

# ROAD SAFETY REGIONAL PROFILE



## EASTERN PARTNERSHIP COUNTRIES







**ARM** 



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Please refer to this Report as follows: World Bank, Road Safety Regional Profile—EaP, 2021.



## EASTERN PARTNERSHIP (Eap) ROAD SAFETY REGIONAL PROFILE 2021 MDA AZE **UKR** TABLE OF CONTENTS SNAPSHOT OF KEY ROAD SAFETY INDICATORS 4 DETAILED ROAD SAFETY STATUS IN THE EAP REGION 5 General Road Safety Positioning (in comparison with EU Countries) Road Crash Fatalities and Injuries Analysis Economic and Social Cost of Road Crashes. Fatalities and Injuries Data Discrepancy of Road Crashes Fatalities and Injuries Data in the EaP Region PILLAR 1 ROAD SAFETY MANAGEMENT 10 Institutional Framework of Road Safety Road Crash Data Collection System PILLAR 2 SAFER ROADS AND ROADSIDES 11 Road Infrastructure Safety Assessment Performance Road Safety Infrastructure Investments PILLAR 3 SAFER SPEEDS 14 Speed Limits and Comparison with Safe System Speed Limits Speed Calming Infrastructure PILLAR 4 SAFER VEHICLES 15 Vehicle Population and Distribution Compliance with UN Vehicle Safety Regulations Regulation of Imported Vehicles and Periodic Inspection of Existing Fleet PILLAR 5 SAFER ROAD USERS 16 Seatbelt Usage Motorcycle Helmet Usage Drink Driving and Drug Driving Child Restraint Usage Mobile Phone Usage PILLAR 6 POST-CRASH CARE 19 National Emergency Care Access Number Coverage Trauma Registry System in the EaP Region Other Key Post-Crash Care Indicators









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## SNAPSHOT OF KEY ROAD SAFETY INDICATORS IN THE EAP REGION

Region Population: 27.94 Million People

No. of Road Crashes: 184,296 Road Crashes

Gross Domestic Product (Total): 280.55 Billion US\$

GDP per Capita (Average): 4,472.30 US\$ (Est.)

Cost of Road Crash Fatalities: 1.55 Billion US\$

Cost of Road Crash Serious Injuries: 5.73 Billion US\$ (Est.)

Cost of Road Crashes (% of GDP): 2.6 % of GDP

No. of Registered Vehicles: 23,407,534 Vehicles

Motorization Rate: 343 vehicles/1,000 pop.

No. of Road Crash Fatalities: 5.854 Fatalities

Total No. of Road Crash Injuries: 51,850 Injuries

No. of Road Crash Serious Injuries: 87,810 Serious Inj. (Est.)

Road Crash Fatality Rate: 8.28 per 100,000 pop.

#### Table 1

Summary of Key Road Safety Indicators in the EaP Region (for 2020)

\* Road crash injuries in some countries in the EaP region are not dissagregated into serious and minor injuries. The serious injuries in these countries have been estimated from the number of road crash fatalities.a

Road Crash Fatalities Distribution by Genderb



**22.9% Female Road Crash Fatalities** 



**Road Crash Fatalities** 

Road Crash Injuries Distribution by Genderb



**32.3% Female Road Crash Injuries** 



**Road Crash Injuries** 

#### Road Crash Fatalities Distribution by Road User Groups<sup>b</sup>









**Pedestrians** 

Cyclists

Motorcyclists

**Vehicle Users** 

Road Crash Fatalities Distribution by Age Groups<sup>b</sup>

0 - 14 Yrs.

3.1%

15 - 64 Yrs.

65 Yrs. & Above 21.0%

#### **Other Key Metrics**

Life Years affected due to disability from road crash injuries per 100,000 people<sup>c</sup>

4,840 Life Yrs.

% Trend in Fatality Rate per 100,000 pp. in the Decade of Action (2010 - 2020)b

% Trend in Fatality Rate per 100,000 pp. (2019 - 2020)b

Sources: ° 15:1 ratio of serious injuries per fatality (Developed by iRAP and Adjusted by GRSF, World Bank)

<sup>b</sup> Averages/Totals of Data from EaP Countries National Data

° Global Burden of Disease (GBD) 2019, Institute for Health Metrics and Evaluation (IHME)





