

Enforcing the speed limit – System of automatic speed enforcement

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INSTYTUT
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CANARD – Centre for Automatic Enforcement of Road Traffic

- In **2001 General Inspectorate for Road Transport (GITD)** was created, started to operate in 2002 (fulfilling one of the EU accession requirement)
 - maintaining fair competitiveness in road transport (to obey the regulations in road transport with regard to drivers work load and dangerous goods transportation)
 - improving road safety
 - protecting the environment
- In **2011** two new offices within GITD were created
 - **CANARD (Centre for Automatic Enforcement of Road Traffic)** – with 10 regional offices
 - BEPO (Office for Electronic Fees Collection)

- revealing by means of recording devices violations of road traffic regulations with regard to speeding and non-compliance with traffic lights signals
- conducting proceedings related to those violations
- cooperation with road managers (with regard to installation/removal and maintenance of recording devices), public administration bodies, national/international institutions



Project „Construction of the central automatic road traffic supervision system”



Main goal: improving road safety and reducing the number of fatalities by implementing an effective and efficient system of automatic traffic supervision

European Regional Development Fund, Operational Programme Infrastructure and Environment

Priority: VIII – Transport Safety and National Transport Networks, Action: 8.1 – Road Safety

Contract: 2011-2015

Total value: 188 871 909 PLN (42 mln EUR)

EU financing: 160 541 122 PLN (36 mln EUR)

Beneficiaries: General Inspectorate for Road Transport GITD, Centre for Automatic Enforcement of Road Traffic CANARD, Centre for EU Transport Projects, Ministry of Infrastructure and Development

- Purchase of speed cameras infrastructure and optoelectronic equipment for road traffic enforcement:
fixed recording devices (400), red light monitoring devices (20), recording devices for sectional speed measurement (29), mobile recording devices (29), technical support, patrol and logistics vehicles (65)
- Purchase, adaptation and equipment of the building for the purposes of CANARD operation
- Development of system software enabling collection, storage and automatic data processing

Road safety analysis at speed cameras locations

Speed cameras locations	Accidents (monthly average)	Killed (monthly average)	Injured (monthly average)
2008-2012 (before installation)	16.3	2.5	21.6
2013-2016 (after installation)	10.3	1.2	12.5
Reduction	- 36.8%	- 52.0%	- 42.1%

Speed limit	Average speed after installation of speed cameras	Decrease of average speed due to speed cameras installation	Traffic accident death risk reduction ¹
50 km/h	47.4	-9.4%	-37.6%
70 km/h	57.6	-6.2%	-24.8%

Average speed at the locations of speed cameras **decreased by 9,4%** comparing to the pre-installation period

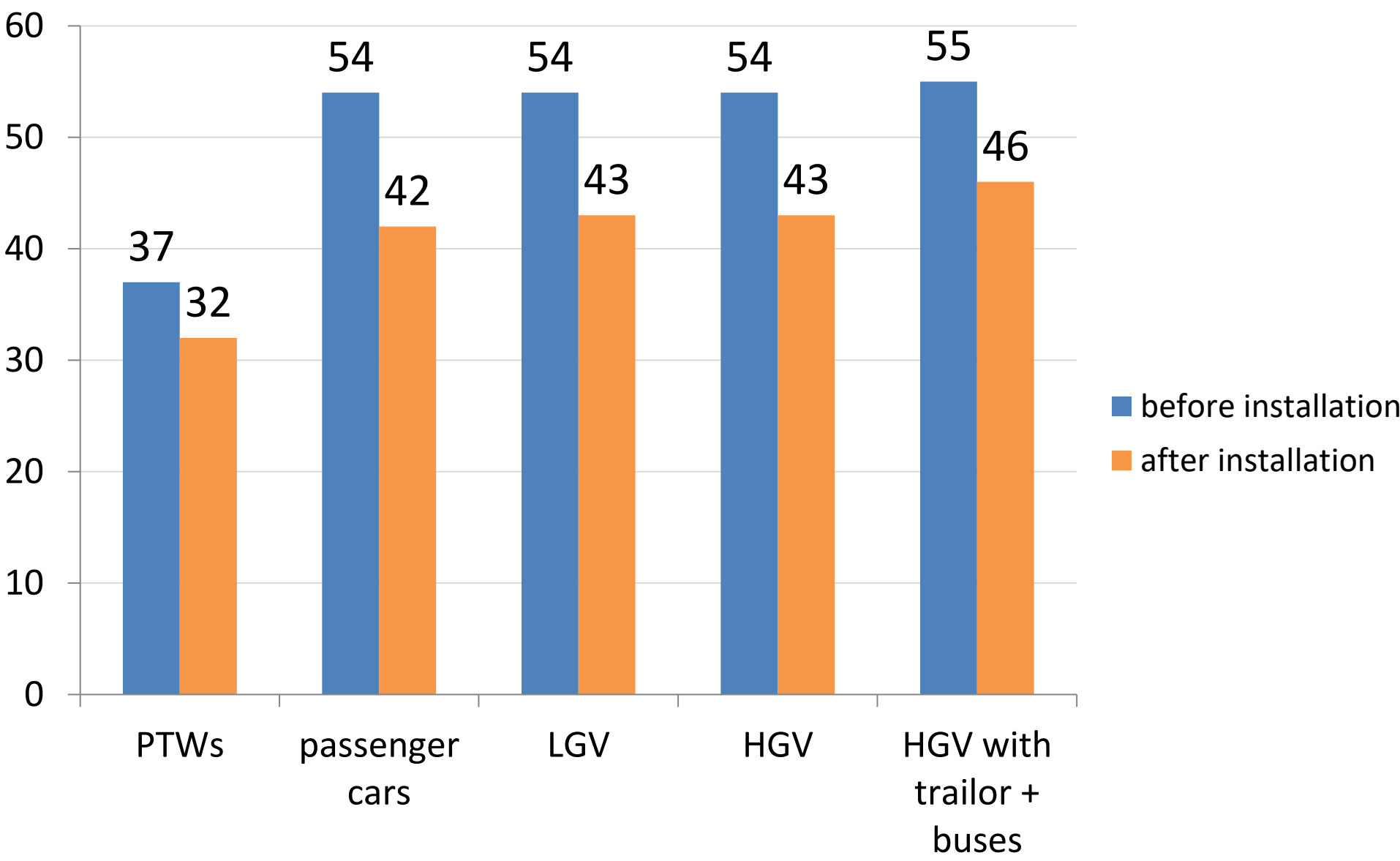
¹ Simulation based on exponential model of Göran Nilsson (G. Nilsson, Traffic Safety Dimensions and the Power Model do Describe the Effect of Speed on Safety, Lund Institute of Technology, 2004)

