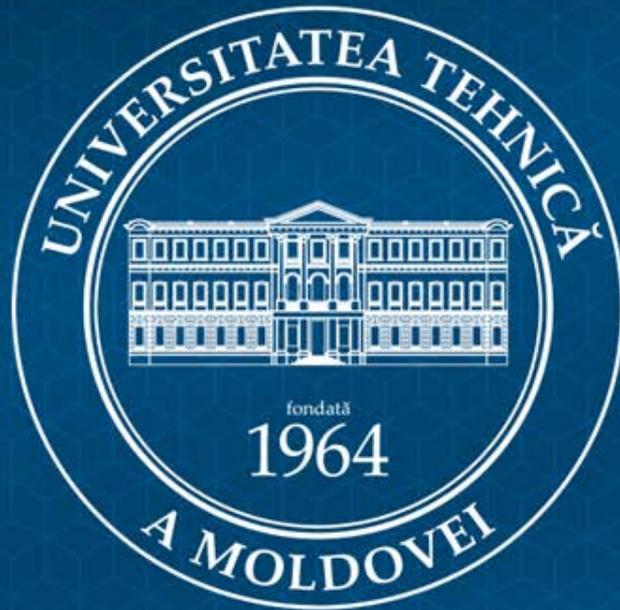


Săptămâna Geodeziei Românești  
Romanian Surveying Week

23-28 September 2019  
Cluj-Napoca, Romania



## CREATING AN INFORMATION SYSTEM FOR THE PREVENTION OF ROAD ACCIDENTS ACCESSIBLE TO THE GENERAL PUBLIC IN THE REPUBLIC OF MOLDOVA

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Technical University of Moldova.*



# PURPOSE AND OBJECTIVES:



***Purpose:*** Creating an informational system on road accidents accessible to the general public.

## ***Objectives:***

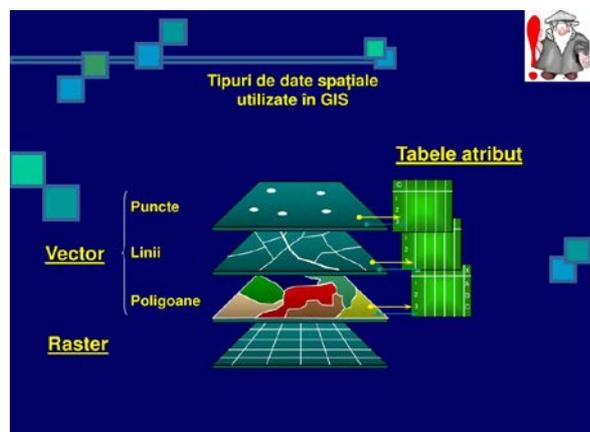
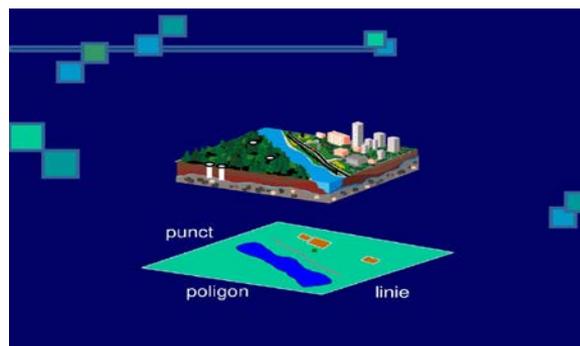
- elaboration and updating of the road accidents thematic map on the territory of the Republic of Moldova;
- analysis of road sectors and routes with the most road accidents;
- developing an interactive thematic map of accidents;
- generating textual and graphic reports and statistics on road accidents.

# SUBJECTS:



- ✓ GEOGRAPHIC INFORMATIONAL SYSTEM ON ROAD ACCIDENTS;
- ✓ ARCGIS PLATFORM, THE LEGAL FRAMEWORK, THE AUTHORITIES INVOLVED IN THE RECORDING OF ROAD ACCIDENTS;
- ✓ ONLINE ROAD ACCIDENT RECORD SYSTEM.