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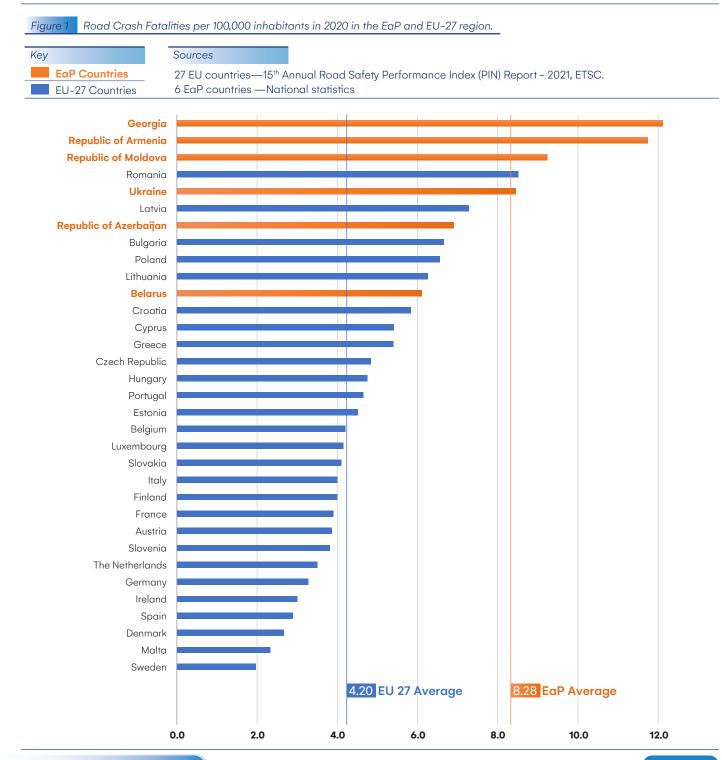


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## **DETAILED ROAD SAFETY STATUS IN THE EAP REGION**

General Road Safety Positioning (in comparison with EU Countries)

The average road crash fatality rate in the EaP Region is 8.28 fatalities per 100,000 inhabitants. The EaP fatality rate is 49.3% higher than that of EU-27. Belarus is the best performing country in the EaP region, with the lowest fatality rate (6.11 fatalities/100,000 inhabitants). Georgia has the highest fatality rate (12.11 fatalities/100,000 inhabitants), while the other countries' fatality rates range between 6.91–11.74 fatalities/100,000 inhabitants. The actual fatality rate for the region may be higher, given that the fatality rates for the individual countries have not been corrected for under-reporting.



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## DETAILED ROAD SAFETY STATUS IN THE EAP REGION

## Road Crash Fatalities and Injuries Analysis

In 2020, the EaP region registered an overall decrease in the number of road crashes (2.8%), a minimal decline in the number of road crash fatalities (0.4%) and an overall reduction in the number of road crash injuries (7.4%), as compared to 2019.

It is noteworthy to mention that during 2020, the COVID-19 pandemic had a significant impact on transport and mobility across the globe, including the EaP region, bringing travel to a standstill, thus leading to an **overall reduction in the number of registered road crashes**. However, it is noted that the **reduction in the registered road crash fatalities is not of the same magnitude**, possibly due to an increase in recorded speeding caused by less traffic, leading to a **higher proportion of fatalities for each road crash**.

The **longer-term trend** for road crash fatalities in the EaP region has a **decreasing trend**. Between <u>2010</u> <u>and 2020</u>, the road crash fatalities per 100 000 inhabitants in the region has <u>dropped by 35.0%</u>.

Figure 3 gives an overall impression of the scale of road crash fatalities and injuries in the EaP region. Table 2 summarizes the percentage increase/decrease in road crashes, crash fatalities and injuries in EaP countries.

Figure 2

Road Crashes, Fatalities and Injuries in the EaP region (2009 – 2020), National Data

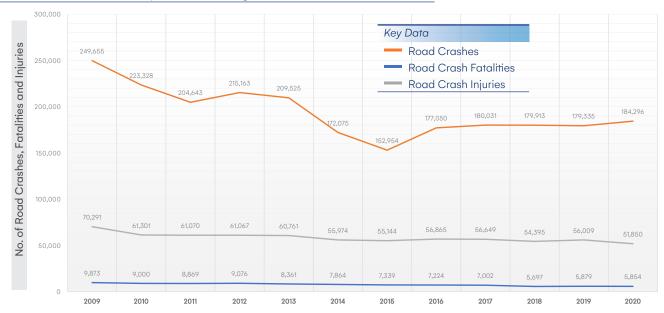


Table 2

Road Crashes, Fatalities and Injuries trends in the EaP Countries from National Data

Percentage Increase (▲) or Decrease (▼)