Source: CANARD

Road safety analysis at speed cameras locations

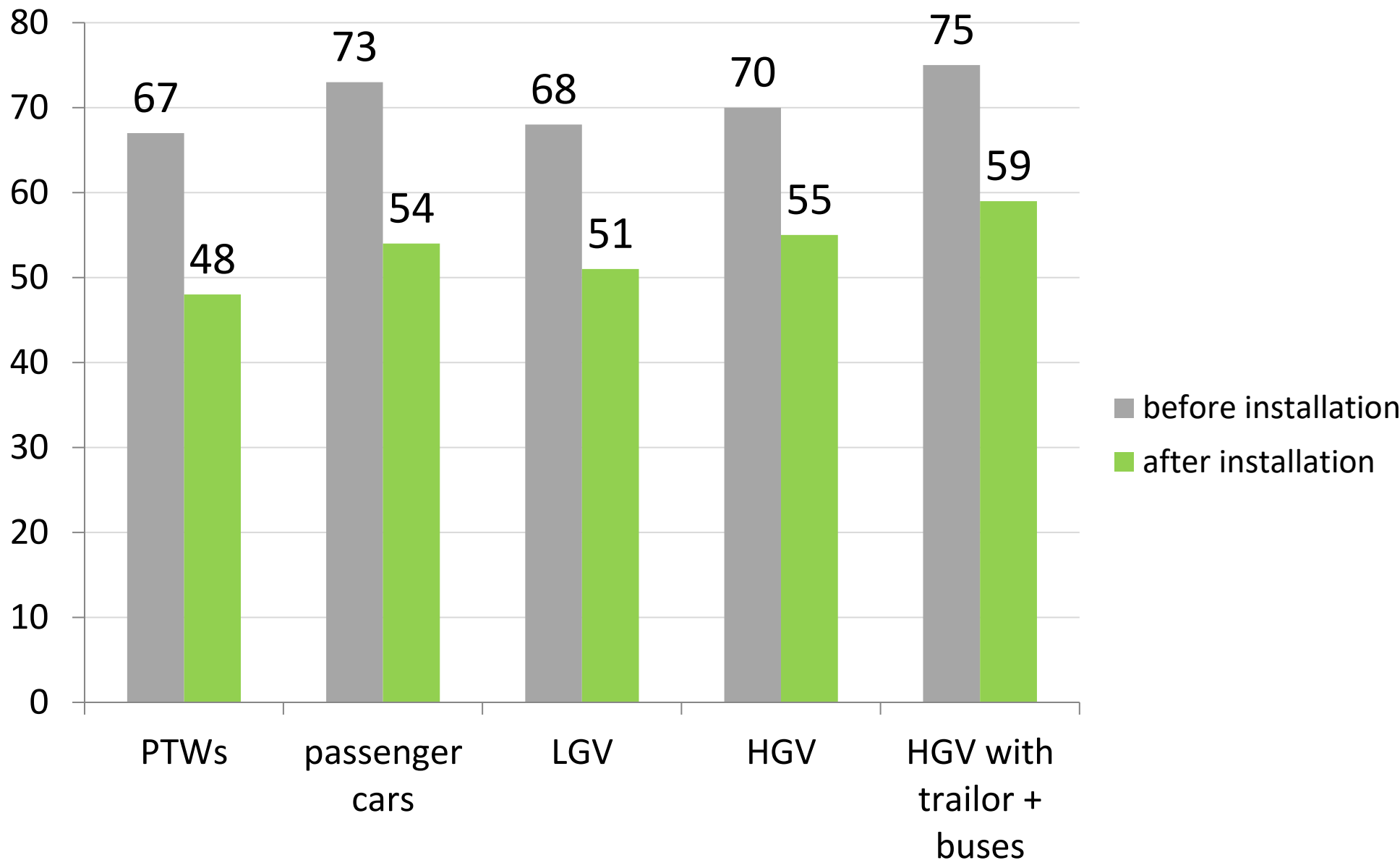
The decrease in the average speed in the tested speed cameras locations (fixed)

