety research centre and collaborate with regional and international institutions to bring best practices to Uzbekistan, as well as building up local capacities.

3.1.6. Monitoring and evaluation

Monitoring and evaluation complete the management loop in a country results-based management system and comprise systematic performance of all the elements of the road safety management system. Periodic monitoring and evaluation of road safety targets and programs is essential to assess performance and to tailor adjustments to be made.

In the national legislation road traffic accident is defined as an event that occurred during the moving of vehicle on the road and caused the death or injury any human, damage to vehicles, structures, cargo or other property[50]. As for a definition of the fatality - a person who died as a result of a traffic accident at the scene of the accident or as a result of it within 30 days, injured person is a person who has been admitted to a hospital for first aid treatment and staying for more than one day due to a traffic accident or is being treated on an outpatient basis after receiving first aid[51].

Collection of statistical road safety data is carried out by the MIA. According to the "Law on Official Statistics" [11/08/2021] State Statistics Committee (SSC)[52] is a leading agency which provide official statistics in all spheres in Uzbekistan. According to publicly available data/statistics published by SSC, numbers of killed and road accidents are the same for all published eight years (see Figure 23). It seems there are misunderstanding or mistypes in such publicly available important figures which should be corrected.

Figure 23

Data published by the State Statistics Committee on the numbers of road accidents and victims

Number of roads accidents

Territories	2014	2015	2016	2017	2018	2019	2020	2021
Republic of Uzbekistan	10,430	10,413	10,265	10,044	8.990	8,092	6,982	10.001
Republic of Karakalpakstan	287	265	340	476	401	400	343	506
Andijan	887	870	782	775	770	766	673	848
Bukhara	414	429	425	423	382	373	339	436
Jizzakh	342	372	370	374	374	351	192	321
Kashkadarya	826	833	816	793	759	681	331	552
Navoi	222	220	241	195	240	234	218	329
Namangan	793	847	912	849	788	803	725	1,082
Samarkand	892	931	979	974	892	851	793	1,129

Number of victims in roads accidents

Territories	2014	2015	2016	2017	2018	2019	2020	2021
Republic of Uzbekistan	10,430	10,413	10,265	10,044	8.990	8,092	6,982	10.001
Republic of Karakalpakstan	287	265	340	476	401	400	343	506
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Bukhara	414	429	425	423	382	373	339	436
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Namangan	793	847	912	849	788	803	725	1,082
Samarkand	892	931	979	974	892	851	793	1,129

Source : https://data.egov.uz/eng/data/6114e246114fbfdc20c354c8, https://data.egov.uz/eng/data/6114e2b9114fbfdc20c354d2

[49] https://www.easst.co.uk/country/uzbekistan/

[50] https://lex.uz/docs/2153413

[51] https://lex.uz/docs/1899292

[52] https://stat.uz/en/

Since 2018 the Traffic Safety Service started publication[53] of some parts of Traffic accident data in own mass-media resources. There is a discrepancy in published data by the Traffic Safety Service and SSC for years 2107-2018. Such discrepancies could lead to lower confidence in the published statistics, thus jeopardizing sound, data driven road safety management.

Table 3
Published data by the Traffic Safety Service and SSC for years 2107-2018

Year/Source	2017	2018	2019	2020	2021
SSC	10,044	8,990	8,092	6,982	10,001
MIA	9,637	8,458	8,092	6,982	10,001
Difference	407	532	0	0	0

Source: Calculated on the data provided by MIA, 2022 and https://data.egov.uz/eng/data/6114e2b9114fbfdc20c354d2

Consistency, coverage, method of presentation of publicly available data should clearly demonstrate systematic approach when publishing key information. Changing the way of presentation of statistics in different years could reduce the possibility for comparing the data, thus analysing effects of some road safety measures implemented (e.g., when analysing the age group of drivers involved in traffic accidents, the age clusters is defined differently).

Data on traffic accidents that occurred in the following cases are not included in the national statistical report:

- inside fenced protected areas with access control
- during motorsports events (competitions, exercises, etc.)
- during execution of agricultural, construction works using tractors or special construction machinery (ploughing, digging, harvesting, collecting agricultural products from the field, loading and unloading, loading and unloading vehicles and self-propelled mechanisms on the trawler, installing poles, supports, etc.)
- in the case of intentional aggression to kill people, harm their health or property (based on the documents of the relevant authorities)
- when committing suicide or acting in a state of mind in which a person cannot respond own action
- during natural disasters
- as a result of violation of the rules of safety of equipment and use of the vehicle (ignition of the engine with the gearbox engaged, when connecting and disconnecting vehicles with trailers, agricultural equipment, etc.)
- explosion, fire in moving vehicles in cases that do not depend on their technical configuration
- in places not intended for road motor vehicles traffic (riverbed, mountain slope, hill, forest, etc.)
- traffic accidents when the driver's heart stopped beating while the vehicle was moving, a victim with a seizure or similar illness threw himself onto the road, etc

First step in registration of road accidents is carried out by the district Police office which is the operational level of the Ministry of Internal Affairs. Each Police office should record following accident-related information in the special registration sealed book:

- Year, month, day, hour when a road accident is occurred
- Complete information about the persons who reported the accident and the medical institutions where victims have been sent
- Name of the city, district and highway and street where the accident occurred
- Brief description of the accident (initial cause and type of accident)
- Complete information on persons injured and killed as a result of an accident (Full names, age, gender)
- Complete information about the vehicles involved in the accident (model, plate number, ownership)
- Information about reporter the accident and full name of duty officer.

[53] https://yhxx.uz/ru/statistics

Here will be collected just preliminary information on the accident. Full information on each accident will be provided in the traffic accident registration form which is base for including to statistical record (database). The content and template of the registration form is approved by MIA.

Medical institutions have to record deaths and injuries in traffic accidents. Existing procedure does not clearly describe how stakeholders mentioned in this Decree should collect, use, share, monitor, control and analyse collected information.

According to Governmental Decree No. 303 on Improving the Recording System of Road Accidents [15/11/2011][54] traffic accidents are recorded by the bodies of the Ministry of Internal Affairs; legal entities whose activities are related to the use of vehicles; specially authorized and local government bodies and other organizations that own public roads, streets of cities and other settlements. Medical institutions also keep records of persons killed and injured due to traffic accidents. However, the legislation does not clearly define the mechanisms of data collection, analysis and sharing. During the preparation of this review, it was observed absence of clear and systematic relations between these agencies on the monitoring of road accident victims within 30 days after accident, or procedures for identifying infrastructural or driver behavioural problems in registered traffic accidents. There are questions related to the uniformity, relevance and reliability of available road accidents data and this makes more challenging to develop evidence-based programs and actions. Furthermore, limited data availability and non-regular publishing significantly jeopardizes possibilities to develop genuine Uzbek road safety research and development capacities. The existing databases related to road accidents in the country are not connected and number of them are inadequate. Substantial work is required to improve and interconnect existing system and data capturing mechanisms. Road traffic crash data of sufficiently high quality could be acquired and processed only if more resources are allocated, national data collection methodology updated (e.g., based on CADaS), more personnel trained, and contemporary digital solutions/data base/GIS introduced.

Government of Uzbekistan tries to assess the performance of local authorities (districts, cities) in improving the state of road safety. For this purpose, the Governmental Decree 415[55] on Scientific and methodological support of road safety, regulation of operational and installation activities on roads and introduction of the practice of maintaining the "Safe Road" index [30/07/2022] was adopted. According to methodology regional traffic safety departments on quarterly base should conduct calculations on the "Safe Road" index for all districts (cities) of Uzbekistan. Assessment will be done based on 29 indicators of two main groups (Annex 1): (i) state of road infrastructure and (ii) compliance of road users' behaviour with traffic rules. Districts based on results will be scored as "green" – good, "yellow" – satisfactory and "red" – bad. Current situations in districts scored yellow and red will be discussed in the quarterly planned meetings of the Governmental Road Safety Committee.

Implementation of assessment of road safety performance is promising idea and it is used in some countries. For further improvement one has to have following in mind:

- The main purpose for conducting of the road safety performance grading is to understand how successful exact district or city is in performing road safety actions. Road Traffic Safety Service in general and its branches in regions are responsible for road safety activities in assigned territory along with local authorities. Implemented index will score Road Policy's performance as well. According to methodology regional Road Police branches are responsible for index calculation which putting them in non-comfortable position to access its own work. In that sense system should be improved to provide independent assessment of all stakeholders and indicators.
- Methodology implemented in Uzbekistan does not consider monitoring of behaviour related road safety indicators like % of speeding; mobile phone use when driving; safety belts and helmets wearing rates; drunk driving etc. In this regard as a good example can be listed Baseline Project on implementation of Road Safety KPIs (Key Performance Indicators) in the eighteen EU countries which already calculate indicators for their national policies, to measure progress and effectiveness of road safety initiatives. This system uses 'Safe System' approach and covers eight areas. A detailed Manual was elaborated to steer data and indicators collection.

[54] https://lex.uz/docs/1899292

[55] https://lex.uz/docs/6136750

3.1.7. Proposed measures and conclusions

Within 4 key areas of work following actions are recommended:

A1.1 To become a contracting party and efficiently implement all core UN road safety conventions

A1.2 Ensure vertical and horizontal coordination between actions taken by designated authorities

A1.3 Empower the Republican Special Commission for Road Safety to deal with strategic issues and monitoring of results

A1.4 Set concrete and measurable targets in road safety strategy and action plan

A1.5 Develop sustainable, domestic funding sources for road safety

LEGISLATION

A1.6 Develop road safety performance indicators and using them to monitor progress and evaluate the impact of enforcement efforts

A1.7 Evaluate the effectiveness of enforcement efforts through data collection and analysis, and use the findings to guide future strategies and initiatives

A1.8 Develop partnerships between stakeholders, such as police, local government, and community groups, to coordinate enforcement efforts and promote road safety

ENFORCEMENT

A1.9 Develop and implement training programs for road safety professionals, law enforcement officials, and other relevant stakeholders to build their capacity in road safety management

A1.10 Encourage knowledge-sharing and collaboration among road safety stakeholders at local, national and international levels

EDUCATION

A1.11 Implement intelligent transportation systems (ITS) to optimize traffic flow, reduce congestion, and improve safety

A1.12 Data collection forms on traffic crashes should be refined based on the CADaS (Common Accident Data Set) standard

A1.13 Technological innovation to reduce environmental impacts, optimise systems' efficiency and reduce the need to travel in the frame of technology

TECHNOLOGY

LEGISLATION

Activity 1.1: To become a contracting party and efficiently implement all Core UN road safety conventions

- Become a contracting party to all Core UN road safety conventions and effectively implement them within the Uzbekistan's legal framework, including two "Core" road safety agreements: The Agreement concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations (1958) and the Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles (1997).
- Continue updating existing road safety legislation and regulations to align with international standards and best practices, especially on speed management and use of safety belts and child restraint system.
- Prepare and regularly update compendium of road safety legislation in force (laws, decrees, regulations, etc) to help road safety practitioners in building better road safety system.
- Ensure that designated authorities responsible for road safety, representatives of the Ministry of Internal Affairs, the Ministry of Transport, the Ministry of Investment, Industry and Trade, the Road Committee, the Regional Hokimiyats, etc are adequately resourced, trained, and empowered implement laws and regulations.
- Strengthen inter-agency and inter-jurisdictional coordination to ensure that road safety measures are effectively implemented at all levels of government. It is required to improve coordination and cooperation of road safety stakeholders, and to increase executive power of the Republican Special Commission for Road Safety.
- Conduct regular reviews and evaluations of road safety laws and regulations to identify gaps, areas for improvement, and emerging issues.

Activity 1.2: Ensure vertical and horizontal coordination between actions taken by designated authorities

- Establish a clear organizational structure and define the roles and responsibilities of each authority involved in road safety management – the Cabinet of Ministers of the Republic of Uzbekistan, the Ministry of Internal Affairs, Ministry of Transport, the Ministry of Investment, Industry and Trade, the Road Committee, Regional Hokimiyats, etc.
- Create mechanisms for regular communication and collaboration among Uzbekistan road safety stakeholders at different levels (national, regional, local) to ensure consistency and alignment in road safety policies and programs.

Activity 1.3: Empower the Republican Special Commission for Road Safety (Commission) to deal with strategic issues and monitoring of results

- Give the Commission a clear mandate, responsibilities, and authority to develop, implement, and monitor the road safety strategy and action plan. Provide active participation of all relevant road safety stakeholders in the Commission activities and decision making.
- Ensure that the Commission has the necessary resources to perform its functions effectively.
- Establish a system for regular reporting and accountability to the Government on the progress of the road safety strategy and action plan.
- Develop and implement regulations and laws that support the work of the Commission and ensure compliance with international road safety conventions.
- Under the Commission umbrella, establish different working groups to prepare analysis, proposals and recommendations related to improvement of road safety system.

Activity 1.4: Set concrete and measurable targets in road safety strategy and action plan

- Developing a clear and concise road safety strategy and action plan that includes specific targets, timelines, responsibilities and performance indicators.
- Regularly monitor and evaluate progress towards achieving the targets, using data and feedback from national institutions and the public.
- Establish a clear system of accountability to the President and the Prime Minister of the Republic of Uzbekistan for achieving the targets, including regular reporting by the Republican Special Commission for Road Safety.

Activity 1.5: Developing sustainable, domestic funding sources for road safety

- Develop and implement policies to establish sustainable funding sources, such as fractions of road safety infringement fines, fees and payments collected (vehicle registration, drivers permit, etc.)
- Create specific road safety budget lines in national budget
- Strengthen the legal and regulatory framework for insurance coverage, including mandatory third-party liability insurance, to ensure that insurance premiums reflect the risk of accidents and provide sufficient compensation to victims. Involve insurance companies in funding of road safety programs
- Ensure transparency, visibility and accountability in the use of road safety funds to build public trust and support for these programs.

ENFORCEMENT

Activity 1.6: Develop road safety performance indicators (RSPI) and using them to monitor progress and evaluate the impact of enforcement efforts

- Develop RSPI to assess and evaluate the effectiveness of road safety activities in reducing road crashes and fatalities.
- Establish a national database to collect, store, and analyse road safety data that can streamline future enforcement efforts (GIS-based, multi RSPI).

Activity 1.7: Evaluate the effectiveness of enforcement efforts through data collection and analysis, and using the findings to guide future strategies and initiatives

- Conduct regular assessments of enforcement programs to evaluate their effectiveness in reducing risky behaviours and improving road safety outcomes.
- Establishing a data collection and analysis system to track the number of traffic violations, citations issued, and crashes to evaluate the impact of enforcement efforts.
- Assess public perception and understanding of road safety laws and enforcement efforts.

Activity 1.8: Developing partnerships between stakeholders, such as police, local government, and community groups, to coordinate enforcement efforts and promote road safety

- Develop partnerships between stakeholders, such as police, local government, and community groups, to coordinate enforcement efforts and promote road safety. This can include regular meetings and joint campaigns to educate the public about road safety and enforce traffic laws.
- Implement community policing programs that involve the public in identifying and addressing road safety issues. This can help build trust between law enforcement and the community and encourage individuals to take responsibility for their own safety and that of others.
- Encourage public reporting of unsafe driving behaviour through hotlines or mobile applications. This can help law enforcement identify and respond to dangerous driving behaviours more quickly and can also help raise public awareness about the importance of road safety.

EDUCATION

Activity 1.9: Develop and implement training programs for road safety professionals, law enforcement officials, and other relevant stakeholders to build their capacity in road safety management.

- To enhance local knowledge and promote cooperation between different road safety stakeholders, a road safety training centre could be established - to facilitate training of officials to foster new skills, enhance road safety research and development projects and promote interdisciplinary decision-making. Training should be conducted by local and international experts and/or academia.
- Develop training modules and materials that are tailored to the identified needs of different target groups. The training should cover topics such as road safety legislation, enforcement, user behaviour, education, and technology.
- Develop a certification program for road safety professionals and law enforcement officials to recognize their competence in road safety management. This program could be linked to career advancement opportunities and could help to build a pool of qualified professionals in the field of road safety.
- Establish partnerships with academic institutions/Universities to develop and deliver academic programs on road safety management. These programs could be tailored to the needs of different target groups, such as undergraduate students, postgraduate students, and mid-career professionals.

Activity 1.10: Encourage knowledge-sharing and collaboration among road safety stakeholders at local, national and international levels.

- Organize regular workshops, seminars, and conferences, peer-to-peer and other learning opportunities for road safety stakeholders to share best practices, experiences, and knowledge.
- Encourage the creation of road safety expert network and forums to promote collaboration and information sharing among stakeholders.
- Establish partnerships with academic institutions and research centres including the Research and production centre "Uzavtotranstehnika"; The Institute of Advanced Training and Retraining of Motor Transport Workers; Nukus Automobile-Road and Service Vocational College; Andijan transport and service vocational college; Samarkand Automobile and Road Vocational College and other specialized organizations to promote research, innovation, and knowledge dissemination in road safety.
- Promote international cooperation and partnerships to share knowledge and experience across borders and regions.

TECHNOLOGY

Activity 1.11: Implement intelligent transportation systems (ITS) to optimize traffic flow, reduce congestion, and improve safety

- Identify the most effective ITS solutions for the context of Uzbekistan, considering the existing road network and infrastructure, traffic patterns, and travel behaviour.
- Develop a comprehensive ITS implementation plan that includes a detailed timeline, cost estimates, and performance indicators, training of relevant stakeholders and establishment of performance monitoring and evaluation system.

Activity 1.12: Data collection forms on traffic crashes should be refined based on the CADaS (Common Accident Data Set) standard.

- Assess the current data collection system including the Governmental Decree No. 303 on Improving the Recording System of Road Accidents [15/11/2011] to identify gaps and areas for improvement.
- Develop and implement centralized and standardized data collection forms based on the CADaS (Common Accident Data Set) standard. Further forms on traffic crashes should be developed to allow electronic data collection through eForms and introduction of GIS coordinates.

- Train relevant stakeholders including the Ministry of Internal Affairs, Ministry of Health and State Statistics Committee on how to use the new data collection forms.
- Develop data analysis tools to better understand the causes and patterns of road crashes.
- The Ministry of Internal Affairs, Ministry of Health and insurance companies' records on road accidents should be cross checked and stored in a single database.

Activity 1.13: Technological innovation to reduce environmental impacts, optimise systems' efficiency and reduce the need to travel in the frame of technology.

- Develop and implement advanced traffic management systems that use real-time data to optimize traffic flow and reduce congestion, can communicate with drivers and provide real-time information on road conditions, hazards, and traffic congestion, thereby improving safety and reducing emissions.
- Develop and implement technologies that can automatically detect and report traffic violations, such as video surveillance systems. This can help deter dangerous driving behaviours and improve overall road safety.

3.2. Safer roads and network

They say that it is good to do a work thinking deep and for long future. Accordingly, if we look at the history of the roads of Uzbekistan, from a geographical point of view, this area has served as an important international corridor connecting Europe and Asia. Khiva oasis is the most concentrated place of important caravan routes in Central Asia, from there the routes spread to the North – Kazalinsk, West – to the shores of the Caspian Sea, South – Ashkhabad, Marv, Bukhara and East – Jizzakh and Tashkent. Bukhara was a particularly important centre of caravan routes in the desert. These connecting roads were mainly dirt and stone roads. By 1928, the construction of the first black-surfaced roads began. After the Second World War, by the 1950s, the gravel roads were eliminated. All population centres, district and regional centres, railway stations, airports and the capital city of Tashkent were connected with all-weather roads. While the Republic of Uzbekistan became independent from the Soviet Union, the road network was fully formed.

Improvements in road infrastructure can help to tangibly reduce the number and severity of road traffic accidents. By giving the road a configuration that is understandable to road users, designers can influence their behaviour. The equipment of the road must allow its safe use by road users of various categories.

Well-designed roads help people to use roads safely and reduce the risk of road accidents. In the event of an accident, forgiving road infrastructure can mean the difference between life and death. Infrastructure that meets the needs of vulnerable road users such as cyclists, motorcyclists, pedestrians, children and the disabled is particularly important in Uzbekistan, as approximately 50 % of fatalities and injuries are pedestrians.

The Law on Motorways [02/10/2007][56] with latest amendments notes following agencies as road authorities:

- the Cabinet of Ministers of the Republic of Uzbekistan
- the Special authorized body
- the State Inspectorate for Quality Control of Road Construction Works under the Cabinet of Ministers of the Republic of Uzbekistan
- local government bodies (Hakimyats)

[56] lex.uz/ru/docs/1254492

Unfortunately, this Law does not precisely define what is the Special authorized body, but from the practice this is The Road Committee (Uzavtoyol). Each body has own assigned roles. Assigned roles of these agencies is provided in following Table 4.

Table 4
Assigned Roles of Authorities

Performing activities	Cabinet of Ministers of Uzbekistan	Special authorized body	State Inspectorate for Quality Control of Road Construction Works under the Cabinet of Ministers of the Republic of Uzbekistan	Local government bodies (Hakimyats)
State administration	+			
Implementation of international transit highway corridors	+			
Development and approval of the List of public roads of the Republic of Uzbekistan;	+	+		
Development, approval of infrastructural development programs	+	+		+
Organization of State control over compliance with the legislation on infrastructure	+			
Play Owner's role		+		
Implementation of technical design, construction specifications, standards		+	+	
Training, professional development		+		
Record keeping of infrastructure		+		+
Conducting of Cadastral Record of infrastructure		+		
Pursuing a unified state technical policy on the implementation of modern approaches		+		
Control of design, construction and maintenance		+	+	+
Participation in the commissioning of completed infrastructural facilities			+	
Implementation of advanced technologies		+		
Implementation of performance indexes for Road's quality			+	
Legislation improvement			+	
Other related activities	+	+	+	+

In the Article 8 of the Law on Motorways [02/10/2007], road categories are classified as follows:

- Public Roads
- City streets and other residential areas
- Company owned or farm roads.

Public roads are state property and are open to all road users. Public roads provide transportation of goods and passengers between cities and other settlements to meet the needs of the population, socio-economic and defence needs of the state. Public roads are divided into International, State and Local roads.

In accordance with the international agreements of the Republic of Uzbekistan, the roads included in the international road network are defined as the International roads based on the Resolution of the Cabinet of Ministers No. 169 on approval of the list of public roads of the Republic of Uzbekistan [05/08/2010].

Table 5
Categories of Public Roads

Economic importance of the road	Public Road category	Estimated traffic intensity, rescaled as each light vehicle per day
International and State Public Roads	Ia (Trunk roads)	More than 14,000
	Ib (Roads)	More than 14,000
	II	6,000 – 14,000
	III	2,000 – 6,000
Local Roads	IV	200 - 2000
	V	Up to 200

Source: https://shaharsozlik.uz/service/gradostroitelnye-normy/

The roads that provide transportation between the administrative centres of the regions and districts of the Republic of Uzbekistan, cities subordinate to the region, cultural and industrial centres, and the roads that connect these centres with roads of international importance, airports, railway stations, ports and docks, as well as with neighbouring countries are included in the State roads.

Roads connecting the administrative centres of districts with towns, villages as well as with roads of state importance, are included in the category of Local roads. The total length of road network in Uzbekistan is presented in the Table 6.

Table 6
The total length of road network in Uzbekistan

#	Name of Roads	Length, km	Percentage
1	Public Roads	42,869	19.4
	International	3,993	1.8
	State	14,203	6.4
	Local	24,673	11.2
2	Farm roads	141,882	64.7
3	Company owned roads	24,745	11.3
4	City streets	9,900	4.6
	Total	**219,396**	**100**

Source: https://mintrans.uz/useful-articles/o-zbekiston-respublikasidagi-avtomobil-yo-llari-to-g-risida-ma-lumot

According to the Decree of the President of the Republic of Uzbekistan No. 4954 on measures to further improve the road management system [14/02/2017] public roads construction, management and maintenance was given to the Road Committee.

According to the Decree of the President of the Republic of Uzbekistan No. 5647 on measures to radically improve the system of Public Administration in the field of Transport [01/02/2019] the State Committee of Roads of the Republic of Uzbekistan was included in the Ministry of Transport and renamed as the Road Committee under the Ministry of Transport.

The Road Committee is a specially authorized body in the field of roads and oversees the design, construction, reconstruction, repair, maintenance and operation of public roads.

Domestic roads are owned by the state or by legal entities and individuals. Domestic roads include roads serving technological purposes, access roads, service roads, patrol roads and other similar roads.

The streets of cities and other settlements are owned by the state and are managed by local state authorities.

According to the Road Committee, the new roads that have been built and put into operation should be repaired every six years, major repairs in 12 years, and reconstruction in 16 years. In a word, according to the established standards, the new road will be built for 16-20 years, and it should serve the population for that period. But unfortunately, due to climatic conditions, and low designed axle load (only seven tons) new sections on national roads are rapidly deteriorating. It is of utmost importance that all negative effects and factors be considered during the design and construction stages of the project to provide long-lasting infrastructure. Furthermore, there is a need to develop national road design standards (for roads and streets) and to consider safety measures at the planning and design stages.

3.2.1. Road standards, road signs and signals and ITS deployment

Design and placement of road signalisation in the Republic of Uzbekistan are done based on GOST, UZDST and ShNK.

The current technical regulatory documents on design, construction, reconstruction of public roads and on road signalisation in Uzbekistan were developed during the USSR, and most of them are technically and meaningfully outdated. The main part of the Interstate Standards (GOST) was recently updated by the Interstate Council for Standardization, Metrology and Certification of the Commonwealth of Independent States (CIS), and it is observed that some of their requirements do not correspond to the conditions and mentality of Uzbekistan. On the territory of the Eurasian Economic Union, as well as on the territory of the CIS, interstate standards are not binding, but applied on voluntary basis. Having all that in mind, the most important design guidelines and standards should undergo an urgent evaluation of road safety aspects. Practices which are recognized worldwide as unsafe (e.g., U-turn passes on motorways, pedestrian crossings on international high-speed roads, open culverts/side drains on the hard shoulder, carriageway with non-defined or too large width of traffic lanes, etc) should be immediately suspended and remedial measures on national roads launched.

Newly installed road signs are mostly with retroreflective coating, but old plain coated road signs are still available. An analysis of compliance of the Uzbek Road Signs and Signals Catalogue with the Convention on Road Signs and Signals (1968) should be done (e.g., promote use of traffic signal and dedicated lanes to provide safe left-turn on intersections, standardize size of letters on direction signs on international roads, adjust Sign 5.46 to be in line with other signs from the Catalogue) to provide consistency and implementation of international best practice on Uzbek roads.

Guideposts installed on the side of the road are still used in reinforced concrete type. Recently, it has become a trend to install metal road restraint systems on the median. Even the existing reinforced concrete barrier (New Jersey) is being removed and replaced with a metal barrier.

Reinforced concrete curbs are mainly used on the city streets, and recently, due to the poor design standards and high speed, there were number of cases that vehicle passed in opposite direction lanes and collided with the oncoming traffic with deadly consequences.

Full scale deployment of Intelligent Transport System (ITS) in the Republic of Uzbekistan is delayed. In the last years, cameras were installed at the main intersections of the city of Tashkent. But for now, these cameras are only used to detect violations. In case of morning and evening traffic jams in the city, the Traffic Safety Service officers are forced to stand at the intersections and regulate the movement of vehicles. Avoiding traffic jams and improvement of traffic management will be much easier using ITS solutions.