Road crashes, crash fatalities and injuries trends	ARM	AZE	BLR	GEO	MDA	UKR	EaP Av.
Road crash reduction/increase between 2019–2020	<b>▲</b> 2.0%	<b>▼</b> 17.8%	▲ 0.9%	▼ 16.8%	▼ 30%	<b>▲</b> 4.6%	▼ 2.8%
Road crash fatalities reduction/increase between 2019–2020	▼ 20%	<b>▼</b> 18%	▲ 12.2%	▼ 6.9%	▼ 13.5%	▲ 2.5%	▼ 0.4%
Road crash injuries reduction/increase between 2019–2020	▲ 0.6%	▼ 20.7%	▼ 2.3%	<b>▼</b> 19.3%	▼34.8%	▼ 2.4%	▼ 7.4%
Road crash fatality rate trend between 2010–2020	<b>▲ 14.9</b> %	▼32.3%	▼ 51.3%	▼ 33.1%	<b>▼</b> 43.9%	▼ 28.7%	▼ 35.0%



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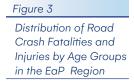
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## **DETAILED ROAD SAFETY STATUS IN THE EAP REGION**

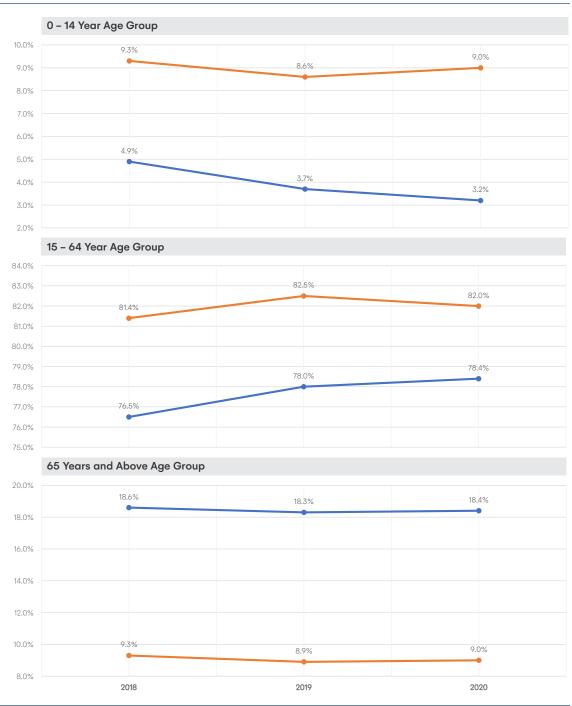
Age has a very significant impact on mortality and risk of road crash fatality and injuries, thus it is recommended to investigate and control for this factor. The most significant mortality rate due to road crashes in the EaP region is observed in population aged between 15 and 64 Years, accounting for an average of 80% of Road Crash Fatalities and Injuries. Road Crash Fatalities and Injuries registered during 2018–2020 for the 0-14 Year and 65 Years & Above Age Group have incurred insignificant change. This pattern of road crash fatalities and injuries in different age groups is observed in all the EaP countries.



Key

Road Crash **Fatalities** 

Road Crash Injuries







AZE







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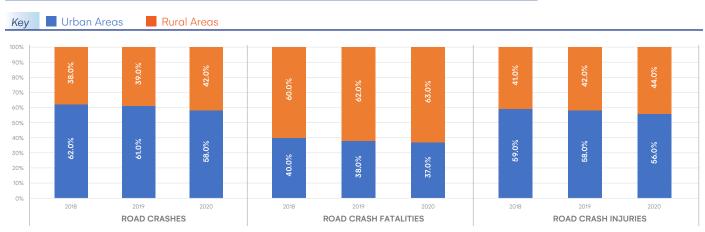
## **DETAILED ROAD SAFETY STATUS IN THE EAP REGION**

The most Vulnerable Road Users (VRUs), in the EaP region, include vehicle occupants (on average accounting for 50.0% of road crash fatalities and 56% of road crash injuries) and pedestrians (on average accounting for 36.9% of road crash fatalities and 26.2% of road crash injuries). Vehicle occupants and pedestrians account for the most vulnerable road users in all the EaP countries.



The EaP Region has an urban population of approximately 67.4%. National data indicates that rural areas account for less than a half of total road crashes registered in the region; for more than two thirds of the total road crash fatalities, and a less than a half of road crash injuries. This pattern of road crashes, crash fatalities and injuries is observed in all the EaP countries. Further analysis of urban and rural area contexts of road crashes is required to learn and understand the disparity, considering a higher mortality risk in rural areas.

