Interreg

EUROPEAN UNION

Danube Transnational Programme

RADAR

Project co-funded by European Union funds (ERDF, IPA, ENI)

O.T.3.2. g Databases on Pilot Actions

TA4 ROAD SAFETY NEAR SCHOOLS - MOLDOVA

RADAR – Risk Assessment on Danube Area Roads

https://www.interreg-danube.eu/radar

Internal Report Hierarchy Level			
Activity Number	5.4	Activity Title	Pilot Action for road Safety near Schools
Work Package Number	5	Work Package Title	Road Safety Pilot Actions
Authors (per company, if more than one company provide it together)	Virginia Mandalac, Automobile Club of Moldova (ACM)		
Status (F: final, D: draft, RD: revised draft):	F		
Version Number	1.0		
File Name	g. O.T 3.2_Databases_RS near Schools_MD.docx		
Issue Date	04.06.2021.		
Project start date and duration	June 1, 2018 – 36 months		

1

Revision log

Version	Date	Reason	Name and Company
1.0	04.06.2021	First Draft	Virginia Mandalac (ACM)

Abbreviation list

ACM	Automobile Club of Moldova
RADAR	Risk Assessment on Danube Area Roads
TA	Thematic Area
NIPS	National Inspectorate for Public Security

Table of Contents

Table of pictures

1. Introduction

Every year thousands of children are killed and seriously injured while getting to and from schools. In many low- and middle-income countries school zones do not comply safe standards for children. A high number of schools are located near main roads, busy roads or rural roads without proper protection and facilities for pedestrians and especially for small children.

About 1.3 million people die on the world's roads and 20 - 50 million are injured every year. Road traffic crashes are a major cause of death among all age groups and the leading cause of death for children and young adults aged 5–29 years. The risk of dying in a road traffic crash is more than 3 times higher in low-income countries than in high-income countries. Worldwide, pedestrians and cyclists comprise 26% of road traffic deaths[1].

Unsafe road design increases the risk for all road users: Roads should be designed for the safety of all road users. This means ensuring adequate facilities for pedestrians, cyclists and motorcyclists. Measures such as footpaths, cycling lanes, safe crossing points and traffic calming measures are critical to reducing the risk of injury among these road users.

Pedestrians, cyclists, and riders of motorized 2- and 3-wheelers and their passengers are collectively known as "vulnerable road users" and account for half of all road traffic deaths around the world. A higher proportion of vulnerable road users die in low-income countries than in high-income countries.

Controlling speed reduces road traffic injuries: As average speed increases, so does the risk of having a road traffic crash and the severity of the consequences should a crash occur. For every 1% increase in mean speed, there is a 4% increase in risk of a fatal crash[2]. A pedestrian hit by a car at 65km/h faces more than 4 times the risk of death than if the car were driving at 50km/h. That is why it is recommended that around schools the speed limit is 30 km/h. Thus, it has become first priority either to reduce the speeds of circulating vehicles around schools or to incorporate measures that will force vehicles to stop when school kids are on the road (e.g., traffic police officer, traffic lights activated by pedestrians).

1.1. Section 1 – RADAR Project

The project RADAR (Risk Assessment on Danube Area Roads) is tackling the differences in road infrastructure safety levels between western and eastern EU countries. It contributes at improving knowledge and capacities of all involved stakeholder in the Danube region to successfully address the road infrastructure safety.

RADAR aims to improve the road infrastructure safety in the Danube region by raising capacity and enhancing transnational cooperation for all road users, including vulnerable road users on Danube major, secondary and tertiary road networks.

One of RADAR's main tasks is to identify risk on road networks and offer plans to systematically reduce that risk by improving infrastructure and road layout. One of the main objective of the project is the implementation of Pilot Actions on 4 Road Safety Thematic Areas in 7 countries (Slovenia, Croatia, Hungary, Czech Republic, Bosnia and Herzegovina, Bulgaria and Moldova)

[1] World Health Organization – Road Traffic Injuries
[2] World Health Organization – Road Safety – Speed facts (https://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/speed_en.pdf)

in order to test the best practices agreed upon beforehand. RADAR addresses all road-users but pays particular attention to vulnerable road users and safety on major roads near schools.

1.1.1. Subsection 1 – Pilot Actions within RADAR in Moldova

Two pilot cases have been selected in Moldova, representing urban and rural typical conditions in Moldova and other countries in the region, as evidence-based identification of sites and treatment selection, following the road infrastructure safety assessment. The pilot actions were focused on behaviour of through traffic and its speeds; behaviour of pupils and their parents; the role of parents and teachers in tackling and reducing risk. The minimum safety road elements according to local conditions were presented and options for road safety upgrade, focusing at vulnerable road users and more specifically to children, were described, including engineering and non-engineering actions. The goal is to have a safe environment around schools for the pupils to arrive and depart safely. The elaborated report on pilot actions focuses on stakeholder cooperation and engagement to potential improvements in order to increase road safety in the vicinity of schools, involvement of children and parents in the process of identifying risks, Star Rating methodology applicability and high-quality policy alterations.

2. Database on Pilot Action on road safety near schools

This database contains useful information on necessary and relevant data used for the implementation of the pilot action on Safe zones around schools. The information consists of available statistical crash data, samples of the surveys conducted and other related details.

Two sites were selected by ACM in consultation with an extensive list of stakeholders, especially with the National Inspectorate for Public Safety (the Police) on the basis of police crash records. One site is located in a rural (Congaz, Gagauzia) and the other in an urban (Chisinau) setting. The representatives of Chisinau Municipality and the local authorities of Gagauzia supported the choice. The sites are both situated in the ultimate vicinity of schools, with populated crosswalks.

Crash records and exposure data were taken into consideration during analysis, utilizing the Star Rating for Schools App (SR4S). During on-site data collection and analysis, the ACM team made traffic and pedestrian flow assessments and investigated the presence (or lack) and state of various infrastructure and traffic calming elements such as adequate speed limits, humps, special traffic signs and road markings, and general pavement condition.

The locations of the pilot action implementation were selected (as the result of consultation between the various stakeholders) based on the significant number of crashes, fatalities and injuries recorded.

For both sites, schematic road layout plans as well as perspective illustrations were developed, describing signs, signals, road markings as well as modifications in horizontal alignment, cross section design and road furniture.

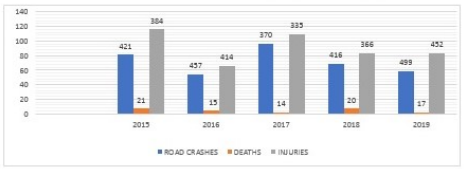
Initially, the ACM team requested the necessary data for analysis from the responsible authorities at national at local levels. Based on the data offered by the National Inspectorate for Public Security (NIPS) the "Princess Natalia Dadiani" school in Chisinau (urban - 24 crashes in the surrounding area, where 1 child died and 7 were injured) and the "Nicolae Cebanov" school zone in Congaz (rural - 8 crashes in the surrounding area, with 3 children injured) were selected for interventions.

