

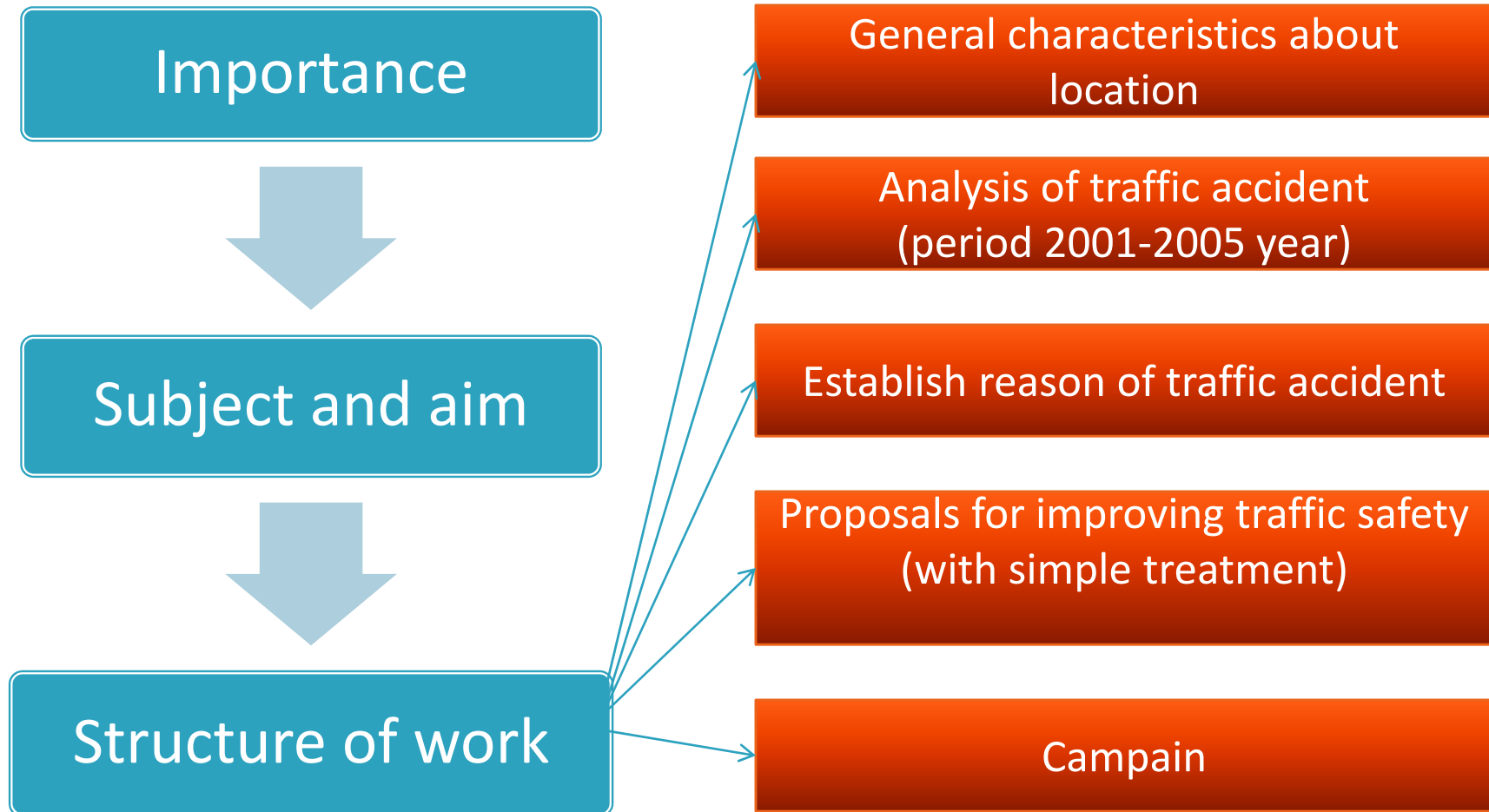
Roads to Respect Project

Petar Krasic
Faculty of Technical Sciences
University of Novi Sad, Serbia

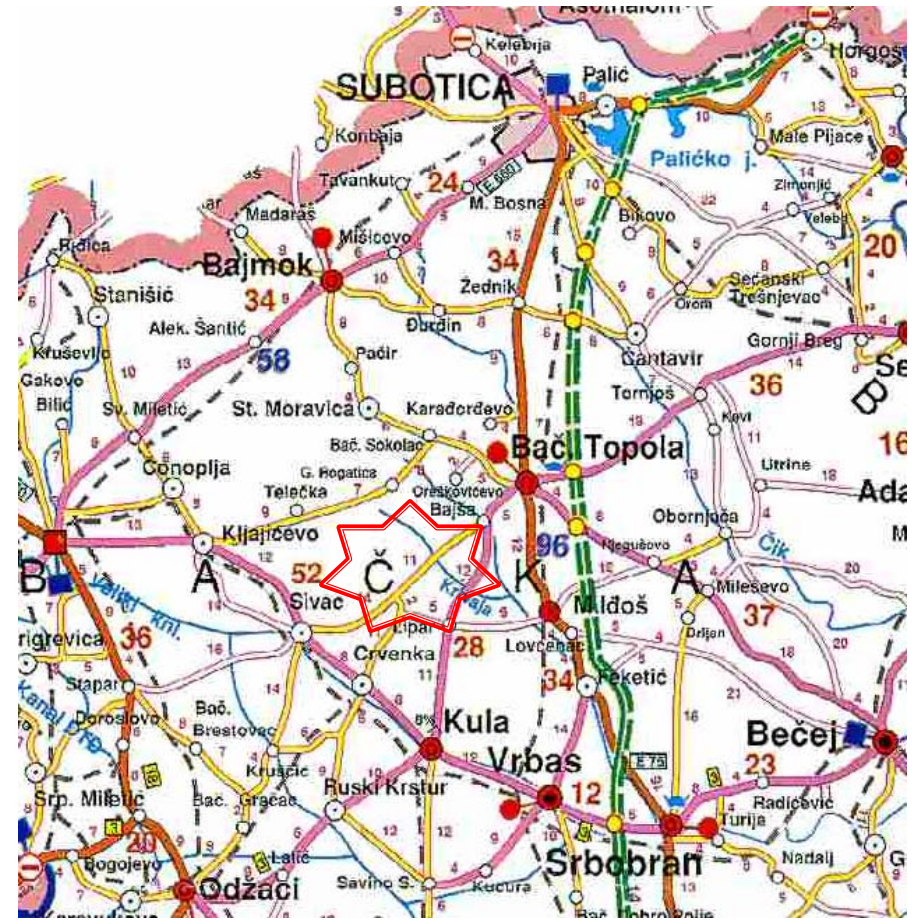


European Parliament, Brussels, 30th September 2009

Introductory remarks



Location description



Local road (L-2) Panonija - Bajsa

High Risk Site description



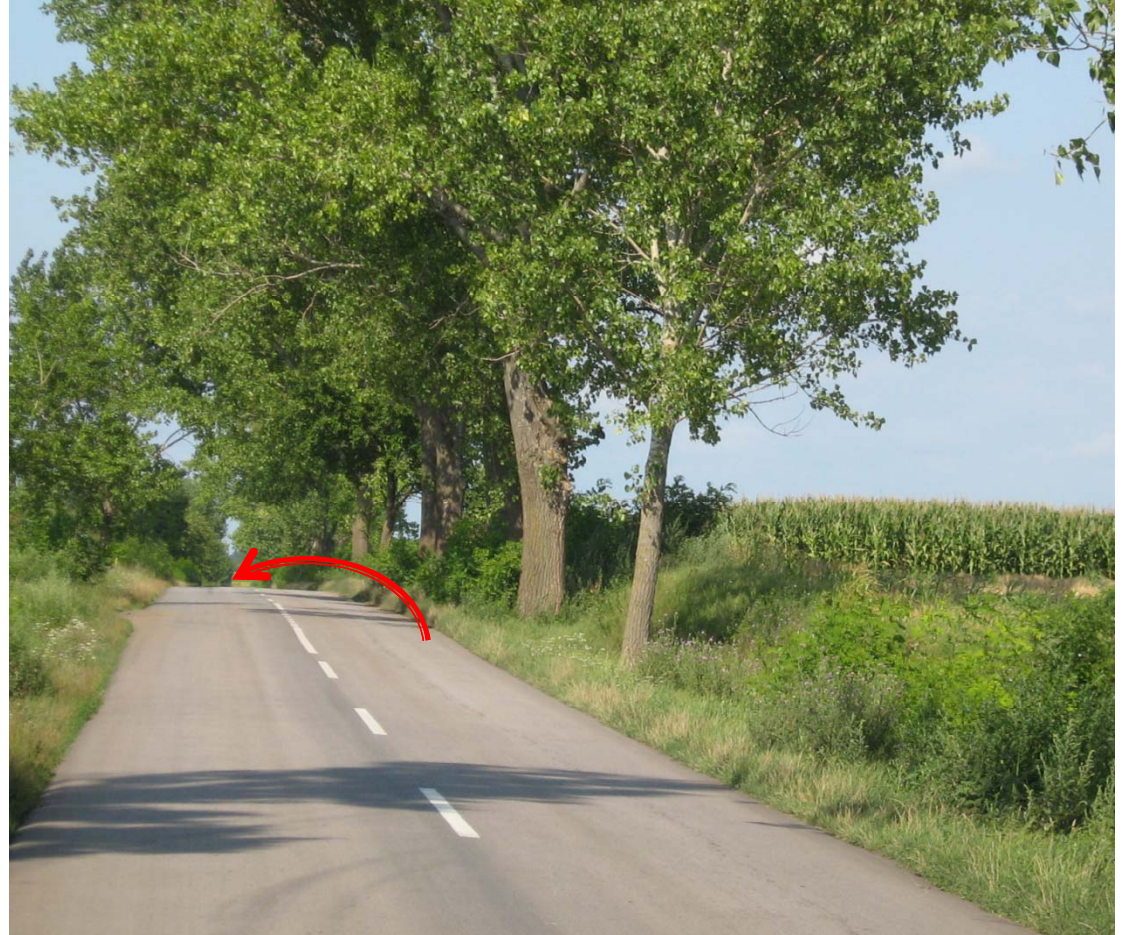
- waved form of carriageway (insufficient visibility)
- small distance between trees and road
- no longitudinal white lines beside border of carriageway, no roadside studs laid



Two existing Black Spots

In these places exists: *vertical curvature of road (bend), existence of roadside alley near carriageway and intersection with rural road (which bring dirt and mud on the road) at the same place.*

3 elements that symbolize terms for accidents to occur!



Accidents already happened

Year	The number of traffic accidents				
	Casualties			Material damage	Σ
	Fatalities	Injuries	Σ		
2006	0	1	1	2	3
2007	0	0	0	0	0
2008	1	5	6	2	8
Σ	1	6	7	4	11

Year	Casualties			
	Fatalities	Severe injuries	Light injuries	Σ
2006	0	0	2	2
2007	0	0	0	0
2008	1	8	3	12
Σ	1	8	5	14



- Small distance between trees and road psychological negative act on drivers;
- Declined leaves on the carriageway is getting a coefficient of friction less and a longer stopping distance;
- After rain, roadside alley is giving a longer time for carriageway to dessicate;
- In the days of autumn and winter, declined hoar makes a carriageway wet, even there was no rainfall;

- Intersection with rural road makes that agricultural vehicles drag dirt and mud on carriageway (less coefficient of adhesion and friction);
- Horizontal and vertical wounds of road makes the situation worse.







Plastic collision with fatalities as a result of tree existence!

