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STARS Project description

Names: Anastasios Koutoulas & Konstantinos Papoutsis

City/University: Thessaloniki / Aristotle University of Thessaloniki (AUTH)

Project name (if any): «Bus stops aimed to be really safe»

Context - Identified site

After the presentation of the "STARS PROJECT" at Hellenic Institute of Transport, in Thessaloniki Greece on the 19th of May, we discussed this subject with some of our professors, specialized in speed management and road safety (prof. Magda Pitsiava, Socrates Basbas) about the "black spots" due to high speed in the road network of Thessaloniki and we found that Georgikis Sxolis - Thessaloniki's avenue is one of the most significant roads not only in Thessaloniki but in whole Greece as well. This road is of high importance as it connects the city of Thessaloniki with the Airport "Macedonia" of Thessaloniki and the suburbs of Thessaloniki (Peraia, Epanomi, Rusio, Mihaniona etc). Furthermore, we contacted with Municipality of Pylaia that is responsible for this road part.

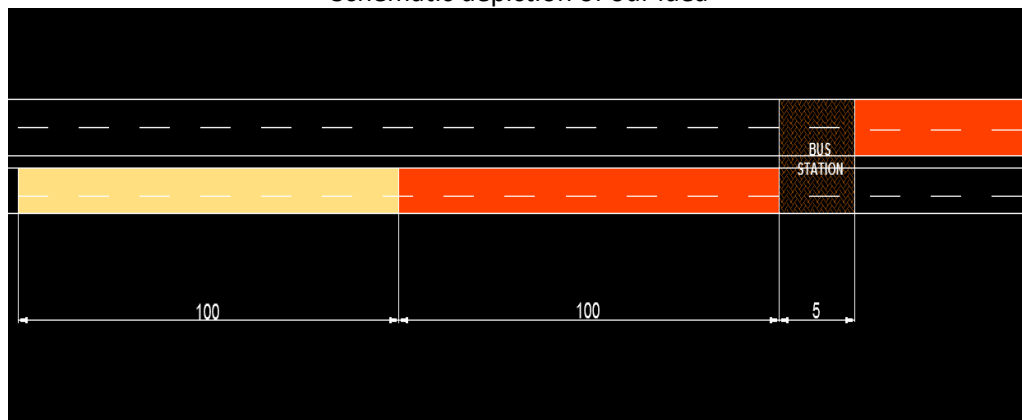
Apart from the primary target to reduce speed through low - cost, effective and innovative measures, we shall widely consider our project. Georgikis Sxolis - Thessaloniki's avenue is mainly used to ease the cross street circulation due to the fact that there are many different commercial centres by the street. The speed limit is about 90 km/h, which is very high according to the street operational level. Nevertheless, road's dimension specifications (direct courses and great road width) allow vehicles to reach high speeds, sometimes over 100-120 km/h, so as the road is treated as high-speed motorway. Our secondary target is to define road's proper function via speed management. For instance, our point of view will be focused on assigning Georgikis Sxolis - Thessaloniki's avenue as a distributor road or a primary/secondary sub-urban collector road achieving lower speed limits and in securing road safety level as well as motivating public transport use.

Ideas – Objectives

At the Georgikis Sxolis - Thessaloniki's avenue there are bus stations on both sides of the road. Especially, these bus stations are established in the middle of long straight routes, which are treated as high-speed areas. This fact makes the speed management on this road of great importance in order to reduce speed in critical parts of the road. The main idea is to use different colours near bus stations. To be more specific, 200m before the bus station and for a distance of 100m, it is recommended to use orange or yellow colour on the surface of the road (by using asphalt in orange or yellow colour) and for the last 100m before the bus station the colour of the road surface could be red. Along the bus station it is proposed a change on the road surface not only concerning the colour but the material as well. As far as the colour of surface concerns, it could be light brown. The road could be formed with paving stones, concrete or another

material, that enables the drivers to feel a very soft vibration and generally feel the sense of moving on different type of road. By this way drivers could have the opportunity to recognize that they approach a bus station and by the different colours which is the distance from them and reduce their speed inchmeal.

