Road Safety Performance Review Moldova





UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE UNITED NATIONS DEVELOPMENT PROGRAMME IN MOLDOVA

Road Safety Performance Review Moldova



Geneva 2024

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

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

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

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Today, UNECE services 60 United Nations inland transport legal instruments. Several of the legal instruments are global either by design or because their success has caused them to grow beyond the ECE region. In addition to negotiating the amendments to existing legal instruments, UNECE has been active in facilitating new legal instruments. Its normative activities are enhanced with developing methodologies, guidelines, and definitions on subjects such as transport planning, data collection and the collection of transport statistics. UNECE's work on transport is governed by the Inland Transport Committee (ITC) and its 21 Working Parties, which are in turn supported by more than 40 formal and informal expert groups and in cooperation with 11 treaty bodies (Administrative Committees). Annual sessions of ITC are the key moments of this comprehensive intergovernmental work, when the results from all subsidiary bodies, as well as the UNECE Sustainable Transport Division, are presented to ITC members and contracting parties.

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

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Acronyms and Abbreviations

112	The unique national service for emergency calls 112
1958 Agreement	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 (Revision 3)
1997 Agreement	Agreement Concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections
AC - ADRI	Authorized Centres – ADR Inspection
AC - BCC	Authorized Centres – Buses Comfort Classification
AC - PTI	Authorized Centres - Periodical Technical Inspection
AC - TP	Authorized Centres – Training Professionals
AC - TSL	Authorized Centres – Tachograph and Speed Limiter
AC - VR/M	Authorized Centres – Vehicle Retrofitting/Manufacturing
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AETR	European Agreement Concerning the Work of Crews of Vehicles Engaged in International Road Transport
BSEC	Organization of the Black Sea Economic Cooperation
CIS	Commonwealth of Independent States
COP21	Conference of Parties, UN Climate Change Conference
EBRD	European Bank for Reconstruction and Development
EC NIF	European Commission Neighbourhood Investment Facility
EEA	Energy Efficiency Agency
EIB	European Investment Bank
EU	European Union
GDP	Gross Domestic Product
GIES	General Inspectorate for Emergency Situations
GIP	General Inspectorate of Police
GRSF	Global Road Safety Facility
GUAM	Organization for Democracy and Economic Development
Intehagro	State Inspectorate Intehagro
iRAP	International Road Assessment Programme
MAFI	Ministry of Agriculture and Food Industry
MD	Ministry of Defence

МН	Ministry of Health
MIA	Ministry of Internal Affairs
MIRD	Ministry of Infrastructure and Regional Development
MLSP	Ministry of Labour and Social Protection
NIM	National Institute for Metrology
NPSI	National Public Security Inspectorate
NRTA	National Road Transport Agency
OECD	Organisation for Economic Cooperation and Development
OSCE	Organization for Security and Cooperation in Europe
PSA	Public Services Agency
TCSO	Technical Consulting Specialized Organizations
TEM	Trans-European North–South Motorway Project
UN	United Nations
UNECE	United Nations Economic Commission for Europe
VIN	Vehicle Identification Number
WB	World Bank
ωтο	World Trade Organization

Executive summary

One of the first steps in building national road safety system capacities is to assess the current road safety situation. This can be done through conducting a **Road Safety Performance Review (RSPR)** based on available documents, local legislation, and statistics of the country in question. The RSPR is 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). Such reviews can be based on the – Inland Transport Committee Recommendations for Enhancing National Road Safety Systems, a recognised approach used all around the World.

The RSPR Moldova identifies the most critical aspects for the development of the country's national road safety system and offers recommendations for its improvement. The project team use a multipoint approach to assess the current road safety situation in Moldova. It includes analyses of the following topics: legal and institutional frameworks 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 Moldovan 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 systems at both the national and local levels. Discussions of the Review's findings were conducted through a number of meetings and workshops with key road safety stakeholders, including a presentation of results at a RSPR Policy Dialogue.

In Moldova, even though the total number of road traffic crashes and fatalities decreased between 2011–2022, public risk remains high, and in recent years (2019–2022), the rate of road fatalities (the number of people killed per one million population) sits at about two times higher than the European Union average. Such figures bring huge economic costs and, depending on the source of data for Moldova, different estimates of socio-economic costs range from 1.26% to 10.5% of GDP.

In terms of improving **Road Safety Management** (RSM), Moldova needs to better coordinate vertical and horizontal activities undertaken by key road safety stakeholders and strengthen their capacity to re-establish/empower the National Road Safety Council (NRSC) as the leading body for road safety management. The NRSC needs to be able to provide strategic direction and monitor road safety results, setting specific and measurable targets within the national road safety strategy and action plan, and enabling stable and sustainable funding sources for road safety.

RSM can also be supported through the use of education, technology and strengthened enforcement, including public awareness campaigns, with Key Performance Indictors (KPIs) introduced to measure effectiveness. Improving road safety data collection, analysis and dissemination based on the CADaS (Common Accident Data Set) protocol should also be a priority for ensuring effective RSM, along with capacity building for all road safety stakeholders and sharing of knowledge.

In Moldova, most passenger travel and freight transport occur by road. **Road infrastructure** projects aimed at further increasing the mobility and movement of people and goods, therefore, must include road safety as a priority. Infrastructure that meets the needs of vulnerable road users such as cyclists, motorcyclists, pedestrians, children and people with disabilities is particularly important in Moldova, where 50% of fatalities are among vulnerable road users. To this end, Moldova needs to improve its legal frameworks and standards for safe road design and road protection. This should include increased usage of Road Infrastructure Safety Management (RISM) tools and strengthened legislation around Intelligent Transportation Systems (ITS) and tunnel safety – as well as improved enforcement of new RISM procedures, work zone safety, and ITS. Education, capacity building and technology should be used to support these interventions towards building safer roads.

According to the Ministry of Internal Affairs (MIA), the most common causal factors of traffic crashes between 2017 and 2022 in Moldova was inappropriate speed for the visibility, road conditions and traffic situation. In terms of casualties, speed was acknowledged as an influential factor in 31.5% of cases where people were injured, and in 51.3% of cases where people died. This Review therefore focuses particularly on the speed limits set for urban roads where there is a high concentration of vulnerable road users, and on rural roads. While speed limits on urban roads correspond with European Union best practice and the Safe System Approach, maximum speed limits on rural roads are still too high. Enforcement of existing speed limits is also a critical issue.



Based on a review of Moldovan legislation regarding the safety of **vehicles**, the following actions are recommended: amend existing legislation and adopt a national legislative framework covering primary and secondary levels in order to clearly define, by separate laws, the administrative and technical conditions for safer vehicles; fully transpose into national legislation prescriptions of UN regulatory frameworks (UN 1958 Agreement, UN 1997 Agreement, European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), AETR Agreement concerning the Work of Crews of Vehicles Engaged in International Road Transport) and European Union regulatory frameworks (EU Regulations 2018/858, 168/2013, 167/2013, 165/2014 and EU Directives 2014/45, 2014/47); designate national authorities responsible for vehicle approval and market surveillance and establish funding sources for its operationalization; define administrative and capability conditions for the designated Technical Services responsible for conducting inspections and tests related to the conformity of vehicles to the specified regulations; and introduce an effective penalty scheme for noncompliance with the specified vehicle regulations. In addition, adequate enforcement regarding vehicle standards should be put in place, supported by education and relevant technologies.

With regards to **Safer Road Users** the following initiatives are recommended: develop/update the Law on Traffic Safety; revise sanctions for non-use of seat belts or child restraints, as well as introducing sanctions for pedestrians, cyclists, scooters for breaking road traffic regulations; differentiate the permissible level of blood alcohol content (BAC) depending on the experience of the driver or the type of vehicle; improve occupational road safety by introducing mandatory road safety policies for all car fleets at a national level; improve national policies to inter-connect with the norms, standards, and needs of persons with disabilities or low mobility; and digitalize processes for documenting road traffic violations. For successful implementation of these recommended interventions, adequate enforcement in combination with education and the use of technology are needed. Special attention may be given to behaviour change campaigns for all road users, involving a sustainable nation-wide collaboration between civic, state and private sectors to raise awareness on road safety, with monitoring and evaluation of the impact.

The following key measures for improving **Post-Crash Care** in Moldova are proposed: implement a mechanism for direct investment in road safety by insurance companies; implement an incentive mechanism for employers regarding the employment of people who have been permanently injured by road traffic crashes; and create centres and programs for the rehabilitation of road traffic victims. In addition, training is needed for police officers in providing of first aid, as well as first aid training for drivers. Technology should also be used to support post-crash care through the use of a unique emergency telephone number (112), modernisation of ambulance fleets, and equipment for police crews that include first aid bags, etc.

There are also **Cross-cutting Areas** (**Safe urban mobility**) in which the following measures are proposed: implement principles of safe road and street design; increase the capacities of local authorities in road safety; and adopt policies focused on increasing the modal share of public transport and active travel. Special attention should be given to road safety approaches such as Vision Zero and the Safe System Approach, as well as to promoting more sustainable mobility.

Global road safety strategic framework developments were considered within 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, this review can act as a strong guiding point for intervention planning.

Given the rapid rate of motorization in Moldova, there is a critical need to address road safety in a holistic way. It is clear that as motorized traffic increases, exposure to risk will also increase and government policy that prioritizes road safety is warranted. Only by implementing targeted actions at all levels will the number of fatalities and injuries be reduced, along with the related human, social, and economic costs, and the burden on the health sector. In Moldova, the political will to improve road safety provides a strong basis for further improvements and it is hoped that implementation of the recommendations provided in this Review will help in improving the road safety system in the country.

The findings of the Review should be used to design an effective road safety strategy, including actions and interventions for the future. The results could also be used to improve road safety behaviour, strengthen 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 Moldova.

1. COUNTRY SNAPSHOT (TRENDS)

1.1. Population and demographics

The Republic of Moldova is a landlocked country in Eastern Europe, in the north-eastern part of the Balkans, bordered by Romania to the west and Ukraine to the north, east, and south. Moldova occupies an area of 33,843.5 km². The port of Giurgiulești on the Danube is the Moldovan port for sea vessels.

Moldova is a parliamentary republic with a president as head of state and a prime minister as head of government. It is a Member State of the United Nations, the Council of Europe, the World Trade Organization (WTO), the Organization for Security and Cooperation in Europe (OSCE), the GUAM Organization for Democracy and Economic Development, the Commonwealth of Independent States (CIS), and the Organization of the Black Sea Economic Cooperation (BSEC). With aspirations to join the European Union,¹ Moldova signed the European Union Association Agreement on 27 June 2014, which was provisionally applied from 1 September 2014. On 1 July 2016, the Association Agreement (AA) between the European Union and the Republic of Moldova fully came into force, following ratification by all 31 signatories. On 23 June 2022, the European Council granted candidate status to the Republic of Moldova.

Moldova has a population of 2.6 million people, with 1.1 million persons living in urban areas and 1.5 million people in rural localities (as of 1 January 2022).

According to the National Bureau of Statistics of Moldova, 52.3% of the population are women and 47.7% are men. At the beginning of 2022, there were 91 men per 100 women. In urban and rural areas, the gender ratio also shows more women than men, with 85 and 96 men per 100 women respectively.

The population density as of 1 January 2022 is 85.5 persons per km². Demographic trends over the last 20 years show a continuous population decline of about 1.7 million people between 1990-2022. The structure of the population has also changed. Moldova has an ageing population, with elderly people representing around 22% of the total population. There has been an increase in internal and international migration especially among young people and those of reproductive age. By 2050, it is estimated that the population of Moldovan diaspora living abroad will be almost equal to the size of the population in the country.²

1.2. Economy

Due to a decrease in industrial and agricultural output following the dissolution of the Soviet Union, the service sector has grown to dominate Moldova's economy and currently comprises over 60% of the nation's GDP (Gross Domestic Product).

Despite a moderate climate and productive farmland, Moldova's economy relies heavily on its agricultural sector, producing fruits, vegetables, wine, wheat, and tobacco. Moldova also depends heavily on annual remittances of about USD 1.5 billion – more than 20% of GDP – from the roughly one million Moldovans working in Europe, Russia, and other former Soviet countries.³

As per Quarter 4 of 2022, the reported unemployment rate in Moldova was 4.6%, an increasing trend from 2021.

¹ <u>https://moldova.md/en/content/about-republic-moldova</u>.

² <u>https://cancelaria.gov.md/ro/content/noile-provocari-demografice-analizate-la-nivel-global-ce-oportunitati-pot-crea-pentru</u> <u>https://moldova.unfpa.org/ro/publications/sumarul-studiului-genera%C8%98ii-%C8%99i-gen-%C3%AEn-republica-moldova</u>.

³ <u>www.economy.com/moldova, https://www.worldbank.org/en/country/moldova/overview.</u>

Table 1

Key economic indicators

Indicator	Units	2017	2018	2019	2020	2021	2022
GDP real	%	4.2	4.1	3.6	-8.3	13.9	-5.0
GDP per capita	USD	3,455	4,156	4,405	4,376	5,235	5,563
Average inflation	%	6.57	3.05	4.84	3.77	5.11	28.74
End of year inflation	%	7.30	0.90	7.50	0.39	13.94	30.24
Unemployment rate	%	3.9	2.9	5.1	3.8	3.2	3.1
Population	Millions	2.78	2.73	2.68	2.64	2.63	2.60
National debt (Moldova Debt to GDP)	% of GDP	28.9	27.0	25.1	34.0	32.1	34.0

Source: statistica.gov.md, bnm.md, mf.gov.md, 2023.

1.3. Topography, climate and geography

Chişinău (Chisinau), the capital of Moldova, is by far the largest city with a population of 677,157. The second-largest city is Bălți (Balti), with a population of about 99,000.

The territory of Moldova spans 339 km from North to South and 155 km from West to East. Moldova's landscape can be described as a rolling steppe with a gradual slope in the south towards the Black Sea. The highest elevation in the country is a hill named Bălănești, with an altitude of 430 meters.

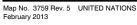
The Republic of Moldova is divided into 32 districts; 13 municipalities (Chisinau, Balti, Tighina, Tiraspol, Comrat, Cahul, Edinet, Hincesti, Orhei, Soroca, Straseni, Ungheni, Ceadir-Lunga); two regions with special status (the Autonomous Territorial Unit Gagauzia and the Territorial Administrative Units on the left bank of Dnister river, generally known as Transnistria).

The total length of Moldova's national border is 1,389 km, including 939 km with Ukraine and 450 km with Romania.

Figure 1

Map of the Republic of Moldova





Department of Field Support Cartographic Section

1.4. Environment (impact of transport)

More than half of Moldova's vehicle fleet is older than 15 years. The age of company-owned motor vehicles in 2021 was the following: 3.2% of all vehicles were up to two years old; 8.6% were between two and five years; 21.2% were up to 10 years; and 67.1% were vehicles over 10 years old.⁴

In 2022, within all modes of public transport, 257.4 million passengers were transported, an increase of 24.4% from 2021. Increases were recorded in air passenger transport (43.2%), buses/minibuses (34.1%), trolleybuses (21.2%) and taxis (10.4%). At the same time, there was a decrease in passenger transport by river (21.3%) and rail (4.3%). Passenger traffic in the reporting year increased by 34.3% compared to 2021 and amounted to 5518.1 million passenger-km.

In 2022, within all modes of transport 49 million tons of goods were transported, a decrease of 3.9% compared to 2021. There was a decrease in the volume of goods transported by river (19.2%), air (13.1%) and road (5.1%). At the same time, the volume of goods transported by rail increased by 15% compared to the previous year.

According to the Environmental Performance Index 2022, Moldova is 84th out of 190 countries in the world.

The Republic of Moldova has an economy-wide unconditional target to reduce its greenhouse gas emissions by between 64-67% below its 1990 level by 2030, and to make its best effort to reduce emissions by 67%. Thus, Moldova is fully committed to the United Nations Framework Convention on Climate Change (UNFCCC) negotiation process towards adopting the COP21 protocol in line with keeping global warming below 2°C.

The graphic below presents the official data of the National Bureau of Statistics regarding the evolution of the index of polluting emissions produced by cars based on liquefied gas, gasoline and diesel (the indices of carbon monoxide is dominated).

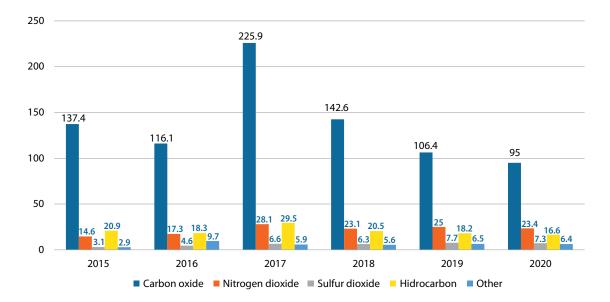


Figure 2 Polluting substances emitted in atmosphere by road transport

Source: statistica.gov.md, 2023.

⁴ https://statistica.gov.md/en/moldova-in-figures-statistical-pocket-book-9877_59483.html.

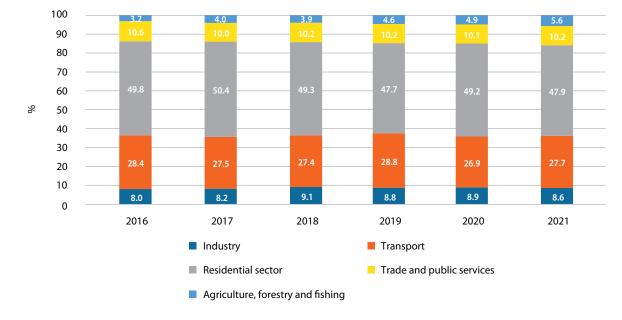


Figure 3 Final energy consumption by sector for 2016-2021 (%)

Source: www.statistica.gov.md, 2023.

Recently, the Energy Efficiency Agency (EEA) announced that the share of energy efficient transport in Moldova has increased in the last five years. According to data processed by the EEA, based on the information provided by the Public Services Agency, over 27,000 electric and hybrid cars were registered in the Republic of Moldova between 2018 and 2022.

Although the share of electric and hybrid vehicles relative to the total number of cars registered in the Republic of Moldova is quite small, at approximately 3%, there is a positive trend in perceptions at the national level regarding the importance of reducing hydrocarbon-based energy consumption in transport.

2. ROAD SAFETY TRENDS 2015-2022

Road safety is an issue of concern to all citizens and has an impact on their quality of life. As such, it is strongly supported by the Government of the Republic of Moldova. In the last two decades, a number of new laws and by-laws related to road safety were adopted. The National Road Safety Council (NRSC) and its Executive Bureau were established to coordinate and manage the road safety activities of key road safety stakeholders. This chapter aims to provide key data and trends over time, that will allow a better understanding of the current road safety situation in Moldova and present a starting point for RSPR analysis and recommendations.

2.1. Road infrastructure

In Article 2 of the Law on Roads No. 509 [22/06/1995] (with latest amendments in 2020), Moldova's roads are classified as:

- Public Roads and
- Private Roads.

From a functional point of view, public roads are divided into:

- European roads,
- National roads and
- Local roads.

National roads can be:

- Highways,
- Express roads,
- Republican roads and
- Regional roads.

Local roads are divided into:

- Roads of district (municipal) interest,
- Communal roads and
- Streets.

European roads (E-roads) are defined as international roads that pass through the Republic of Moldova according to the European Agreement on the Major International Traffic Arteries (AGR), administered by UNECE, to which the Republic of Moldova is a Contracting Party, and which may coincide with Highways, Express roads and Republican roads.

National roads are defined as roads that are public property of the state, which provide main international road connections, connection between the Capital and cities-of-residence, municipalities and places of Republican importance, as well as the connection between them. They can be:

- Highways high-capacity, high-speed roads reserved exclusively for motor vehicle traffic. Identifiable by two one-way lanes separated by a median zone, with at least two traffic lanes in each direction and a stopping lane with grade separated intersections and limited access, the entry and exit of vehicles is allowed only through traffic junctions equipped for the safety and comfort of users.
- Express roads roads with two or more traffic lanes, to which access is possible only through grade separated road junctions or regulated intersections, and on which the stopping and parking of vehicles on the carriageway(s) is prohibited.
- Republican roads roads that ensure the connection between the Capital and other cities, municipalities, and places of Republican importance (industrial centres, public leisure places, nature reserves, historical and cultural monuments, etc.) as well as the connection between cities, municipalities, and between cities-of-residence and municipalities. They also ensure the connection between cities-of-residence and railway stations, airports and river ports in the immediate vicinity.
- Regional roads roads of regional significance that ensure the connection between localities in two or more districts or between at least four localities in an administrative-territorial unit.

The road infrastructure of the Republic of Moldova consists of over 10,680 km of public roads, of which 5,952 km are national public roads, 3,708 km are local public roads, and 1,070 km of public roads located on the left side of the Dniester River.

National roads are divided into categories of Regional, Express and Republican roads. The total length of which, under the management of the State Road Administration, is 5,951.9 km. National public roads have the following composition and length:

- Express roads (M) 631.1 km.
- Republican roads (R) 1,995.6 km.
- Regional roads (G) 3,304.1 km.
- Local public roads (L) 21.1 km.

In addition, there is 3,708 km of local public roads at the regional (municipal) level under the administration of local public authorities.

The road network under management of State Road Administration is presented in table 2.

Table 2

Moldova road network managed by the State Road Administration

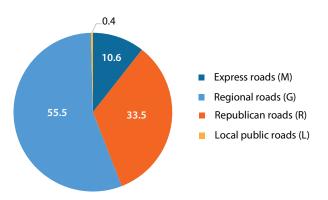
Road network	Length (in km)	Percentages (%)
Express roads (M)	631.1	10.6
Republican roads (R)	1,995.6	33.5
Regional roads (G)	3,304.1	55.5
Local public roads (L)	21.1	0.4
Total	5,951.9	

Source: The State Road Administration, 2023.

For easier understanding of share, the percentage of different roads under the management of State Road Administration are presented within figure 4.

Figure 4

Road types in Moldova managed by the State Road Administration



In the last decade, a number of roads were rehabilitated and constructed. Table 3 presents investments in the period 2017–2023 as well as planned investment for the next five years.

Table 3

Recent and newly planned network of roads

New planned network of roads	Length (in km)
New national roads under construction	57.1
New national roads in the design phase	6.0
Investments (2017–2022)	382.1
Planned investments for the next five years (national and local level)	497.2

Source: The State Road Administration, 2023.

In addition, a number of projects related to road infrastructure were implemented in Moldova (table 4).

Table 4

Recent infrastructure projects in Moldova

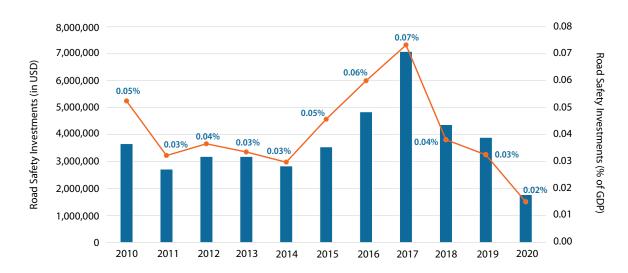
No.	Project name	Beneficiary	Implementation period	Project value	IFI/ development partner	
			penou	(MEUR)		
1.	Rehabilitation of road: R1 Chişinău — Ungheni — Sculeni, km 6+446 — km 24+050		2014-2016	23.1	European Investment Bank (EIB)	
2.	Rehabilitation of road: R1 Chișinău — Ungheni — Sculeni, km 24+050 — km 68+250	State Road Administration	2014-2016	27.0	EIB	
3.	Rehabilitation of road: R1 Chişinău — Ungheni — Sculeni, km 96+200 — km 103+913		2014-2016	10.7	EC NIF –European Commission Neighbourhood Investment Facility	
4.	Rehabilitation of road: R1 Chişinău — Ungheni — Sculeni, km 74+177 — km 96+200		2014-2016	15.1	EBRD	
5.	Rehabilitation of road: R33 Hîncești — Lăpușna — M1, km 0+000 — km 37+200		2014-2016	18.8	EBRD	
б.	Rehabilitation of road: R16 Bălți — Fălești — Sculeni, 1 sect. km 4+800 — km 30+270; 2 sect. km 30+270 — km 59+480		2016-2019	50.6	EIB	

No.	Project name	Beneficiary	Implementation period	Project value (MEUR)	IFI/ development partner				
7.	Construction of road: R1 ocolirea Bahmut, km 68+250 — km 74+177						2018-2021	5.3	EC NIF
8.	Construction of road: M3 Porumbrei — Cimişlia km 0+000 — km 19+010		2019-2022	29.9	EIB				
9.	Rehabilitation of road: M3 ocolirea Comrat, km 0+000 — km 18+263		2019-2022	29.5	EIB				
10.	Rehabilitation of road: M3 Chişinău — Giurgiuleşti, km 96+800 — km 122+800; km 122+800 — km 151+200; km 151+200 — km 171+290; km 179+650 — km 190+750.		2019-2022	29.9	EBRD				
11.	Construction of road: M3 Slobozia Mare bypass km 0+000 – km 18+290		2019-2022	18.3	EBRD				
12.	Modernization of M2 – road Chisinau ring road, km 0+000 –km 6+550		2019-2021	9.9	EIB				
13.	Rehabilitation of road: R6 Chisinau-Orhei-Balti 1 sect: km 99+530 – km 111+230 2 sect: km 76+700 – km 94+700 and the bridge km 72+944		2019-2022	36.0	EBRD				
14.	Rehabilitation of road: R34 Hînceşti — Leova — Cahul, km 0+000 — km 83+000		2020-2023	56.5	EBRD				
15.	Supervision of Construction Works on R1 Bahmut bypass, km 68+250 — km 74+177		2018-2020	1.3	EC NIF				
16.	Supervision of Construction Works on R1 Chişinău — Ungheni — Sculeni, km 6+446 — km 24+050, km 24+050 — km 68+250, km 74+177 — km 96+200	State Road Administration	2014-2016	5.4	EIB				
17.	Supervision of Construction Works on R33 Hînceşti — Lăpuşna — M1, km 0+000 — km 37+200		2014-2016	2.3	EBRD				
18.	Supervision of Construction Works on R1 Chişinău — Ungheni — Sculeni, km 74+177 — km 96+200		2014-2016	2.1	EBRD				
19.	Supervision of Construction Works on R16 Bălți — Fălești — Sculeni, 1 sect. km 4+800 — km 30+270; 2 sect. km 30+270 — km 59+480		2016-2019	3.0	EBRD				
20.	Supervision of Rehabilitation of M3 Chisinau — Giurgiulesti Road, km. 96+800 —km. 171+ 290 and km. 179+650 — km. 190 + 750		2019-2022	2.4	EBRD				
21.	Supervision of Rehabilitation of M3 Porumbrei — Cimişlia km 0+000 — km 19+010 and M3 ocolirea Comrat, km 0+000 — km 18+263		2019-2022	3.1	EIB				
22.	Supervision of Rehabilitation of M3 Slobozia Mare km 0+000 — km 18+290		2019-2022	2.2	EBRD				
23.	Improvements work of Corridor 11, Contract 2: LRIP/W3/02: L314 Drum de ocolire a S. Izbişte, km 15+390 — km 19+810 şi Drum L314 M2- Peresecina-Hirtopul Mare- Ohrincea km 19+810 — km 24+300		2019-2020	63.4	World Bank				

No.	Project name	Beneficiary	Implementation period	Project value	IFI/ development partner
24.	Improvements work of Corridor 11, Contract 1: LRIP/W3/01: L313 M2- Drum de acces spre satul Micleşti km 0+000 km 5+000 şi Drum L314 M2- Peresecina-Hirtopul Mare- Ohrincea km 1+640 – km 15+390	State Road Administration	2019-2020	(MEUR) 99.9	World Bank
25.	Improvements work of Corridor 13, Contract 2: LRIP/W4/02: Drumul L390 Pîrliţa-Nisporeni, km 10+900 – km 23+400		2019-2020	97.6	World Bank
26.	Improvements work of Corridor 13, Contract LRIP/W4/03: Drumul L390 Pîrliţa — Nisporeni, km 23+400 — km 32+942		2019-2020	70.9	World Bank
27.	Improvements work of Corridor 13, Contract LRIP/W4/04: Drumul L431 Paruceni — Seliste — Vinatori, km 0 + 000 — km 4+ 200 și R25 drumul de acces către s. Seliște, km 0 + 000 — km 3 + 600		2019-2020	73.1	World Bank
28.	Improvements work of Corridor 13, Contract LRIP/W5/04: Drumul L390 Pirlita — Nisporeni, km 0 + 000 — km 10+900		2020-2022	84.2	World Bank
29.	Improvements work of Corridor 8.3 Contract No. LRIP/W2/02: Road L405, R21 — Oniscani, km 0+000 — km 9+962		2019-2021	88.3	World Bank
30.	Improvements work of Corridor 10 Contract LRIP/W5/01: Drumul G46: Dobrusa — Ignatei — Scorteni — Codrul Nou — R14, km 22+610 — km 29+200		2020 – 2021	103.7	World Bank
31.	Improvements work of Corridor 10, Contract LRIP/W5/02: Drumul G46: Dobrusa — Ignatei — Scorteni — Codrul Nou — R14, km 15+760 — km 22+610		2020-2021	150.1	World Bank
32.	Improvements work of Corridor 10, Contract LRIP/W5/03: Drumul G49: G47 – Peciste – Trifesti – R20, km 0+000 – km 11+426		2020-2021	110.3	World Bank
33.	Improvements work of Corridor 16, Contract LRIP/W6/01: Drumul G105: R3 — Costesti — Tipala — G106, km 0+000 — km 8+450		2020-2022	98.4	World Bank
34.	Improvements work of Corridor 16, Contract LRIP/W6/02: Drumul G105: R3 — Costesti — Tipala — G106, km 8+450 — km 17+350		2020-2022	94.9	World Bank
35.	Improvements work of Corridor 16, Contract LRIP/W6/03: Drumul G105: R3 — Costesti — Tipala — G106, km 17+350 — km 26+400		2020-2022	81.8	World Bank
36.	Improvements work of Corridor 16, Contract LRIP/W6/04: Drumul G105: R3 — Costesti — Tipala — G106, km 26+400 — km 34+584		2020-2022	87.9	World Bank

Source: MINISTRY OF INFRASTRUCTURE AND REGIONAL DEVELOPMENT (gov.md), 2023.

A better indication of the level of road safety infrastructure investments in Moldova is presented in figure 5.





Source: World Bank, Road Safety Country Profile - The Republic of Moldova, 2021.

Figure 5 shows a trend of investments decreasing from 2017. In 2020, the total road safety investment was about sixty times less than estimated cost of road crashes presented in chapter 2.3 (based on the iRAP (International Road Assessment Programme).

2.2. Road vehicle fleet

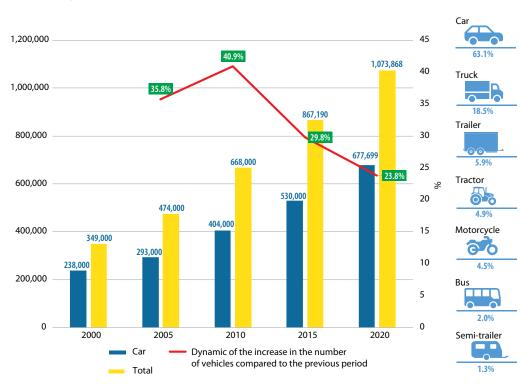
Thousands of new or second-hand vehicles are registered annually in the Republic of Moldova. Furthermore, this number is projected to increase in the future due to the improvement of Moldova's economic situation and the relatively low level of motorisation in the country.

The number of motor vehicles today is more than three times higher than in the late 2000s, when this number was 349,000. According to the State Register of Transport (RST), Moldova reached the milestone of 1,000,000 registered motor vehicles in May 2019. The most impacted area has been the municipality of Chisinau where the pressure on road infrastructure has increased by five to seven times compared to levels of the 2000s. The rate of car ownership in Moldova is doubling every 15 years. Some experts predict that the number of vehicles will double again (up to two million) in the next 10 years (See figure 6).



Figure 6

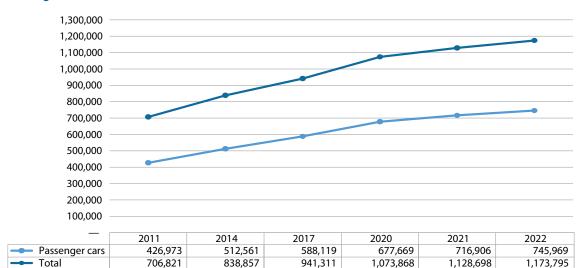




Source: PSA (Agenția Servicii Publice), 2021.

However, the Republic of Moldova is far below the European average in terms of the number of passenger cars per 1,000 inhabitants. For example, motorization rate across the European Union was 541.4 per 1,000 in 2020. At the same time, in Moldova, there were 219 cars per 1,000 inhabitants in 2020. This, simple comparison shows that despite a strong rise in Moldova, the number of cars in the country is still about 2.5 times lower than European Union average rate.

The Republic of Moldova's vehicle fleet (figure 8 and table 5) comprises mostly of passenger cars (63%) and trucks (18%). Despite the increasing number of passenger cars in the Republic of Moldova (figure 7), road lengths and infrastructure have remained the same as they were 30 years ago, thus increasing the exposure to traffic of all road users.



Number of registered motor vehicles

Figure 7

Source: https://dataset.gov.md/dataset/4687-date-statistice-referitor-la-componenta-registrului-de-stat-al-transporturilor-dupa-tipul-mijlo, 2023.



Table 5

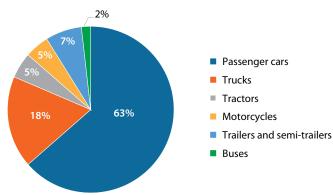
Structure of registered motor vehicles in 2022

Туре	Number
Passenger cars	745,969
Trucks	209,873
Tractors	58,641
Motorcycles	55,376
Trailers and semi-trailers	82,881
Buses	21,055
Total	1,173,795

Source: PSA, 2023.

Figure 8

Registered vehicle types – 2022



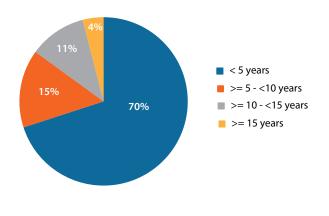
Source: PSA, 2023.

Since the 1990s, the Republic of Moldova has used vehicle and driver databases under the authority of the Public Services Agency. Based on information received from public officials of the Ministry of Internal Affairs (MAI), these databases are available on-line during the on-the-spot checks carried out by the patrol police. Additionally, the State Road Administration holds the national database on roads.

Existing statistics on the national vehicle fleet show that, although the number of vehicles has steadily increased in recent years, the average vehicle age is high. According to data provided by the Public Services Agency in May 2023, about 70% of registered passenger cars are older than 15 years (figure 9).

Figure 9

The age of the passenger car fleet (M1 category) in May 2023



2.3. Road Safety Indicators

The following definitions and classifications for road crashes (i.e. road accidents, road deaths, minor injuries, serious injuries, etc.) are updated and provided as per the Joint Order of the MIA, Ministry of Transport and Infrastructure (MTRI), Ministry of Health (MoH) and National Bureau of Statistics (NBS) No. 335/224/827/81 of 26 October 2016 "On the registration of road crashes":

- Road Crash: The Road Accident/Traffic Accident an event produced as a result of a violation of traffic rules in which one or more vehicles in operation on a public road were involved, resulting in injury to health, physical wellbeing, or death of one or more persons, or where material damage has been caused.
- **Road Crash Fatality:** Deceased Person a person who has died at the scene of the crash, or during a period of up to 30 days after the crash, as a result of injuries or complications sustained following the crash.
- **Road Crash Serious Injury:** Severely Traumatized Person a person who has suffered moderate or serious physical injury or health damage, or who has died after the 30th day from the date of the crash.
- Road Crash Minor Injuries: Lightly Traumatized Person a person who has suffered a minor health or physical injury that does not cause harm to health, but which has resulted in a temporary incapacity for work or the need for hospitalization for not less than 24 hours, or treatment as an outpatient after first aid.