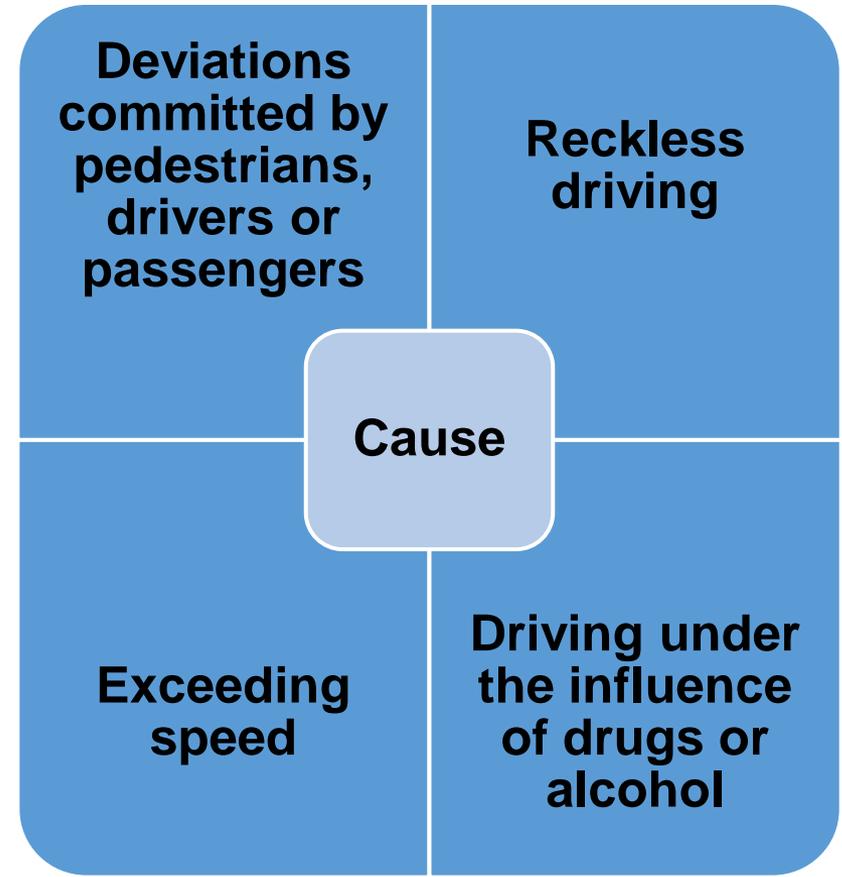
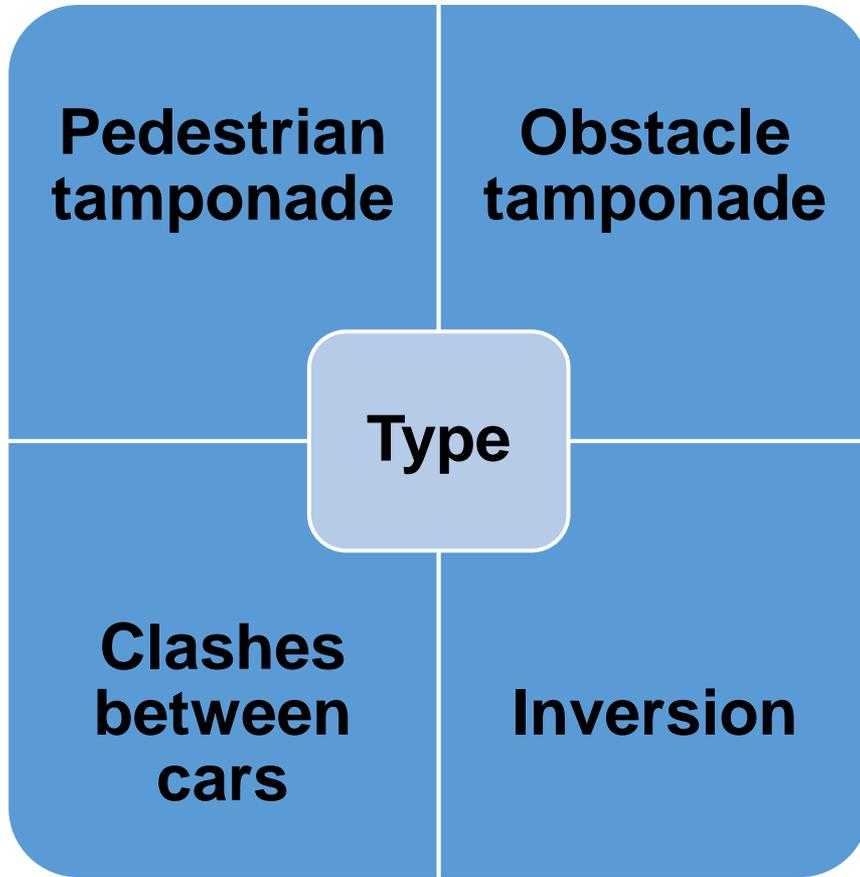
# GEOGRAPHICAL INFORMATIONAL SYSTEM FOR ROAD ACCIDENTS