speed limits: 40 km/h, 50/60 km/h



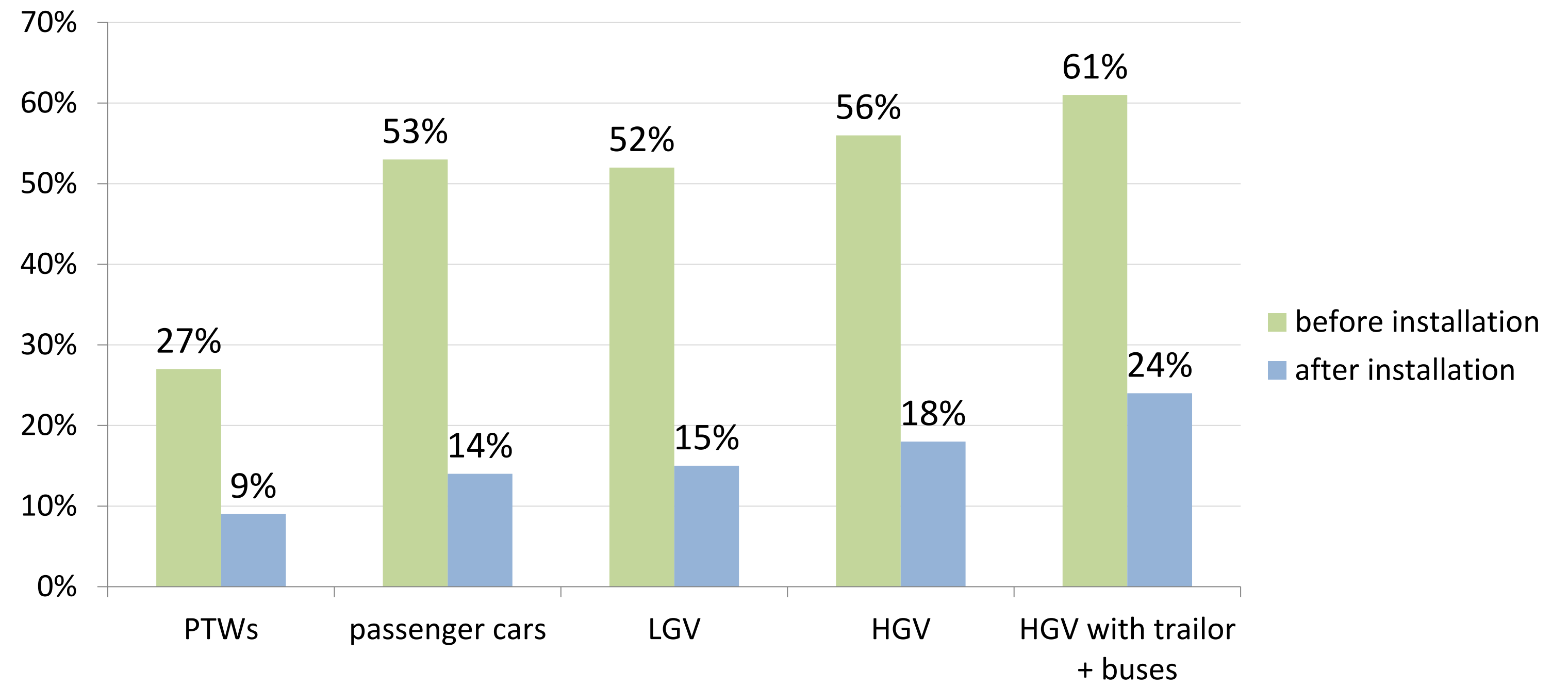
Data source: CANARD

speed limits: 70 km/h, 70/90 km/h, 80/100 km/h



Road safety analysis at speed cameras locations

Percentage of vehicles not complying with the speed limit in the tested speed camera locations (fixed)



Data source: CANARD

Project „Increasing the effectiveness and efficiency of the automatic traffic enforcement system”

Main goal: to increase road safety on all road categories and decreasing the number of road deaths by expanding the automatic system of road traffic supervision

*European Regional Development Fund, Operational Programme Infrastructure and Environment 2014-2020
Contract: 2018-2023*

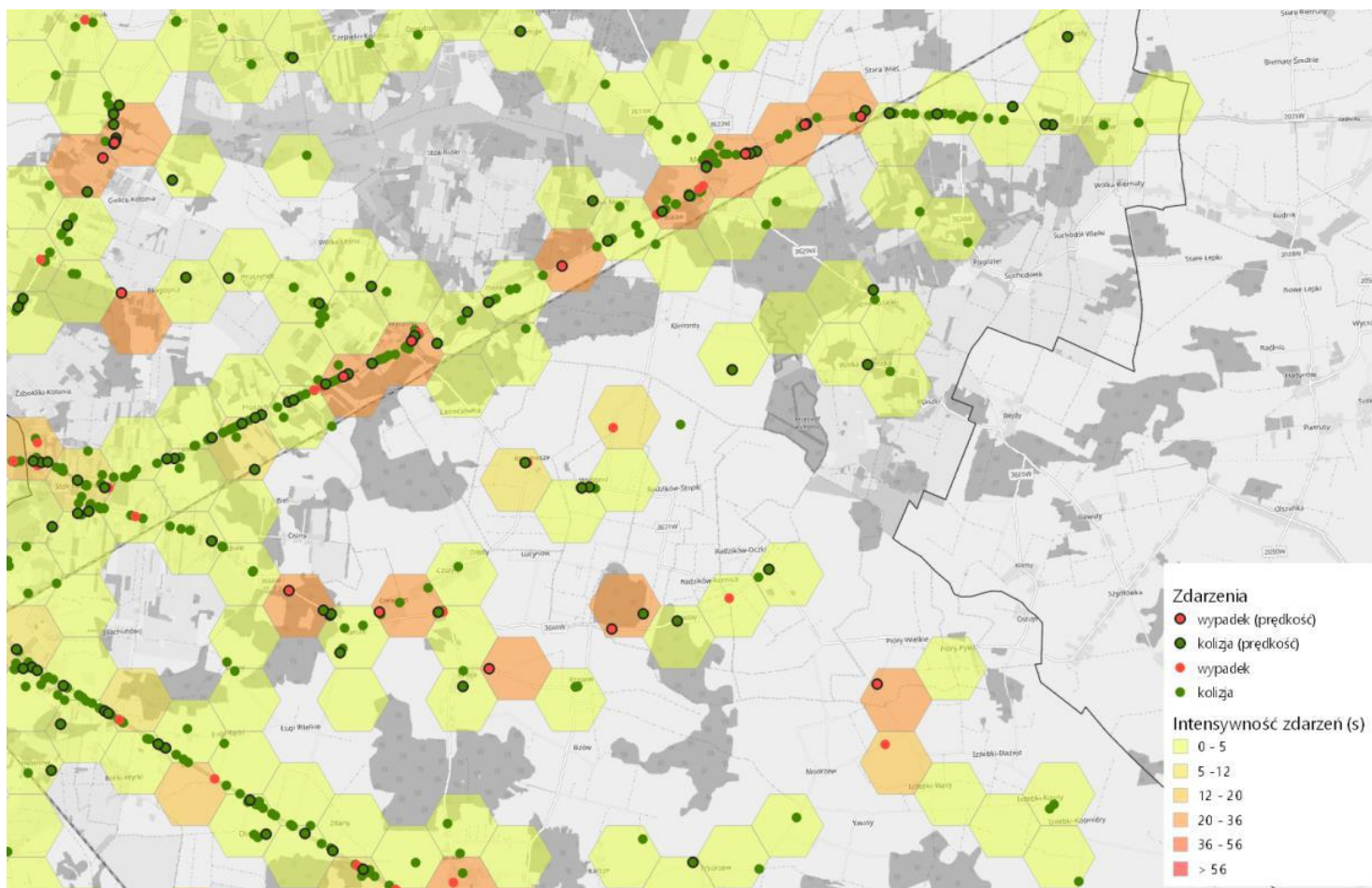
Scope of the project:

