

Speed reduction on a narrow curve



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Introduction



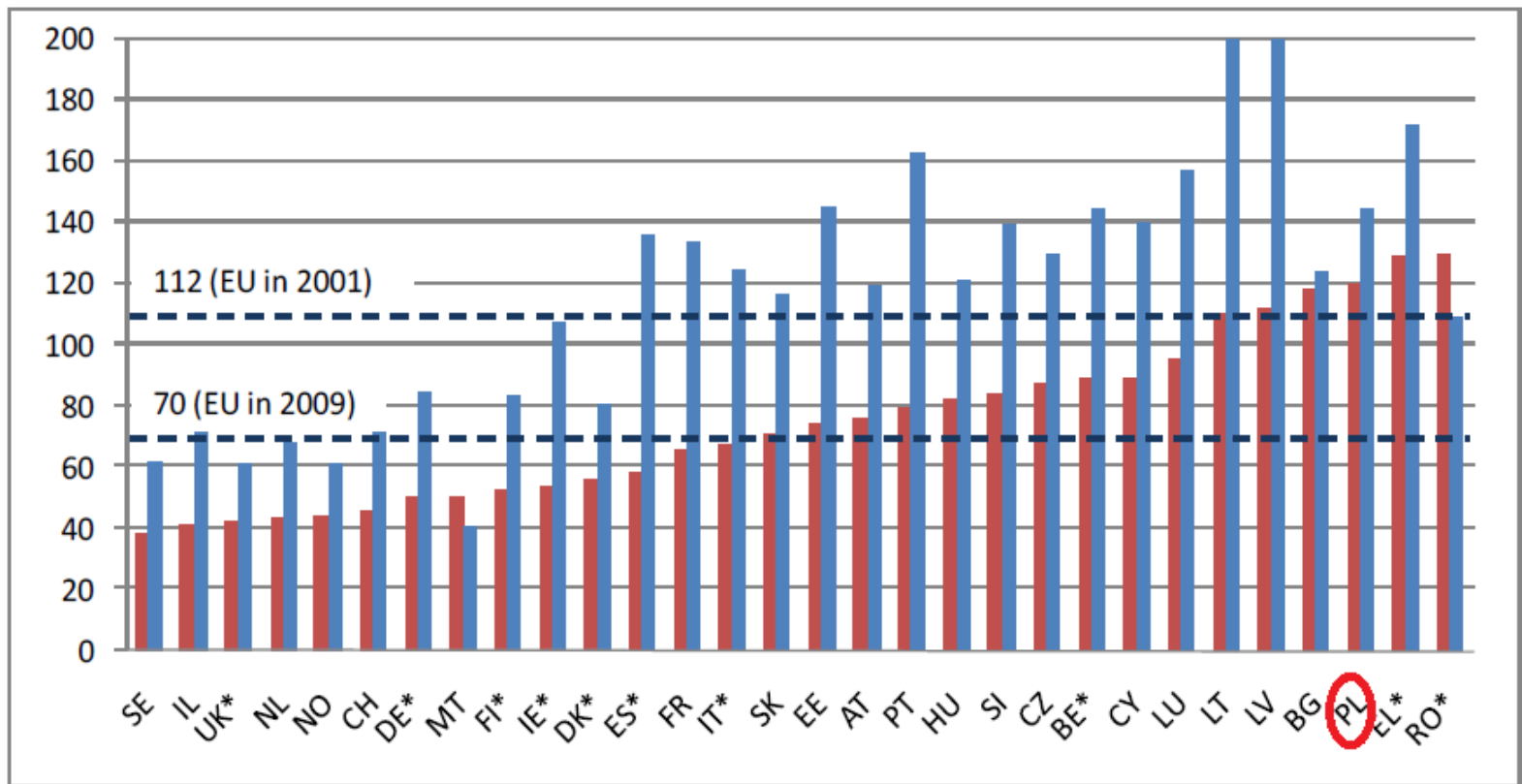
We decided to choose a passage of a street in Dziekanówice which is located next to Cracow.