A specialized unit of the National Inspectorate for Public Security under the General Police Inspectorate (GPI) (hereafter Traffic Police) is responsible for crash data collection. Traffic crash data are collected through a paper-based crash form completed at the crash scene and later entered into a central crash database - Automated Information System "State Register of Road Accidents" (AIS RAR) - following a quality control procedure. The existing crash database has been used since 2014 but has not been further upgraded.

Crashes, fatalities and injuries

Based on data officially received from the MIA (figure 10), the number of registered road crashes decreased by 17.5 %, from 2,826 in 2011 to 2,332 in 2022. There was a notable reduction in 2020, mostly attributed to the COVID-19 pandemic.

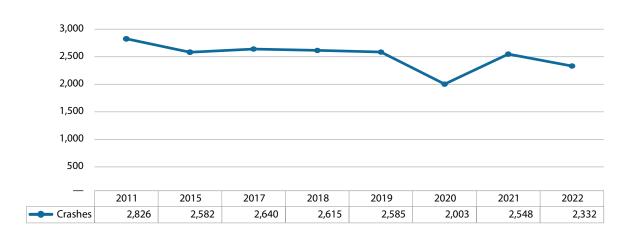


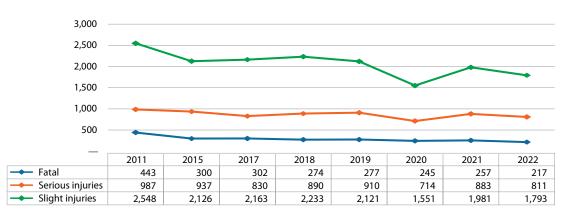
Figure 10 Number of registered road crashes

Source: MIA, 2023.

Similar trends can be seen in the number of fatalities (figure 11). The number of people killed decreased by 51%, from 443 to 217 in the period 2011 to 2022. In the same period, the number of seriously injured people decreased by 17.8 %, from 987 to 811. Similarly, the number of slightly injured people decreased by 29.6%, from 2,548 to 1,793.

Figure 11

Total number of killed and injured



Source: MIA, 2023

Within the same time frame (2011–2022), public risk i.e. the number of people killed per one million inhabitants (figure 12), decreased by 46.5% (from 155 to 83). Compared to recent European Union figures, public risk is significantly higher in Moldova. From 2019 to 2022, public risk was about two times higher in Moldova.

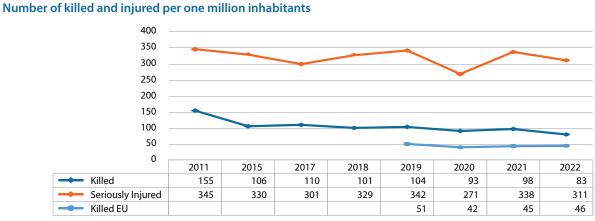


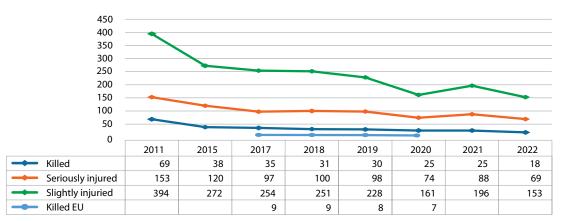
Figure 12

Source: MIA, 2023,

Traffic risk (figure 13), which takes into account the number of people killed per 100,000 vehicles, shows a reduction of 73.9 % (from 69 in 2011 to 18 in 2022). Compared to latest European Union figures, the traffic risk in Moldova in 2020 was about 3.5 times higher than the European Union average.

Figure 13

Number of killed and injured per 100,000 vehicles



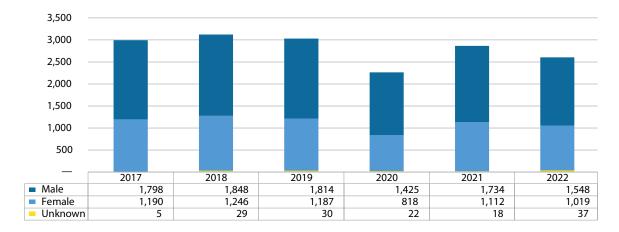
Source: MIA, 2023.



Crash rate

When disaggregated by gender (figure 14), the data shows that the majority of people injured between 2017 and 2022 year were men. This may be due to the fact that the majority of drivers in Moldova are men. The high exposure of men to road crashes may also be explained by longer commutes and working hours as drivers.

Figure 14 Number of injured by gender



Source: MIA, 2023.

González-Iglesias et al. (2012) point out in their research that women understand danger better than men and are less inclined to take risks. Women commit fewer traffic violations and, in particular, they tend not to exceed the speed limit. They respect traffic signalization and rarely run on red lights. They are less likely to drive aggressively or drink and drive, resulting in fewer fatalities. (figure 15).

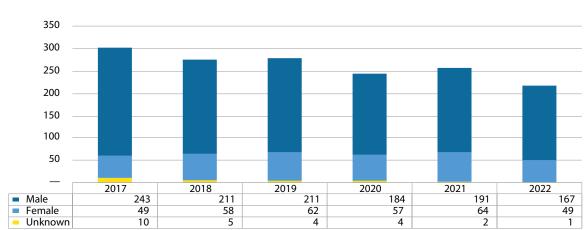


Figure 15 Number of fatalities by gender

Source: MIA, 2023.

Different age groups have different levels of knowledge, attitudes, abilities, and behaviours, and different levels of exposure to traffic. There are differing factors to explain the differing risks for young and older drivers (figure 16). In general, the risk for young drivers may lie in their inexperience, tendency towards risky behaviour and beginner's mistakes. On the other hand, for older drivers, age reduces their psycho-physical abilities. For example, they may react more slowly, their vision is impaired, etc.

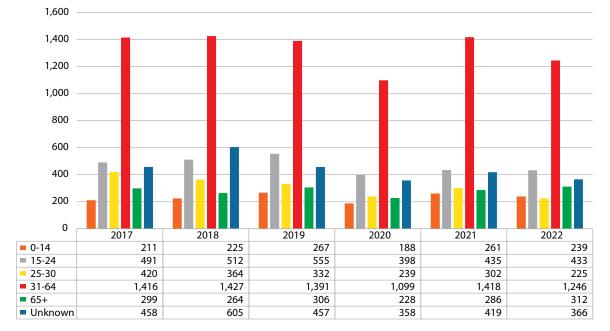


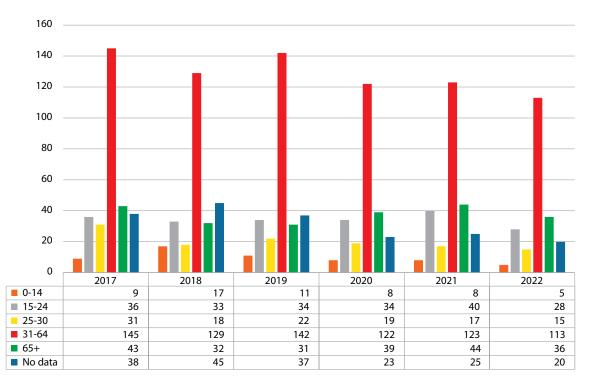
Figure 16

Number of injured in crashes by age group

Source: MIA, 2023.

By age, the highest level of mortality attributed to traffic crashes in Moldova (figure 17) is observed among people who are 31–64 years old and over 65 years. This is a serious problem because these people tend to be the most economically active, presenting a tremendous loss for the national economy. It is notable that in both cases (the number of people injured and fatalities by age) there is a significant number of people recorded without a known age. This is important data and, in future, missing such data shall need to be minimised.

Figure 17 Number of fatalities in crashes by age group

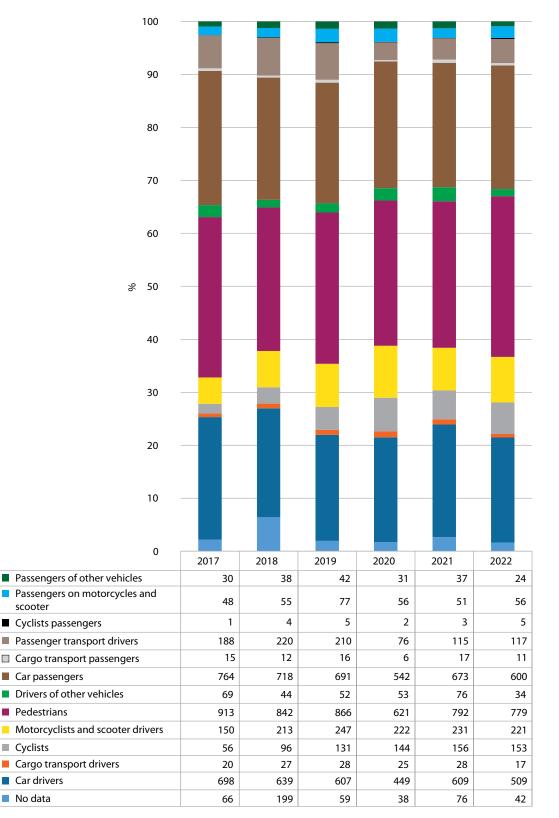


Source: MIA, 2023.

In figure 18, it can be seen that between 2017 and 2022, the majority of people injured were pedestrians (4,813; 28.6 %). This is followed by passengers (3,988; 23.7 %) and drivers (3,511; 20.8%). Likewise, in the same period, the majority of people who died were also pedestrians (596; 37.9%) (figure 19). This is not a negligible indicator given that pedestrians are one of the most vulnerable categories of road users.

Figure 18

Number of injured by type of road user

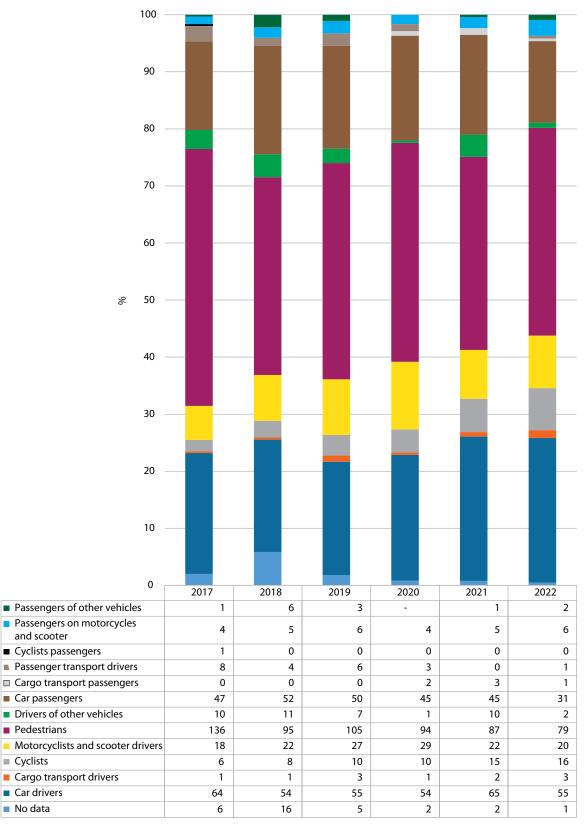


Source: MIA, 2023.



Figure 19

Number of fatalities by type of road user



Source: MIA, 2023.

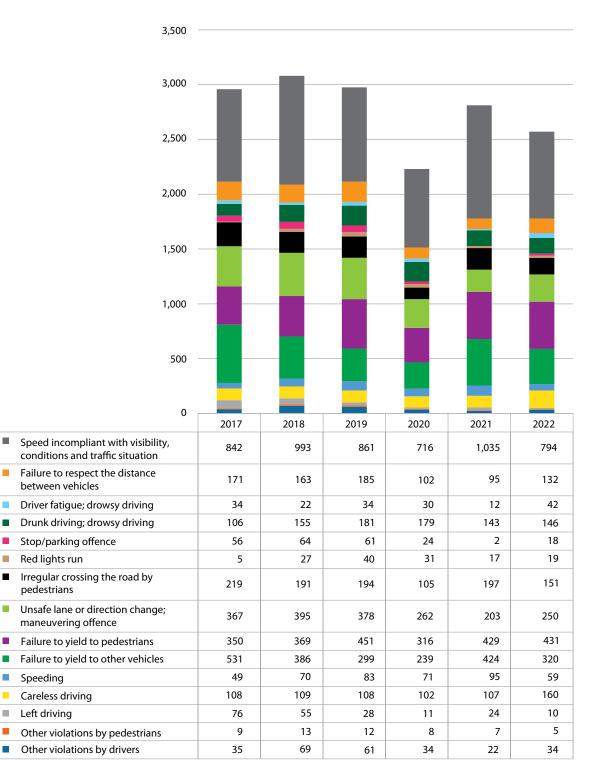
Road traffic crashes occur due to four basic influencing factors that make up the road safety system: people, vehicles, roads, and the environment. Nowadays, there are two main schools of thought and scientific approaches that are used regarding the level influence of each of these factors and the extent to which they contribute to the occurrence of a traffic crash.

The traditional opinion is that drivers are to blame for the largest number of crashes, followed by bad roads, defective vehicles, and other causes. The more modern approach, and the approach accepted by the European Union and United Nations, is the Safe System Approach – whereby an error in the system is responsible for someone being killed in a road traffic crash, with safety being considered a shared responsibility among all road safety stakeholders.

Figures 20 and 21 indicate the most common reported causes of crashes resulting in fatalities and injuries.

Figure 20

Number of injured by main causal factor

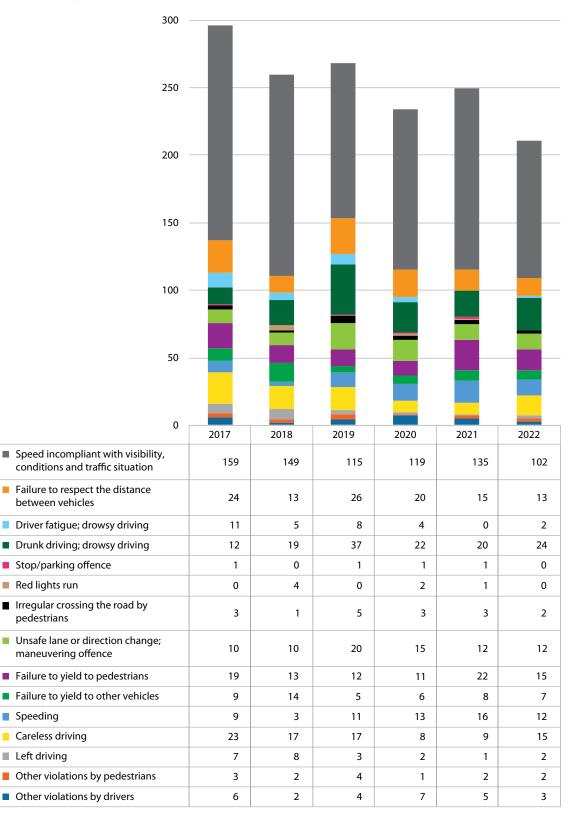


Source: MIA, 2023.

According to the MIA, the most common cause of traffic crashes in which people were injured or killed between 2017 and 2022 was inappropriate speed for visibility, road conditions and traffic situation. In terms of people injured, speed was noted as an influential factor in 31.5% of traffic crashes, while for fatalities speed was noted in more than half of cases reported (51.3%).

Figure 21

Number of fatalities by main causal factor



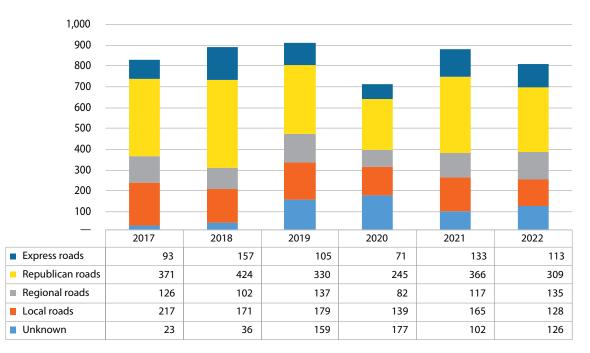
Source: MIA, 2023.



In terms of the use of child restraints systems and helmet use for motorcyclists, data currently collected are not sufficient for sound analysis. However, work is currently underway to modify the "Road Accident Registry" automated information system and procedures, and to update data collection processes in line with the CADaS framework (Common Accident Data Set).

Roads differ in terms of traffic volume, traffic mix, speed limits, technical-technological characteristics, structure and frequency of traffic conflicts, etc. The elements of a road layout that have the most impact include: alignment of the road (for example, the radius of the curve and the slope), average number of connecting roads (intersection), road condition, roadside obstacles etc. Within figures 22 and 23, the number of injured and killed people by road type are presented.



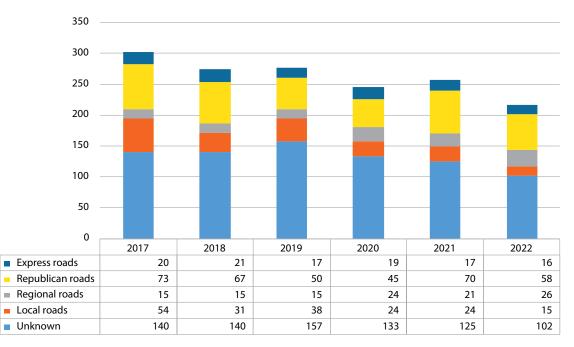


Source: MIA, 2023.

Over the period 2017 to 2022, almost half of all localized crashes that resulted in a person being injured or killed were on republican roads (2,045 injured; 46.3% and 363 killed; 46.8%). This is followed by local roads where 999 injuries (22.6%) and 186 fatalities (24%) were recorded. Unfortunately, a very high percentage of fatalities by road type remained unknown. This limits the conclusions that can be drawn.

Figure 23

Number of fatalities by road type

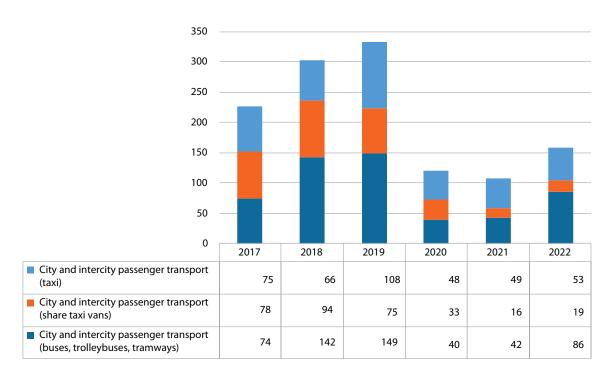


Source: MIA, 2023.

Most of those who were injured or killed as passengers in public transport were traveling by bus, trolleybus and tram. The safest form of public transport for passengers, based on available data, are shared taxi-vans (figure 24 and 25).

Figure 24

Number of injured in public transport



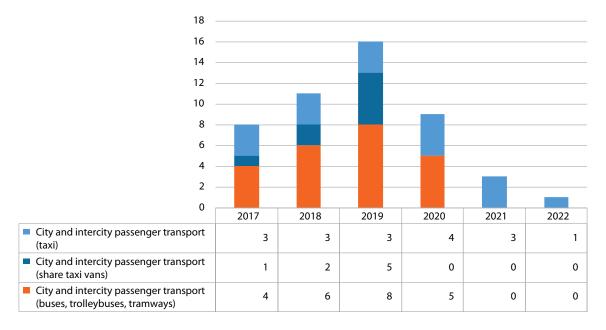
Source: MIA, 2023.



The need for greater mobility is increasingly present everywhere. Road transport has experienced the greatest increase in use of all types of transport and its functioning is of great importance in urban areas. A positive indicator is that in the last two years there have been no deaths in buses, trolleybuses and trams, as well as in shared taxi-vans.

Figure 25

Number of fatalities in public transport



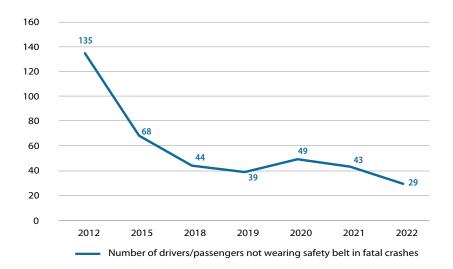
Source: MIA, 2023.

Safety belt wearing rates, child restraint use, helmet use

Today, methodologies to measure Key Performance Indicators (KPI's) on safety belt wearing rates, use of child restraint systems, and helmet wearing rates do not exist in Moldova. Data on the number of drivers/passengers that were not wearing safety belts in fatal crashes are presented below (figure 26.).

Figure 26

Number of drivers/passengers that are not wearing safety belts in fatal crashes



Source: Road Safety Enforcement Practices in the EaP Countries (World Bank, 2023).

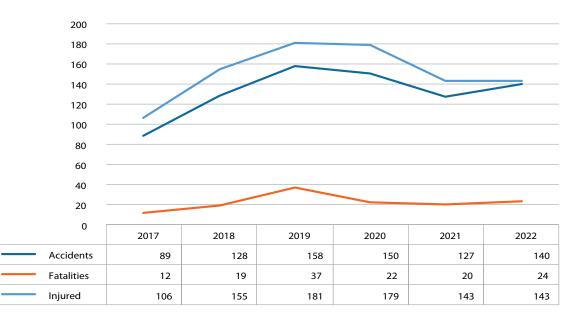


Driving under the influence - DUI (fines, accidents, fatalities)

Figure 27 shows the number of traffic crashes, fatalities and injuries due to drink driving. It can be seen that the trend increased between 2017 and 2022 and that additional attention needs to be provided to education and enforcement of driving under the influence (drink driving).

Figure 27

Number of crashes, fatalities and injured due to drink-driving



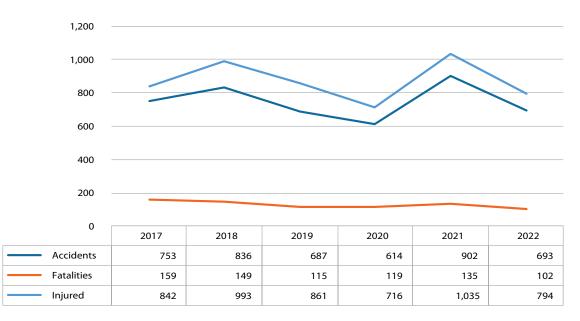
Source: MIA, 2023.

Speeding (fines, accidents, fatalities)

In Moldova, according to the MIA, the main cause of road traffic crashes is speeding (inappropriate speed for visibility, conditions and traffic situation, and driving above the speed limit). The trend line of fatalities caused by speeding between 2017 and 2022 is stable. This indicates that speeding issues should be treated with utmost attention.

Figure 28

Number of crashes, fatalities and injured due to speeding



Source: MIA, 2023.



Social cost of road crashes

Car crashes have serious socio-economic consequences. Many of the consequences can be expressed economically in the form of costs, losses, and damages. The full extent and significance of these consequences are often not seen directly because they are borne across several sectors, e.g. within the health sector, in employment, and by individuals and households. However, if the consequences of road crashes are not understood, it is difficult to expect decision-makers to be ready to invest to improve road safety. In Moldova, there is currently no officially adopted mechanism for measuring the social costs of crashes.

Today, there are several methods for estimating the economic costs of fatalities and serious injuries. This RSPR presents the models developed by iRAP and the WB GRSF (World Bank Global Road Safety Facility)⁵ to provide estimates of the potential savings that can be achieved by preventing fatalities and serious injuries through specific and targeted road safety investments proposed within the RSPR.

Table 6

Estimated cost of road crashes in Moldova using 2021 Gross Domestic Product/capita and using the International Road Assessment Program economic appraisal model values

ltem	iRAP value	Moldova estimates
Value of fatalities	70*GDP/Capita	USD 94,177,650
Value of serious injuries	17*GDP/Capita	USD 78,582,585
Total		USD 172,760,235
% of GDP		1.26

Note: Data for 2021: GDP: USD 13,691 billion; UGDP/Capita: USD 5,235; Fatalities: 257; Serious Injuries 883.

The iRAP model is rather conservative and estimates the annual economic cost of road crash fatalities and serious injuries to Moldova to be about USD 172.76 million. This is about 1.26 % of GDP.

However, if latest European Union cost estimations are applied in Moldova,⁶ the annual economic costs will be much higher at 1,349,999,700 Euros, which is about 8.3 times more than the iRAP appraisal model values and represents about 10.5% of GDP.

⁵ https://resources.irap.org/Research/iRAP_report_the_true_cost_of_road_crashes_EN.pdf?_ga=2.166555258.534024523.1665659099-199993850.1665659026.

⁶ <u>http://publications.europa.eu/resource/cellar/e021854b-a451-11e9-9d01-01aa75ed71a1.0001.01/DOC_1</u>.

3. ROAD SAFETY SYSTEM AREAS

3.1. Road Safety Management (RSM)

Assessing all elements of the road safety management system and the linkages between them is critical for any country seeking to improve its current performance levels.

Figure 29

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



Source: UNECE, 2020.

The ITC Recommendations give a comprehensive picture of national road safety systems that interconnect the five pillars of road safety (road safety management, safe road users, safe vehicles, safe roads, and effective post-crash response) with key action areas (legislation, enforcement, education, technology) and international support. Proposed actions, including appointing the ideal responsible authority, national coordination, international support, and the application of relevant UN road safety-related legal instruments for each pillar are specified in the ITC Recommendations.

The founding principle of the Road Safety Management System concept is that all elements – pillars and action areas – should be in place and function in an integrated way. They are interconnected and support each other. Thus, building an integrated Safe System Approach as per the ITC Recommendations. This integrated approach allows for improving one or more elements at a time but always within the bigger picture of the system as well as promoting systemic long-term solutions. It also offers a tool for prioritizing interventions in a systematic way. International regulatory support – through the adoption and implementation of the United Nations' road safety-related legal instruments – is critical to ensuring harmonized national solutions for a common international system.⁷

⁷ https://unece.org/sites/default/files/2022-01/ITC%20Recommendations%20for%20Enhancing%20National%20Road%20Safety%20Systems.pdf.



3.1.1. Strategic Framework for RSM

The national goals of the Republic of Moldova that are directly or in-directly linked to road safety include:

- Ensuring the stable and sustainable development of the State.
- European integration.
- Prosperity and well-being of citizens.

The United Nations legal instruments serve as a foundation for Member States to build national legal frameworks. There are 60 United Nations legal instruments in the area of inland transport which are administered by the United Nations Economic Commission for Europe (UNECE). United Nations General Assembly resolution on "Improving global road safety" encourages all Member States to accede to the seven "core" road safety conventions and agreements. So far, Moldova has acceded (ratified) the following:

- The Convention on Road Traffic, 8 November 1968.
- The Convention on Road Signs and Signals, 8 November 1968.
- The Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), 30 September 1957, also its additional Protocol of October 1993.
- The Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles, 13 November 1997.
- 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, 20 March 1958.
- The Agreement on Global Technical Regulations on Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles, 25 June 1998.

Since Moldova is a Contracting Party of AETR,⁸ legislation on digital tachographs in road transport should be implemented. The Road Transport Code sets rules on driving and rest times, largely in line with the European Union acquis. It remains unclear if all European Union minimum standards governing the organization of the working time of persons performing mobile road transport activities are incorporated into national law (e.g., the working time Directive).

The European Union Acquis Communautaire include common rules governing multiple aspects of transport policy, including: technical and safety standards, security, social standards, state aid and market liberalization in road transport, railways, inland waterways, combined transport, aviation and maritime transport. The Republic of Moldova signed the AA/DCFTA⁹ in 2000 in which transport is covered under chapter 15 and annex IX. The main objective of the AA is to promote transport cooperation between the European Union and Moldova and so boost the development of sustainable transport systems and promote efficient, safe and secure transport operations as well as the inter-modality and interoperability of transport systems. As of 2020, the Republic of Moldova is a European Union Candidate Country which stipulates an obligation to transpose the Acquis into national legislation. The 6th Ministerial Council of the Transport Community held on 15 November 2022 endorsed a Joint Statement calling for more systematic involvement by the Republic of Moldova as an observing participant in the relevant Transport Community bodies.

The main law governing road safety issues in Moldova is the Law on Traffic Safety No. 131 [07/06/2007] (with the latest amendment in 2020).

In addition to the Law on Traffic Safety, legal instruments pertaining to road safety are contained within decisions made by the Council of Ministers and instructions (by-laws) of the Minister of Transport and Infrastructure, which are summarized in tables 7 and 8 below.

⁸ The European Agreement concerning the Work of Crews of Vehicles engaged in International Road Transport, 1 July 1970.

⁹ Association Agreement/Deep and Comprehensive Free Trade Areas.

Table 7

Road safety legal framework

Title	Area	Description	Date
Law on Road Transport No. 150	Safer transport	Establishes the legal framework for the organization and performance of road transport of goods and people, as well as activities related to road transport on the territory of the Republic of Moldova, in safe and quality conditions, respecting the principles of free competition and measures to protect the environment, rights and interests concerning both legitimate individuals and legal entities. It also establishes the rights, obligations and responsibilities of public bodies responsible for organizing road transport, as well as of natural and legal persons carrying out road transport activity.	17/07/2014
Law on Roads No. 509	Fundamental legislation on road safety	Establishes the economic, legal and organizational principles of administration, maintenance, expansion and use of roads. Aims to establish the basic normative framework regarding the operation of roads and their use, regarding the acquisition and use of land areas related to roads, regarding the management, coordination and control of activities in the field of roads, as well as regarding the respect of the interests of road users, road owners and the state.	22/06/1995
Law on Road Fund No. 720-XII	Safer roads	This law establishes the legal, organizational and financial basis for the establishment and operation of the road fund.	02/02/1996
Law on Quality in Construction No. 721	Safer roads	This law establishes the legal, technical–economic and organizational basis for the activity of natural and legal persons in the field of construction, their obligations and responsibilities regarding construction quality.	02/02/1996
Contravention Code No. 218	Enforcement	This law includes legal norms that establish general and special principles and provisions in contravention matters, determine the facts that constitute contraventions and provide for the contravention process and contravention sanctions.	24/10/2008
Criminal Code No. 985	Enforcement	This code is the only criminal law of the Republic of Moldova. The criminal code is the legislative act that includes legal norms that establish the general and special principles and provisions of criminal law, determines the facts that constitute crimes and provides for the punishments applied to criminals.	18/04/2002

Table 8

Decisions of the Council of Ministers and Instructions of the Minister in charge of transport (by-laws)

Title	Area	Date
Government Decision No. 155 on the National Road Safety Council	Road safety	13/02/2003
Government Decision No. 357 on Road Traffic Regulation	Road safety	13/05/2009
Government Decision No. 181 on the approval of the Regulation on examination procedures for obtaining the right to drive vehicles, the issuance and validity of driving permits	Road safety legislation implementation and update	23/03/2022
Government Decision No. 296 on the approval of the Regulation on the method of alcohol testing and medical examination to establish the state of intoxication and its nature	Control of traffic participants	16/04/2009
Government Decision No. 589 on the approval of the Regulation on road transport of dangerous goods	Road Transport legislation implementation and update	24/07/2017
Government Decision No. 312 on the approval of the Regulation on carrying out of road transport on public roads with exceeding the total weight, the axle weights and/or the maximum permitted dimensions	Road safety legislation implementation and update	18/05/2022
Government Decision No. 415 on the approval of the Regulation regarding the technical supervision exercised by the National Public Security Inspectorate	Road safety	08/04/2003
Government Decision No. 1047 on the reorganization of the "Car" automated search information system in the State Transport Register and the introduction of testing of motor vehicles and their trailers	Safer vehicles	08/11/1999
Government Decision No. 854 on the Regulation of road transport of passengers and luggage	Road transport	28/07/2006
Government Decision No. 88 on the implementation of license plates for vehicles intended for public passenger transport	Road safety legislation implementation and update	06/02/2014
Government Decision No. 500 on the approval of the Regulation regarding the general equipment requirements for vehicles with priority traffic regime and special vehicles	Road safety legislation implementation and update	29/05/2018
Government Decision No. 1074 on the approval of the Model-Regulation regarding the registration and records of animal- drawn vehicles and the amendments and additions made in Annex No. 1 to Government Decision No. 357 of 13 May 2009	Regulatory legislation, vehicle standards	30/12/2013

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To produce positive road safety outcomes, strong management in all aspects of road safety is key. The presence of a funded lead institution or agency to guide the national road safety effort and implement a Safe System Approach is a strong recommendation.

The "European Moldova 2030" National Development Strategy, approved by the Parliament of the Republic of Moldova on 17 November 2022 and officially published on 12 December 2022, is a national long-term strategic vision document, which indicates the country's development directions. It adapts priorities, objectives, and indicators, as well as targets of international commitments made by the Republic of Moldova, to the national context with particular reference to the Association Agreement of the Republic of Moldova with the European Union.

The Moldovan Government is one of the signatories of the Memorandum of Understanding in support of the establishment of an Eastern Partnership (EaP) Regional Road Safety Observatory (RRSO), a recommendation of the Eastern Partnership Road Safety Declaration signed in Ljubljana in 2018. This represents a joint commitment to improve the quality of systematic and consolidated data collection on road traffic deaths and serious road injuries in line with European Union and international best practices, which is reported to the Regional Road Safety Observatory.

3.1.2. Institutional set-up

The Law on Traffic Safety No. 131, with latest amendments from 2022, indicate the following agencies as road safety related authorities:

- The Government.
- The National Road Safety Council.
- The Ministry of Internal Affairs.
- The Ministry of Infrastructure and Regional Development.
- The Ministry of Health.
- The Ministry of Education and Research.
- The Ministry of Defence.
- The Ministry of Agriculture and Food Industry.
- The Public Services Agency.
- Local public administration authorities.
- Public associations.

The Government is responsible for:

- Coordination of road traffic safety subjects.
- Adoption of state road traffic development programs.
- Financing, directing and controlling the implementation of road traffic development programs.
- Supervision of the implementation and compliance with road traffic safety regulations.
- Approval of the list of drugs contraindicated for vehicles.
- Determining the minimum content of first aid kits as part of the vehicle's equipment.
- Determination of methodological norms in the field of vehicle driver training.
- Determining the category of vehicles that can be released into traffic without homologation.

The National Road Safety Council

- Examines the situation and evaluates the work of competent authorities in the area of road traffic safety.
- Coordinates activities in the field, participates in the drafting and examination of normative acts in the field of road traffic and its safety.
- Coordinates the process of developing and promoting strategies at the national level, as well as action plans in the field of traffic safety.
- Ensures the performance of detailed studies based on traffic crash data, analysis of costs and benefits.

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The Ministry of Internal Affairs:

- Interdepartmental control of the provision of legal and normative acts in the field of road traffic.
- Coordination, by areas of competence, of activities to increase the degree of organization and safety of road traffic.
- Ensuring the direction, supervision and control of road traffic by measuring means.
- Control of vehicles in terms of compliance with road traffic safety rules.
- Carrying out quality control of works in the field of exploitation, maintenance, overhaul and periodic technical inspections.
- Monitoring of traffic crashes and creating media campaigns related to the state of road traffic, in order for traffic participants to obey the regulations.
- Investigation of traffic crashes.
- Organization of training programs for employees in the traffic police, fire service, and other specialized structures for providing first aid to victims of traffic crashes.
- Issuing special permits for drivers of special vehicles.
- Centralized evidence management of violations in the field of road traffic and applied sanctions.
- Coordination of transport schemes for oversized and dangerous cargo.
- Escorting official convoys.