3.2.2. Design, construction and maintenance standards and guidelines

Currently, the rules and procedure for the development of the project are implemented in accordance with the Resolution of the President of the Republic of Uzbekistan No. RP-3857 dated 16 July 2018 "On measures to improve the efficiency of preparation and implementation of projects with the participation of international financial institutions and foreign governmental financial organizations" and SNK 1.03.01-16 "Contents, procedure for development, coordination and approval of design and estimate documentation for capital construction of enterprises, buildings and structures" (Approved by Order of the State Committee of the Republic of Uzbekistan for Architecture and Construction dated 16 May 2016 No. 65.)

This ShNK establishes requirements (mandatory and recommended) for the composition, procedure for the development, coordination and approval of design estimates for construction, major repairs, expansion, reconstruction, modernization and technical re-equipment of existing enterprises (hereinafter - capital construction), maintenance and is mandatory when designing facilities under construction at the expense of all types of investments and sources of financing on the territory of the Republic of Uzbekistan.

ShNK is designed to guide customers (investors), public administration and supervision bodies, enterprises, organizations, associations, and other legal entities (including foreign ones) participating in the investment process.

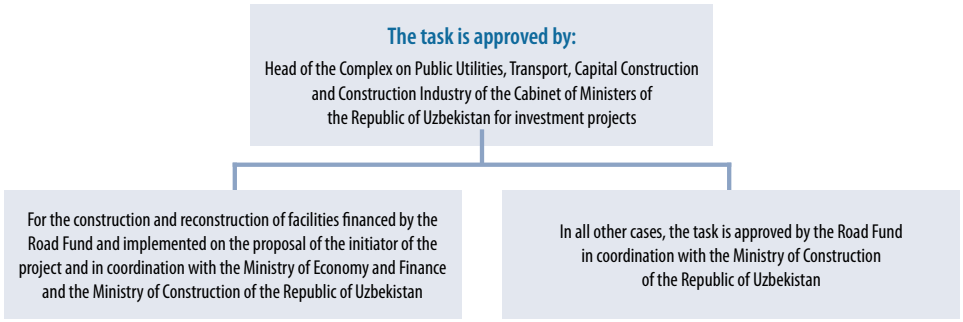
The following terms are used in this ShNK

- preliminary feasibility or prefeasibility study - a document justifying the choice of rational placement and the most effective technical, organizational and economic solution for implementation, the marginal cost of the project, including the cost of technological equipment, based on consideration of options and possible schemes for its implementation.
- the final feasibility study or feasibility study is a document that establishes the final, most effective technical, organizational and financial and economic solutions for the implementation of an investment project, determined based on competitive bidding.
- a detailed design is a document consisting of an approved part with the main technical and economic indicators with a marginal cost and working documentation.

Procedure for approval and approval of the design assignment

The content of the terms of reference for road design is established by the Road Fund in coordination with the Ministry of Construction and the Road Committee.

Figure 24
Procedure for approval and approval of the design

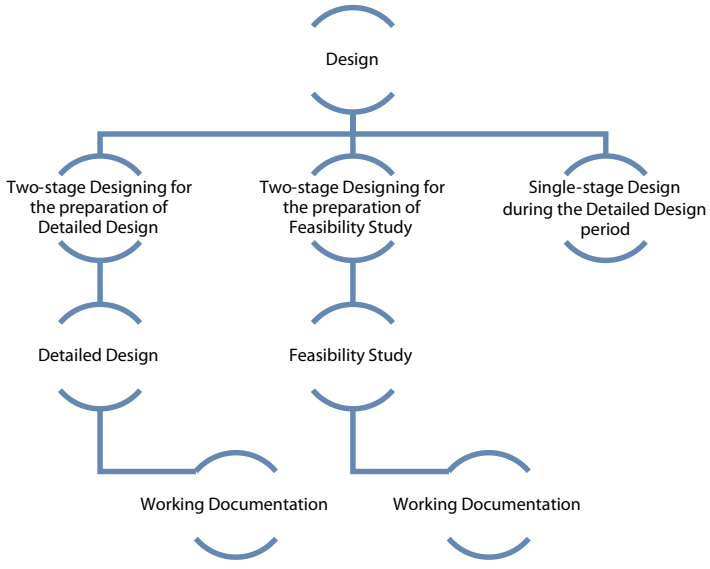


The project design documents developed by the project organization are checked and approved only by the Traffic Safety Service and their representatives in the region. During the road maintenance works, changes are made to these technical solutions by the representatives of the Traffic Safety Service and their representatives in the region.

The procedure for the development of project documentation

- Depending on the conditions of the project implementation, the project documentation is developed in the following sequence:

Figure 25
Types of design by stage of the project



The design documents/project documentation are subject to state examination in accordance with the established procedure for compliance with the requirements of building codes and rules for strength, durability, compliance with approved fire safety standards and rules, labour and environmental protection requirements, the quantity and cost of construction.

Currently, there are no official national and uniform standards for road design, in some cases different standards of other countries are used for road design on the international and local network.

The development and approval of regulatory documents for civil engineering works is mainly carried out by the ICT development Centre of the Ministry of Construction, and the applicable regulatory documents can be found at the following link https://mc.uz/gradostroitelnye-normy/.

Also, the development of technical standards for the design, construction, reconstruction, repair and maintenance of public roads is carried out by the Tashkent Institute for Design, Construction and Operation of Roads under the Road Committee.

Currently the following regulatory documents (standards) are in use:

- ShNK 2.05.02-07 "Automotive roads", is used mainly in the design of roads.
- ShNK 3.06.03-08 "Motorways" is used as the main document for the construction of roads.
- In the design of bridges and artificial structures ShNK 2.05.03-12 "Bridges and pipelines".
- ShNK 2.07.01-03 Shaharsozlik. Development planning for urban and rural settlements
- MShN 24-2005, "Technical rules for the repair and maintenance of roads", Tashkent, 2007 - These departmental town-planning norms apply to public roads and establish the basic requirements for the transport and operational condition of public roads.

Another thing that we need to pay attention to is that there are no regulatory documents on reconstruction and rehabilitation of roads. Public road network has been formed in the Republic, and now and in the future, there will be a greater need for road reconstruction and rehabilitation.

On many road types, the design regulations and standards define only road safety principles without necessary details. This is a huge burden for road managers in terms of making the right engineering decisions and ensuring assets are built and maintained for their original purpose.

There is a need to develop national road design standards (both roads and streets) and introduce safety practices in the planning and design phases. More attention should be paid to the study of ways to ensure the safe operation of the road network under specific operational and traffic conditions.

Local and secondary road rehabilitation projects/schemes should take advantage of opportunities to minimize access to direct roads, maintain relatively low speeds when such roads pass through settlements and establish a road hierarchy. In addition, improved crash data collection and the introduction of comprehensive black-spot analysis tools, combined with a nationally accepted definition of a high-risk road section, will allow scarce resources to be directed to the most cost-effective measures.

Particular attention should be given to construction, reconstruction and rehabilitation projects on international and state roads financed by the Multi Development Banks. These projects, having in mind commitment to promote road safety in all projects financed by MDBs[57], should be a catalyser of modernization of legal framework, design guidance, and standards for building and maintenance of public roads.

3.2.3. Road infrastructure safety management

As we mentioned above, road safety audit and inspection procedures are not applied in Uzbekistan. But recently, several things are being done by the state and authorities, for example:

By the Decree of the President of the Republic of Uzbekistan No. 27 on the approval of the concept of public safety of the Republic of Uzbekistan and measures for its implementation [29/11/2021], the Centre for the Study of Road Safety Problems (the Centre) was established in the structure of the Traffic Safety Service of the Ministry of Internal Affairs.

[57] MDB Road Safety Guidelines, 2014 (https://scioteca.caf.com/handle/123456789/413?locale-attribute=en)

The Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 415 [30/07/2022] defines the specific tasks of the Centre, which are:

- organization and coordination of research on the causes of road accidents
- implementation of targeted fundamental, applied and innovative research projects in the field of road safety
- participation in the improvement of legal, informational, analytical and technical regulation in the field of road safety
- identification of the initial factors that allow violations and road accidents in the field of road safety, and the development of measures to eliminate them
- study of legal, engineering, technical, informational, organizational and methodological problems of increasing the level of protection of road users from road accidents
- methodological support for the activities of the Traffic Safety Service, including the development of modern methods
- study of foreign best practices in the field of road safety and development of proposals for its implementation in practice
- conducting scientific research to identify factors and conditions that contribute to the occurrence of road accidents, scientific substantiation of priority areas for the prevention and reduction of mortality and bodily injuries, development of scientific foundations for eliminating urgent problems in the activities of the Traffic Safety Service
- development of scientifically and practically substantiated proposals for improving the organization of road traffic, studying traffic flows, identifying road sections (accident hotspots) with a high probability of occurrence of road accidents and their elimination
- proposals for the scientific study and improvement of the work carried out by the operational and installation units of the Traffic Safety Inspectorate in the field of traffic management
- scientific and methodological support of the activities of the State Road Traffic Safety Department, including the development of modern methods
- conducting scientific research on problematic issues of traffic management, publishing scientific articles on this topic in republican and international scientific journals, participating and organizing scientific conferences.

From 5 April 2022, the Republic fund "Safe Road and Safe Pedestrian" was created under the Ministry of Internal Affairs without the establishment of a legal entity.

As of 1 July 2022, the practice of maintaining "Safe Road" index was envisaged in all districts (cities) of the Republic. Based on the index indicators, districts (cities) are divided into "green", "yellow" and "red" categories by state of road safety.

Within the Road Committee, the unitary enterprise "Centre for organizing and monitoring the safe movement of vehicles on roads" has been established on 13 July 2021.

By Presidential Decree No. 190 [04/04/2022] the Republic of Uzbekistan established the Republican Special Commission for Road Traffic Safety. The Commission, along with its territorial special committees, was tasked with evaluating the state of road infrastructure and compliance with traffic regulations in various regions of Uzbekistan, based on 29 indicators at the end of each quarter. The execution of the commission's decisions regarding road safety is mandatory for all government ministries, agencies, and local authorities, with one example being the reduction of the established speed limit in urban areas to 60 km/h.

In the Republic of Uzbekistan, apart from some pilot attempts, independent road safety audit and road safety inspection is not carried out.

Several capacity development activities on RSA/RSI were organized by MDBs last few years:

- The seminar, organized by the Road Committee and the Asian Development Bank on 22 November 2018, was dedicated to the International Road Assessment Program and discussed issues on the intelligent transport system of Uzbekistan. The purpose of the seminar was to study the assessment of road safety, the process, preparation of investment plans to improve road safety and the introduction of intelligent transport systems in the road industry.
- From 19 to 24 December 2022, IRD Engineering conducted a training on road safety audit for employees of the agency "Avtoyolinvest" under the Road Committee, which is funded by the World Bank. The main purpose of this seminar, which received wide coverage in the media, was to create a new opportunity for Uzbek engineers and specialists to expand their knowledge and experience in conducting road safety audits and case studies in the field of road safety design.
- A mission of experts from the Asian Development Bank (ADB) was held in Tashkent from 22 to 26 August 2022 to support the newly established Republican Special Commission for Road Safety in Uzbekistan. ADB experts shared presentations on the state of road safety, actions to reduce deaths and injuries as a result of accidents, the development of a national road safety policy, road safety management actions and group negotiations.

Anyhow, national legislation does not recognize Road Safety Audit and Road Safety Inspection procedures. However, the Traffic Safety Service has developed a draft "Law on the organization of traffic".[58] In the draft law, the concept of Road Safety Audit is given as "conducting an expert examination for compliance of road traffic management projects with the requirements of this Law and road safety". The need to develop this legal act is justified by the fact that the condition of roads today does not meet the requirements of ensuring uninterrupted movement of an ever-growing number of vehicles. There is also no proper organization of traffic for passengers, pedestrians and cyclists who are road users. The proposed draft law defines the basic principles of traffic management, public administration in the field of traffic management, the rights and obligations of the road owner and manager, general requirements for traffic management, monitoring of traffic, ensuring the effectiveness of traffic management. In addition, it provides requirements for parking places, the procedure for organizing traffic in work zones/construction sites, public participation in the implementation of traffic management measures, the procedure for developing projects and general requirements for documentation on traffic management, as well as conducting scientific research in this area. To date, the draft Law has passed all stages of discussion, after which the Draft was adopted by deputies on 20 September 2022.

The draft law has allocated a separate chapter to the road safety audit, which provides that road traffic projects are subject to audit for compliance with road safety requirements. The audit is carried out by specially authorized state bodies independently or with the involvement on a contractual basis of a business entity authorized to conduct such an audit. Based on the results of the audit, a conclusion is drawn up, which indicates the compliance or non-compliance of the traffic organization with the requirements of this Law and road safety. If, as a result of the audit, it is established that the road traffic project does not meet the requirements of this Law or road safety, then appropriate changes should be made to the project and redesign has to be carried out.

3.2.4. Speed management

Excessive speeding is a main factor to fatal outcome in most crashes. It is a complex road safety issue which involves public attitude, driver behaviour, vehicle performance, road design and characteristics, posted speed limits and speed management strategies.

Each road has its own design speed, justified by the specifics of road function in national road network, traffic volumes and the road surrounding.

[58] https://regulation.gov.uz/ru/d/53953

The main parameters and characteristics which determining the transport and operational road conditions are:

- geometric parameters, which include the width of the carriageway and the edge reinforced lanes, the total and reinforced width of the shoulders, longitudinal slopes, radii of curves in plan and profile, slopes of bends and visibility distance.
- the axle load and condition of the road surface of the carriageway and roadsides
- evenness and adhesion of roadway and roadside coverings.
- condition of the roadbed
- condition and operability of the drainage system
- dimensions, load capacity and condition of bridges, overpasses, tunnels and other artificial structures
- condition of elements of engineering equipment and road construction

The main parameters of road should be defined based on the road function and should be self-explanatory for all road users. Currently, functional classification of roads/streets and road/street parameters are not in line with requirements of modern, safe and sustainable transport system. Speed limits in urban areas are too high, width and other parameters of streets/roads are too high, etc. which is resulting in higher speeds and more road accidents and fatalities. Speed limits for urban areas, school areas and shared roads should be reviewed and revised as appropriate. Thus, the safety performance of roads should be reviewed or evaluated in respect of speed limits. It's important to review the functional classification and speed management system in Uzbekistan to determine if roads and roads network support and encourage safe speed for all road users.

Speed management and control

According to the Resolution of the Cabinet of Ministers No. 172 [12/04/2022] the driver must control the speed of the vehicle, considering the speed of traffic, the nature and condition of the vehicle and cargo, road and weather conditions, as well as visibility in the direction of movement. The speed of the vehicle must allow the driver to be in constant control of the vehicle.

If there is a danger that the driver can detect during movement, he must reduce the speed of the vehicle to the extent that he can ensure a complete stop or take measures to bypass the obstacle without causing danger to other road users.

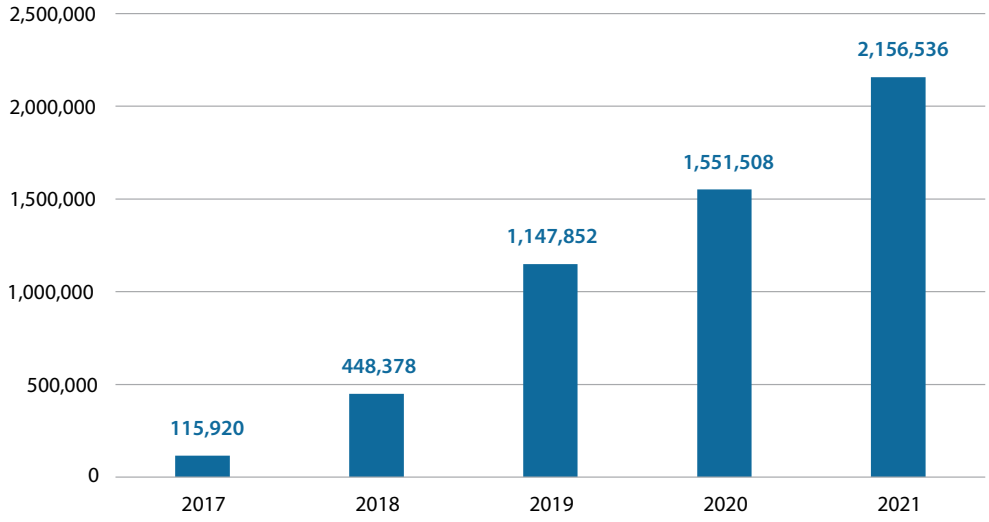
Current speed limits for different vehicle types - Outside the settlements:

- for passenger cars and trucks with a permissible full weight not exceeding 3.5 tons - speed limit of 100 kilometres per hour
- for intercity buses and minibuses – speed limit 90 kilometres per hour
- other buses, cars with trailers, motorcycles, trucks with a permissible full weight of more than 3.5 tons – speed limit 80 kilometres per hour
- trucks with trailers – a speed limit 70 kilometres per hour.
- trucks carrying people in the trunk – speed limit 60 kilometres per hour
- vehicles transporting a group of children – speed limit 60 kilometres per hour
- vehicles transporting dangerous, heavy and oversized cargo, moving in an organized group, are allowed to move without exceeding the speed allowed by the Traffic Safety Service.

The number of road accidents and number of killed and injured in the Republic of Uzbekistan in the period from 2017 to 2021 is given in the Figure 11.

The trend of the number of persons brought to administrative and legal responsibility due speeding in period 2017-2021 is presented in the Figure 26. It could be noticed that number of persons prosecuted rose for almost 20 times over 5-year period.

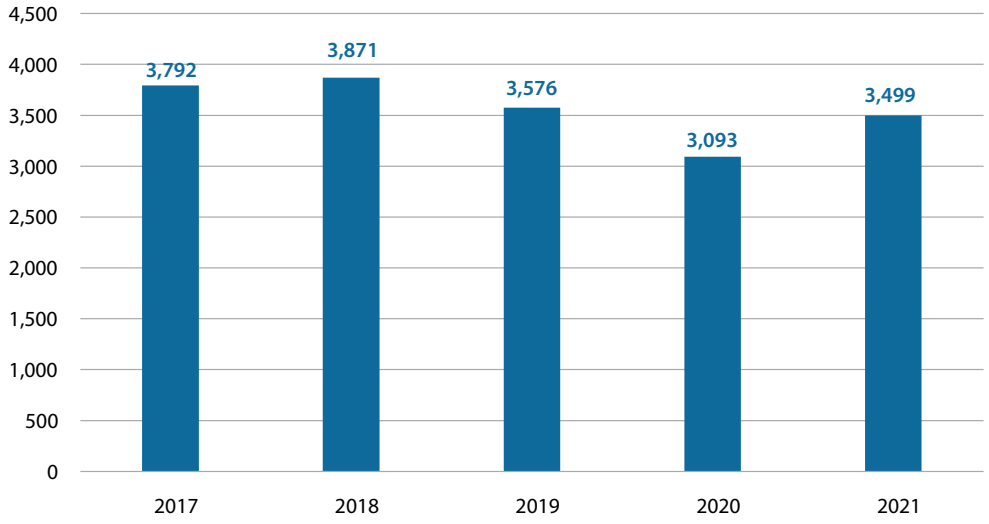
Figure 26
Number of prosecuted due to speeding



Source: MIA, 2022

The trend in the number of accidents caused by speeding in the period of 2017- 2021 is presented in the Figure 27. Speeding is the cause of more than 30% of fatal accidents and this requires adjusting speed limits, particularly in urban areas, to best international practice.

Figure 27
Number of accidents due to speeding

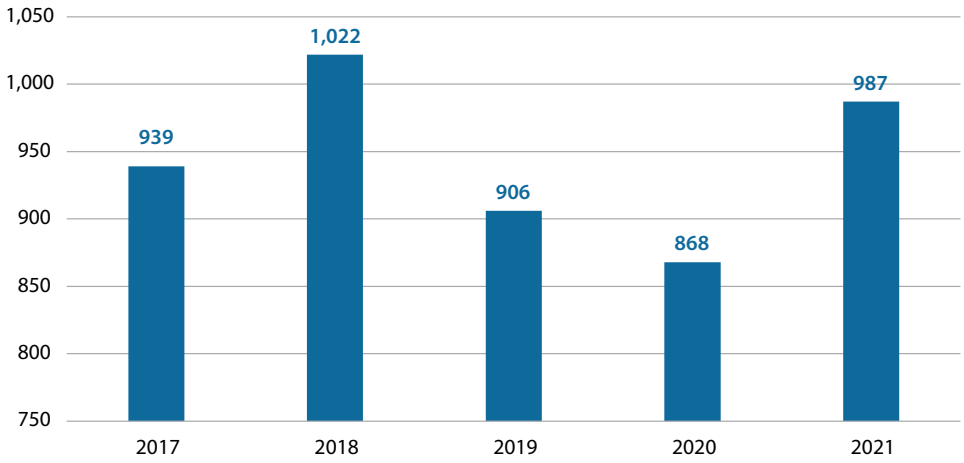


Source: MIA, 2022

The trend of persons killed as a result of accidents caused by speeding in the 2017-2021 are presented in the Figure 28. The number of people killed in accidents due speeding is not declining even though number of people prosecuted rose 20 times. The raises the question of the reliability of data on prosecuted persons which are provided – usually much tougher enforcement is giving immediate results in less people killed in short to mid-term.

From 1 May 2022 fines for traffic violations are increased in Uzbekistan: driving without a permit – 330,000 soums; passing on red traffic light signal – 660,000 soums; talking on the phone – 990,000 soums; drunken driving– 8,350,000 soums[59].

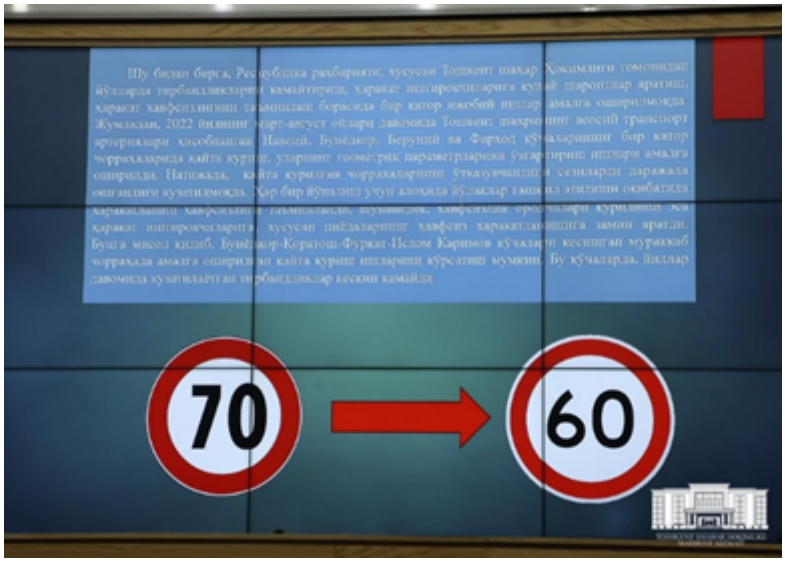
Figure 28
Number of killed due to speeding



Source: MIA, 2022

According to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 140 [03/04/2023] the allowed speed in cities Nukus and Tashkent, centres of regions and districts, as well as in the territories of the cities should not exceed 60 km/h. Previously, this speed limit was 70 km/h.

Figure 29
The proposal to reduce the speed in the cities and residential areas of Uzbekistan from 70 to 60 km/h



[59] https://kun.uz/en/24118581

It can be said from foreign experience that there are not many countries in the world where the maximum permitted speed in urban areas is 70 km/h. In several CIS countries (all of them with a poor road safety record), Armenia, Georgia, Azerbaijan, the maximum permitted speed in residential areas is 60 km/h. In Ukraine, from 1 January 2019, as one of the measures to reduce the number of road deaths, the maximum speed was reduced from 60 to 50 km/h. The speed limit in almost all European countries is 50 km/h, in London, United Kingdom it is 48 km/h.

According to research, speeding is related to the probability of an accident and its grave consequences. For example, a 1% increase in speed increases the probability of a fatal accident by 4%, and the probability of a serious accident by 3%. Pedestrians are also more likely to die as a result of being hit by a car. At a speed of 65 km/s, the probability of fatal outcome is 4.5 times higher than at a speed of 50 km/s. When driving at a speed of 65 km/h, the probability of death of the driver and passengers as a result of a side impact is 85%.

By reducing the average speed by just 5%, fatal traffic accidents can be reduced by almost 30%. Therefore, the higher the speed, the longer is stopping distance, which increases the probability of a traffic accident. A car driving at a speed of 70 km/h on a dry road has to pass 18-20 m to manoeuvre in response to a situation, and to come to a complete stop, he needs to pass minimum 47 m.

Along with the adoption of speed limit laws, their enforcement, road design, and vehicle technology implementation are also important. In the 2015 WHO Global Road Safety Report, 97 out of 180 participating countries have legislation to limit the speed to 50 km/h in urban areas, however, only 27 countries (15%) gave a positive assessment of the control of speed limit laws (8 and above in 10 points system).

3.2.5. Road work zones

Officials and other persons responsible for road construction, repair work and maintenance are required to ensure road safety in the work zones. Such places, as well as non-working machinery and road vehicles, construction materials, and equipment, which cannot be removed from the road, should be protected with road restraint, marked with appropriate road signs, guiding and blocking devices, and in the dark and in poor visibility conditions, with additional orange or yellow light signals. Safe movement of vehicles and pedestrians should be restored as soon as possible after completion of road works.

Every road construction project should have a traffic management plan. The plan should consist of a temporary traffic control plan to protect workers and road users by safely conducting traffic around or through the work zone. Additionally, traffic control plan for inside the work zone that manages the flow of heavy equipment, construction vehicles, and workers should be in place.

In Uzbekistan traffic management plan should be prepared according to the Instruction MKN 37-2007 Instructions for the organization of traffic and protection of road work sights.

When drawing up traffic management schemes in places where road works are carried out, the following requirements must be met:

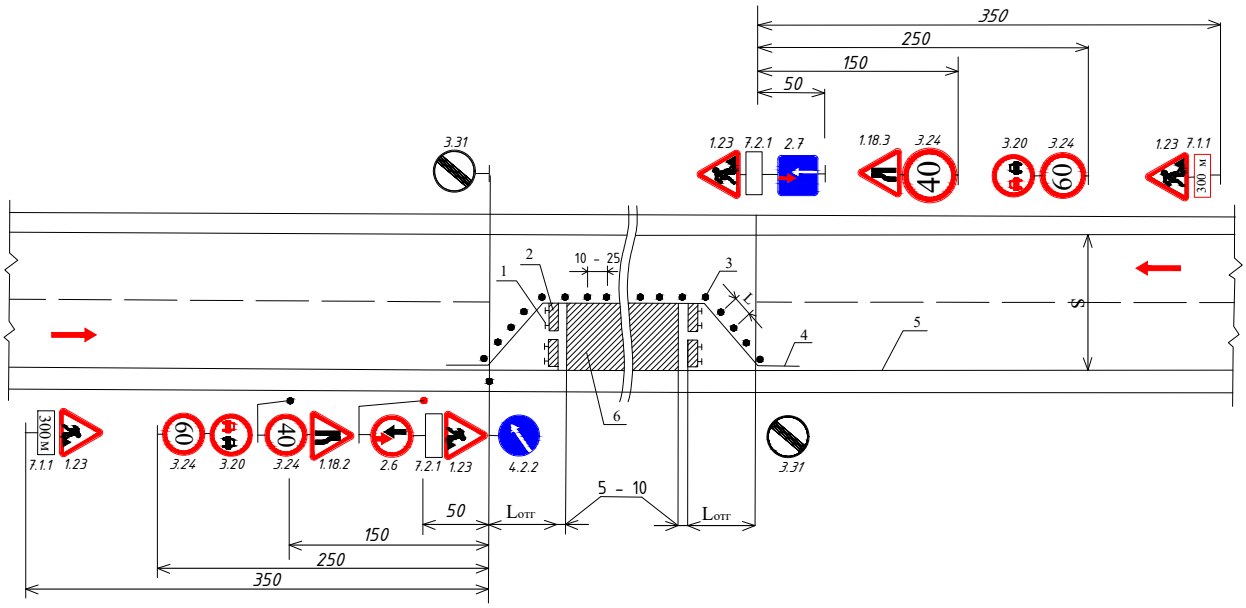
- warn drivers of vehicles and pedestrians in advance of the danger caused by road works
- clearly indicate the direction of detour of the obstacles on the roadway, and when setting up a detour of the repaired section, its route
- create a safe mode of movement of vehicles and pedestrians, both on the approaches and on the sections of road works themselves.