Law No.  
254 of  
17.11.2016  
on INDS

Directive  
2007/2 /  
EC of  
14.03.2007  
INSPIRE

# CAUSES AND TYPES OF ROAD ACCIDENTS

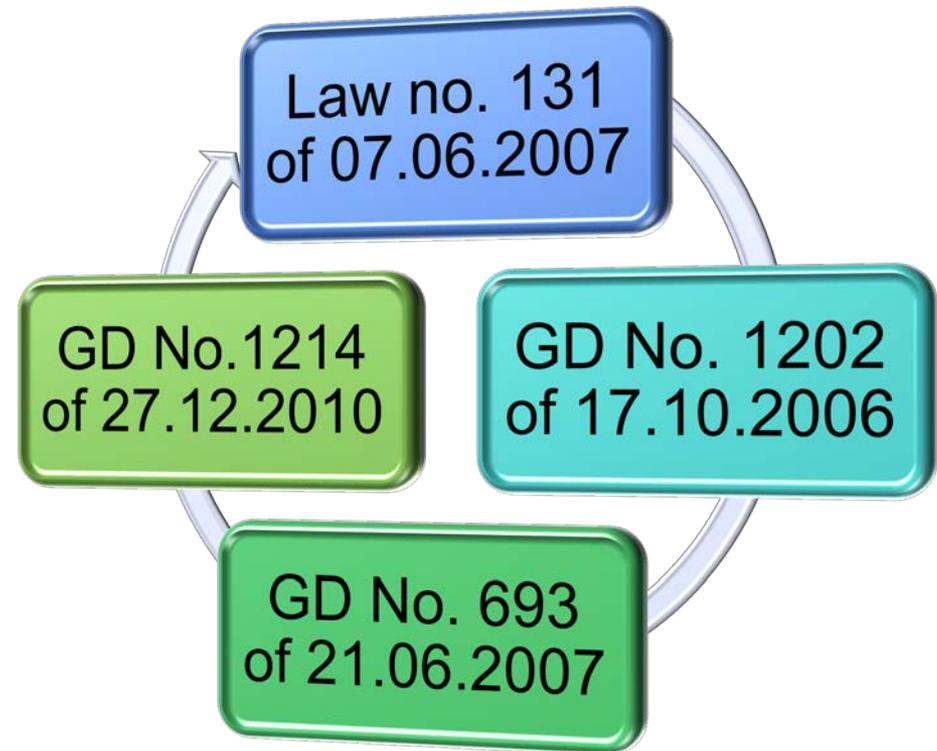
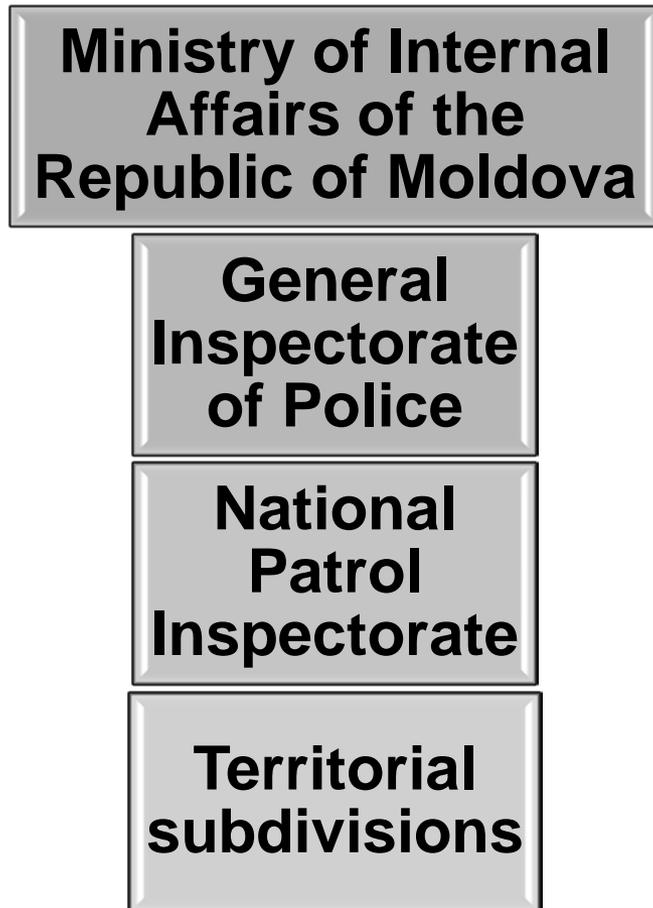