- purchase/modernization of recording devices
- increasing the number of roads which are supervised by the automatic system and development of the ICT infrastructure and adding new functions to increase the effectiveness of CANARD system
- securing the functional support of CANARD

Road safety analysis for the installation of new recording devices

In 2019 Motor Transport Institute in a consortium with Heller Consult Ltd. carried out a study on the effectiveness of the traffic supervision system

- Development of methodology for road safety analysis (including the causes of road accidents)
- Assessment of road safety level at **150 new locations** for speed cameras installation (indicated by GITD)
- Indication and assessment of **140 new locations** for speed cameras installation (including 35 fixed cameras, 50 time-over-distance cameras, 40 not complying with traffic lights cameras, 15 fixed cameras at level crossings)
- Assessment of **247 existing locations** of fixed speed cameras
- Analysis of risk spots from technical and legal capacities to install the speed cameras (290 new locations)



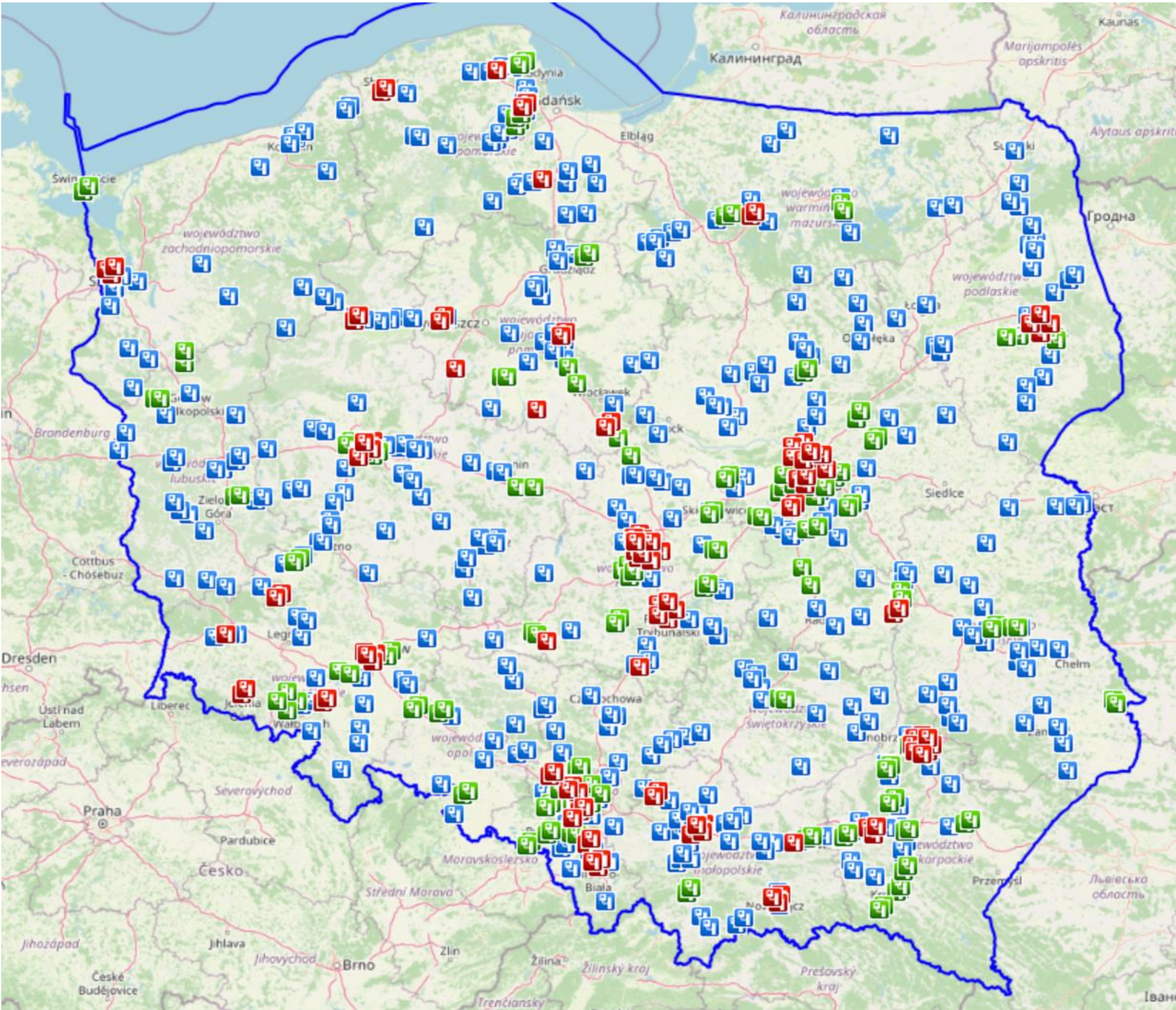
Analysis of all road network → selection of locations