Figure 5 Distribution of Road Crashes, Fatalities and Injuries by Area (Urban/Rural) in the EaP Region





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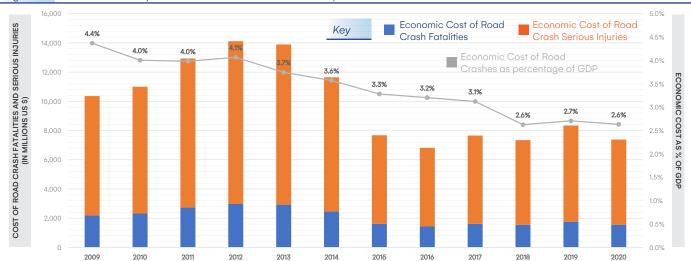
## **DETAILED ROAD SAFETY STATUS IN THE EAP REGION**

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### Economic and Social Cost of Road Crashes Fatalities and Injuries in the EaP Region

The Economic and Social Cost of Road Crash Fatalities and Injuries in the EaP region has been calculated by applying the general approximation rule developed by iRAP (Fatality Cost – 70 x GDP/Capita; Serious Injury Cost – 17.5 x GDP/Capita). An estimate of 15:1 ratio of serious injuries per fatality has been used where data was not available (Developed by iRAP and Adjusted by GRSF, World Bank). The socio-economic cost of road crash fatalities and serious injuries in the EaP region has been steadily decreasing (by 39.8%) since its highest in 2009 (4.4% of GDP) to 2.6% of GDP estimated for 2020. Georgia experiences the highest socio-economic cost, 4.0% of GDP. Belarus experiences the lowest cost, 2.0% of GDP, while the other countries costs lie between 2.3–3.2% of GDP.





#### Data Discrepancy of Road Crashes Fatalities and Injuries Data in the EaP Region

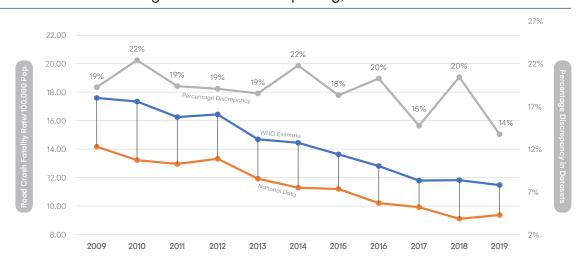
Data Discrepancy in the EaP region reported at the national level and corrected by WHO (for each country) has been estimated at between 14 to 22% in 2009–2019. This shows a high level of underreporting in the region presumably due to a lack of a robust data collection systems that are interlinked with hospitals, police and other actors within the countries. Armenia has the highest level of under-reporting, 42%, while Azerbaijan and Moldova have the lowest levels of under-reporting, 3% and 6% respectively. Belarus, Georgia and Ukraine have average levels of under-reporting, between 21–30%.

Figure 7

Data Discrepancy of Road Crash Fatalities in EaP Region – between National Data and WHO Estimates

Source

WHO Global Health Observatory data (2009 – 2019)



ARM AZE BLR GEO 👬 MDA 😻

## **PILLAR 1 | ROAD SAFETY MANAGEMENT**

## Institutional Framework of Road Safety in the EaP Region

ARM AZE BLR MDA UKR

EaP Countries with a road safety lead agency/authority

ARM AZE BLR GEO MDA UKR

EaP Countries with agencies that guide, implement and monitor road safety interventions (with an institutional framework) ARM AZE BLR MDA UKR

UKR

EaP Countries with a funded lead agency

ARM AZE BLR GEO MDA UKR

EaP Countries with up-to-date road safety targets

### Road Crash Data Collection System

The figure below provides an overview of the crash data system benchmarking assessment based on self-reporting by the representatives of the EaP Regional Working Group.

#### Table 3

Crash data system benchmarking assessment for the EaP Region (Country Scores and EaP Average)

Crash data system benchmarking assessment

Self-reported scores (Percentage, %)

Benchmarking Indicators Used	ARM	AZE	BLR	GEO	MDA	UKR	EaP Av.
Legislation	50	95	95	45	45	45	63
Institution	80	95	95	80	95	95	90
Software Platform	95	5	95	95	95	95	80
GIS Oriented	5	5	95	95	45	95	57
WEB Oriented	95	5	95	95	95	95	80
Database Availability	5	5	45	15	45	5	20
Updated	5	15	95	15	95	5	38
Willingness for data exchange	5	5	5	95	5	95	35
Connectivity	5	5	95	15	5	75	33
Concept of road safety database	5	95	95	95	45	45	63
Total Scores for Crash Data System Benchmarking Assessment	350	330	810	645	570	650	559



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## **PILLAR 2 | SAFER ROADS AND ROADSIDES**

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## Road Infrastructure Safety Assessment Performance in the EaP Region

The benchmarking survey on implementation of the EU road safety Directive in each of the EaP countries was conducted by the EaP TP Secretariat in two rounds during 2018. Initially, a quantitative survey was conducted, where EaP countries self-reported the degree to which the introduction of individual measures from the EU 2008/96 Directive on road infrastructure safety has been achieved. Subsequently, an additional qualitative survey was produced by the Bank team, focusing on the four main tools of Road Safety Audit (RSA), Inspection (RSI), Impact Assessment (RSIA) and Blackspot Management (BSM) and aiming at a closer understanding of the current situation.