Schematic depiction of our idea



Strategy – Partners

After we came back from Brussels, we had a meeting with the president of the “The Hellenic Institute of Transport (part of the Centre for Research and Technology Hellas (CERTH))” Mr. Giannopoulos, who was very interested in the implementation of our idea and was actually willing to help us. Our first step was to find who is responsible for this road. We were informed by the municipality of Pylaia that they don’t have any responsibility for any infrastructure on this road and we should address to the Periphery of Central Macedonia. So, now we are preparing a technical description of our idea, combined with a letter of recommendation by Mrs. Pistiava – Latinopoulou (The director of our MSc program in AUTH) and Mr. Giannopoulos and we plan to send it to the director of Periphery of Central Macedonia. The most important part of implementing our idea is to find the finance for this project and for that way we are going to “press” the Periphery to invest in our project. If they find that it is expensive we are going to come up with some changes on our first plan (for example, implement it to one of these stations or minimizing the distance of these different colours).

Communications

One of the most important steps of our idea is to make it known to as much people as we can. By this way, we hope that they will promote our idea and help us implement it. If the citizens of Thessaloniki be convinced that this measure will drop down the speeds on this road and of course reduce the number of deaths and accidents, they will put pressure for the implementation of the idea on the local authorities.

We are thinking of contacting local press and generally local journalists but we are wondering if they will find such project really interesting and promote it. Nevertheless, we are going to do our best. Additionally, we are going to co-operate with our colleagues in Athens (Georgia and Lambrini) and post our idea and everything has to do with our idea to the facebook page “Road Safety Greece” (<http://www.facebook.com/#!/pages/Road-Safety-Greece/156411521050665>) and everywhere else that may help us to implement it.

Evaluation

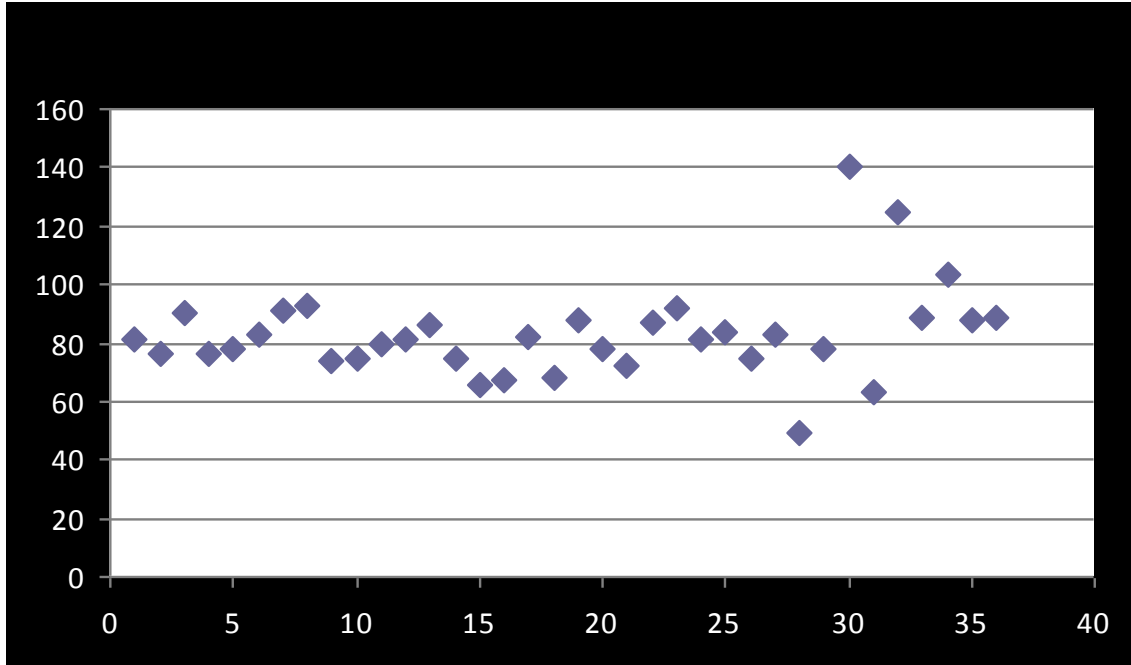
As far as the evaluation concerns, we think that a “before and after” measurement of speed in specific bus stops of the Georgikis Sxolis venue might be useful and will illustrate the effectiveness of our idea. Moreover, the amount of accidents on this road could assess the improvement in road safety after the implementation of our measure but it is unfeasible for two reasons. Firstly, because of the lack of data concerning the accidents on this road and secondly there is a very short time to measure the number of accidents and the extracts won’t be representative.

