49th ASECAP DAYS Decarbonizing Road Infrastructure : Challenges, Perspectives and Actions in Tough Economy







Hotel Marriott Grand Place, Brussels 24 – 25 November 2022



IMPACT OF DAMAGED AND **STOLEN TRAFFIC** SIGNS AND **EQUIPMENT ON TRAFFIC SAFETY**

Ljerka Ibrović Ivana Subotić Nevena Jugović



- Media campaigns Asignificant contribution to changing the behavior of traffic participants
- Campaigns on the topic of theft and vandalism of traffic signs are rarely implemented
- Target group: traffic participants and the population that directly participate in vandalism and stealing of traffic signs and equipment.
- Research conducted on the data from 2016 to 2020 using:

Analysis of the total number and structure of Traffic accidents (TA)
Spatial analysis of TA
Time analysis of TA
Analysis of influential factors



- The main goal: Reducing the number of TA on the national road network
- Raising public awareness
- Effective communication strategy and education of target groups
- Prevention of vandalism committed by third parties
- Confirmation of the active role of PERS in the field of traffic safety

Goals <u>Data</u>

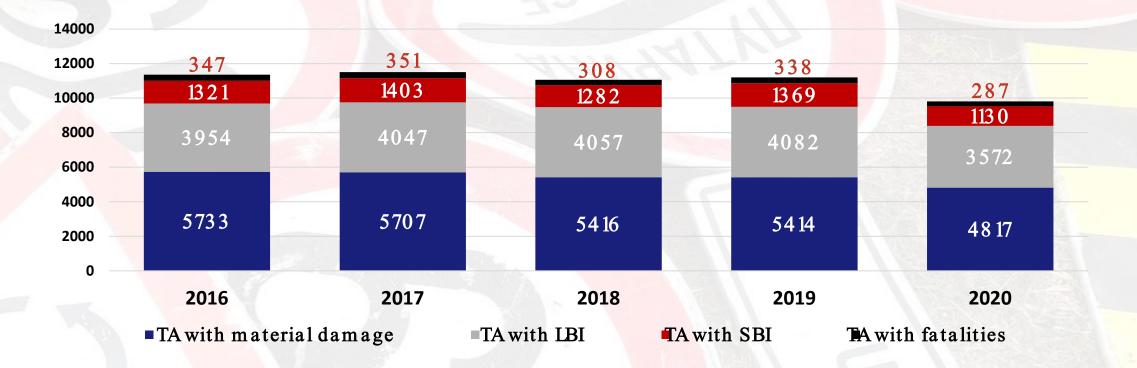
Introduction

<u>Data analysis</u>

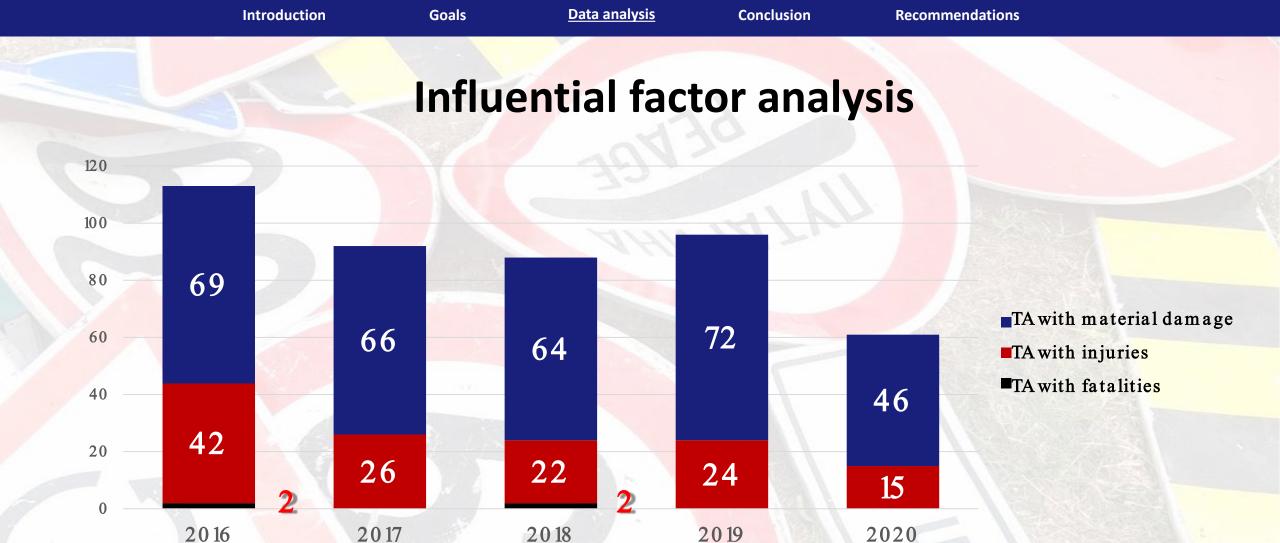
Conclusion

Recommendations

Traffic accidents in the Republic of Serbia



By analyzing the obtained data, it can be seen that a total of 54,935 traffic accidents occurred in the period from 2016 to the end of 2020, of which 1,631 were accidents with fatalities.



From 2016 to the end of 2020, a total of **450** traffic accidents occurred on state roads in the Republic of Serbia, which had "Inadequate/non-existent or insufficiently visible traffic signs and/or road equipment" as the influencing factor. The influencing factor was recognized in **0.8%** of TA with fatalities.

Goals

Conclusion

The costs of replacing damaged or stolen traffic signs

Year	No. of New Traffic Signs	No. of New Traffic Boards	Total Costs [in/€]
2018	2.768	52	173.000,00
2019	2.725	56	142.000,00
2020	2.804	60	201.000,00
Total	8.297	<u>16</u> 8	516.000,00