Number of children involving in road crashes by categories of road users in the Republic of Moldova, 2015-2019

According to the data provided by the automated Information System "Register of road crashes", in the period of 2015-2019 there were registered 1904 road crashes involving children, as a result of which 87 people died and others 1951 were injured.

As regards the category of child road users mostly involved in road crashes as pedestrians, 974 road accidents were registered, resulting in 44 deaths and 917 injuries, accounting for 45% of the total number of road crashes in the entire country involving minors committed in 2015-2019. In addition, besides pedestrians, children were involved most frequently in road crashes as passengers of the car, representing 30% of the total number of road accidents occurred in the country in 2015-2019, resulted in 26 deaths and 595 injuries.

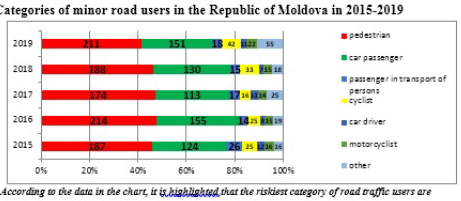
Road crashes involving children in Moldova, 2015-2019



1. **Category of participants per country**

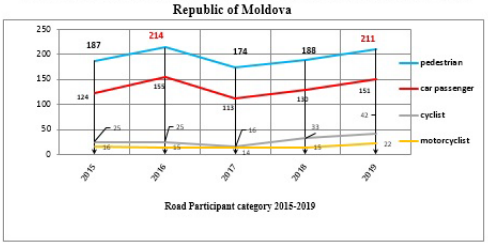
	2015				2016				2017				2018				2019			
	RC	D	I	N/S	RC	D	I	N/S	RC	D	I	N/S	RC	D	I	N/S	RC	D	I	N/S
	1	0	1	0	2	0	2	0	5	0	5	0	2	0	2	0	-	-	-	-
Horseman	1	0	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coachman	2	0	2	0	2	0	1	1	-	-	-	-	1	1	0	0	-	-	-	-
Cyclist	25	1	24	0	25	1	23	1	16	0	15	1	33	1	29	3	42	0	40	2
Passenger transport driver	1	0	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Car driver	12	1	2	9	8	0	6	2	11	0	8	3	7	0	2	5	11	0	6	5
Driver of another type of vehicle	-	-	-	-	1	0	0	1	1	1	0	0	1	0	0	1	2	0	1	1
Scooter driver	8	0	7	1	8	0	6	2	3	0	3	0	8	0	6	2	11	1	7	3
Motorcyclist	8	0	8	0	7	0	5	2	11	1	8	2	12	0	10	2	10	1	8	1
Passenger of another type of vehicle	3	1	2	0	-	-	-	-	2	0	2	0	2	1	1	0	3	0	3	0
Cargo truck passenger	3	0	3	0	2	0	2	0	-	-	-	-	1	0	1	0	-	-	-	-
Passenger in transport of persons	26	0	26	0	14	0	14	0	17	0	15	2	15	0	15	0	18	1	17	0
Passenger of the horse cart transport	3	0	3	0	7	0	7	0	4	0	4	0	5	2	2	1	10	0	7	3
Car passenger	124	9	111	4	155	3	137	15	113	3	101	9	130	6	110	14	151	5	136	10
Bicycle passenger	1	0	1	0	2	0	2	0	1	1	0	0	2	0	2	0	4	0	4	0
Motorcycle passenger	14	0	14	0	8	1	6	1	11	0	11	0	4	0	3	1	24	1	21	2
Scooter passenger	2	0	2	0	2	0	2	0	1	0	1	0	5	0	5	0	2	0	2	0
Pedestrian	187	9	176	2	214	10	201	3	174	8	162	4	188	9	178	1	211	8	200	3
Total RC children involved	421	21	384	16	487	16	414	28	370	14	335	21	416	20	366	30	499	17	452	30
Total RC	362				400				332				371				439			

Categories of minor road users in the Republic of Moldova in 2015-2019



Note: According to the data in the chart, it is highlighted that the riskiest category of road traffic users are pedestrians, which generated 45% of the total number of road crashes involving minors registered in the country during 2015-2019.

The most vulnerable categories of road traffic users (minors -2 015-2019) in the Republic of Moldova



Road Participant category 2015-2019

It is important to mention a special category of minors involved in road crashes as car drivers, they do not have the official permission and right to drive.

With their involvement in 2015-2019 there were registered 49 road accidents, resulting in one death and 24 injured persons.

Number of children involving in road crashes by categories of road traffic users in Chisinau, 2015-2019

According to the data from the automated Information System "Register of road accidents", in 2015-2019 in Chisinau municipality 755 road crashes involving children were registered, as a result of which 7 people died and 807 persons were injured.

With respect to the category of child road traffic participants most often involved in road accidents, as pedestrians in 2015-2019, the majority cases account for 58.6% of the total number of road crashes in Chisinau involving minors: **445 road crashes, resulting in 4 deaths and 439 injuries.**

Road crashes involving children in Chisinau, 2015-2019

2. **Category of road traffic participants in Chisinau**

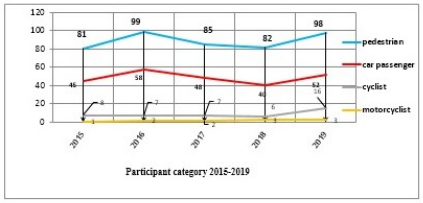
	2015				2016				2017				2018				2019			
	RC	D	I	N/S	RC	D	I	N/S	RC	D	I	N/S	RC	D	I	N/S	RC	D	I	N/S
	1	0	1	0	2	0	2	0	5	0	5	0	2	0	2	0				
Cyclist	8	0	8	0	7	0	7	0	7	0	6	1	6	0	6	0	16	0	14	2
Car driver	1	0	1	0	4	0	4	0	6	0	5	1	2	0	1	1	2	0	0	2
Driver of another type of vehicle	-	-	-	-	-	-	-	-	1	1	0	0	-	-	-	-	-	-	-	-
Scooter driver	1	0	1	0	1	0	1	0	-	-	-	-	1	0	1	0	3	0	2	1
Motorcyclist					1	0	0	1	2	0	2	0	2	0	1	1				
Passenger of another type of vehicle	1	0	1	0	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1	0
Passenger in	11	0	11	0	11	0	11	0	13	0	12	1	8	0	8	0	9	0	9	0

transport of persons																				
Car passenger	45	0	45	0	58	0	58	0	45	0	45	0	40	2	37	1	82	0	82	0
Bicycle passenger	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1	0
Motorcycle passenger	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1	0	2	0	2	0
Scooter passenger	1	0	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrian	81	1	79	1	99	2	97	0	85	0	84	1	82	1	81	0	98	0	98	0
Total RC children involved	150	1	148	1	183	2	180	1	167	1	162	42	144	3	138	3	184	0	179	28
Total RC	141				164				151				131				168			

Categories of minor road users in Chisinau, 2015-2019

Note: According to the data in the chart, it is highlighted that the most risk category of road traffic participants are pedestrians, which generated 58.6% of the total number of road accidents involving minors registered in Chisinau in 2015-2019.