#### Table 4

EaP Countries Status regarding EC 96/2008 Directive Implementation

EaP Countries Status regarding EC 96/2008 Directive Implementation	Answers confirmed by countries						
Impact Indicators used		AZE	BLR	GEO	MDA	UKR	EaP Av.
Implementation of RSIA (Road Safety Impact Assessment)							
Legal basis for RSIA exists	90	95	5	5	5	5	34
Adequate RSIA manual in official use		95	5	5	5	5	33
Trained staff for RSIA available	60	50	5	5	10	5	23
Road Authorities have budget to purchase RSIA	50	95	5	5	5	5	28
All major new roads and reconstructions passed RSIA procedure		95	5	5	5	5	32
RSIA Recommendations being accepted in feasibility stage		95	5	5	5	5	33
Total Scores for Road Safety Impact Assessments (RSIA)		525	30	30	35	30	183
Implementation of RSA (Road Safety Audit)							
Legal basis for RSA (Road Safety Audit) exists	85	50	5	30	5	5	30
Adequate RSA manual in official use	95	70	5	85	5	5	44
Trained road safety auditors available	25	50	5	50	30	15	29
Road Authorities have budget to purchase RSA	25	95	5	10	5	5	24
All new, reconstructed and rehabilitated roads being safety audited	50	95	5	10	25	5	32
RSA Recommendations being implemented by Roads Authority	80	95	5	50	20	5	43
Total Scores for Road Safety Audits (RSA)	360	455	30	235	90	40	202
Implementation of RSI (Road Safety Inspection)							
Revision (update) of road design standards undertaken	75	95	25	75	85	5	60
Revision (update) of road design norms (guidelines) undertaken	65	95	25	80	20	5	48
Convention of road signs/ signals 1968 fully implemented	60	95	25	50	30	10	45



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## PILLAR 2 | SAFER ROADS AND ROADSIDES

EaP Countries Status regarding EC 96/2008 Directive Implementation	Answer	s confirn	ned by c	ountries					
Impact Indicators used	ARM	AZE	BLR	GEO	MDA	UKR	EaP Av		
mplementation of RSI (Road Safety Inspection)									
Vehicle Restraint Systems (VRS) standard based on EN 1317	50	95	75	20	5	5	42		
Work zone protection based on best international practice	70	95	75	75	35	5	59		
Harmonization between standards/norms/guidelines and other legislation undertaken		50	75	80	50	5	57		
Average Scores for Road Safety Inspections (RSI)		525	300	380	225	35	311		
Black Spot Management – BSM (Black Spot Management)									
Legal basis for BSM (Black Spot Management) exists	60	50	90	10	10	50	45		
Adequate BSM Manual in official use	50	35	75	70	5	85	53		
Clear definition (criteria) of black spot exists	80	80	85	10	20	85	60		
Trained black spot investigators available	80	80	70	40	30	20	53		
Annual black spot improvement program in place	95	75	70	75	5	20	57		
Road Authorities has dedicated founds for BSM improvements	90	50	70	50	10	5	46		
BSM recommendations being implemented by Roads Authority	90	70	70	70	50	5	59		
Average Scores for Black Spot Management (BSM)	545	440	530	325	130	270	373		
Road Assessment Program (RAP) (e.g. iRAP)									
Legal basis for RAP (Road Assessment Program) exists	60	20	80	10	5	10	31		
RAP implemented on road network	50	20	80	10	20	5	31		
Annual RAP program exists	50	20	50	10	5	10	24		
Road Authorities has dedicated founds for RAP improvements	60	80	50	10	5	10	36		
RAP recommendations being implemented by Roads Authority	80	80	80	10	5	10	44		
Average Scores for Road Assessment Programs (RAP)	300	220	340	50	40	45	166		
Application of traffic calming measures									
Legal basis for application of traffic calming measures exists	60	50	90	10	10	50	45		
Adequate traffic calming Manual in official use	50	35	75	70	5	85	53		
Clear criteria for selection of traffic calming measures exists	80	80	85	10	20	85	60		
Trained staff available	80	80	70	40	30	20	53		
Road Authorities has dedicated funds for traffic calming implementation	95	75	70	75	5	20	57		
Traffic calming recommendations being implemented by Roads Authority	90	50	70	50	10	5	46		
Average Scores for Traffic Calming Measures	455	370	460	255	80	265	314		



