

# ShLOW!

## Show me How Slow

### Progress report I



31.08.2009

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[www.shlow.eu](http://www.shlow.eu)

My ShLOW idea is to make physics visible to the car driver. I want to show him what effect higher speeds have to the breaking distance of the car.

I would like to show the difference of the breaking distance with 30km/h and 50km/h with an installation on the street. This way people can see what negative effects “a bit” more driving speed have. The breaking distance of 30km/h should be painted in green on the street and the additional breaking distance of 50km/h should be painted in red behind the green section. To make clear the consequences of this negative effect to the people the installation could be installed in connection with a crosswalk. The green section ends at the beginning of the crosswalk and the red section runs over the crosswalk. So everybody sees that higher speed endangers people.

For the implementation of painting the breaking distances of different speeds on the road a first meeting with the responsible authorities of the city of Hannover was arranged.

- In the meeting (on 25.06.2009) we realized that the first layout of my idea is too difficult to implement in such a short time. The problem is that the red color of the painted breaking distance runs over the crosswalk. Therefore a special permission would be needed to change the appearance of the crosswalk. It was not sure how long this could take or if the permission would be given in the end.

There it was decided to implement my modified idea that I brought to the meeting for such a case.

The modified idea (Fig. 1 and Fig. 2) doesn't show the difference of the breaking distance with 30km/h and 50km/h. It shows the stopping distance (braking including the reaction time) for a car that drives with 30km/h. This stopping distance is painted in red on the street and ends just before the crosswalk begins. In front of the red area is a green area that shows where he should break (see fig. 1). To show the decreasing time to react the green field is shaped as triangle. Accordingly the red field is also shaped as a mirrored triangle to express the increasing danger when approaching the crosswalk without braking in time.

This installation is a help to the car driver where he should break. And it shows the long stopping distance that a car may have, even when it "only" drives 30km/h.



Figure 1: Concept layout

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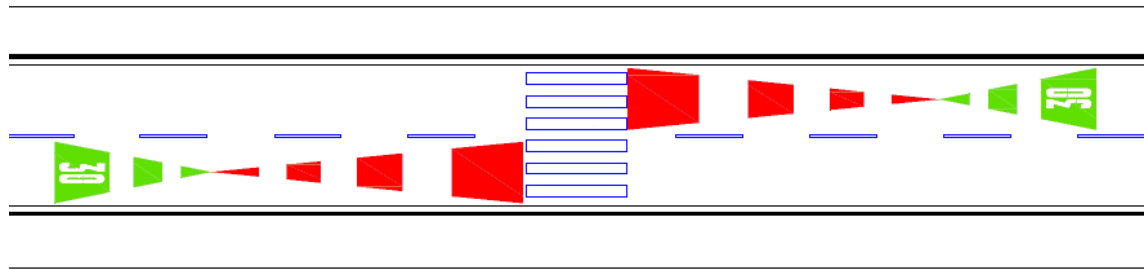


Figure 2: Design of the road painting.

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At the second meeting on 31.07.2009 the responsible authorities of the city of Hannover, including the police and education authority (they made the proposal where the installation could be implemented) were present. The meeting was a site visit in the “Ebelingstraße” (Fig. 3), close to two schools where the crosswalk is frequently used by children. The final layout of the road painting (measures and type of paint) at this crosswalk and the realization of the speed measurement were discussed. Due to a street entering the “Ebelingstraße” close to the crosswalk the road painting can only be applied in one direction.



Figure 3: Eberlingstraße (installation location)

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As for the further procedures it was agreed to have a week of speed measuring at this place with the speed panel switched off before the road painting was applied. After that the breaking distances shall be painted on the road as explained before. Sometime after the implementation of the road painting another speed measurement with the speed panel switched off shall be conducted.

### State of affairs:

In the week from the 24<sup>th</sup> of august to the 31<sup>st</sup> of august the speed panel was installed and hidden speed measurements at the crosswalk in the “Eberlingstraße” were conducted (fig. 4). I will receive a table with the measured speeds for analysis of the speed level before implementing my idea.



Figure 4: Speed display installed and measuring with display switched off.

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