This regulatory document contains more than 30 examples of the placement of technical means of traffic management in places where road works are carried out in different conditions.

The instruction defines the procedure and methods of organizing the movement of vehicles and pedestrians in work zones, ensuring the safety of both those working on the road and all road users.

Figure 30
Organization of the road work zone

The scheme organization the movement and fencing places roadworks



Legend:

1 - *The guide cones and reflective elements*
2 - *The barriers*
3 - *The guide cones*
4 - *Marking of road movement*
5 - *The edge of the road*
6 - *Area roadwork*
7 - *S - width of road movement stripe*
8 - *L-The distance between the cones*

Notes:
1. This scheme is designed in accordance with MKN 37-2007 "Instructions for the organization of movement and fencing production work places" and is recommendatory character.
2. The road organization before the start of road works should make schemes organization movement vehicle, geocoded. The scheme movement organization and fencing places of production work must be approved by the head of traffic organization and previously agreed with bodies Public service road safety (Sec. 1.3 MKN 37-2007).
3.At the boundaries of the site roadworks should be set information boards indicating the name of the construction company, surname responsible person etc. (Sec. 1.6 MKN 37-2007).
4. All dimensions are in meters.

During the period of construction and repair, traffic management is carried out according to the above scheme, and in many cases traffic management plans are not fully deployed by the Contractors. In number of cases road works are not marked at all and left without traffic management plan.

Inadequate installation of road signs and signals, especially in the evening, or lack of continuous power supply for traffic signals, leads to many dangerous situations. Currently mobile warning road signs and lights are rarely used in work zones in Uzbekistan.

Figure 31
Road signs in work zone

Setting up and signposting of appropriate speed limits are necessary in road work zones. It should be paired with tough enforcement to deter drivers from exceeding the speed limits.

3.2.6. Proposed measures and conclusions

Within 4 key areas of work following actions are recommended:

A2.1 Update national legislation, standards and guidelines for road construction, reconstruction and maintenance

A2.2 Introduction of functional classification of roads and streets

A2.3 Introduction of RSA and RSI procedures with necessary guidelines in the national legislation

LEGISLATION

A2.4 Protection of right-of-way

A2.5 Speed management in urban areas

A2.6 Adoption road safety audits and inspection

ENFORCEMENT

A2.7 Road safety oriented education programmes and training for road designers and engineers

A2.8 Public campaigns to promote construction, operation and maintenance of safe roads

EDUCATION

A2.9 Develop and introduce technology for better traffic management

A2.10 Develop and introduce technology to detect traffic violations and ensure the high probability to detect the violator

A2.11 Ensure that equipment installed in road work zones are in line with approved traffic management plan and with sufficient quality of equipment

A.12 Improve registration of each accident with fatalities by representatives of the Road Committee and municipal road administration

TECHNOLOGY

LEGISLATION

Activity 2.1: Update national legislation, standards and guidelines for road construction, reconstruction and maintenance

- Conduct a gap analysis of national legal framework re contemporary road design practices. Update national legislation to ban highly unsafe design (e.g., U-turn on motorways, open culverts/side drains on the hard shoulder, carriageway with non-defined or too large width of traffic lanes), allow widely used solutions (e.g., introduce left turn lanes with supporting left turn traffic lights (separate left-turn phase), build pedestrian refuge islands on intersections with more traffic lanes, separate bicycle lanes from motor traffic) and deploy contemporary equipment (speed cameras, traffic management, road restraint systems (particularly on highways), etc.).
- Update national standards for road infrastructure development and work zones in line with provisions of the 1968 Vienna conventions, the AGR (European Agreement on Main International Traffic Arteries) and other infrastructure agreements.
- Update national legislation to allow efficient use of contemporary systems for traffic offence detections.
- Accelerate and facilitate the approval and implementation of regulatory documents to update national standards and guidelines.
- Increase research and development activities, provide necessary funds for development and constant update of national standards and guidelines.
- Amend current road safety legislation to lower the general speed limit in urban areas to 50km/h and introduce 30 km/h speed limits in zones with high volumes of vulnerable road users.

Activity 2.2: Introduce functional classification of roads and streets

- Develop functional classification of roads and streets of Uzbekistan in line with requirements of modern, safe and sustainable transport system
- Define clear design parameters for all road types based on functional classification and classify all roads and streets - the hierarchical classification of roads that meet transport demand and needs for all road users in particular vulnerable road users
- Encourage urban planning with mixed land use (work, living, leisure)/15 minutes city to reduce exposure to traffic of road users

Activity 2.3: Introduction of RSA and RSI procedures with necessary guidelines in the national legislation

- Update national legislation to introduce mandatory RSA and RSI at least on the high-level network, designate national authorities in-charge of RSA and RSI implementation and develop guidelines for the implementation of RSA and RSI.

ENFORCEMENT

Activity 2.4 Protect right-of-way

- Based on functional classification of roads provide secondary road network to feed national high-level road network and avoid direct connection from bordering properties

Activity 2.5: Speed management in urban areas

- Speed limit in Uzbekistan needs to be revised, according to the function of the roads. Speed limits for urban areas, school areas and shared roads should be reviewed and revised as appropriate. Speed limit in urban areas should be set to 50 km/h like in all good road safety performing countries.
- In residential areas, which have a living, shopping or work function, school zones and residential areas with high number of pedestrians and cyclists - speed limits of 30 km/h should be introduced, speeding should be discouraged by speed reduction measures such as speed humps, road narrowing etc and strict enforcement.
- Simultaneous implementation of engineering and speed enforcement programmes in urban areas

Activity 2.6: Adoption of road safety audits and inspection

- Update national legislation with provisions on mandatory road safety audit in different stages of road design and road safety inspection after completion of construction and reconstruction of road (at least for high-level network).
- Update national legislation to introduce mandatory certification of legal entities and individuals involved in training and certification of auditors and inspectors.
- Update national legislation to introduce mandatory certification of auditors and inspectors.
- The Road Committee and municipal road agencies to provide necessary resources for road safety audits and inspections

EDUCATION

Activity 2.7: Road safety-oriented education programmes and training for road designers and engineers
Update university curricula with road safety courses dedicated to safe road design, self-explanatory roads, road infrastructure safety management tools.

- Introduce training for certification of auditors and inspectors.
- Introduce training for road safety practitioners (engineers, designers, enforcement, etc) to explain design principles and benefits of safe roads.
- Explore possibilities to create a centre for training of road designers and road safety experts based on international best practice and Peer-to-Peer learning programs on safe roads.
- Introduce training for enforcement officers on use of contemporary systems for detection of traffic offences

Activity 2.8: Public campaigns to promote construction, operation and maintenance of safe roads through education and marketing initiatives.

- Carry out campaigns to build public support to construction and maintenance of safe roads.
- Constantly inform public on benefits and explain all dilemmas related to introduction of 50 kmph speed limits in urban areas and 30 kmph in school and mixed zones.

TECHNOLOGY

Activity 2.9: Develop and introduce technology for better traffic management

- Deploy contemporary traffic management centres on national road network and in urban areas to allow better use of existing transport infrastructure and prioritize public transport.
- Allow centralized change of traffic lights regime and speed limits depending on traffic situation.

Activity 2.10: Develop and introduce the technology to detect traffic violation and ensure the high probability to detect the violator

- Detection of high-risk road sections (with high number of accidents) and installation of cameras in these places. Pre and post installation analysis should be carried out to determine effects and cost-effectiveness of applied measures.
- Introduce contemporary systems for control of parking regime in urban areas.

Activity 2.11: Ensure that equipment installed in road work zone is in line with approved traffic management plan and with sufficient quality.

- Ensure that equipment in road work zone is with sufficient quality (especially at night-time) and ensures safety for all road users

Activity 2.12: Improve registration of each accident with fatalities by representatives of the Road Committee and municipal road administration

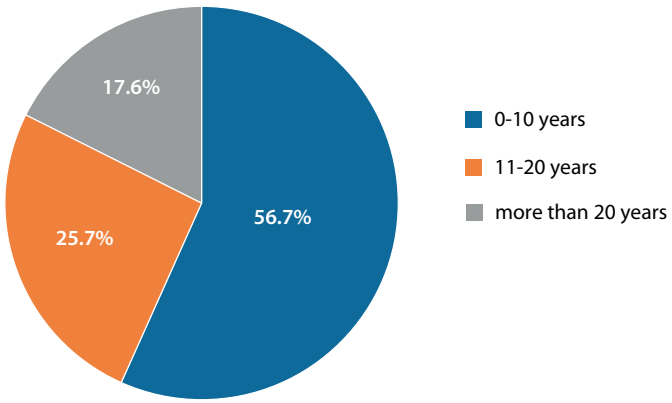
- Development of a system for registering each accident with fatalities by the Road Committee and the Municipal Road Administration and independent analysis of contribution of road infrastructure (in-depth analysis). Based on findings, development of measures to eliminate road infrastructure deficiencies.

3.3. Safe vehicles

3.3.1. Fleet and importation of motor vehicles

According to information provided by the Traffic Safety Service, the total number of vehicles in the Republic of Uzbekistan at the beginning of 2023 is 4,186,521 with a very high percentage of vehicles under 10 years old (Figure 32).

Figure 32
Age of vehicle fleet (01/01/2023)



Source: MIA, 2023

There are four automobile plants in the Republic of Uzbekistan, which production is presented in the Table 7.

Table 7
Number of cars produced

Year of production	Number of cars produced
2017	145,047
2018	225,853
2019	277,967
2020	284,885
2021	241,214

Source: MIA, 2022

In 2017 - 28,376 cars, in 2018 - 5,112 cars, in 2019 - 16,404 cars, in 2020 - 18,908 cars, and in 2021 - 29,194 cars were exported mainly to Kazakhstan, the Russian Federation, and Ukraine.

In addition, the Republic of Uzbekistan imported 2,849 cars in 2017, 1,065 cars in 2018, 5,063 cars in 2019, 2,756 cars in 2020 and 9,943 cars in 2021, mainly from China, Korea, and the Russian Federation.

Also in 2020-2021, 1,535 electric vehicles from foreign countries were imported into the Republic, and during 2022 - 4,616 units. Currently, private sector offers charging stations near stores, but there are no exact statistics on their number. To further promote use of electric vehicles the Resolution of the President of Uzbekistan No. 443 [19/10/2022] was signed.

According to the resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 191 on the safety of the design of motor vehicles under operating conditions [04/07/2012], paragraph 112, requirements for emissions of harmful substances, the carbon monoxide (CO) content in the exhaust gases of a motor vehicle with petrol and gas engines idling at minimum and higher engine speeds shall not exceed the values set by the manufacturer of the motor vehicle and, in the absence of such data, shall not exceed the values indicated in the Table 8.

Table 8
Requirements for emissions of harmful substances

Categories and equipment of vehicles	Motor speed	CO, volume fraction, per cent
M and N manufactured on 1 October 1986	Minimum	4.5
M and N not equipped with exhaust gas neutralization systems	Minimum	3.5
	Increased	2.0
M and N equipped with exhaust gas neutralization systems	Minimum	1.0
	Increased	0.7

According to Article 2 of the Law on Standardization [28/12/1999] the organization, coordination and support of standardization work in the sectors of the national economy is carried out by the Agency for Standardization, Metrology and Certification of Uzbekistan (Uzstandard Agency, currently known as the Uzbek Agency for Technical Regulation).

3.3.2. Technical and roadside inspections

Periodic technical inspection is regulated by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 125 [09/03/2021], and its Appendix 1, paragraph 5, is the following:

- passenger cars used for commercial purposes, buses, trolleybuses, trams and trucks with eight or more seats (except for the driver's seat), trucks equipped for the regular transport of persons, over-sized HGV, heavy goods vehicles and HGV for transport of dangerous goods and their trailers – twice a year.
- vehicles owned by legal entities not older than six years (except for vehicles referred to in subparagraph (a) of this paragraph), as well as vehicles of category M1 owned by natural persons, from 11-14 years old (including the fourteenth year) (except for vehicles referred to in subparagraph (a) of this paragraph) –- once every two years.
- vehicles belonging to legal entities more than six years old, vehicles with an indefinite date of manufacture (except for vehicles referred to in subparagraph (a) of this paragraph), as well as M1 belonging to natural persons older than 15 years (except for vehicles specified in subparagraph (a) of this paragraph) – once a year.
- trailers and semi-trailers shall be subject to technical inspection within the time limits fixed for the vehicle.
- vehicles of category M1 belonging to natural persons up to 10 years old (including the tenth year) (except for vehicles referred to in subparagraph (a) of this paragraph) shall be subject to voluntary technical inspection.

The regulatory framework defines the requirements for vehicle test centres, control systems, material and technical base (including the surroundings, industrial buildings, necessary equipment and mechanisms, instruments and measuring instruments within the scope of accreditation) and the qualifications of employees.

The compliance of test centres with these requirements is checked by the "Unified National Accreditation Body - Accreditation Centre" during periodic inspections. Its activities are regulated by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 125 [09/03/2021], and the general procedure for conducting a technical inspection is defined in its Annex 1, Chapter 5.

- Technical inspection of any vehicle begins with verification of compliance with the type, brand, model, state registration number, identification numbers of the chassis (frame), body and engine with the information specified in the technical passport (technical passport, technical card).
- The technical condition and equipment of each vehicle is checked for compliance with technical regulations, standards, rules and road safety norms.
- During the technical inspection of cars converted to work on gas fuel, the service life of gas cylinders, the year of manufacture, the serial number, the terms of testing of gas cylinders, the compliance of gas cylinder fittings with the established requirements are also checked.
- Technical inspection of trailers and semi-trailers is carried out both as part of a train and as a separate vehicle.

According to paragraph 14 of the Resolution No. 125, privately-owned diagnostic stations, mobile stations and diagnostic stations of the Traffic Safety Inspectorate for technical inspection of private vehicles are subject to accreditation by the "Accreditation Centre ".

Accreditation of test centres is carried out in accordance with the standard O'zDst 3410: 2019, "General requirements for the technical competence of testing laboratories". To obtain accreditation, test centres should have a production and technical base equipped with the necessary technological equipment for the technical inspection of vehicles.

Currently, the Accreditation Centre is accrediting business entities to conduct a technical inspection of M1 private vehicles through stationary and mobile technical inspection points. Currently, there are 281 stationary technical inspection points and only four mobile lines of technical control for technical inspections in the Republic, which belong to business entities.

3.3.3. Right-hand drive vehicles

To ensure road safety and prevent road traffic accidents in the Republic, on 17 February 1993 the Cabinet of Ministers of the Republic of Uzbekistan signed Decision No. 90, according to which right-hand drive vehicles are prohibited from being registered from 1 March 1993 and shall enter into force on 1 July 1993. Transit of right-hand drive vehicles, as well as their use for a period of 1 month in the territory of the Republic of Uzbekistan are allowed only for foreign citizens. For this reason, there are currently no right-hand drive cars on the territory of the Republic.

3.3.4. Vehicle emission standards

Uzbekistan has three main car producing plants under the Chevrolet brand, buses and medium trucks under the Isuzu brand, as well as MAN buses and heavy trucks. JV "GM-Uzbekistan" produces more than 200,000 Chevrolet cars per year.

However, constant increase in traffic and the non-compliance of vehicles and fuels with environmental requirements leads to a constant increase in air pollution.

According to the ranking compiled by the Institute for Health Measurement and Evaluation (USA), the World Bank and the United Nations, Uzbekistan ranks first in the world in the number of deaths from air pollution per 100,000 people.

According to the State Committee for Ecology and Environmental Protection, one of the main sources of air pollution in Uzbekistan are motor vehicles. (These data are specified in articles 16, 17 and 28 of the Law of the Republic of Uzbekistan "On Protection of Atmospheric Air" and Article 11 of the Law f the Republic of Uzbekistan "On Environmental Protection"). Every year (data for 2020), more than 2.3 million tons of polluters enter the air. 900,000 tons of them are produced by industrial enterprises, 1.4 million tons by motor vehicles. The largest air pollution is recorded in Tashkent, where more than 40% of all registered vehicles in the country are moving.

Worn or faulty catalytic converters significantly increase air pollution. Addressing this issue is important for public health and risk reduction. This makes mandatory vehicle inspections even more important. In connection with this resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 125 on additional measures to improve the procedure for conducting mandatory technical inspection of vehicles [09/03/2021], the necessary equipment for diagnostics is required at the technical inspection points, including: exhaust gas analyser and smoke meter - devices designed to determine the amount of pollutants and smoke in the exhaust gases of cars with combustion engines.

According to the Resolution No. 125 and Annex 1 to it, Chapter 5 defines the general procedure for conducting a technical inspection, according to which the vehicles in operation must undergo a technical inspection. Vehicles with a high level of emissions are recognized as defective during a technical inspection and sent for repair.

3.3.5. Used car parts/unlicensed car services

Car maintenance (repair and maintenance) and vending of auto parts are also carried out by unlicensed service centres using used spare parts, due to the lower price of used spare parts in the secondary markets, and in some cases, cars produced in foreign countries.

Import of spare parts is allowed based on a certificate issued by the Uzbek Agency on Technical Regulation. The Customs Committee of the Republic of Uzbekistan and the State Tax Inspectorate are working to prevent the import and sale of counterfeit spare parts. Number of licensed car services use and sell original auto parts, but the price for them is higher than for old spare parts. For this reason, some drivers prefer to buy used auto parts from unlicensed service centres.

3.3.6. Carriage of dangerous goods

The Road Traffic Safety Service controls transport of dangerous goods by road. Every year, 800-1,000 transports of dangerous goods are completed on the national roads.

Legal frameworks consist of: Law on Road Transport [29/08/1998] Resolution of the Cabinet of Ministers No. 342 [26/12/2011], Resolution of the Cabinet of Ministers No. 172 [12/04/2022], and the Resolution of the Cabinet of Ministers No. 35 on Approval of the Rules for the Carriage of Dangerous Goods by Road in the Republic of Uzbekistan [16/02/2011]. These documents describe rules for the transportation of dangerous goods by road in the Republic of Uzbekistan, the regulation on the issuance of a certificate for the use of a motor vehicle for the transportation of dangerous goods, and a list of dangerous goods allowed for carriage by road. The Rules define the rules for the carriage of dangerous goods by road, regardless of who owns dangerous goods and vehicles carrying dangerous goods, on the streets of cities and towns, public roads, as well as commercial roads that are not closed to public use, and senders (recipients) of goods.

It is mandatory for all service organizations and regulates the interaction of participants in the transportation process, their rights, duties and responsibilities, and determines the requirements for the transportation of dangerous goods, traffic safety, conditions for ensuring the storage of goods, and norms for the high-quality transportation of dangerous goods.

Transportation of dangerous goods is carried out under the mandatory control of a directly responsible person - a representative of the shipper (consignee), who knows the properties of dangerous goods and knows how to handle them. According to the contract for the carriage of dangerous goods by road, in cases where the driver of the vehicle is entrusted with the control of dangerous goods, the driver must be instructed by the consignor about the physics-chemical and harmful properties of dangerous goods, the rules for handling them and their transportation before sending dangerous goods. When preparing a transportation route, the carrier must comply with the following basic requirements: (a) there should be no important, large industrial facilities adjacent to the transport route; b) the route should not pass through recreation areas, architecture, nature reserves, specially protected areas, etc., it is necessary to avoid travel through settlements as much as possible; c) parking spaces and petrol stations should be provided during the journey; g) the route should not pass through large settlements. In exceptional cases, when it is necessary to transport dangerous goods through large settlements, traffic routes should not pass near entertainment, cultural, educational, educational, preschool and medical institutions. In order to agree on the directions of transportation of dangerous goods by transport, the carrier must submit at least ten days before the start of transportation to the regional road safety department, on the territory of which it is planned to transportation of dangerous goods, the following documents: a) developed route of transportation in the established form in triplicate; b) a certificate of conformity of the vehicle for the carriage of dangerous goods; c) special instructions for the transport of dangerous goods provided by the consignor (consignee) for certain dangerous goods; g) conclusion of the State Committee for Industrial Safety of the Republic of Uzbekistan on the suitability of containers (containers, tanks, tank-containers, etc.) for the transportation of dangerous goods; d) a certificate of admission of the driver of the vehicle to the carriage of dangerous goods; Information tables for the marking of vehicles shall be drawn up in accordance with the following requirements: (a) the general background of the table is white; (b) "SCC (Emergency Measures Code)" and "UN List Substance Serial Number" — column background — orange; c) table dimensions 690x300 mm, right part 400x300 mm, left part 290x300 mm; g) the table frame, column separation lines, numbers and letters of the text are made in black; d) the name of the graph (CHEK, BMT No.) and the inscription on the danger sign "Corrosive substance" are made in white; (e) the label frame is 5 mm from the edge of the label. at a distance of at least 5 mm thick. is drawn with a black line; (k) The thickness of the letters in the columns "SČK" and "BMT No" is 15 millimetres and the thickness of the label is not less than 3 millimetres; h) the frame of the table and the dividing lines are applied with a thickness equal to 15 millimetres; i) the alphanumeric code of emergency measures shall be written in any order of letters and numbers.

3.3.7. Use of the tachograph

In 1998, the Republic of Uzbekistan acceded to the European Agreement for the Work of Crews of Vehicles Engaged in International Transport (AETR), signed at Geneva on 1 July 1970.

The procedure for using the tachograph were defined by – the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 482 [11/04/2003], the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 289 [26/04/2011], the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 340 [22/12/2011], the Resolution of the Cabinet of Ministers No. 636 [30/07/2019] and the Resolution of the Cabinet of Ministers No. 738 [06/12/2021]

According to the Resolution of the Cabinet of Ministers No. 482, Annex 2, paragraph 15, "Buses carrying passengers between cities, districts and in international traffic must be equipped with control devices (tachographs) sealed by the service workshop, and for international transportation they must also have an identification mark of the Republic of Uzbekistan".

This resolution specifies control over the compliance of the bus driver with the work and rest regime, in which the time of driving is controlled, using the results of the analysis of the bus driver's work schedule, waybill, personal control book, and tachograph records kept in bus transport enterprises to control the time of work and rest. In case of violation of the work and rest regime, the enterprise should immediately react and eliminates such cases in the future;

- To prevent road accidents, the employer must equip buses with devices to determine driving and rest times of drivers.
- Employers who do not ensure the driver's work and rest regime are liable in accordance with the legislation of the Republic of Uzbekistan.
- Tachographs should be registered in the State Register of Measuring Instruments of the Republic of Uzbekistan and verified in accordance with the established procedure. Employers who have released buses on the line without a tachograph or with a faulty tachograph are liable in accordance with legislation of the Republic of Uzbekistan.
- The company must keep documents confirming the actual work and rest time of the driver, tachograph records, used personal control books within twelve months from the date of the last entry and present them for control upon request.

- That every bus driver must record his rest hours in a personal control book during the day, he must have a control book with him and present it at the request of the controller, if the bus is equipped with an electronic or digital control device (tachograph), control book is not required.
- The duration of the rest time of bus drivers between shifts is determined by comparing the actual data on the exit from the garage in the road sheet with the data on the entrance to the garage for the previous day in accordance with the instructions for filling in coupons and road sheets.

In addition, by the Resolution of the Cabinet of Ministers No. 340, the Ministry of Transport of the Republic of Uzbekistan is designated as the competent authority for the fulfilment of the obligations of the Republic of Uzbekistan related to Uzbekistan's participation in the 1970 AETR Agreement.

In 2012, in connection with the implementation of this decision, the Road and River Transport Agency (nowadays Ministry of Transport) developed the following regulatory documents, approved by the order of the Head of the Agency and registered with the Ministry of Justice:

- "Regulations on cards of digital control and measuring devices used to control the modes of work and rest of drivers in international road transport" (Reg. MU No. 2345 of 26.03.2012).
- "Instructions for the use of digital control devices" (Reg. MJ No. 2346 of 226 March 2012).

Part four of Article 125 of the Code on Administrative Liability provides that drivers of passenger buses in intercity and international traffic without control devices (tachographs) or with tachographs turned off are subject to a fine in the amount of three times the amount of the basic calculation. However, information on annual number of violations of the rules for the use of the tachograph was not available.

3.3.8. Transportation of schoolchildren

Special school buses or minibuses to transport students to primary or secondary schools do not exist. Only some parents take their children to school in private cars, while traffic safety controls in front of secondary schools is carried out by staff of the road patrol service of the Traffic Safety Service.

3.3.9. Use of the safety belt

Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 172 on Approval of the Rules of the Road [12/04/2022] determines the procedure for using a safety belt.

In Chapter 2, paragraph 9 it is stated the driver and passengers in the front seat of a car equipped with safety belts shall buckle up before driving.

The following persons are allowed not to wear safety belts:

- children up to 12 years in the back seat of the vehicle (in accordance with paragraph 159 of this Regulation)
- driving instructor in practical training, who teaches the driving of a car or urban electric vehicle. The instructor must act freely when necessary to assist the trainee and prevent possible dangerous situations on the road
- pregnant women, so as not to harm the foetus
- patients whose state of health does not allow them to wear a safety belt (in accordance with the list of diseases established by the Ministry of Health, and if there is a medical certificate on the presence of these diseases)
- drivers and passengers of vehicles equipped with a blue, red or blue-red flashing beacon attached to a duty officer and marked with special colour schemes and inscriptions.

Drivers and passengers of motorcycles and mopeds must wear appropriately positioned motorcycle helmet. Use of child restraint systems is not mandatory by law.

According to Article 125 of Part 1of the Code on Administrative Liability of Uzbekistan, persons who violate such regulations are fined half of the basic calculation for "non-compliance with the rules for the use of safety belts by drivers" of safety belts when driving vehicles and transporting passengers, as well as the rules for the use of helmets by motorcycle and moped drivers. No clear segregation of information on fines for categories of seven violations in Article 125 of the Code of Administrative Responsibility of the Republic of Uzbekistan is available.

3.3.10. Proposed measures and conclusions

Within 4 key areas of work following actions are recommended:

A3.1 Update national legal framework to ensure compliance with UN road safety conventions

A3.2 Implement stricter vehicle safety and emission standards and enforce compliance with these standards

Introduce regulations and standards for the importation of motor vehicles to ensure the safety and quality of vehicles entering the country

A3.3 Develop and enforce laws to regulate the use of used car parts and unlicensed car services to ensure the safety and reliability of vehicle repairs

A3.4 Legislation on use of safety belts, child restraint systems and helmets should be revised based on the international best practice and latest scientific evidence

LEGISLATION

A3.5 Strengthen the enforcement of technical and roadside inspections to ensure that vehicles meet safety standards and are in proper working condition

ENFORCEMENT

A3.6 Launch public awareness campaigns to educate drivers about the importance of vehicle safety and the need to comply with emission standards, about the dangers of using unlicensed car services and the benefits of using authorized service centers.