# ARCGIS PLATFORM, LEGAL FRAMEWORK, AUTHORITIES INVOLVED IN THE EVIDENCE OF ROAD ACCIDENTS



# ArcGIS

# COMPETENT BODIES AND LEGISLATION



# ONLINE SYSTEM OF EVIDENCE OF ROAD ACCIDENTS



Accidents occur in certain locations, which is why they have a geographic reference system. This system establishes the link between GIS and accident data.

GIS offers a number of analytical capabilities and features that can help improve traditional methods of processing and analyzing data on road accidents, such as :

- Database query and data display
- Spatial and network analysis
- GIS interoperability

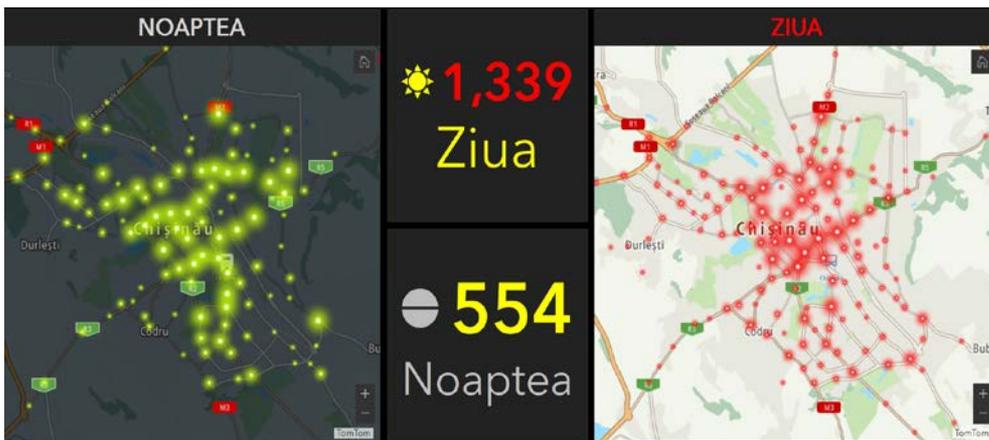


As a rule, information on road accidents is collected by the Road Police patrol inspector and kept in certain registers, which are stored in the Automated Informational System "State Register of Road Accidents". The state language is used when completing the report.