On the street there is a little radius of a horizontal curve. Drivers who drive down from the hill accelerate instead of decelerate. Despite of the fact that before the turn there is a sign „30km/h speed limit”, drivers do not respect it at all. Consequently, the vehicles which drive too fast steer out of the road, usually into a barrier (a dented barrier) or into a fence.



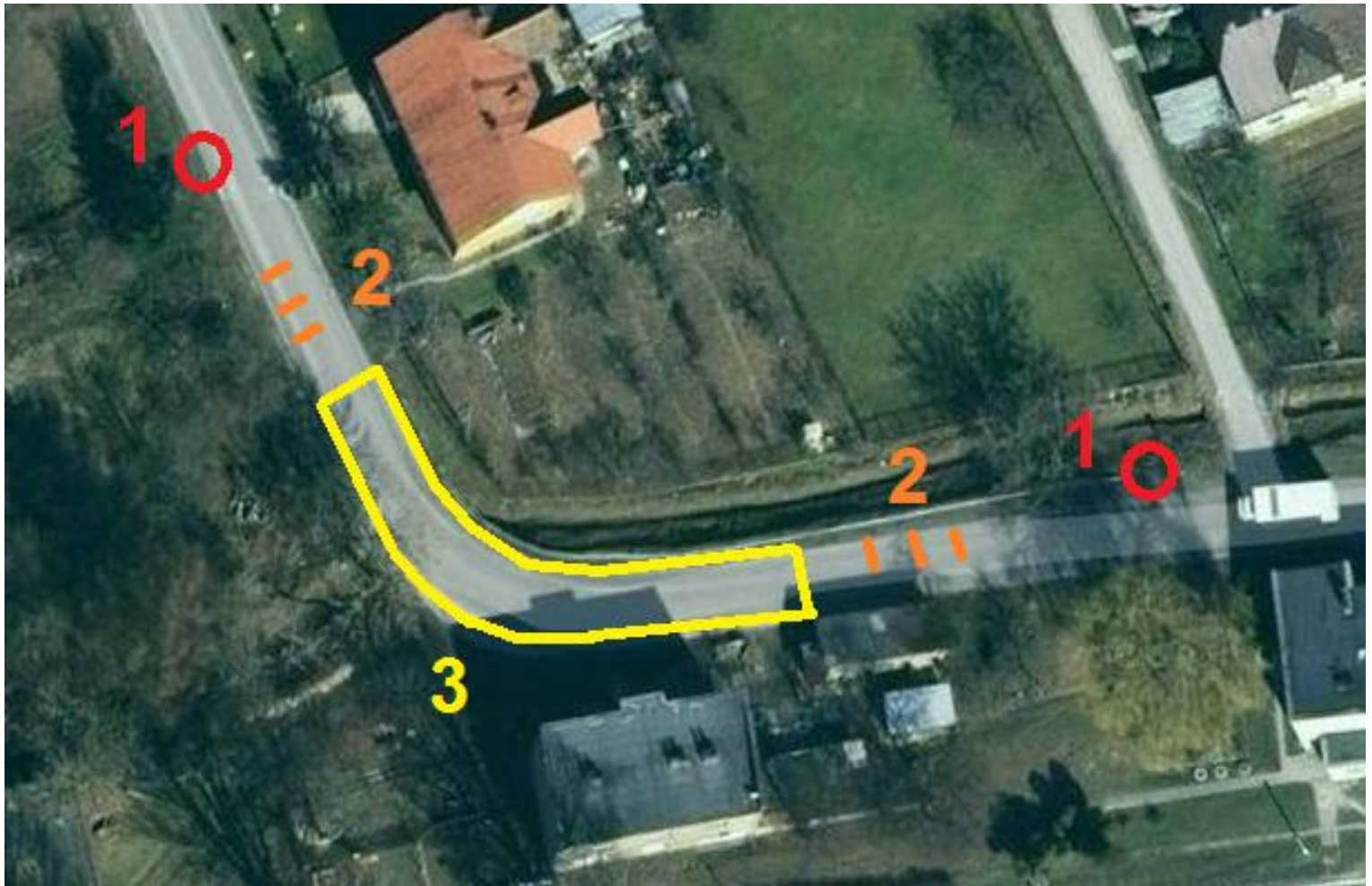
Context



Road deaths per population (2009)

Poland has to take precautions to minimise the risk on roads and streets not only to avoid deaths of people but also to decrease the amount of casualties.