The Ministry of Infrastructure and Regional Development is responsible for:

- Management, maintenance, repair and provision of state public roads; development of secondary roads for vehicle traffic with live traction, self-propelled vehicles and arrangement of paths for cyclists.
- Authorization of persons engaged in entrepreneurial activity in the fields of homologation, periodic technical inspections, provision of repair services and technical maintenance of vehicles.
- Coordination of training programs, initial training processes and periodic training, within specialized training units, for expert workers involved in the homologation process, periodic technical inspections, repair service and technical service.
- Development of technical regulations for the production, reconstruction and reuse of vehicles,
- Development of technical conditions and a methodology for the homologation process, the provision of technical repair and maintenance services, and periodic technical inspections of vehicles, as well as for vehicle servicing.
- Control in connection with state control of company activities, vehicle homologation activities and periodic technical inspections, as well as vehicle certification.
- Drafting of mandatory rules regarding the organization and smooth running of road traffic, and monitoring compliance
 of these rules.
- Drafting of special regulations in the field of road transport of dangerous goods, transport carried out by vehicles whose total mass and/or dimensions exceed permitted limits, and determination of safety measures for such transport.
- Adoption of technical regulations for the maintenance and repair of public roads and railway crossings.
- Drafting of legal regulations on the conditions for the organization of road transport for carriers of goods and passengers on domestic and international lines, and the manner of their performance.
- Drafting of regulations related to the regulation and control of compliance with work and rest regimes of vehicle drivers in domestic and international transport of goods and passengers.
- Determination, in cooperation with other competent authorities, of methodological norms for training, improvement and attestation of professional drivers; homologation and periodic technical inspections, as well as personnel in the field of road traffic.
- Development of a methodology for the installation, use and verification of tachographs and speed limiters in vehicles, in connection with the issuance, replacement, change and renewal of tachograph cards, in connection with downloading and data.
- Drafting of rules related to the implementation of traffic safety impact assessments, road safety audits, road safety inspections, as well as regulating the activities of training and certification.



The Ministry of Health

- Drafting of regulations on the health condition of drivers and candidates for acquiring the right to drive vehicles.
- Drafting of regulations on the method of alcohol testing and medical examination in order to determine the state of intoxication and its nature.
- Determination of rules for collecting and analysing biological samples for determination of alcohol in blood, consumption of drugs and other psychotropic substances, and medicines that negatively affect drivers' behaviour.
- Development of training programs for vehicle drivers, police officers, Civil Protection and Emergency Services and other specialized structures related to the provision of first aid to persons injured in traffic crashes.
- Determining the minimum content of first aid kits as part of the vehicle's equipment.
- Provision of emergency medical assistance to victims of traffic crashes.
- Writing records, in the integrated information system, of persons who have been admitted to medical and sanitary institutions, and of those traumatized and/or deceased as a result of traffic crashes.

The Ministry of Education and Research:

- Creation of illustrative and audio-visual methodical-didactic programs and materials in the field of road safety education, and training and provision of activities in this area in preschool and school educational institutions, including training and development of the teaching staff responsible for performing these activities.
- Drafting of regulations on the organization of didactic activities within the units for training personnel in the field of road traffic for acquiring the right to drive vehicles, as well as the model of their education.
- Creation, together with the competent authorities, of training and retraining programs, theoretical knowledge verification tests and criteria for evaluating the practical skills of driver candidates by categories and subcategories of vehicles, as well as monitoring their implementation.
- Determination, in cooperation with other competent authorities, of methodological norms and the organization of training, development, and testing of road traffic teaching staff and driving qualification exams evaluators.
- Monitoring of didactic activity, evaluation and accreditation of personnel of training facilities in the field of road traffic.

The Ministry of Defence:

- Training of vehicle drivers needed by the Army.
- Registration of vehicles from its own fleet and keeping their records.
- Organizing and performing periodic technical inspections of vehicles in its own fleet.
- Regulation, direction and supervision of traffic on public roads of Army vehicles, checking whether its drivers comply with road traffic regulations.
- Drafting, together with the Ministry of Internal Affairs, rules on the conditions for the movement of special vehicles on public roads and the control of their movement.

The Ministry of Agriculture and Food Industry:

- Drafting of normative acts related to the preparation, improvement, attestation and issuance of driver's licenses for self-propelled vehicles (tractors, agricultural machines) with trailers.
- Leading, coordinating and supervising the training and development of drivers of self-propelled vehicles (tractors, agricultural machines).
- Registration of self-propelled vehicles (tractors, agricultural machines) and their trailers from its own fleet, and keeping their records.
- Organizing and performing periodic technical inspections of self-propelled vehicles (tractors, agricultural machines).
- Creation, in accordance with international requirements and national standards, an environmental protection program by participants in road traffic.

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The Public Services Agency:

- Making models and issuing driver permits, certificates and vehicle registration plates.
- Organizing and conducting driving tests; registration and deletion of vehicles from the state vehicle register.
- Drafting of regulations related to the records of driver permits and registration certificates, conducting examinations for acquiring the right to drive vehicles, as well as registration and deletion of vehicles from the state vehicle register.
- Creating, using, updating and maintaining the state register of vehicles and the state register of drivers.

The Public Services Agency is responsible for verifying the fulfilment of the licensing conditions for the training of personnel in the field of road transport as well as the organization of prior on-site verification, together with other competent public authorities, of the fulfilment of the licensing conditions.

The local public administration authorities are responsible for:

- Administration, maintenance, repair, and provision of signalling on local public roads and at road construction sites in accordance with road traffic safety requirements.
- Systematisation and organisation of road traffic to guarantee its safety.
- Drawing up and updating traffic organisation plans in urban localities to improve the flow and safety of traffic and to reduce the level of environmental pollution.
- Establishing regulations regarding the access regime, circulation, stationary, and parking of different categories of vehicles.
- Building sidewalks for pedestrians, tracks for cyclists, and side roads for the circulation of animal-drawn vehicles and self-propelled vehicles.
- Ensuring the removal from public roads, and storage in specially arranged places, of motor vehicles, their trailers, bodies, or subassemblies, which have become technically useless or abandoned.

In order to associate efforts to prevent road traffic crashes, public associations for the protection of the rights and interests of road users (NGOs, e.g., Automobile Club of Moldova, Drivers Union) have the right to:

- Submit to central and local public administration proposals for improving rules, state standards, technical norms and other normative acts in road traffic safety.
- Carry out, at the request of members of public associations, examinations of the causes and circumstances of road traffic crashes, the transmission of materials to the prosecutor's office and the representation of the interests of their members in court.
- Undertake actions to prevent road traffic crashes (alone or in partnership with the competent public authorities).

A comprehensive and efficient national road safety system, built on international regulatory frameworks, good practice and experience, consists of five pillars. The Road Safety Management pillar calls for a focus on road safety target setting, vertical and horizontal management, and monitoring and evaluation. Further action under this pillar includes coordination with other efforts linked to ensuring high-quality living conditions and mobility of the population covered through land use planning policies and mobility policies.

The Law on Traffic Safety precisely defines competences of agencies in the field of road safety. The assigned roles of these agencies are presented in table 9.

Table 9

Key Actors per Road Safety Function in Moldova

Road Safety Function	Key Institution	Legal Act
Road Safety coordination	The National Road Safety Council (NRSC) chaired by the Prime Minister. The Executive Bureau of the NRSC has the role of road safety coordination in the country as per the last amendments to the relevant legislation.	Law on Traffic Safety No.131 [07/06/2007] Government Decision No. 155 of 13/02/2003 "On the National Council on Road Traffic Safety", amended by GD No. 442 of 16/05/2018 and by GD of 03/10/2018
Implementation of the Road Safety programme	Executive Bureau of the NRSC, responsible authorities mentioned in the Action Plan on the Implementation of the road safety action plan (different, road safety related, companies and NGOs)	Government Decision No. 972 of 21/12/2011"On the approval of the Action Plan on the Implementation of the National Road Safety Strategy", approved by Government Decision No. 1214 of 27/12/2010
Implementation of the 5% of the Road Fund	State Road Administration subordinated to the Ministry of Economy and Infrastructure	Government Decision No. 225 of 14/03/2018 "For the approval of the Means Allocation Program of the road fund for national public roads for 2018 and the Public Road Repairs Program for national (within localities), local, communal and street"
Improvements in road infrastructure	State Road Administration subordinated to the Ministry of Economy and Infrastructure	Law on Traffic Safety No.131 [07/06/2007]
Vehicle improvement	The National Road Transport Agency subordinated to the Ministry of Economy and Infrastructure	Government Decision No. 225 [14/03/2018] "For the approval of the Means Allocation Program of the road fund for national public roads for 2018 and the Public Road Repairs Program for national (within localities), local, communal and street"
Improvement in road user education	Ministry of Education, Culture and Research, Ministry of Internal Affairs	Law on Traffic Safety No.131 [07/06/2007]
Publicity campaigns	NGOs	Law on Traffic Safety No.131 [07/06/2007]
Enforcement of road traffic laws	General Police Inspectorate of the Ministry of Internal Affairs, National Public Security Inspectorate	Law on Traffic Safety No.131 [07/06/2007] Law on Police Activity and Police Status No. 320 [27/12/2012]

Source: Moldova's legislation related to the road traffic issues and World Bank, Road Safety Country Profile - The Republic of Moldova, 2021.

Moldova has a lead road safety agency/national road safety coordination body – the National Road Safety Council (NRSC) – which is chaired by the Prime Minister and includes representatives of relevant ministries, local authorities and civil society. The Council's mission consists of ensuring, at the national level, an integrated process of strategic planning, implementation and monitoring of Government policies in road traffic safety by correlating national priorities with sectoral policies, assumed international commitments and the framework of internal and external resources. Following the expiration of the mandate of the National Road Safety Strategy 2011–2020, the NRSC was reconvened in May 2023. Working Groups were established with a focus on drafting a concept for a new National Road Safety Strategy for 2024–2030. There is no permanent secretariat for the NRSC. The so-called Executive Bureau was established as a secretariat, but its function has been limited. The functions of the NRSC include coordination, legislation and monitoring and evaluation of road safety strategies.

Table 10

Road Safety Function	Key Institution
Road Safety Lead National Coordination Body	The National Road Safety Council (NRSC) has a lead road safety function. The Executive Bureau of the NRSC, is a coordination centre in the field of road safety within the State Chancellery. Note: In May 2023, NRSC has been revoked. There is no permanent secretariat for NRSC operational.
Lead Agency Funding	The road safety measures identified by NRSC/Executive Bureau are implemented through responsible Ministries and Agencies. Beginning 2018, the measures are financed from the state budget.
Lead Agency Functions	The NRSC functions are coordination, monitoring and evaluation of legislation and road safety strategies.
Road Safety Targets	Moldovan road safety target is to halve road crash fatalities and serious injuries by 2030.

Road Safety Institutional Framework in Moldova

Source: Road safety country profile 2021 Republic of Moldova and fact-finding mission.

Road sector reforms have progressed significantly since 2003, with the result that the sector is more functional and rational, with improvements in competencies and responsibilities. The Government has made a coordinated effort in 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 within the different road safety system components are diverse. Therefore, meaningful institutional collaboration within Government needs to take place alongside a system-wide strategy to achieve programme integration of the (sometimes competing) development, environment, accessibility, equity and safety objectives of national/regional governments.¹⁰

3.1.3. Road safety funding and resource allocation

The main funding sources for road safety in Moldova include the State Budget (e.g. the medium-term budgetary framework), the Road Fund, and some ad hoc external sources. Despite some positive elements of the current system, a key conclusion is that road safety funding in Moldova is currently insufficient and not sustainable. For instance:

- A road safety budget required to implement the road safety strategy has not been estimated.
- Ministries and agencies are not able to report a separate budget allocated to road safety activities as their road safety expenses tend to be "hidden" in general budget lines used for statutory activities.
- The current Road Fund has a very narrow scope. It can be used only for road infrastructure improvements and seems to be accessible to only one agency.
- There is no centralized road safety funding mechanism managed by the current road safety lead entity National Road Safety Council (NRSC).
- The NRSC currently has no control over road safety related revenues and expenditures.
- A dedicated Road Safety Fund or equivalent mechanism, which would preferably compile funds for road safety from different sources, is not in place.

There is currently no dedicated funding allocated to road safety in Moldova, although in many countries different revenue streams are used to finance road safety through the national budget or dedicated funding structures. There is a need for an annual dedicated road safety fund to be established along with a national road safety plan that includes the distribution of responsibilities and resources among stakeholders involved, and the publication of an annual report and impact evaluation.

¹⁰ https://road-safety.transport.ec.europa.eu/system/files/2021-07/ersosynthesis2018-roadsafetymanagement.pdf.



Several additional funding options could be considered based on international examples. These options should be assessed in terms of their relevance and feasibility in the context of Moldova and include:

- A foreseen increase in Road Fund revenues as an opportunity to expand the scope of the Fund and bring dedicated (clear percentage) additional resources to road safety.
- As a short-term measure, redirecting a share of funds collected by Police from traffic fines to road safety funding. This may be particularly attractive as it can be also used to justify better enforcement of traffic rules, particularly speed as the main risk factor contributing to crashes, to the general public.
- As a medium-term measure, the introduction of a fixed charge on vehicle insurance premiums earmarked for road safety.
- The establishment of partnerships with NGOs and the private sector which may create further opportunities for co-financing road safety projects.
- Continually pursuing IFIs and other external sources, including twinning projects.

More sustainable and gradual increases in funding for road safety measures should foster better cooperation and partnership between key road safety partners. An investment plan for road safety could serve as the main financial planning tool and the core of the road safety funding mechanism.

3.1.4. Recent and previously implemented road safety projects

Based on publicly available information, a number of road-safety oriented projects have been identified and are presented in table 11.

Table 11

IFI Road Safety oriented projects (and activities within projects)

IFI	WB	EBRD	EIB / IDB
Previous projects	 Technical assistance to the road sector by SweRoad (2002) WB estimated costs of crashes 	 Moldova Road Rehabilitation III (2010) Signing of tranche 1 of the Ioan for Moldova Road Rehabilitation: EUR 63 mln Road Safety Audits of the financed sections Workshop about Corporate Road Safety in Chisinau for companies operating large fleets Driving for Business Safely: Study Tour to the UK for a Moldovan delegation in order to build a deeper understanding of the practical application of occupational road safety policies. EBRD funded IMC Worldwide to look at standards Moldova Roads Rehabilitation IV, EUR 150 mln in three tranches (2013) 	
Present projects		— Capacity Building to CSO (Civil Society Organizations) on Road Safety	 All roads schemes by EIB, EBRD WB, EU MCC shown on govt website www.mtid.gov.net Have new funding instrument via which they can fund policy type studies (incl. safety) with Prime Minister's office
Future projects		 — Signing of tranches 2 and 3 of Moldova Road Rehabilitation (EUR 87 Mln) 	

Source: <u>www.traceca-org.org</u>.

In addition, the European Union -funded regional transport project "TRACECA-Road safety II"¹¹ was implemented as a follow up to an earlier European Union -funded RRSAP project, which sought to identify the safety needs in each of the 10 beneficiary countries (listed below) and develop a regional road safety action plan. The Action Plan was prepared at the end of 2011 and was published in early 2012. The beneficiary countries included Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. Romania, Bulgaria and Turkey were also associated with the project as indirect beneficiary countries but were not eligible for any of the technical assistance that was provided under the project.

¹¹ www.traceca-org.org/fileadmin/fm-dam/TAREP/70ta/TRACECA_Documents/TRACECA_Inception_Report_Eng_22082014_AR_Final_1__02.pdf.

The initiatives and projects listed above are all primarily oriented towards road rehabilitation. Since 2008, such projects have included mandatory components related to the implementation of the Road Infrastructure Safety Management Directive (2008/96/EC), which introduced modern road safety tools such as Road Safety Audit, Road Safety Inspection, Risk Mapping, etc. However, the scale of direct road safety investment for activities such as road safety management capacity reviews, capacity building, knowledge-transfer and research, etc. has been limited and not sufficient to enable the sustainable management of road safety in Moldova.

3.1.5. Research, development and knowledge transfer

Research, technical support and knowledge transfer underpin road safety performance and ensure that the road safety sector is well-supported. This vital institutional management function guides the design and implementation of national strategies that sustain reductions in road death and injury in the face of growing mobility and exposure to risk. It contributes to producing a cadre of international, national and local professionals who can contribute research-based approaches and disseminate knowledge to support road safety policy, programs and public debate.

The Technical University of Moldova (UTM) is the only accredited higher education technical institution in the Republic of Moldova. One of the strengths of the UTM in road safety research, support and educational coordination has been the development of its Research Centre: the Road Infrastructure Safety Observatory. The UTM-RISO was established in 2019 as part of the Department of Transportation Infrastructure and Engineering (DTIE) which covers almost all transport modes (road, rail, airport runways), all transport infrastructure types (urban and interurban, national and international, terminals), and all phases of transportation projects (planning, design, tendering, construction, delivery for operation, operation, management, maintenance). DTIE bachelors' students have a dedicated road safety course – Road Traffic and Safety – under which an introduction to the Road Infrastructure Safety Management (RISM) Directive process and procedures is provided. Further details and more in-depth provisions about the management of the Directive are provided as part of a RISM course under the University's master's program. In 2020, the UTM-RISO signed a collaboration agreement with all Moldovan authorities dealing with road safety data (Ministry of Infrastructure and Regional Development, Ministry of Internal Affairs, National Bureau of Statistics, etc.) on the provision of data. In general, the main goal of the UTM-RISO is to contribute to the significant reduction of road crashes and related casualties in the Republic of Moldova and the Region through providing scientific support for evidence-based decision making related to road safety policies, programmes and measures.

The Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova (USMF) is the only higher education institution in the country that trains medical doctors, dentists, pharmacists, optometry specialists, general medical assistants, public health specialists, radiology technicians, and physiotherapists. The USMF also conducts scientific research, public awareness and health promotion, and provides methodological and organizational assistance to the national health system.

The Department of Preventive Medicine collaborates with a number of countries and institutions and takes part in series of international research projects (such as iCREATE1 and iCREATE2, INITIATE, etc.). The Department prepares publications on the prevention of road crashes and road injuries using its own data or data collected by the General Police Inspectorate. Since September 2018, medical students have attended a dedicated course on injury and violence prevention in which they gain knowledge and practical skills in raising awareness of road crash injury prevention.

To date, Moldova has not had any European Union or IFI funded projects with a scope of work aimed at improving road safety knowledge at university level.

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 Moldova, a specialized unit of the National Inspectorate for Public Security under the General Police Inspectorate (GPI) is responsible for crash data collection and the publication of national road crash statistics. Traffic crash data are collected through a paper-based crash form completed at the crash scene and later entered into a central crash database, following a quality control procedure. The last modification to the scope of crash data collection was done in 2008.



Closed cases are signed by the relevant individual and the Head of the Territorial Police Inspectorate and entered into the Automated Information System "State Register of Road Accidents" (OSI RAR) database within three days from the date of occurrence or registration with the Inspectorate. A new police department has been instituted to improve data quality and support all activities related to data security, analysis, and other services.

The crash database management system currently used in Moldova is MS SQL. This lacks a GIS (Geographic Information System) interface but has the option to use point location. The system receives and responds to queries from other stakeholders and data can be accessed online. It is password-protected and can be used for online or daily data collection. The institution responsible for software development is the Ministry of Internal Affairs' Information Technology Service. The software has been used since 2014 and, to date, no further updates or developments are underway.

In Moldova, data on injuries are collected for people who are killed or sustain serious or minor injuries in road crashes. Police patrol units collect data about: (a) people killed at the scene of the road crash, (b) those who succumbed on the way to the hospital and (c) those who passed away up to 30 days after the crash occurred. Data on all these categories are available in the crash database.

Moldova is using the following definition for persons killed: a person who died at the scene of a crash or up to 30 days after a crash as a result of bodily injuries or complications following the crash.

Moldova maintains separate data for serious injuries and minor injuries sustained in road crashes. The definition used to describe serious injuries is: a person who has suffered moderate or serious bodily injury or health damage or who has died after the 30th days from the date of the crash.

These definitions are not based on international standards (e.g. AIS or MAIS scales). Verification of crash data between the health sector and the police is done by checking for fatalities after 30 days, after which they are classified as "seriously injured".

Crash data are available online to the Ministry of Internal Affairs, National Patrol Inspectorate and General Inspectorate of Police. Other institutions/organizations can receive crash data by submitting a request. The General Inspectorate of Police of the Ministry of Internal Affairs prepares semi-annual and annual reports on crash data and these reports are available upon request (they are not published on their official website).

The Republic of Moldova has established vehicle and driver databases. These databases are the responsibility of the Public Services Agency. Based on information received from public officials of the MIA, these databases are available online to patrol police on the spot. Additionally, the State Road Administration holds the national database on roads. Road length data by type of road (motorways/highways, interurban roads, urban roads) are available. However, this database is not linked to the crash database.

To date, the Republic of Moldova does not collect data on Safety Performance Indicators (SPIs) or KPIs¹² to measure the behaviour of road users i.e. the percentage of car occupants wearing safety belts; the percentage of drivers driving within the legal speed limits; the percentage of moped/motorcycle riders wearing safety helmets; the percentage of drivers driving under the influence of alcohol, etc.

Data on road traffic violations (such as the number of speed offenders, drivers using a hand-held mobile phone or not wearing a safety belt) are available through traffic violation controls. Data on traffic violations are also collected by video cameras – CCTV or ANPR – and are stored at the Information Technology Service and Cyber Security. It is of utmost importance to establish an effective connection between all available databases to enable efficient utilization of contemporary traffic control devices.

¹² <u>https://baseline.vias.be/en/publications/methodological-guidelines-kpi/.</u>

3.1.7. Proposed measures and conclusions

The following key measures and conclusions for the improvement of road traffic safety management in the Republic of Moldova are proposed:

- A1.1 Better coordinate vertical and horizontal activities undertaken by key road safety stakeholders and strengthen their capacity and integrity
- A1.2 Re-establish/empower the National Road Safety Council (NRSC) as the leading body for road safety management to deal with strategic issues and monitor road safety results
- A1.3 Set specific and measurable targets within the national road safety strategy and action plan
- A1.4 Enable stable and sustainable funding sources for road safety

- A1.5 Perform a regular review of Key Performance Indicators (KPIs), using them to monitor progress and evaluate the impact of road safety activities undertaken, including enforcement
- A1.6 Improve and evaluate the effectiveness of enforcement efforts
- **A1.7** Use road traffic safety campaigns in coordination with enforcement to raise awareness of risky road user behaviour.

LEGISLATION



ENFORCEMENT



- A1.8 Establish and implement a national road safety research program in the field of road safety
- A1.9 Strengthen/improve knowledge transfer, knowledge sharing and collaboration among road safety stakeholders at local, national and international levels
- **A1.10** Research, analyse and make use of information around the socio-economic costs of road crashes
- A1.11 Improve existing crash databases in accordance with CADaS (Common Accident Data Set) protocol recommendations (all variables).
- A1.12 Implement the use of Intelligent Transportation Systems (ITS) to improve road safety, optimize traffic flows and reduce congestion

EDUCATION

TECHNOLOGY



LEGISLATION

Activity A1.1: Better coordinate vertical and horizontal activities undertaken by key road safety stakeholders and strengthen their capacity and integrity.

Establish permanent protocols for regular communication and collaboration among key road safety stakeholders at different levels (national, regional, local) to ensure consistency and alignment in road safety policies, programs and activities. Dedicate additional efforts for improving vertical cooperation in implementation of road safety activities (including better coordination between national/regional and local levels regarding road safety initiatives).

Activity A1.2: Re-establish/empower the National Road Safety Council (NRSC) as the leading body for road safety management to deal with strategic issues and monitor road safety results

- Support the NRSC in developing, implementing, and monitoring the national road safety strategy and action plan.
 Ensure active participation of key road safety stakeholders in Council activities and decision making.
- Provide to the NRSC all necessary resources to perform its functions effectively, including an operational secretariat.
- Establish a system for regular reporting to the Government on the implementation of the national road safety strategy and action plan.
- Support the work of different Working Groups to prepare analysis, proposals and recommendations related to the improvement of the road safety system.

Activity A1.3: Set specific and measurable targets within the national road safety strategy and action plan

- Prepare a comprehensive national road safety strategy and action plan that includes specific targets, timelines, responsibilities and performance indicators. The Action Plan should include actions related to the transposition of the European Union Acquis Communautaire.
- Permanently monitor and evaluate progress towards achieving agreed targets based on available crash data, KPIs and other public data.
- Establish a system of accountability and reporting on the road safety situation to the Prime Minister, including the publication of information on the achievement of agreed road safety targets.

Activity A1.4: Enable stable and sustainable funding sources for road safety

- Prepare and implement policies/laws/by-laws to establish sustainable funding sources for the improvement of road traffic safety. This can be based on shares of road safety infringement fines, and other fees and payments collected (such as vehicle registration fees and driver permit fees, etc.).
- Establish specific road safety dedicated budget lines in the national budget.

ENFORCEMENT

Activity A1.5: Perform a regular review of Key Performance Indicators (KPIs), using them to monitor progress and evaluate the impact of road safety activities undertaken, including enforcement

- Prepare and adopt a methodology to deploy and regularly review KPIs for road safety, based on European Union methodologies.¹³
- In addition to the final outcomes, use KPIs to assess and evaluate the effectiveness of road safety activities in reducing road crashes and fatalities and establish regular reporting on road safety at national, regional and local levels. Official reports should be made accessible to decision makers, experts, and the general public.

Activity A1.6: Improve and evaluate the effectiveness of enforcement efforts

- Establish a sound connection between different national databases on drivers, vehicles, roads and traffic offences to enable efficient use of traffic control devices (e.g. speed and red-light cameras, section control, etc.).
- Conduct regular assessments of enforcement programs to evaluate their effectiveness in reducing risky road user behaviour and improving road safety outcomes.
- Assess public perception and understanding of road safety laws and enforcement efforts.

Activity A1.7: Use road traffic safety campaigns in coordination with enforcement to raise awareness of risky road user behaviour

- Regularly promote the national road safety strategy vision/goals, specific interventions and target groups.
- Develop partnerships between road safety stakeholders, such as police, local government, and community groups to coordinate enforcement efforts and implement awareness campaigns targeting unsafe road user behaviour.
- Perform informational, behaviour change, agenda setting and inter-organizational road traffic safety campaigns in coordination with enforcement and evaluate their effects.

EDUCATION

Activity A1.8: Establish and implement a national road safety research program in the field of road safety

- Establish and implement a national road safety research program in the field of road safety.
- Involve scientists/Academia in different road safety activities including in the implementation and evaluation of road safety projects.

Activity A1.9: Strengthen/improve knowledge transfer, 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 a road safety expert network and forums to promote collaboration and information sharing among stakeholders.
- Promote international cooperation and partnerships to share knowledge and experience across borders and regions.

Activity A1.10: Research, analyse and make use of information around the socio-economic costs of road crashes

 Use local academic institutions for research, analysis and making official use of information around the socio-economic costs of road crashes in Moldova.

¹³ <u>https://baseline.vias.be/en/publications/methodological-guidelines-kpi/.</u>

TECHNOLOGY

Activity A1.11: Improve existing crash databases in accordance with CADaS (Common Accident Data Set) protocol recommendations

- Conduct an assessment of the current crash data collection system to identify gaps and areas for improvement.
- Collect data in GIS and train and equip traffic police to collect data on crash scenes digitally (including GPS coordinates).
- Improve existing crash databases in accordance with CADaS (Common Accident Data Set) protocol recommendations (all variables).
- Train relevant stakeholders including the Ministry of Internal Affairs, Ministry of Health and National Bureau of Statistics on how to use the new data collection forms.

Activity A1.12: Implement the use of Intelligent Transportation Systems (ITS) to improve road safety, optimize traffic flows and reduce congestion

- Tailor the most effective ITS solutions for the traffic situation in Moldova, taking into account the existing road network and infrastructure, traffic patterns, and travel behaviour.
- Within larger cities, develop and implement advanced traffic management systems to optimize traffic flow and reduce congestion. These systems can communicate with drivers and provide real-time information on road conditions, hazards, traffic congestion, and can automatically detect and report traffic violations.

3.2. Safer roads and network

The road network accommodates most of the passenger and freight traffic in Moldova with the roads classified by national, regional and local roads.

For the last 25 years, the Government has focused on upgrading road infrastructure from the old construction norms which were based on Soviet standards from the 1950s. After 2000, the Government, with financial support from institutions such as the World Bank, EIB and EBRD, financed the development of the road network. Priority was given to the main road corridors which link Moldova with neighbouring countries. The rest of the network has been upgraded and improved according to domestic traffic demand.

Despite existing investments in the road sector, the pace of modernization has been slow and road infrastructure is considered to be in a bad condition, from the road surface condition to road design and safety of infrastructure.

Moldovan design standards are still mostly based on Soviet standards. The NCM D.02.01:2015 Design Standards for Roads were approved in 2015 and made applicable to national and rural road networks. However, updates to the design standards for streets have not yet been prepared. Local governments prepare street designs based more on standards for national roads and local conditions than by following dedicated design guidelines.

Another element which contributes to road safety is land use planning. After 1990, many people living in rural areas moved to big cities and surrounding areas. In urban areas, illegal construction took place near to the main road network, which now must accommodate not only international and intercity traffic but urban traffic as well.

The urban planning process did not consider traffic and safety implications. This led to a situation where, on some roads, direct frontal access of private properties was permitted – increasing exposure to road traffic conflicts.

At the same time, the modernization process still tended to follow the existing Soviet-era plans of the road network. Most of this network ran through villages and did not have bypass roads. The construction and upgrading of the existing road network has also caused an increase in the operating speeds of vehicles using the reconstructed/rehabilitated roads. The modernization of these roads and the increase in traffic flow has led to an increase in the number of crashes (in particular, those involving pedestrians) in these localities.

3.2.1. National road network

The road infrastructure of the Republic of Moldova consists of over 10,670 km of public roads, of which 5,900 km are national roads, 3,700 km are regional roads, and 1,070 km of public roads located on the left side of the Dniester River.

The main mandated state body in the field of road infrastructure development is the Ministry of Infrastructure and Regional Development (MIRD), which is responsible for the development of national policies, legislative and regulatory frameworks, and the implementation of the policy documents – including programming and implementation of the necessary investments for road infrastructure (functions of the former Ministry of Transport and Road Infrastructure). The MIRD also coordinates spatial planning policy for infrastructure development and the development and approval of norms and standards in the field of construction, architecture and urban planning.

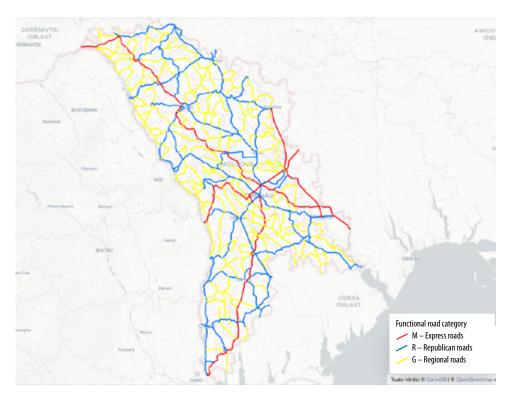
The MIRD is the state body responsible for the development and promotion of national policy in the field of regional development. Through the four Regional Development Agencies, the MIRD contributes to the planning and development process of road infrastructure of regional and local importance. It coordinates the National Regional Development Fund, which is an important source of funding for local and regional road infrastructure development projects.

The MIRD coordinates the activity of the State Road Administration (ASD), which was established as Moldova's road infrastructure administration body as per Government Decision No. 678 of 19/07/2011. Under the Ministry, the State Road Administration (ASD) is a state enterprise responsible for maintenance, repair, rehabilitation, development, upgrades, and administration of national public roads and other road infrastructure as defined by law in order to ensure the safe, fluent and continuous movement of road traffic.

The ASD is also responsible for the implementation of unitary development programs on the public road network in accordance with the National Development Strategy Moldova 2030. In terms of the maintenance of the national public road network, ASD operates joint venture contracts with regional, state-owned, road construction companies or private companies.

The road network is sufficiently developed, but its condition and infrastructure is considered to be poor, requiring rehabilitation and modernization. According to the latest data, 92.5% of national roads and 46.1% of local roads have either permanent or semi-permanent road surfacing (asphalt concrete, concrete cement, and bituminous mixtures).

Figure 30 Moldova national roads map



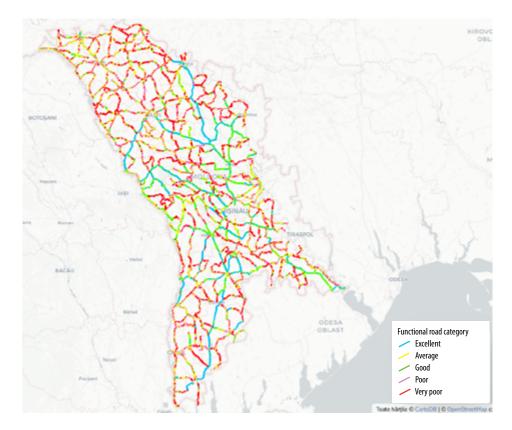
Source: State Road Administration, 2023 (https://harta.asd.md/).



According to State Road Administration data, most national and regional roads are in a poor or very poor condition due to degraded road surfaces. Only some sections of national roads are in a good or satisfactory condition. As a result, many small towns and villages lack safe road infrastructure and access to well-designed, modern roads.

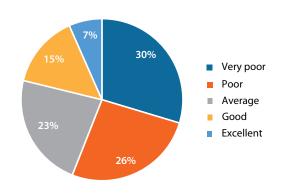
Figure 31

Moldova road roughness index map



Source: State Road Administration, 2023.

Figure 32



State of national and regional roads in Moldova, 2020

Source: State Road Administration, 2021.

The main instrument that ensures the financing of the development and maintenance of road infrastructure is the Road Fund, which is regulated by the Law on Road Fund No. 720 [02/02/1996].

RSPR Moldova

The Road Fund sits under the state budget and is used to finance:

- Maintenance, repair and reconstruction of national public roads and roads of regional (municipal) interest
- Road design
- Developing the production base of units for road maintenance works
- The procurement of equipment and machinery for maintenance
- Production of road construction materials
- Scientific research and design in the field of construction works
- Road management administration.

The main funding sources are:

- An annual breakdown of the volume of excise duties on petroleum products subject to excise duties, with the exception of liquefied gas, in the state budget law for the respective year
- Road taxes levied according to fiscal legislation, with the exception of the road tax for vehicles registered in the Republic of Moldova
- Fees related to the issuing of permits for international road transport of goods and occasional passengers
- Fines applied for non-compliance with passenger transport rules, damage to roads, construction and road equipment, and plantations related to roads
- Tax on the sale of natural gas intended for use as fuel for passenger vehicles.

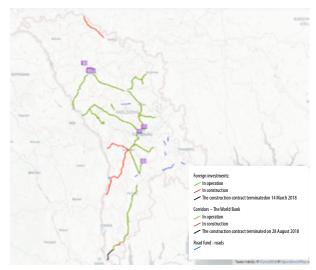
In 2018, an essential amendment to the Law on Road Fund was made which had a direct impact on the sources and the annual amount of road funding. Before this amendment, the share of excise taxes on petroleum products (which were subject to excise taxes) used to be no less than 80%. After the amendment, the total amount of funds is based on the budget law for each year. This change severely limited the likelihood of achieving the objectives of the Transport and Logistics Strategy 2013–2022, approved in 2013, on time and as expected. Additionally, the financial sources of the Road Fund have not been allocated in the amount as intended by the Law on Road Fund. This has created an impediment to reaching the targets set by the NDS for 2020. Also, as of 2015, the funds have been allocated towards the end of the calendar year resulting in any funds not used by the State Road Administration in that calendar year being returned to the Treasury and not being invested in road development and rehabilitation.

Donors and International Financial Institutions (IFIs) are an important source of funding for the road sector in the Republic of Moldova. They include the European Union, World Bank (WB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), US Agency for International Development (USAID), etc.

Between 2017 and 2022, over 382.1 km of national roads were being either totally or partially reconstructed. Currently, 57.1 km of national roads are under construction and six km are in the design phase. Over the next five years there are planned investments to modernize 497.2 km of national and local roads, and 180 km have rehabilitation projects ongoing.



Figure 33 Moldova road reconstruction map



Source: State Road Administration, 2023.

Through the implementation of the Trans-European Transport Network policy (TEN-T), Moldova aims to build an efficient transport infrastructure network. The European Union funding programs and initiatives are providing financial support for the following roads on the tentative TEN-T:

- M5 road Border with Ukraine Criva Balti Chisinau Tiraspol border with Ukraine
- M2 road the belt sectors of Chisinau municipality
- M1 road Border with Romania Leuseni Chisinau Dubasari border with Ukraine
- M3 road Chisinau Comrat Giurgiulesti border with Romania

Figure 34 The TEN-T Tentative Transport Network: Republic of Moldova



Source: European Commission, 2013.