Based on several factors ranking lists were developed for cameras to be installed

Lista 140 nowych lokalizacji wytypowanych na podstawie analizy bezpieczeństwa na drogach w Polsce

lp.	id	delegatura	województwo	mięscowosc	opis lokalizacji	kat. drogi	nr drogi	typ	s
1	14652501	Centralna	MAZOWIECKIE	Warszawa	Al. Prymasa Tysiąclecia / Wolska	K	7	REDS	112,73
2	12622502	Południowa	MAŁOPOLSKIE	Nowy Sącz	Kilińskiego / Królowej Jadwigi	K	75	REDS	112,28
3	24611568	Śląska	ŚLĄSKIE	Bielsko-Biała	Al. Jana Pawła II	K	51	PKT	109,28
4	10611503	Centralna	ŁÓDZKIE	Łódź	Al. Marszałka Edwarda Śmigłego-Rydza	K	14	PKT	103,94
5	12612504	Południowa	MAŁOPOLSKIE	Kraków	Kuklińskiego / Nowohucka	W	776	REDS	98,55
6	02643505	Płd.-Zach.	DOLNOŚLĄSKIE	Leśnica k. Wrocławia	Średzka	K	94	REDP	86,43
7	24692506	Śląska	ŚLĄSKIE	Katowice	Stęślińskiego / Chorzowska	K	79	REDS	85,04
8	10024507	Centralna	ŁÓDZKIE		Pomorzany / Bociany	K	A1	OPP	79,68
9	12064626	Południowa	MAŁOPOLSKIE		Węzeł Balice - Węzeł Rudno	K	A4	OPP	78,16
10	14652508	Centralna	MAZOWIECKIE	Warszawa	Al. Jerozolimskie / Chałubińskiego	W	631	REDS	76,17
11	04073509	Północna	KUJAWSKO-POMORSKIE	Chełmce	Chełmce - Czołowo	K	62	REDP	73,60
12	14211510	Centralna	MAZOWIECKIE	Łąży	Al. Krakowska	K	7	PKT	73,21
13	10084701	Centralna	ŁÓDZKIE	Pabianice	Dobroń-Pabianice Płn. od 75 km 300 m do 69 km 900m	K	514	OPP	72,11
14	18632511	Płd.-Wsch.	PODKARPACKIE	Rzeszów	Al. Piłsudskiego / Al. Cieplickiego	W	878	REDS	69,34
15	10612512	Centralna	ŁÓDZKIE	Łódź	Rondo Inwalidów - Rokicińska / Puszkina	W	713	REDS	65,83
16	06632513	Wschodnia	LUBELSKIE	Lublin	Rondo Kuklińskiego - Lubomska / Al. Solidarności	K	82	REDS	63,33
17	12612514	Południowa	MAŁOPOLSKIE	Kraków	Konopnickiej / Wadowicka Kalwaryjska	P		REDS	61,17
18	30214627	Wielkopolska	WIELKOPOLSKIE		Tarnowo Podgórne - Poznań Ławica	K	511	OPP	60,70
19	18632515	Płd.-Wsch.	PODKARPACKIE	Rzeszów	Al. Rejtana / Al. AK	K/W	94	REDS	60,64
20	30642516	Wielkopolska	WIELKOPOLSKIE	Poznań	rondo Kaponiera / Roosvelta	W		REDS	55,33
21	14211517	Centralna	MAZOWIECKIE	Reguły	Al. Jerozolimskie	W	719	PKT	55,01
22	14054518	Centralna	MAZOWIECKIE		Grodzisk Maz. / Wiskitki	K	A2	OPP	54,45
23	26612519	Południowa	ŚWIĘTOKRZYSKIE	Kielce	Świętokrzyska / Al. Solidarności	K	73	REDS	51,60
24	02234629	Płd.-Zach.	DOLNOŚLĄSKIE		Węzeł Bielany Wrocławskie - SPO Krajów	K	A4	OPP	50,07
25	24671570	Śląska	ŚLĄSKIE	Jastrzębie Zdrój	11 Listopada 67	W	937	PKT	48,89
26	06081571	Wschodnia	LUBELSKIE	Wandzin	koło Kozłowieckiego Parku krajobrazowego	K	19	PKT	47,90
27	12612521	Południowa	MAŁOPOLSKIE	Kraków	Nowohucka / Al. Pokoju	W	776	REDS	46,23
28	14061522	Centralna	MAZOWIECKIE	Grójec	Mogielnicka 32	P		PKT	46,17
29	32622523	Płn.-Zach.	ZACHODNIOPOMORSKIE	Szczecin	Al. Wyzwolenia / Al. Niepodległości	P		REDS	45,31
30	04612524	Północna	KUJAWSKO-POMORSKIE	Bydgoszcz	Jagiellońska / Ogińskiego	W	232	REDS	45,15
31	14652525	Centralna	MAZOWIECKIE	Warszawa	Al. Krakowska / Łopuszańska	K/W	79	REDS	44,41
32	30104631	Wielkopolska	WIELKOPOLSKIE	Konin	MOP Leonia / Kuny do PPO Zdziary	K	A2	OPP	44,24
33	32621572	Płn.-Zach.	ZACHODNIOPOMORSKIE	Szczecin	Gdańska	K	10	PKT	44,16
34	06631573	Wschodnia	LUBELSKIE	Lublin	Al. Solidarności	K	82	PKT	44,11
35	24612526	Śląska	ŚLĄSKIE	Bielsko-Biała	Warszawska / Sarni skok	W		REDS	43,93
36	10612527	Centralna	ŁÓDZKIE	Łódź	Andrzeja Struga / Kościuszki	W		REDS	43,63
37	14652528	Centralna	MAZOWIECKIE	Warszawa	Pl. Zawiszy / Towarowa	W	634	REDS	43,09
38	12081575	Południowa	MAŁOPOLSKIE	Biskupice	pikietaż: 280 km 500 m	W	783	PKT	42,32
39	24722529	Śląska	ŚLĄSKIE	Ruda Śląska	1 Maja / Kokota	W	925	REDS	42,11
40	06044702	Wschodnia	LUBELSKIE	Hrubieszów	Janki-Hrubieszów od 46 km 000m do 50 km 100 m	W	844	OPP	40,15