A3.7 Provide information and resources to educate drivers about the risks and consequences of transporting dangerous goods and promote safe practices.

EDUCATION

A3.8 Invest in the development and implementation of technology-based solutions for vehicle inspections, such as advanced diagnostic systems and emission testing equipment.

A3.9 Expand the availability of charging stations for electric vehicles to support the growing number of electric vehicles.

TECHNOLOGY

LEGISLATION

Activity A3.1: Update national legal framework on safe vehicles to ensure compliance with UN road safety conventions.

- Consider accession and efficient implementation of the 1958 Agreement[60] and 1997 Agreement[61] together with the related Resolutions.
- Efficiently implement the 1998 Agreement[62] together with the related Resolutions and the ADR[63].
- Gradual introduction of mandatory use of tachographs for all vehicle categories defined by the AETR[64] (international and national transport).

Activity A3.2: Implement minimum vehicle safety and emission standards for admission to traffic and enforce compliance with these standards.

- Develop updated and comprehensive minimum vehicle safety and emission standards for new and second-hand vehicles tailored to the specific needs and conditions of Uzbekistan.
- Establish a regulatory body or authority responsible for vehicle certification, monitoring and enforcing compliance with safety and emission standards.
- Put in place stricter regime for periodic technical inspection (regular and roadside inspection) of vehicles to ensure compliance with safety and emission standards. Shorten period between two periodic technical inspection in line with best international practice to safeguard good technical condition of vehicles.
- Encouraging the use of electric and hybrid vehicles through incentives such as tax breaks, and further improvement and implementation of the Presidential Decree No. 443 on Measures for the State support of the organization of the production electric vehicles [19/12/2022].

Activity A3.3: Provide incentives for small and medium enterprises (SME) dealing with motor vehicle repair and maintenance aimed to ensure safety and reliability of vehicle repairs.

- Develop legislation to incentivise registration and licensing of SME dealing with motor vehicle repairs and maintenance.
- Implement mechanisms for monitoring of SME to ensure compliance with the regulations. Conduct inspections, and quality assessments to verify adherence to safety standards, proper use and traceability of spare parts, and compliance with repair guidelines.

Activity A3.4: Legislation on use of safety belts, child restraint systems and helmets should be revised based on the international best practice and latest scientific evidence

- Conduct a comprehensive review of existing legislation on safety belts, child restraint systems, and helmets in Uzbekistan, considering international best practices and the latest scientific research on their effectiveness.
- Revise and update the legislation to ensure that the use of safety belts on all seats, child restraint systems, and helmets is mandatory.

[60] Agreement concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations

[61] Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections

[62] Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be fitted and / or be used on Wheeled Vehicles

[63] Agreement concerning the International Carriage of Dangerous Goods by Road (1957)

[64] European Agreement concerning the Work of Crews of Vehicles engaged in International Road Transport (1970)

ENFORCEMENT

Activity A3.5: Strengthen the enforcement of periodic technical and roadside inspections to ensure that vehicles meet safety and emission standards and are in proper working condition.

- Regularly supervise technical inspection centres, their operations and qualifications and operations of personnel.
- Collaborate with law enforcement agencies and relevant authorities to conduct regular roadside inspections to identify vehicles that do not meet safety and emission standards or are in poor working condition.
- Establish and interlink data bases for vehicle registration, periodic technical inspection and roadside inspection.

EDUCATION

Activity A3.6: Launch public awareness campaigns to educate drivers about the importance of vehicle safety and the need to comply with safety and emission standards.

- Develop engaging and informative multimedia campaigns, including videos, social media posts, and infographics on importance of vehicle maintenance and proper use of safety belts, child restraint systems and helmets.
- Organize workshops or seminars for inspectors to carry out high quality periodic vehicle inspection. Train enforcement personnel to carry out high quality assessment and audit of operations of service centres

Activity A3.7: Provide information and resources to educate drivers about the risks and consequences of transporting dangerous goods and promote safe practices.

- Develop comprehensive guides or handbooks that outline the proper handling, storage, and transportation procedures for different types of dangerous goods.
- Establish an online platform or mobile application that provides drivers with access to information on regulations, safety guidelines, and emergency response procedures related to transporting dangerous goods.
- Collaborate with relevant regulatory agencies and industry experts to conduct workshops or training sessions for drivers, emphasizing the importance of adhering to safety protocols when handling and transporting dangerous goods.

TECHNOLOGY

Activity A3.8: Invest in the development and implementation of technology-based solutions for vehicle inspections, such as advanced diagnostic systems and emission testing equipment.

- Collaborate with research institutions and industry experts to stay updated on the latest advancements in vehicle inspection technology.
- Establish partnerships with automotive manufacturers to incorporate built-in diagnostic systems and emission testing capabilities in new vehicles.

Activity A3.9: Expand the availability of charging stations for electric vehicles to support the growing number of electric vehicles.

- Conduct surveys and collect data on electric vehicle usage patterns and charging needs in different regions to inform the expansion strategy.
- Seek funding opportunities and incentives from government agencies or private entities to support the installation and maintenance of charging stations.

3.4. Safe road user behaviour

It is known that road safety system consists of the following aspects – safe infrastructure, safe vehicles, safe road users and environment. Infrastructure and vehicles can be adjusted according to our needs when enough knowledge and funds are available. Behaviour of road users is most important and hard to deal component. Every person has its own identity, habits, level of ability and self-responsibility. Regardless of what kind of road user they are; these people should comply with the Traffic Rules.

3.4.1. Education of children as road users

Road safety promotional, awareness raising, and educational activities are considered essential in improving road safety. Government of Uzbekistan understood importance of road safety education starting from early age. The Presidential Decree No. 190 [04/04/2022] and the Presidential Decree No. 316 on implementation of the National program "Safe and Smooth Roads" for 2022-2026 [12/07/2022] and the Governmental Decree No. 212 [26/04/2022] define education on basic traffic rules from the childhood, and introduction of road safety curriculum in the preschool education, elementary and secondary schools. In each school "Young Propagandist of Traffic Rules" club should be organized.

The "Green Light" competition will be held with participation of school age children:

- The 1st stage is held annually in February-March in educational institutions. At this stage, the competition on traffic rules is held between different interclasses in one school, and "green light" groups are formed from students who have mastered traffic rules well. These groups are composed of fifth to eight grade students (age 11-14).
- The 2nd stage (local stage) is held every year in March-April within the district (city).
- The 3rd stage (regional stage) is held every year in May with the participation of district (city) winners within the framework of regions and the Tashkent city.
- The 4th stage (republican stage) is held every year in June-July with the participation of the groups that took the 1st place in the third stage.

By the Presidential Decree No. 316 it is planned to implement following measures for education of children:

Table 9

Traffic rules education for children for 2022-2026

Measures	Number of events, each
Organization of classrooms for teaching traffic rules in schools	705
Organization of training yards for traffic rules in neighbourhoods	421
Organization of training yards for teaching traffic rules for children in state-owned pre-school educational organizations	434
Installation of road safety promotion means (advertising and informational posters, leaflets) on the roads with the most traffic accidents	1,292
Organization of regular actions such as "Attention, passenger!", "Attention, children!" and similar preventive measures	108
Conducting competitions as "Green Light", "Knowledge of Traffic Rules", "The Most Exemplary Passenger"	108
Preparation of social videos aimed increasing the culture of compliance with traffic rules and showing them on central and local TV channels	162

Source : https://lex.uz/docs/6106551

In kindergartens and schools, the Traffic Safety Service is regularly having training and awareness actions. In some schools and communities training at special equipped yards for children on safe behaviour already started. All these actions should be supplemented with regular classroom hours with approved curriculums as a basis for a road safety education. Along with the Traffic Safety Service local country office of UNICEF and NGOs have capacity building and awareness campaigns on child road safety within UN's Road Safety week, European Union's mobility week, World Remembrance Day of Road accident victims etc.

Figure 33
Trainings held by the Traffic Safety Service


Source: MIA

3.4.2. Child and youth road safety (case study)

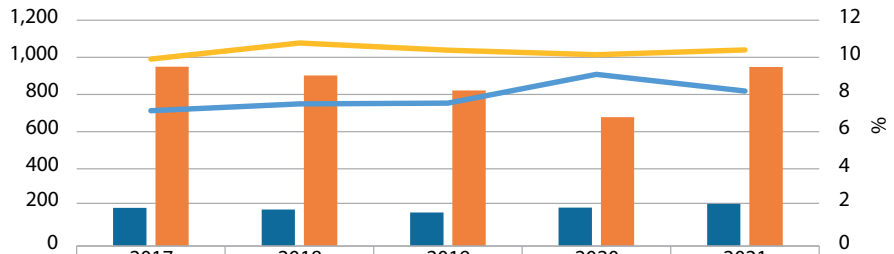
Safety of children on their way to and from school, including during their transportation

It is a basic responsibility of adults to ensure the safety of children, especially in addressing the serious social problem of death and injury of children in road accidents and is fully consistent with the Convention on the Rights of the Child, which clearly calls on adults and various institutions to be responsible for the well-being of children. This task involves education and information of children and adults, improvement of children's behaviour in traffic and transportation and measures for active and passive protection of children in traffic.

Road traffic is the most complex and demanding environment that a child may encounter. As a result of the physiological and mental development, child's behaviour is less predictable and significantly different from the behaviour of an adult. Therefore, all available active and passive safety measures should be applied to protect children participating in traffic. Due to their constitution and fragility, children are particularly vulnerable to road traffic injuries and the risk of long-term (permanent) disability, which can have a profound negative impact on the quality of life of children. To reduce the number of fatalities in road accidents, a significant number of which occur with school-aged children on their way to and from school, and in the immediate vicinity of schools, the authorities, parents and school administrators should take all necessary measures to prevent such accidents and reduce the dangers to which children are exposed.

Absolute and relative road safety indicators involving children in Uzbekistan are remarkably high in comparison with the best performing countries where percentage of children's fatalities is less than 2.5%. In Uzbekistan percentage of children are around 7-8% in total number of fatalities. In pandemic 2020 this figure rose to 9.2%. Absolute number of killed under 16 has been raised for 10% by 2021 comparing with 2017. Level of injures of children is higher and it is around 10%. See Figure 34.

Figure 34
Number and share of killed and injured children age 0 - 16 years



	2017	2018	2019	2020	2021
Killed	179	171	157	180	198
Injured	956	903	819	668	955
% killed	7.2	7.6	7.6	9.2	8.2
% injured	9.9	10.7	10.3	10.1	10.3

Source: Calculated on data provided by MIA

Initial step for safer school zones in Uzbekistan is the Government decision to lower speed limits in school zones to 30 km/h. This approach has been declared by the President of Uzbekistan in February 2022 during the meeting where Road Safety has been discussed. On some locations road signs and road restraints were installed. Changes in design manuals or requirements still do not exist.

In May 2021 the Ministry of the Interior of Uzbekistan, International Public Foundation Zamin and UNICEF launched U-Report survey to analyse conditions of road safety for children and youth during their journey to and from schools, around their neighbourhood.

UNICEF[65] U-Report survey, with the participation of 7,500 young people over all country, shows major gaps in ensuring children's safety on roads in both urban and rural areas of Uzbekistan.

According to most respondents (75%), students mostly get to school on foot, yet half of the respondents believed that the road to school were not safe (51%). In the city of Tashkent, the percentage was higher – 60%.

Only 37% of respondents confirmed that materials and posters on road safety are available in their school, in addition to textbooks. They suggested inviting traffic police experts to classes (19%), introducing traffic rules course in schools (18%), setting pedestrian and bike paths (16%), and limiting the speed of cars on roads near schools to 30 km/h (14%).

Recommended activities - authorities:

- Develop training curricula for school children which should include safety aspects on the way to and from school. It should include how to behave at the bus stop, when getting on and off the bus, and on the bus itself during the trip. Such training should include theoretic and practical classes, with practical training in real traffic conditions; children should be taught how a pedestrian should behave (how to cross the road, how to walk along the edge of the road that has no sidewalks, etc.). For students of the higher grades, which in accordance with the national law may use bicycles, special training for safe behaviour as riders should be provided.
- Launch information campaigns for drivers to raise awareness on limitations in perception of children who do not have the experience and the necessary skills to adequately respond to the dangers on the road.
- Prepare and adopt national guidelines for design and assessment of school zones. Whenever possible implement active and passive road infrastructure safety measures to protect children.
- Strengthen enforcement of traffic rules in school zones, especially during the hours of arrival and departure of children. Fixed speed/red light running cameras should be installed on locations with the high number of accidents in the last five years.
- Develop educational programmes to be broadcasted in media for parents and children aimed at improving the safety of children on their way to and from school. Promote dedicated TV programmes on road safety for children on national television.
- Disseminate statistics at the national level on all road traffic accidents involving children, take steps to improve the quality of data collected and, when possible, introduce in-depth analysis of accidents with fatalities.
- Organize a system of transportation for children (e.g., school buses), for elementary school students, and especially if the school is located far from the place of residence.

[65] https://www.unicef.org/uzbekistan/en/press-releases/partners-call-join-efforts-ensure-safety-roads-children

Recommended activities - parents and school administrators

- Parents should be responsible for the safety of their children:
  - i) through supervision - special encouragement should be given to the escort of children - especially those in the lower grades - by their parents or another person, and to their gradual learning to walk unaccompanied.
  - ii) through education – basic road safety attitudes and knowledge for safe behaviour in traffic should be taught by parents. Adults should always lead by example and to demonstrate to children safe and responsible behaviour on the road.
- Parents could volunteer as a members of school patrol to ensure the safety of children on pedestrian crossings in the vicinity of schools.
- Parents and school administrators should be informed of the importance of improving the visibility of children by using brightly coloured clothing or safety devices (reflective or luminescent materials), in conditions of poor visibility.
- School administrators for children who, in accordance with the national law, may use bicycles should organize training how to participate in traffic safely and special courses to obtain "bicycle driving licence" for children.
- Parents with children who, in accordance with the national law, may use bicycles should:
  - i) teach them the basic traffic rules and behaviour on the road.
  - ii) emphasize the importance of the correct bicycle equipment (steering, lighting, brakes, etc.) and of wearing brightly coloured/reflective clothing.
  - iii) train them in correct use of protective devices (helmets, etc.).
  - iv) explain the hazards that may arise when driving on the road (e.g., HGV, low visibility or icy conditions, etc).

Recommended activities - collective transportation of children

- Standing of children should not be allowed. Whenever possible children should wear safety belt.
- The presence of an escort is highly recommended. If the chaperone is a student, it should be if he/she is at least 16 years of age and that he/she has completed special training.
- Drivers should be fully informed on the specificities of transporting children.
- Vehicles intended for the carriage of children should be clearly marked, should have forward-facing seats fitted with seat belts and be fully equipped as prescribed by law for public transport vehicles.
- In the case of daily/regularly transportation of schoolchildren, it is necessary to organize the training on safe evacuation.

Driver training and education of road users

Uzbekistan has around 2% of annual population growth and stable economic situation which consequently leads to high and constant demand for driving permits. Since public transport is not well developed, especially in small towns and villages, private cars are the main mean of transport. Uzbekistan has ratified the United Nations Convention on Road Traffic (1968) and has adopted and amended legislation on driving permits accordingly. According to the Law on Traffic Safety [10/04/2013] Government:

- Approves the Road Traffic Rules and other regulatory legal acts on the issues of ensuring traffic safety and its organization.
- Establishes general requirements for the training of vehicle drivers, as well as training the population in the rules of safe behaviour on the roads.
- Approves a unified system for recording drivers, vehicles, violations of traffic rules, traffic accidents and other indicators.

Minimum age for obtaining permit, driving categories, procedures of training, licensing of drivers' educational institutions, procedures of examinations and other related matters are regulated by more than 30 documents issued by President, Government and other authorities.

In the following table driving categories and minimal age requirements for novice driving candidates are presented.

Table 10
Age requirements to driving categories in Uzbekistan

Driving category	Minimum age requirement, years
A	16
B and C	18
BE and CE	19
D and DE, trolleybus and tramway	21

Source : https://lex.uz/ru/docs/5953883#5956007, Article 148

Driving school training is compulsory for applicants for a driving licence in Uzbekistan. More information on number of mandatory training hours could be find in Table 11. Without obtaining of certificate on successful passing of training in a driving school candidates cannot proceed to theoretical and practical examination. According to the Law of the Republic of Uzbekistan No. 816 [06/02/2023], the licence for the provision of private educational activities in the field of training and retraining of drivers of motor vehicles and urban electric transport is issued by the Ministry of Internal Affairs. Driving schools are subject to licensing based on paragraph 1 of Appendix 1 of the Law on licensing, permitting and notification procedures No. 701 [14/07/2021]. The procedure for licensing activities for the provision of non-state educational services for training and retraining of drivers of motor vehicles and urban electric transport is regulated by the Decree of the Cabinet of Ministers of the Republic of Uzbekistan No. 408 [31/05/2018].

All activities of driving schools and business entities conducting theoretical and practical driving exams are supervised by the Traffic Safety Service. Legislation prescribes that only business entities having a license to provide non-state educational services for the training of drivers of motor vehicles can apply for special permit for conducting theoretical and practical driving examination. The termination or suspension of a licence is carried out in accordance with the Law on Licensing, Permitting and Notification Procedures [14/07/2021]. Before starting classes, candidates should provide to the driving school a medical certificate on the state of good health and fitness to drive vehicles of the relevant categories. There are minimal standards defining numbers of theoretical and practical lessons; qualifying requirements to equipment of driving schools, trainers, driving instructors etc. The Governmental Decree No. 393 [20/07/2022] assigned the Traffic Safety Service as an authority which will develop and approve curriculum for training, retraining and refreshing knowledges of motor vehicle drivers. Also, the Academy of MIA is responsible for training and certification of driving school trainers and driving instructors. Obtained certificates are valid for three years. There are following requirements to trainers of theoretical disciplines:

i) only persons with a higher education in the field of motor transport are accepted as theoretical trainers of fields such as auto motor vehicle study and its maintenance, traffic rules, safe driving of motor vehicles and the basics of traffic rules.

ii) persons with a higher or secondary specialized education in medicine or an instructor (paramedic) qualification certificate in "Emergency medical aid" are accepted as trainers of first aid in a traffic accident.

Following qualifications are required for driving instructors:

i) Should have completed secondary education diploma

ii) Should have a driver's license giving the right to drive a motor vehicle of the relevant category and at least three years of driving experience in driving (for a "D" category - five years)

Table 11

Minimal numbers of formal training hours in driving schools of Uzbekistan

Categories	Type of training	Weeks	Theoretical course, academic hours	Practical course, academic hours
A	Novice	9	180	20
B	Novice	18	216	69
C	Novice	22	264	69
B and C	Novice	24	288	72
C	Retraining B category holders	7	140	20
D	Retraining C category holders	10	200	60
BE	Retraining for B category holders	7	140	20
CE	Retraining for C category holders	7	140	20
DE	Retraining for D category holders	8	120	26

Source: https://lex.uz/docs/3765833, Article 11(1) of the Annex 3

The Governmental Decree No. 353 [4/07/2022] defined procedures for rating of driving schools based on several types of data like:

- results of theoretical and practical exams of their graduates.
- earned penalty points for non-compliance with traffic rules within the year after obtaining a driver's license by their graduates.
- number of traffic accidents committed by their graduates.
- information on the number of teachers with higher degree or academic degrees working on a permanent basis in a driving school.

Based on above mentioned criteria at the end of each year driving schools will be rated as Green, Yellow and Red. This rating will be publicly available as an information for future candidates to decide on which driving school to select. It is planned to start with rating system in 2023.

In Uzbekistan the number of formal obligatory hours in driving schools is very high. But national road safety record does not show that positive road safety attitudes are deeply embedded in the novice drivers. This requires further analysis why high number of obligatory formal hours does not guarantee better road safety attitudes, thus lower road accident rate.

Table 12

Number of formal obligatory hours in driving schools for a category and road accident death rate in some countries

Countries	Theoretical course, academic hours	Practical course, academic hours	Road crash death for 100 000 people[g] (WHO, 2018)
Uzbekistan[a]	216[*]	69[a]	11.5
Kazakhstan[b]	174[b]	54[b]	24.2
Russia[c]	130[c]	56 manual gear/ 54 automatic gear[c]	11.6
Georgia[d]	0[d]	0[d]	11.8
Sweden[e]	8[e]	0[e]	2.2
Austria[e]	12[f]	18[f]	5.4

Source:

[a] https://lex.uz/docs/3765833

[b] https://adilet.zan.kz/rus/docs/V14C0010056#z87

[c] https://www.autonews.ru/news/623065189a7947da917916f0

[d] https://nlevshits.com/inostrannye-grazhdane-mogut-v-gruzii-poluchit-prava-na-vozhdenie-avtomobilya-mezhdunarodnogo-obrazca-srokom-na-15-let/

[e] https://korkortonline.se/en/facts/

[f] https://www.oesterreich.gv.at/en/themen/dokumente_und_recht/fuehrerschein/1/1/Seite.040710.html

[g] https://en.wikipedia.org/wiki/List_of_countries_by_traffic-related_death_rate

3.4.3. Driver's license and novice drivers

After successful completion of driving school's internal examination, candidates could take final theoretical and practical examination in the special licensed company or in the appointed regional Traffic Safety Service office. According to the Governmental Decree No. 272 on additional measures to engage private sector in the field of examination for obtaining a motor vehicle's driving permit [04/05/2021] business entities that have a license to provide private educational services for the training of drivers of motor vehicles are given right to apply for special permit for conducting theoretical and practical exams for obtaining a driver's permits. The Traffic Safety Service will stop conducting driving exams from the day when business entities start taking examination services in their territories. By the end of 2022 in four regions examination centres already started with operations. After successful passing both theoretical and practical examinations centre will issue special certificate to a candidate and forward it to the Traffic Safety Service. Here will be taken candidate's digital picture and driver permit will be issued immediately.

Theoretical exams have 20 questions and candidate should give correct answer to at least 18 to pass. For theoretical exam, a list of 1,000 questions with correct answers confirmed by the Traffic Safety Service is in use. Process of taking theoretical exams is conducted electronically in the licensed examination centre and this process is fully automated. According to authorities,' human factor is excluded, and examination process is recorded and monitored by the Traffic Safety Service remotely online. Retaking of failed theoretical exam can be done after at least one week.

After successfully passing theoretical exam, candidate could apply for practical examination. Positive result of the theoretical examination is valid for two months. During the retraining (upgrading) for driving categories such as "BE", "CE" and "DE", only practical exams are taken. Practical examinations are taken in special areas with restricted access. Whole area should be under video control. Examination will be taken using same vehicle category and it should be equipped with devices that automatically evaluate and record examination results. The cabin of the vehicle used for the practical exam should be equipped with a video surveillance and recording system that works continuously in a 360-degree view during the exam, transmits and stores data to the dispatching control point. All examination vehicles should have mechanical transmission system only. The list of practical examination manoeuvres is prepared and approved by the Traffic Safety Service. Now this list in not publicly available. The Traffic Safety Service tries avoiding human involvement in the examination process. So, certification of examiners is not considered in national legislation.

In Uzbekistan, a practical driving examination is taken in a closed area only. Driving exams in real conditions - streets or roads - are not used. In the best performing countries, practical examination is carried out for identifying real skills not only of manoeuvring, but also how candidate will act in real busy traffic conditions.

Figure 35
Blank form of the driving permit

Source: https://lex.uz/docs/3127705

Current Traffic Rules[66] and enforcement policy do not consider specific requirements to novice drivers. In Uzbekistan traffic rules a special sign for novice drivers with experience less thantwo years is defined. There are no obligatory requirements for installing this sign. Also, local legislation does not consider any special sanctions to novice drivers for their violations.

Driving permit point system

According to the Presidential speech held in February 2022 on road safety situation in Uzbekistan in 2021, across the country

- 95,000 drivers - committed more than 5 violations.
- 9,000 drivers - committed up to 20 violations.
- 700 - committed up to 50 violations.
- 18 - committed up to 100 violations.

Unfortunately, as permanent violators are considering only those who break the same rule several times within 12 months. If driver commits several types of sever violations, legislation is considering them separately without cumulative effect. In the Presidential Decree No. 190 [4/04/2022] is noted that from 1 December 2022, all types of violations will be rated in accordance with their severity and these points will be consolidated. Recently, the Traffic Safety Service announced[67] that since 1 December 2022, a system of penalty points to drivers for violations of traffic rules will be introduced in testing regime. This procedure is considered as an additional measure to ensure road safety. Drivers' non-compliance with traffic rules will be assessed during the year – with maximum of 12 penalty points. Penalty points are awarded from the date of the first violation by the driver until the same day of the following year. If driver does not reach 12 points for one year, points will be cancelled after this period. The application of penalty points to the driver for violating traffic rules, as well as the deprivation of a driver's license with 12 or more points does not exempt driver from the basic penalty defined by the law. In cases where the driver has committed several administrative offenses, penalty points for each offense are awarded separately, and these points are cumulated.

If the total amount of penalty points awarded to the driver for violations committed within 12 months exceeds 12 points, a driver will be deprived of the right to drive a vehicle. When the violation committed by the driver of the vehicle is equal to eight penalty points, he will be notified about this via SMS message or through the postal service.

When a driver challenges a traffic violation and sends the case to the criminal court for consideration, penalty points are awarded based on the final decision of the criminal court. Drivers deprived of the right to drive a motor vehicle, after the expiration of the term of administrative penalty, are obliged to improve their qualifications and pass theoretical and practical exams in accordance with the procedure established for obtaining a driver's license.

Drivers who have not violated traffic rules during 12 months will not be awarded with penalty points for the first traffic violation committed next year. At the same time, the driver is not exempted from the main penalty.

For now, there is not any published draft legislation which describe procedure of awarding of these points. But it is advisable to consider specific requirements for professional and novice drivers.

3.4.4. Professional drivers

Current legislation does not consider special additional requirements to professional drivers apart from appropriate driving permit. Administrative procedures[68] adopted by the Governmental Decree No. 636 on licensing of passenger and international goods transportation [30/07/2019] do not consider any specific requirements like the EU's Certificate of Professional Competence (CPC). In 2021 based on Presidential decree[69] No. 6044 on measures for cardinal improvement of licensing and permitting procedures", licensing of transportation companies and entrepreneurs in Uzbekistan has been repealed. So, now any truck can do business in goods transportation in Uzbekistan without licensing.

66 https://lex.uz/docs/5953883

67 https://yhxx.uz/uz/news/1-dekabrdan-boshlab-zharima-ballarini-isoblash-tizimi-test-rezhimida-ishga-tushiriladi

68 https://lex.uz/docs/4454883

69 https://lex.uz/docs/5693027

International transport is regulated by international agreements ratified by Uzbekistan. One of the biggest problems is control of drivers' work and rest times. Based on the Governmental Decree No. 482 on rules for the carriage of passengers and their baggage by road transport and requirements for ensuring the safety of bus transportation in the Republic of Uzbekistan [04/10/ 2003], installation of tachographs started on 1 January 2004. All buses carrying out interregional city-interregional and international passenger transportation must be equipped with control devices (tachographs) with service workshop seals. According to the Traffic rules absence of tachographs is one of violations which can cause prohibiting use of vehicles. Also, one of requirements of the administrative procedures on licensing of passenger and international goods transportation approved by the Governmental Decree No. 636 [30/07/2019] is presence of control devices (tachographs) sealed by the service workshop in motor vehicles carrying out intercity, interregional and international transportation. Another document which requires installation of tachographs is the Governmental Decree No. 738 on measures for the electronic organization of open tendering on passenger routes of road transport [06/12/2021]. In this document there is a chapter "Control of compliance with work and rest procedures by bus drivers". Along with requirement of tachographs installation here is mentioned that owners will take responsibility for violation of their installation. Current legislation does not any sanctions against to owners of buses. Article 125 of the Administrative Responsibility Code of Uzbekistan presumes around USD 80 fine to driver only for absence or turned off tachographs. All activities related with installation, controlling of tachographs are under responsibility of the Ministry of Transport.