Example:

From year 2019 to 2021, worth of damaged wire fences amounted to 830.000,00€. For the maintenance of IB, II Aand II B category roads, it was spent 715.000€ in 2021.





Concluding considerations

- Damage/theft on roads of I A category target of vandals are larger size traffic signs
- Damage/theft on lower-tier network roads less AADT and police control
- TA concentration in the vicinity of larger populated places the responsible culprits are most likely local residents
- The motive for stealing traffic signs can be their value as secondary raw material



Recommendations

- Better record keeping of accidents and stolen signs
- Identification of specific microlocation
- Targeted controls and cooperation with Ministry of Interior Affairs
- Continuous implementation of campaigns
- Marking the back side of the traffic sign with the amount of fines for theft/damage of TSE (traffic signs and elements)
- Public invitation to raw material buyers not to be involved in purchasing of TSE

KEEP TRAFFIC SIGNS IT SAVES OUR TRAFFIC SIGN MEANS LIFE



Republic of Serbia MINISTRY OF CONSTRUCTION, TRANSPORT AND INFRASTRUCTURE







Republic of Serbia MINISTRY OF INTERIOR

DID YOU KNOW?



On the roads in Serbia, over 25.000 traffic signs and parts of equipment have been damaged or stolen in last four years The value of stolen and damaged traffic signs and equipment is over one million euros in last five years



Negligently damaged and intentionally destroyed traffic signs can lead to a fatal traffic accident

IT IS FORBIDEN TO

- Destroy
- Remove or replace
- Steal
- Paint or scribble

By stealing and destroying traffic signs you become an accomplice in an accident



KEEP TRAFFIC SIGNS, IT SAVES OUR LIVES!

CLICK HERE TO WATCH THE VIDEO

TRAFFIC SIGN MEANS LIFE!



Republic of Serbia MINISTRY OF CONSTRUCTION, TRANSPORT AND INFRASTRUCTURE





Republic of Serbia MINISTRY OF INTERIOR

ASECAP DAYS



THANK YOU FOR YOUR ATTENTION



Ljerka Ibrović *M.Sc.Economics Transport and Traffic Specialist*

Mobile: +38166 866 5023 E-mail: ljerka.ibrovic@putevi-srbije.rs www.putevi-srbije.rs