Existing elements of automatic road traffic supervision system in 2025



Source: CANARD

474 Fixed speed cameras



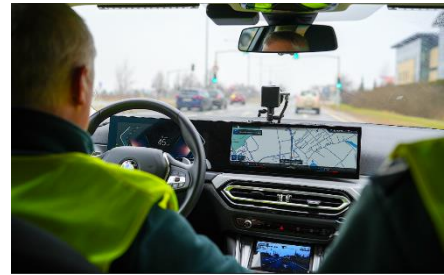
71 Time-over-distance enforcement devices



50 + 5 Red light and level crossings violations supervision devices



33 Mobile speed cameras



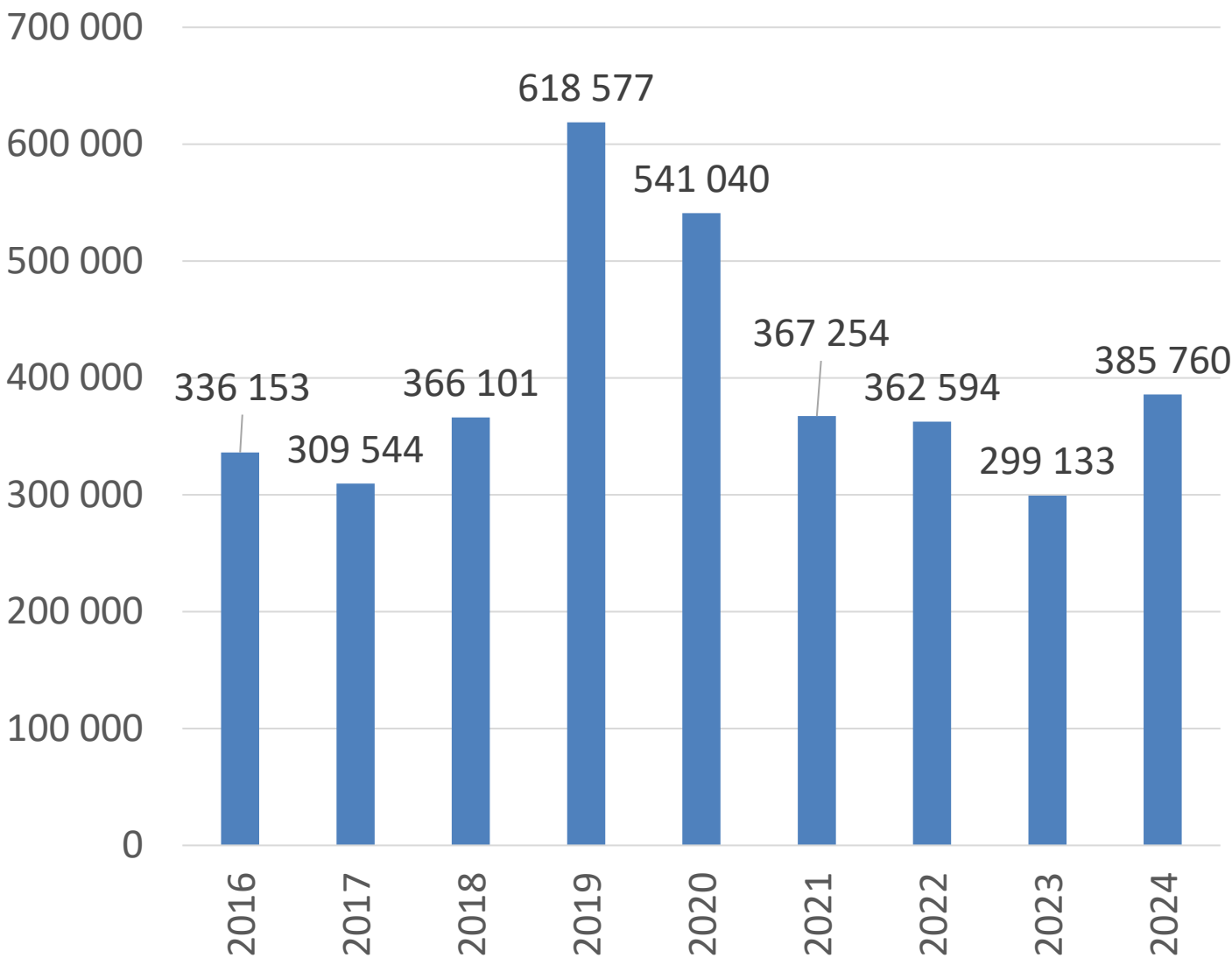
Percentage of vehicles overspeeding

	Red light at level crossing	Red light at road crossing	Section control	Fixed speed cameras
Pasenger cars, LGV	90.13%	90.30%	86.62%	88.03%
HGV	9.76%	9.40%	13.11%	11.73%
Buses	0.11%	0.30%	0.27%	0.24%