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## **PILLAR 2 | SAFER ROADS AND ROADSIDES**

EaP Countries Status regarding EC 96/2008 Directive Implementation	Answers confirmed by countries						
Impact Indicators used		AZE	BLR	GEO	MDA	UKR	EaP Av.
Application of road design standard/norms (guideline) revision							
Revision (update) of road design standards undertaken	85	95	90	80	50	30	72
Revision (update) of road design norms (guidelines) undertaken		80	90	80	50	30	68
Convention of road signs/ signals 1968 fully implemented		95	99	80	100	90	94
Vehicle Restraint Systems (VRS) standard based on EN 1317		70	50	80	80	30	62
Work zone protection based on best international practice		50	40	50	50	20	42
Harmonization between standards/norms/guidelines and other legislation undertaken	60	80	80	80	70	50	70
Average Scores for Road Design Standard Revision	420	470	449	450	400	250	408
Building the capacity of engineers and technical staff							
Adequate Manuals/Guidelines for safety engineering produced	50	75	30	70	10	10	41
Selected Government, Consultants and Academic staff trained	35	75	30	60	5	5	35
Different road safety curricula for University courses produced (RSIA, RSA, RSI, RAP, BSM, TC)		50	40	30	30	5	33
Students being taught about safe design approaches during their studies	50	50	50	30	70	10	43
Average Scores for Capacity Building	175	250	150	190	115	30	152

## Road Safety Infrastructure Investments in the EaP Region

Improving the world's roads to a 3-star or better standard is a key way to achieve the United Nations Sustainable Development Goals target of halving road deaths and injuries by 2030. The Business Case for Safer Roads (iRAP) analyzes the investment required to achieve 75% of travel on 3-star or better roads, as shown in the table below.

Table 5

What can be achieved with >75% of travel in the EaP region on 3-star or better roads for all road users by 2030

Total infrastructure and speed management investment required	8.54 Billion US\$
Average annual investment as a percentage of GDP (2020-2030)	0.22%
Total reduction in road crash fatalities per year	3,129 fatalities
Reduction in road crash fatalities and serious injuries (FSI) over 20 years	688,487
Total Economic Benefit	42.64 Billion US\$
Average Benefit Cost Ratio (BCR)	8

<sup>1</sup> iRAP Vaccines for Roads. The Big Data Tool. <u>https://www.vaccinesforroads.org/irap-big-data-tool-map/</u> Source:





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## **PILLAR 3 | SAFER SPEEDS**

Speed Limits and Comparison with Safe System Speed Limits in the EaP Region - National Data (2020)

All countries in the EaP region have an existing National Speed Limit Law. Local authorities in half of the countries (Azerbaijan, Moldova and Ukraine) are allowed to modify the speed limits within the localities. Comparison of the EaP region speed Limits to the recommended Safe System Speeds shows that on average the speed limits are 22 km/h higher than recommended.

The predominant Enforcement of speed limits in the region is automated enforcement, however some countries (Belarus, Moldova and Ukraine) still use manual enforcement. The average self reported enforcement score is 72% – Georgia having the highest score of 100% and Ukraine having the lowest score of 30%. The potential decrease in fatal road crashes from enforcement of Safe Speed Limits is estimated, on average, to be three-fold.

#### Table 6

Maximum Speed Limits, Recommended Safe System Speeds and the Potential Decrease in Road Crash Fatalities

	ROADS							
	RESIDENTIAL	URBAN	RURAL	MOTORWAYS				
Average Maximum Speed Limit in EaP Region	57 km/h	57 km/h	73 km/h	113 km/h				
Difference with Recommended Safe System Speeds <sup>1</sup>	+ 27 km/h	+ 27 km/h	+ 3 km/h	+ 23 km/h				
Potential Decrease in Fatal Road Crashes from Enforcement of Safe System Speed Limits <sup>2</sup>	5 times lower	5 times lower	1.2 times lower	2 times lower				

Note: <sup>1</sup> Safe System Recommended Speed Limits: Residential and Urban – 30 km/h; Rural – 70 km/h; Motorways – 90 km/h.