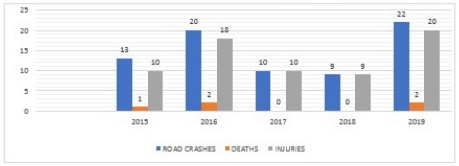
The most vulnerable categories of road traffic participants (minors, 2015-2019) in Chisinau



Participant category 2015-2019

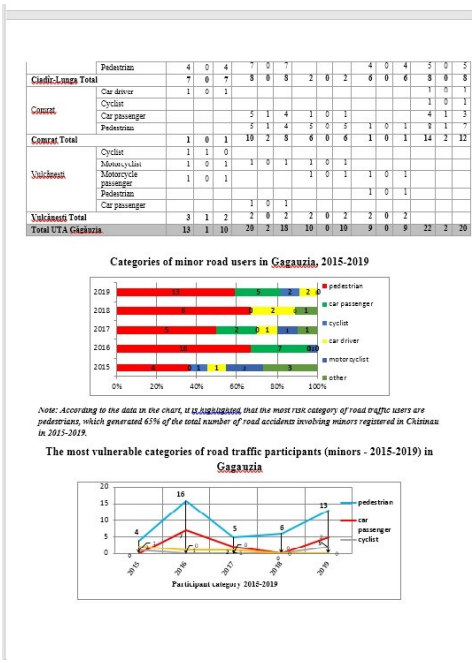
Number of children involving in road crashes by categories of participants in Gagauzia 2015-2019

Road crashes involving children in Gagauzia, 2015-2019



3. **Category of road traffic participants in Gagauzia**

Territorial authority	Participant category	2015			2016			2017			2018			2019		
		RC	D	I	RC	D	I	RC	D	I	RC	D	I	RC	D	I
Ciadîr-Lunga	Driver of passenger transport	1	0	1												
	Motorcyclist	1	0	1												
	Cyclist													1	0	1
	Motorcycle passenger	1	0	1												
	Car driver							1	0	1	2	0	2	1	0	1
	Car passenger				1	0	1	1	0	1				1	0	1



	Pedestrian	4	0	4	7	0	7				4	0	4	5	0	5
Cîadîr-Lunga Total		7	0	7	8	0	8	2	0	2	6	0	6	8	0	8
Comrat	Car driver	1	0	1										1	0	1
	Cyclist													1	0	1
	Car passenger				5	1	4	1	0	1				4	1	3
	Pedestrian				5	1	4	5	0	5	1	0	1	6	1	7
Comrat Total		1	0	1	10	2	8	6	0	6	1	0	1	14	2	12
Vulcănești	Cyclist	1	1	0												
	Motorcyclist	1	0	1	1	0	1	1	0	1						
	Motorcycle passenger	1	0	1				1	0	1	1	0	1			
	Pedestrian										1	0	1			
	Car passenger				1	0	1									
Vulcănești Total		3	1	2	2	0	2	2	0	2	2	0	2			
Total UTA Găgăuzia		13	1	10	20	2	18	10	0	10	9	0	9	22	2	20

Categories of minor road users in Gagauzia, 2015-2019

Note: According to the data in the chart, it is highlighted that the most risk category of road traffic users are pedestrians, which generated 65% of the total number of road accidents involving minors registered in Chisinau in 2015-2019.

The most vulnerable categories of road traffic participants (minors - 2015-2019) in Gagauzia

Picture 2-1 National crash data 2015-2019. Source NIPS

For the location selected in the capital there were analysed the crash data involving children for Chisinau.

INFORMATIA
cu privire la accidentele rutiere cu implicarea copiilor în mun.Chișinău pe parcursul anului 2019

În municipiul Chișinău s-au produs **168** (+28,2%, a.p.131) accidente rutiere cu implicarea minorilor, soldate cu **179** (+29,7%, a.p.138) persoane traumatizate.

Analiza accidentelor, repartizate pe sectoarele municipiului, denotă, că o creștere a accidentelor rutiere a fost înregistrată în sec.Buiucani al municipiului, fiind comise 41 accidente rutiere soldate cu 43 persoane persoane traumatizate.

Organul teritorial	2018 Implicati in accidene	2018 Decedati	2018 Traum usor	2018 Traum grav	2019 Implicati in accidene	2019 Decedati	2019 Traum usor	2019 Traum grav
Botanica sec	33	1	27	5	43	0	34	8
Buiucani sec.	**26**	**1**	**22**	**3**	**45**	**0**	**35**	**8**
Centru sec	36	0	31	4	36	0	29	5
Ciocana sec.	17	0	13	3	31	0	27	4
Rîşcani sec.	32	1	23	8	29	0	26	3
mun.Chișinău Total	144	3	118	20	184	0	151	28

Reieșind din tipul accidentului rutier în care au avut de pătimit minorii,cea mai mare parte o constituie:

tamponarea pietonilor – 98 copii implicați (55,4% din numărul total de accidente comise în perioada respectivă);
ciocnire laterală – 38 copii implicați (20,6%);
ciocnire față,n spate – 19 copii implicați (10,3%);
tamponarea cicliștilor – 11 copii implicați (5,9%);
ciocnire frontală – 5 copii implicați (2,7%);

Conform statisticii, cea mai mare parte din numărul de accidente cu implicarea copiilor s-au produs din vina **conducătorilor auto – 148** sau 80% din toate accidentele înregistrate în mun.Chișinău

CATEGORIA DE VÎRSTĂ A VICTIMILOR ACCIDENTELOR RUTIERE

Organ evidență	Vîrsta persoanei	2018 Implicati in accident	2018 Decedati	2018 Traum usor	2018 Traum grav	2019 Implicati in accident	2019 Decedati	2019 Traum usor	2019 Traum grav
mun.Chișinău	7	15	0	14	1	31	0	26	4
	00-06	26	3	20	3	44	0	39	5
	07-09	20	0	16	3	23	0	13	2
	10-14	39	0	32	7	48	0	37	10
	15-17	44	0	36	6	36	0	26	7
mun.Chișinău Total		144	3	118	20	184	0	151	28

Analiza consecințelor survenite în urma accidentelor rutiere **(persoane traumatizate)** în coraport cu vârsta victimelor se precizează faptul că, cele mai multe persoane traumatizate au fost cu vârsta cuprinsă între **10-17** ani, **63** persoane au fost traumatizate ușor și **17** persoane au fost traumatizate grav, pe parcursul anului 2019.
Este alarmant faptul că în anul 2018 au fost înregistrate 3 accidente rutiere soldate cu 3 decese a minorilor cu vârsta pînă la 6 ani.