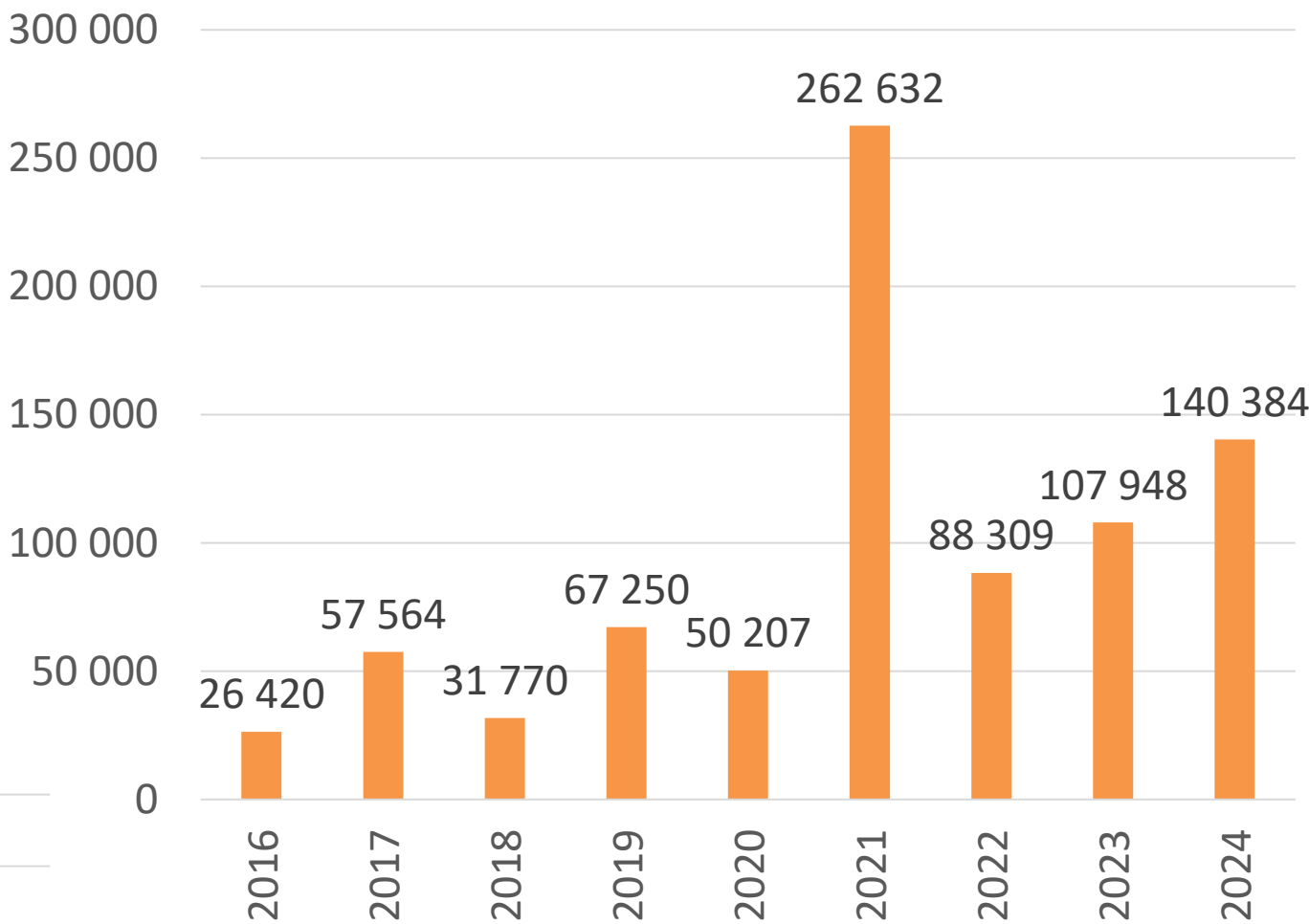
Data source: CANARD

Number of traffic fines issued in 2016-2024 in Poland

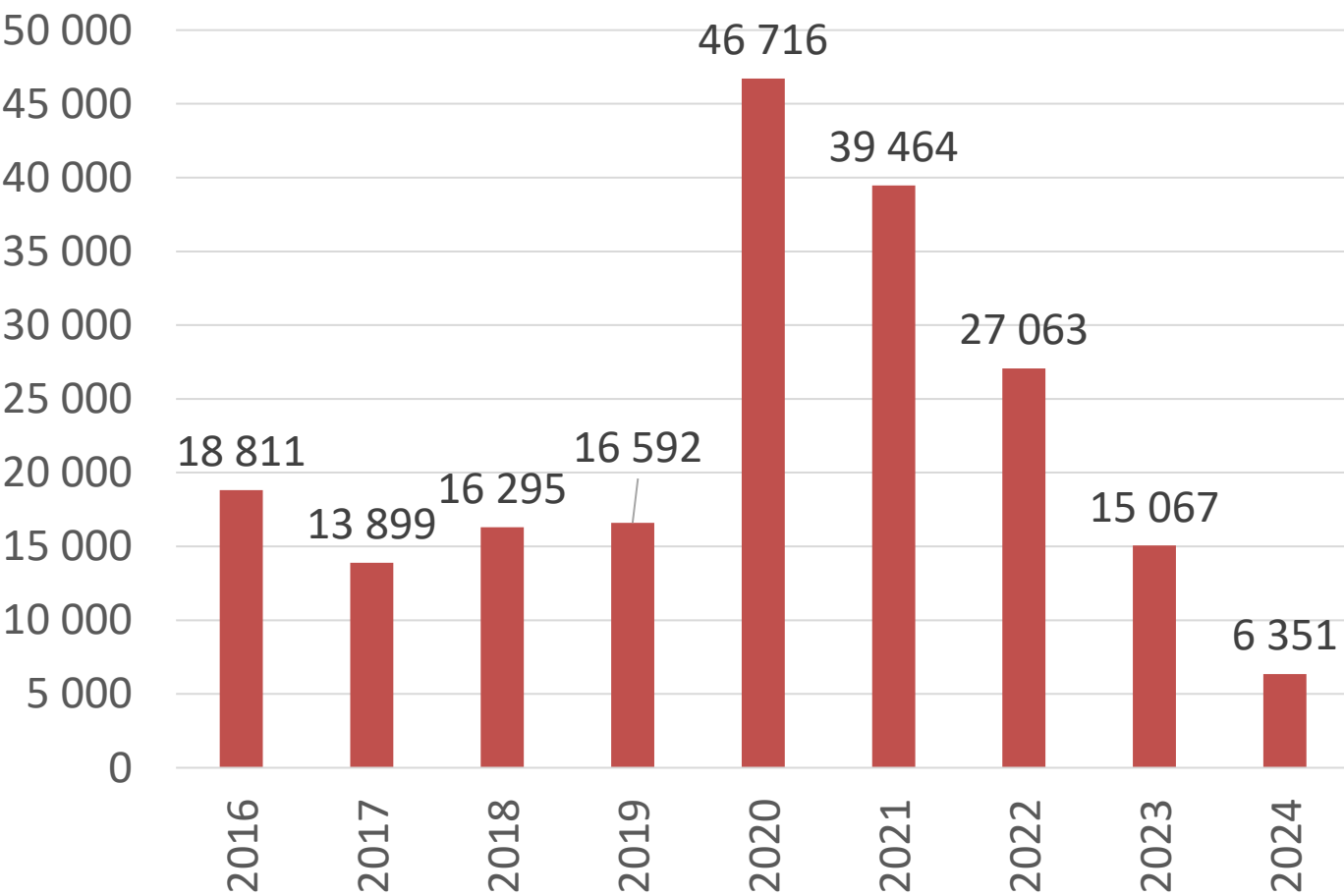
Fixed cameras



Time-over-distance cameras

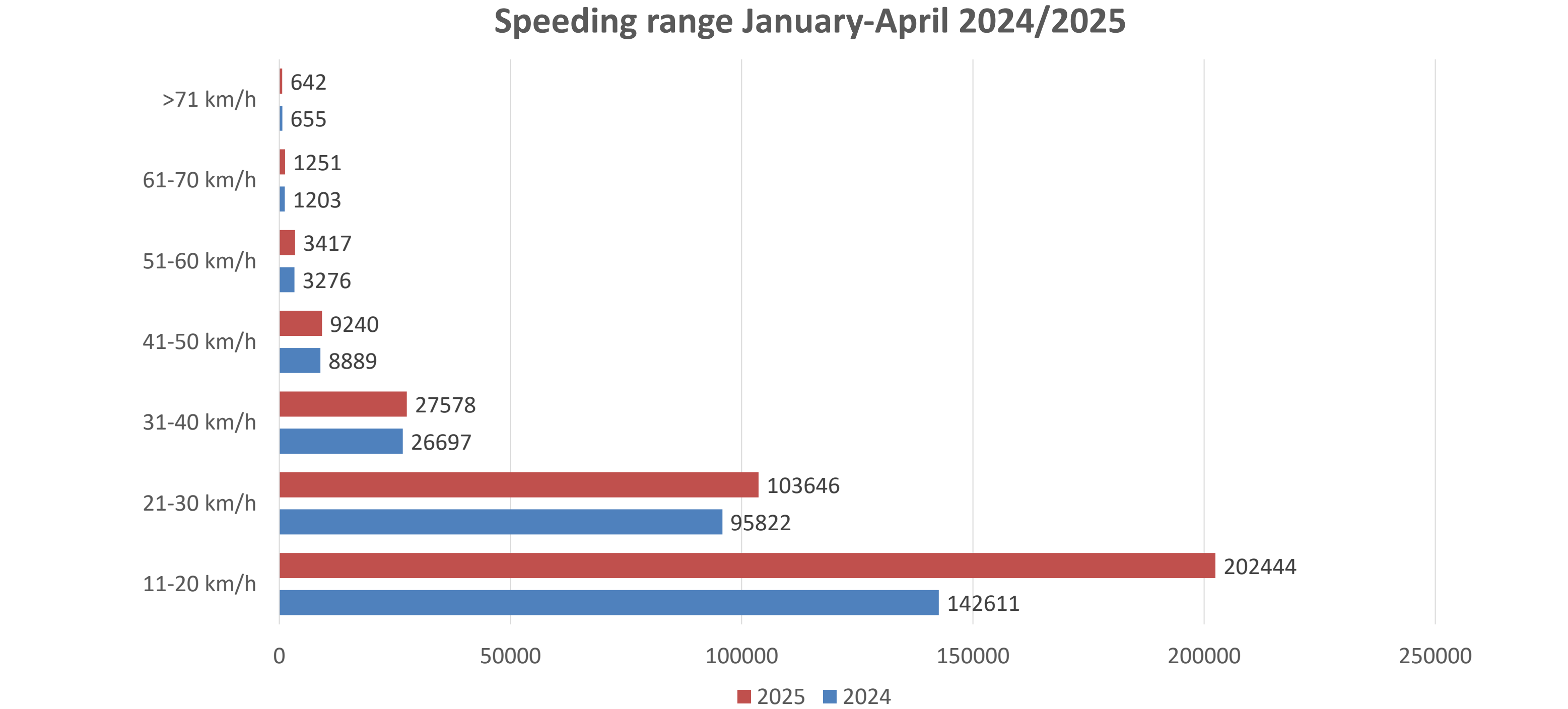


Mobile cameras



Data source: CANARD

Comparison of speeding range



	11-20 km/h	21-30 km/h	31-40 km/h	41-50 km/h	51-60 km/h	61-70 km/h	>71 km/h
2024	51.09%	34.33%	9.56%	3.18%	1.17%	0.43%	0.23%
2025	58.14%	29.76%	7.92%	2.65%	0.98%	0.36%	0.18%

Data source: CANARD

Plans for the future – expansion of the system

Project „Development of the operability of the Automatic Road Traffic Supervision Centre in the management of road traffic safety on Polish roads”

National Recovery Plan Fund

Completion date: January 2024 – August 2026

Total value of the project: 160 696 677,88 PLN (38 mln EUR)



Goal: launching 128 new recording and control devices

- Fixed speed cameras – 70
- Time-over-distance cameras – 43
- Red light cameras – 10
- Red light at level crossing cameras – 5

THANK YOU FOR YOUR ATTENTION!



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