Our ideas

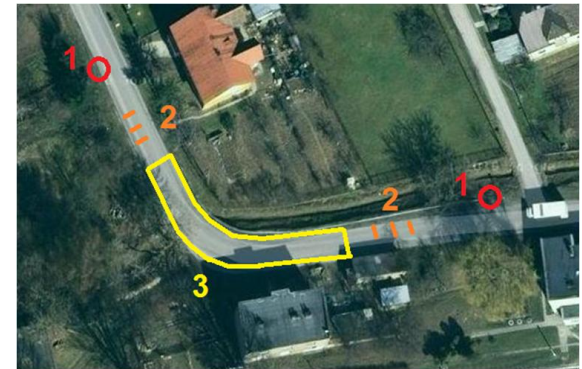


Point „1”

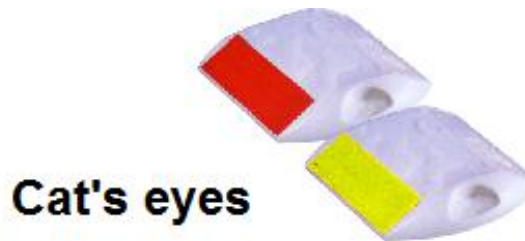
Next to „30 km/h speed limit” (which are situated in point „1”) we suggest to put two-dimensional shape of a police officer holding a speed camera.



This two-dimensional shape can be applied not only on this street, but also in other dangerous places. We suggest to put eg. police officer's shape one day in Dziekanowice, the other in other places when the reduction of speed is necessary. It will be a good solution to exchange the shape to a real police officer with a speed camera from time to time.



Point „2”



Cat's eyes

Our next proposal to reduce speed and increase safety on the curve is to introduce a few rows of „cat's eyes” into a surface.

Point „3”

We decided to apply a slanting lines along the street on a curve. These lines optically narrow lanes so that cars will probably slow down before the curve.



Plan B



Partners



Difficulties

- Lack of local partners (road on the outskirts of the city, no places of destiny in neighbourhood)
- Possible lack of fatalities or serious injuries (local authorities won't take the problem seriously)
- Lack of money



Evaluation

We measured speed of vehicles by means of a speed camera to check whether speed is a problem on a curve.

| speed [km/h] | a sum of proportional numbers | number | proportiona l number |
|--------------|-------------------------------------|--------|-------------------------|
| 30 | 3,00% | 3 | 3,0% |
| 35 | 8,00% | 5 | 5,0% |
| 40 | 21,00% | 13 | 13,0% |
| 45 | 46,00% | 25 | 25,0% |
| 50 | 74,00% | 28 | 28,0% |
| 55 | 93,00% | 19 | 19,0% |
| 60 | 100,00% | 7 | 7,0% |

k85 = 53km/h

Permissible speed – 30 km/h!

We plan to measure speed again, compare the results and make a particular analysis of the statistic data.

Timeline

| Timing | January | | | | February | | | | March | | | | April | | | | May | | | | June | | | | July | | | | August | | | | September | | | |
|--|---------|--|--|--|----------|--|--|--|-------|--|--|--|-------|--|--|--|-----|--|--|--|------|--|--|--|------|--|--|--|--------|--|--|--|-----------|--|--|--|
| STARS Camp | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Geting accident data | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Talk again with proffesors | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ask for support from the Campus' headmaster | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Look for sponsors | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Talk to the traffic authorities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Measure speed before campaign (again) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modify the infrastructure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Measure speed after campaign | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Write a pre-report with all the data | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inform the local media | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Measure speed after a month | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Write the final report | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Send results to the council and stakeholders | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Expectations



- recommendation letters
- recommendations of organizations that can support us
- opinions
- clues how to implement the solution



FOR YOUR ATTENTION

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