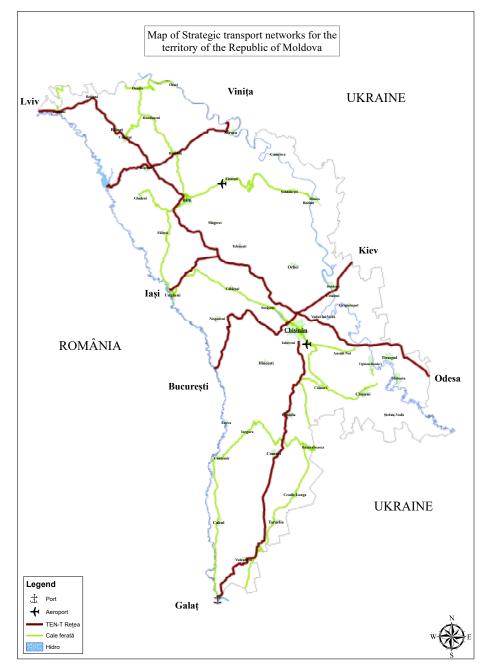


The National Development Strategy Moldova 2030 sets out a strategic goal to enhance access to safe water sources, energy, sewage systems, road infrastructure and information technology infrastructure. Considering the country's poor transport infrastructure, the strategic vision in this regard is to provide access to safe, affordable, accessible and sustainable transport systems for all and improve road safety, notably by expanding public transport (SDG 3.6 and 11.2). One of the monitoring and evaluation indicators for this objective is to reduce the rate of people killed in road crashes from six per 100 thousand people in 2022 to four in 2030.

As a part of European integration process, the Republic of Moldova – European Union Association Agreement emphasizes the importance of implementing the priority measures as set out in the Transport Infrastructure Investment Strategy of the Republic of Moldova. This strategy is aimed at rehabilitating and extending internationally important rail and road links crossing the territory of the Republic of Moldova, starting with the M3, Chisinau – Giurgiulesti, and M5, Ukrainian border – Criva – Balti – Chisinau – Tiraspol – Ukrainian border.







Source: Official Journal of the European Union, 2023.

3.2.2. Road infrastructure safety management

Road infrastructure safety management (RISM) procedures are stipulated within EU Directive 96/2008 and its amendment EC 1936/2019. With EU Directive No. 2008/96 and amendment 2019/1936 on road infrastructure safety management (RISM), the European Union makes clear that the stated procedures and tools are mandatory for member States and on major roads. Among the RISM tools, Road Safety Audits (RSA) and Road Safety Inspections (RSI) are two of the most important procedures for ensuring the safety of new and existing infrastructure.

Unfortunately, to date, there are few examples of the systematic application or acceptance of RSA/RSI procedures in Moldova. Most RSAs that have been implemented have mostly been done at the request of International Financing Institutions (IFIs) and under road rehabilitation processes.

Such RSAs were implemented by foreign consulting companies and covered only a small number of road sections, resulting in only minor capacity building of national experts. Even when such RSAs are undertaken, the resulting RSA recommendations are not always implemented by road authorities due to old design standards which don't comply with the proposals within the reports.

Some recent IFI/ European Union projects have attempted to develop local capacity for the implementation of RISM tools, including RSAs and RSIs such as the TRACECA Road Safety II project where a number of people were trained in RSA and RSI.

RISM in Moldova is covered under the Government Decision on the Approval of the National Road Safety Strategy for 2011–2020 No. 1214 [27/12/2010] and Government Decision on the Approval of the Action Plan for the implementation of the National Road Safety Strategy No. 972 [21/12/2011].

Between 2011 and 2020, the country had a road safety target to reduce fatalities by 50%.

The plan included the following objectives:

- Establishing a framework for efficient and sustainable policy in the field of road safety.
- Consolidation of control over the application of road standards.
- Developing and educating traffic participants.
- Protection of the most vulnerable traffic participants pedestrians, children, cyclists.
- Developing safer infrastructure.
- Reducing the severity and consequences of road crashes.

However, the Road Safety Strategy 2011–2020 was not fully implemented due to a lack of funding, and it expired in 2020.

National legislation does not currently recognize Road Safety Audit and Road Safety Inspection as necessary procedures, with the exception of a mention in the Law on Traffic Safety No. 131 [07/06/2007] which added a definition of RSA and RSI as part of the latest amendments in 2020 but without further explanation or guidance.

There is a strong need to introduce RISM procedures, especially road safety audit and inspection, within national legislation. In addition, it is necessary to prepare accompanying RSA and RSI guidance, and initiate a system for training and certification/ licensing of auditors and inspectors.

3.2.3. Road design regulatory standards

In the Republic of Moldova, road infrastructure design and construction is mainly based on USSR technical frameworks, construction rules and official standards (known as SNiP and GOST). These are based on technologies used 30-40 years ago, and in many cases exclude the use of modern advanced technologies.

Currently, the following technical and regulatory standards from the former USSR still apply:

- SNiP 2.05.03-84 Bridges and pipes. Design
- NCM D.02.01:2015 Design of public roads
- SniP 3.06.04-91 Bridges and pipes. Execution and approval of works
- SniP 2.04.02-84 Bridges and pipes. Inspection and testing rules.

RSPR Moldova

The road safety regulations in the Republic of Moldova are based on:

- Law on Roads No. 509
- Law on Traffic Safety No. 131
- Law on Road Fund No. 720-XII
- Law on Quality in Constructions No. 721.

These laws establish the economic, legal, and organizational principles of road administration, maintenance, expansion, and use. They create a basic normative framework regarding the operation of roads and their use, the acquisition and use of land related to roads, the management, coordination and control of activities in the field of road transport, as well as the legal, technical-economic and organizational basis for activity in the field of construction: including obligations and responsibilities regarding construction quality.

Several new design standards have recently been developed and approved, replacing the old Soviet provisions for public roads (NCM_D.02.01-2015) and streets in urban and rural localities (CP_D.02.11-2014). At the same time, there are several new design guidelines "CP" incorporating recommendations on road design and construction and the organization of road maintenance and repair works.

Moldova is making efforts to improve regulations and technical standards in road construction. In recent years, more than 400 new standards have been approved, enabling the use of modern materials and technology. In 2015, the Ministry of Transport and Road Infrastructure of the Republic of Moldova signed a memorandum with the Ministry of Transport of Romania, allowing the use of the Romanian technical regulations and standards in Moldova. Considering that most of the technical norms and standards in Romania have been brought in line with European requirements, the problem of technical norms has been partially solved, although a lot of hard work is still needed. Currently, over 100 Romanian technical standards in road construction and road safety have been approved in Moldova.

In general, existing standards follow the best international practice with only some minor areas still in need of review and improvement (e.g. lowering design speeds, improving safety on some cross profiles, etc.). There is also a need for the development of additional guidance documents (e.g. guidelines on Work Zones, guidelines for the selection of road restraint systems, etc.).

Particular attention should be given to construction, reconstruction and rehabilitation projects on national roads financed by Multinational Development Banks (MDBs). These projects, bearing in mind the commitment to promote road safety in all projects financed by MDBs,¹⁴ can be a catalyst for the modernization of legal frameworks, design guidance, and standards for building and maintaining public roads.

3.2.4. Road work zones

According to data presented by the police, road repair/maintenance works and construction sites are among the main causes of traffic crashes and traffic jams. Of particular note is:

- Inadequate signalling at the place where works are carried out.
- Storage of construction materials on the roadside.
- Occupation of areas on the roadway outside of that which has been authorized.
- Special vehicles carrying out dangerous manoeuvres within the work process.
- Non-compliance with the terms of the works, abandonment of construction sites for a long period of time.
- Lack of physical protection of the places where the works are being carried out.
- Applying road markings, performing road sealing/repair/sanitization works during the day, at peak hours.

Road work zones are managed according to different national technical regulations. These regulations are scattered across many technical guidelines and prescriptions, and most of the time they are not followed during construction work. The companies carrying out construction and maintenance activities on roads are responsible for the safety of traffic and workers during road works. The construction company must prepare a traffic management plan and submit it for approval to the traffic police as well as the road administrator. This is the SRA for national roads and Municipality Services for local roads.

A comprehensive Road Works Zone Manual that would define the ways in which traffic should be managed during construction and maintenance works should be developed and efficiently implemented for improved road safety.

¹⁴ MDB Road Safety Guidelines, 2014 (<u>https://scioteca.caf.com/handle/123456789/413?locale-attribute=en</u>).

3.2.5. Road signs, markings and Intelligent Transport Systems

The Moldovan Road Traffic Regulations and Technical Norms clearly define standards and designs for signalling and markings, including the types of road signs needed, dimensions and construction standards.

However, this technical framework was drafted based on USSR standards and practices and the use of signs and markings based on this framework are not correct in many situations. The maintenance backlog for signs and markings is also an issue which must be addressed. Many national and urban roads lack or have incomplete horizontal markings.

An Intelligent Transportation System (ITS) for the national road network does not exist. The only ITS in use is related to the National Inspectorate of Police's ITS centre and is mostly used for identifying traffic violations on national roads and in Chisinau.

According to official data, of 181 traffic lights functioning in Chisinau, the capital of Moldova, 115 are remote controlled: of which 73 are controlled by radio signal, 20 are controlled by a physical connection line, and only 22 are directed by GSM signals (smart traffic lights) and connected to a traffic management centre.

In Chisinau there also are about 47 road traffic surveillance stations with 125 video cameras, 145 cameras and 29 PTZ cameras (pan tilt zoom, have a rotation, tilt and long-distance zoom system) that are connected to a "Traffic Control" system of automated road traffic surveillance.

These devices provide necessary information about road traffic, including violations committed by road users. The surveillance cameras record violations such as: exceeding speed limits, red-light running, ignoring road markings and other road traffic rules/signalling. Surveillance stations are set up and managed by the National Patrol Inspectorate. However, the information generated by these devices and intelligent systems have little utility in managing and streamlining traffic in real time due to the fact that they are not designed for traffic management. While the Transport Directorate of Chisinau City Hall has the capability of managing traffic through traffic lights, it does not have access to the cameras or the data generated by the Automated Road Traffic Surveillance System.

In Chisinau, local authorities have started establishing a traffic control centre based on data from traffic lights, police traffic cameras, and a public transport GPS system but it is still uncertain to what extent this project will be implemented.

Simultaneously, there are plans to expand the road traffic control video surveillance system throughout the Republic of Moldova, with six additional cameras installed and another seven cameras proposed to be installed by early 2024.

Moldova does not have a GIS database for monitoring and managing road traffic on the national road network. The State Roads Administration has implemented some Road Weather Information System and Weight in Motion pilot projects.

RSPR Moldova

3.2.6. Proposed measures and conclusions

The following key measures and conclusions for the improvement of road safety in the Republic of Moldova are proposed

- A2.1 Improve the legal framework of Moldova in terms of road infrastructure safety management (incorporating missing RISM tools).
- **A2.2** Improve the legal framework and standards for safe road design and road protection.
- A2.3 Legal aspects of ITS and tunnel safety should be incorporated within national laws.
- **A2.4** Supervision of the implementation of RISM tools, ITS and tunnel safety measures.
- A2.5 Improve law enforcement in road work zones.
- A2.6 Increase implementation of RISM tools and procedures in accordance with the Road Safety Strategy.
- **A2.7** Develop a framework for ITS architecture in terms of enforcement in Moldova.
- A2.8 Enforcement of road safety audits and inspections as permanent procedures.





ENFORCEMENT

- A2.9 Development of training materials and guidelines for safe road design and construction.
- A2.10 Implement training for entities/ administrative districts responsible for road construction and design.
- A2.11 Exchange best practices from the European Union.
- **A2.12** Implementation of ITS technologies on the tentative Core and Comprehensive Road network.
- A2.13 Implement a Road Weather Information System (RWIS) on major road links.
- **A2.14** Develop and introduce ITS technology for better traffic management dedicated to the improvement of RISM.
- A2.15 Development of a database for road safety infrastructure management tools (Network Safety Management).

EDUCATION

TECHNOLOGY



LEGISLATION

Activity A2.1: Improve the legal framework of Moldova in terms of road infrastructure safety management

- Ensure a sufficient legal basis for the introduction of RISM tools.
- Improve national legislation to enable the introduction of RSA and RSI as mandatory procedures.
- Define national authorities in charge of RSA and RSI implementation and monitoring, and enable sustainable funding of RSA/RSI.
- Develop guidelines for the implementation of RSA and RSI.
- Train and license personnel for undertaking RSA and RSI procedures.

Activity A2.2: Improve the legal framework and standards for safe road design and road protection

- Adopt necessary by-laws or guidelines on the functional hierarchy of the road network. This document should define the functional classification of public roads and define technical and design parameters for every road category.
- Prepare a manual for setting and managing speed limits (speed management). A Speed Management Manual is a very important tool for improving road safety and it could be a constitutive part of design standards for roads.
- Prepare Road Access Guidelines. The preparation of Road Access Guidelines should describe how secondary roads and services should be linked with the main national network. It must establish procedures and standards to protect the functions, capacity, and safety of the motorway system. It should also establish who has the right and under which conditions to access the main road network.
- Develop legislation to allow for the implementation of Directive EC 54/2004 on minimum safety requirements for tunnels in the Trans-European Road Network.
- Draft by-law regulations for the implementation of road safety infrastructure tools: including Road Safety Impact Assessments, network-wide road safety assessments (including Risk Mapping tools), Black Spot Management, in-depth analysis, Road Safety Inspection and Road Safety Audit.

Activity A2.3: Legal aspects of ITS and tunnel safety to be incorporated within national laws

Develop legislation to allow for the implementation of EU Directive 40/2010 on Intelligent Transport Systems.

ENFORCEMENT

Activity A2.4: Supervision of the implementation of RISM tools, ITS and tunnel safety measures

- Recognition of the institutions in charge for checking the compliance of laws for RISM, ITS and tunnel safety matters.
- Supervision of the implementation of RISM tools by the institutions in charge.
- Supervision of the implementation of ITS and tunnel safety measures by road managers.

Activity A2.5: Improve law enforcement in road work zones

Work zone enforcement is critical for maintaining safety and obtaining motorist compliance with traffic control regulations. Legislation must be updated to improve work zone design and integrate automated law enforcement methods.

Activity A2.6: Increase implementation of RISM tools and procedures in accordance with the Road Safety Strategy

- Develop a study/methodology for the deployment of enforcement-oriented ITS.
- Deploy selected enforcement infrastructure, services and applications within Moldova's road network, in accordance with the study/methodology.

Activity A2.7: Develop a framework for ITS architecture in terms of enforcement for Moldova

- Evaluation of the inclusion of ITS in strategies and action plans in road transport in Moldova and the integration of the ITS technologies in line with European Union integration frameworks.
- Implement modern technologies, primarily across the core road network but also on the other parts of the network (regional, inter-city and urban roads).

Activity A2.8: Enforcement of road safety audits and inspections as permanent procedures

- Improve national legislation to enable the introduction of mandatory certification (licensing) of legal entities/ individuals involved in training/certification of auditors and inspectors.
- Improve national legislation to introduce mandatory certification of auditors and inspectors.

EDUCATION

Activity A2.9: Develop training materials and guidelines for safe road design and construction

- Deliver capacity development courses on Network Safety Management, Road Safety Impact Assessment and Risk Mapping tools.
- Develop a study/methodology on Network Safety Management, Road Safety Impact Assessment and networkwide road safety assessments (including Risk Mapping tools).
- Update university curricula with road safety courses dedicated to safe road design, self-explaining roads, and road infrastructure safety management tools.
- Present/disseminate study/methodology results to key road safety stakeholders.

Activity A2.10: Implement training for entities/administrative districts responsible for road construction, design and road safety enforcement

- Draft a curriculum for a road safety audit/inspection course and deliver periodic training in accordance with European Union Directives and international best practice.
- Draft and adopt training materials for a road safety audit/inspection course, share/deliver materials.
- Introduce training for road safety practitioners (engineers, designers, enforcement, etc) to explain key design principles and benefits of safe roads.
- Introduce training for enforcement officers on the use of contemporary systems for the detection of traffic offences.
- Develop a database of certified auditors/inspectors.

Activity A2.11: Exchange best practices from the European Union

Establish connections between Moldovan road management authorities and their counterparts from European Union Member States and international road safety organizations for exchanging best practices in road safety and road safety management.

TECHNOLOGY

Activity A2.12: Implement ITS technologies on the tentative Core and Comprehensive Road network

Implement ITS technologies for national network management to provide more efficient road and traffic management.

Activity A2.13: Implement a Road Weather Information System (RWIS) on major road links

- Traffic on road networks should be managed by information gathered through a RWIS.
- Implement a Road Weather Information System or related systems on the road network in Moldova.

Activity A2.14: Develop and introduce ITS technology for better traffic management dedicated to the improvement of RISM

Introduce specific technology (variable message signs; Road Weather Information Systems, etc.) that can be used within RISM procedures.

Activity A2.15: Develop a database for road safety infrastructure management tools (Network Safety Management)

 Appoint an authority responsible for database development and developing a procedure for data collection and analysis.

3.3. Safe vehicles

3.3.1. Regulatory framework analysis for safer vehicles

The legal administrative and technical instruments related to vehicle safety in the Republic of Moldova (RMD) have been analysed based on three main sources of information:



- The Republic of Moldova national legislative framework
- Best practice examples (from European Union Member States and United Nations Contracting Parties)
- International legal frameworks (1958, 1997, ADR and AETR UN Agreements)

There are four main domains, defined by the United Nations legal instruments, and nine specific activities that legally speaking support the technical vehicle safety standards needed for the operation of safer vehicles, and that have an important impact on road safety.

These activities are typically deployed across European countries and inform good practice in the establishment of vehicle safety standards at national levels.

Table 12

Safe vehicles – domains and identified activities

No.	Domain	Activity
	Admission to traffic and placing on the market of vehicles, equipment and parts	Vehicle registration
1		Single unit manufactured, modified, completed or retrofitted vehicle national approval
I		National Type Approval of new vehicles manufactured or imported in Moldova
		UN Type Approval of new vehicles, components, equipment and parts manufactured in Moldova or abroad
2	Technical increasion of unbidge	Periodic technical inspection
Z	2 Technical inspection of vehicles	Roadside technical inspection
C	Fleet Management	Installation and inspection of tachographs and speed limiter devices
3	(safe operations)	Bus classification with regards to comfort criteria
4	Vehicles for transport of dangerous goods	Approval and inspection of ADR vehicles

Table 13

Laws and bylaws on safe vehicles

Law Title*	Description	Date
Law on Traffic Safety No. 131	Regulates legal-social relations in the field of traffic road, establishes the rights, obligations, responsibilities of the relevant authorities and of participants in this traffic, determines the principles of organizing the activity of the units of training of road transport personnel, as well as admission conditions to traffic of vehicle drivers.	07/06/2007
Law on Accession to the 1958 UN Agreement No. 111	The Republic of Moldova adheres to the Agreement on the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts that can be mounted and/or can be used on wheeled vehicles and the conditions for the recognition of approvals based on these prescriptions, done at Geneva on 20 March 1958.	27/05/2016
Law on Road Transport No. 150	Establishes the legal framework for the organization and performance of road transport of goods and people, as well as transport-related activities by road in the territory of the Republic of Moldova, in safe and quality conditions, with respect to the principles of free competition and measures to protect the environment, rights and the legitimate interests of natural and legal persons.	17/07/2014
By-law Title*	Description	Date
Government Decision No. 1047 regarding the State Register of Transport	Regulation defines the concept and content of the State Register of Transports, establishes the manner of its creation and maintenance, the list and attributions of the subjects that ensure its operation. Introduces the testing of motor vehicles and their trailers.	08/11/1999
Government Decision No. 415 regarding technical supervision	Regulation regarding technical supervision exercised by the National Public Security Inspectorate, provides prescriptions and ensures the effectiveness of technical supervision, establishes the obligations of all subdivisions of the National Public Security Inspectorate responsible for technical supervision and the method of their realization, determines the forms of relations with legal and natural persons – owners of vehicles, economic agents, which carry out manufacturing activities, operation, technical servicing of vehicles, repair, and technical testing, as well as with drivers.	08/04/2003
Government Decision No. 357 regarding road traffic	The road traffic regulation includes the rules that determine the movement of vehicles and pedestrians on the public roads of the Republic of Moldova. Compliance with this Regulation will guarantee the safety of all traffic participants, the protection of the environment, the protection of the rights and legitimate interests of natural and legal persons, as well as the defence of their property.	13/05/2009
Government Decision No. 589 regarding the road transport of dangerous goods	Regulation of road transport of dangerous goods establishes the framework for the application in the Republic of Moldova of the provisions of the European Agreement on the International Road Transport of Dangerous Goods (ADR), done at Geneva on 30 September 1957, to which the Republic of Moldova acceded through Parliament Decision No. 44-XIV of 4 June 1998.	24/07/2017
Government Decision No. 475 regarding tachographs and speed limiter devices	The Regulation on the conditions for installation, repair and verification of tachographs and speed limiters transposes Directive 92/6/EEC of 10 February 1992 on the installation and use of speed limiting devices for certain categories of vehicles within the Community and partially transposes Regulation (EU) No. 165/2014 of the European Parliament and of the Council of 4 February 2014 regarding tachographs in road transport.	20/04/2016
Government Decision No. 437 regarding the issuance of tachograph cards	The Regulation establishes the way of organizing the release, replacement, changing and renewing tachograph cards, as well as downloading, storing and destroying data from digital tachographs and tachograph cards used by transport operators from the territory of the Republic of Moldova.	12/04/2016
Government Decision No. 854 regarding the road transport of passengers and luggage	The Regulation on road transport of passengers and luggage establishes the main conditions for carrying out in the territory of the Republic of Moldova and outside the country the transport of passengers (passengers) and luggage by means of road transport, being mandatory for transport agents-license holders, as well as for enterprises, the institutions, organizations and persons who benefit from the car transport services.	28/07/2006
Ministry of Economy and Infrastructure Order No. 355 on classification by comfort categories for buses and coaches	The instruction establishes the conditions and criteria on the basis of which classification certificates are issued by comfort category granted to buses/coaches intended for the paid road transport of people through regular district and inter-district services, in order to serve them only with buses/coaches, classified by comfort categories, according to the provisions of art. 63 paragraph (1) of the Road Transport Code No. 150/2014.	27/12/2019

*Latest modification in force.

3.3.2. Admission to traffic and placing on the market of vehicles, equipment, and parts

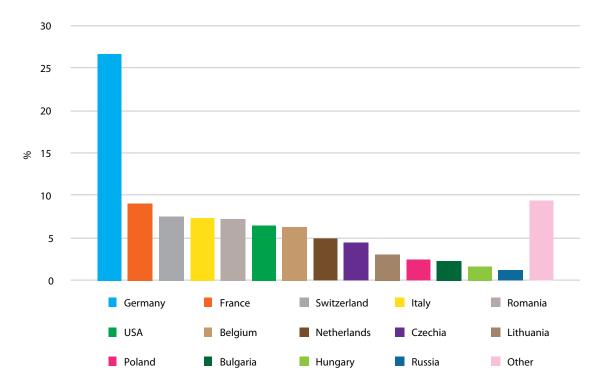
As presented in chapter 2.2, about 70% of registered passenger cars in Moldova are older than 15 years. This figure is not necessarily representative of the total number of vehicles in circulation, as it counts just those that are registered. The Public Services Agency claims that there are a number very old vehicles that are no longer operational, but which have not been officially removed from the registry.

Using the age of the vehicle fleet as an evaluation criterion is very important in terms of establishing technical requirements that must be legally applied to increase the safety performance of vehicles. In order to ensure and maintain the safety of vehicles in circulation, as well as to reduce the age of the fleet over time, the technical requirements for both admission to traffic and periodic technical inspections must be gradually harmonized with the latest international regulatory frameworks.

In all sets of data, it can be observed that the vast majority of vehicles belong to the M1 category (passenger cars). This typically covers private cars operated by regular drivers, not by highly trained professional drivers. This is another key indicator that can be used to establish the technical requirements for different vehicle categories and their admission into traffic. Safer vehicles equipped with modern systems for braking, steering, illumination, and advanced driver assistance, will help drivers to operate their own vehicles in safer conditions.

At the same time, the Public Services Agency has provided data showing that the majority of used cars imported into the Republic of Moldova between 2010 and 2022 came from European Union Member States (figure 36). Vehicles originating from the European Union Member States, even if they are older, certainly met European Union legal requirements at the time of their manufacture.





Source: PSA, 2023.

Registration of vehicles

The registration of vehicles is carried out by the Public Services Agency, a government authority, and is recorded on an electronic platform (the State Transport Register). This database records details of the owner and vehicle data including identification data for vehicle engines, bodies and chassis existing on the market. During the registration process, an identification procedure is carried out by trained and authorized experts through a direct inspection of the vehicle and its documents. This inspection consists of:

- Certifying that the main identifying elements of the vehicle (body number, chassis number (VIN) and engine number) are original and/or have not been subject to unauthorized changes
- Attestation of the vehicle's identity in relation to the information mentioned in its documents
- Certification that documentation on the previous registration of the vehicle, issued by the competent authorities of the country of origin, is authentic (only for vehicles being registered for the first time in the Republic of Moldova).

The results are recorded in a vehicle identification report and are valid for five working days. After the expiration of this term, the vehicle must be subject to a repeat of the identification process.

The main information/documentation required as proof of a vehicle's compliance with the technical safety standards is the Periodic Technical Inspection Report. The technical inspection is mandatory for vehicle registration, including new vehicles. In specific cases, such as single unit manufactured vehicle approval or in the case of retrofitted or modified vehicles, separate conformity compliance documents are required (acceptance for modification or technical expertise for single units). These documents are issued by the Ministry of Internal Affairs (National Public Security Inspectorate).

According to Annex I, Section V, Article 42 of Government Decision No. 1047/1999, the list of technical documents required for vehicle registration and determining the level of safety includes:

- Technical passports of the manufacturer plant.
- Receipt-handover documents.
- Receipt certificates.
- Quality certificates.
- Documents of the technical condition of the vehicles sold by military units.
- Periodic technical inspection reports of vehicles.
- Minutes of examination of the vehicles involved in road accidents.

The condition that vehicles must be approved for registration is covered by the Law on Traffic Safety No. 131. However, the vehicle approval procedure is not implemented and is not confirmed by a clear and unique national document issued by a technical authority.

For admission to traffic, approval and certification on the technical conditions and methodology is based on current legislation established by the Ministry of Infrastructure and Regional Development. The same legislation requires that, for the purpose of approval and certification, the degree of compliance of motor vehicles with technical regulations, requirements of traffic safety and environmental protection, as well as their end use, is verified. These technical regulations are still under development and are not in force. At the same time, the terms of approval and certification have not been clearly defined, nor is it defined when one or the other is to be used. A set of technical requirements have been identified only for national approval in the case of individual completed or retrofitted vehicles. According to national legislation, vehicles and their trailers, including their body types, are classified according to the provisions of the European regulatory acts for the approval of vehicles, which will be transposed through national legal instruments. The classification of vehicles into approval categories, categories of use and body types is performed in accordance with the provisions of the annex to Government Decision No. 1047/1999 in an identical way to the provisions of the EC framework Directive 2007/46/EC.

In the Republic of Moldova, four variations of registration certificate are used depending on the type of registration (permanent or temporary) and the geographical data of the vehicle owners. The registration certificate partially uses the data and labels prescribed by EC Directive 1999/37/EC on vehicle registration documents for vehicles.

An example of the certificate issued for permanent registration can be seen in figure 37.

Figure 37

Example of a registration certificate issued for permanent registration



Applications for specific activities can be made through an electronic portal – the Public Services Portal – where information on applications, costs, legislative basis, and other related information can be found.

Approval procedures for vehicles and their components and parts

According to legislation of the Republic of Moldova, prior to their mass production, vehicles and subassemblies are subject to testing and a conformity assessment. This is a prerequisite to being issued a certificate of compliance with standards and technical requirements. However, the form of this certificate does not yet exist. At the same time, the law prescribes that retrofitted and modified vehicles must include any characteristics that have been changed in their registration certificates. However, a mechanism for ensuring traceability in such cases does not exist.

Further legislation, Government Decision No. 415/2003, states that structures within the Ministry of Internal Affairs (National Public Security Inspectorate) are responsible for coordinating the manufacture of vehicles and additional devices in the Republic of Moldova. This includes the following stages:

- Coordination of technical tasks
- Coordination of the technical project
- Coordination of technical manufacturing conditions
- Coordination of the methodical program of reception tests
- Participation in prototype reception tests for placing them into production.

MIA representatives must sign documentation on the technical acceptance and recommendations for manufacturing. Coordination at each stage is carried out both for vehicle manufacturing, as well as for vehicle retrofitting and modification (changes in dimensions and mass parameters, braking systems, visibility angles, characteristics of lighting and signalling devices, running components, steering systems, as well as elements which assure visibility, visual field and post-crash safety).

In the case of single unit completed, modified or retrofitted road vehicles, interventions in the systems that concern safety, environmental protection and energy efficiency can be performed only by authorized companies using equipment, components, technical entities, spare parts and materials approved or certified according to the legislation in force. Dedicated and approved technological flows must also be used in those cases. However, for the approval of these vehicles, the technical legal requirements in force have no direct reference to UN or European Union Regulations. Current legislation designates that the main authority for this purpose is the National Public Security Inspectorate, but other authorities, technical inspection centres and stakeholders are also involved in the process.

There are no technical requirements in force for the individual approval of new or used imported vehicles nor for the type approval of new domestic vehicles. There are no legal procedures related to UN type approval of systems, components, equipment and parts.

The Public Services Portal can be used only for vehicle modifications, where the relevant information on applications, costs, legislative basis, and other related information can be found.

Data regarding the number of vehicles modified, completed or retrofitted and the number of vehicles manufactured as a single unit since 2019 was provided by the National Public Security Inspectorate.

Table 14

Number of modified vehicles, completed or retrofitted and manufactured as a single unit

No. of Vehicles /Year	2019	2020	2021	2022
Modified/Completed/Retrofitted	6,736	5,735	6,795	5,915
Manufactured as a single unit	277	295	276	208

Source: NRTA, 2023.

The Republic of Moldova is a Contracting Party to the 1958 Agreement and applies all UN annexed regulations. It has the E30 country symbol and has assigned the majority of UN Regulation codes 30(A) and 30(B) for type approval authority and technical service. However, the names of these administrative and technical entities have not been notified ("waiting for data" is stated in the UN official document). The synthesis of the approval activities is presented in the Appendix (tables 25, 26, and 27). These tables provide information about current legislation, enforcement and surveillance authorities, technologies and processes applied, documents issued, and proposed international regulatory support.

The legal procedures regarding the national approval and registration of single unit manufactured vehicles and completed, modified or retrofitted vehicles are presented in two different diagrams – figures 38 and 39.

Figure 38 Process of approval and registration of single unit manufactured vehicles

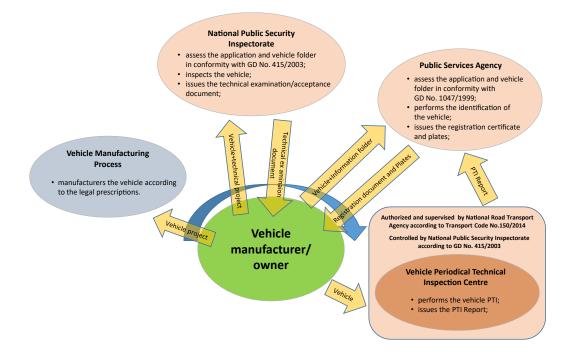
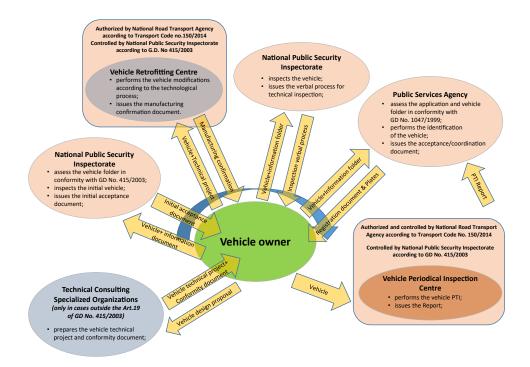




Figure 39

Process of approval and registration of completed, modified or retrofitted vehicles



The activities performed by authorities and stakeholders involved are separately highlighted for vehicles and documents, following the same action areas for legislation, enforcement, training, and technologies applied. As a general rule, vehicle manufacture and retrofitting centres, as well as periodic technical inspection centres, must be authorized by the National Road Transport Agency. They are also controlled by the National Inspectorate for Public Security.

According to the website of the National Road Transport Agency,¹⁵ the National State Register of activities related to road transport contains 725 authorized economic agents. Most are authorized for motor vehicle repair and maintenance, but 26 are authorized for carrying out body modification and completion of vehicles, including retrofitting (ex. LPG system installation).

3.3.3. Technical inspection of vehicles

Periodic Technical Inspection

Periodic technical inspection must be performed as a condition for the admission of road vehicles to traffic and maintaining their roadworthiness.

A set of technical criteria and the inspection method (operation table) are described in legislation. Any nonconformities and/ or deficiencies found during the inspection are classified into two categories, depending on the level of risk, according to their impact on traffic safety and others. UN Rules annexed to the 1997 Agreement and the 2014/45/EU Directive (Minor, Major, and Dangerous) both use three categories. Specific measuring and control equipment is required for the inspection, with approved devices held in a dedicated National Register.

The mandatory measurement devices required for the verification of roadworthiness are more extensive in Moldova than those used by European Union Member States (for example, the installation of suspension and shock absorbers, testing devices, and steering angle measurement devices are all mandatory in testing centres). However, current legislation does not provide for the critical/limit values required to successfully pass the inspection. In this case, it is not clear how a decision to admit or reject a vehicle can be made transparently.

Technical inspection centres are authorized by the National Road Transport Agency and classified into three categories depending on their technical capability in terms of the total mass of vehicles that can be inspected. Inspection centres are under periodic supervision and control.

¹⁵ <u>https://anta.gov.md/anta-api/stoc/Registr_Conex.pdf</u>.



The same authorization criteria for periodic technical inspection centres are covered in three legislative acts: the Law on Road Transport No. 150, the Law on Traffic Safety No. 131, and Government Decision No. 1047/1999. No legislative requirements on the implementation of quality management standards (ex. ISO 17020) by authorized inspection centres were identified.

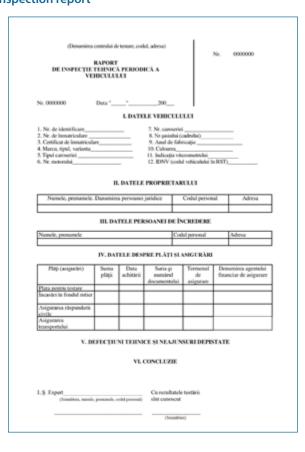
The frequency at which periodic technical inspections for vehicles registered in the Republic of Moldova are required is as follows:

- Every six months for vehicles intended for public transport of passengers and those involved in transport of dangerous goods
- Annually for all other vehicle types.

The risk of impartiality is minimized by the prohibition of economic operators who carry out manufacturing, sale, transport, technical service and repair activities carrying out periodic vehicle inspection activities. There are sanctions in place for inspection centres or inspectors that do not comply with the conditions as required by law.

As of May 2023, 112 technical inspection centres and 204 experts (inspectors) were authorized in the Republic of Moldova.

Figure 40 Example of Periodic Technical Inspection report



Vehicle inspection activity is performed only by professionally trained and certified personnel from training centres in the field of road transport. These training centres are authorized by the National Road Transport Agency (NRTA) and use training programmes approved by the Ministry of Education and Research. A national centralized system is used with information pertaining to a vehicle's periodic technical inspection generated daily and transmitted in electronic form to the State Register of Transport through the Autotest IT system. The NRTA uses this data for statistical reports. Starting this year, the validity of inspection certificates will be made available to traffic control authorities through an electronic platform (MConnect). The 2023 fees for periodic technical inspection activities are set out in legislation and range from 50 to 350 Moldovan lei depending on the total vehicle mass and category.