#### Speed Calming Infrastructure in the EaP Region - National Data (2020)

#### Table 7

Speed Calming Infrastructure in the EaP Region - Presence and Brief Descriptions of Implementation

Speed Calming Infrastructure Category	Presence in EaP Region (Present/Not Preset)	Brief Description/Narrative of Implementation and Results
Narrowing e.g. extending sidewalks, pedestrian refuges.	PRESENT	Implemented in ARM, AZE, BLR, GEO, MDA and UKR.
Vertical Deflections e.g. speed bumps, humps and tables.	PRESENT	Implemented in ARM, BLR, GEO, MDA and UKR.
Horizontal Deflection e.g. chicanes and chokers.	PRESENT	Implemented in BLR, MDA and UKR.
Block/Restrict Access e.g. median diverters and cul-de-sacs.	PRESENT	Implemented in BLR, GEO, MDA and UKR.
Road Markings, Signs and Furniture e.g. colored surfacing	PRESENT	Implemented in ARM, AZE, BLR, GEO, MDA and UKR.



<sup>&</sup>lt;sup>2</sup> Potential decrease in fatal road crashes from enforcement of safe system speed limits calculated using the Nilsson's Power Model connecting speed and road trauma. [M.H. Cameron, R. Elvik. 2010]

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## **PILLAR 4 | SAFER VEHICLES**

## Vehicle Population and Distribution in the EaP Region

Most of the countries in the EaP Region have an up-to-date database of the existing vehicle population. The vehicle categorization within the countries in the region are not standardized, inhibiting comparison. The average motorization in the EaP region is 343 vehicles/1,000 people. The majority of the vehicle population includes Cars and Light Wheeled Vehicles, Motorized 2/3 Wheelers, Trucks and Buses respectively.

#### Compliance with UN Vehicle Safety Regulations in the EaP Region - National Data (2020)

The EaP region compliance (WHO, 2018) to the recommended Vehicle Safety Standards is shown below:

























## Regulation of Imported Vehicles and Periodic Inspection of Existing Fleet in the EaP Region (2020)



NONE

**BLR** ARM **GEO MDA** 

EaP Countries with Regulated Import of Used Vehicles

EaP Countries with Age Limit Based Import Restriction

**EaP Countries with Taxation Based Import Restriction** 

ARM **BLR** GEO **MDA UKR** 

EaP Countries with Imported Vehicle Inspection

All countries in the EaP region have a vehicle inspection system in place for imported vehicles.



EaP Countries with Periodic Inspection for Existing Fleet Periodic inspection systems for existing vehicle fleet exist in some of the EaP countries (Armenia, Belarus, Georgia and Moldova).



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## **PILLAR 5 | SAFER ROAD USERS**

Seatbelt Usage in the EaP Region - WHO Data (2018)° and National Data (2020)b

All countries in the EaP region have an existing National Seatbelt Law, which applies to all vehicle passengers (drivers, front and rear passengers). The enforcement is done by visual inspection at traffic controls. Drivers and Passengers found to be breaking the law are fined through monetary terms and demerit points.

70 %

Self-Reported **Enforcement Score of** Seatbelt Legislation<sup>a</sup> (EaP Average)

Self-reported enforcement scores are provided for all the EaP countries. Armenia, Belarus, Georgia and Moldova report an 80% enforcement, followed by Azerbaijan and Ukraine with an enforcement score of 70% and 30%, respectively.

47 %

**Average Seatbelt** Wearing Rate<sup>a</sup> (EaP Average)

Average seatbelt wearing rates are reported for Armenia (70%), Azerbaijan (30%) and Moldova (40%).

Motorcycle Helmet Usage in the EaP Region - WHO Data (2018)<sup>a</sup> and National Data (2020)<sup>b</sup>

All countries in the EaP region have an existing National Motorcycle Helmet Law, which applies to all motorcycle users. Children passengers under 12 yrs. are prohibited on motorcycles in the whole region. Users found breaking the law are fined through monetary terms and demerit points.

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EaP Countries with mandatory Motorcycle Helmet Fastening<sup>b</sup>

EaP Countries with specified Motorcycle Helmet Standards<sup>b</sup>

**70** %

Self-Reported Enforcement Score<sup>a</sup> (EaP Average)

Self-reported enforcement scores are provided for all the EaP countries. Armenia reports a 90% enforcement score, with Ukraine having the lowest enforcement score of 30%. The other countries scores range between 60%-80%.

92 %

Avg. Helmet Wearing Rate<sup>a</sup> (EaP Average)

The average helmet wearing rate is only reported for Armenia (92%).