# THEMATIC MAPS



Transport Public	Biciclete	Camioane
<b>106</b>	<b>10</b>	<b>111</b>
Pietoni	Autoturisme	Motociclete
<b>103</b>	<b>3,410</b>	<b>27</b>



# THE MAIN SOURCES OF INFORMATION



Organiz	ID AR	Data	Ora	Locul	Tip AR	Cauza AR	Deces	Tranz	
Frontal	51154	05.07.2018	23:55	Tl. M 14 B res. Biserica-Doroban-Treapii-Olesea, km 313-300m	Tamponare cu obstacol de pe partea carosabilă	Neobservarea distanței dintre vehicule	0	0	
	51155	05.07.2018	19:20	s. Bubușca	Tamponare cu obstacol din alina carosabilă	Neobservare la schimbarea bătăi, viteză încreștată	0	0	
	51194	03.07.2018	18:00	s. Bubușca	Coliziune laterală	Neobservare la schimbarea bătăi, viteză încreștată	0	0	
	51153	11.07.2018	07:20	dr. Severina	Coliziune cu vehicul staționat	Neobservare la schimbarea bătăi, viteză încreștată	0	0	
	51298	17.07.2018	14:30	Tl. Chișinău-Treapii, km 39+400m	Încercare	Alte stăruiri cauze de control distanță	0	0	
	51307	10.07.2018	18:35	Tl. Doroban Treapii, km 39	Coliziune frontală	Ușor neobservare vitezei, condiții slabe de vizibilitate	0	0	
	Scoatere din trafic	51408	01.07.2018	12:45	Tl. 9-36 km 5-70m	Tamponare cu obstacol din alina carosabilă	Ușor neobservare vitezei, condiții slabe de vizibilitate	0	0
		51500	16.07.2018	21:20	dr. I. Săreni, 1, s. Abadă	Tamponare cu obstacol din alina carosabilă	Împrejurarea adăsoarelor (16-18 ani)	0	0
	SOP	51436	17.07.2018	13:30	dr. Știrlei cel Mare, 48	Coliziune laterală	Neobservare la schimbarea bătăi, viteză încreștată	0	0
		51255	01.07.2018	16:42	dr. Igor Vieru, 135	Tamponare cu obstacol de pe partea carosabilă	Neobservare la schimbarea bătăi, viteză încreștată	0	0
51190		05.07.2018	11:25	Intersecție Tr. 88 - dr. Știrlei	Coliziune laterală	Neobservare semnului verticalizării	0	1	
51291		08.07.2018	09:30	dr. Știrlei 2A	Tamponare obstacol	Neobservare la schimbarea bătăi, viteză încreștată	0	1	
51335		07.07.2018	13:30	dr. Vlașcărești, 1 A	Coliziune cu vehicul staționat	Neobservare la schimbarea bătăi, viteză încreștată	0	0	
Rivni	51126	05.07.2018	06:30	s. Știrlei	Tamponare pietonilor care circula pe partea dreaptă a drumului	Stare de ebrietate alcoolică, admisie în viză	0	1	
	51383	04.07.2018	13:10	dr. M. Eminescu	Tamponare cu obstacol	Neobservare la schimbarea bătăi, viteză încreștată	0	0	
	51321	08.07.2018	13:45	dr. M. Eminescu	Coliziune cu vehicul staționat	Neobservare la schimbarea bătăi, viteză încreștată	0	0	
	51418	17.07.2018	06:10	s. Drajăuț	Tamponare pe pietonilor angajați în lucrare și neobservare a stării de ebrietate	Ușor neobservare vitezei, condiții slabe de vizibilitate	1	0	
Centrul	51232	01.07.2018	03:40	Tl. R21 - drum de acces spre s. Tigheci	Tamponare cu obstacol din alina carosabilă	Stare de ebrietate alcoolică, admisie în viză	0	0	
	51419	16.07.2018	13:37	dr. Bani Bani	Coliziune cu vehicul staționat	Conducere imprudentă	0	0	
Clujeni	51232	01.07.2018	06:45	dr. Tigheci	Coliziune tangențială	Conducere neregulamentată	0	0	
	51294	05.07.2018	08:30	dr. M. Eminescu	Coliziune tangențială	Neobservare la schimbarea bătăi, viteză încreștată	0	0	
	51238	01.07.2018	13:45	s. Știrlei	Alte accidente cu participarea unui vehicul	Neobservare la schimbarea bătăi, viteză încreștată	0	0	
	51360	17.07.2018	09:30	s. Penarșeni	Tamponare cu obstacol din alina carosabilă	Neobservare la schimbarea bătăi, viteză încreștată	0	0	