Dacă să ne referim la categoria participanților a minorilor implicați în accidente rutiere, în calitate de pietoni avem cele mai multe cazuri, constituind **53,2%** din numărul total de accidente în mun.Chișinău, totodată se observă că, în afară de pietoni, cel mai des implicați în accidentele rutiere, **sunt minorii în calitate de pasageri, în 52** (a.p.40) **accidente rutiere, soldate cu 52 persoane traumatizate.**

Organ evidență	Categorie participant	2018 Implicati in accident	2018 Decedati	2018 Traum usor	2018 Traum grav	2019 Implicati in accident	2019 Decedati	2019 Traum usor	2019 Traum grav
mun.Chișinău		2	0	1	1				
	Ciclist	6	0	6	0	16	0	12	2
	Conducător autoturism	2	0	1	0	2	0	0	0
	Conducător scuter	1	0	1	0	3	0	2	0
	Motociclist	2	0	1	0				
	Pasager al transportului de persoane	8	0	7	1	9	0	8	1
	Pasager autoturism	40	2	32	5	32	0	49	3
	Pasager bicicletă					1	0	0	1
	Pasager motocicletă	1	0	0	1	2	0	1	1
	Pieton	82	1	69	12	98	0	78	20
mun.Chișinău Total		144	3	118	20	184	0	151	28

Apartenența după gen

Organ evidență	Sex	2018 Implicati in accident	2018 Decedati	2018 Traum usor	2018 Traum grav	2019 Implicati in accident	2019 Decedati	2019 Traum usor	2019 Traum grav
mun.Chișinău	Feminin	62	1	52	8	73	0	61	11
	Masculin	82	2	66	12	111	0	90	17
mun.Chișinău Total		144	3	118	20	184	0	151	28

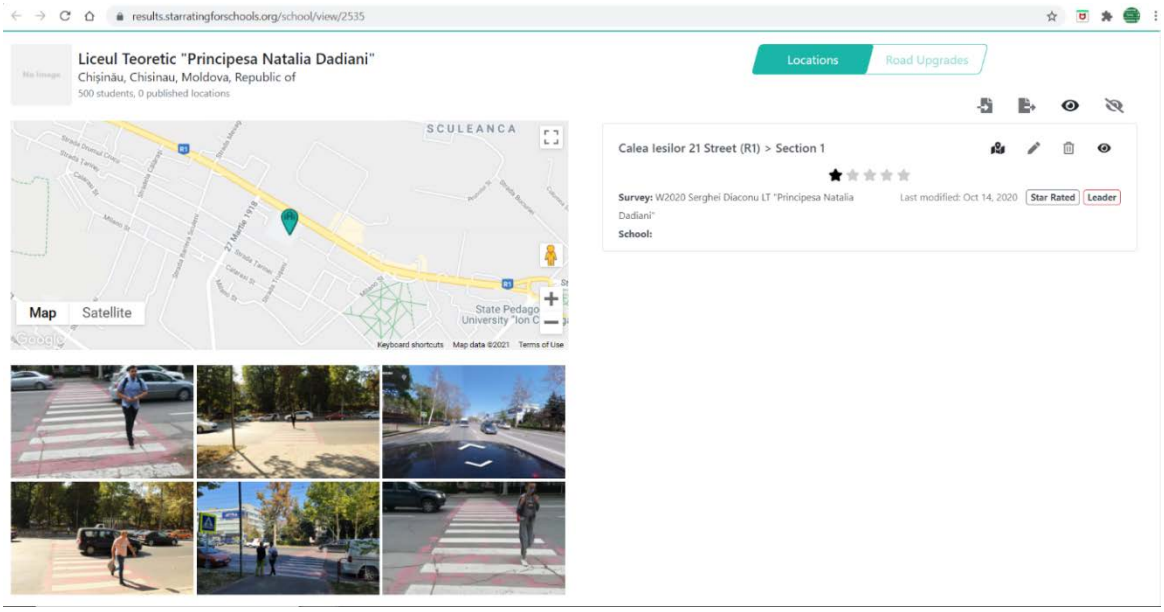
Picture 2-2 Crash data Chisinau 2019. Source NIPS

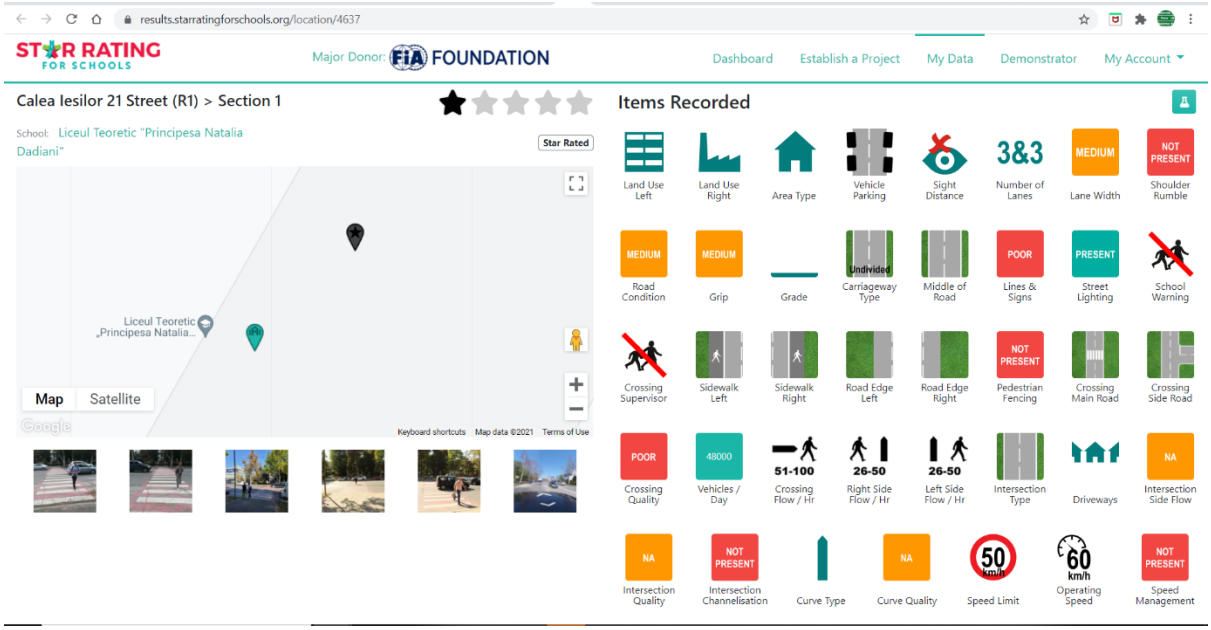
For the location selected in Congaz, the statistical data provided by the local authorities was used.