Since 3 February 2008, the Republic of Moldova has been a Contracting Party of the UN's 1997 Agreement on periodic technical inspections. The document regarding the official status of this Agreement (ECE/TRANS/WP.29/1074/Rev.16) does not provide information about the administrative authority or technical inspection centres for the Republic of Moldova. The synthesis of the vehicle periodic technical inspection process is presented in the appendix (table 28).

Roadside Technical Inspection

Roadside technical inspections of vehicles are performed in the Republic of Moldova by two designated authorities. General technical conditions are checked by the State Inspectors of the National Public Security Inspectorate. In the case of vehicles transporting dangerous goods and for the verification of tachographs and speed limiter devices, the authority in charge is the National Road Transport Agency. Roadside inspection covers all vehicle categories and operator types (private or company-owned). The fulfilment of the appropriate technical conditions of road vehicles is a condition for keeping them in circulation on public roads. Technical verification criteria are covered by legislation. In general, roadside checks are performed through visual inspection, but the National Public Security Inspectorate may use also vehicles equipped with mobile measuring and inspection devices.

An important part of the checks carried out on vehicles in operation include on-site inspections of economic agents involved in transport activities. State inspectors (belonging to the National Road Transport Agency and the National Public Security Inspectorate) conduct both planned and unannounced inspections covering the technical condition of vehicle equipment owned by the transport company and accompanying documents. In 2023, according to an NRTA Director Order, 200 control actions for road transport, 75 control actions for passenger transport, and 81 control actions for inspection centres, workshops and training centres were planned. The Ministry of Infrastructure and Regional Development Order No. 52/2023 provides official data on the results of control actions performed in 2022 by NRTA inspectors.

Table 15

Number of planned and unannounced controls between 2020 and 2022

NRTA Activity	Planned control actions	Unannounced control actions
2020	85	359
2021	69	254
2022	5	240

Source: NRTA, 2023.

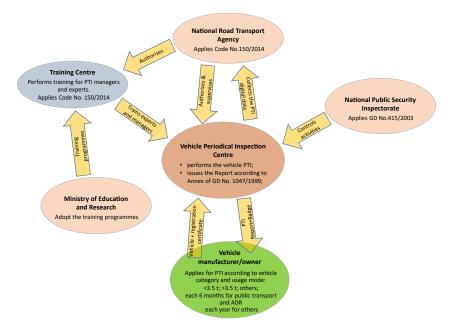
The same document states that there were:

- Three thousand thirty-five cases of total vehicle mass, axle mass or dimensions being exceeded
- Eighty cases of non-compliance with the high tonnage restrictions in the conditions of high temperatures
- Three hundred thirty-seven cases regarding the fight against the illegal transport of goods and passengers in national and international traffic

documented during road-side monitoring activities performed by the NRTA in 2022.

Figure 41

Vehicle Periodic Technical inspection process



As one of the most important methods of verifying the compliance of the national vehicle fleet with technical safety requirements, the periodic technical inspection process implemented in the Republic of Moldova represents a key condition for the admission to traffic and maintenance of all vehicle categories. The overall process, including the authorization of technical centres and professional training of managers and inspectors, are used as a case study in this chapter and presented in figure 41. Table 29 (in the appendix) presents a synthesis of roadside inspection activity.

3.3.4. Fleet management

Installation and inspection of tachographs and speed limiter devices

In the Republic of Moldova, the use of tachographs is mandatory for all road vehicles transporting goods, including vehicles with a trailer or semi-trailer and a maximum authorized mass exceeding 3.5 tonnes. The same specification is applicable for road vehicles designed and manufactured to transport passengers with a capacity of more than nine people, including the driver, and for vehicles operating taxi services: exceptions include vehicles that are owned by individuals and used in their own interest, and for vehicles used by the armedforces, civil protection, fire services, police, medical missions or emergency situations. Vehicles with speeds of 40 km/h or below and breakdown recovery and maintenance vehicles that are within 100km of their base are also exempt.

The installation of speed limiter devices is mandatory for all vehicles belonging to the M2, M3, N2, and N3 categories with a maximum speed exceeding 25 km/h: exceptions cover the same vehicle categories as for tachograph installation, including vehicles used for local public services.

The only permitted tachographs are those with type approval certificates as specified in accordance with current national legislation or which have been approved in another country according to the specifications of the AETR – European Agreement concerning the Work of Crews of Vehicles Engaged in International Road Transport. Similarly, the only permitted speed limiters are those that have been approved in accordance with national legislation or which have been approved in another country in accordance with the requirements of UN Regulation No. 89.

Installation, repair and verification of analogue and digital tachographs and speed limiter devices are carried out at specialized inspection centres authorized by the National Road Transport Agency and with agreement of the tachograph manufacturer. According to information provided by the Agency at the time of the assessment, six inspection centres were authorized to carry out activities in this field.

Technical criteria, procedures, records and documents are specified in Government Decision No. 475/2016 for the installation, repair and verification of tachographs and speed limiter devices, including smart cards for digital tachographs. Technical requirements regarding the activation, calibration, verification, seals, marking, and prevention of unauthorized interventions are covered by the same legislation. Government Decision No. 437/2016 establishes conditions on the issuance, replacement, change and renewal of tachograph cards, and downloading and storing data from tachographs and tachograph cards. Smart cards for digital tachographs are provided by the National Road Transport Agency. According to representatives of the NRTS, these are ordered abroad. There is no information on the total number of tachograph cards issued per year.

Tachographs and speed limiters are checked periodically, with a minimum frequency of two years. The risk of impartiality is minimized by prohibiting economic operators from conducting specific activities on their own vehicles. Sanctions are applicable by law for non-compliance with these requirements.

Control activities regarding the use and operation of tachographs and speed limiter devices are carried out by state inspectors of the National Road Transport Agency. The frequency of these activities is based on risk assessment indicators and is set out in the annual planning. State inspectors from the National Public Security Inspectorate also have responsibilities related to the traffic control of these systems.

Using a similar process as for the periodic inspection of vehicles, the activities for installation, repair and verification of tachographs and speed limiting devices can only be carried out by certified and professionally trained personnel. The training process is assured by authorized training centres whose curricula are provided by the Ministry of Education and Research. An application for the authorization of inspection centres can be made through the Public Services Portal.

Current legislation does not provide requirements (neither technical nor administrative) for the management of secondgeneration tachographs (intelligent tachographs). EU Regulation 165/2014 has been partially transposed at the time of the assessment. Table 30 (in the Appendix) presents the synthesis for activities related to the AETR. In addition, Moldova aims to undertake steps to gradually align its legislation to the relevant European Union legislation and international instruments, including:

- Regulation (EC) No. 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonization
 of certain social legislation relating to road transport.
- Directive 2006/22/EC of the European Parliament and of the Council of 15 March 2006 on minimum conditions for the implementation of the EC Regulation 561/2006 and EU Regulation 165/2014 concerning social legislation relating to road transport activities.
- Council Directive 92/6/EEC of 10 February 1992 on the installation and use of speed limitation devices for certain categories of motor vehicles in the Community.

Classification of buses and coaches with regards to comfort criteria

Current legislation specifies that regular passenger transport services (national or international) will only receive authorization by operating buses and coaches which meet specified comfort criteria. An exemption is made for irregular passenger transport services carried out in the own interests of the vehicle operators. There are transitional provisions regarding the obligation to classify buses according to comfort criteria for regular domestic routes. More precisely, this classification is used as a criterion for changing the level of transport fees. For international traffic, the requirements of the INTERBUS Agreement are currently used. Generally, this serves as a means to evaluate the construction characteristics of buses and coaches that have an impact on both passenger comfort and safety. This type of classification has an important role in ensuring the minimum safety conditions for passengers, especially when requirements of UN Regulation 107 are not verified, and buses are admitted into traffic.

Inspections and classifications are carried out by trained and certified experts at specialized inspection centres authorized by the National Road Transport Agency. Requirements, procedures, records and documents are specified under Ministry of Infrastructure and Regional Development Decision No. 355/2019. Two categories of comfort are specified. The authorization of experts and inspection centres occurs periodically. If the classification requirements are fulfilled, a classification certificate is issued. Its validity is one year. A national centralized information system is used. Information relating to vehicles subject to inspection and classification are recorded in the State Register of Transport through the Autotest IT system.

As of May 2023, there were 35 stations authorized in the territory of the Republic of Moldova to carry out inspection activities in order to classify buses and coaches by comfort category. The synthesis of this activity is presented in the appendix (table 31).

3.3.5. Transport of dangerous goods

The Regulation on the road transport of dangerous goods of the Republic of Moldova establishes the framework for the application of the provisions of the European Agreement on the international transport of dangerous goods by road (ADR), done at Geneva on 30 September 1957, to which the Republic of Moldova acceded by Parliament decision No. 44-XIV on 4 June 1998.

These rules apply to the road transport of dangerous goods carried out in the territory of the Republic of Moldova, the control activities carried out in the road transport of dangerous goods on vehicles traveling or entering the territory of the Republic of Moldova from another country, and do not apply to the transport of dangerous goods by vehicles belonging to public institutions that are part of the national defence system or under their responsibility.

For the transport of dangerous goods in national traffic, carried out with vehicles registered in the Republic of Moldova, the Ministry of Infrastructure and Regional Development can adopt additional provisions compared to those provided in annexes A and B to ADR, if they comply with the recommendations of the United Nations Organization regarding the transport of dangerous goods.

The Government can regulate or prohibit the road transport of certain dangerous goods, strictly for reasons other than safety during transport, for reasons of national security, prohibition of their possession or use, or environmental protection.

The National Road Transport Agency, in accordance with the provisions of Government Decision No. 143/2016 "For the approval of the Regulation on the internal transport of dangerous goods", may permit the carrying out of an ad hoc operation of road transport of dangerous goods in domestic traffic, which is either prohibited by annex A or B to the ADR, or is carried out in conditions different from those provided in these annexes, provided that this ad hoc transport operation does not affect safety or security and is clearly limited in time and purpose.



The following public administration authorities are involved in the regulation and operation of the transporting of dangerous goods: Ministry of Infrastructure and Regional Development, NRTA, Ministry of Internal Affairs, Ministry of Defence, Ministry of the Environment, Customs Service, Institute of Standardization, Ministry of Education.

To coordinate the transport routes of dangerous goods, road transport operators must submit an application to the National Road Transport Agency containing the following information:

- Point of departure (loading) and point of destination (unloading) of dangerous goods.
- Name(s) of the town(s) on the route .
- Name, classes and subclasses of the dangerous goods transported on the route, and the dangers.
- Quantity (weight) of the dangerous goods to be transported.
- Period of transportation.

National legislation specifies that base vehicles (chassis) used for the road transport of dangerous goods shall meet the requirements of part 9 of annex B to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). The proof of compliance is the ADR certificate which is issued only after inspections have been carried out by trained and certified experts in specialised inspection centres authorised by the National Road Transport Agency, using the same process as in all other vehicle inspection activities.

During the preparation of this RSPR, the procedures and documents used by the authorised inspection centres to demonstrate the fulfilment of the technical conditions provided by Part 9a of Annex B or UN Regulation No. 105 for the basic vehicles inspected, were not fully identified. There were also no requirements for the recognition of type approval certificates issued in accordance with UN Regulation No. 105.

An ADR approval certificate is granted for each transport unit separately and the validity period is six months, after which it can be extended for another similar period. Following the inspection, if the technical requirements have been fulfilled, an ADR approval certificate is granted. ADR certificates are managed by the National Road Transport Agency. Applications for the issuing of certificates and data exchange can be submitted through an electronic platform. Upon issuing the ADR approval certificate and the vehicle. Current legislation sets out sanctions for economic operators who carry out specific activities that do not comply with the requirements. Oversight and control of the ADR vehicle approvals and inspections are performed by state inspectors from the National Road Transport Agency and the National Public Security Inspectorate.

Vehicles registered or entered into circulation in other states are admitted to international transports of dangerous goods in the territory of the Republic of Moldova if the transports in question comply with the provisions of the ADR. At the time of assessment, 31 economic operators were authorized to carry out specific activities for the ADR vehicles approval in the territory of the Republic of Moldova. Applications regarding ADR approval can be made through the Public Services Portal of the Republic of Moldova. The Ministry of Infrastructure and Regional Development is the main competent authority, and the National Road Transport Agency is the secondary authority.

The processes for vehicle inspection and approval, inspectors and expert training and authorization of ADR inspection centres are presented in figure 42. An example of the vehicle ADR certificate is presented in figure 43 and the synthesis of the issuing process is presented in the appendix (table 32).



Figure 42

Process of approval and inspection ADR vehicles

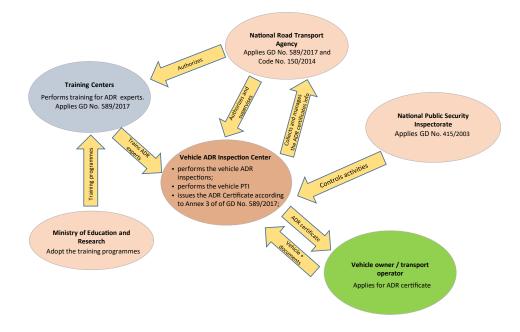


Figure 43 Example of an approval certificate for vehicles carrying certain dangerous goods



3.3.6. Proposed measures and conclusions

The Analytical Report issued in February 2012 regarding the European Commission's Opinion on the Republic of Moldova's application for membership of the European Union, stated that for the internal market sector, harmonized area, old-approach product legislation: "Moldova is not aligned with the European Union acquis on motor vehicles, tractors, non-road mobile machinery" and "it is partly aligned on 2/3 wheeled vehicles". In the road transport sector, it stated that: "Moldova has achieved partial alignment of the Regulation on tachographs in road transport" and the conclusion was: "Moldova has achieved some level of preparation on transport policy. It needs to further align with European Union acquis on transport and implement it effectively. Moldova needs to increase its administrative capacity to improve road safety, enhance infrastructure maintenance and launch awareness-raising campaigns to reduce the high number of accidents and fatalities. It must also adopt laws on the transport of dangerous goods in full alignment with the European Union acquis and relevant international agreements and set up the corresponding administrative structures."

The general status described in the European Commission document follows a similar line to the findings of the assessment performed in the present report with regards safer vehicles. This classification generates a general picture of the degree of harmonization for both administrative and technical provisions of the domains and activities assessed.

Table 16

Classification of the level of harmonization and implementation of United Nations legal instruments in the Moldovan national legislative framework

Domain	Activity	Level of harmonization with the international legal framework		
Duilain	Ατινιγ	Administrative provisions	Technical provisions	
Admission to traffic and placing on the market of vehicles, equipment	Vehicle registration	Medium	Low	
and parts	Single unit manufactured, modified, completed or retrofitted vehicle national approval	Medium	Low	
	National Type Approval of new vehicles manufactured or imported in Moldova	Low	Low	
	UN Type Approval of new vehicles, components, equipment and parts manufactured in Moldova or abroad	Low	Low	
Technical inspection of vehicles	Periodic technical inspection	Medium	Low	
	Roadside technical inspection	Medium	Low	
Fleet Management (safe operations)	Installation and inspection of tachographs and speed limiter devices	Medium	Medium	
·	Bus classification with regards to comfort criteria	Medium	Low	
Vehicles for the transport of dangerous goods	Approval and inspection of ADR vehicles	Medium	Medium	

In terms of the Safer Vehicles pillar, taking into account key areas of the national road safety system, the following activities are recommended:

- A3.1 Amend the existing legislation and adopt a national legislative framework covering primary and secondary levels in order to clearly define, by separate laws, the administrative and technical conditions for safer vehicles.
- A3.2 Fully transpose into national legislation prescriptions of the UN regulatory framework (UN 1958 Agreement, UN 1997 Agreement, ADR Agreement, AETR Agreement) and the EU Regulatory framework (EU Regulations 2018/858, 168/2013, 167/2013, 165/2014 and EU Directives 2014/45, 2014/47).
- A3.3 Designate national authorities responsible for vehicle approval and market surveillance. Establish the funding sources for its operationalization.
- A3.4 Define the administrative and capability conditions for the designated Technical Services conducting inspections and tests related to the conformity of vehicles.
- A3.5 Introduce an effective penalty scheme for noncompliance with the specified vehicle requirements.

LEGISLATION

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- **A3.11** The training programs for auditors and inspectors from designated authorities, technical services and inspection centres must be continually updated and improved.
- A3.12 Organize and conduct public awareness campaigns on the benefits of using safer vehicles.

- A3.6 National vehicle approval and market surveillance authorities must be sustainably budgeted for to maintain their capacity and functionality.
- **A3.7** Interconnect and synchronize the tasks of the vehicle registration authority, the vehicle approval authority, the technical inspection centres, and the market surveillance authority.
- **A3.8** Extend and develop the technical requirements and capability for roadside inspections.
- **A3.9** The authorization of vehicle inspection centres and repair workshops must be based on initial on-site audits and supervision.
- A3.10 Adapt the frequency of periodic inspections according to vehicle age and establish an owner information system regarding the expiration date of the certificate.

ENFORCEMENT



- **A3.13** Develop IT portals and specific applications that help vehicle users receive information about technical inspection validity, odometer and other vehicle safety history data.
- **A3.14** Support the use of complementary methods for the assessment of roadworthiness during the technical inspection using the electronic interfaces installed on vehicles (OBD II).
- **A3.15** Support the registration of new vehicles which comply with the latest safety regulations and have ADAS technologies (Advanced Driving Assistance Systems) installed.

EDUCATION



TECHNOLOGY



LEGISLATION

Activity A3.1: Amend the existing legislation and adopt a national legislative framework covering primary and secondary levels in order to clearly define, by separate laws, the administrative and technical conditions for safer vehicles

- The Republic of Moldova has primary legislation that requires vehicle approval as a condition for registration. However, there is no secondary or subsequent legislation covering the implementation of this condition. Existing legislation must be reorganized in order to clearly and separately address vehicle safety, including:
 - Approval of vehicles to be admitted into traffic
 - Vehicle registration
 - Approval of components, equipment and parts placed on the market
 - Market surveillance of vehicles, components, equipment and parts
 - Periodic technical inspection and technical roadside inspections.
- Furthermore, it needs to create and implement a system for national vehicle approval by establishing a legal framework with applicable technical requirements with multiple layers of stringency depending on the vehicle's status and approval procedure: e.g. new or used, type approval, or individual approval. The national approval procedure must be performed prior to registration and result in the issuance of a unique document used to demonstrate the vehicle's conformity to vehicle registration and periodic technical inspections. Similar legislative processes must be applied for the approval of components and parts for market surveillance activities and for the requirements of periodic and roadside technical inspections.

Activity A3.2: Fully transpose into national legislation prescriptions of the UN regulatory framework (UN 1958 Agreement, UN 1997 Agreement, ADR Agreement, AETR Agreement) and the EU Regulatory framework (EU Regulations 2018/858, 168/2013, 167/2013, 165/2014 and EU Directives 2014/45, 2014/47)

- The technical requirements applied for national vehicle approval must have as reference UN and EU Regulations, and at least the following regulatory acts must be considered:
 - UN Regulations No. 13, 13H and 78 on vehicle and motorcycle braking
 - UN Regulation No. 140 on electronic stability control
 - UN Regulation No. 79 on steering
 - UN Regulations No. 30, 54 and 75 on tyres
 - UN Regulations No. 48, 53 and 74 on lighting installation
 - UN Regulations No. 16 and 14 on safety-belts and safety-belts anchorages
 - UN Regulation No. 145 on ISOFIX anchorages
 - UN Regulation No. 94 and 95 front and side impact protection and UN Regulation No. 135 on pole side impact
 - UN Regulation No. 127 on Pedestrian Safety
 - UN Regulation No. 100 on Electric Vehicle Safety
 - UN Regulation No. 58 and 93 on rear- and front-underrun protection
 - UN Regulation No. 43 on safety glazing.
- For national vehicle approval, documents demonstrating the UN-I-Whole Vehicle Type Approval or the EU-Whole Vehicle Type Approval should be recognized. In these cases, the unique document can be issued without any technical verifications or tests. The same process must be applied in the case of a UN approved component or part.

- The activity of periodic and roadside technical inspections benefits from good national level administrative and technical specifications in terms of harmonization with the requirements of UN R.E.6. Specifications and processes should be implemented for the authorization of inspection centres, for the certification of inspectors and managers, and for the technical requirements of the equipment used for measurements. Greater harmonization with periodic technical inspection requirements (operational tables) with those provided in the UN Rules of the 1997 Agreement (Rules No. 1, 2, 3 and 4) and in Annex I of the EU Directive 2014/45 should be considered.
- Update existing legislation related to roadside inspections in order to transpose the requirements laid down in EU Directive 2014/47.
- Update existing legislation and national systems related to the installation, inspection and verification of tachographs in order to meet the specifications for tacho smart devices in place in European Union Member States. The process for the authorization of inspection centres and experts must also be updated.
- Update existing legislation related to the implementation of monitoring systems to control limits on maximum driving times and minimum rest periods for professional drivers;
- Increase the level of comfort and safety in passenger transport services by harmonising bus classification requirements with the International Road System Union (IRU) recommendations and UN Regulation No. 107.

Activity A3.3: Designate national authorities responsible for vehicle approval and market surveillance. Establish the funding sources for its operationalization

- Designate a single competent authority responsible for vehicle and components approvals (type or individual) at a national level. The national authority will manage the approval administrative processes, including the issuance of technical vehicle documents, and will be responsible for the compliance of the national vehicle fleet with safety and emission regulations. The approval authority will implement a system for assuring the conformity of production for type approved vehicles and components mass produced or imported into the Republic of Moldova. The funding sources for the operationalisation of this authority can include the approval fees charged to vehicle owners, vehicle and component manufacturers or their representatives in Moldova.
- Designate a competent authority for market surveillance of vehicles, components, and parts. The national authority will assure, by transposing to the European Union legal framework, the surveillance of the conformity of vehicles, components, and parts placed on the Moldavian market.

Activity A3.4: Define the administrative and capability conditions for the designated Technical Services conducting inspections and tests related to the conformity of the vehicles

- Establish a higher level of technical competence and create a legal system for the designation of technical services by assessing their capability using quality management standards (personnel, facilities and knowledge) as per ISO 17025 and ISO 17020. The appropriate rules are to be related to Schedule No. 2 of the 1958 Agreement. The technical services must be third party organizations or part of the national approval authority. A technical service demonstrates the compliance of vehicles, components and parts with the legal requirements and must have the ability to carry out tests in accordance with UN Regulations (personnel and equipment) and the necessary knowledge to evaluate type approval certificates or test reports received from other Contracting Parties to the 1958 Agreement.
- In order to demonstrate the compliance of vehicles with legal requirements, technical services responsible for carrying out homologation tests must be designated. These technical services must be third party organizations or part of the national approval authority. A technical service must have the ability to carry out tests in accordance with UN Regulations (personnel and equipment) and the necessary knowledge to evaluate type approval certificates or test reports received from other Contracting Parties to the 1958 Agreement.

Activity A3.5: Introduce an effective penalty scheme for noncompliance with the specified vehicle requirements

Vehicle market surveillance legislation must establish a penalty scheme (fines) for non-compliant vehicles, components, and parts placed on the national market. Penalties must be classified according to the vehicle safety domains and relate to each specific non-conforming aspect on traffic safety.

ENFORCEMENT



Activity A3.6: National vehicle approval and market surveillance authorities must be sustainably budgeted for to maintain their capacity and functionality

Vehicle approval and market surveillance authorities must be appropriately sized in terms of personnel and capability to assess vehicle documentation and perform tests and inspections according to the distribution and composition of the national vehicle fleet. Operational performance indicators need to be used in order to realistically evaluate the results. If these authorities will have embedded technical services and inspection centres conducting tests and inspections, these entities must operate and be organized in compliance with the specific quality management standards (ISO 17025 and ISO 17020). The funding sources used must be sustainable and be provided either from the budget or through the fees applied for conformity assessment, inspection and testing.

Activity A3.7: Interconnect and synchronize the tasks of the vehicle registration authority, the vehicle approval authority, the technical inspection centres and the market surveillance authority

Establish a unique national document which attests the approval of vehicles and contains information on the technical data and technical requirements that the vehicles comply with. This document must be issued for all vehicles and in all cases before the first permanent registration by the national approval authority. The document must be changed or replaced whenever the technical characteristics are changed during the vehicle's lifetime and must be part of the required documents for permanent registration. The document must be issued through an electronic database that is fed by the approval authority and then used by the registration authority in the process of issuing vehicle registrations, and by the technical centres during periodic inspections. The market surveillance authority must be also part of this information exchange process.

Activity A3.8: Expand and develop the technical requirements and capability for roadside inspections

Define technical requirements for roadside inspections and establish effective collaboration of 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.

Activity A3.9: The authorization of vehicle inspection centres and repair workshops must be based on initial on-site audits and supervision

The assessment of vehicle inspection centres and repair workshops, during the authorization process, should be based on initial on-site audits and supervision. Audits must be conducted by trained auditors from the state authorities and play a role of directly assessing the compliance and technical capability of centres. The audit process gives a more realistic picture of the audited organization than a purely paper-based assessment process.

Activity A3.10: Adapt the frequency of periodic inspections according to vehicle age and establish an owner information system regarding the expiration date of the certificate

Reconsider the frequency of periodic technical inspections according to a risk assessment process in correlation with the age of the vehicle and the impact on road safety (number and categories). Furthermore, in order to achieve better enforcement in carrying out inspections, a national IT system should be developed for notifying vehicle owners regarding certificate expiration dates and recall campaigns carried out for their vehicles.

EDUCATION

Activity A3.11: The training programs for auditors and inspectors from designated authorities, technical services and inspection centres must be continually updated and improved

The training programs of the inspectors, assessors and testing specialists need to be continually updated in line with vehicle technology development and information from the manufacturers and authorities in charge of deploying measures for safer vehicles. As a specific example, the professional training centres for inspectors and managers use programs developed by the Ministry of Education and Research. Personnel of the National Road Transport Agency, who are involved in the evaluation and authorization of these inspection centres, should also participate in the development of the training curricula.

Activity A3.12: Organize and conduct public awareness campaigns on the benefits of using safer vehicles

- The advantages of using safer vehicles that have:
 - periodic technical inspection carried out on time
 - maintenance and repair works performed in authorized workshops, according to the manufacturer's documentation, and with approved/certified components and parts
 - safety recall campaigns carried out whenever the manufacturer requests it
 - advanced driver assistance systems installed on board (automated braking, lane keeping assistance, driver drowsiness, intelligent speed assistance)
 - must to be brought to the attention of vehicle users by developing engaging and informative multimedia campaigns, including videos and social media posts.

TECHNOLOGY

Activity A3.13: Develop IT portals and specific applications that help vehicle users receive information about the technical inspection validity, odometer and other vehicle safety history data

The authorities need to support the development of IT portals and applications designed to remind vehicle users about their technical inspection expiration date, including the history of odometer indications. If the IT systems can also provide maintenance and repair history, especially technical interventions to safety systems, then it can become an important tool for an evaluation of the vehicle's status before an inspection or purchasing procedure.

Activity A3.14: Support the use of complementary methods for the assessment of roadworthiness during the technical inspections using the electronic interfaces installed on vehicles (OBD II)

The UN Roadworthiness Rules annexed to the 1997 Agreement and EU Directive 2014/45 regarding periodic technical inspections recommend as a complementary testing method for vehicle systems geared by electronic devices and software the use of an existing electronic interface. It is recommended that the OBD II interface should be used as a more efficient and reliable method for the confirmation of inspection results.

Activity A3.15: Support the registration of new vehicles which comply with the latest safety regulations and have ADAS technologies (Advanced Driving Assistance Systems) installed

Vehicles equipped with the latest driver assistance technologies for emergency situations are key to improving safety. It is strongly recommended to support a renewal of the national fleet with incentives for vehicles equipped with Advanced Driving Assistance Systems (e.g. advanced emergency braking, lane keeping assistance, intelligent speed assistance, electronic stability control, driver drowsiness alerts, and alcohol interlock systems).

3.4. Safe road user behaviour

3.4.1. Driver training and testing

Any person who meets the medical fitness criteria and is at least 16 years old (for motorcycles or motorised quadricycles i.e. vehicle categories A1, B1) or at least 18 years old (for other vehicle categories) can obtain a driving permit in Moldova.

The training of provisional drivers is carried out through authorized/accredited programs by the National Agency for Quality Assurance in Education and Research.

The legal right to drive is classified as a special right according to the category and/or subcategory of license obtained in accordance with the legislation of the Republic of Moldova and registered in the State Register of Vehicle Drivers (SRVD). The legal right to drive is determined by holding a driving permit, which indicates the category or subcategory of vehicle for which the right to drive is held, or by registering this right in the SRVD, provided that the driver has a valid identity document in his/her name.

Driving permits

In accordance with the provisions of the Law on Traffic Safety No 131, the Public Services Agency (PSA) is responsible for:

- (a) Drawing up forms and issuing driving permits, certificates and vehicle registration numbers
- (b) Organising and conducting examinations for obtaining the right to drive vehicles
- (c) Registration and deletion of vehicles from the State Transport Register
- (d) Development of rules, to be approved by the Government, regarding the recording of driving permits and registration certificates, the templates of these documents, the conduct of examinations for obtaining the right to drive vehicles, as well as the registration and deletion of vehicles from the State Transport Register
- (e) Creation, use, updating and management of the State Transport Register and the State Register of Vehicle Drivers and
- (f) Verification of an applicant's fulfilment of the licensing conditions for training personnel in the field of road transport, based on the declaration for the issuance of the permit and the attached documents, as well as the organisation of prior on-site verification jointly with other competent public authorities of the applicant's fulfilment of the licensing conditions.

Driving permit categories

In accordance with the provisions of Government Decision No. 181/2022 on the approval of the regulation on examination procedures for obtaining the right to drive vehicles, the issuance and validity of driving permits, depending on the type, destination and technical particularities of the vehicles for which driving is required to hold a special right, confirmed by a driving permit, is divided into the categories and subcategories according to the main principles of the 1968 Convention on Road Traffic ratified by the Republic of Moldova through Parliament Decision No. 1318-XII of 2 March 1993, and the EC Directives on driving licensing (2006/126/CE).

Table 17

Minimum age and selected categories of driving permits

Category of driving permit	Age
AM subcategory	from 16 years old
category A	from 20 years old if the person provides proof of driving for a period of at least two years on a motorcycle in subcategory A2; from 24 years old
category B	from 18 years old
category C	from 21 years old
category D	from 24 years old

Examination for obtaining the right to drive vehicles

Persons applying for a driving examination or to upgrade the category/subcategory of their driving permit must show proof of completing an authorised/accredited training program, meet the age requirements, and be medically fit as per the rules approved by the Government.

Driver training centres/units must record information related to all persons enrolled in driver training courses within three working days of the start of the course. This information is recorded in the Register of Training Units of Vehicle Drivers and Trainees owned by the Ministry of Education and Research.

The information recorded in the Register of Training Unite of Vehicle Drivers and Trainees should include the date of issuance, series and number of the certificate obtained and the category/subcategory of vehicle for which the driver training was completed.

Applicants may attend a course organised a driver training centre/unit if they have not reached the minimum age prescribed for the category/subcategory they are training for, but no more than 12 months before its completion, with the exception of students of vocational education institutions with a technical profile whose study programs include studying the appropriate material for obtaining the right to drive vehicles.

Persons applying for a driving examination or to upgrade the category/subcategory of their driving permit, who have proof of training from another state may be admitted to the examination if an agreement has been reached between the Republic of Moldova and the respective state covering this area.

In order to obtain a driving permit, a person with disabilities must take their practical exam using a vehicle adapted to their disabilities in the respective category/subcategory. Their licence to drive and driving permit will contain the details on the vehicles in which they are permitted to drive and any restrictions.

The methodology for conducting driving examinations and the documentation of driving permits is developed by the Ministry of Education and Research jointly with the competent authorities and approved by the MER.

In December 2022, the Ministry of Education and Research (MER) approved the "Methodology for conducting driving examinations and the documentation of driving permits" which was developed in collaboration with the Public Services Agency (PSA). The methodology transposes into the examination procedure details listed in EU Directive 2006/126/EC of the European Parliament and of the Council of 20 December 2006 on driving permits and tools for conducting a rigorous, transparent and objective assessment in order to obtain a licence to drive covering all categories/ subcategories. The amendments include setting a minimum time for practical tests: 25 minutes for categories B and BE and 45 minutes for categories C, CE, D/ subcategories C1, C1E, D1, DE; as well as new technical parameters for special driving manoeuvres performed on the test route.

The new examination procedure also sets out conditions for the exchange of driving permits issued by the authorities of other states with which the Republic of Moldova has concluded bilateral agreements on the conversion of driving permits.

To ensure objective assessment, the methodology includes an emphasis on safe driving according to different situations and road conditions, and respecting the Road Traffic Regulations, within the examinations of Professional Training Programs for drivers of all categories/subcategories (MER Order No. 260 of 12 April 2022).

The examination for obtaining driving permit consists of:

- (1) **Theoretical test** of knowledge of road regulations, vehicle driving techniques, behaviour and safety, medical first aid techniques and general notions of vehicle mechanics, which is carried out using the technical-applicative examination complex theoretical "Examination class", based on the didactic material approved by the Ministry of Education and Research and coordinated with the Ministry of Internal Affairs
- (2) **Practical test** covering the dexterity/ability to drive a vehicle according to category/subcategory for which the right to drive is requested:
 - For category A/subcategories AM, A1, A2 and B1, a practical test takes place on a polygon/test facility
 - For categories/subcategories B, BE, C1, C1E, C, CE, D1, D1E and D, a practical test is carried out on a test route. The testing of route conditions covers the dexterity/ability to exercise special driving manoeuvres specific to testing on polygon
 - For obtaining category F, drivers take a practical test at the road transport staff training units where they were trained

The procedure for contesting exam papers is also regulated. People who do not agree with the result of their theoretical or practical test may submit an appeal within three working days. The appeal request is submitted to the subdivision that conducted the examination within the Department of Vehicle Registration and Driver Qualification of the Agency.

Table 18

Categories of drivers by gender (as of 1 January 2023)

Categories of drivers	Ger	der	Total	
	М	F		
TOTAL	735,124	270,480	1,005,604	

Source: PSA, 2023 (asp.gov.md).

Driving schools operate under the following legal framework: Law on Traffic Safety No. 131 and Code of Education of the Republic of Moldova No. 152/2014.

According to information provided by the Public Services Agency, updated on 29 June 2022, in the Republic of Moldova, 111 driving schools are registered, which have a valid licence issued by the Licensing Chamber for the training activity of personnel in the field of road transport or have provisional authorization/accreditation for a professional training program as per the decision of the Ministry of Education and Research.¹⁶

A digital register of institutions that conduct training for drivers and trainees was launched in 2022. This new electronic register is an information system developed by the Electronic Management Agency (EMA) in partnership with the Ministry of Education and Research. It is a single platform for the digital management of information about establishments that are engaged in training vehicle drivers. The register provides an accessible and safe management environment for the registration and verification of trainees, as well as for recording exam results.

Those interested in obtaining a driving permit can access www.scoliauto.gov.md and find out which driving schools have received accreditation and register online to participate in the training programs. The system allows the Public Services Agency to receive, by means of MConnect, data about persons who have successfully passed the internal exams in driving schools in order to include them on an electronic list for participation in the external examination to obtain the right to drive vehicles.

The new electronic solution was developed within the framework of the project "Modernization of governmental services" with the assistance of the World Bank Group.

Moldova has a penalty points system in accordance with the provisions of the Contravention Code as a complimentary sanction and means of correction and re-education towards a person who has committed a criminal offence related to road safety. Approximately 400-500 drivers with revoked permits are registered per year.