Proposals for Road Safety improvement

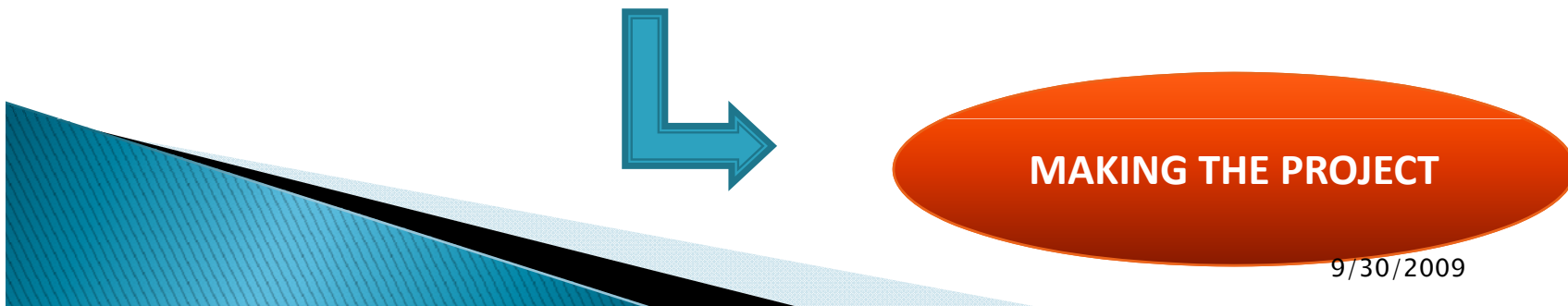
- ▶ Cutting down the trees in these black spots;
- ▶ If it is enviromental problem, than build crash barriers;
- ▶ Marking longitudinal white lines beside the border of carriageway;
- ▶ Installing roadside studs (conventional passive retro-reflectors).



No more black spots on the road !

Technical part of project:

- ▶ Identification of dangerous place and its characteristics (“Road Safety Inspection”);
- ▶ Taking measures of periphery of trees;
- ▶ Distance between trees;
- ▶ Distance between trees and outside border of carriageway;
- ▶ The start and end meter of dangerous sections where crash barriers will be positioned;
- ▶ The start and end meter of whole alley;
- ▶ The position of traffic signs on the road Panonija – Bajsa (in total 26 signs);
- ▶ The position of new signs whose installing is the secondary task of the project;
- ▶ Measuring depth of ditches;





The campaign

- ▶ **Analysis of casualties** in the Municipality of Backa Topola for the period 2001 – 2005;
- ▶ Writing to the **Division for Correspondence with Citizens of the European Parliament** for the EU Directives;
- ▶ Getting recommendation from **Faculty administration** (Mr. Dragan Jovanovic, prof.; Mr. Vladimir Katic, Vice Dean);
- ▶ Getting recommendation from the **European Transport Safety Council**, Mr. Antonio Avenoso;
- ▶ Cooperation with **Police Station** in Backa Topola Municipality (getting support and necessary data of traffic accidents);
- ▶ Cooperation with **Road Infrastructure Company “VOJPUT”** (project information and support);
- ▶ Cooperation with **transportation company “Topolatrans”** (poll of bus and taxi drivers of road Panonija – Bajsa);

- The questionnaire has been conducted from 02 December to 23 December 2008 in the company "TOPOLATRANS" in Backa Topola and it included bus and taxi drivers.

- **52** drivers were asked for opinion, of that number **14** are taxi drivers and **38** are bus drivers. They answered on 11 questions, nameless.

	QUESTIONNAIRE FOR USERS OF TRAFFIC AREA (road Panonija – Bajša)		
	Date:		
	Place:	Backa Topola	