INFOTRAFIC MOLDOVA

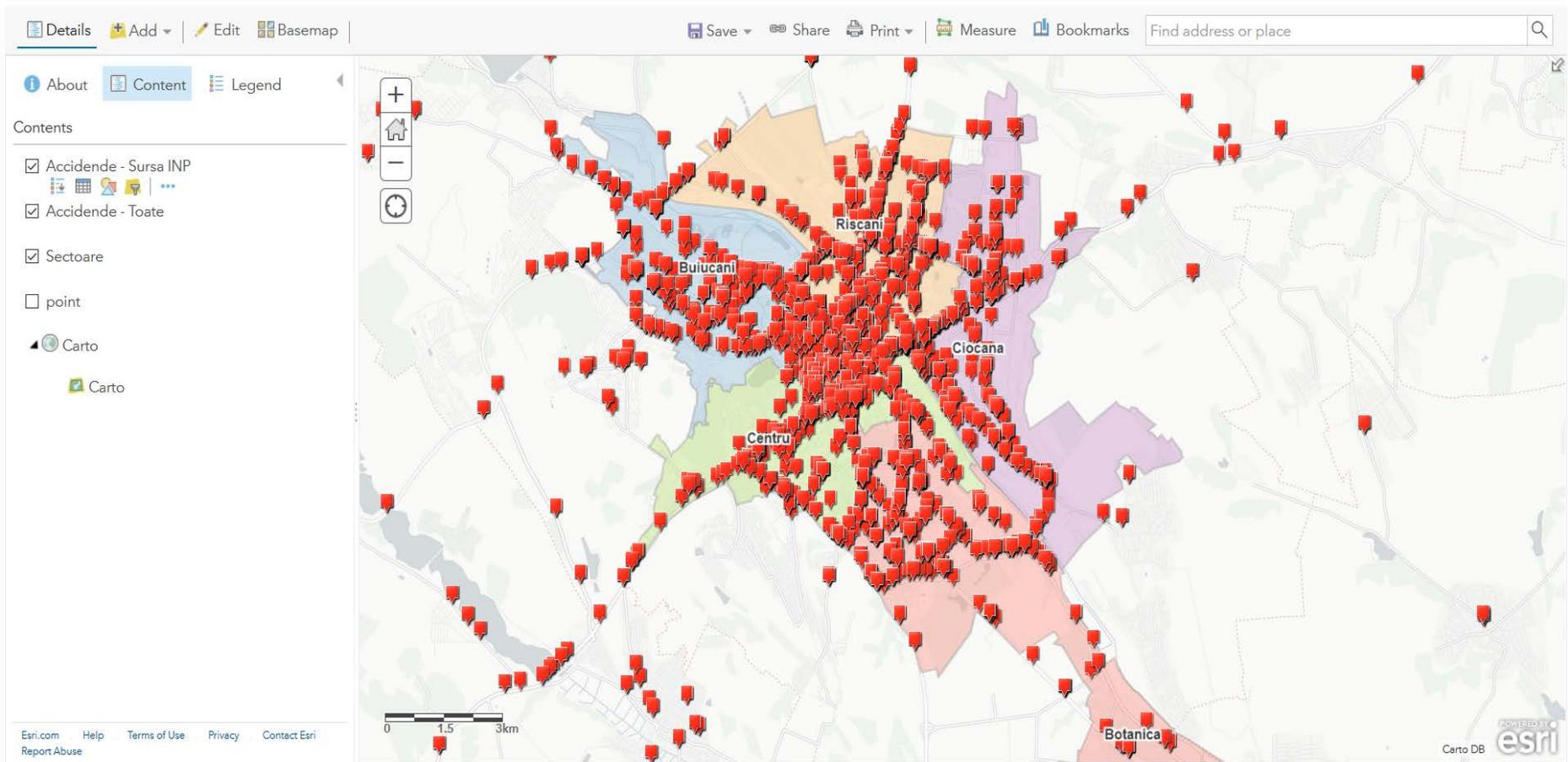
551 1



La intersecția străzilor: Ciuflea - București, este înregistrat accident rutier, care crează obstacol. **CONDUCEȚI CU PRUDENȚĂ !!!**



# CONTROL PANEL OF THE ROAD ACCIDENTS THEMATIC MAP



# LAYER CONTROL



Details Add Edit Basemap

About Content Legend

### Accidente Editare

asd

Web Map by 1hartamd

Last Modified: February 11, 2019

★★★★★ (0 ratings, 0 comments, 464 views)

[More Details...](#)