In accordance with the Information System Concept "Register of Training Units for Vehicle Drivers and Trainees" and the regulation on the manner of keeping the Register of Training Units for Vehicle Drivers and Trainees, approved by Government Decision No. 370/2022, this information system is a unique platform for managing information in electronic an format regarding training units and trainees, and provides an accessible and secure information environment for ensuring the recording and accreditation of training units, verification and registration of trainees, and the recording of examination results.

If 15 penalty points are accumulated, the investigating officer must refer the contravention case for examination in the relevant court. Along with the main sanction and application of penalty points, the court may apply a ban on the right to drive vehicles for a period of six months to one year as an additional sanction.

Penalty points are cancelled after a six-month period from the date of the contravention for which they were applied or from the date of the court decision to revoke the right to drive. Penalty points may be cancelled upon presentation of a document certifying the passing of a special training program for the cancellation of penalty points as approved by the Government.

¹⁶ <u>https://asp.gov.md/ro/informatii-utile/scoli-auto</u>.

3.4.2. Professional drivers

Training and information centres for road transport personnel undertake their activities according to the Law of Road Transportation No. 150 and Law on Education Code No.152 [17/07/2014].

A certificate of professional competence is issued by the National Road Transport Agency upon attending initial qualification courses at an accredited and registered professional training, improvement and attestation centre. For practicing road transport management or for practicing as a paid driver in road transport an examination in the form of a grid test must be completed.

A certificate of professional competence for driving can be obtained through the possession of a driving permit for the respective vehicle category/subcategory and a certificate certifying the completion of a course on driving in national and/or international traffic. A certificate of professional competence for driving in international traffic allows the holder to operate in national traffic as well.

Drivers who transport dangerous goods must be holders of an ADR – professional driver training certificate - of which the validity period is five years. This must be obtained at an accredited professional training, improvement and attestation centre, according to the provisions of sections 8.2.1 and 8.2.2 of annex B to the ADR.

3.4.3. Education of all road users

Basic road safety education for Moldovan citizens is obtained in school. Further road safety education can be obtained within higher education institutions such as universities (bachelor, licence, or master's studies) for students of specific programmes.

Activity related to road safety education of the Ministry of Education and Research (MER) includes:

- 1. Approval of the curriculum for early education (three to seven years old; with content on road safety), approved by the National Curriculum Council (Order of the Ministry of Education, Culture and Research No. 1699 of 15 November 2018).
- 2. Approval of the national curriculum "Primary Education, Curriculum Area Counselling and personal development" (7-11/12 years old) with road safety content, approved by the National Curriculum Council (Order of the Ministry of Education, Culture and Research No. 1124 of 20 July 2018).
- Approval of the national curriculum "Personal development" (with content on personal safety, including road safety), cl. 5-12 grades (11/12-16/17 years old), approved by the National Curriculum Council (Order of the Ministry of Education, Culture and Research No. 1124 of 20 July 2018).
- 4. In accordance with the provisions of the Order of the Ministry of Education, Culture and Research No. 1407 of 15 December 2020, curricular products "Road safety: Methodological guide for teaching staff in institutions" were developed, edited, multiplied and distributed to local specialised bodies in education of early education (6500 copies) and "Road safety: Album of demonstrative materials" (1500 copies).
- 5. In 2018, a Road Safety Education Pack was approved by the Ministry of Education, Culture and Research and introduced into the National Curriculum of Moldova as a didactic support guide for teachers and educators within the Personal Development Discipline.

The Road Safety Education Pack was developed by the Eastern Alliance for Safe and Sustainable Transport (EASST) and translated and adapted by the Automobile Club of Moldova and ProtectMD Foundation.

The Pack is an educational tool to support road safety teaching in both formal and non-formal settings for preschool and school-age education. It provides resources to teach children and young people the core messages and knowledge they need to keep safe on the road. The key principles underlying all the activities in the EASST Road Safety Education Pack include: awareness of traffic and its dangers; good behaviour around roads; and making safe choices to keep you and others safe. The Education Pack includes a diverse range of activities such as storytelling, art, drama, surveys, research projects, practical exercises, and group discussions. Divided into three sections targeted at under 6, 6-11 and 12-14 years old, the Pack includes age-appropriate content based on the principle of active learning and student enquiry.¹⁷

6. The development of responsible behaviour in road traffic is carried out within the optional discipline "Motor vehicles: behaviour and safety" (10-12 grades), recommended by the Ministry of Education and Research. The curriculum for this discipline was approved by Ministerial Order No. 653/2020.

¹⁷ http://saferoads.md/index.php?view=news&t=road-safety-education-pack-for-teachers-and-educators-in-moldova.

- 7. For the organisation of extracurricular activities in the field of ensuring the protection of life and health of students, the Ministry annually elaborates on the methodological guidelines regarding the organisation and conduct of activities for training students in responsible behaviour in the case of exceptional and/or risky situations, including in road traffic with methodological suggestions related to road safety (academic years of 2022–2023, chapters I and III).
- 8. In order to effectively ensure the training process for students of responsible behaviour in road traffic and in the case of exceptional situations and/or risk, the Annual Activity Plan of each educational institution includes a component on "Ensuring the life protection and health of children" (resulting from the provisions of p. 1.7 of the Framework Plan for primary, secondary and high school education, academic years of 2022–2023).
- 9. At an institutional level, in order to maintain a connection with the reality of road traffic, managerial units should supplement the educational offer by designing/organising/realising didactic/managerial activities on the various generative results models that complement the cognitive dimension of learning with affective, attitudinal and moral dimensions related to safety in various road situations and contexts. In this sense, various activities are recommended annually, such as Road Safety Weeks in September/May; various multidimensional activities connecting educational institutions, families, and communities in formal and non-formal contexts; and participating in European or global road safety campaigns/weeks in partnership road safety civil society organisations.

Periodically, police officers make visits to preschools and schools and provide lessons on road safety as part of the activities of the Prevention Department of the National Inspectorate for Public Order of the MIA. Most of these actions are supported by national and international non-governmental organisations through the provision of resources, teaching materials and equipment. Unfortunately, these events are not enough to address the topic of road safety and achieve a high level of awareness among children and young people to ensure safer behaviour on the road fully and systematically.

Annually, throughout the country, the police carry out a range of measures and information and awareness campaigns, aimed at reducing road traffic crashes. At the same time, depending on the operative trends within certain risk areas, special operations may be implemented covering: speed, White Nights (drink driving), bus safety, motorcyclist safety, traffic light safety, railway crossing safety, and pedestrian safety.

Positive policing and community engagement improves public awareness and respect for the police activity in enforcing road safety laws. Rather than solely focusing on penalising drivers and collecting fines after the fact, police started to include engagement with communities, road risk awareness raising, and educational activities.

Public Awareness Programmes

It is important to involve civil society in road safety activity on a national level by means of providing expertise and guidance to ensure accountability and sustainability within the National Road Safety Council.

For instance, in 2018, the Automobile Club of Moldova (ACM) came up with an innovative solution to providing child restraints to low-income families. www.baby4baby.org is a web-donation platform enabling families to donate and share child restraints across Moldova.

These donations were formally presented to low-income families at a launch event in Chisinau. The launch included presentations by the ACM on how to use the new web-donation platform as well as a practical demonstration on how to properly install and use different categories of child restraint system according to age/height. Coupled with a national advocacy campaign on the use of child restraints, the project resulted in an increase in the use and understanding of child restraint systems.

To date, the donation platform has facilitated the donation of 790 child restraints to low-income families. Of these, 320 were donations from local Moldovan families to the platform. Through <u>www.baby4baby.org</u> the ACM aims to educate members of the public on the requirements and safe usage of child restraint systems, engage communities in the process and facilitate access to child restraint systems to vulnerable families across the country.

3.4.4. Risk factor analysis

According to the State Police, Moldova lost 1,572 citizens (on average 262/year) as a result of approximately 2,454 road crashes per year between 2017 and 2022. The highest fatality rate due to road crashes was registered in 2017, with 302 fatalities resulting from 2,640 crashes, compared to 217 fatalities registered in 2022 (see the detailed data in chapter 2).

Within the last five years, there has been a constant reduction in the number of road crashes. The lowest indices were recorded in 2020: this fact being strongly linked to the COVID-19 pandemic.

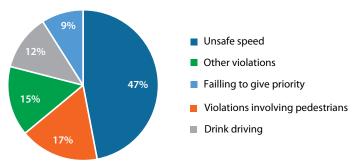


Speeding

According to Police data, the severity of road crashes in residential areas that run alongside national roads (linear settlements) is twice as high as in urban areas, even though the number of crashes is two times lower. The most common cause of road crashes registered in 2022, according to Police data, was excessive speed (figure 44), which is evidenced by "exceeding the safe speed for the road conditions" accounting for 47% of the total number of deaths, even though only 30% of crashes are based on exceeding safe speeds.

Figure 44

Death rate by types of violation in 2022



Source: MIA, 2023.

According to police analysis, the main cause of road crashes at a national level is the "inappropriate speed for the visibility, conditions, and road situation". This accounts for an average of 747 crashes a year, or 30.45% of the total number of crashes. Speed is also proved to be the main cause of death, with an even higher rate of 49.55% and an average of 130 deaths recorded annually. As a result of crashes where speed is a factor, an average of 889 persons per year are injured.

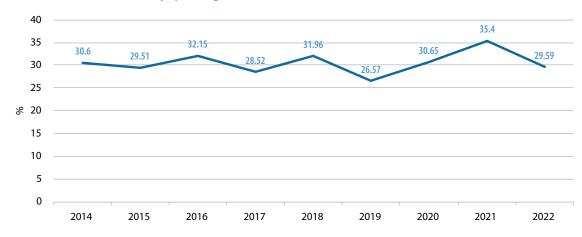


Figure 45 Evolution of road crashes caused by speeding 2014–2022

Source: MIA, 2023.

Another common cause of road crashes, according to police data, is "not giving priority to pedestrians". This is recorded as causing 2,351 road crashes, or an average of 392 crashes/year, practically one crash daily.

In recent years no public surveys have been conducted at the state level to assess changes in attitude to traffic rules nor on public compliance with traffic rules. Though there have been some surveys conducted by NGOs, for example, on the use of safety belts, child safety seats, pedestrian safety and accessibility for people with disabilities, and speeding, etc. See more at: <u>www.saferoads.md/</u>.

In 2021, the ACM conducted a survey to better understand public opinion on issues of speeding and to gauge the level of public support for reducing speed limits to 30 km/h in urban environments. As a result, 63% of respondents in Moldova, compared to less than 50% regionally, felt that speed limits on local urban roads should be set at 30 km/h or lower. 92% of respondents, compared to 80% regionally, agreed that 30 km/h should be the maximum speed around school zones. Only 23% of respondents felt that the local traffic police did not have the capacity to supervise and enforce such speed limits compared to 33% regionally.

Vulnerable road users

A common challenge of all developing states, including the Republic of Moldova, is ensuring the safety of vulnerable road users. With an overall share of more than 35%, pedestrian collisions are the most frequent type of crash recorded on the public road network. Pedestrians account for 37.9% of the total number of deaths as a result of road crashes, compared to the European average rate of 27%, and 19% for high-income countries around (World Health Organization, 2018).

According to MIA, young vulnerable road users aged between 18 and 24 are the most exposed to danger, accounting for more than 49% of the share of the total number of deaths in 2022. This figure is also increasing compared to previous years. This may be due to the lack of experience they have in driving a vehicle, as well as less developed behaviour and decision-making reasoning.

The largest increase in deaths by age however is counted among teenagers aged 15 and 17. This may be due to an increase in the use of alternative transport or smart vehicles (bicycles, scooters, etc.) which, in the absence of bicycle facilities, are used on (sometimes unsuitable) roads.

In the Republic of Moldova, analysis of road fatality data between 2017 and 2022 shows that pedestrians account for 37.9% of the total number of deaths, 22% are car drivers and 17.18% are car passengers.

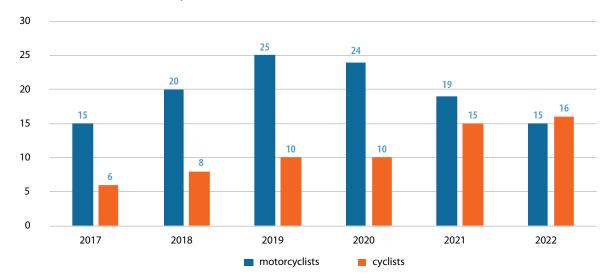
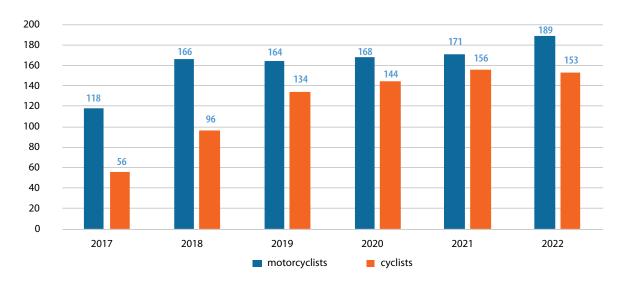


Figure 46 Number of killed – PTW riders and cyclist

Source: MIA, 2023.

Figure 47

Number of injured - PTW riders and cyclist



Source: MIA, 2023.

Meanwhile, the number of crashes involving bicycles and powered two-wheelers (PTW) also shows an upward trend for the period analysed (2017–2022), with the number of fatalities among cyclists increasing by almost 2.3 times and the number of injuries almost tripling. Among PTW riders, the number of injuries increased by 56%.

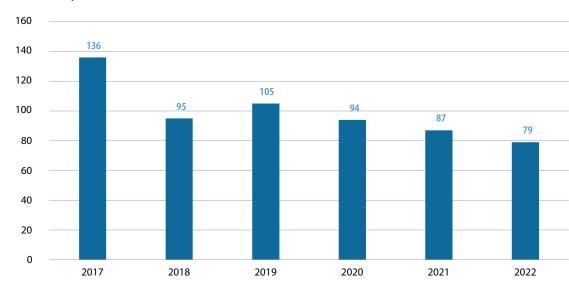


Figure 48

Number of killed – pedestrians

Source: MIA, 2023.

Data on the number of the road crashes involving vulnerable road users shows that pedestrian deaths decreased in 2022 compared to 2017 (see chapter 2). Annually, fatal crashes involving pedestrians represent over 35% of the total number of road crashes registered.

Table 19 Number of accidents, killed and injured – pedestrians

Year	Total				% of total crashes		
	Crashes Killed		Injuries	Crashes Killed		Injuries	
2017	2,640	302	2,993	997	136	913	37.76
2018	2,615	274	3,123	946	195	842	36.17
2019	2,585	277	3,031	948	105	866	36.67
2020	2,003	245	2,265	679	94	621	33.89
2021	2,548	257	2,864	876	87	792	34.37
2022	2,332	217	2,604	812	79	779	35.33

Source: MIA, 2023.

When looking at the number of children involved in road crashes for the period between 2017 and 2022, 86 (5.47%) lost their lives and 1992 (11.8%) were injured. In context of the wider overall data, an increasing trend of child casualties in this period can be seen with a 15.4% increase in child fatalities and an increase in children injured of 47.7%.

Figure 49

killed Injured

Number of killed and injured – minors (age 0–17)

Source: MIA, 2023.

There are also serious safety concerns for persons with disabilities and low mobility. In 2016, a study on disability and road risk in Moldova was published by the Automobile Club of Moldova and EASST. This research was based on a survey of 100 persons with disabilities and was conducted in partnership with the United Nations in Moldova along with several non-governmental organisations.¹⁸ The study concluded that persons with disabilities face moderate to severe difficulties with transport in Moldova. Almost 50% of the survey's participants noted issues when travelling to other cities and 16% of the respondents do not travel at all. Even crossing the road was found to be worrisome for 40% of the people interviewed.

In this regard, various projects on disability and road safety have been initiated in Moldova at both local and national levels with the support of EASST, FIA, UNDP and other organisations <u>www.easst.co.uk/disability-mobility-and-road-risk/</u>.

A recent civil society study has found that "seven out of ten people with limited mobility in Chisinau do not feel safe and even feel in danger when walking around the city, particularly when crossing the street". A study on "Identifying the needs of people with limited mobility in road safety in Chisinau" was conducted by the ACM, in partnership with experts from the Centre for the Rights of Persons with Disabilities (CDPD) and Universal Access Ltd.¹⁹ This indicated a relatively high level of support for road safety measures being implemented in Moldova and a good general awareness of the benefits that road safety measures can bring.

As in other countries, over the past two to three years, a fairly new issue has emerged in road traffic safety that is an increased in users of alternative transport. This has increased the need for an adapted urban infrastructure to meet the needs of these road users. According to a 2020 survey of 2003 respondents, four out of ten people cycle 5–10 km, a quarter cover distances of 10–20 km, 15.4% cycle up to five km, with 17.7% cycling distances greater than 20 km. Thus, bicycle transport can account for a significant number of daily trips to Chisinau. The study was conducted by the EcoPro NGO with the support of the UNDP Green City project and the Automobile Club of Moldova. Seventy-five per cent of respondents stated that they would definitely opt for cycling if infrastructure was adapted more for this ecological mode of transport.

In 2021, the Green City Lab of UNDP Moldova and the Global Environment Facility (GEF), with the expertise of ECOPRO and Automobile Club of Moldova, developed a strategy for improving infrastructure for alternative transport in Chisinau.²⁰ The main aim of the strategy was to formulate a vision for the Municipal Council to make Chisinau a friendly city for pedestrians and cyclists. Currently, the Strategy is being updated by the ACM and the Transport Department of Chisinau.

¹⁸ <u>http://saferoads.md/information/DMR-in-Moldova.pdf.</u>

¹⁹ www.saferoads.md/index.php?view=news&t=the-rights-of-free-and-safe-access-for-pedestrians-with-low-mobility-are-violated-on-the-streets-of-chiinu.

²⁰ www.undp.org/moldova/press-releases/strategy-development-alternative-transport-infrastructure-chisinau-was-developed-support-undp.

Law enforcement activities

According to data offered by the automated information system for recording contraventions, contravention causes and persons who have committed violations, an average of 17,420 contravention reports were issued per year between 2017 and 2022. These reports are based on article 242, paragraphs (1) and (2) of the Contravention Code. For leaving the scene of the road crash, an average of 2,376 reports per year were issued based on article 243, paragraphs (1) and (2) of the Contravention Code, with an increase seen in the number of road crashes where the offenders left the scene.

Table 20

Year	Article	Contraventions detected	Fines applied by the investigation agent	Sent to court	Private	Arrest	Fine	Closed
2017	242	18,811	15,477	805	43	-	517	160
	243	1,401	-	1,382	651	34	65	327
2018	242	18,130	15,377	737	51	-	181	53
	243	1,356	77	1,239	354	16	253	149
2019	242	18,258	14,960	495	24		325	71
	243	2,324	1,557	698	13	-	439	74
2020	242	14,196	11,233	510	19	-	339	80
	243	2,592	2,094	294	13	1	187	24
2021	242	18,134	14,196	598	26	-	386	56
	243	3,449	2,693	205	8	-	133	18
2022	242	16,993	13,986	623	35	-	276	38
	243	3,137	2,720	238	13	-	129	6

Number of fines - Traffic offenses Art. 242 and Art. 243

Source: MIA, 2023.

*Notes:

Article 238. Violation of stop rules and failure to give priority to pedestrians and other road users

Article 242. Violation of road traffic rules resulting in damage to material assets or causing minor bodily injuries

Article 243. Leaving the scene of a road accident occurred

Article 245. Violation of traffic rules by pedestrians and other road users.

10,384 reports were issued per year regarding violations based on article 245 of the Contravention Code. On average, 6,215 reports were drawn up yearly for not giving priority to pedestrians, based on article 238, paragraph (3) of the Contravention Code, with an increase in the number of violations of traffic rules by pedestrians being observed, as well as an increase in the number of violations related to stopping, and a failure of drivers to give priority to pedestrians.

Table 21

Number of fines – Traffic offenses Art. 238 and Art. 245

Year / Article	2017	2018	2019	2020	2021	2022
Art. 238	3,524	2,046	1,396	2,527	12,969	14,830
Art. 245	4,792	2,293	2,991	10,898	18,438	22,896

Source: MIA, 2023.

Road traffic violations detected through the "Traffic Control" automated road traffic surveillance system from 47 intersections in Chisinau municipality are supervised by the Monitoring System (under the provision of Government Decision No. 965/2014). There are a total of 224 modernised road traffic surveillance cameras with extended capabilities which monitor road traffic security in the country, of which 178 surveillance stations are equipped with radars.

Thus, through this system, the following violations are fixed automatically:

- Exceeding the speed limit
- Non-observance of road markings
- Disregarding traffic light signals
- Failure to use safety belt
- Using a mobile phone.

Safety belt use (road crash statistics)

According to police reports, in 2022, 152 (8.3%) road crashes (167 in 2021) were registered in which the car occupants in the front seat did not fasten their seat belt. As a result, 29 (43 in 2021) people died, and 113 (134 in 2021) were injured. This data was based on the total number of registered road crashes in 2022 (2,312). Comparing the general data with the analogous period of the previous year, a decrease can be seen in all areas as follows: 9% reduction in the number of registered crashes, 32.6% reduction in the number of deaths, and 15.7% reduction in the number of injuries.

Speed management

Moldova has a National Speed Limit legislation which came into force through Government Decision Nr. 357/2009 on the approval of the Road Traffic Regulations. Local authorities in Moldova are allowed to modify the speed limits according to this legislation and are responsible for road safety management in their respective localities.

In September 2022, amendments to the Moldovan Road Traffic Regulations (RTR) advanced the safe systems approach, requiring vehicle speed limits of below 30 km/h in areas where vulnerable road users and motorised vehicles mix, including schools, hospitals, parks and historic city centres. This includes the installation of infrastructure to slow traffic to below 30 km/h and separated traffic lanes for motorised vehicles and cyclists.

Thus, conforming to the RTR, the maximum speed limits of vehicles on public roads are:

- In urban areas
 - 50 km/h, general speed limit
 - 30 km/h in territories adjacent to educational institutions, hospitals, parks, historical centres of cities
 - 20 km/h in residential areas and territories adjacent to the road
 - 5 km/h in pedestrian areas
- Rural areas:
 - 110 km/h on roads signalled by road sign No. 5.4
 - 90 km/h on the other roads.

Other measures included in the legislation cover the protection of cyclists and other two-wheeler riders while being overtaken on the road; mobile phone and headphone use are now banned while riding a scooter, bicycle or moped; electric scooter use has now been regulated, including speed limits, road use guidelines, and bans on riding under the influence of alcohol or narcotic substances. There are further plans to develop a new Highway Code to address Moldova's changing mobility trends.

Currently, according to the provisions of Article 236 of the Contravention Code,²¹ the following sanctions are in place for exceeding traffic speeds on the respective road sector:

- (1) Exceeding the traffic speed on the respective road sector from 10 to 20 km/h is sanctioned with a fine of 12 to 18 conventional units (1 unit=MDL 50 equivalent to USD 2.6) with the application of three penalty points.
- (2) Exceeding the traffic speed on the respective road sector from 20 to 40 km/h is sanctioned with a fine of 18 to 24 conventional units with the application of four penalty points.
- (3) Exceeding the traffic speed on the respective road sector by more than 40 km/h is sanctioned with a fine of 30 to 36 conventional units with the application of five penalty points

²¹ <u>CC218/2008 (legis.md)</u>.

Driving under the influence of alcohol/drugs

Moldova has an existing drink driving and drug driving legislation which applies to the general population, novice drivers and professional drivers. Enforcement of drink/drug driving legislation is carried out by visual inspections at traffic controls. Alcohol and drug tests are widely conducted using blood tests or Drager devices.

The following maximum permissible alcohol concentrations are set for vehicle drivers: 0.3 g/l in blood and 0.15 mg/l in exhaled air.

A state of minimal alcohol intoxication refers to a person with a blood alcohol concentration of 0.3 to 0.5 g/l, or an alcohol concentration in exhaled air of 0.15 to 0.3 mg/l.

A state of advanced alcoholic intoxication refers to a person with a blood alcohol concentration of 0.5 g/l and higher, or an alcohol concentration in exhaled air of 0.3 mg/l and higher.

According to the Contravention Code Article 233 and Criminal Code Article 264, a graduated system of fines and demerit points for different levels of contraventions and repetition is used in Moldova. These penalties range from the application of 350 to 500 conventional units (17,500 to 25,000 MDL equivalent to approximately 975 to 1,395 USD); unpaid community service from 40 to 240 hours; the withdrawal of driving permits from six months to three years; and the termination of driving permits.

At the same time, in accordance with the provisions of Article 211 of Law on Traffic Safety, a termination of the right to drive the vehicle may be ordered by the Court in the following cases:

- The permit holder was convicted of a criminal penalty
- The permit holder has been declared unfit by qualified medical personnel

The termination of the right to drive can be regained after the grounds for its cancellation have expired, upon presentation of proof to this effect, and the applicant re-passing a driving test for the relevant vehicle by an authorised authority. Additionally, in the case of a criminal conviction, the revoked driving permit can be regained after attending an anti-alcohol and anti-drug probation program and the expiration of the 4-year term from the time of the conviction.

	3			
Year	Crashes	Killed	Injured	% of total crashes
2015	143	24	189	5.5
2016	131	32	165	5.2
2017	89	12	106	3.3
2018	128	19	155	4.9
2019	158	37	181	6.1
2020	150	22	179	7.5
2021	127	20	143	5.04
2022	140	24	143	6.05

Table 22 Road crashes due to drink driving

Source: National Inspectorate of Public Order, MIA, 2023.

Driving under the influence of alcohol is a factor in 11% of road crash deaths and accounts for approximately 5% of people seriously injured as a result of road crashes.

The average number of road crashes where drink-driving is a factor has decreased by 36.5% in recent years compared to the period of 2000-2014 as more efforts have been made by the state. Fines for violations have been tightened and the community has been widely informed about the consequences of such driving behaviour.

However, according to data presented by the National Public Order Inspectorate, an average of approximately 6,000 people are sanctioned for drink driving annually, of which 26% represent contravention cases and 74% of cases are classified as a crime.

Use of protective helmets, safety belts and child restraint systems

In accordance with the provisions of the Road Traffic Regulations, drivers are obliged to wear buckled safety helmets while riding a motorcycle (or moped) and to ensure that passengers do the same. Protective helmets are also mandatory for bicycle riders who travel on roads with a speed limit of above 50 km/h.

In Moldova, there is no official collection and analysis of data on the use of safety belts, child restraint systems (CRS) and helmets. However, this type of data has been collected and published on an ad hoc basis as part of public awareness campaigns run by non-governmental organisations in partnership with police and other stakeholders.

Observation and research work conducted within the framework of a national road safety campaign in 2017 showed that only 33% of inspected vehicles were fitted with adequate child restraint systems tailored to the age and size of the children using them. 59% had safety belts with 92% of people asked confirmed that they are used "always" or "usually". Eight per cent of parents admitted to not using restraints at all. The campaign, which aimed at keeping children safe in cars, was implemented by the Automobile Club of Moldova and National Police. The post-campaign survey documented an 8% increase in the permanent use of child restraint systems and a 7% increase in the use of the safety belts at a frequency of two to three times per week.²²

Conforming to Contravention Code Article 235, a violation of safety belt use, fluorescent-reflective vests, child restraint systems and motorcyclists' protective helmets may be sanctioned with a fine of nine to 12 conventional units (MDL 450-600 = USD 24-32) and the application of three penalty points.

In accordance with the provisions of the Road Traffic Regulations, drivers are obliged to wear a safety belt while driving and to ensure that passengers have also fastened their safety belts, if the vehicle is equipped with them.

It is also forbidden to transport children in the front seat of a passenger car. Child restraint systems (CRS) are compulsory for children under 12 years old. More specifically, children up to 12 years old may only be transported in a car equipped with a special child supporting system (or other device such as a special cushion adjustable along the seat height which enables standard safety belts to buckle up). Child supporting systems should also comply with the following requirements: (a) safety standards; (b) the child's weight and height; and (c) position of the child in the seat, allowing them to correctly buckle up (in relation to shoulder and pelvis).

Transporting children under the age of 12 contrary to the provisions of the Road Traffic Regulations is sanctioned with a fine of 12 to 24 conventional units (600-1200 MDL) and the application of two penalty points.

²² <u>http://saferoads.md/index.php?view=news&t=increased-the-number-of-parents-using-car-seats</u>, <u>www.easst.co.uk/are-parents-keeping-their-children-safe-in-cars/</u>.

3.4.5. Proposed measures and conclusions

The following key measures and conclusions for the improvement of road user safety in the Republic of Moldova are proposed:

- **A4.1** Develop/update the Law on Traffic Safety
- **A4.2** Revise sanctions for non-use of safety belts or child restraints, as well as sanctions for pedestrians breaking road traffic regulations
- **A4.3** Differentiate the permissible level of blood and exhaled alcohol content depending on the experience of the driver or the type of vehicle
- **A4.4** Improve occupational road safety and introduce road safety policies for all car fleets at a national level
- **A4.5** Improve national policies to inter-connect with the norms, standards, and needs of persons with disabilities or low mobility
- A4.6 Digitalize the processes for documenting road traffic violations
- LEGISLATION



- A4.7 Intensify the documentation of deviations from provisions within the Road Regulations, including through the use of new methodologies and equipment
- A4.8 Establish a cooperation/verification mechanism jointly with the Customs Service for cars with foreign registration plates
- A4.9 Speed management treatments in urban areas, measures for safety of vulnerable road users

ENFORCEMENT



- A4.11Capacity building and extensive training of
- teachers, educators and police inspectors on road safety topicsA4.12 Review the national curricula on road safety
- education including for higher education institutions
- A4.13 Develop partnerships between national and local stakeholders to promote road safety as a national culture, and improve law enforcement.
- A4.14 Adjustment of the ROSSOFT database (official contravention record system) and improve/establish interconnection with the courts' portal
- A4.15 Promote the use of Intelligent Transport Systems and equipment
- **A4.16** Develop an application for public use that includes searching for violations found by the "Traffic Control" system and the penalty points applied.

EDUCATION



TECHNOLOGY



LEGISLATION

Activity 4.1: Develop/update the Law on Traffic Safety.

- Analyse the feasibility and benefits of unifying existing normative acts that cover road traffic, infrastructure, and road safety into a single normative act such as a Highway Code
- Update the legal framework to include the use of electric scooters in the territory of the Republic of Moldova the technical characteristics, speeds with which they can be driven/used, and the admissible weight must be capped from the start.

Activity 4.2: Revise sanctions for non-use of safety belts or child restraints, as well as sanctions for pedestrians breaking road traffic regulations

- Revise the sanctions for non-use of safety belts or child restraints, for driving a vehicle with an expired driver's license, and for violations committed by pedestrians/cyclists/scooters.
- It is proposed that violations committed by pedestrians be separated from the existing Article (245) in the Road Regulations – a separate Article should be developed that provides for penalties for pedestrians for different road traffic violations (e.g. irregular crossing, creating dangerous situations, etc.).
- Revise the Article on use of reflective elements by pedestrians and cart users in the Road Regulations.

Activity 4.3: Differentiate the permissible level of blood and exhaled alcohol content depending on the experience of the driver or the type of vehicle

In several countries the requirements for drivers with less than two years of driving experience are stricter, as well as for drivers of taxis, motorcycles, and vehicles with a total mass of over 3.5 tons or with more than nine seats. It is proposed that for novice drivers (up to two or three years) the admissible norm for contravention sanctioning should be reduced from 0.15 to 0. The same norm should be introduced for professional drivers (truck drivers, public transport drivers, taxi drivers).

Activity 4.4: Improve occupational road safety and introduce road safety policies for all car fleets at a national level

- Improve occupational road safety and introduce road safety policies with control, enforcement and incentive programmes for all car fleets at a national level.
- A set of instructions covering road safety commitments, obligations and rules must be developed and applied for each fleet. Data collection and analysis of road crash statistics involving transport of fleets should be kept and monitored in partnership with the police.
- A national competition (e.g. under the auspices of the Government) on the best road safety policy implementation among fleets could be announced.

Activity 4.5: Improve national policies to inter-connect with the norms, standards, and needs of persons with disabilities or low mobility

Amend the Road Regulations and relevant Articles to take into account the needs of people with disabilities or introduce a separate chapter including a description of the obligations of local public administrations to ensure the building of appropriate road infrastructure and implementation of other inclusive measures related to accessibility and the needs of persons with disabilities and low mobility.

Activity 4.6: Digitalize the processes of documenting road traffic violations

- Review and update of the legislative mechanism regarding the automated road traffic surveillance system "Traffic Control" (Government Decision No. 40 of 17 January 2012) to ensure the documentation of fixed violations and efficient sanctioning of offenders.
- Transition to electronic documentation of offenses using a dedicated application. Reduce the waiting time until the Verbal Protocol is drawn up so that the person leaves faster after the contravention verbal report has been issued.

ENFORCEMENT

Activity 4.7: Intensify the documentation of deviations from provisions within the Road Regulations, including through the use of new methodologies and equipment

 Diversification through new methodologies and equipment would ensure accurate sanctions for traffic offenders based on the violation committed and prevent opportunities to evade sanctions under different pretexts. This means the use of car-trap (police interceptors), drones, tablets, and laptops for issuing electronic Verbal Protocol.

Activity 4.8: Establish a cooperation/verification mechanism jointly with the Customs Service for cars with foreign registration plates

- Agreement on cooperation and development of an action plan between the police and the customs service on the creation of a mechanism for monitoring and exchanging information about offenders driving cars with foreign registration plates (foreign citizens and citizens of Moldova).
- Development of a unique instruction manual/guide one policy document containing Articles from the Road Traffic Regulations, safety rules and safe behaviour, technical condition and maintenance of vehicles (e.g. right-hand drive traffic), notes related to the Contravention Code, the Highway Code (to be developed), etc.

Activity 4.9: Speed management treatments in urban and rural areas, measures for safety of vulnerable road users

- Promotion of measures for the safety of vulnerable road users (children, cyclists, motorcyclists, people with disabilities, cart drivers) on a national level involving private and civil society sectors.
- Traffic calming measures based on the Safe System Approach for road design should be applied in rural and urban zones. Local authorities should focus on speed management infrastructure to slow traffic and protect vulnerable road users including implementing a 30 km/h policy around schools and other educational institutions, hospitals and historic central zones.

EDUCATION



Activity 4.10: Carrying out public awareness activities in line with enforcement on a national level

Carrying out public awareness activities in line with enforcement, targeting in particular the most vulnerable road users (children, cyclists, motorcyclists, people with disabilities, cart drivers) on a national level involving private and civil society sectors, mass media. Enforcement strategies and activities should be backed up by identifying local risks, efficient communication, monitoring progress and evaluating impact to encourage and ensure the support of the general public, as well as involving local stakeholders to facilitate engagement.

Activity 4.11: Capacity building and extensive training for teachers, educators and police inspectors on road safety topics

To improve local knowledge and promote cooperation between different road safety stakeholders on a local level, a national or local road safety training programme/centre(s) could be established.

Activity 4.12: Review the national curricula on road safety education including for higher education institutions

- Develop an extra-curricular policy and plan activities to improve road safety behaviour targeted at different age categories. Promote use of existing toolkit/guide for teachers, mentors and educators, considering the age, type of users, needs and risk factors for all categories of children and youth including those with disabilities.
- Establish partnerships with international organizations, road safety experts, NGOs, and academic institutions/ universities to develop and deliver academic programs on road safety management, road safety implementation, and behaviours. These programs could be adapted to the needs of different target groups, such as university students and postgraduate students.

Activity 4.13: Develop partnerships between national and local stakeholders to promote road safety as a national culture and improve law enforcement

Develop partnerships between national and local stakeholders such as the police, local government, private companies (insurance) and community groups focusing on specific areas with high road risk or specific road users to promote road safety as a national culture and improve law enforcement. Encourage best practice knowledge sharing at local, national and international levels (via the National Road Safety Council).