Table 13

Practical training requirements for drivers of commercial vehicles

Types of commercial vehicles	Minimal experience, years	Needed practical study at company, hours
Vehicles with special sound and light signals	3	
Vehicles carrying out dangerous goods	3	
Buses and minibuses	5	60 and 224 for novice drivers
Tramways, trolleybuses		70-140
Commercial light vehicles up to 4 passenger seats	3	30
Commercial light vehicles with 5-7 passenger seats	5	30

Source: https://lex.uz/docs/3765840, see Chapter 3 of the Annex 2

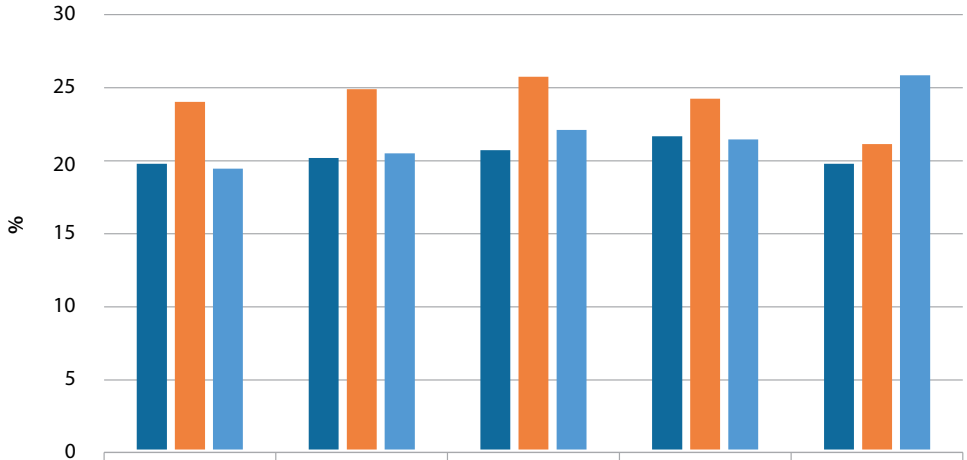
3.4.5. Vulnerable road users

In Uzbek legislation definition of the term "vulnerable road user" is not provided. Coming out from international experience: pedestrians, motorcyclists, cyclists, disabled people, children and the elderly in this Review will be considered as vulnerable road users. This category lacks the physical protection of vehicles and is more exposed to the risk of being fatally or seriously injured when involved in an accident. In developed countries special attention is paid for designing of infrastructures, enforcement and education of drivers to respect vulnerable road users.

Figure 36 shows share of fatal cases in total number of victims among each type of vulnerable road users in Uzbekistan. Another words this graph shows how grave are consequences of accidents. Last five years (from 2017 to 2021) fatality rate of motorcyclists increased from 19.5 to 26 and in 2021 this type of road users became the most defenceless. According to this graph the second most endangered road users are bicyclists. Last five years their fatality rate experienced slight decrease to 21.4 in 2021. In the third place by level of consequences are accidents involving pedestrians. Number of accidents involved pedestrians in 2021 is the highest (44.5% of all accidents) with fatality rate of 19.8. Another words, almost every fifth pedestrian involved in road accident dies. This rate is much higher than in countries applying the Safe System Approach through lower speed limits in urban areas and mixed traffic zones; prioritization of vulnerable road users; physical segregation of different road user categories; design of forgiving roads etc.

Figure 36

Fatality rate of vulnerable road users



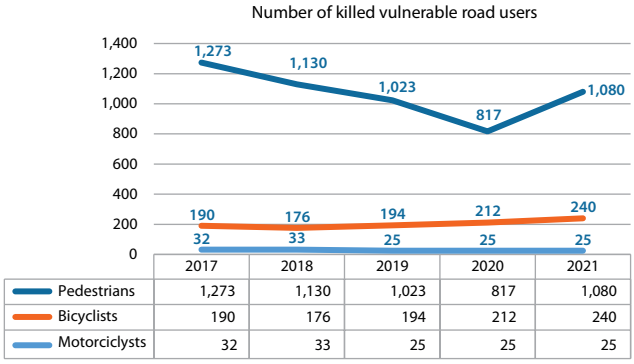
	2017	2018	2019	2020	2021
Pedestrians	19.80	20.50	21.00	21.90	19.80
Bicyclists	24.10	24.90	25.70	24.30	21.40
Motorciclysts	19.50	20.80	22.30	21.70	25.80

Source: Calculated on MIA's data, 2022

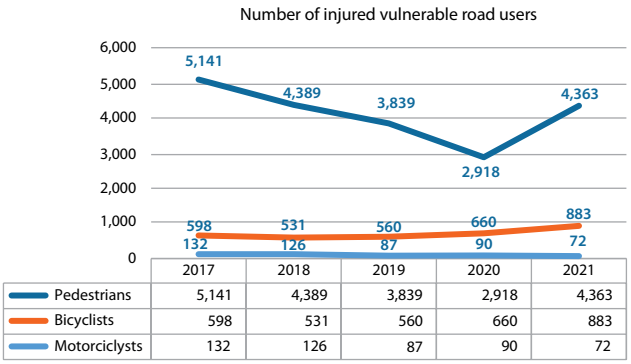
Figure 37 and 38 shows total numbers and shares of killed and injured vulnerable road users. Absolute number of deaths among vulnerable road users had a stable trend of decreasing in 2017-2020 - felt down from 1,495 in 2017 up to 1,054 in 2020. But in the post-pandemic 2021 number of deaths dramatically rose for more than 30% to 1,345 (see Figures 13 and 14). The percentage of vulnerable road users' among killed (death rate) in 2017-2019 was constantly stable around 60%. In 2019 and 2020 this figure is 53.9% and 55.4% respectively.

Figure 37

Number of killed and injured vulnerable road users



	2017	2018	2019	2020	2021
Pedestrians	1,273	1,130	1,023	817	1,080
Bicyclists	190	176	194	212	240
Motorciclysts	32	33	25	25	25



	2017	2018	2019	2020	2021
Pedestrians	5,141	4,389	3,839	2,918	4,363
Bicyclists	598	531	560	660	883
Motorciclysts	132	126	87	90	72

Source: MIA, 2022

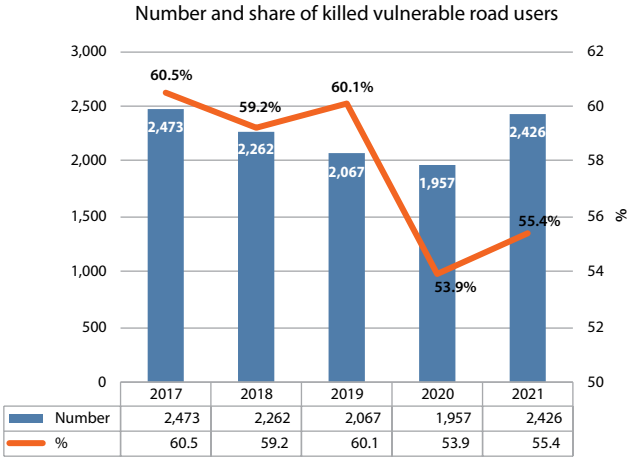
Almost same trends could be observed in injuries. Number of injured vulnerable road users in 2017-2020 stable decreased from 5,871 to 3,668. But, in 2021 number of injures has been sharply increased for almost 70% to 5,318. Share of injured vulnerable road users ranges between 55% and 61% of all injured.

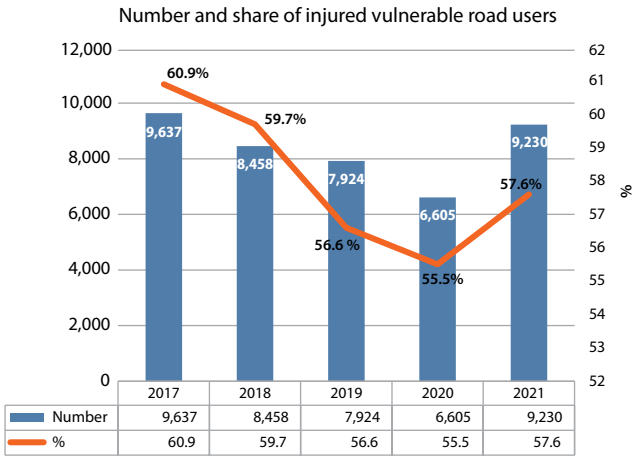
If we compare share of killed and injured vulnerable road users in Uzbekistan with world trends it can be noted that this category is at higher risk. For example, in Australia[70] deaths and injuries rate are 33.5% and 46.1% respectively. This can be explained by implementation of systematic measures related to safety of vulnerable road users.

[70] https://www.roadsafety.gov.au/nrss/fact-sheets/vulnerable-road-users#_ftnref1

Figure 38

Number and share of killed and injured vulnerable road users in road accidents





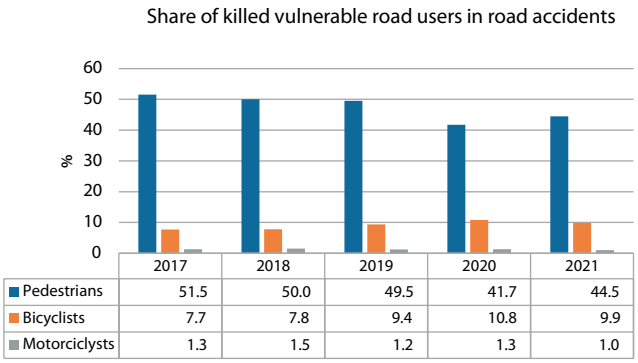
Source: MIA, 2022

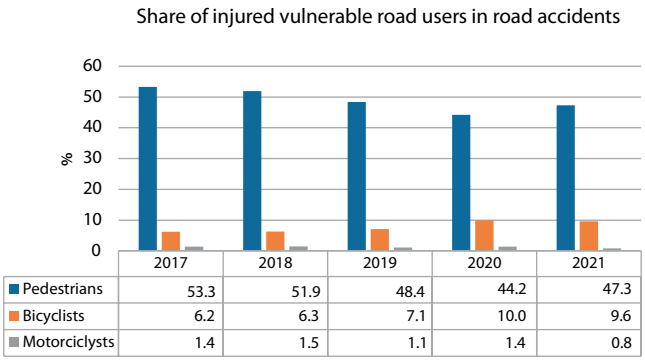
The highest portion of vulnerable road users involved in accidents are among pedestrians (Figure 39). From 2017 to 2021 the share of killed pedestrians decreased from 51.5% to 44.5% of all killed. Same trend followed injury rates with decrease from 53.3% to 47.3% of all injured.

The number of deaths and injuries of bicyclists continuously is increasing (Figure 39). Share of killed is increased from 7.7% to 9.9% and injured from 6.2% to 9.6% in 2017 and 2021 respectively. The highest level of cyclist victims was noted in pandemic 2020 – injured 10% and killed 10.8%. Since in Uzbekistan motorcycling is not so popular, number of deaths and injuries is around 1.5% only. But takin into account current share of registered motorcycles and fatality rate one could conclude that this mean of transport is extremely dangerous.

Figure 39

Share of killed and injured vulnerable road users in road accidents





Source: MIA, 2022

In urban areas, causes of such high fatality rates of vulnerable road users could be found in poor availability of sidewalks, large lane width and number of traffic lanes at intersections without protected median islands, design of pedestrian crossings and traffic lights which does not consider characteristic of vulnerable road users, etc. Extremely high-speed limit in urban areas (up to 70 km/h) is a fatal factor in road accidents. Recently 30 km/h school zone speed limit is being introduced on some locations, but there is a need of strong law enforcement in these areas.

Bicyclists are very often victims of road accidents. Separate cycling lanes on the roads are missing, and they are forced to merge into the carriageway and move with ongoing traffic of motor vehicles – which often results in road accidents.

Pedestrians

In many regions of Uzbekistan, pedestrians are the most common road users. Especially, young and more vulnerable part of population mostly walk. According to the Traffic Safety Service, main causes of pedestrian-involved accidents are violations of traffic rules by pedestrians, lack of proper infrastructure, speeding, ignoring of traffic light signals, absence of traffic signs and road markings, drunk driving etc. Unfortunately, placement of pedestrian crossings in wide arterial streets and busy roads without traffic lights, absence of sidewalks or obstacles located on sidewalks are still frequent practice in Uzbekistan.

Figure 40
Lack of proper infrastructure


Source: Anvar Matkarimov, 2022

Violation of traffic rules and unsafe trades along roads and streets on the sidewalks are another widespread practice in Uzbekistan which highly affects road safety.

Figure 41
Violation of traffic rules


Source: Anvar Matkarimo

Unsafe crossing of roads and streets is common attitude for most pedestrians. Unfortunately, this is considered as regular routine and for this kind of violations pedestrians can be charged the sum equal to USD 11 (2022 data).

Recommendations regarding pedestrian facilities

Because pedestrians as a heterogeneous group have quite different capabilities and as such are particularly vulnerable, strategies for adapting their behaviour to existing road infrastructures are limited. Therefore, legal provisions, recommendations and other infrastructure approaches are needed. Facilities and infrastructure should be designed to facilitate pedestrian mobility, reduce road hazards and promote safe and responsible behaviour among all road users. The following measures regarding pedestrians are recommended:

- **Sidewalks and footpaths**

In all towns and cities, a network of uninterrupted walking routes (including sidewalks, etc.) should be established. They will provide secure, direct connections between residences, shops, schools, public transport access points and other vital facilities and services. Sidewalks should be well lit and well maintained. Their width should be determined depending on their functional role (school paths or routes through shopping areas, etc.). The sidewalk should not be used for parking vehicles. If this cannot be avoided, sufficient space should be guaranteed for the movement of pedestrians and persons with reduced mobility using wheelchairs and, in the event of an acceptable deviation from this rule, appropriate parking spaces should be marked.

Provision should be made to ensure that signs and other equipment do not impede the movement of pedestrians. The use of sidewalks by vehicles, including all personal mobility devices, which are powered by any type of engine, should not be allowed, except for slow-moving vehicles intended for the disabled.

- **Pedestrian crossings**

Pedestrian crossings - general principle

Pedestrian crossings should provide safe crossing possibility the carriageway of any pedestrian regardless of age and physical condition. Therefore, crossings cannot be considered simply as road markings, but should be considered as an integral part of the transport scheme (including access areas and, if possible, a central refuge island), forming an integral part of the entire road structure. Therefore, aspects related to their location and layout should in all cases be considered in the context of the planning, design and construction of the road. In essence, the aim is to prioritize, whenever possible, the creation of safe conditions for pedestrians to cross the road without changing the level. However, if necessary, to improve the safety of pedestrians in certain places, it should be possible to use engineering structures such as pedestrian bridges or underpasses if they do not occur inconveniences to vulnerable road users. Sufficient pedestrian crossings should be created, carefully planned so as not to force pedestrians to use long detours and obstacles.

- **Visibility at pedestrian crossings**

It should be provided that in the zone of approach to the crossing, nothing obstructs the view, since for the safe crossing of the road, pedestrians need to be able to see approaching vehicles and be visible to drivers of such vehicles. Therefore, to ensure good visibility in the area of the pedestrian crossing, it is recommended to increase the width of the sidewalk, if possible, so that its edge is in line with the side of the carriageway where parking spaces are provided, or to enforce the prohibition of stopping or parking in front of the pedestrian crossing at a distance of at least five meters.

- **Crossing equipment**

In general, roads should be designed to minimize the distance between the edges of the crossed carriageway at marked pedestrian crossings. Pedestrian crossings that are not equipped with traffic lights should be appropriately signposted. Pedestrian crossings should also be clearly marked on the carriageway, and lighted to a much greater extent than other parts of the road.

It should be ensured that the timing of traffic light phases allows sufficient time for pedestrians to cross the road safely. In exceptional cases, different detectors should be used to provide additional time for slow-moving pedestrians to cross the road. At pedestrian crossings not regulated by traffic lights, the speed of approaching vehicles should be limited in such a way that it is possible for pedestrians to cross the road safely.

Finally, in places of increased danger, especially when there is more than one lane in each direction or where there is a possibility of vehicles moving at an increased speed, pedestrian crossings in the same level should be avoided. If this is not possible, they should be equipped with a central refuge island and/or other means, along with good lighting, to facilitate the safe crossing of the roadway for pedestrians, especially children and the elderly.

- **Underpasses and pedestrian bridges**

Where a high traffic road with more than two lanes has to be crossed by a significant number of pedestrians, footbridges and underpasses can be an appropriate solution if they are properly maintained, lit and accessible to all users, including persons with disabilities.

- **Pedestrian zones**

Pedestrian areas are intended for use by pedestrians and should be designed for this purpose. National legislation should include clear regulations governing the conditions for access to them by vehicles and road users of certain categories, as well as rules for the installation of signs, speed limits and driving hours in these areas. Particular attention should be paid to access to walking routes at the entrance to and exit from the pedestrian zones.

- **Speed limit zones**

Ensuring low speeds in built-up areas is critical to pedestrian safety. However, to create a zone with low traffic speed, as a rule, it is not enough just to install road signs. It is also necessary to use various special infrastructure facilities (e.g., speed humps, narrowing of road) and continuous law enforcement (e.g., speed cameras).

- **30 km/h speed limit zones**

This is a zone for slowing down the speed of movement within a maximum of 30 km/h, which is significantly different from a normal road. It should be marked with an appropriate road sign. It is designed and planned in such a way as to reduce both the intensity and speed of traffic. When creating such zones, some/all the following measures can be taken:

- Creation of clearly visible "gates" at the entrances to the zone.
- Setting a general speed limit of 30 km/h.
- Road design of adjacent areas in such a way that they contribute to the reduction of speed.

Bicyclists

In contrast with the Tashkent city, use of bicycles is quite popular in the other parts of Uzbekistan, especially in villages and towns, where cycling is a main mean of transport for thousands of people. As a sample see following picture (Figure 42) made in Sakhand village of Namangan region with 35,000 inhabitants within a mosque service on Friday with high number of bicycles. In Tashkent city cycling is considered mostly as outdoor recreation only.

Figure 42
Bicycle parking in Sakhand village of Namangan region

Source: Anvar Matkarimov, 2022

Even though number of killed and injured cyclists is continuously increasing, research studies of cycle use, length of bicycle infrastructure etc. in Uzbekistan are still missing. Too often bicyclists are becoming victims of road accidents and they in the second place in whole number of accidents related with vulnerable road users.

According to the Resolution of the Cabinet of Ministers No. 172 [12/04/2022], children can drive bicycles on public roads and streets when they reach 14 years only. Unfortunately, current legislation does not consider neither how and where younger than 14 years old children can cycle, nor technical requirements for riding of children by parents with or without special seats or trailers.

Current Traffic Rules do not require mandatory wearing of helmets by bicyclists. Bicyclists moving on the carriageway of roads must wear reflective vests or outerwear with reflective elements in the dark and in low visibility conditions, but national legislation does not consider any sanctions against violators.

In view of the vulnerability of cyclists, it is advisable, whenever possible, to create special cycle paths and lanes to better protect this category of road users and reduce the likelihood of conflict with other road users. Currently, according to national legislation any cyclist who crosses roads and streets should cross them by walking only. Also, in junctions left turns for cyclists are prohibited.

Motorcyclists

According to legislation motorcyclists have the same speed requirements as motor powered vehicles. Since they lack the physical protection, they are more exposed to the risk of being fatally or seriously injured when involved in an accident. In Uzbekistan consequences of accidents with motorcyclists are graver than for other road users. In 2021, almost 26% of all motorcyclists involved in an accident died.

According to Traffic Rules for driving motorcycles and mopeds (scooters) should be obtained A category driving license. Minimal age requirement for driving is 16. It is prohibited driving of children under 12. Wearing of helmets by motorcyclists and their passengers is obligatory and for ignoring of this requirement they can be charged fine equal to USD 17 (2022 data).

A driver's license allows the competent authorities to exercise control over persons who acquire the right to drive a vehicle. It also serves as a means of verifying that the driver has sufficient knowledge of the traffic rules, as well as his ability to drive a vehicle. Regarding the issuance of driving licenses for the categories "motorcycles" and "mopeds", various strategies have been tried over the years with mixed results. Detailed studies of road traffic accidents show that one of the key elements in the safe operation of a motorcycle or moped is the experience of the driver. The analysis shows that successful completion of a driver training program is equivalent to having up to six months of driving experience. The findings of this analysis have stimulated the wider use of the phased permitting system. European experience shows that young road users usually start with a bicycle and then move on to a moped and later a motorcycle or car.

3.4.6. Drink and drive practices

Currently in Uzbekistan drunk driving is not so common violation. As reasons can be considered that most of population is Muslims and strict sanctions to drunk drivers. So, driving under alcohol influence is one of heaviest traffic rules' violations in Uzbekistan. According to the Article 131 of the Code on Administrative Liability following penalties can be implemented for drug and drunk driving or allowing to drive a vehicle by person who is under alcoholic, narcotic or other intoxication:

Table 14
Sanctions for driving under the influence violations

Violation type	Sanction
Driving vehicles by drivers under alcoholic, narcotic or other intoxication	Fine equal to around USD 730 (2023 data) and revocation of driving license for from 6 to 36 months
Driving vehicles by a person who does not have the right to drive vehicles under alcoholic, narcotic or other intoxication	Fine equal to around USDF 1,174 (2023 data) and administrative detention for 15 days
Transfer of control of the vehicle to a person who is under alcoholic, narcotic or other intoxication	Fine equal to around USD 730 (2023 data) and revocation of driving license for from 24 to 36 months

Source : https://lex.uz/docs/97661

Alcohol and drug testing for drivers is regulated by the Procedure No. 3099 registered on 14 December 2018 by the Ministry of Justice. The following can be considered as a reason for test whether driver is under the influence of alcohol, drugs, or otherwise intoxicated:

- smell of alcohol from the driver
- driver's inability to stand in straight position (wobble)
- impaired driver's speech
- tremors of the driver's fingers
- a notable change in the colour of the driver's facial skin

Examination to determine whether driver of the vehicle is under influence of alcohol is carried out by special technical devices (Alcohol testers) that detects ethanol consistence in vapours emitted by the driver. This tool should be calibrated and certified by Uzbek Agency for Technical Regulation.

If a Traffic Safety Service officer does not have with him portable alcoholic tester or driver is suspected as under the influence of drugs or otherwise intoxicated, the medical examination should be conducted by the responsible medical staff at any medical organization where this kind of analysis can be provided with the presence of police officer.

Alcohol testing can be carried out by both ways – by the Traffic Safety Service and medical examination. According to Article 9 of the Procedure No. 3099 driver suspected of being under influence of alcohol at the medical institution is subjected to examination of exhaled breath samples only. According to Article 10 of the Procedure No. 3099 maximum Ethanol Concentration for breath should be lower than 0.135. Also, in the Article 20 is noted that in cases when it is not possible to determine the clinical signs of intoxication (cases requiring urgent medical assistance), a blood sample for examination can be taken based on the decision of the investigator or prosecutor. A medical conclusion that a person is under the influence of alcohol, drugs or in any other way can be based on the results of blood laboratory test. If Blood Alcohol Concentration is 0.3 ppm or higher, driver will be considered as under influence of alcohol.

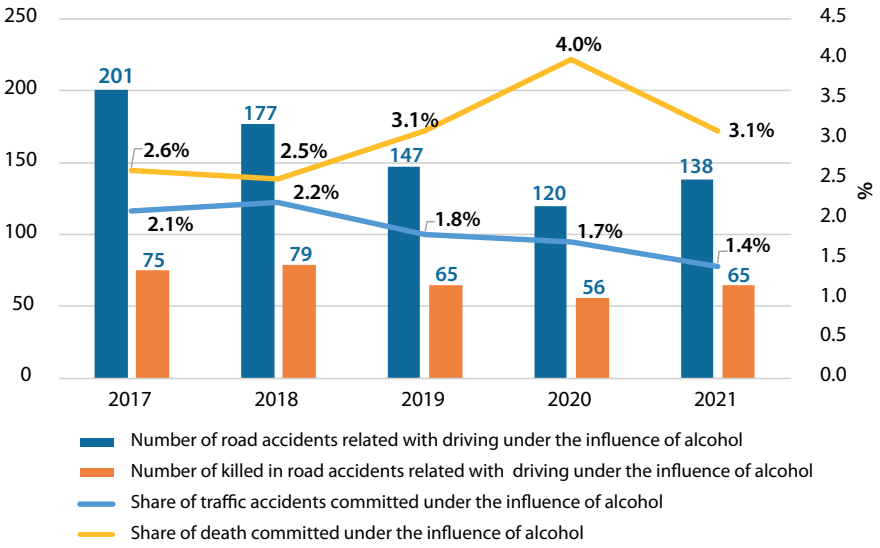
Drug testing should be carried out on-spot (drug testers) or at medical institutions or narcological dispensaries by examination of biological fluids (urine, saliva) only.

Medical institutions carrying out these kinds of examinations should register all cases in the special numbered, signed and sealed registration book. This book has all necessary information. It should be renewed every calendar year and kept within five years in the medical institution.

Statistics related with drunk driving for 2017-2021 shows that (see Figure 43) even when absolute numbers of accidents decreasing for 31%, number of killed decreasing for 13% only. Especially warning sign is that share of killed in accidents with impaired driving in the number of overall accidents rose. Comparing with other countries, the level of alcohol related accidents is not so high, but it has a trend to increasing which requires timely actions.

Figure 43

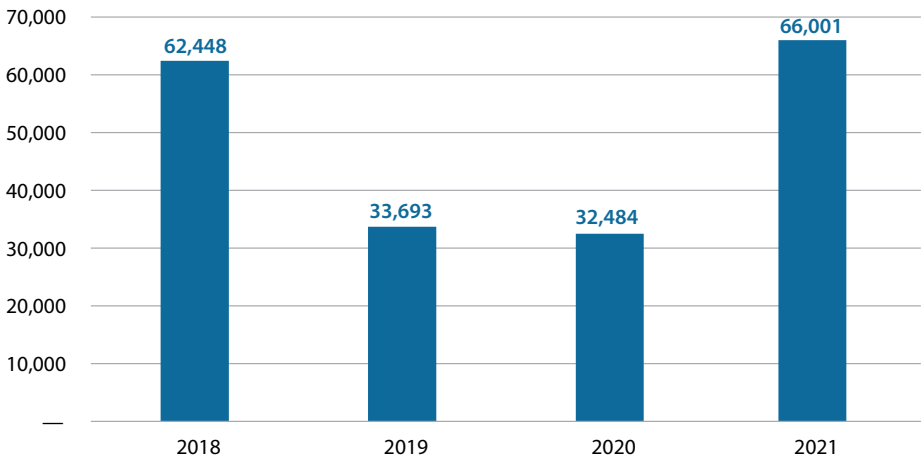
Statistics on driving under the influence of alcohol



Source: MIA, 2022

Figure 44

Number of persons prosecuted for drunk driving



Source: MIA, 2022

Manually collected information in books is essential for analysing of situation with driving under alcohol and drug influence. Unfortunately, this data remaining in registration books in each medical institution and are not collected or stored on national level by the Ministry of Health or the Traffic Safety Service.