	Organ evidență	Organul teritorial	Sex	Categorie participant(F3)	Implicati in accident(F3)	Decedati(F3)	Traum usor(F3)	Traum grav(F3)	Nu a patimit(F3)
5	U.T.A. Găgăuzia	Ciadîr-Lunga	Feminin	Pasager autoturism	1	0	1	0	0
6				Pieton	1	0	0	1	0
7			Feminin Total		2	0	1	1	0
8			Masculin	Ciclist	1	0	0	1	0
9				Conducător autoturism	1	0	0	1	0
10				Pieton	4	0	1	3	0
11			Masculin Total		6	0	1	5	0
12		Ciadîr-Lunga Total			8	0	2	6	0
13		Comrat	Feminin	Pasager autoturism	2	1	0	1	0
14				Pieton	1	0	1	0	0
15			Feminin Total		3	1	1	1	0
16			Masculin	Ciclist	1	0	1	0	0
17				Conducător autoturism	1	0	0	0	1
18				Pasager autoturism	2	0	0	2	0
19				Pieton	7	1	1	5	0
20			Masculin Total		11	1	2	7	1
21		Comrat Total			14	2	3	8	1
22	U.T.A. Găgăuzia Total				22	2	5	14	1

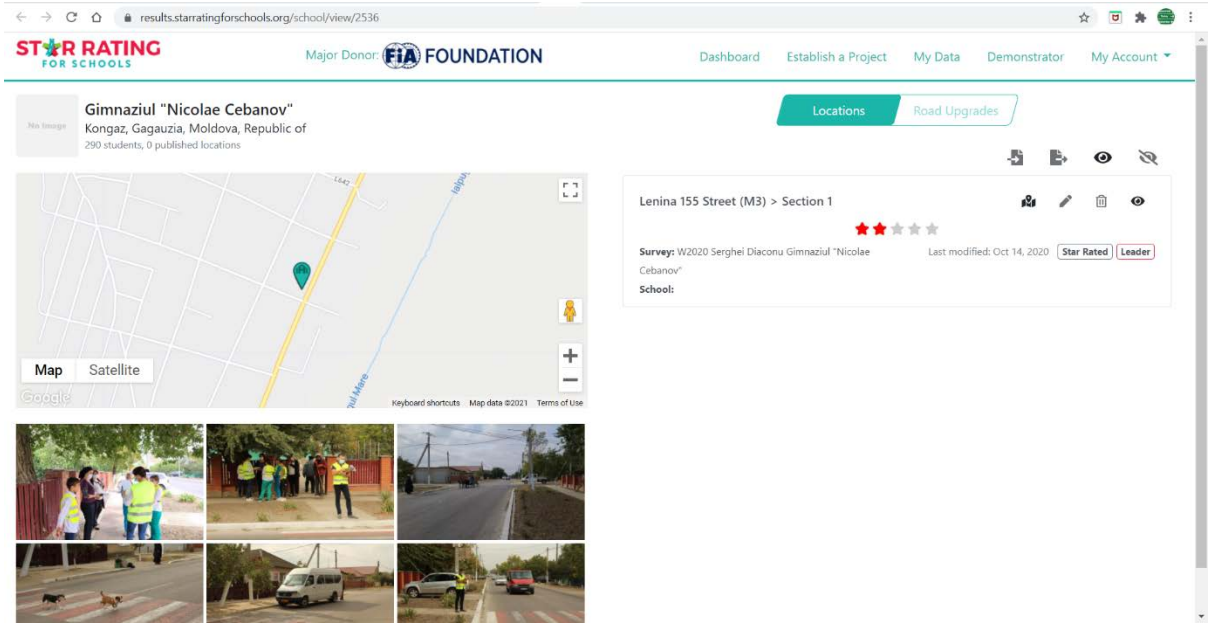
Picture 2-3 Crash data Congaz, 2019. Source NIPS

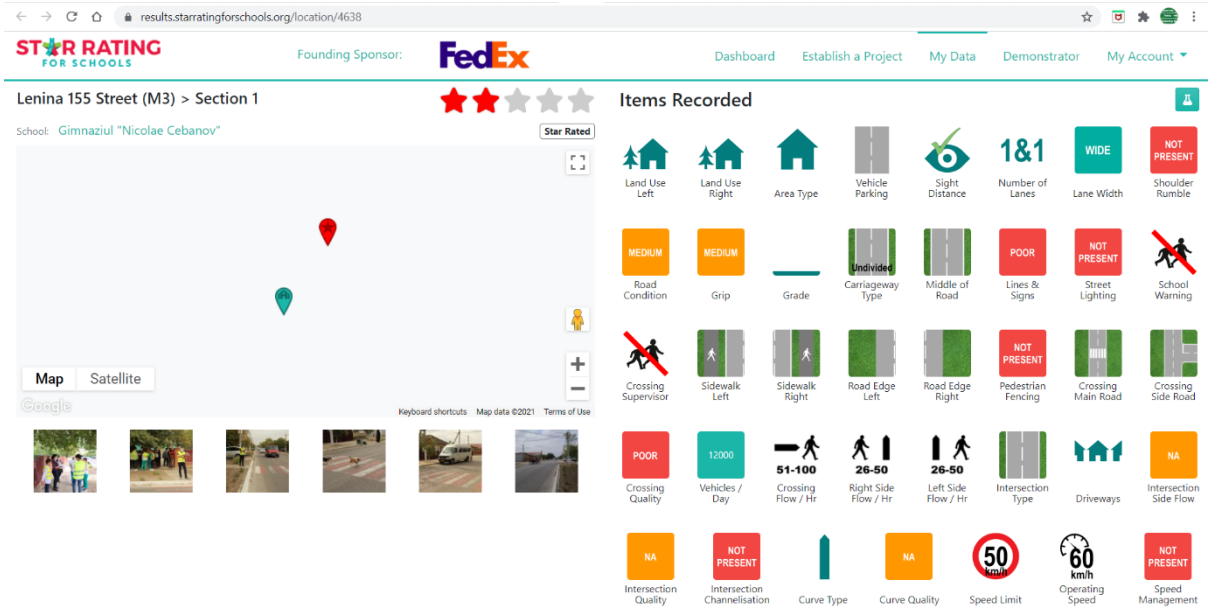
Not all the data, especially concerning specific categories and small crashes with minor injuries were necessarily reported by the police, but appeared in health sector data, mainly coming from hospitals and the ACM team added them during the cross check to better evaluate the risk. The crash data records were taken into consideration, in combination with the exposure data and potential exposure to risk per traffic characteristics and per time evaluated, utilizing the Star Rating for Schools App (SR4S). During the data collection and analysis, the ACM team investigated the impact of various infrastructure elements (geometric characteristics, electric lighting, parking, driver training, enforcements, etc.) on road crashes severance in order to propose safer solutions, based on SR4S App.





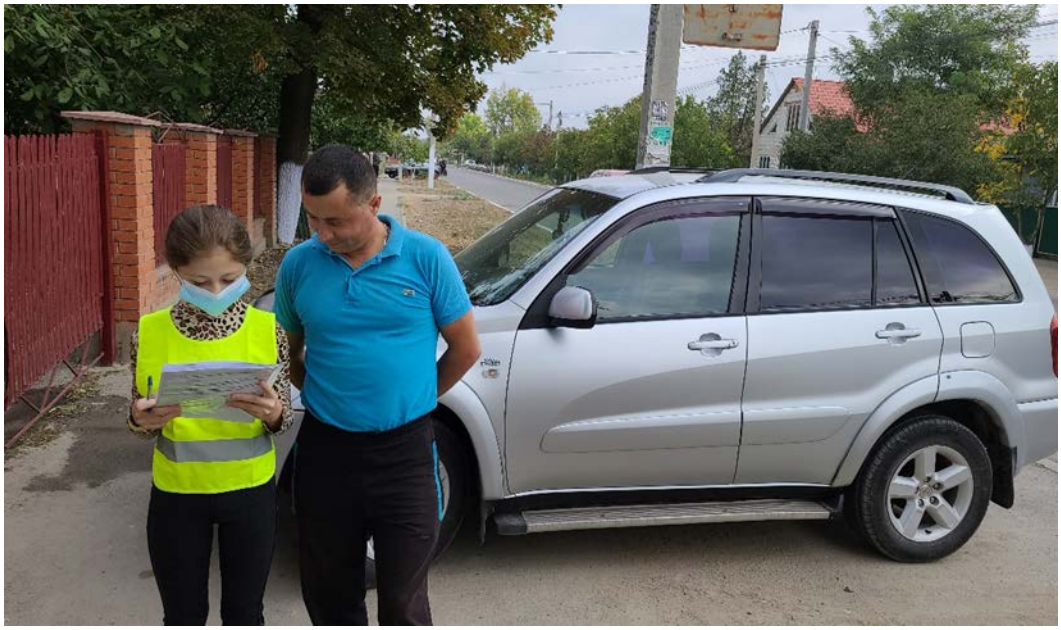
Picture -4 Picture 2-5 Screenshot SR4S App - Chisinau case (urban area)