TECHNOLOGY

Activity 4.14: Adjustment of the ROSSOFT database (official contravention record system) and improve/ establish interconnection with the courts' portal

Provide investigative agents with special equipment for verifying drivers' previous violations. Support the implementation of the penalty points system (differentiated system for habitual offenders).

Activity 4.15: Promote the use of Intelligent Transport Systems and equipment

Install smart traffic lights, speed sensors, weight in-motion, sound and navigation systems for persons with disabilities and low mobility, bike sharing systems, etc.

Activity 4.16: Develop an application for public use that enables searching for violations found by the "Traffic Control" system and the penalty points applied

Develop and implement an application for public use with the aim to enable searching violations and penalty points applied.

3.5. Post-crash care

3.5.1. Pre-hospital care

WHO Guidance on prehospital trauma care

The WHO recommendations on prehospital trauma care are partially transposed in the medical standards approved in 2017 by the Order of the Ministry of Health "On the update of the medical standards for diagnosis and treatment,²³ with amendments²⁴ approved in 2020 by the Order of the Ministry of Health "On the modification of the Order No. 574 from 30 June 2017 on the update of the medical standards for diagnosis and treatment".

At the same time, to ensure aeromedical transportation in Moldova, as well as the neighbouring country of Romania, a Joint Response Plan,²⁵ signed by Ministry of Internal Affairs of Romania, Ministry of Internal Affairs of the Republic of Moldova, Ministry of Health of Romania and Ministry of Health of the Republic of Moldova in 2015, was implemented for emergency response, disasters, and exceptional situations to provide emergency medical assistance. This plan ensures the response of emergency services, as well as transportation, including by air, of road traffic victims using helicopters of the Emergency Medical, Resuscitation and Rescue Service (SMURD) from Romania.

The implementation of this Plan in Moldova has reduced the transportation time of seriously injured people reaching medical institutions. Today, SMURD in Moldova continues to develop its operational capabilities by increasing the number of heliports and equipping the General Inspectorate for Emergency Situations with new ambulances, as well as training paramedics.

²³ <u>15503-Ordin205742030.06.2017.pdf</u> (gov.md).

²⁴ ordin-nr.953.pdf (gov.md).

²⁵ <u>https://dse.md/sites/default/files/pdf/SMURD/Plan_de_interventie_comuna/Plan%20de%20interventie%20comuna.pdf</u>



Figure 50

First aid vehicle and helicopter



Source: SMURD, 2023

National emergency call number

A unique national service number for emergency calls, 112,²⁶ operates for the public benefit and aims to ensure, in a unified, professional manner, the protection of the population throughout the territory of Moldova by using the capacities of modern electronic communications infrastructure and information resources.

There are two 112 Emergency Call Reception Centres located in the municipality of Chisinau, with headquarters located in the Buiucani sector, and Băcioi commune. The basic function of the centres are to ensure the reception, processing, storage, and transmission of information to the Dispatchers of the specialized Emergency Services. Each centre serves as a backup centre for another centre. In the event of a failure of one of the centres or in the event that the throughput capacity of the information and electronic communications system of one of the centres does not allow the qualitative service of the received call traffic, in accordance with the established requirements, all or part of the call traffic is automatically transferred to the other centre. These emergency call centres are permanently open with 24/7 operations organized into three shifts, on average, with eight operators per shift.

The 112 service is organised as an integrated structure, in which the 112 emergency call centres ensure the reception of emergency calls throughout the territory of Moldova. The location of the caller's terminal based on the information communicated by the caller and the processing of the information obtained occurs through the automated information system of the 112 service. This may include using other available sources and transmitting the data associated with the intervention request to the specialized emergency services dispatchers of the ambulance, police and fire services.

The unique number for emergency calls, 112, must be used only when the intervention of specialized emergency services is necessary to ensure immediate assistance in situations where there is a risk to life or the health of an individual or wider population, where private and/or public property are threatened, or there is a danger to the environment or public order. It became operational in the Republic of Moldova in July 2018. The number 112 is free and can be called 24 hours a day from any landline or mobile phone in Moldova and the entire European Union. The operates based on the Law on the Organization and Operation of the Unique National Service for Emergency Calls 112 No. 174 [25/07/2014].²⁷

There are procedures established between the 112 service and ambulance, police and fire services on how to respond to road traffic collisions. In this sense, the Regulation of Interaction between the Single National Service for Emergency Calls 112 and Specialized Emergency Services is approved by Government Decision No. 647/2018.

The emergency call is taken by the operator from the 112 service, who fills in a "Case Record" via an electronic system. In the event of a road traffic collision, the Record is automatically sent to dispatchers within the fire service, police and ambulance service who send response teams to the scene of the crash and maintain permanent contact with each other. After completing the intervention, the dispatchers enter necessary details into the "Case Record" which is viewed by the operator of the 112 service.

At the same time, the 112 service has the ability to geographically locate the caller and transmit the exact GPS coordinates of the caller to the emergency services. The average response times to attend to the scene of a road traffic collision is about 15 minutes for urban areas and 25 minutes for rural areas.

²⁶ <u>https://112.md/</u>.

²⁷ www.legis.md/cautare/getResults?doc_id=115204&lang=ro.

First aid – Rescue services and Police fully equipped and trained

All emergency rescue vehicles and fire appliances in Moldova are equipped with hydraulic extrication equipment. All intervention personnel are trained on extrication procedures and the provision of medical first aid. Likewise, all special vehicles are equipped with basic first aid kits. In 2011, a set of "Methodical recommendations regarding the execution of extrication works"²⁸ were developed and approved by the General Inspectorate for Emergency Situations. These Recommendations were further supplemented according to the requirements of the World Rescue Organization (WRO). Concurrently, between 2015 and 2019, members of the United Kingdom Rescue Organization (UKRO) in cooperation with EASST and UK charity Operation Florian carried out a series of training programmes on vehicle extrication and the provision of first aid. Today, in line with the renewal of the vehicle fleet, all emergency vehicles are equipped with modern extrication equipment.

Approximately 60% of police crews are trained in first aid with the last training being held in 2020, organised by the Ministry of Health. Taking into account the fluctuation of personnel within the police force and the lack of continuity in first aid training, it is possible that level of practical skill within the police force will decrease significantly in the next few years.

Police cars are equipped with medical first aid kits, which are mandatory for every vehicle. However, they do not have extrication tools as this work is carried out exclusively by rescuers and firefighters. It could be very useful to provide additional first aid equipment in police cars to enable timely interventions by police officers who are, in many cases, the first at the crash scene. The map of Rescue and Firefighting Stations in Moldova could be found here.²⁹

In Ministry of Education and Research Order No. 267 [17/03/2021] on the approval of didactic lessons of the professional training units for vehicle drivers, the chapter "Emergency assistance to victims of road accidents" is given only five academic hours for practical lessons out of a total of 720 hours of mandatory training.

"Golden hour" for ambulance at the crash scene

The "Golden Hour" principle is well known by ambulance crews, and they tend to adhere to this principle where possible. But there are several factors that prevent the full observance of this principle such as: a small number of ambulance teams; outdated vehicle fleets, especially in rural areas; a culture of drivers who only passively give way to ambulances; and unsatisfactory road infrastructure, especially in rural areas. Ensuring the functionality of all communication systems (GSM, TETRA) is also essential for proximate team allocation/ positioning by GPS.

The Prehospital Emergency Medical Assistance Service has five regional Emergency Medical Assistance Departments located in the five geographical areas of the Republic of Moldova: Chisinau municipality, Center, North, South, and Gagauzia.

The network of the Emergency Medical Assistance Service is represented by: 41 Emergency Medical Assistance substations located in municipalities/cities and 95 Emergency Medical Assistance substations located in rural areas.

In order to ensure equity, efficiency, accessibility of the population to emergency medical assistance at the pre-hospital stage, particularly in the case of surgical emergencies, the Prehospital Emergency Medical Assistance Service subdivisions cover a geographical range of no more than 15km.

Currently, around 4,000 personnel are involved in the Prehospital Emergency Medical Assistance Service including about 400 emergency doctors, 1,400 emergency medical assistants, 700 nurses and other staff from Substations and Emergency Medical Assistance Points located in the territory of the Republic of Moldova.

The total number of crews in 2022 was 260.

The medical and sanitary personnel employed at Emergency Medical Assistance Service Points are given special purpose clothing, which corresponds to the orange and blue colour scheme of the Emergency Medical Assistance Points with reflective strips.

²⁸ https://dse.md/sites/default/files/pdf/acte-normative/Ordin%20SPC%20si%20SE%20nr.189%20din%2008.12.2011%20Anexa.pdf.

²⁹ www.google.com/maps/d/viewer?mid=1hzNUis_IHNzI2uBIXn0fFWGFiBiEfiad&hl=ru&ll=46.98619614657957%2C28.39194900000004&z=7.

Incident management

The main actors who respond to road traffic collisions in Moldova include a team of rescuers and firefighters from the GIES of the MIA, ambulance crews from the MH, and a team of police from the NPSI of the MIA. There is a "Cooperation Agreement between the MIA and the MH regarding intervention in accidents (catastrophes) on roads" which was approved in 2013 through a joint Order between the MIA and MH. At the same time, in 2014, Cooperation Protocols were approved between the MIA and MH regarding joint intervention in pre-hospital medico-surgical emergencies in the northern and southern areas of Moldova. According to these procedures, the overall management of the road traffic crash response process belongs to the police. The interaction between the intervention crews at the scene of a road crash is carried out by the superior officers of these crews. The results of the response are then sent to the dispatchers of each intervention service, after which a general case file is drawn up with the information provided by the 112 Service.

3.5.2. Care in transit

Medical support during transit

Procedures for the care of road traffic victims during transit from the crash scene to medical facility are partially developed and approved. At the same time, these procedures are sufficient and meet the needs of victims (the nature of the injuries). Medical personnel are also included in the composition of the crews. The entire ambulance crew is trained in the treatment and transportation of road traffic victims, except for the driver.

Ambulance fully equipped and trained

All medical vehicles are equipped with adequate equipment for the care of road traffic victims during the transit period. Medical personnel are trained in the handling and use of equipment for the care of victims. At the same time, it should be noted that the ambulance drivers are not involved in the process of caring for victims, but only deal with driving the vehicle.

According to data provided by the Ministry of Health, the Pre-hospital Emergency Medical Assistance Service has a total of 430 type B and C ambulances. Current regulations specify that at least 140 vehicles are needed. The serious issue is that more than 270 vehicles, which represents 63% of the total, have an extreme degree of wear and tear. In the last five years, about 200 vehicles have been bought. In 2018, 109 type B ambulances were procured, which were distributed to rural areas. 35 ambulances were distributed to Chisinau Municipality. Between 2020–2021, 55 type B ambulances and one type C ambulance were purchased, and in 2022 the Emergency Medical Assistance fleet was completed with 37 ambulances of which 20 were type B and 17 type C. However, to ensure the needs of patients are met, at least 100 ambulances would need to be replaced each year.

According to the draft Decision of the National Program on the Development of Emergency Medical Assistance 2023–2027, every year, starting from 2024, 151 million MDL should be allocated for the procurement of new ambulances.

Transit time to hospital

In general, travel time from the scene of a crash to a medical facility in both rural and urban areas is under 30 minutes. However, this can be improved by modernizing the vehicle fleet to further reduce travel time and improving the quality of care in the transit period through modernizing care equipment.

Modern vehicles are equipped with diagnostic, monitoring and treatment equipment that allow the continuation of the treatment initiated at the place of request and the dynamic monitoring of vital functions.

Regular assessment

All emergency services are periodically assessed for their response capabilities. Each service sets its own individual evaluation period for testing its intervention capabilities. At the same time, a continuous training process is foreseen in each emergency service. As part of this process, employees are assessed annually on their theoretical and practical knowledge.

In the same way, Government Decisions, (e.g. HG No. 823 of 30 November 2022³⁰ regarding the Preparatory Measures in the field of Civil Protection of the Republic of Moldova for the year 2023) are applied to civil protection annually in which road traffic collisions are simulated.

³⁰ HG823/2022 (legis.md).

3.5.3. Hospital trauma care

Data collection

The National Agency for Public Health³¹ owns and is responsible for completing the population mortality database on causes of death according to the WHO International Statistical Classification of Diseases and Problems of Health, 10th edition. Public Health institutions, including the Pre-hospital Emergency Medical Assistance Service, register people with trauma following a road traffic collision and submit them to the statistical database, recording the diagnosis and type of trauma.

Completion of the statistical database is carried out by statistician medical assistants from the AMU subdivisions.

Bodily injuries received as a result of road traffic crashes are classified according to the WHO International Statistical Classification of Diseases and Problems of Health, 10th edition. For the tabulation of causes of death, a double classification is used, chapter XIX traumatic injuries, poisoning and other consequences of external causes (S00-T98) and chapter XX External causes of mortality – road accidents (V010-V 899).

The NAPH database has no interconnection between medical institutions. The statistical database records: injuries, deaths and other pathologies following road traffic crashes. Injuries are classified according to the degree of severity and according to the anatomical region.

At the same time, the automated information system "State Register of Road Accidents" is implemented in Moldova, approved by Government Decision No. 693 of 21 June 2007.³² This System allows the collection of data on the number of deceased persons; the number of slightly injured; the number of seriously injured; the number of identified victims; the number of deceased persons in the vehicle; and the number of injured people in the vehicle. The Instructions on the Record of Road Accidents were developed and approved by a joint order of the MAI, the Minister of Transport and Road Management, the Ministry of Health, and the Director General of the National Bureau of Statistics with No. 160/64/214/38 of 24 May 2006.³³

Hospital trauma care

Hospitals in each district, which have the capacity to receive victims of road traffic crashes, are mainly located in the district centres: a fact that limits the organization of transporting victims. At the same time, for the convenience of citizens, an online map³⁴ of the location of medical facilities by profile and with contact details is available. Not all hospitals provide mental health assistance and support, which would allow for rehabilitation and support procedures to be carried out to minimize the effects of both physical and psychological trauma.

At the national level, there is no data available regarding the load of hospitals with victims of road traffic crashes. The Institute of Emergency Medicine had an average load share of 8.28% in 2022. A total of 479 patients were registered spending 5075 days/ bed. Of 250 beds reserved for traumatological patients, 61,238 days/bed were occupied by crash victims.

Hospitals fully equipped and trained

All hospitals prepared to receive road crash victims are adequately equipped and provided with medical personnel. Doctors from Emergency Reception Units (UPU)/Emergency Medicine Departments (DMU) traumatologists, resuscitators, surgeons are trained in the application of the ATLS (Advanced Trauma Life Support) Algorithm, however it is necessary to maintain a continuous training process.

³¹ <u>https://ansp.md/</u>.

³² <u>www.legis.md/cautare/getResults?doc_id=14313&lang=ro</u>.

³³ www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwilgoe18fr_AhUcSfEDHe4aC_sQFnoECBIQA-Q&url=https%3A%2F%2Fparticip.gov.md%2Fro%2Fdownload_attachment%2F5452&usg=AOvVaw2GG2mTgv0zxXtFja30hQFm&opi=89978449.

³⁴ <u>http://map.cnam.md</u>.

3.5.4. Rehabilitation and insurance

Crash victim rehabilitation

In Moldova, a Law on the Fund for the Protection of Road Victims No. 106 [21/04/2022]³⁵ has been established and is subject to supervision by the National Bank of Moldova. This road victims' protection fund has been set up to protect people injured in road crashes where vehicle owners and/or users have not concluded compulsory auto liability insurance contracts, for unidentified vehicles and/or vehicle drivers, for unregistered vehicles or those which were not subject to registration in the territory of the Republic of Moldova, and/or vehicles obtained illegally and not insured by civil liability.

Licensed motor liability insurers are obliged to contribute to the establishment of the Fund in proportion to the volume of insurance premiums collected for this class of insurance, in accordance with the regulatory acts of the supervisory authority. The amount of auto liability insurers' contributions to this Fund is established by the normative acts of the National Bank of Moldova.

Insurance schemes for crash victims

The national body in Moldova that regulates insurance companies is the National Financial Market Commission.³⁶

Mandatory motor civil liability insurance for damage caused by vehicles is carried out in accordance with the Law on the Fund for the Protection of Road Victims No. 106 [21/04/2022]. Insurance for drivers is mandatory and is executed for the benefit of third parties. Compulsory insurance against road traffic crashes for citizens, with the exception of drivers, does not exist. However, it is voluntary. At the same time, insurance companies offer the option of insuring people against road traffic crashes. Insurance companies promote the need to insure people against road traffic crashes through various seminars, presentations, and public consultations. The percentage of people insured against road traffic crashes from the total number of insurance schemes offered is only eight per cent. The percentage of insured cases from the total number of road traffic crash insurance schemes offered is one per cent.

In Moldova, there is no practice of investing in road safety by insurance companies. At the same time, some companies provide help upon request, including financial, to the victims of road traffic crashes.

Encouraged to employ disabled crash victims

In Moldova, there are no national or special programs regarding employment stimulation for victims with disabilities following road traffic crashes. At the same time, in Moldova, according to Labour Code No. 154 [28/03/2003],³⁷ the rights of people with disabilities are ensured, such as: the right to employment; the right to wages without any discrimination based on disability criteria; the right to reduced working hours; the prohibition of discrimination in the sphere of work of persons with disabilities; improving working conditions and labour protection for employees with disabilities.

³⁵ LP106/2022 (legis.md).

³⁶ www.cnpf.md/ro.

³⁷ www.legis.md/cautare/getResults?doc_id=136676&lang=ro#.

3.5.5. Proposed measures and conclusions

The following key measures and conclusions for the improvement of road traffic for Post-crash Care in the Republic of Moldova are proposed:

- A5.1 Implement a mechanism of direct investment in road safety by insurance companies.
- **A5.2** Implement an incentive mechanism for employers regarding the employment of disabled road traffic victims.
- **A5.3** Create centres and programs for the rehabilitation of road traffic victims.



LEGISLATION

- **A5.4** Train police officers in providing medical first aid.
- **A5.5** Organize free additional courses for drivers as well as increasing the number of medical first aid training hours during courses for drivers.
- **A5.6** Train ambulance drivers in the provision of medical first aid.
- **A5.7** Implement information systems to ensure the interconnection of the Road Accident Register of the MIA and the 112 Service.
- **A5.8** Modernize the ambulance fleet.
- **A5.9** Equip police crews with first aid kits.

EDUCATION



TECHNOLOGY



LEGISLATION

Activity 5.1: Implement a mechanism of direct investment in road safety by insurance companies

- Assessment and development of a mechanism for direct investment in road safety by insurance companies.
- Amendment of the Law on insurance or insurance renewal No. 92 to allow for investment in road safety by insurance companies.

Activity 5.2: Implement an incentive mechanism for employers regarding the employment of disabled road traffic victims

- The introduction into national legislation of a rule that provides tax relief to employers who employ people with disabilities.
- Encourage employers to hire people with disabilities.

Activity 5.3: Create centres and programs for the rehabilitation of road traffic victims

- Creation of centres and programs for the rehabilitation of road traffic victims within emergency hospitals or the creation of separate rehabilitation centres.
- Development of psychological assistance/mental health support in emergency hospitals.

EDUCATION

Activity 5.4: Train police officers in providing medical first aid

Resume first aid training of police officers and emphasise the obligation of police to provide medical first aid at the scene of a crash when police crews are first to arrive.

Activity 5.5: Organize free additional courses for drivers as well as increasing the number of medical first aid training hours during courses for drivers

- Increase the number of practical training hours covering the provision of medical first aid in driver training courses.
- Organize additional courses on providing medical first aid, free of charge, for drivers, as well as the promotion of these courses.

Activity 5.6: Train ambulance drivers in the provision of medical first aid

Provide additional training to ambulance drivers in the provision of medical first aid i.e. the assignment of a paramedic specialty and full involvement in the care of victims to support in instances where they are not driving.

TECHNOLOGY

Activity 5.7: Implement information systems to ensure the interconnection of the Road Accident Register of the MIA and the 112 Service

- Explore the possibility of connecting the 112 Service and the Road Accident Register. Medical records of crash victims should be interconnected too.
- Establish procedures to digitalize medical and 112 records.

Activity 5.8: Modernize the ambulance fleet

Purchase new vehicle models, including through investment projects.

Activity 5.9: Equip police crews with first aid kits

Equip police cars with first aid kits, in addition to those required by regulation which will allow them to give quality medical first aid to crash victims.

4. CROSS CUTTING AREAS

4.1. Safe urban mobility

4.1.1. Land use and transport planning

In 2022, the percentage of the population living in urban areas in Moldova was around 43%.³⁸ While still being the least urbanised European country with over 55% of the population residing in rural areas (as of 2014), Chisinau, the capital city, is experiencing a strong inflow of new residents putting pressure on the city's infrastructure and services. Thus, the management of urbanisation and the rural-urban migration process has been gaining attention as one of the key national development priorities.

The development of the urban transport system in Moldova is not conceptually different from the planning and administration of the national transport system. However, urban planning tends to focus more on the transport system and less on mobility, with modern urban mobility planning principles very often ignored. Although some attempts are being made to transition towards more sustainable urban development, Moldovan cities continue to focus on car-centred development.

Moldova's regional and urban development legal framework consists of a set of laws and government decisions focused on the regulation of urbanism and territorial development. The Law on the Principles of Urbanism and Territorial Development No. 835-XIII states that urban planning and land development documentation should include land development plans, urban plans, and their related regulations. Every city has a General Urban Plan which sets out the general scheme of the system of technical-building networks, establishing the traffic routes and characteristics of the routes that must be maintained, modified or built, as well as establishing the main traffic arteries and areas of public circulation.

Even though Moldova has assumed the adoption of European Union practices and recommendations in all areas of development as part of its European integration process, in terms of urban development and sustainable urban mobility planning, this process has not yet begun. The legal framework does not expressly mention the need for a directive regarding the development of a Sustainable Urban Mobility Plan (SUMP) in urban planning documentation. It is limited more to the planning and regulation of the road traffic system and transport infrastructure.

Using this urban development documentation, each city can develop and adopt various strategic documents and action plans focused on the development of the local transport system. However, only a few big cities have done this (Chisinau, Balti, Cahul, Ungheni, Orhei, Hânceşti, and Străseni) and it is only to a minimal extent. Although this documentation is not complete and up to date, it provides some general guidelines of urban development.

Since it is the capital city and has more financial and human resources, Chisinau has a better urban planning framework than others. However, the Chisinau General Urban Plan is now quite outdated. It was adopted in 2007 and one of its most important parts, the transport organization plan, was never approved. This led to a chaotic process of land use allocation (or lack thereof) and construction, which also affected transport infrastructure planning. As a result, the city does not have proper street categorisation, and lacks a parking management system and connections between different modes of transport. However, the city is currently working on developing a Sustainable Urban Mobility Plan, according to European best practice.

³⁸ www.statista.com/statistics/513318/urbanization-in-moldova/.

Moldova

Among the key issues related to urban transport in Moldova 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 private cars. The number of registered vehicles in Moldova was reported at 1,044,429 units in December 2022. This is an increase from 1,008,204 units in December 2021.³⁹ Most of these cars are registered within the Chisinau Municipality and other urban areas.
- These changes have increasingly fostered demand for more efficient road and public transport infrastructure.⁴⁰
- Most new construction work in Moldova during the last two decades has been built without parking facilities, and as a result, cars are parked on the streets, creating traffic congestion. As road users, pedestrians suffer the most in the current context due to an insufficient number of road crossing facilities.⁴¹
- A lack of streets with adequate traffic capacity hinders the operation of public transport and accessibility to many areas of the city and is sometimes a potential cause of road traffic crashes.
- The occupation of roadsides by parked vehicles is one of the major causes of traffic jams with a reduced level of service and slow traffic flows.

More specifically, serious issues that affect the safety of urban transport in Moldova include:

- The slow introduction of urban road safety improvements. Implementation is not primarily constrained by lack of knowledge but by lack of commitment and inadequate institutional capacity and funding.
- 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.

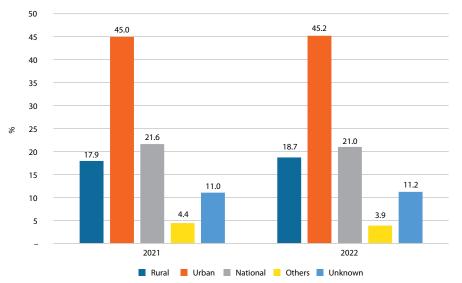
Despite large investments in the urban road network, there are many deficiencies due to the lack of road design standards in urban areas as well as in the urban planning process. Pedestrians in urban areas face difficulties because of poor quality and blocked sidewalks and ramps, signal phasing (short phases), inaccessible underground passages, and aggressive drivers who do not respect vulnerable road users.

4.1.2. Urban transport and mobility

According to the road crash statistics for 2022, the percentage of crashes between vehicles and pedestrians in urban areas was 45%, which is more than twice as high than in rural areas (18.7%). A further 21.0% of crashes occurred on national roads, which is a similar situation to 2021.

Figure 51





Source: National Public Security Inspectorate, 2022.

³⁹ CEIC Data, <u>www.ceicdata.com/en/indicator/moldova/number-of-registered-vehicles</u>.

- ⁴⁰ SMARTA 2019, https://ruralsharedmobility.eu/wp-content/uploads/2019/08/SMARTA-IP-Moldova.pdf.
- ⁴¹ www.ipn.md/en/problem-of-parking-spaces-in-chisinau-becomes-more-serious-expert-7967_1037190.html.



In some cases, due to the lack of sidewalks, pedestrians are forced to use the carriageway. Vulnerable road users suffer most from bad infrastructure as road administrators are more focused on accommodating vehicles than other road users.

In urban areas, road categorization is based on the design standards for national roads due to a lack of appropriate road categorization and design guidelines for urban streets. The Law on Roads No. 509 defines the speed limit according to the type of road network and geometric characteristics, but there is no manual which goes into detail on how and where these speed limits are to be applied.

According to the Road Traffic Regulations, the speed limit in urban areas is 50 km per hour. But due to permissive design features and a lack of traffic calming measures, violations of this speed limit is omnipresent. Attempts to limit speeding are dependent on the installation of road signs but in the absence of an effective enforcement system, many drivers ignore these signs. As a result, most collisions with pedestrians in the urban environment occur on pedestrian crossings (52.8%).⁴²

Conversely, drivers are constantly complaining about urban traffic jams, poor road conditions and insufficient parking facilities. According to data presented by the police, among the main causes of traffic crashes and traffic jams are:

- Road repair/maintenance works and construction sites.
- A lack of direction signs informing drivers about the direction of travel to certain places or localities. Most streets are also not equipped with road signs with the name of the street and the buildings lack numbering. The lack of these signs reduces the orientation-ability of drivers and, respectively, generates situations with increased risk of crashes.
- Boarding/disembarking of passengers outside stations by maxi-taxi units.
- A lack of signs, markings and signalling at many public transport stops in the city.
- Irregular parking due to a lack of parking space around some newly built areas in the city. Many office buildings, shopping centres and stores do not provide enough parking spaces for employees and residents. As a result, they are forced to park on sidewalks, on the road, in public pedestrian spaces, and in block yards and green areas throughout the working day.
- A lack of daytime parking spaces on city streets also causes irregular parking on the roadway, blocking one to two traffic lanes.

All of these issues seriously reduce traffic capacity on streets as well as at intersections, roundabouts, and major transit arteries in the city and negatively impact on road safety.

In Chisinau, but also in other major cities in Moldova, current transport systems and related infrastructure are dated and present a major concern for mobility. Long commuting times, underserved areas, and the inefficient distribution of the transport network have been identified as the main challenges for citizens concerning the use of public transport. In addition, certain groups living in the outskirts of the city, including people with disabilities, face difficulties when commuting. This has important social and economic costs, and impedes the inclusion of such groups in wider society. As a result, due to the poor public transport system, citizens are switching to private transportation instead.

In recent years, Moldova has seen an increase in the number of private vehicles. Based on this trend, a further increase in the number of vehicles by five to ten percents per year is expected in the next few years. In Chisinau there are currently over 215,000 passenger vehicles. This is equivalent to about 386 cars for every 1,000 inhabitants. In the absence of modernization and reforms, the municipal transport system cannot provide the necessary comfort and mobility to attract users. In combination with the degraded pedestrian infrastructure, this phenomenon determines the constant increase in the number of private cars in the municipality and their intensive use. Despite this, however, the most popular mode of transport in Moldova's two biggest cities, Chisinau, and Balti, is still public transport.

Chisinau has a very good accessibility in terms public transport stops with 90% of the city being within 500 meters walking distance of a public transport stop (in central areas this reduces to up to 250 metres). It is estimated that over 72% of Chisinau residents use public transport every day. Only 16% of residents do not use public transport at all.⁴³

Public transport is provided through trolleybus (390), bus (143), and minibus (743). There is also a functioning railway in the city but trains, some of which also serve the suburbs, are not connected to the rest of the public transport network. Trolleybuses are operated by an independent municipal transport company, RTEC, and buses are operated by another independent municipal transport company, PUA. One route is operated by a private carrier (minibuses).

⁴² National Police Report on accident situation for the period 1 January 2022 – 31 December 2022.

⁴³ Chisinau Municipality, IData survey, 2022 https://newsmaker.md/ro/sondaj-cati-locuitori-ai-municipiului-chisinau-folosesc-transportul-public-si-cati-il-evita/.



There is a similar situation in Balti, the second biggest city in Moldova. City public transport services consist of a network of buses and trolleybuses. Electric public transport is a service of the Department of Trolleybuses Municipal Enterprise with a total number of 53 trolleybuses, including 11 fitted with electric batteries. The length of the electric operating network is 38.6 km². Bus routes are operated by private companies. However, large sections of the public transport fleet are outdated. The average age of the public buses and trolleybuses in Balti is 15 years and some of the trolleybuses are over 30 years. Renewing the bus fleet is a high priority towards creating a greener, more comfortable, and reliable public transport service.

In smaller cities, the public transport system is poorly developed and very limited in terms of its coverage. Usually, the public transport network consists of three to four routes, served by minibuses and managed by private companies.

Pedestrian infrastructure in the urban environment is a legacy from the Soviet era. It is mostly degraded and poorly maintained. In larger cities, it is further affected by car parking on the sidewalks.

Although cities in Moldova have major potential for attracting more cycling, bicycle infrastructure is completely lacking, and to use a bike as a mode of transport is very dangerous. Cyclists are forced to use the existing road infrastructure, but they are not seen as equal participants in traffic, neither by drivers nor by the authorities. Collisions with cyclists in the urban environment are frequent, a fact that presents a strong barrier to people using this as a means of everyday transport. A similar situation is true for other modes of non-motorised transport. Although more and more electric scooters, electric unicycles, and hover boards are appearing in Moldovan cities, they are difficult and dangerous to use due to degraded infrastructure and a lack of road safety.

Inter-urban transport is underdeveloped and is unsatisfactory in terms of safety. It is mostly provided by private companies on a licensed basis.⁴⁴ These companies mostly operate with minibuses, many of which are outdated, uncomfortable and provide limited safety for passengers.

4.1.3. Institutional framework

The Law on Traffic Safety No. 131 expressly establishes the road safety responsibilities of each relevant entity. Article 16 of this law, defines the responsibilities of the local public administration authorities and the Ministry of Internal Affairs (Chapter 3.1.2).

In terms of the Municipality of Chisinau, the Urban Mobility Department of Chisinau City Hall is responsible for road safety and traffic management, sharing these responsibilities with the National Public Security Inspectorate.

Table 23

Institutional responsibilities for traffic management and road safety

Area of responsibility	Municipal Urban Mobility Department	The National Public Security Inspectorate (police)
Infrastructure planning and traffic safety design.	 Construction, reconstruction, repair and maintenance works of streets and road traffic regulation. Road traffic organisation, installation of road signs and markings, parking management. Ensuring road traffic safety. 	 Coordination of road traffic design proposals.
Traffic management	 The electronic road traffic management system managed by Î.M. REI"Lumteh" (traffic lights). GPS tracking of public transport units. 	 Management of the Road Traffic Monitoring Centre (video cameras). "Info Traffic" service – informing drivers about possible traffic jams or traffic restrictions.
Law Enforcement	Not applied	 Traffic violations, penalising drivers, and evacuating cars.

Therefore, the local authorities have responsibility for organising and managing traffic and providing infrastructure but do not have any enforcement capacity, while the police have powers and some capacity but are not responsible for managing urban traffic, only aiding local public authorities.

⁴⁴ Road Transport Code No. 150 of 17 July 2014.

4.1.4. Proposed measures and conclusions

The following key measures and conclusions for the improvement of road safety in the Republic of Moldova are proposed:



LEGISLATION

Activity A6.1: Implement the principles of safe road and street design

- Adapt the legislative framework with regards to the design of roads and streets, traffic signs and signals, road restraint systems (i.e. safety barriers), guidelines on right-of-way protection (i.e. prevention of illegal connections at higher levels of the road network), road work zones (standards and guidelines), speed management in urban areas (introduction of "Zone 30", school zones etc.) and outside urban zones.
- Adopt a national methodology for the preparation of a Sustainable Urban Mobility Plan (SUMP). Share experience on the preparation of the SUMP with municipalities and monitor the implementation of recommended measures.

Activity A6.2: Increase the capacities of local authorities in road safety

Strengthen road safety responsibilities and capacities at the local government level through legal/regulatory reform and providing technical assistance and capacity building training for local authorities.

Activity A6.3: Adopt policies focused on increasing the alternative transport modal share

Introduce policies focused on increasing the alternative transport modal share (public transport, cycling, walking) through the development of safer and more comfortable public transport, and infrastructure for pedestrians and cyclists.

ENFORCEMENT

Activity A6.4: Implement the principles of Vision Zero

Increase capacities and efforts to adapt road infrastructure to urban conditions according to Vision Zero principles: traffic calming interventions, speed reduction, securing pedestrian crossings, protecting vulnerable road users.

Activity A6.5: Monitor road user behaviour

Increase capacities and efforts to implement monitoring of various safety performance indicators (safety belts and child restraint systems, speeding, drink-driving, helmet use, etc.).

EDUCATION

Activity A6.6: Promote community involvement and participation

- Conduct studies and analysis into the needs of different road user groups, especially pedestrians, motorcyclists and cyclists, who should be an important element in local road safety plans.
- Strengthen capacities and cooperation between all local agencies/stakeholders through public consultations with residents and road safety training for different stakeholders.

Activity A6.7: Promote a mobility paradigm shift towards more sustainable mobility

Promote a change to the urban planning paradigm from a focus on private transport/cars to urban mobility planning based on the inverted pyramid of priorities of transport types (where vulnerable road users are prioritised).

TECHNOLOGY

Activity A6.8: Implement ITS technologies on road and traffic management for the urban street network

Implement contemporary ITS equipment, services, and applications in relation to defined strategic and legal objectives. The implementation of modern technologies primarily across the other parts of the network (regional, inter-city and urban roads).





5. CONCLUSIONS

Ensuring the safety of all road users is a paramount concern for every country and the RSPR stands as a comprehensive assessment tool in this critical endeavour. This table encapsulates the results of the Moldova 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 a national road safety action, strategy or policy. More detailed descriptions of RSPR recommendations and follow up activities can be found at the end of each sub-chapter in chapter 3 and 4, providing policymakers with a concrete proposal of activities to be included in a strategic roadmap to address key issues and enhance road safety across the country.