On 3 September 2010 we measured the speed in the following bus stops:

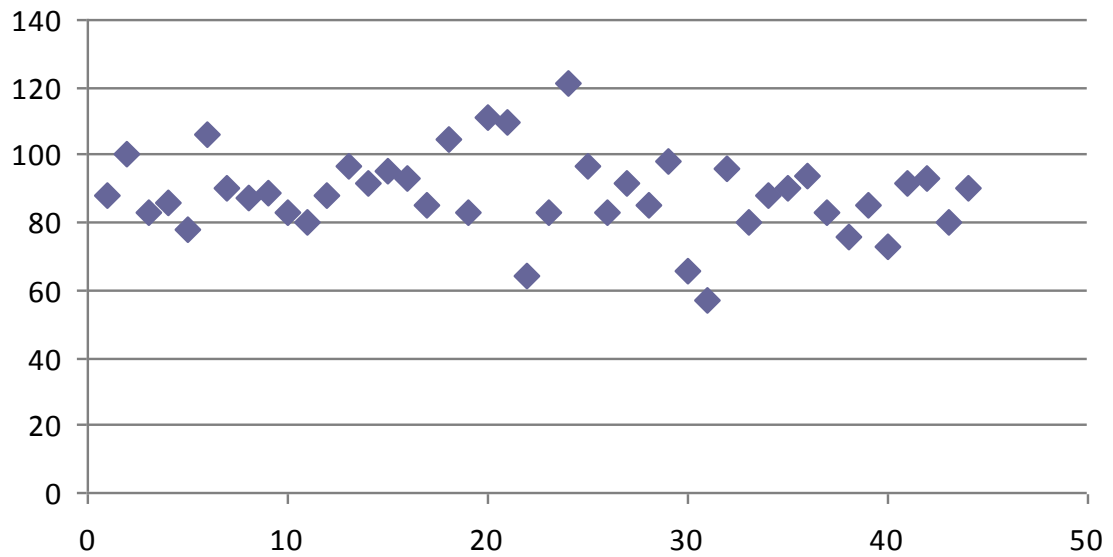
- Pronoia
- Loumidi
- Kalamari
- Biamyl

For the measurement of the speed, we used special equipment (radar), which was provided by the Aristotle University of Thessaloniki (and specifically from the Laboratory of Highway Engineering of the division of Transport, Infrastructure, Management and Regional Planning Engineering of the Department of Civil Engineering) for the needs of our experiment. The number of the measured vehicles varies from 40 to 50 cars, as it can be seen in the following diagrams:

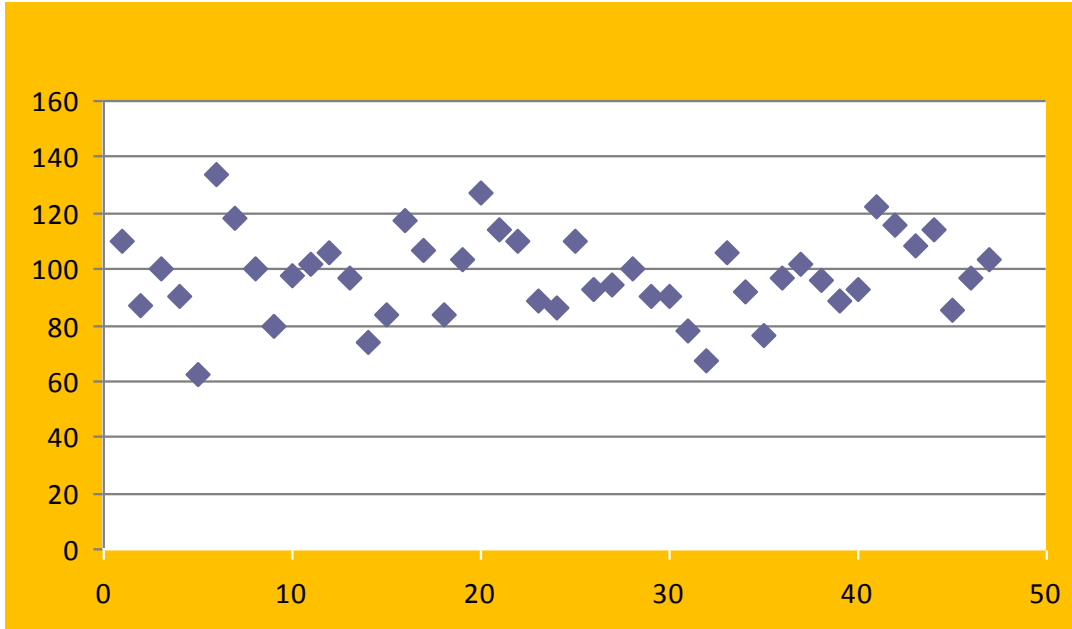
Speed on the bus stop Pronoia



Speed on the bus stop Loumidi



Speed on the bus stop Kalamari



Speed on the bus stop Biamyl