Details Add Edit Basemap

About Content Legend

### Contents

- Accidente - Sursa INP
- Accidente - Toate
- Sectoare
- point
- ▶ Carto

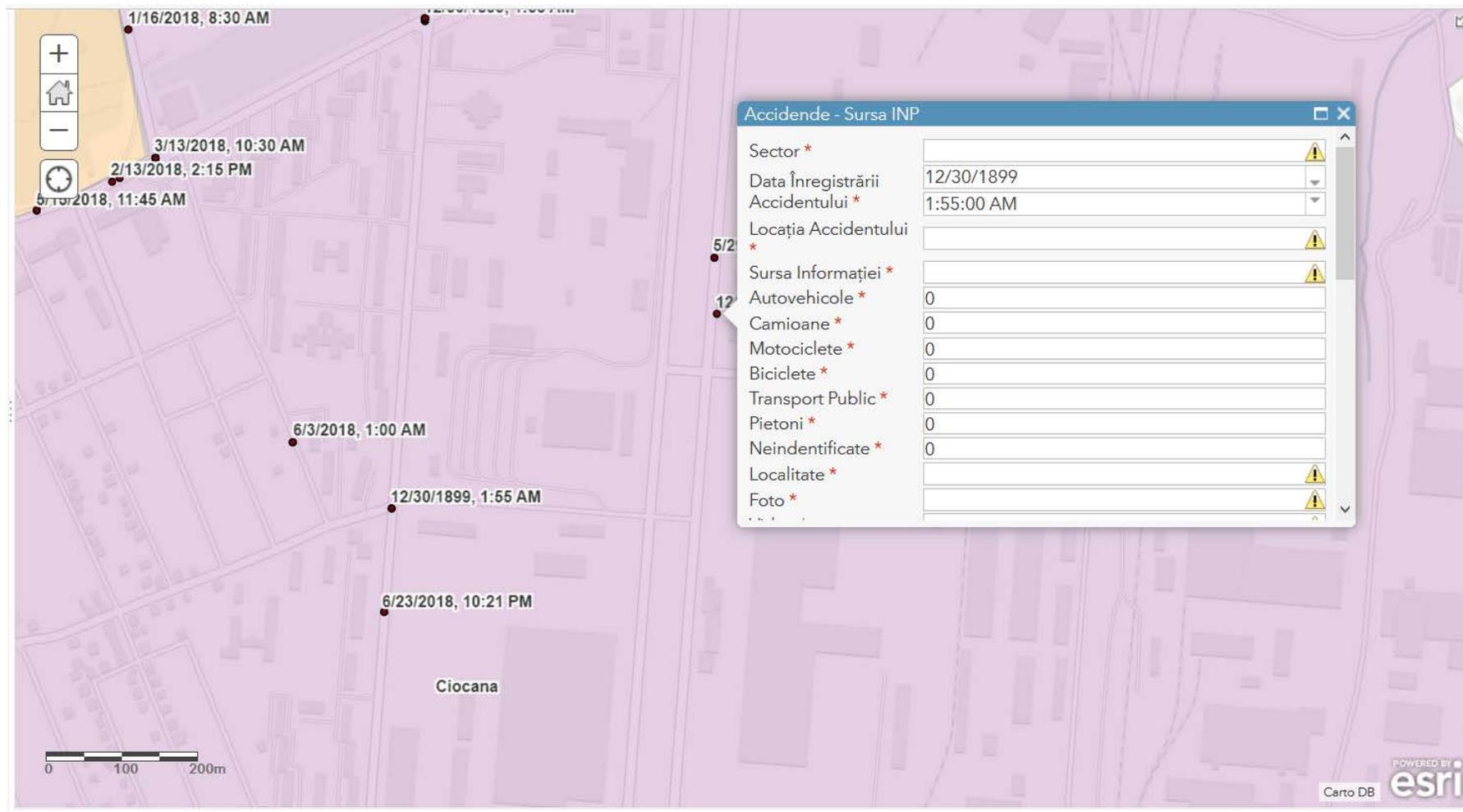
Details Add Edit Basemap

About Content Legend

### Legend

- Accidente - Sursa INP**
- Accidente - Toate**
- Sectoare**
  - Botanica
  - Buiucani
  - Centru
  - Ciocana
  - Riscani

# ATTRIBUTES OF THE POINT ADDED TO THE MAP



# ECONOMIC ANALYSIS OF THE WORK



Analyzing the digital product market, a comparative analysis was carried out between the indirect competitors, which could influence the demand for the road accident map mentioned in this paper.

<b>Strong points:</b> <ul style="list-style-type: none"><li>- compared to other sources of information, this digital map provides more details about road accidents;</li><li>- no need to download third-party applications to view the data;</li></ul>	<b>Weaknesses:</b> <ul style="list-style-type: none"><li>- for using the map, a good internet connection is required</li><li>- the map user cannot enter data on the map;</li></ul>
<b>Opportunities:</b> <ul style="list-style-type: none"><li>- the demand for this product can become much higher, compared to the products offered by the competitors;</li></ul>	<b>Threats:</b> <ul style="list-style-type: none"><li>- if internet services are no longer provided, regular map users can no longer use the product, which results in a reduction in the number of users by default.</li></ul>

# CONCLUSIONS:



- ✓ Due to the GIS standards implemented both in the European Union and in the Republic of Moldova, it can be firmly said that this system of road accident records ensures the correctness of the information, the convenient display, for the consumer, of it, and, last but not least, the quality of the system;
- ✓ Thanks to all GIS skills, ways to prevent road accidents can be developed, and the population can have access to accident information at any time and anywhere;
- ✓ Although this online map has potential competitors, it remains a widely used product by the population and which has proven over time to be effective;
- ✓ No one can ever be guarded by a road accident. Therefore, any road traffic participant, regardless of whether he is a driver, passenger or pedestrian, must assume civic responsibility, know the rules, regulations and laws established by the competent bodies and circulate wisely.



**LIFE HAS PRIORITY!**

**THANK YOU FOR YOUR ATTENTION!**