Δετίντο	Time period for the implementation of	Drinritv	Level	el	Institution/s/organization/s responsible for the activity and cooperation	on/s responsible for the cooperation	Evnartad outroma	Connection with
(1411)	activity		National	Local	Responsible	Cooperation		
Pillar 1: Road Safety Management								
Activity 1.1. Better coordinate vertical and horizontal activities undertaken by key road safety stakeholders and strengthen their capacity and integrity.	2024-2025	High	×	×	The Government	NRSC, key road safety- oriented Ministries and local communities	Vertical and horizontal road safety coordination established and operational at both national and local levels, leading to more effective road safety measures.	A1.2, A1.3, A1.9, A4.13
Activity 1.2. Re-establish/empower the National Road Safety Council (NRSC) as the leading body for road safety management to deal with strategic issues and monitor road safety results.	2024-2026* Note: 2026 for local communities' work	High	×	×	The Government	NRSC, key road safety- oriented Ministries and local communities	Enhanced capacity of the NRSC, Executive Bureau, local road safety councils, to address strategic road safety issues and monitor the results of road safety initiatives.	A1.1, A1.3, A1.4, A1.8, A3.1
Activity 1.3. Set specific and measurable targets within the national road safety strategy and action plan.	2024-2026	High	×	×	NRSC	All road safety-oriented ministries and key road safety stakeholders at National/local level	National Road Traffic Safety Strategy and accompanying Action Plan with clear and measurable targets officially adopted to guide efforts and evaluate progress effectively.	A1.1, A1.2, A1,3, A1.5, A1.7, A1.8, A1.9, A2.6
Activity 1.4. Enable stabile and sustainable funding sources for road safety.	2024-2027	High	×	×	The Government - Ministry of finance / Economy / Transport	Financial institutions and road safety-oriented ministries and key road safety stakeholders at National/local level	Stable and sustainable mechanism for funding of road safety activities established and operational.	A1.2, A5.1, A3.6
Activity 1.5. Perform a regular review of Key Performance Indicators (KPIs), using them to monitor progress and evaluate the impact of road safety activities undertaken, including enforcement.	2024- (Permanent activity)	High	×	×	NRSC	MIA /Traffic Police, Academia/Institutes, experts in road safety, NGO, etc.	KPls collected and used for monitoring and evaluation of activities undertaken / enforcement.	A1.2, A1.3, A1.6, A1.7, A6.5

Activity	Time period for the implementation of	Priority	Level	el	Institution/s/organizati activity and	lnstitution/s/organization/s responsible for the activity and cooperation	Expected outcome	Connection with
(mma)	activity	ĺ	National	Local	Responsible	Cooperation		
Activity 1.6. Improve and evaluate the effectiveness of enforcement efforts.	2024-2025	High	×	×	MIA & NRSC	MoT, MoE, road safety researchers	Enforcement efforts evaluated and guided based on data (data-led policing).	A1.5, A1.11, A2.5, A2.8, A3.4, A3.5, A4.2, A4.6, A4.8, A4.16, A6.1
Activity 1.7. Use road traffic safety campaigns in coordination with enforcement to raise awareness of risky road user behaviour.	2024- (Permanent activity))	High	×	×	NRSC	MIA and other key road safety- oriented ministries and key road safety stakeholders at National/local level.	Key risky behaviours covered by campaigns as support to enforcement.	A1.3, A1.5, A3.12, A4.10, A6.6
Activity 1.8. Establish and implement a national road safety research program in the field of road safety.	2024- (Permanent activity))	Middle	×		NRSC & Ministry of Education and Research	Academia (UTM, USMF) and key road safety stakeholders.	National road safety research program in place and operational (working).	A1.2, A1.3, A1.10, A2.9, A.11, A4.12, A6.1, A6.3, A6.4
Activity 1.9. Strengthen/improve knowledge transfer, knowledge sharing and collaboration among road safety stakeholders at local, national, and international levels.	2024 - (Permanent activity))	High	×	×	NRSC	Academia (UTM, USMF), key road safety stakeholders, international organizations.	Knowledge transfer and sharing at national/regional/local levels improved.	A1.1, A1.3, A2.10, A3.11, A4.11, A4.13, A6.2
Activity 1.10. Research, analyse and make use of information around the socio-economic costs of road crashes.	2024	Middle	×		NRSC	Academia, institutes, NGO.	Socio-economic costs of crashes known and used in C/B analysis.	A1.8.
Activity 1.11. Improve existing crash database in accordance with CADaS (Common Accident Data Set) protocol recommendations.	2024-2026	High	×		MIA / Traffic Police	If needed MIRD — Road Administration for road reference system as part of CADaS.	Improved crash database with CADaS variables implemented.	A1.5, A5.7.
Activity 1.12. Implement the use of Intelligent Transportation Systems (ITS) to improve road safety, optimize traffic flows and reduce congestion.	2024-2027	Middle	×		MoIRD – Road Administration / MIA	Key road safety stakeholders	ITS for improvement of road safety, optimizing traffic flows and reducing congestion in place.	A2.3, A2.7, A2.12, A2.13, A2.14, A4.15, A6.8

Artivitv	Time period for the implementation of	Prinrity	Level	e	Institution/s/organizati activity and	lnstitution/s/organization/s responsible for the activity and cooperation	Evnerted outrome	Connection with
(many)	activity		National	Local	Responsible	Cooperation		
Pillar 2: Safe Roads								
Activity 2.1. Improve the legal framework of Moldova in terms of road infrastructure safety management.	2023-2025	High	×		The Government	NRSC, key road safety- oriented institutions	Improvement of the legal framework of Moldova in terms of road infrastructure safety management (missing RISM tools).	A3.1, A4.1, A6.1, A6.3, A6.8
Activity 2.2. Improve the legal framework and standards for safe road design and road protection.	2023-2025	High	×		The Government	NRSC, key road safety- oriented institutions	Improvement of the legal framework and standards for safe road design and road protection.	A1.1, A5.1, A6.1, A6.3, A6.8
Activity 2.3. Legal aspects of ITS and tunnel safety should be incorporated within national laws.	2023-2025	High	Х		The Government	NRSC, key road safety- oriented institutions	National laws with ITS and tunnel safety legal aspects incorporated.	A1.12, A6.1, A6.8
Activity 2.4. Supervision of the implementation of RISM tools, ITS and tunnel safety measures.	2023-2028	Middle	×		NRSC	All road safety-oriented ministries and key road safety stakeholders at National/local level	RISM tools, ITS and tunnel safety measures efficiently implemented.	A1.9, A1.10, A1.12
Activity 2.5. Improve law enforcement in road work zones.	2023-2028	Middle	×	×	NRSC	All road safety-oriented ministries and key road safety stakeholders at National/local level	Increasing the compliance with traffic control regulations. Improve work zone design and integrate automated law enforcement methods.	A1.6
Activity 2.6. Increase implementation of RISM tools and procedures in accordance with the Road Safety Strategy.	2023-2028	Middle	×	×	NRSC	All road safety-oriented ministries and key road safety stakeholders at National/local level	Deployment of selected enforcement infrastructure, services and applications within Moldovas' road network, in accordance with the methodology.	A1.3
Activity 2.7. Develop a framework for ITS architecture in terms of enforcement in Moldova.	2023-2028	Middle	~	×	NRSC	All road safety-oriented ministries and key road safety stakeholders at National/local level	Inclusion of ITS in strategies and action plans in the road sector in Moldova and integration of ITS technologies in line with the European Union integration framework.	A1.12, A6.8

<u>Artivity</u>	Time period for the implementation of	Prinritv	Level	e	Institution/s/organization/s responsible for the activity and cooperation	on/s responsible for the cooperation	Evnerted outrome	Connection with
(activity		National	Local	Responsible	Cooperation		
Activity 2.8. Enforcement of road safety audits and inspection as permanent procedures.	2023-2028	Middle	×	×	NRSC	All road safety-oriented ministries and key road safety stakeholders at National/local level	Improve national legislation to introduce mandatory certification (licensing) of legal entities/ individuals involved in training/ certification of auditors and inspectors.	A1.6, A6.1.
Activity 2.9. Development of training materials and guidelines for safe road design and construction.	2023-2025	High	×		NRSC & Ministry of Education and Research	Academia, institutes, NGO	Increase the professional capacity and knowledge of local experts and technical staff of the entities/administrative districts responsible for road construction, design, and road safety enforcement.	A1.8, A4.5, A4.9, A6.2.
Activity 2.10. Implement training for entities/administrative districts responsible for road construction, design, and road safety enforcement.	2023-2025	High	×	×	NRSC & Ministry of Education and Research	Academia (UTM), key road safety stakeholders, international organizations.	Increase the professional capacity and knowledge of local experts and technical staff of the entities/administrative districts responsible for road construction, design, and road safety enforcement.	A1.9, A2.9
Activity 2.11. Exchange best practices from the European Union.	2023-2030	Middle	×	×	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, international organizations.	Adopt best practices in road safety and road safety management from European Union Member States.	A1.8, A4.10
Activity 2.12. Implementation of ITS technologies on the tentative Core and Comprehensive Road network.	2023-2030	High	~	~	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, private sector, international organizations.	Implementation of ITS technologies for national network management to provide more efficient road and traffic management.	A1.12, A6.8
Activity 2.13. Implement a Road Weather Information System (RWIS) on major road links.	2023-2025	High	×	×	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, international organizations.	Traffic on the road network managed by the information gathered through RWIS.	A1.10, A1.12

Activity	Time period for the implementation of	Priority	Level	6	Institution/s/organization/s respons activity and cooperation	lnstitution/s/organization/s responsible for the activity and cooperation	Expected outcome	Connection with
(conserved)	activity		National	Local	Responsible	Cooperation		
Activity 2.14. Develop and introduce ITS technology for better traffic management dedicated to the improvement of RISM.	2023-2030	High	×	×	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, international organizations.	Introduce specific technology (variable message signs; Road Weather Information Systems, etc.) that can be used within RISM procedures.	A1.11, A1.12, A2.1, A2.4
Activity 2.15. Development of a database for road safety infrastructure management tools (Network Safety Management).	2023-2030	High	~	×	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, international organizations.	Establishing an authority responsible for database development and developing a procedure for data collection and analysis.	A1.11, A1.12
Pillar 3: Safe Vehicles								
Activity 3.1. Amend existing legislation and adopt a national legislative framework covering primary and secondary levels in order to clearly define, by separate laws, the administrative and technical conditions for safer vehicles.	2024-2026	High	×		Ministry of Infrastructure and Regional Development National Road Safety Council	Ministry of Internal Affairs Ministry of Agriculture and Food Industry	Adopt clear and separate national legislation for vehicle approval, vehicle PTI and equipment and parts approval.	A1.2, A2.1, A3.2, A3.3, A3.4, A3.7, A3.8, A3.10, A3.14, A4.1
Activity 3.2. Fully transpose into national legislation prescriptions of the UN regulatory framework and the EU regulatory framework.	2024-2028	High	×		Ministry of Infrastructure and Regional Development National Road Safety Council	Ministry of Internal Affairs Ministry of Agriculture and Food Industry	UN and EU Regulation to be used for granting national vehicle individual and type approval and for PTI	A3.1, A3.3, A3.4, A3.8, A3.10, A3.14, A3.15, A4.5
Activity 3.3. Designate national authorities responsible for vehicle approval and market sur veillance. Establish the funding sources for its operationalization.	2024-2025	High	~		Ministry of Infrastructure and Regional Development National Road Safety Council	Ministry of Agriculture and Food Industry	Designation and operationalization of the authorities for vehicle approval and market surveillance	A3:1, A3.2, A3.4
Activity 3.4. Define the administrative and capability conditions for the designated Technical Services conducting inspections and tests related to the conformity of the vehicles.	2024-2025	Нір	×		Ministry of Infrastructure and Regional Development National Road Safety Council	Ministry of Internal Affairs Ministry of Agriculture and Food Industry	Greate a legal system for the designation of TS by assessing their capability using QMS (personnel, facilities and knowledge) as ISO 17025 and ISO 17020.	A3.1, A3.2, A3.3, A3.11

Artivity	Time period for the imnlementation of	Priority	Level	/el	Institution/s/organization/s responsible for the activity and cooperation	pn/s responsible for the cooperation	Evnerted outrome	Connection with
(construction)	activity		National	Local	Responsible	Cooperation		
Activity 3.5. Introduce an effective penalty scheme for noncompliance with the specified vehicle requirements.	2026-2028	Middle	×		Ministry of Infrastructure and Regional Development National Road Safety Council	Ministry of Internal Affairs Ministry of Agriculture and Food Industry	Penalties (fines) to be established for noncompliant vehicles, components, and parts placed on the national market.	A3.1, A3.3, A3.6, A3.8, A3.9
Activity 3.6. National vehicle approval and market surveillance authorities must be sustainably budgeted for to maintain their capacity and functionality.	2024-2025	High	×		Ministry of Infrastructure and Regional Development.		Authorities to be correctly allocated regarding personnel and their capability to assess vehicles. Performance indicators to be implemented at the operational level.	A1.4, A3.1, A3.3, A3.4
Activity 3.7. Interconnect and synchronize the tasks of the vehicle registration authority, the vehicle approval authority, the technical inspection centres, and the market surveillance authority.	2024-2026	High	×		Ministry of Infrastructure and Regional Development Public Services Agency	Ministry of Internal Affairs	Adopt a unique national document which shows the approval of the vehicle, used as basis for vehicle registration.	A3.1, A3.8, A3.10
Activity 3.8. Extend and develop the technical requirements and capability for roadside inspections.	2024-2027	High	×		Ministry of Internal Affairs		Increase the number and capability of roadside check mobile laboratories.	A3.4, A3.11, A3.14
Activity 3.9. The authorization of vehicle inspection centres and repair workshops must be based on initial, on-site audits and supervision.	2024-2027	High	×		Ministry of Infrastructure and Regional Development		The assessment of the inspection centres to be based on initial, supervised, on-site audits.	A3.1, A3.2, A3.10, A3.11,
Activity 3.10. Adapt the frequency of periodic inspections according to vehicle age and establish an owner information system regarding the expiration date of the certificate.	2024-2027	High	×		Ministry of Infrastructure and Regional Development National Road Safety Council	Ministry of Internal Affairs Ministry of Agriculture and Food Industry	Adapt PTI frequency according to the UN 1997 Agreement Rules. Supplementary, older vehicles to be inspected more often.	A3.1, A3.2, A3.7, A3.14
Activity 3.11. The training programs for auditors and inspectors from designated authorities, technical services and inspection centres must be continually updated and improved.	2024-2028	Middle	×		Ministry of Infrastructure and Regional Development Ministry of Education and Research		Staff involved in the evaluation and authorization of inspection centres should participate in the development of the training curricula.	A1.9, A3.1, A3.2, A3.8, A3.9, A4.11

Activity	Time period for the implementation of	Prinritv	Level		Institution/s/organization/s responsible for the activity and cooperation	n/s responsible for the ooperation	Exnected outcome	Connection with
	activity		National	Local	Responsible	Cooperation		
Activity 3.12. Organize and conduct public awareness campaigns on the benefits of using safer vehicles.	2024-2028	Middle	×		Ministry of Infrastructure and Regional Development Ministry of Internal Affairs		Vehicle users must be aware of the advantages of using safe, approved vehicles.	A1.7, A3.1, A3.2, A3.7, A3.10, A4.4, A4.10
Activity 3.13. Develop IT portals and specific applications that help vehicle users receive information about technical inspection validity, odometer and other vehicle safety history data.	2024-2028	Middle	×		Ministry of Infrastructure and Regional Development Ministry of Internal Affairs	Public Services Agency	Improved vehicle safety by reminding users about PTI expiration dates, including the history of odometer indications.	A3.7, A3.10, A3.12.
Activity 3.14. Support the use of complementary methods for the assessment of roadworthiness during the technical inspection using the electronic interfaces installed on vehicles (OBD II).	2024-2026	High	×		Ministry of Infrastructure and Regional Development	Ministry of Education and Research	Increased confidence in PTI results by using information provided by OBD II.	A3.1, A3.2, A3.11
Activity 3.15. Support the registration of new vehicles which comply with the latest safety regulations and installed. ADAS technologies (Advanced Driving Assistance Systems) installed.	2024-2028	High	×		Ministry of Infrastructure and Regional Development	Public Services Agency Ministry of Internal Affairs	Increased support and incentives for vehicles equipped with Advanced Driving Assistance Systems.	A3.12
Pillar 4: Safer Road Users								
Activity 4. 1. Development/update of the Law on Traffic Safety.	2024-2025	High	×		Relevant Members of the National Road Safety Council	MIA Public Services Agency	Highway Code developed as a single normative act. Legal framework for the use of electric scooters in the territory of the Republic of Moldova updated.	A2.1, A.3.1, A4.2, A5.1, A6.4, A6.3, A6.1
Activity 4. 2. Revise sanctions for non-use of safety belts or child restraints, as well as sanctions for pedestrians breaking the road traffic regulations.	2024-2025	High	×		MIA Ministry of Justice	Public Services Agency National Probation Inspectorate	Revised sanctions for non-use of safety belts or child restraints, driving a vehicle with an expired driver's license, violations committed by pedestrians/ cyclists/scooters (with a separate Article developed covering pendities for pedestrians). Revision of the Article on the use of reflective elements by pedestrians and cart users.	A1.6, A4.1, A6.4

Activity	Time period for the implementation of	Priority	Level	le	Institution/s/organization/s responsible for the activity and cooperation	on/s responsible for the cooperation	Fxnerted outcome	Connection with
(conserved)	activity		National	Local	Responsible	Cooperation		
Activity 4.3. Differentiate the permissible level of blood and exhaled alcohol content depending on the experience of the driver or the type of vehicle.	2024-2026	Middle	~		MIA Ministry of Justice	Prosecutor office National Probation Inspectorate Public Services Agency Ministry of Health	For novice drivers (up to two or three years) the admissible norm for contravention sanctioning should be reduced from 0.15 to 0 BAC. The same norm should be introduced for professional drivers (truck drivers, taxi drivers).	A6.4
Activity 4.4. Improve occupational road safety and introduce road safety policies for all car fleets at a national level.	2024-2026	Middle	~		MIA Ministry of Labour and Social Protection	Relevant Members of the NRSC Private/business sector NGOs International partners Transport Companies and Agencies LPA	Occupational road safety and road safety policies with improved control, enforcement and incentive programs in all car fleets at a national level introduced. A national level introduced. A national competition (e.g. under the auspices of the Government) on the best road safety policy implementation among fleets could be	A5.8, A3.8, A3.12
Activity 4.5. Improve national policies to inter-connection with the norms, standards, and needs of persons with disabilities or low mobility.	2024-2025	High	×		Ministry of Labour and Social Protection MIA	NRSC Disability organizations NGOs International partners Private sector LPA	Road Regulations and relevant Articles amended, taking into account the needs of people with disabilities, obligations for the local public administrations and other compulsory measures by the LPAs related to the needs of people with low mobility and disabilities.	A2.9, A3.2, A4.15, A5.2, A5.3, A6.1, A6.4, A6.7
Activity 4.6. Digitalize the processes of documenting road traffic violations.	2024-2030	High	×		MIA E-Governance Agency Information Technology Service and Cyber Security	Ministry of Justice	Legislative mechanism regarding the automated road traffic surveillance system "Traffic Control" updated. Transition to electronic documentation of offenses using a special application.	A1.6, A6.5.

Activity	Time period for the implementation of	Drinritu	Level	e	lnstitution/s/organization/s responsible for the activity and cooperation	on/s responsible for the cooperation	Evnerted outrome	Connection with
	activity	() 1011	National	Local	Responsible	Cooperation		
Activity 4.7. Intensify the documentation of deviations from provisions within the Road Regulations, including through the use of new methodologies and equipment.	2024-2028	Middle	×		MIA, Ministry of Justice	NRSC State agencies Private sector international partners	Equipment upgraded (use of car-trap, drones, tablets, laptops for issuing electronic Verbal Protocol).	A6.5
Activity 4.8. Establish a cooperation/verification mechanism jointly with the Customs Service for cars with foreign registration plates.	2024-2026	Middle	×		MIA	Customs Service Public Services Agency	Agreement on cooperation and development of an action plan between the police and customs service on the creation of a mechanism for monitoring and exchanging information. Unique guidelines/instructions developed.	A1.6
Activity 4.9. Speed management treatments in urban and rural areas, measures for the safety of vulnerable road users.	2024-2025	High	×	×	State Chancellery LPA	MIA MIRD SRA Private sector	Implementation of safety measures for vulnerable road users on a national level involving private and civil society sectors. Taffic calming measures in urban and rural areas; 30 km/h policy implemented around schools and other educational institutions, hospitals and historic central zones at local levels.	A2.9, 4.10, A4.15, A6.4, A6.2, A6.1
Activity 4.10. Carrying out public awareness activities in line with enforcement on a national level.	2024-2030	High	×	×	National Road Safety Council (esp. MIA, MER)	Private and civil society sectors Mass media	Periodic public awareness activities in line with enforcement, especially targeting the most vulnerable road users.	A1.7, A2.11, A3.12, A4.9, A4.11, A4.12, A4.13, A6.4, A6.6
Activity 4.11. Capacity building and extensive training for teachers, educators and police inspectors on road safety topics.	2024-2025	High	×	×	Ministry of Education and Research MIA	LPA NGOs Local Police USMF	Improved local knowledge and local cooperation strengthened. A national/local road safety training program/centre established.	A1.9, A3.8, A3.11, A4.10, A5.4, A6.2, A6.6

Archivitry	Time period for the implementation of	Drinvitu	Level	e	lnstitution/s/organization/s responsible for the activity and cooperation	on/s responsible for the cooperation	Evnerted outrome	Connection with
(1441)	activity		National	Local	Responsible	Cooperation		
Activity 4.12. Review the national curricula on road safety education including for higher education institutions.	2024-2025	Hgh	~	×	Ministry of Education and Research	MIA National Road Safety Council Schools Academia UMT, USME) UPA NGOs driving schools international partners	Extra-curricular policy and plan of activities to improve road safety behaviour for different age categories. A toolkit or guide for teachers, mentors and educators. Academic programs on road safety management, road safety use and behaviours, established partnerships with international organizations, road safety experts, NGOs, and academic institutions.	A1.8, A4.11, A4.10, A5.5
Activity 4.13. Develop partnerships between national and local stakeholders to promote road safety as a national culture and improve law enforcement.	2024-2030	High	×	×	National Road Safety Council	LPA Private sector Insurance companies Civil society and NGOs International organizations and partners	Partnerships between national and local stakeholders such as the police, local government, private community groups. Best practice sharing at local, national and international levels.	A1.1, A1.9, A4.10, A4.14, A6.4, A6.6
Activity 4.14. Adjustment of the ROSSOFT database (official contravention record system) and improve/ establish interconnection with the courts portal.	2024-2027	High	×		MIA	Ministry of Justice E-Governance Agency Service Cyber Security Superior Council of Magistrates	Provision of investigative agents with special equipment for the verification of drivers' previous violations. Support for the implementation of the penalty points system (differentiated system for habitual offenders).	A4.13
Activity 4.15. Promote the use of Intelligent Transport Systems and equipment.	2024-2027	Middle	×	×	Ministry of Infrastructure and Regional Development, MIA	Public Services Agency LPA	Instalment of smart traffic lights, speed sensors, weight in-motion, as well as sound and navigation systems for persons with disabilities and low mobility, bike sharing systems, etc.	A1.12, A2.4, A4.5, A4.9
Activity 4.16. Develop an application for public use that enables searching for violations found by the"Traffic Control" system and the penalty points applied.	2024-2025	High	×		E-Governance Agency	Information Technology Service and Cyber Security MIA Ministry of Justice	Application for public use with the aim of enabling the searching of violations and penalty points applied developed & implemented.	A1.6, A6.5

A stirition	Time period for the	Drintity	Level	<u></u>	Institution/s/organizati activity and	Institution/s/organization/s responsible for the activity and cooperation	Evnorted outcome	Connoction with
ANUNA	activity	r IIUILY	National	Local	Responsible	Cooperation		
Pillar 5: Post-crash Response								
Activity 5.1 Implement a mechanism of direct investment in road safety by insurance companies.	2024-2025	High	×		State Chancellery. National Bank of Moldova.	Ministry of Infrastructure and Regional Development. Ministry of Internal Affairs. Insurance Companies.	Modified Law. Increased budget to improve road safety (infrastructure, equipment, rehabilitation). Improved road safety education and awareness campaigns.	A1.4 A2.2, A4. 1, A5.3, A5.6
Activity 5.2. Implement an incentive mechanism for employers regarding the employment of disabled road traffic victims.	2024-2025	High	×	×	Ministry of Labour and Social Protection. Ministry of Health.	Governmental organizations. Private sector.	Disabled victims could be employed. Employers could hire disabled victims.	A4.5 A5.3.
Activity 5.3. Create centres and programs for the rehabilitation of road traffic victims.	2024-2025	High	Х	×	Ministry of Labour and Social Protection. Ministry of Health	Private sector. Donors.	Centres created. Victims rehabilitated.	A4.5 A5.1, A5.2
Activity 5.4. Train police officers in providing medical first aid.	2024-2025	Middle	×	×	Ministry of Internal Affairs. Ministry of Health.		Improving the ability of police officers to provide first aid (reducing the time of providing first aid at the scene; reduction in the number of deaths.)	A4.11, A5.5, A.5.6, A5.9
Activity 5.5. Organize free additional courses for drivers as well as increasing the number of medical first aid training hours during courses for drivers.	2024-2025	Middle	×	×	Ministry of Education and Research. Ministry of Health.	Driving Schools.	Improving the ability of drivers to provide first aid (reducing the time of providing first aid at the scene; reduction in the number of deaths.)	A4.12 A5.4, A5.6
Activity 5.6. Train ambulance drivers in the provision of medical first aid.	2024-2025	Middle	×	×	Ministry of Health.		Improving the ability of ambulance drivers to provide first aid (improving the capacity of ambulance teams to provide first aid.)	A5.1, A5.4, A5.5.
Activity 5.7. Implement information systems to ensure the interconnection of the Road Accident Register of the MIA and the 112 Service.	2024-2025	Middle	×		Ministry of Internal Affairs. 112 Service.	Ministry of Health.	Improved data accuracy. Improved collaboration and information sharing.	A1.11

Artivity	Time period for the implementation of	Prinrity	Level	el	Institution/s/organizati activity and	lnstitution/s/organization/s responsible for the activity and cooperation	Evnerted outrome	Connection with
	activity		National	Local	Responsible	Cooperation		
Activity 5.8. Modernize the ambulance fleet.	2024-2025	High	×	×	Ministry of Health.	Donors.	Improving the capacity of ambulance teams to provide first aid (decreasing response time; increasing the quality of first aid; reduction in the number of deaths)	A4.4
Activity 5.9. Equip police crews with first aid kits.	2024-2025	Middle	×	×	Ministry of Internal Affairs.	Ministry of Health Donors.	Improving the capacity of police teams to provide first aid (reduction in the number of deaths)	A5.4
Pillar 6: Safe urban mobility								
Activity 6.1. Implement the principles of safe road and street design.	2023-2030	Hgh	×	~	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, international organizations.	Adapt the legislative framework around the design of roads and streets, traffic signs and signals, road restraint systems (i.e. safety barriers), guidelines on right-of- way protection (i.e. prevention of illegal connections at higher levels of the road network), road work zones (standards and guidelines), speed management in urban areas (introduction of "Zone 30", school zones etc.) and outside urban zones.	A1.1, A1.8, A2.1, A2.2, A2.3, A2.8, A3.1, A4.1, A4.5, A4.9
Activity 6.2. Increase the capacities of local authorities in road safety.	2023-2030	НдН	×	×	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, international organizations.	Strengthened road safety responsibilities and capacities at the local government level through legal/regulatory reform and providing technical assistance and capacity building training for local authorities.	A1.1, A1.9, A2.9, A4.9, A4.11
Activity 6.3. Adopt policies focused on increasing the alternative transport modal share.	2023-2030	High	×	~	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, international organizations.	Policies focused on increasing the alternative transport modal share (public transport, cycling, walking) through the development of safer and more comfortable public transport, and infrastructure for pedestrians and cyclists should be developed.	A1.8, A2.1 A.2.2, A4.1.

Δ. crivitv	Time period for the implementation of	Drinrity	Level	el	Institution/s/organizati activity and	lnstitution/s/organization/s responsible for the activity and cooperation	Evnerted outrome	Connection with
(many	activity	(National	Local	Responsible	Cooperation		
Activity 6.4. Implement the principles of Vision Zero.	2023-2030	High	×	×	The Government	Academia (UTM), key road safety stakeholders, international organizations.	Increased capacities and efforts to adapt road infrastructure to urban conditions according to Vision Zero principles: traffic calming interventions, speed reduction, securing pedestrian crossings, protecting vulnerable road users.	A1.8, A2.1, A2.2, A4.1, A4.2, A4.3, A4.5, A4.9, A4.10, A4.13
Activity 6.5. Monitor road user behaviour.	2023-2030	Middle	×		NRSC, MIRD — Road Administration / MIA	Academia (UTM), key road safety stakeholders, international organizations.	Increased capacities and efforts to implement monitoring of various safety performance indicators (safety belts and child restraint systems, speeding, drink-driving, helmet use, aggressive driving, pedestrians, etc.).	A1.5, A4.6, A4.7, A4.16
Activity 6.6. Promote community involvement and participation.	2023-2030	Middle	×	×	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, intermational organizations, business companies.	Strengthened capacities and better cooperation between all local agencies/stakeholders, through public consultations with residents and road safety training for different stakeholders.	A1.7, A4.10, A4.11, A4.13
Activity 6.7. Promote a mobility paradigm-shift towards more sustainable mobility.	2023-2030	Middle	×	×	The Government	NRSC, Road Administration Academia (UTM), key road safety stakeholders, international organizations, private sector.	Changes to the urban planning paradigm from a focus on private transport/cars to urban mobility planning based on the inverted pyramid of priorities of transport types (where vulnerable road users are prioritised).	All the activities
Activity 6.8. Implement ITS technologies on road and traffic management for the urban street network.	2023-2030	High	×	×	NRSC, MIRD – Road Administration / MIA	Academia (UTM), key road safety stakeholders, international organizations.	Implementation of contemporary ITS equipment, services, and applications in relation to defined strategic and legal objectives. Implementation of modern technologies primarily across the other parts of the network (regional, inter-city and urban roads).	A1.12, A2.1, A2.2, A2.12

6. ANNEX - Safe vehicles

This Appendix contains examples of the processes referred to in the chapter on Safe Vehicles.

Table 24 Vehicle registration process

Activity	Vehicle Registration
Legislation	Parliament. Law No.131/2007 Government Decision No.1047/1999
Enforcement / Surveillance	MIA PSA MD, MAFI
Education / Training	MIA
Documents / Issued by	Registration certificate / PSA
Technology / Process	Annex 2, Government Decision No.1047/1999 – National Register "Automobilul"
Technical Compliance proof	PTI Report Vehicle Identification Report Technical Expertise Retrofitting Accept

Table 25

National process for single unit vehicle approval

Activity	Single unit manufactured, modified, completed or retrofitted vehicle national approval
Legislation	Parliament Law No.131/2007 Parliament Code No.150/2014 Government Decision No.1047/1999 Government Decision No.415/2003
Enforcement / Surveillance	NPSI, NRTA, PSA
Education / Training	TCSO, NRTA, AC-TP
Documents / Issued by	Vehicle project, Technical conformity document / TCSO Initial accept, Technical examination document, Verbal process for technical inspection / NPSI Manufacturing confirmation / AC-VR/M
Technology / Process	Art.38, 39 from Parliament Law No.131/2007 Art.104, 109 from Parliament Code No.150/2014 Annex 2, art.25, 37 from Government Decision. No.1047/1999 Chapter IV(15), V from Government Decision No.415/2003
International Regulatory Support	Unidentified Proposed reference: Regulations annexed to the UN 1958 Agreement; EU Regulation 2018/858

Table 26

National Type Approval of new vehicles

Activity	National Type Approval of new vehicles manufactured or imported in Moldova
Legislation	Parliament Law No.131/2007 Government Decision No.415/2003
Enforcement / Surveillance	NPSI, NRTA
Education / Training	MIRD
Documents / Issued by	Do not exist
Technology / Process	Art. 38, 39 from Parliament Law No.131/2007 Chapter IV from Government Decision No. 415/2003
International Regulatory Support	Unidentified Proposed reference: Regulations annexed to the UN 1958 Agreement, EU Framework Regulations

Table 27

UN Type Approval

Activity	UN Type Approvalof new vehicles, components, equipment and parts manufactured in Moldova or abroad.
	Parliament Law No.111/2016
Legislation	Art.38(2) from Parliament Law No.131/2007
Legislation	Art.104 from Parliament Code No.150/2014
	Chapter IV from Government Decision No.415/2003
Enforcement/ Surveillance	MIRD
Education / Training	MIRD
Documents / Issued by	Do not exist
	No notification to the UN regarding the type approval authority or the technical services
	Schedule 3 of the UN 1958 Agreement rev.3
Technology / Process	Art.38 (2) from Parliament Law No.131/2007
Technology / Flocess	Art.104 from Parliament Code No.150/2014
	Chapter IV from Government Decision No.415/2003
International Regulatory Support	Unidentified
······································	Proposed reference: Regulations annexed to the UN 1958 Agreement

Table 28

Periodic Technical Inspection process

Activity	Periodic Technical Inspection
	Parliament Law No. 131/2007
	Parliament Code No. 150/2014
Legislation	Government Decision No. 1047/1999
	Government Decision No. 415/2003
	Government Decision No. 357/2009
Enforcement / Surveillance	NRTA, NPSI, NIM
Education / Training	NRTA, AC-TP
Documents / Issued by	PTI Report, badge/ AC-PTI, Intehagro, MD
	Annex 1 of Annex 3 from Government Decision No. 1047/1999
Technology / Process	Title V, chapter 6 from Parliament Code No. 150/2014
	Art. 40 - 42 from Parliament Law No. 131/2007
International Regulatory Support	Unidentified Proposed reference: Rules annexed to the UN 1997 Agreement

Table 29

Roadside Technical inspection process

Activity	Roadside Technical Inspection (General Conditions)	Roadside Technical Inspection (ADR and T&SLD)
Legislation	Government Decision No. 357/2009 Government Decision No. 415/2003	Parliament Code No. 150/2014 Government Decision No. 589/2017
Enforcement / Surveillance	NPSI	NRTA
Education / Training	MIA	NRTA, AC-TP
Documents / Issued by	Verbal process / NPSI	Verbal process / NRTA
Technology / Process	Section 18, Government Decision No. 357/2009 Section VI, Art.28 Government Decision No. 415/2003	Title VIII, Parliament Code No.150/2014 Annex 1, art 40(3), Section V Government Decision No. 589/2017
International Regulatory Support	Unidentified Proposed reference: EU Directive 2014/47	Prescriptions of the UN AETR and ADR Agreements

Table 30

Installation and inspection of tachographs and speed limiter devices process

Activity	Installation and inspection of tachographs and speed limiter devices
Legislation	Parliament Code No. 150/2014 Government Decision No. 475/2016
Enforcement / Surveillance	NPSI, NRTA
Education / Training	AC-TP, NRTA
Documents / Issued by	Compliance document, warranty document/AC-TSL, NRTA
Technology / Process	Section II, paragraph 3 and paragraph 4 Government Decision No. 475/2016 Title V, chapter 4, Parliament Code No. 150/2014
International Regulatory Support	Prescriptions of the UN AETR Agreement, UN Regulation No. 89, EU Regulation 165/2014

Table 31

Bus and Coach classification process

Activity	Bus and coach classification with regards to comfort criteria
Legislation	Parliament Code No.150/2014 Government Decision No. 854/2006 MIRD Decision No. 355/2019
Enforcement / Surveillance	NRTA, NPSI
Education / Training	NRTA, AC-TP
Documents / Issued by	Classification certificate /AC-BCC, NRTA
Technology / Process	Annex 1, from MIRD.D. No. 355/2019
International Regulatory Support	Unidentified Proposed reference: IRU classification regulation for buses and coaches UN Regulation No.107

Table 32

Approval and inspection of ADR vehicles

Activity	Approval and inspection of ADR vehicles
Legislation	Parliament Code No. 150/2014 Government Decision No. 589/2017
Enforcement / Surveillance	NRTA, NPSI
Education / Training	AC-TP, NRTA
Documents / Issued by	ADR certificate (approval/inspection) / AC-ADRI, NRTA
Technology / Process	Annex 1 from Parliament Code No. 150/2014 Annex B, Part 9 from UN ADR Agreement
International Regulatory Support	Prescriptions of the UN ADR Agreement Proposed reference: UN Regulation No. 105

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Road Safety Performance Review Moldova 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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