1. How old are you? ____	
2. WORK STATUS (encircle): 1. Taxi driver 2. Bus driver	
3. Driver experience (encircle): Until 5 years 5 – 10 y. 10 – 15 y. 15 – 20 y. over 20 y.	
4. How many times do you transport passengers to Panonija? ____ (number) 1- If it is not every day, how many times per week? ____ (number) 2- I am not transporting on that road section	
5. Are you getting sufficient information from traffic signalization on the road Panonija - Bajša (encircle)? YES NO	
6. Do you think it is necessary to ensure more traffic signalisation on that road (encircle)? YES NO	
7. Do you think that roadside alley symbolize danger for drivers (encircle)? YES NO	
8. Are you getting enough information from traffic signalization driving thru the curves (encircle)? YES NO	
9. Did you ever got into conflict situation, which might produce accident? YES – how many times? ____ NO <small>number</small>	
10. Did you had traffic accident on the road Panonija – Bajša? (encircle) YES NO	
11. Do you think that road is DANGEROUS? (encircle) YES NO	

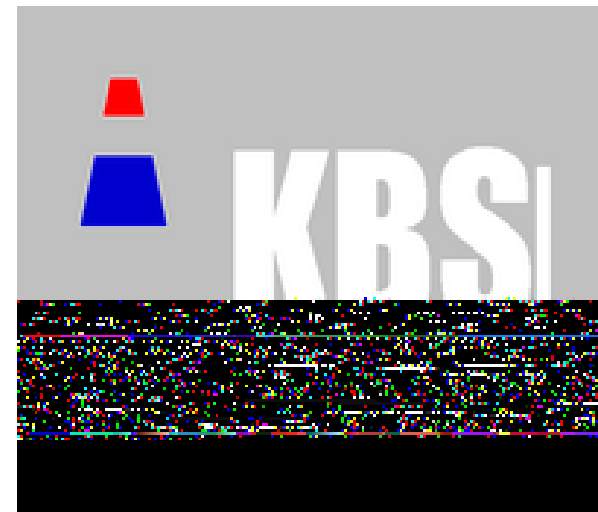
THANK YOU FOR YOUR COOPERATION!

This questionnaire is nameless

- ▶ Getting support from the **Yugoslavian Road Safety Society**;
- ▶ Still negotiating with **Serbian Road Safety Committee** for their support;
- ▶ Getting sponsorship from the **production company “MIKRACOOP”**;
- ▶ More sponsorship from insurance companies...



*Yugoslavian Road Safety Society
logo (www.yubs.org.yu)*



*Serbian Road Safety Committee logo
(www.kbs.org.yu)*

Benefits of the project

- ▶ **Cutting down the alley** will improve the safety of all users of the road Panonija – Bajsa. Drivers will have more space for passing each other, a clear shoulder could hold a vehicle if gets off the carriageway. There will be no more optical illusion, and drivers will slow down the speed.
- ▶ **Building crash barriers** on two black spots (if it`s not permitted to cut down the trees) will secure vehicle, which leave the carriageway, from hitting the tree. Also, it will show the intensity of vertical curve (bend), so the drivers approaching can adapt their speed.
- ▶ **Ensuring the white longitudinal lines** beside the border of carriageway would mark the edge of road and improve visibility in night conditions. This is important because this road wounds and gets drivers into unknown situations.
- ▶ **Installing road studs** will bring more visibility in night conditions. They will show the line (route) of the road and mark a shoulder. It is important to have road studs in waved terrain, together with longitudinal lines.

Afterwards

The authorities accepted to implement the project.

It is now in the Road Safety Plan of the Municipality.

Sponsorship is also very helpful for the project implementation and I will intend to obtain more from insurance companies.



Impressons

The Camp was great idea, it gave me a new knowledge and a good new friendships.

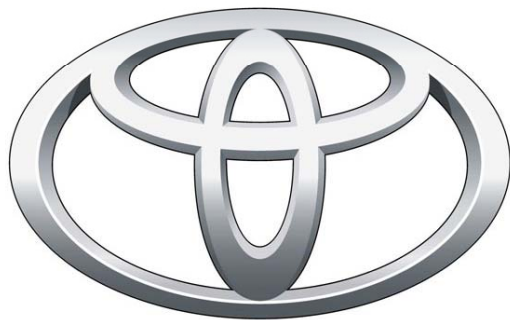
Working on this project I got experience that I newer had before!



Thanks to...



and special thanks to



TOYOTA



Thank you for your attention !

Petar Krasic