Picture 2-6 Screenshot SR4S App - Congaz case (rural area)

The two surveys performed by the ACM team with the support of volunteers near the selected schools in Congaz and Chisinau, were conducted based on two different types of questionnaires - for parents and for pupils. In Chisinau a total of 187 parents and 201 pupils were surveyed in Chisinau and 67 parents and 112 pupils in Congaz.



Picture 2-7 Daughter filling-in the parents Questionnaire, with her father in Congaz

Annex 2

Road safety survey
"Safety zone near the school"

QUESTIONNAIRE for parents (182 pers) CHISINAU

1. What grade is your child? **How old is he/she**

1st grade	70		7 to 8 years	
2nd grade	44		8-9 years	
3rd grade	52		9-10 years	
4th grade	16		10-11 years	

2. During last month, where was your child sitting when you brought him to school by car (only those who bring children by car answer)?
1) In the front seat **74**
2) In the back seat **108**

3. How often do you bring your child to school by car?
1) Always **56** (31%)
2) Sometimes **74**
3) Very rarely **22**
4) Never **30**

4. How often do you remind your child about road traffic rules when crossing the road?
1) Always **122**
2) Sometimes **44**
3) Very rarely **16**
4) Never **0**

5. Do you think that the pedestrian crossing at the school is safe?
1) Yes, it is very safe **9**
2) No, it's quite dangerous **153** (84%)
3) Didn't notice **20**

6. What does your child use to increase their visibility on the road?
1) Flashlight **13**
2) Bright clothing **2**
3) Reflective elements **24**
4) Nothing **143**

7. How do you cross the road most often (everyone answers)?
1) At the traffic lights **42**
2) On a pedestrian crossing **50**
3) I go where it's convenient for me **40**
4) I only cross with a large group of people **50**

8. During the last month when you crossed the road near the school, did the drivers stop? Did they give way to you? (everyone responds)
1) Yes, always **23**
2) Sometimes **64**
3) Very rarely **80**
4) Never **15**

9. Since the Covid-19 pandemic began, are there more cars near the school during rush hours (all responding)?
1) No, just like during other years/months of studying **98**
2) Yes, more **46**
3) Less than in other academic years **38**

10. Since the Covid-19 pandemic began, are there more children who commute to school by bicycle or other alternative transport means (scooter, etc.) (all responding)?
1) Yes, there are more of them **25**
2) Nothing has changed **99**
3) No, there are fewer of them **58**

11. Since the Covid-19 pandemic began, has the environmental situation and air pollution levels in the school area changed (all respond)?
1) Yes, very **15**
2) Nothing has changed **123**
3) Didn't notice **44**

12. Do you believe that the road to your child's school is safe? (all respond)
1) Yes, it is very safe **19**
2) No, it's quite dangerous **153** (84%)
3) I have not think of this aspect **10**

13. What improvements would you suggest to improve the road safety level near the school?
1) Speed limit up to 30 km/h
2) Installation of speed limiters (including bumps)
3) Installation of several warning signs with high visibility (more visible)
4) Installation of a car-free zone around a wide perimeter around the school
5) Lighting and other visibility measures
6) Other_____

130 (71%) of respondents consider all the measures of the above important!

Thank You for participating!

Picture 2-8 Sample of survey for parents (urban type, Chisinau)

Annex 2

Road safety survey
"Safety zone near the school"

QUESTIONNAIRE for pupils Chisinau (201 persons)

1. What grade are you? **How old are you?**

1st grade	34		7 to 8 years	
2nd grade	56		8-9 years	
3rd grade	87		9-10 years	
4th grade	24		10-12 years	

2. How do you get to school?
1) By car with parents **130**
2) On public transport **50**
3) By foot **21**
4) On the bike **0**
5) Other_____

3. During the last month, where did you sit when you came to school with your parents by car (only those who go by car answer)?
1) In the front seat **57**
2) In the back seat **55**

4. During the last month, did you sit in a car seat (or a booster) when you came to school with your parents in a car (only those who go by car answer)?
1) Yes, always **87**
2) Sometimes **34**
3) Very rarely **24**
4) Never **56**
5) No, because I'm over 12

5. During the last month, how often did you fasten your seat belt when you came to school with your parents by car (only those who go by car answer)?
1) Yes, always **90**
2) Sometimes **31**
3) Very rarely **24**
4) Never **57**

6. Do you know why you need to Fasten your seat belt (everyone answers)?
1) Yes, for my safety **98**
2) Yes, because the police will fine you **35**

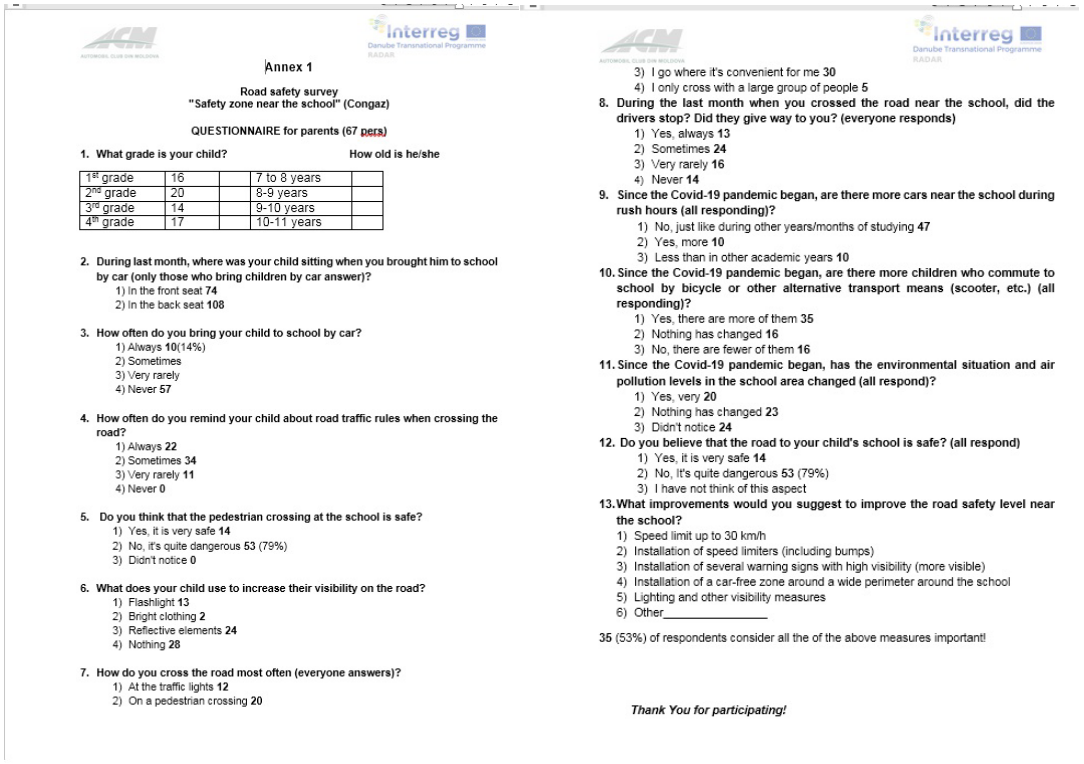
14. Since the Covid-19 pandemic began, are there more children who commute to school by Bicycle or other alternative means of transportation (scooter, etc.) (all responding)?
1) Yes, there are more of them **33**
2) Nothing has changed **139**
3) No, there are fewer of them **29**