3.4.7. Proposed measures and conclusions

A4.1 Introduce gradual driving permit system

A4.2 Introduce road safety passports for schools and kindergardens

A4.3 Update legislation to improve knowledges and skills assessment of driving permit candidates

A4.4 Implement digital/analogue tachographs. Intoduce and enforce mandatory use of tachographs for heavy goods vehicles above 3.5 t and buses

LEGISLATION

A4.5 Improve control and audit of driving schools

A4.6 Special focus on safety of professional drivers

A4.7 Stricter enforcement, especially at night time and in motorways

ENFORCEMENT

A4.8 Introduce road safety training for school children

A4.9 Improve trainning of professional drivers

EDUCATION

A4.10 Use of automated enforcement devices

A4.11 Use of ITS

TECHNOLOGY

LEGISLATION

Activity A4.1: Implementation of gradual driving permit system

- Amend national legislation to introduce gradual driving permit system with stricter requirements for novice drivers.

Activity A4.2. Introduction of road safety passports for schools and kindergartens

- Put in place legislation which will require preparation of road safety passports for education facilities (assessment of access routes, school children transport).
- Develop national guidelines for design and reconstruction of safe school zones.
- Include road safety lessons in mandatory curricula for elementary and secondary school children including practical courses on how to safely walk to school, drive bicycle, behave in traffic.

Activity A4.3. Update legislation to improve knowledges and skills assessment of driver's candidates

- Update legal provisions on mandatory driving school (internal) certificates to improve road safety attitudes of driver's candidates.
- Consider implementation of practical exams for driving permit candidates in real traffic conditions on public roads.

Activity A4.4 Implementation of digital/analogue tachographs.

- Amend national legislation to introduce mandatory use of tachographs for heavy vehicles above 3.5 t and buses (urban public transport, intercity and international routes).

ENFORCEMENT

Activity A4.5 Improve control and audit of driving schools

- Carry out regular checks of driver training organization including curricula, training, candidate's road safety attitudes and licenses of trainers.
- Analyse number of accidents with involvement of novice drivers and audit schools with high number of accidents committed by their candidates.

Activity A4.6 Special focus on safety of professional drivers

- Introduction of certificate of professional competence for professional drivers. Mandatory training of all professional drivers in line with recent best road safety practice.
- Regular checks of driving/rest times and safety record in transport enterprises.
- Road safety record of company and rivers should be one of the criteria in tendering process for passenger and goods transportation licences/lines issued by national authorities
- Consider introduction of higher fines and demerit points for offences committed by the professional drivers.

Activity A4.7 Stricter enforcement, especially at night-time and on motorways

- Wide use of a mobile patrol system to detect traffic violations especially at night-time and on motorways.
- Use equipment for automated traffic enforcement (speed and red-light cameras, section speed control) particularly on high-risk road sections and in urban areas.

EDUCATION

Activity A4.8 Introduction of road safety training for school children.

- Mandatory road safety awareness raising and training form age of five with focus on safe road to school.

Activity A4.9 Training of professional drivers.

- Develop training curricula to obtain certificate of professional competences for professional drivers. Develop and implement accreditation criteria for institutions and trainers involved in this education.
- Train enforcement personal to perform high-quality roadside checks and identify offences.

TECHNOLOGY

Activity A4.10. Use of automated enforcement systems

- Implementation of speed cameras (stationary, mobile, and measuring of average speed).
- Implementation of automatic noise control devices.
- Increase number of Weight in Motion (WIM) and automatic oversize measurement systems.

Activity A4.11 Use of ITS

- Implementation of traffic management centers and monitoring equipment in urban areas.
- Implementation of road weather information stations for accurate info on road conditions to users and road administration, particularly in mountainous regions.

3.5. Post-crash care

3.5.1. Introduction

Post-crash care seeks to avoid preventable death and disability and limit the severity of injury and physical and mental suffering caused by road trauma. It is well accepted by experts, in both the transport and health fields, that adequate emergency assistance at the scene of a crash and transport of the injured to hospitals are essential elements for saving lives. Road injury is one of the leading causes of mortality and morbidity worldwide.

In Uzbekistan in 2019, road injury ranked 6th among all causes of death (4th for men) and was the leading cause of death due to injury. Road crashes were also the 7th leading cause of disability in the country (again, 4th leading cause for men), and were the top cause of death and disability for young people aged 25-34 – both a human tragedy and a financial one, as productive young people are lost to the economy[71]. The World Bank estimates that there were 54,255 serious injuries in Uzbekistan in 2016, costing the country USD 3.09 billion (including the cost of fatalities)[72]. The economic assessment of the cost of road traffic incidents in Uzbekistan carried out by WHO and CERR Uzbekistan (2022) suggests a more conservative estimate of nearly USD 2 billion, or 2.8% of GDP – still a very large toll on the economy and society.

The goal for post-crash care should be not only to prevent injuries but also to mitigate their consequences and enhance the quality of life of people with disabilities. This chapter will highlight the importance of fully equipped and trained Post-crash Emergency Care (PEC) services – including ambulance services, fire & rescue, and police. Timely response is also important to ensure a patient has the best chances of survival when transported to a hospital after a crash.

[71] https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death

[72] https://www.roadsafetyfacility.org/country/uzbekistan

Once arriving at a medical establishment appropriate trauma care for road crash victims is essential, as is rehabilitation after medical interventions to overcome their newfound physical and mental difficulties. Insurance for crash victims is a noteworthy tool in this respect. The local situation in these directions, challenges and potential solutions will also be discussed.

3.5.2. Post-crash emergency response and care in Uzbekistan

Responsibilities – Key counterparts

The Law on the rescue service and status of the rescuer [09/07/2014] sets out responsibilities for rescue services which include, among many requirements, "the elimination (localization) of emergency situations in road transport" as well as "the elimination of medical and sanitary consequences of emergency situations".[73]

Different state agencies and authorities are given responsibility for certifying and managing rescue services. Primary responsibility falls to the Ministry for Emergency Situations, Ministry of Health, and Ministry of Internal Affairs. Within the Ministry of Internal Affairs, both the Police and State Fire Safety Service play important roles. In addition, the Ministry of Transport has a duty to inspect and maintain the road infrastructure which can include access for emergency services. State authorities at a local level also have a duty to support emergency rescue operations, so that each Khokimiyat has registered services within their territories.

Registered emergency services are required to keep detailed records on the equipment they use and their operational state. Additionally, individual rescuers maintain logbooks which record their participation in different emergency response incidents. There is an Interdepartmental Certification Commission which oversees the certification of rescue services to attest their fitness to perform.

Road Injury Data

As described in Chapter 2, following a Governmental Decree No. 303 [15/11/2011] data on traffic victims should be aligned to ensure communication and agreement between data collected by the Traffic Safety Service and the Ministry of Health medical institutions. A positive feature of road casualty data in Uzbekistan is that the definition of a road fatality conforms to international best practice – i.e., all deaths registered either at the scene or within 30 days of a road crash, but there is a doubt whether all stakeholders in this system uses this definition in practice. Both the Traffic Safety Service and health services must keep a record book of all injuries due to traffic incidents. Moreover, there is a requirement for the Ministry of Internal Affairs bodies and medical establishments to jointly review data to ensure they are compatible. For road injuries, medical institutions must keep information about the cause of injury and the initial diagnosis. This includes information on people involved in road crashes who are taken to hospital due to mental trauma (shock) and may be dispatched home following treatment.

Road Crash Response Times

On 5 May 2022, the President of Uzbekistan chaired a video conference aimed at improving the activities of the ambulance and rescue services[74]. In his speech he identified issues which needed to be addressed to ensure the safety of victims of road crashes and other emergencies. These included:

- More than 50,000 complaints about the late arrival of ambulances to an emergency
- Ill-equipped ambulances with no navigation systems, a problem compounded by the fact that some 10,000 streets in Uzbekistan have no names, and 500,000 houses have no numbers to help identify their location.

Lacking GPS information and other means of identifying the location of a crash is often a contributory factor to slow post-crash response.

Road crash response time, of course, also includes the response times for the police and fire services. Police and fire services often arrive at a scene before an ambulance and play a vital role in ensuring the safety of the crash scene, stabilising any injured victims and assessing risks (such as risk from fire). Their timely and efficient operation can be as important as that of ambulance services.

Information about police response times for road incidents in Uzbekistan is not published but should be extractable from police data. Information on road crashes is collected by the Uzbekistan traffic police and recorded on cards which include information on the time of the crash, who reported the crash and – if there were any people killed or injured – the medical institutions receiving victims. Those medical institutions must also record the time of arrival of any injured or deceased people arriving for their care.

[73] https://lex.uz/uz/docs/2424659 See appendix 6

[74] https://uzlidep.uz/en/news-of-uzbekistan/12094

Depending upon circumstances, fire services may also be the first to arrive and in many countries also provide basic emergency medical assistance. Response times for fire services are also not published but could potentially be derived from emergency logbooks. Without knowledge of police and fire service response times it is difficult to assess the effectiveness of post-crash response. This information should be part of an overall review of post-crash management.

Communications

Communications are a key factor in effective post-crash response. It is recognised that the sooner a road victim receives medical treatment the better their chances of survival and recovery. The golden hour is often referenced – the immediate hour following a road trauma when chances of preventing death by prompt medical treatment is enhanced. The time lapse between a crash occurring, the crash being reported, and emergency medical treatment being received is therefore a vital contributor to crash survival and recovery rates[75]. Factors which influence this include:

- Victim or bystander reporting - Survivors or bystanders at a crash scene are normally the first to report a crash (though sometimes all parties involved may be unconscious). Being able to ring on a mobile phone or satellite service is therefore vital. On the plus side, in Uzbekistan mobile phone usage has grown from a very low base in 2010 to reach nearly 100% by 2021[76], so that even in rural areas people are likely to have access to phones. The geographic reach of mobile signals is also important of course. It is estimated that 87% of the territory of Uzbekistan is currently covered by wired and mobile internet[77]. Hard to reach areas include remote rural regions where mountains or deserts pose geographic challenges to communications infrastructure[78]. Extending high quality communications services to all areas in the country has been identified as a priority by the Government, so these problems should ease in future. In the meantime, extra care needs to be taken to ensure monitoring of road incidents in these regions.
- One-Call systems and dispatch - In Uzbekistan there is a single emergency services number, but citizens still using multiple numbers for contacting different emergency services: 101 for the fire service; 102 for Ministry of Internal Affairs and Road Traffic Safety Service; 103 for the ambulance service; and 050 for the rescue service of the Ministry of Emergency Situations. This multiplicity of emergency numbers can lead to time being wasted and a duplication of services called to a scene. There are also challenges to the timely dispatch of ambulances due to a lack of unified ambulance service management across all regions of Uzbekistan. This means that only ambulances based in the territory where a crash occurs can provide emergency response, although ambulance outposts in a neighbouring district may be closer. Emergency assistance to victims is only provided by certain pre-assigned hospitals and not necessarily the centre nearest to a crash[79]. A World Bank assessment in 2018 concluded that: "The current EMS system is highly fragmented with little coordination between districts and regions. There is no screening of calls to determine whether highly specialised ambulance teams are required at the scene. In addition, there is no automation of the dispatch function..."[80] Presidential Decrees No. 2838 on measures of further strengthening of material-technical base and organisation of activities of emergency medical aid system and No. 4985 on further improvement of emergency medical aid system on [16/03/2017] aimed to address these issues within the ambulance service and have centred upon improvement of dispatch services. The decrees proposed a unified ambulance management system to coordinate services across the country like the service operating in Tashkent. District dispatch services will be replaced by unified call centres in each of the regions, all within a national ambulance management structure under the Republican Scientific Centre of Emergency Medical Services (RSCEMS). 172 district call centres and sub-stations will work within a common, integrated computer aided dispatch and communications system. 2,750 dispatch centre staff have been trained to date out of an assessed requirement for all regions of 42,000 staff. A communications strategy will also include public awareness to reduce the number of non-emergency ambulance calls (more than 3 million in 2020) which are a problem with the current system[81].

[75] http://www.academicstar.us/UploadFile/Picture/2018-5/201852235417759.pdf

[76] https://www.worlddata.info/asia/uzbekistan/telecommunication.php#:~:text=Under%20the%20country%20code%20%2B998,the%20world%27s%20average%20by%20population

[77] https://www.spacetechnologyconference.com/post/uzbekistan-exploring-options-for-first-national-satellites

[78] https://www.bcsatellite.net/satellite-internet-in-uzbekistan/

[79] https://uzlidep.uz/en/news-of-uzbekistan/12094

[80] https://projects.worldbank.org/en/projects-operations/project-detail/P159544

[81] http://www.uzdaily.com/en/post/63398

Coordination at the scene

Because all emergency services may arrive at the scene of a road crash, each with different priorities and responsibilities, good coordination between services and recognised operational protocols are essential to effective post-crash response. The many vital tasks which must take place at the scene of a crash include a quick, general assessment of the scene to identify any hazards and casualties; ensuring the scene is safe; communicating with the dispatch services on the status of the scene; managing traffic safely; addressing risks (such as fire risk or hazardous chemicals); caring for victims and ensuring adequate space for their treatment and transportation; developing an incident plan to be agreed by all services; reporting; and carrying out investigations. The complexity of these issues – all of which are important for saving lives and preventing further injury – means there can be only one person in charge at the scene. It requires agreement about incident command, and well-observed protocols for the roles and behaviour of different services.

Under the Resolution of the Cabinet of Ministers No. 80 on Approval of the Regulation on the Unified Aviation Search and Rescue Service of the Republic of Uzbekistan [13/04/2015], there is provision for a unified Aviation Search and Rescue Service. This deals only with air transport, however. There is also an Interdepartmental Certification Commission which certifies all other rescue services but does not establish protocols for incident management. Different emergency services in Uzbekistan (police, fire and ambulance) do take part in joint training, and if so, this is positive and helpful. In addition, as part of a new centralised coordination structure for emergency medical services, it is foreseen to have close interaction between the ministries of Health, Internal Affairs and Emergency Situations – including sharing data.

The most effective approach to organising pre-hospital post-crash response is one where all services agree principles for joint working, along with protocols on incident command and on roles and responsibilities at a crash scene. These principles apply during all stages of emergency response – from strategic planning of EMS services to joint debriefing after incidents to learn lessons for important for improving service provision.

Emergency vehicles and equipment

Information on vehicles and equipment available to the police and fire services is not publicly available. The national standard for ambulance provision in Uzbekistan is 1:13,000 people. In 2018 this target was not being met, with one ambulance per 18,300 people[82]. Moreover, most ambulances in Uzbekistan were poorly equipped, lacking the essential equipment needed to support pre-hospital trauma and emergency care. According to the World Bank: "Ambulances are undersupplied and often inappropriately used. Most of the current fleet is unsuitable for providing modern pre-hospital care. They have limited space for providing life-saving care en route to the hospital and for storing emergency equipment and are essentially used to transport patients to and from hospitals regardless of whether there is an emergency. The ambulances are not even suitable for basic transport because the passenger compartment is too small to comfortably hold people of above-average height[83]."

Improving the quality of ambulances, their equipment and the training provided for ambulance crews has been a priority over increasing the ambulance fleet. However, since 2018 the number of ambulances has been augmented, currently standing at one ambulance for every 11,876 people. Most of these vehicles (88.4%) are less than 8 years old, so relatively new for the region[84]. This can be partly attributed to donor projects which have focussed on replacing old ambulances with newer, better equipped vehicles: since 2018 over 2,000 new ambulances including 450 advanced life support vehicles have been purchased by the World Bank alone, distributed to all regions[85]. Uzbekistan is also beginning to manufacture 1,000 new ambulances to supply the 103-dispatch service[86].

Skills and training for medical personnel

While the numbers and quality of ambulances have been increasing, the Government estimated that in 2022 around one fifth of the ambulance fleet did not have the necessary doctors medical professionals in their crews. The skills and training of health care professionals providing emergency treatment within the ambulance service has been assessed by the World Bank as less than adequate. Because ambulances have been ill-equipped, specialist training is also required for safely deploying new, more modern equipment for handling road victims: "Trauma care such as those required because of motor vehicle accidents was one area that did not appear to be well covered based on site visits.

82 https://www.worldbank.org/en/news/press-release/2018/04/25/citizens-of-uzbekistan-to-benefit-from-better-emergency-medical-services-with-world-bank-support

83 https://projects.worldbank.org/en/projects-operations/project-detail/P159544

84 Communication from Ministry of Health

85 https://projects.worldbank.org/en/projects-operations/project-detail/P159544

86 https://kun.uz/en/news/2022/08/18/uzbekistan-to-start-producing-ambulance-cars

The 'Damas' ambulances are too small to carry the required equipment (including spine boards, 'scoop' stretchers, immobilization devices, splints, and so on), and even larger ambulances did not have the necessary equipment… this suggests that there may be a need for further training in trauma care for all clinical staff." [87] The World Bank Emergency Services Project begin in 2018 aims to address some of these issues and will continue until August 2024.

Once arriving at a medical treatment centre, the medical skills and facilities available for road victims is also a vital factor in road crash survival and outcomes. Designated trauma centres in hospitals have been shown to improve survival rates. A 2019 comparative study of trauma systems in Asian countries included information from Uzbekistan, where the highest hospital level for trauma patients was a general hospital. One general hospital with an Emergency Department seeing around 5,000 emergency visits per year was considered in depth. This operated a specialised trauma practice education programme but did not include an operation practice trauma programme. It did include a hospital-based trauma registry including pre-hospital information, which is a positive aid to trauma care. There was no hospital trauma review or audit programme, however[88].

A Presidential Decree on 16 March 2017 recognised that: "rendering emergency medical care still does not meet the modern requirements, there is insufficient level of security of services of emergency medical service by qualified personnel, medicines, the medical equipment, specialized motor transport and means of communication. The due attention is not paid to implementation of modern control mechanisms, coordination and control of rendering emergency medical service, and domestic scientific and practical developments in the sphere of the emergency medicine."

To address this, a single organisational structure is being established to oversee all emergency medical care, including all urgent medical emergency services. Positive steps are now being taken to address problems, and there is an open door for cooperation with international agencies and experts. Use of the WHO Trauma Care Checklist by emergency units as an effective tool for ensuring the best outcomes for treating life-threatening injuries resulting from road crashes is recommended[89].

3.5.3. Rehabilitation

Road crashes in Uzbekistan are the leading cause of injury-related disability[90]. The Ministry of Health estimates that in 2019 around 9 million people in Uzbekistan could benefit from some form of rehabilitation services to address a disability, and it is likely that many of these road crash victims could face either long- or short-term disabilities. Disability due to road injuries can lead to individual and family poverty, due to lost jobs for both those injured and their careers, barriers to employment and reliance on social assistance. Rehabilitation for survivors of road crashes is therefore an essential feature of good post-crash care.

The Presidential Decree of 27 February 2023[91] is most welcome news for people with disabilities, those facing locomotor difficulties as a result of road injuries. This decree sets out a range of ambitious measures for providing modern prosthetic and orthopaedic products, and rehabilitation facilities related to these. The aim is to reach 60% of the population requiring these aids. There will also be cooperation between ministries, such as the Minister of Justice, the National Centre for Human Rights, the Ministry of Economy and Finance and the Ministry of Employment and Poverty Reduction to regularly review the situation.

The World Health Organisation is currently assisting the Ministry of Health to develop a national strategic plan on rehabilitation and assistive technology (AT) in a project launched April 2023. A team of experts has been working with the government, using the WHO's 'Systematic Assessment of Rehabilitation Situation (STARS)' tool. Initial results of this work have been shared with stakeholders, and the next steps will be to put in place an action plan[92].

87 https://projects.worldbank.org/en/projects-operations/project-detail/P159544

88 Young Hee Jung et all, 'Comparison of trauma systems in Asian countries: a cross-sectional study,' Journal of Clinical and Experimental Emergency Medicine, 2019 Dec; 6(4): 321-329

89 https://www.who.int/publications/i/item/trauma-care-checklist

90 https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death

91 https://uza.uz/ru/posts/o-dopolnitelnyx-merax-po-sovershenstvovaniyu-sistemy-podderzhki-lic-s-invalidnostyu_458014

92 https://www.who.int/europe/news/item/05-04-2023-who-helps-uzbekistan-to-strengthen-rehabilitation-services-and-assistive-technology

3.5.4. Insurance and legal support

The third-party insurance for drivers is a legal requirement in Uzbekistan, as is Passengers' Accident Insurance. This protects the health, life, and property of any third parties and passengers involved in a traffic collision, though it does not cover the driver of the insured vehicle. Insurance is more than monetary compensation; it is a highly effective mechanism for assessing, managing and reducing risk. In general, the role of the car insurance industry in road safety should be recognized as very important in reducing road traffic accidents by supporting road safety management and activities.

Currently the overall insurance market overall in Uzbekistan is small, with just 7.3 million policy contracts in 2022. However, the market is growing exponentially, and is forecast to more than double by 2026[93]. The biggest contributor to retail insurance growth is motor insurance, an understandable trend due to the rapid expansion of motorization in the country. Most of the over 3 million passenger cars and light goods vehicles are likely to be covered by third party insurance at least[94].

There is also provision for compensation for damages from road crashes where the party at fault is not able to provide damages. This is done via a "Fund for Guaranteeing Payments" set up under a Presidential Resolution No. 5265 about additional measures for digitalization of the insurance market and development of the sphere of life insurance [23/10/2021]. These measures are designed to encourage proliferation of the private insurance market and confidence in insurance protection[95].

Other important protections in the case of road crashes are the existence of professional ethics and protections for healthcare workers handling victims, legal protections accompanied by a "duty to care" for any off-duty health professionals who encounter a road crash, and "Good Samaritan" laws to protect any bystanders from liability if they intervene to assist injured road victims. These protections are unclear for Uzbekistan.

In case of legal redress, one element of the registration of road crash investigations in the country is cause for concern, however. The way in which road crashes are recorded by the Uzbekistan Traffic Safety Service is focused on violations of road rules and does not capture other elements of a safe system which is necessary for road safety. Thus, road engineering defects, poor visibility or weather factors are not attributed, putting far too great an emphasis on road users. "Pedestrian offences" therefore account for some 11% of traffic violations[96], while in the UK it is extremely rare for a pedestrian to be considered the cause of a road crash. This puts disproportionate blame on vulnerable road users who may not have a safe choice when crossing roads, when other factors are normally the main cause of pedestrian collisions. This issue should be addressed in Uzbekistan.

[93] https://www.globaldata.com/store/report/uzbekistan-insurance-industry-market-analysis/

[94] https://w3.unece.org/PXWeb2015/pxweb/en/STAT/STAT__40-TRTRANS__03-TRRoadFleet/02_en_TRRoadtypVeh_r.px/table/tableViewLayout1/

[95] See tkj.uz/en.

[96] Abdunazarov, "Method of Analysis of the Reasons and Consequences of Traffic Accidents in Uzbekistan Cities", International Journal of Safety and Security Engineering, 10(4):483-490

3.5.5. Proposed measures and conclusions

Within 4 key areas of work following actions are recommended:

A5.1 Ensure legal requirements for anyone to perform first-aid activities within their capacity ("duty of care" and "Good Samaritan")

A5.2 Enable systemic financing of road safety activities by insurance companies

A5.3 Inclusion of the physical and mental health needs of road crash victims in the national health strategy

LEGISLATION

A5.4 Introduction of joint emergency services interoperability and protocols to improve post-crash response

A5.5 The "one call" dispatch service to include all emergency services and not limited to ambulance services

ENFORCEMENT

A5.6 Provide first-aid trainning for driver's candidates

A5.7 Investment in training for trauma care personnel

A5.8 Adoption of a "team approach" to trauma care and incorporation into training

EDUCATION

A5.9 Investment in contemporary trauma care facilities

TECHNOLOGY

LEGISLATION

Activity A5.1: Ensure legal requirements for anyone to perform first-aid activities within their capacity ("duty of care" and "Good Samaritan")

- Carry out a review of the legal protections available to people who help an injured road victim before professional emergency responders arrive
- Introduce a legal 'duty of care' for off-duty emergency staff to protect them when they stop to assist road victims

Activity A5.2: Enable systemic financing of road safety activities by insurance companies.

- Consider a high-level roundtable with insurance companies to discuss issues such as road safety promotion, assessing road risk for young or new drivers, and financing on road safety activities.
- Open a discussion on sharing non-personal insurance data on road crashes and their costs as part of an annual review of road safety data.

Activity A5.3: Inclusion of the physical and mental health needs of road crash victims in the national health strategy

- Include specific physical and mental health rehabilitation programmes for road victims, along with targets for treatment, in the national health strategy
- Collect and publish specific data on the employment of people with disabilities of all types, including information on road victims.
- Collect and publish data on the number carers for road crash victims and their employment status.

ENFORCEMENT

Activity A5.4: Introduction of joint emergency services interoperability and protocols to improve post-crash response

- Establishment of a joint operational programme for all emergency services for handling all injury road crashes, including joint planning between all services, joint training on post-crash response, and joint debriefing following incidents
- Agreeing operational protocols and a lead agency for managing the scene at road crashes
- Having an agreed joint communications strategy so that all services have a mutual understanding of policy and practice.

Activity A5.5: The "one call" dispatch service to include all emergency services and not limited to ambulance services.

- Ensuring that one known phone number for emergency road crash response is available, valid, and free for use throughout Uzbekistan
- This should be linked to the 'one call' dispatch centre for deployment of the necessary emergency services
- Dispatchers to be trained to collect essential information, prioritise according to urgency, and assess which services need to be dispatched.

EDUCATION

Activity A5.6: Provide first-aid training for driver's candidates

- Include efficient first-aid course in mandatory training for driver's permit candidates

Activity A5.7: Investment in training for trauma care personnel

- Include trauma and emergency care in the curricula of all schools of medicine, nursing and other allied professions
- Ensure all emergency response personnel (including police and fire) are trained in essential trauma management and care

Activity A5.8: Adoption of a "team approach" to trauma care and incorporation into training

- Introduce a multi-sector team approach to handling severely injured patients to resuscitate, stabilise, diagnose, and make a treatment plan for incoming patients. Teams should include a team leader (doctor or surgeon), airway control doctor or nurse, a primary nurse, and x-ray technician and lab technician.

TECHNOLOGY

Activity A5.9: Investment in contemporary trauma care facilities.

- Ensure adequate trauma care facilities are located near areas where crashes occur
- Adopt the World Health Organisation "Trauma Care Checklist" for use in managing all road crash victims suffering serious trauma

4. CROSS CUTTING AREAS

4.1. Safe urban mobility

Urban mobility is currently facing changing circumstances globally - congestion, air and noise pollution, climate change, the search for alternatives to fossil fuels, urbanisation, and the impacts of new technologies. Cities are facing even greater social challenges in respect of the environment, transport, health, and social cohesion. To accommodate growing demand for residential and commercial space, urban boundaries are extending in an often-uncoordinated manner, especially in rapidly growing cities in developing countries like Uzbekistan.[97] A common trend that have affected all cities is the rapid growth in urban population and continuous rural-urban migration flows, which has led to fast expanding cities. In Uzbekistan, urbanization indicators in the main metropolitan areas have not stopped growing in the last twenty years, with population increases in Samarkand and Tashkent of 47% and 24%, housing stock of 20% and 16%, respectively.[98] In the last decades, Uzbek cities have experienced rapid socio-economic transformation, but also severe setbacks of public transport services in cities. Too often, transport infrastructure and services fail to keep up with the mobility needs of the growing population. Growing use of passenger cars contributes to traffic congestion, poor air quality, declining public health, social segregation, and growing pressure to implement costly road expansions.[99] The urban mobility remains under stress, with increasing levels of congestion, pollution and road crashes. According to the Ministry of Internal Affairs of the Republic of Uzbekistan, in 2020, 1,919 fatalities were recorded on urban roads, an annual growth of 20% compared to 2019. In Uzbekistan in terms of air pollution, the transport sector was the highest NOx emitter, accounting for 63% of NOx emissions in 2016.[100] According to Air Visual, which monitors air quality, Uzbekistan is ranked 16th in the ranking of countries with the most polluted air in 2018.[101] Moreover, the lack of integration between land-use and transport policies has led to the development of new passenger car-dependent urban areas within cities, particularly, in the outskirts.