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## **PILLAR 5 | SAFER ROAD USERS**

Drink Driving and Drug Driving in the EaP Region - WHO Data (2018)<sup>a</sup> and National Data (2020)<sup>b</sup>

All countries in the EaP region have an existing Drink Driving and Drug Driving Law. Enforcement of drink/drug driving laws is generally done by visual inspections at traffic controls and random drink driving tests. All countries use a graduated system of fines and demerit points for different levels of contraventions and repetitions, including withdrawal and cancellation of driving licenses.







for General Population<sup>b</sup>

EaP Countries with BAC Limit for Young/Novice Drivers<sup>b</sup>

EaP Countries with BAC Limit for Professional Drivers<sup>b</sup>

60 %

Self-Reported Enforcement Score<sup>a</sup> (EaP Average)

Self-reported enforcement scores are provided for all the EaP countries. Belarus and Moldova both report an 80% enforcement score, with Azerbaijan having the lowest enforcement score of 20%. The other countries scores range between 50%-70%.

8.0 %

% of Alcohol Related Road Crash Fatalities<sup>a</sup> (EaP Average)

The percentage of alcohol related road crash fatalities are reported for all the EaP countries. Belarus has the highest share of alcohol related crashes at 22.7%. Azerbaijan has the lowest share of 0.6%. The other countries scores range between 3.2%-8.0%.

Child Restraint Usage in the EaP Region – WHO Data (2018)<sup>a</sup> and National Data (2020)<sup>b</sup>

All countries in the EaP region have an existing Child Restraint National Law, with most of them having front seat prohibition for children 12 years and below and car seat requirements for children.







EaP Countries with Car Seat Requirement for Children<sup>b</sup>

EaP Countries with Child Restraint Standards<sup>b</sup> (under preparation/existing)

60 %

Self-Reported Enforcement Score<sup>a</sup> (EaP Average)

Self-reported enforcement scores are provided for Azerbaijan, Belarus, Georgia, Moldova and Ukraine. Belarus, Georgia and Moldova report an 80% enforcement, followed by Azerbaijan and Ukraine with an enforcement score of 40% and 20%, respectively.



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## **PILLAR 5 | SAFER ROAD USERS**

Child Restraint Usage in the EaP Region - WHO Data (2018)° and National Data (2020)b

50 %

Average Child Restraint Usage Rate<sup>a</sup> (EaP Average)

Child restraint usage rate is only reported for Moldova, with a usage rate of 50%.

Mobile Phone Usage while Driving in the EaP Region - National Data (2020)

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EaP Countries with Existing Laws on Mobile Phone/ Communication Tool Usage while Driving

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> **EaP Countries** with a Ban on Hand-Held Mobile Phone Use

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> **EaP Countries** with No Ban on Hands-Free Mobile Phone Use





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## PILLAR 6 | POST-CRASH CARE

National Emergency Care Access Number Coverage in EaP Region (2020)

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EaP Countries with Multiple Emergency Care Access Numbers

EaP Countries with a Single Emergency Care **Access Numbers** 

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EaP Countries with National Coverage of the Emergency Care **Access Numbers** 

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## Trauma Registry System in the EaP Region

In the EaP Region, only half of the countries (Belarus, Georgia and Moldova) have an established trauma registry system, with detailed road crash injury classification and recording. Training of road crash first responders is conducted in 2 of the countries (Belarus and Georgia).

## Other Key Post-Crash Care Indicators for the EaP Region

## 20 min.

First Responders Response time to Road Crashes (EaP Average)

First responders response time to road crashes is provided for half of the countries (Armenia, Belarus and Georgia). Georgia has the quickest response time of 11 minutes, followed by Belarus and Armenia with response times of 20 and 30 minutes, respectively.

**42%** 

Average % difference with Golden Hour Response Time (10 min.)

Armenia, Belarus and Georgia all have a response time higher than the recommended Golden Hour response time of 10 minutes. Georgia has a 9% difference, followed by Belarus and Armenia, with a difference of 50% and 67% respectively.

## **31** min.

Time Taken to Care Centre from Crash Scene (EaP Average)

The time taken from the road crash scene to a care center is only provided for Georgia. On average the time taken is 31 minutes.

35%

Average % difference with Golden Hour Transport Time (20 min.)

Georgia has a transport time higher than the recommended Golden Hour transport time of 20 minutes. Georgia has a 35% difference, compared to the Golden Hour transport time.



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Other Key Post-Crash Care Indicators for the EaP Region

## 85 out of 100

**Average Service Capacity and Access** Score Universal Health Coverage (WHO UHC Report, 2019)

The service capacity and access score universal health coverage is available for all the EaP countries. Armenia has the highest score, 98/100. Ukraine has the lowest score, of 79/100. The other countries scores range between 89-96/100.









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