15. Since the Covid-19 pandemic began, have the environmental situation and air pollution levels in the school area changed (all respond)?
1) Yes, very **159**
2) Nothing has changed **10**
3) Didn't notice **32**

16. What improvements would you suggest to improve the road safety level near the school?
1) Speed limit up to 30 km/h
2) Installation of speed limiters (including bumps)
3) Installation of several warning signs with high visibility (more visible)
4) Installation of a car-free zone around a wide perimeter around the school
5) Lighting and other visibility measures
6) Traffic lights **117 (58%)**
7) Other_____

Thank You for participating!

Picture 2-9 Sample of survey for pupils (urban type, Chisinau)



Annex 1

Road safety survey
"Safety zone near the school" (Congaz)

QUESTIONNAIRE for parents (67 pers)

1. What grade is your child? How old is he/she

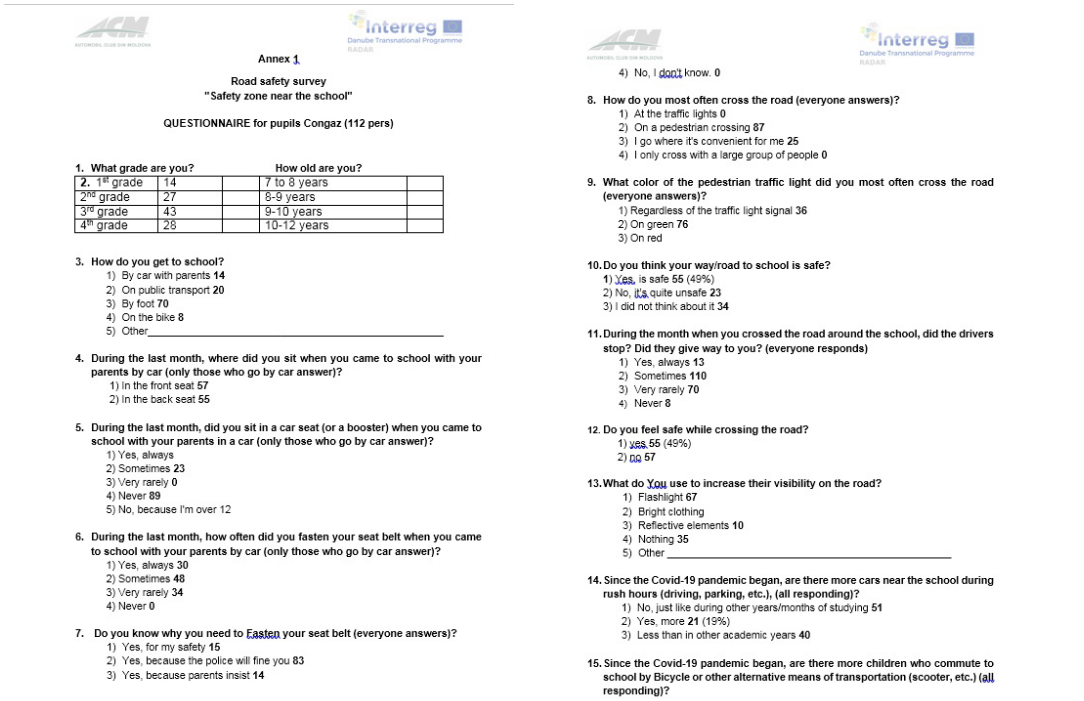
1st grade	16		7 to 8 years	
2nd grade	20		8-9 years	
3rd grade	14		9-10 years	
4th grade	17		10-11 years	

2. During last month, where was your child sitting when you brought him to school by car (only those who bring children by car answer)?
   1) In the front seat **74**
   2) In the back seat **108**
3. How often do you bring your child to school by car?
   1) Always **10**(14%)
   2) Sometimes
   3) Very rarely
   4) Never **57**
4. How often do you remind your child about road traffic rules when crossing the road?
   1) Always **22**
   2) Sometimes **34**
   3) Very rarely **11**
   4) Never **0**
5. Do you think that the pedestrian crossing at the school is safe?
   1) Yes, it is very safe **14**
   2) No, it's quite dangerous **53** (79%)
   3) Didn't notice **0**
6. What does your child use to increase their visibility on the road?
   1) Flashlight **13**
   2) Bright clothing **2**
   3) Reflective elements **24**
   4) Nothing **28**
7. How do you cross the road most often (everyone answers)?
   1) At the traffic lights **12**
   2) On a pedestrian crossing **20**
   3) I go where it's convenient for me **30**
   4) I only cross with a large group of people **5**
8. During the last month when you crossed the road near the school, did the drivers stop? Did they give way to you? (everyone responds)
   1) Yes, always **13**
   2) Sometimes **24**
   3) Very rarely **16**
   4) Never **14**
9. Since the Covid-19 pandemic began, are there more cars near the school during rush hours (all responding)?
   1) No, just like during other years/months of studying **47**
   2) Yes, more **10**
   3) Less than in other academic years **10**
10. Since the Covid-19 pandemic began, are there more children who commute to school by bicycle or other alternative transport means (scooter, etc.) (all responding)?
    1) Yes, there are more of them **35**
    2) Nothing has changed **16**
    3) No, there are fewer of them **16**
11. Since the Covid-19 pandemic began, has the environmental situation and air pollution levels in the school area changed (all respond)?
    1) Yes, very **20**
    2) Nothing has changed **23**
    3) Didn't notice **24**
12. Do you believe that the road to your child's school is safe? (all respond)
    1) Yes, it is very safe **14**
    2) No, it's quite dangerous **53** (79%)
    3) I have not think of this aspect
13. What improvements would you suggest to improve the road safety level near the school?
    1) Speed limit up to 30 km/h
    2) Installation of speed limiters (including bumps)
    3) Installation of several warning signs with high visibility (more visible)
    4) Installation of a car-free zone around a wide perimeter around the school
    5) Lighting and other visibility measures
    6) Other_____

35 (53%) of respondents consider all the of the above measures important!