The problem is compounded by the fact that the urban road safety problem requires a multi-sectorial and well-coordinated approach. Where direct measures have included interventions on improving vehicle technology and road infrastructure, a sustainable urban safety culture that includes complete street standards were left behind. Key issues related to urban transport in Uzbekistan are the following: Over recent years neither transport infrastructure nor transport services have kept pace with population growth and the rise in the number of passenger cars. These changes have increasingly fostered demand for more efficient transport infrastructures, as well as integrated plans for urban development and traffic management in bigger cities; The lack of streets with adequate traffic capacity hindered operation of public transport and accessibility to many areas of the city and was sometimes a potential cause of road accidents; The occupation of roadsides is one of the major causes of traffic jams with a reduced level of service and slowing traffic flows.

Serious issues that affect the safety of urban transport in Uzbekistan are: The introduction of urban road safety improvements has been slow; Very few safety projects have focused on urban problems or solutions but there has been an increasing emphasis on vulnerable road users, particularly those in large cities; There is a few examples of crash reductions from improvements in urban transport but there are a few promising results from junction improvements, the construction of segregated lanes for nonmotorized vehicles and the introduction of traffic-calming devices. Urban development of Uzbekistan requires sustainable and efficient mobility options and services that are constantly evolving in line with economic development. It can unlock the city's potential as a safe, accessible, and attractive place for all.

[97] Urban Mobility Plans National Approaches and Local Practice Moving Towards Strategic, Sustainable and Inclusive Urban Transport Planning

[98] https://www.researchgate.net/publication/363280621_A_Sustainable_Model_of_Urban_Public_Mobility_in_Uzbekistan

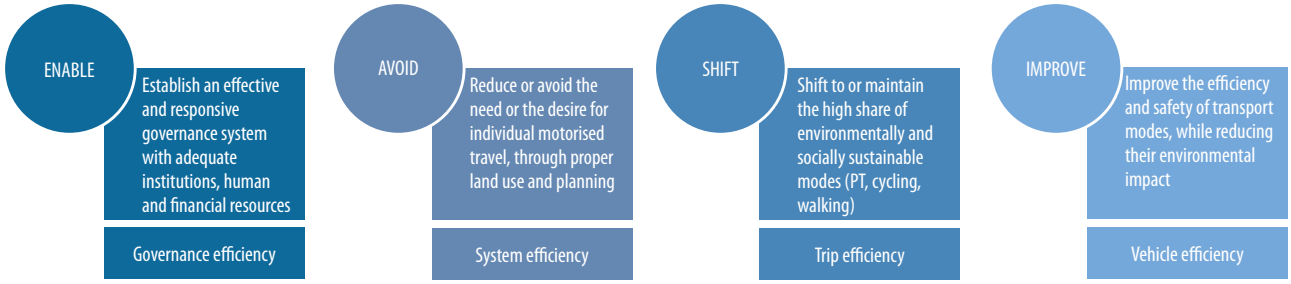
[99] Urban Mobility Plans National Approaches and Local Practice Moving Towards Strategic, Sustainable and Inclusive Urban Transport Planning

[100] https://unece.org/DAM/env/epr/epr_studies/Synopsis/ECE.CEP.188_Uzbekistan_Eng_Synopsiss.pdf

[101] World Air Quality Report 2018

4.1.1. The E-A-S-I framework

Figure 45
The EASI conceptual framework for steering public action towards sustainable accessibility and mobility



Source: Movemobility adapted from Dalkmann & Brannigan, 2007

The E-A-S-I (Enable – Avoid – Shift – Improve) approach is an all-encompassing framework, as it discusses two main dimensions that are a pre-requisite for a pathway towards sustainability in the transport sector: (i) the governance system and, (ii) the urban transport system itself. This is an internationally recognised paradigm for promoting and advocating low-carbon and sustainable urban transport. Applying a comprehensive set of measures, from various areas of interventions and at various levels can accelerate the transformation of the transport system towards sustainable goals. The E-A-S-I strategies have proved to provide co-benefits in combating climate change, reducing congestion, increasing inclusiveness and efficiency of the transport system.[102]

It is also important to mention that most of the interventions do not fall into only one category, most of them corresponding to two or even three strategy categories. Such is the case for parking management, for example, which falls under both avoid and shift, or fuel taxes which fall under three policy spheres: avoid, shift, and improve. For convenience, they have been classified in one category only.

ENABLE

The "ENABLE" notion refers to the substantial preconditions that are required at an institutional, fiscal and legislative level in order to follow the path towards the realisation of a sustainable urban transport system, in its whole. The institutional framework in Uzbekistan, both at national and local level, is currently not suitably equipped to deal with the challenges and gaps characterising the Uzbekistan urban transport system.

In Uzbekistan one of the major hindrances for achieving a sustainable transport system is the absence and the lack of coordination between institutions at various levels in the transport and spatial planning field, as well as lack of guidance and assistance from national level. Furthermore, Uzbekistan as a country, but also individual urban areas are lacking a coherent vision related to sustainable urban transport.

The road network of the Tashkent City Municipality (TCM) is known for its wide transport corridors, many with 8 to 12 passing lanes. While these corridors are common for the main routes of the City, the secondary road system that accesses residential areas is typically 2 to 4 lanes with no policies for parking along these roads. Currently, the Tashkent metro has 5 lines (Chilanzar, Uzbek, Yunusabad, Thirty Years of Independence (circular above-ground) and Sergeli (above-ground)), 48 stations with a total length of 66.04 km, and a city bus system managed by JSC "Toshshakhartranskhizmat" that operates over 1,000 buses. There is connectivity between different modes of transport within the city (between metro stations, bus routes and train stations) that can be improved to encourage more use of public transport. While there are sidewalks for pedestrians along most of the key transport corridors in Tashkent, there are only a few kilometres of cycling pathways in the city. The increase in the number of passenger cars has created more congestion in Tashkent which impacted the efficiencies of City-operated public buses as well as urban mobility within the city.[103]

[102] Move mobility adapted from Dalkmann & Brannigan, 2007

[103] 6417_TAILEVProDoc_05052021_Clean1_8724_110 (undp.org)

The development of public transport in Tashkent is regulated in accordance with the Cabinet of Ministers decree No. 129 on measures for the further development of passenger transport in Tashkent until 2021[03/11/2017]. The main directions of further development of passenger transport in the Tashkent city were identified as:

- Ensuring that bus transportation meets the requirements of the residents and guests of the Tashkent city, including updating fleet with modern buses and taking measures to improve the safety of passenger transportation.
- Optimization of the existing route network of urban passenger transport, the opening of new routes, the construction of final stops should consider the commissioning of new metro lines, roads, overpasses, and bridges.
- Optimization of city schemes and suburban routes by moving out final stopping points of suburban routes along the Tashkent Ring Road and the construction of passenger bus terminals.
- Improving the quality of services provided, the effectiveness of compliance with schedules and intervals on routes.
- Ensuring the rational and efficient operation of comfortable modern buses.
- The widespread adoption of modern information and communication technologies in passenger transport services.

The following Programs are approved by this government decree:

- A comprehensive program of measures for further improvement in the organization of passenger transport in the Tashkent city for the period 2017-2019.
- The program for updating the fleet of the enterprises of JSC "Toshshahartranskhizmat" with the large and medium capacity city buses of domestic production for the period of 2017-2019.
- Measures to optimize the route network of passenger transport in the Tashkent city for the period 2017- 2021.

To ensure environmental safety of transport vehicles, a draft concept on "the development of transport and road transport infrastructure in the Tashkent city for the period 2019-2025" has been formulated. The draft concept provides for implementation of measures aimed at: the development of a public transportation system; optimization of road transport infrastructure; optimization of the public transport route network; the introduction of dedicated lanes for public transport, particularly for buses; development of bike lanes and cycle infrastructure; the use of alternative energy sources in public transport.

Samarkand's public transport is serviced by 20 companies that operate more than 800 buses (ISUZU brands mainly working on gas fuels) and 35 taxis (cars running on gasoline and gas fuels) on 105 bus lines. In 2019, 390 buses were being purchased including 190 buses of large capacity with gas engines and 200 buses of medium capacity brand ISUZU with diesel and gas engines. There are ongoing efforts to transfer the functions of a public transport regulator to a newly created transport department of the Samarkand region to the Ministry of Transport. The city also has tram lines routed along key corridors including the Gagarin Street, one of the central and widest streets of the city that accesses the UNESCO protected attractions. There are plans in Samarkand to improve its urban road network including a large capital project for the reconstruction of Gagarin Street, and an improvement of the city's unique tram system. However, the city is also challenged by a growing number of motor vehicles on its roads significantly contributing the traffic congestion and local air pollution. In response, Samarkand municipality have expressed interest in the concepts of green urban transport which has potential for vastly improving urban mobility in Samarkand. Such initiatives will likely require unique measures to preserve the city's unique cultural heritage.

Namangan City with a population of 600,000 is Uzbekistan's second largest city that is in the Fergana Valley to the east of Tashkent. Namangan is also a city experiencing growing congestion from an increase in the number of motor vehicles, many of which are marshrutkas that provide the bulk of public transport for the city. With regards to public transport, Namangan lacks a single operator for regulating public transport issues. Currently, there are 4 large private companies for the transport of passengers operating 300 Isuzu gas buses. Currently, the city's Hokimiyat is working on transferring the function of the regulator of public transport to a newly created transport department of the Namangan region that would reports to the Ministry of Transport. The lack of a single operator to regulate public transport issues has resulted in an underdeveloped public transport system, which contributes to traffic congestion. Furthermore, there is a lack of parking policies that allow motor vehicles to be parked in a manner that partially obstructs road spaces for more efficient urban mobility. City municipal officials are interested in green e-mobility projects that will improve their current state of public transport and reduce their transport-related carbon footprint.[104]Difficulties with decision-making processes, and other issues such as the management of traffic flows, spatial and urban planning, economic and financial problems often hinder local authority's ability in taking effective steps to improve urban mobility and road safety.

[104] Tashkent - Accelerating Investments in Low Emission Vehicles (TAILEV)

- In Uzbekistan the role of local authorities in reducing road casualties is crucial. It is suggested to address in greater detail strengthening road safety responsibilities and capacities at the local government level – by legal/regulatory reform and providing technical assistance and capacity building training for local authorities.
- In Uzbekistan, there is a need for an integrated policy action related to urban transport and mobility. Cities should adopt an integrated urban mobility plan based on the Safe System Approach and consider developing a Sustainable Urban Mobility Plan that covers all forms of mobility. Such a plan should prioritise public transport and non-motorised mobility.
- With support of central government local authorities have to develop local road safety action plans with quantitative targets for the reduction of crash casualties and other safety performance indicators should be developed, implemented and systematically monitored at city level. It should include assessing the problem and setting targets for casualty reductions, making specific provisions for vulnerable road user groups such as pedestrians, cyclists, children, and elderly people and creating a safer road infrastructure, including public transport priority lanes.
- Today, in the EU, all cities with a population of more than 100,000 people are required to develop and implement sustainable urban mobility plans. The Uzbek Government could adopt new legislation that demands development of such programs by cities mandatory.
- Studies and analysis of the needs of different road user groups, especially pedestrians, motorcyclists and cyclists should be an important input to local road safety plans.

AVOID

Generally, AVOID strategies seek to limit the number and length of trips, especially that of carbon - intensive ones, such as light duty vehicles (LDVs), which are major GHG emissions contributors and refer to the overall efficiency of the transport system. The AVOID elements focus mainly on designing and implementing improvements in accessibility at the urban planning level.

The Government has often expressed the view that the urban transport sector is among the country's priority sectors. Indeed, Uzbek cities have specific features (shared with most other cities in the former Soviet Union) which make urban passenger transport of special importance for their population. These cities are unusually spread out with low overall population densities and long distances between residential and work areas. Commerce, markets and social services are also not within walking distance of people's residences in most cases. In addition, the climate is difficult, with cold temperatures during the winter and extremely hot summers. A recognised success factor for achieving a sustainable urban transport system is the integration of urban transport with other urban development strategies, such as land-use plans, environmental policies and economic development. To this day, spatial planning is still viewed in many cities in Uzbekistan as a separate topic from transportation planning. The central government should develop a spatial development strategy, applicable to all Uzbek cities, which encourages the development of dense, compact and mixed urban areas, developed around transport corridors and with easy, comfortable and safe access to public transport and non-motorised transport modes. For all the mentioned reasons, urban passenger transport is essential for access to jobs and services, and, more generally, for the efficient functioning of the labour and product markets as well as the effectiveness of economic and social life. This is particularly relevant for those with unstable employment and uncertain access to support networks, who constitute most of the poor people. The development should prevent the urban expansion and promote the reduction of passenger car usage. Hence, this policy must specify that housing development is in the vicinity of other basic equipment (working, educational and recreational facilities) to diminish the daily long travel distances, especially by passenger cars.

The parking situation in Uzbekistan is chaotic. The drivers do not pay much attention to the parking rules. They park everywhere it is possible to place a car, which reduces the road safety and accessibility for road users, especially for vulnerable ones. One of the effects of such illegal parking is traffic congestion which also leads to delay in travelling time and increases the cost of travelling. The most important problems affecting the overall system is the absence of a functioning parking system. Currently, Uzbek cities have few or no parking regulations in place. Parking planning as an integrated part of land use and urban planning is still in its initial phases. Most municipalities do not have parking regulation plans or strategies. A parking study would be beneficial to identify parking demand, especially in central locations in Uzbek cities. A special programme should be prepared to encourage multi-place parking system planning and construction, especially for new construction projects by private sector contractors.

In 2017, according to the General Directorate of Architecture and Construction of Tashkent, it was planned to build about 20 high-rise parking lots by demolishing private garages with a total area of 25.6 hectares and a capacity of 8,470 cars. Partial demolition of garages was carried out; however, the construction of high-rise parks has not yet been fully implemented. Recently, the construction of car parking in Tashkent, is becoming more and more relevant and does not stand still. According to statistics for 2015, there were more than 140 open and closed parking lots in the city with a total capacity of more than 27,400 cars. Consequently, the provision of public parking for 2015 was only 6.9%.[105]

The Tashkent Department of Transport and Road Infrastructure has published a project for the location of paid parking spaces in the capital. In February 2022, the President signed a corresponding resolution. According to the plan, at the first stage it is proposed to create more than 2,200 parking spaces. About 72 parking meters will be installed. At the same time, part of the parking spaces will be allocated for car owners with disabilities. They will be able to park for free. Two cars with an automatic video-detection system will monitor the parking lots. Cars of the violators will be sent to the impound.[106] The goal of the reform is to reduce the number of passenger cars on the roads and create conditions for the use of public transport instead of private.[107]

The draft master plan of Tashkent City 2045 considers the establishment of social requirements for buildings. For example, if a multi-storey building is planned to be built in a city, depending on its type, certain standards will be established for the availability of a school, kindergarten, consumer service centres, parking spaces, as well as for the area to be landscaped.[108]

SHIFT

Given the social and economic development trends in Uzbekistan, the transport demand for goods and people is increasing, thus shifting to environmentally friendlier transport modes is a major step for achieving sustainable and safe urban transport. The goal of SHIFT strategies is to increase the modal shares of public transport and non-motorised modes, such as cycling and walking, and they refer to trip efficiency.

People continue to prefer to use their private cars to commute and move around the urban environment. This is because, public transport has not been accessible, the networks have not covered key residential areas and the services themselves have not been attractive. To reverse this trend and help in achieving the Sustainable Development Goal Target 11.2, recent investments have been initiated, such as the extension of the metro and the acquisition of new buses. These initiatives are not supplemented by policies and action plans[109]

Convenient public transport is a necessary attribute of a modern city. But in Tashkent, this issue has become an urgent problem. The depreciation of the bus fleet, the closure of central bus stations, and the inefficient connection of routes created a number of inconveniences for residents. In Uzbekistan, until recently public policies and investments have mostly focused on accommodating the growing demand for passenger car use. For the past two decades, a remarkable high percentage of the government investments dedicated to transport has been used to build roads primarily for car use and there is lack on investment in public transport.

Over the past five years, the population of the capital has increased by 300 thousand people, its territory has expanded. Every day more than a million people come and go to the capital. However, the public transport system does not correspond to the changes taking place in the capital. The service life of 350 buses has exceeded 10 years, 393 buses are missing. Due to traffic jams on the streets, the interval of buses is extended to 30 minutes during peak hours. As a result, passengers are rightly dissatisfied with the services provided and prefer personal transport. In Tashkent, the rate of use of a passenger car is 79%, respectively, the level of use of public transport is only 21%.[110]

[105] https://iopscience.iop.org/article/10.1088/1757-899X/883/1/012067/meta

[106] https://www.uzdaily.com/en/post/77341

[107] https://uzreport.news/society/uzbek-authorities-envision-creating-more-social-facilities-at-expense-of-parking-areas

[108] https://uza.uz/en/posts/the-draft-master-plan-of-tashkent-city-2045-considered_416936?q=%2Fposts%2Fthe-draft-master-plan-of-tashkent-city-2045-considered_416936

[109] https://unece.org/DAM/env/epr/epr_studies/Synopsis/ECE.CEP.188_Uzbekistan_Eng_Synopsiss.pdf

[110] https://yuz.uz/en/news/toshkent-shahrida-jamoat-transportini-rivojlantirish-masalalari-muhokama-qilindi

The main task of the Ministry of Transport and the Khokimiyat of Tashkent is to increase the level of use of public transport by two times.[111] Priority should be given to a systematic approach and facilitating the movement of people, ensuring connectivity and the integrated development of all modes of transport, including route, rail and metro lines, as well as infrastructure for cycling and walking. It was instructed to build 10 modern parking on the main roads of entry from the regions to Tashkent, as well as parking lots next to six metro stations with the largest number of passengers.

In 2022 the construction of the overhead metro line "Kuyluk-Kipchak" will be completed. As a result, for 70,000 people who use passenger cars, there will be conditions for using public transport. In addition, the task was set to create an economic and mathematical model of the public transport system based on the forecast of passenger traffic for the next five years, as well as to increase the scientific potential of the Transport Institute.

Urban transport services should be financially sustainable while satisfying social needs. Public-private partnerships can be an effective way to build and implement new infrastructure or to renovate and manage existing public transport.

The draft master plan of Tashkent City 2045 considers that public transport will be improved to solve the problem of traffic jams. The presence of a bus stop within a radius of at least 15 minutes on foot from the house will become mandatory. Parking lots near public transport stops will also be organized on the outskirts of the city on the principle of Park and Ride.[112]

Roads are poorly adapted for pedestrians and cyclists. As a result of this, as well as the low traffic culture, road accidents have become more frequent. It is planned to introduce a traffic control system at 200 intersections, build 2 overpasses, 180 kilometres of pedestrian and bicycle paths, and create parking spaces for 2,000 cars. It's also planned to update 35% of the bus fleet.

IMPROVE

IMPROVE strategies refer to improvement of current modes of transport, by increasing fuel efficiency and promote alternative technologies, in order to reduce the environmental impact of each travelled kilometre.

Although not a solution for all the urban transport problems, new technology vehicles such as electric vehicles (EVs) can contribute significantly to reducing GHG emissions caused by private motorised transport. The uptake of newer, environmentally friendlier technologies is facing various barriers which the government through sound policy programmes can overcome.

In 2020, testing of the Chinese Yutong electric bus has begun in Tashkent according to reports from a Podrobno.uz correspondent reports with reference to Toshshahartranskhizmat. On 7 March, the new bus entered the passenger service of route No. 51 "Beshagach - Yunusabad".

Vehicle taxation is a policy instrument that can contribute to the improvement of the vehicle fleet, discouraging the import and the ownership of environmentally underperforming and unsafe vehicles. Based on international experiences, Uzbekistan can reform its vehicle taxation system, increasing the cost of ownership of personal cars, especially of those older than 7-10 years. There are various vehicle taxes that the governments are employing, such as: vehicle registration tax (RT), vehicle registration fee (RF), annual motoring tax (AMT), circulation tax (CR). Across the EU CO2 based taxation of private vehicles is a widespread practice, but there are also other criteria that can be used for setting the level of taxes: cylinder capacity, fuel type use, weight, fuel consumption, length of vehicle. Many countries use a combination of such criteria.

The National government can provide financial support for modern traffic signalling systems and other ITS measures in Uzbekistan, if these are part of a coherent strategic transport planning process, or it can help disseminate best practices and support training opportunities through ITS targeted programs.

[111] https://www.uzdaily.uz/en/post/70828

[112] https://uza.uz/en/posts/the-draft-master-plan-of-tashkent-city-2045-considered_416936?q=%2Fposts%2Fthe-draft-master-plan-of-tashkent-city-2045-considered_416936

4.1.2. Proposed measures and conclusions

Within 4 key areas of work following actions are recommended:

A6.1 Develop comprehensive urban mobility strategies and plans at national and local levels

A6.2 Empower and strengthen the role of municipalities

A6.3 Control and coordinate land-use and integrate urban and transport planning

A6.4 Gradually define and implement stricter requirements in terms of energy efficiency and GHG emissions standards

LEGISLATION

A6.5 Prioritise public transport and active travel

A6.6 Implementing effective enforcement mechanisms

A6.7 Developing partnerships between stakeholders

ENFORCEMENT

A6.8 Capacity development to promote sustainable transport options such as cycling, walking and public transport, the implementation of traffic calming measures and the relevant infrastructure

A6.9 Public campaigns to encourage sustainable transport choices and the promotion of active travel through education and marketing initiatives

EDUCATION

A6.10 Technological innovation to reduce environmental impacts, optimise systems' efficincy and reduce the need to travel

A6.11 Development of Intelligent Transport Systems (ITS)

TECHNOLOGY

LEGISLATION

Activity A6.1: Develop comprehensive urban mobility strategies and plans at national and local levels

- Establishment of policy and legal frameworks on national level that support sustainable urban mobility, such as regulations on transport, land use, and environmental protection.
- Developing a comprehensive national urban mobility strategy and action plan that outlines specific measures and initiatives that will be implemented to achieve the objectives set out in the strategy, such as the expansion of public transport networks, the promotion of cycling and walking, and the introduction of low-emission zones.
- Establishing a system for monitoring and evaluating the implementation of the strategy, to ensure that it is delivering the desired outcomes and to enable adjustments to be made where necessary.

Activity A6.2: Empower and strengthen the role of municipalities

- Reviewing and updating the legal and regulatory framework to clarify and strengthen the role of municipalities in urban planning, transportation, and other relevant areas.
- Identifying and mobilizing financial resources to support municipalities in implementing urban mobility strategies and plans, including through the development of financing mechanisms and partnerships with the private sector.

Activity A6.3: Control and coordinate land-use and integrate urban and transport planning

- Developing land-use plans that are coordinated with urban mobility plans, to ensure that land-use and transportation infrastructure are planned and developed in a coordinated and integrated way.
- Reviewing and updating regulatory frameworks to facilitate coordinated and integrated land-use and transport planning, including regulations on zoning, development, and transportation infrastructure.
- Establishing a system for monitoring and evaluating the effectiveness of integrated land-use and transport planning

Activity A6.4: Gradually define and implement stricter requirements in terms of energy efficiency and GHG emissions standards

- Developing and implementing energy efficiency and GHG emissions standards for different modes of transportation (vehicles, fuels, and infrastructure) to gradually reduce emissions over time.
- Implementing a mix of incentives and disincentives to encourage the adoption of low-emissions modes of transportation and penalize high-emissions modes, such as through taxation, subsidies, and pricing mechanisms.
- Establishing compliance and enforcement mechanisms to ensure that energy efficiency and emissions standards are being met, and penalties for non-compliance.

ENFORCEMENT

Activity A6.5: Prioritise public transport and active travel

- Developing and implementing policies that prioritize public transport and active travel modes, such as walking and cycling, in urban mobility planning and infrastructure investment decisions.
- Ensuring that law enforcement agencies are adequately trained and equipped to enforce regulations related to public transport and active travel, such as bus lane restrictions, cycling lanes, and pedestrian crossings.

Activity A6.6: Implementing effective enforcement mechanisms

- Developing and implementing policies and regulations that define clear and enforceable safety standards for urban mobility, including infrastructure design, vehicle standards, and driver behaviour.
- Establishing effective enforcement mechanisms, such as automated speed cameras, red-light cameras, and other monitoring technologies that can detect and deter unsafe behaviour.
- Establishing mobile parking enforcement system which will allow effect enforcement of parking regime in urban areas.

Activity A6.7: Developing partnerships between stakeholders

- Bringing together relevant stakeholders, including law enforcement agencies, urban planners, public transport operators, cycling and pedestrian advocacy groups, and other community organizations to collaborate on urban mobility safety initiatives.
- Developing joint public education campaigns and targeted messaging to increase awareness of the importance of safe and sustainable urban mobility practices.

EDUCATION

Activity A6.8: Capacity development to promote sustainable transport options such as cycling, walking and public transport, the implementation of traffic calming measures and the relevant infrastructure

- Developing training programs and workshops for law enforcement officials to promote awareness of sustainable transport options and the benefits of traffic calming measures.
- Developing guidelines and protocols for the design and implementation of pedestrian and cycling infrastructure, such as dedicated bike lanes, pedestrian crossings, and shared-use paths.
- Providing technical assistance and support to municipalities and other stakeholders to implement traffic calming measures to promote safer and more sustainable mobility options.
- Encouraging the participation of local communities and vulnerable road users in the development and implementation of sustainable transport initiatives, to ensure that their needs and perspectives are considered.

Activity A6.9: Public campaigns to encourage sustainable transport choices and the promotion of active travel through education and marketing initiatives.

- Developing targeted marketing campaigns and education initiatives to promote the benefits of sustainable transport options, such as cycling, walking, and public transport.
- Creating user-friendly information materials, such as maps and apps, to facilitate active travel and public transport use.
- Conducting outreach and public awareness campaigns to promote the use of sustainable transport options, including engaging with local schools, community groups, employers and businesses.
- Organizing events and activities, such as cycling and walking tours, to promote the benefits of active travel and sustainable transport options.

TECHNOLOGY

Activity A6.10: Development of Intelligent Transport Systems (ITS)

- Developing the overall system design and architecture that integrates the different components of an ITS, including sensors, communication networks, data processing and management systems, and user interfaces that can gather/provide information on traffic flow, weather conditions, vehicle movements, accidents, congestion and other factors that can affect transport systems.
- Designing and implementing communication networks that connect different components of an ITS, such as vehicles, infrastructure, and control centres.
- Designing and developing user interfaces that allow users to access and interact with an ITS, such as mobile apps, websites, and in-vehicle displays.
- Developing systems that promote sustainable transport, such as public transport systems, bike-sharing schemes, and carpooling services.

Activity A6.11: Technological innovation to reduce environmental impacts, optimise systems' efficiency and reduce the need to travel

- Investing in sustainable transport technologies, such as electric vehicles, hybrid buses, and hydrogen-powered trains.
- Encourage the use of public transportation in the cities of Uzbekistan and implementing technologies such as smart ticketing systems and real-time passenger information to make public transport more convenient and efficient.
- Developing and implementing integrated transport platforms to provide users with a range of sustainable transport options and simplify trip planning and payment.
- Developing and implementing digital platforms for sustainable urban logistics and freight transport, such as shared delivery services.

5. Conclusions

Ensuring the safety of all road users is a paramount concern for every country, and the Road Safety Performance Review (RSPR) stands as a comprehensive assessment tool in this critical endeavour. This table encapsulates the results of the Uzbekistan RSPR, meticulously organizing its recommendations in a prioritized manner. By distilling the findings into a clear and accessible format, this table could serve as a foundational document for shaping national road safety action, strategy or policy. More detailed description of RSPR recommendations and follow up activities could be found at the end of each sub-chapter in Chapters 3 and 4, providing policymakers with a concrete proposal of activities to be included in strategic roadmap to address key issues and enhance road safety across the country.

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Pillar 1 Road Safety Management								
Activity 1.1. To become a contracting party and efficiently implement all core UN road safety conventions	2024-2027	High	X		Cabinet of Ministers of the Republic of Uzbekistan	United Nations and international partners	Full implementation of core UN road safety conventions, aligning Uzbekistan with international road safety standards.	A1.3, A2.1, A3.1, A3.6, A4.1, A4.3, A2.5
Activity 1.2. Ensure vertical and horizontal coordination between actions taken by designated authorities	2024-2026	High	X		Cabinet of Ministers of the Republic of Uzbekistan	Various government agencies at national and local levels.	Improved coordination and cooperation among various authorities at both national and local levels, leading to more effective road safety measures.	A1.3, A1.8, A1.10, A5.3, A5.4, A5.5, A6.2, A6.7
Activity 1.3. Empower the Republican Special Commission for Road Safety (Commission) to deal with strategic issues and monitoring of results	2024-2025	High	X		Cabinet of Ministers of the Republic of Uzbekistan	Republican Special Commission for Road Safety and various government agencies at national and local levels.	Enhanced capacity of the Commission to address strategic road safety issues and monitor the results of road safety initiatives.	A1.1, A1.2, A1.4, A1.5, A6.7
Activity 1.4. Set concrete and measurable targets in road safety strategy and action plan	2024-2026	High	X	X	Republican Special Commission for Road Safety	Various government agencies at national and local levels, NGOs, international partners.	Clear and measurable targets in the road safety strategy and action plan to guide efforts and evaluate progress effectively.	A1.3, A1.6, A1.12, A6.1
Activity 1.5. Developing sustainable, domestic funding sources for road safety	2024-2030	High	X		Ministry of Economy and Finance, Ministry of Transport	Financial institutions and various government agencies at national and local levels.	Establishment of reliable domestic funding mechanisms for ongoing road safety initiatives and programs.	A1.3, A5.2
Activity 1.6. Develop road safety performance indicators (RSPI) and using them to monitor progress and evaluate the impact of enforcement efforts	2024-2025	High	X	X	Republican Special Commission for Road Safety	Ministry of Internal Affairs, Data analysts and experts in road safety	Effective use of road safety performance indicators to track progress and assess the impact of enforcement efforts.	A1.4, A1.7, A1.12, A2.12

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Activity 1.7. Evaluate the effectiveness of enforcement efforts through data collection and analysis, and using the findings to guide future strategies and initiatives	2024-2025	High	X	X	Ministry of Internal Affairs, Ministry of Transport Republican Special Commission for Road Safety	Data collection agencies, law enforcement agencies, and analytical experts.	Data-driven decision-making, leading to more effective enforcement strategies and initiatives.	A1.6, A1.12, A2.12
Activity 1.8. Developing partnerships between stakeholders, such as police, local government, and community groups, to coordinate enforcement efforts and promote road safety	2024-2025	High	X	X	Ministry of Interior, Khokimiyats	Community organizations, NGOs, youth groups	Enhanced collaboration among stakeholders for coordinated road safety enforcement and promotion.	A1.2, A1.9, A6.2, A6.6
Activity 1.9. Develop and implement training programs for road safety professionals, law enforcement officials, and other relevant stakeholders to build their capacity in road safety management.	2024-2026	High	X	X	Ministry of Higher Education, Science and Innovation, Ministry of Internal Affairs, Ministry of Health	Collaboration with training institutions and road safety experts.	Improved capacity and expertise among road safety professionals and law enforcement officials.	A1.8, A2.1, A2.2, A2.3, A2.4, A2.5, A2.6, A6.2
Activity 1.10. Encourage knowledge-sharing and collaboration among road safety stakeholders at local, national and international levels.	2024-2026	Middle	X	X	Ministry of Internal Affairs, Republican Special Commission for Road Safety	International organizations, local and national stakeholders, and educational institutions.	Enhanced knowledge-sharing and collaboration to exchange best practices and innovations in road safety.	A1.2, A1.13, A6.2
Activity 1.11. Implement intelligent transportation systems (ITS) to optimize traffic flow, reduce congestion, and improve safety	2024-2030	Middle	X		Ministry of Transport, Local Municipalities, Ministry of Internal Affairs	Technology providers, transportation experts, and local authorities.	Improved traffic management, reduced congestion, and enhanced road safety through ITS implementation.	A2.9, A4.10, A6.2, A6.5, A6.6
Activity 1.12. Data collection forms on traffic crashes should be refined based on the CADaS standard.	2024-2026	High	X		Republican Special Commission for Road Safety, Ministry of Internal Affairs	Data experts and international standards bodies	Standardized and improved data collection on traffic crashes, facilitating more accurate analysis and response.	A1.4, A1.6, A1.7

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Activity 1.13. Technological innovation to reduce environmental impacts, optimise systems' efficiency and reduce the need to travel in the frame of technology.	2024-2030	Middle	X		Republican Special Commission for Road Safety, Ministry of Transport, Ministry of Ecology, Environmental protection and Climate change	Technology companies, environmental experts, and research institutions.	Integration of innovative technologies to reduce environmental impacts, enhance transportation efficiency, and promote sustainable travel options.	A1.10, A5.5, A6,4, A6.5, A6.6
Pillar 2 Safe Roads								
Activity 2.1. Update national legislation, standards and guidelines for road construction, reconstruction and maintenance	2024-2026	High	X		Ministry of Transport, Ministry of Construction and Housing and Communal services	Legal experts, construction industry, and relevant ministries	Enhanced legal framework and updated standards to ensure safer road construction, reconstruction, and maintenance.	A1.1, A1.9, A2.4, A2.5, A2.6, A2.7, A6.5
Activity 2.2. Introduce functional classification of roads and streets	2024-2025	High	X		Republican Special Commission for Road Safety, Road Committee	Local authorities and urban planning experts.	Improved road classification for better traffic management and safety.	A1.9, A2.1, A2.7, A6.1
Activity 2.3. Introduction of RSA and RSI procedures with necessary guidelines in the national legislation	2024-2025	High	X	X	Road committee, Republican Special Commission for Road Safety	Road safety experts and legal professionals.	Inclusion of Road Safety Audits (RSA) and Road Safety Inspections (RSI) in national legislation, leading to safer road infrastructure.	A1.9, A2.1, A2.6, A2.7, A2.11
Activity 2.4. Protect right-of-way	2024-2025	High	X	X	Ministry of Transport, Republican Special Commission for Road Safety	Legal experts and land management authorities.	Improved protection of the right-of-way for road construction and safety.	A1.9, A2.1, A2.7, A2.8, A6.3
Activity 2.5. Speed management in urban areas	2024-2025	High	X	X	Ministry of Internal Affairs, Khokimiyats	Road Committee and traffic management experts, local government, NGOs	Safer urban road environments through effective speed management.	A1.1, A1.9, A2.1, A2.7, A2.8, A2.10, A4.10, A4.11, A6.1, A6.3
Activity 2.6. Adoption of road safety audits and inspection	2024-2025	High	X		Cabinet of Ministers of the Republic of Uzbekistan	Road safety experts and audit/inspection professionals.	Implementation of road safety audits and inspections for enhanced road safety.	A1.9, A2.3, A2.7, A2.11

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Activity 2.7. Road safety-oriented education programmes and training for road designers and engineers	2024-2025	High	X	X	Ministry of Higher Education, Science and Innovation, Republican Special Commission for Road Safety	Educational institutions, road design experts, and engineering faculties.	Well-educated road designers and engineers with a focus on road safety principles.	A2.1, A2.2, A2.3, A2.4, A2.5, A2.6, A2.10, A2.11
Activity 2.8. Public campaigns to promote construction, operation and maintenance of safe roads through education and marketing initiatives	2024-2025	High	X	X	Road Committee, Republican Special Commission for Road Safety	Advertising agencies, educational institutions, and the media.	Increased public awareness and support for safe road construction and maintenance.	A2.4, A2.5
Activity 2.9. Develop and introduce technology for better traffic management	2024-2027	High	X		Road Committee, Republican Special Commission for Road Safety	Technology providers and experts.	Improved traffic management systems for enhanced safety.	A1.11
Activity 2.10. Develop and introduce the technology to detect traffic violation and ensure the high probability to detect the violator	2024-2027	Middle	X		Ministry of Internal Affairs	Technology companies and law enforcement agencies.	Improved enforcement of traffic rules and deterrence of violations.	A2.5, A2.7
Activity 2.11. Ensure that equipment installed in road work zone is in line with approved traffic management plan and with sufficient quality.	2024-2027	High	X	X	Ministry of Construction and Housing and Communal services, Road Committee	Construction companies and traffic management experts.	Safer road work zones with equipment meeting quality and safety standards.	A2.3, A2.6, A2.7
Activity 2.12. Improve registration of each accident with fatalities by representatives of the Road Committee and municipal road administration	2024-2026	High	X		Road Committee, Khokimiyats	Road safety authorities and municipal administrations	Enhanced accident reporting and data collection, leading to improved safety measures.	A1.6, A1.7

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Pillar 3 Safe Vehicle								
Activity 3.1. Update national legal framework on safe vehicles to ensure compliance with UN road safety conventions.	2024-2027	High	X		Ministry of Transport, Ministry of Justice	Legal experts and international road safety organizations	An updated legal framework in line with international road safety conventions, promoting safer vehicles.	A1.1, A3.2, A3.3, A3.4, A3.5, A3.7, A3.9, A4.4
Activity 3.2. Implement minimum vehicle safety and emission standards for admission to traffic and enforce compliance with these standards.	2024-2027	High	X		Cabinet of Ministers of the Republic of Uzbekistan	Enforcement agencies, and environmental experts	Safer and environmentally friendly vehicles on the road, reducing emissions and improving road safety.	A3.1, A3.5, A3.6, A3.8, A4.4, A6.4
Activity 3.3. Provide incentives for small and medium enterprises (SME) dealing with motor vehicle repair and maintenance aimed to ensure safety and reliability of vehicle repairs.	2024-2025	Middle	X		Ministry of Economy and Finance, Ministry of Transport	SME associations and automotive repair industry experts	Improved vehicle repair and maintenance quality, enhancing vehicle safety.	A3.1, A4.4
Activity 3.4. Legislation on use of safety belts, child restraint systems and helmets should be revised based on the international best practice and latest scientific evidence	2024-2026	High	X		Ministry of Internal Affairs, Ministry of Health	Health professionals, legal experts, and road safety advocates.	Revised legislation promoting the use of safety equipment based on best practices and scientific evidence.	A3.1
Activity 3.5. Strengthen the enforcement of periodic technical and roadside inspections to ensure that vehicles meet safety and emission standards and are in proper working condition.	2024-2026	High	X		Ministry of Internal Affairs, Republican Special Commission for Road Safety	Law enforcement agencies, inspection authorities, and automotive experts	Improved compliance with safety and emission standards through rigorous inspections.	A3.1, A3.2, A3.6, A3.8, A6.4
Activity 3.6. Launch public awareness campaigns to educate drivers about the importance of vehicle safety and the need to comply with safety and emission standards.	2024-2025	High	X	X	Cabinet of Ministers of the Republic of Uzbekistan, Republican Special Commission for Road Safety	Advertising agencies, NGOs and other road safety organizations, and media.	Increased awareness among drivers, leading to better compliance with safety and emission standards.	A1.1, A3.2, A3.5, A4.6, A6.4

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Activity 3.7. Provide information and resources to educate drivers about the risks and consequences of transporting dangerous goods and promote safe practices	2024-2025	High	X	X	Ministry of Transport	Emergency response agencies and relevant authorities.	Safer transportation of dangerous goods, reducing potential hazards on the road.	A3.1, A3.8, A4.6
Activity 3.8. Invest in the development and implementation of technology-based solutions for vehicle inspections, such as advanced diagnostic systems and emission testing equipment.	2024-2026	High	X		Ministry of Investments, Industry and Trade, Ministry of Transport	Technology providers and automotive industry experts.	Enhanced and efficient technology-based vehicle inspections for better safety and emissions control.	A3.2, A3.5, A3.7, A4.6
Activity 3.9. Expand the availability of charging stations for electric vehicles to support the growing number of imported electric vehicles.	2024-2027	High	X		Ministry of Energy, Ministry of Transport	Energy companies and electric vehicle manufacturers.	Increased support for electric vehicles, promoting eco-friendly transportation options.	A3.1
Pillar 4 Safe Road User								
Activity 4.1. Implementation of gradual driving permit system	2024-2026	High	X		Ministry of Internal Affairs	Driver training schools and licensing authorities.	Gradual and phased driver training and licensing system leading to safer and more skilled drivers.	A1.1, A4.5, A4.9
Activity 4.2. Introduction of road safety passports for schools and kindergartens	2024-2025	Middle	X	X	Ministry of Internal Affairs, Ministry of preschool and school education	Schools, parents, and local authorities, academia and NGOs	Improved safety measures for children during school transportation.	A4.8, A4.10
Activity 4.3. Update legislation to improve knowledges and skills assessment of driver's candidates	2024-2027	High	X		Ministry of Transport, Republican Special Commission for Road Safety	Legal experts, licensing authorities, and driving schools.	Enhanced driver knowledge and skills assessments for safer road users.	A1.1, A4.5, A4.6, A5.6
Activity 4.4. Implementation of digital/analogue tachographs.	2024-2026	High	X		Ministry of Transport, Republican Special Commission for Road Safety	Technology providers and transport companies.	Better monitoring of driving hours and rest periods for professional drivers, reducing fatigue-related accidents.	A3.1, A3.2, A3.3
Activity 4.5. Improve control and audit of driving schools	2024-2025	High	X		Ministry of Internal Affairs	Law enforcement agencies and educational institutions.	Enhanced quality and safety standards in driver training schools.	A4.1, A4.3, A4.6, A4.10

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Activity 4.6. Special focus on safety of professional drivers	2024-2025	High	X		Ministry of Transport	Labor organizations, professional driver associations, and transport companies.	Improved safety conditions and well-being for professional drivers.	A3.6, A3.7, A3.8, A4.3, A4.5, A4.9,
Activity 4.7. Stricter enforcement, especially at night-time and on motorways	2024-2025	High	X	X	Ministry of Internal Affairs, Ministry of Transport	Law enforcement agencies, traffic management authorities, and transport companies.	Enhanced enforcement to deter violations and reduce accidents during high-risk periods.	A4.10, A4.11
Activity 4.8. Introduction of road safety training for school children.	2024-2025	High	X	X	Ministry of Higher Education, Science and Innovation, Ministry of Internal Affairs	Schools, parents, and road safety organizations and NGOs	Safer road behaviours and habits among school children.	A4.2
Activity 4.9. Training of professional drivers.	2024-2025	High	X		Ministry of Transport	Training institutions, transport companies, and professional driver associations.	Well-trained and skilled professional drivers, leading to safer transportation.	A4.1, A4.6
Activity 4.10. Use of automated enforcement systems	2024-2027	High	X		Ministry of Internal Affairs	Technology providers and law enforcement agencies.	Efficient enforcement and deterrence of traffic violations.	A1.11, A2.5, A4.2, A4.5, A4.7
Activity 4.11. Use of ITS	2024-2027	Middle	X		Ministry of Transport, Ministry of Internal Affairs	Technology providers, traffic management authorities and transport experts	Enhanced traffic management and safety through technology-based solutions.	A2.5, A4.7
Pillar 5 Post-crash								
Activity 5.1. Ensure legal requirements for anyone to perform first-aid activities within their capacity (duty of care and Good Samaritan)	2024-2027	High	X		Ministry of Health, Ministry of Justice	Legal experts, healthcare organizations, and community groups.	Legal framework promoting first-aid activities and encouraging individuals to provide assistance in emergencies.	A5.6
Activity 5.2. Enable systemic financing of road safety activities by insurance companies.	2024-2027	High	X		Republican Special Commission for Road Safety, Ministry of Economy and Finance	Insurance companies, financial institutions, and authorities.	Sustainable financing for road safety initiatives through contributions from insurance companies.	A1.5

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Activity 5.3. Inclusion of the physical and mental health needs of road crash victims in the national health strategy	2024-2025	Middle	X		Ministry of Health, Republican Special Commission for Road Safety	Healthcare providers, mental health professionals, and victim support organizations	Comprehensive health services addressing the needs of road crash victims, both physical and mental.	A1.2, A5.8, A5.9
Activity 5.4. Introduction of joint emergency services interoperability and protocols to improve post-crash response	2024-2025	High	X		Ministry of Internal Affairs, Ministry of Health	Emergency services, healthcare providers, and communication technology experts	Improved coordination and response times in post-crash emergency situations.	A1.2, A5.7, A5.8
Activity 5.5. The one call dispatch service to include all emergency services and not limited to ambulance services	2024-2026	High	X		Ministry of Internal Affairs, Ministry of Health, Ministry of Emergency Situations	Emergency services, technology providers, and communication experts	Streamlined emergency response through a single, comprehensive 'one call' dispatch service.	A1.2, A1.13, A5.7, A5.8
Activity 5.6. Provide first-aid training for driver's candidates	2024-2025	Middle	X	X	Ministry of Transport, Ministry of Health	Driver training schools, NGOs and healthcare professionals	Safer drivers with first-aid skills to respond to emergencies.	A4.3, A5.1
Activity 5.7. Investment in training for trauma care personnel	2024-2025	Middle	X	X	Ministry of Health, Medical Training Institutions	Medical institutions, universities, and trauma care experts.	Highly trained trauma care personnel to improve post-crash care.	A5.4, A5.5
Activity 5.8. Adoption of a team approach to trauma care and incorporation into training	2024-2025	Middle	X	X	Ministry of Health, Medical Training Institutions	Healthcare institutions, trauma care experts, and medical schools.	Enhanced trauma care through a coordinated 'team approach.'	A5.3, A5.4, A5.5
Activity 5.9. Investment in contemporary trauma care facilities.	2024-2027	High	X		Ministry of Health, Ministry of Economy and Finance	Healthcare institutions, financial institutions, and trauma care experts.	Access to state-of-the-art trauma care facilities for road crash victims.	A5.3

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Safe Urban Mobility								
Activity 6.1. Develop comprehensive urban mobility strategies and plans at national and local levels	2024-2026	High	X	X	Ministry of Transport, Republican Special Commission for Road Safety, Khokimiyats	Local governments, urban planners, and transportation experts.	Comprehensive urban mobility strategies and plans developed at both national and local levels to enhance transportation systems and infrastructure.	A1.4, A2.2, A2.5, A6.3, A6.5, A6.10
Activity 6.2. Empower and strengthen the role of municipalities	2024-2026	High	X	X	Republican Special Commission for Road Safety, Khokimiyats	Central and Local governments, urban planners, and transportation experts.	Empowered and strengthened municipal bodies capable of managing and implementing urban mobility projects and policies.	A1.2, A1.8, A1.9, A1.10, A1.11, A6.7, A6.8
Activity 6.3. Control and coordinate land-use and integrate urban and transport planning	2024-2026	High	X	X	Ministry of Transport, Central and local governments	Local governments, urban planners, and transportation experts.	Improved coordination of land-use, urban development, and transport planning, resulting in more integrated and sustainable urban environments.	A2.4, A2.5, A6.1, A6.11
Activity 6.4. Gradually define and implement stricter requirements in terms of energy efficiency and GHG emissions standards	2024-2026	Middle	X		Central government, Ministry of Transport, Ministry of Ecology, Environmental protection and Climate change	NGOs, academia and international donor organizations	Gradual implementation of stricter energy efficiency and greenhouse gas emissions standards for vehicles, leading to reduced environmental impact.	A1.13, A3.2, A3.5, A3.6, A6.10
Activity 6.5. Prioritize public transport and active travel	2024-2027	High	X	X	Ministry of Transport and local governments	Local governments, urban planners, and transportation experts	Prioritization of public transport and active travel options to reduce congestion and promote sustainable transportation choices.	A1.11, A1.13, A2.1, A6.1, A6.8, A6.9, A6.10

Activity	Time period for the implementation of activity	Priority	Level		Institution/s/organization/s responsible for the activity and cooperation		Expected outcome	Connection with
			National	Local	Responsible	Cooperationo		
Activity 6.6. Implementing effective enforcement mechanisms	2024-2025	High	X		Ministry of Internal Affairs, Ministry of Transport and local governments	Private business, transportation experts	Implementation of effective enforcement mechanisms to ensure compliance with traffic regulations and enhance road safety.	A1.8, A1.11, A1.13, A6.10, A6.11
Activity 6.7. Developing partnerships between stakeholders	2024-2025	High	X	X	Republican Special Commission for Road Safety	Central and Local governments, private business	Development of partnerships between various stakeholders to support and fund urban mobility initiatives.	A1.2, A1.3, A6.2
Activity 6.8. Capacity development to promote sustainable transport options such as cycling, walking and public transport, the implementation of traffic calming measures and the relevant infrastructure	2024-2025	High	X	X	Ministry of Transport and local governments	Local governments, urban planners, and transportation experts	Capacity development to promote sustainable transport options, enhance cycling and walking infrastructure, and implement traffic calming measures.	A6.2, A6.5
Activity 6.9. Public campaigns to encourage sustainable transport choices and the promotion of active travel through education and marketing initiatives.	2024-2025	High	X	X	Ministry of Transport and local governments	Local governments, urban planners, NGOs, academia and transportation experts	Public campaigns to encourage sustainable transport choices, education on active travel, and marketing initiatives to promote these choices.	A6.5
Activity 6.10. Development of Intelligent Transport Systems (ITS)	2024-2027	Middle	X	X	Central government, Ministry of Transport and local governments	Private business, academia	Development of Intelligent Transport Systems (ITS) to improve transportation efficiency and safety	A6.1, A6.4, A6.5, A6.6
Activity 6.11. Technological innovation to reduce environmental impacts, optimize systems' efficiency and reduce the need to travel	2024-2027	Middle	X		Central government, Ministry of Transport	Local government, Technologic companies, Environmental organizations	Technological innovation to reduce environmental impacts, optimize transportation systems' efficiency, and reduce the need for unnecessary travel.	A6.3, A6.6

6. Annexes

Annex 1 List of indicators to be calculated for grading of safety performance in Uzbekistan

Road infrastructure	
1. Condition of road surface.	Scored "0" if indicator is lower than 55% scored "1" if indicator is lower than 56-70% scored "2" if indicator is between 71-85% scored "3" if indicator is between 86-100%
2. Availability of road signs.	Same as above
3. Availability of direction assisting sign boards.	Same as above
4. Regulation of pedestrian crossings.	Same as above
5. Availability of underground and surface pedestrian crossings.	Same as above
6. Availability of sidewalks.	Same as above
7. Availability of bicycle lanes.	Same as above
8. Provision of parking lots.	Same as above
9. Condition of horizontal road marking	Same as above
10. It is equipped with a barrier separating the road.	Same as above
11. Road lighting.	Same as above
12. Equipment level of educational institutions.	Same as above
13. Availability of road safety classrooms in educational institutions.	Same as above
14. Availability of road safety platforms in educational institutions.	Same as above
15. Availability of traffic lights.	Same as above
16. Roadside landscaping.	Same as above
17. Installation of guideposts.	Same as above
18. Provision of violation detection devices.	Same as above
19. Equipped with video surveillance cameras.	Same as above
20. Presence of artificial irregularities.	Same as above
21. State of compliance with traffic rules in enterprises and organizations located in the territory.	Same as above
22. Level of equipping with visual aids promoting and promoting traffic rules.	Same as above
23.Level of preventive measures to promote traffic rules.	Same as above
24. State of involvement of sponsorship funds that are not prohibited by law to ensure road safety.	Same as above
Compliance of road users' behaviour with traffic rules.	
25. Number of traffic accidents per hundred thousand population.	Scored 3 if number is 0; scored 2 if number is 1; scored 1 if number is 2; scored 3 if number is 3 or more
26. Number of people who died as a result of traffic accidents per hundred thousand inhabitants.	Same as above
27. Number of black spots	Same as above
28. Number of administrative offenses related to traffic violations per hundred thousand inhabitants.	Scored 3 if number is up to 200; scored 2 if scored up to 400; scored 1 if number is up to 600; scored 0 if number is 600 or more
29. Number of congested places	scored 3 if number is 0; scored 2 if number is 1; scored 1 if number is 2; scored 3 if number is 3 or more
Road safety performance grading of districts (cities)	Red if 0 – 29 points; Yellow if 30-58 points; Green if 59 – 87 points.

Source: https://lex.uz/docs/6136750, chapter 3 of the attachment 4

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Road Safety Performance Review
Uzbekistan

Road accidents are a major problem in modern societies: annually almost 1.2 million people are killed and 50 million injured globally. Road traffic injuries are estimated to be the eighth leading cause of death globally, and the leading cause for children and young adults aged between 15 and 29 years, thus heavily implicating people who are entering their most productive years. These losses are largely preventable, and they underscore the urgent need for action to improve road safety.

In 2020, the United Nations General Assembly proclaimed the decade 2021-2030 as the Second Decade of Action for Road Safety and set a goal to stabilize and reduce the level of global road traffic fatalities by increasing safety programmes at the national, regional and global levels.

Using previous experiences in establishing road safety system, in 2020 the Inland Transport Committee Recommendation to Enhance National Road Safety System (ITC Recommendations) were formulated, focusing on applying the safe system approach: in road safety system management; for safe users, safe vehicles, safe roads, and effective post-crash response, and addressing them as the essential blocks for developing an integrated and effective national road safety system.

The Road Safety Performance Review (RSPR) was designed to help the beneficiary country to strengthen the road safety capacities and effectively address and improve national road safety system. The most critical road safety aspects and priority needs in the beneficiary country will be identified by preparing the RSPR. The RSPR will map gaps in national institutional, legal and regulatory frameworks, assess the level of compliance with UN road safety legal instruments - all in line with the ITC Recommendations and the Second Decade of Action for Road Safety and give recommendations for future actions. Based on the RSPR findings, a national capacity-building workshop/s and policy dialogue will take place to provide further training on the priority areas identified through the RSPR and on accession and implementation of United Nations road-safety related legal instruments.

The RSPR was prepared for four countries Albania, Georgia, Dominican Republic and Viet Nam in the framework of the UNDA-financed project and the UN Secretary General Special Envoy for Road Safety Secretariat completed four more RSPR in Uganda, Cameroon, Ethiopia and Zimbabwe based on the same methodology.

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