Thank You for participating!

Picture 2-10 Sample of survey for parents (rural type, Congaz)



Annex 1

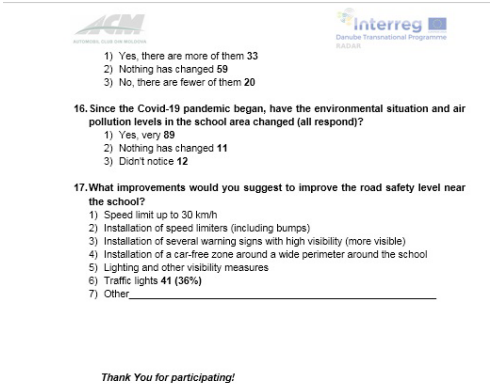
Road safety survey
"Safety zone near the school"

QUESTIONNAIRE for pupils Congaz (112 pers)

1. What grade are you? How old are you?

2. 1st grade	14		7 to 8 years	
2nd grade	27		8-9 years	
3rd grade	43		9-10 years	
4th grade	28		10-12 years	

3. How do you get to school?
   1) By car with parents **14**
   2) On public transport **20**
   3) By foot **70**
   4) On the bike **8**
   5) Other_____
4. During the last month, where did you sit when you came to school with your parents by car (only those who go by car answer)?
   1) In the front seat **57**
   2) In the back seat **55**
5. During the last month, did you sit in a car seat (or a booster) when you came to school with your parents in a car (only those who go by car answer)?
   1) Yes, always
   2) Sometimes **23**
   3) Very rarely **0**
   4) Never **89**
   5) No, because I'm over 12
6. During the last month, how often did you fasten your seat belt when you came to school with your parents by car (only those who go by car answer)?
   1) Yes, always **30**
   2) Sometimes **48**
   3) Very rarely **34**
   4) Never **0**
7. Do you know why you need to Fasten your seat belt (everyone answers)?
   1) Yes, for my safety **15**
   2) Yes, because the police will fine you **83**
   3) Yes, because parents insist **14**
   4) No, I don't know. **0**
8. How do you most often cross the road (everyone answers)?
   1) At the traffic lights **0**
   2) On a pedestrian crossing **87**
   3) I go where it's convenient for me **25**
   4) I only cross with a large group of people **0**
9. What color of the pedestrian traffic light did you most often cross the road (everyone answers)?
   1) Regardless of the traffic light signal **36**
   2) On green **76**
   3) On red
10. Do you think your way/road to school is safe?
    1) Yes, is safe **55** (49%)
    2) No, it's quite unsafe **23**
    3) I did not think about it **34**
11. During the month when you crossed the road around the school, did the drivers stop? Did they give way to you? (everyone responds)
    1) Yes, always **13**
    2) Sometimes **110**
    3) Very rarely **70**
    4) Never **8**
12. Do you feel safe while crossing the road?
    1) yes **55** (49%)
    2) no **57**
13. What do You use to increase their visibility on the road?
    1) Flashlight **67**
    2) Bright clothing
    3) Reflective elements **10**
    4) Nothing **35**
    5) Other _____
14. Since the Covid-19 pandemic began, are there more cars near the school during rush hours (driving, parking, etc.), (all responding)?
    1) No, just like during other years/months of studying **51**
    2) Yes, more **21** (19%)
    3) Less than in other academic years **40**
15. Since the Covid-19 pandemic began, are there more children who commute to school by Bicycle or other alternative means of transportation (scooter, etc.) (all responding)?



1) Yes, there are more of them **33**
2) Nothing has changed **69**
3) No, there are fewer of them **20**

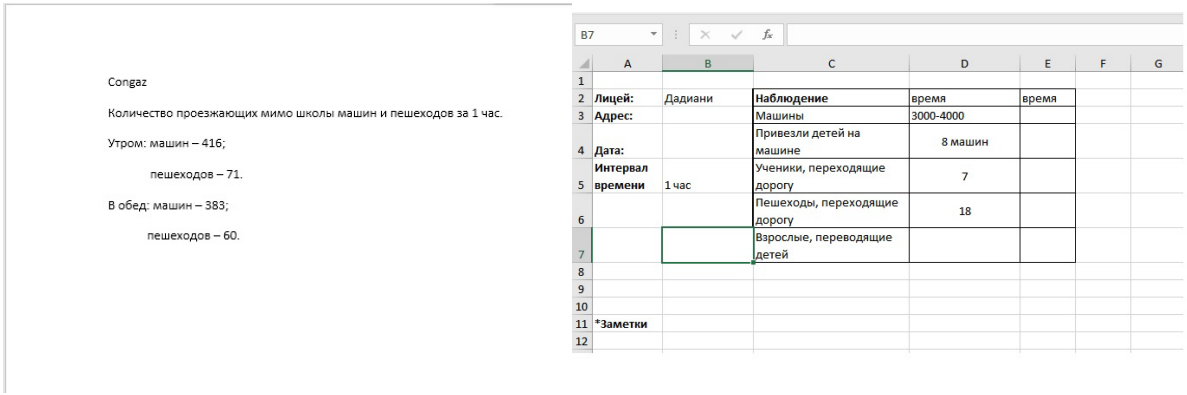
16. Since the Covid-19 pandemic began, have the environmental situation and air pollution levels in the school area changed (all respond)?
1) Yes, very **89**
2) Nothing has changed **11**
3) Didn't notice **12**

17. What improvements would you suggest to improve the road safety level near the school?
1) Speed limit up to 30 km/h
2) Installation of speed limiters (including bumps)
3) Installation of several warning signs with high visibility (more visible)
4) Installation of a car-free zone around a wide perimeter around the school
5) Lighting and other visibility measures
6) Traffic lights **41 (36%)**
7) Other_____

Thank You for participating!

Picture 2-11 Sample of survey for pupils (rural type, Congaz)

Because of the lack of data on AADT in the selected zones at the responsible national responsible authority, the ACM team counted manually the number of cars crossing the zone per hour and calculated an average number for each location.



Congaz

Количество проезжающих мимо школы машин и пешеходов за 1 час.

Утром: машин – 416;

пешеходов – 71.

В обед: машин – 383;

пешеходов – 60.

B7

	A	B	C	D	E	F	G
1							
2	**Лицей:**	Дадиани	**Наблюдение**	время	время		
3	**Адрес:**		Машины	3000-4000			
4	**Дата:**		Привезли детей на машине	8 машин			
5	**Интервал времени**	1 час	Ученики, переходящие дорогу	7			
6			Пешеходы, переходящие дорогу	18			
7			Взрослые, переводящие детей				
8							
9							
10							
11	***Заметки**						
12							

Picture 2-12 Samples of 1 hour volunteer car counting for both zones