



ADYSE

ADAPT YOUR SPEED TO THE URBAN ENVIRONMENT



TÉCNICO
LISBOA



ASSOCIAÇÃO PORTUGUESA
DE SINALIZAÇÃO E SEGURANÇA RODOVIÁRIA



TRAFIURBE



ISPA
INSTITUTO UNIVERSITÁRIO
CIÊNCIAS PSICOLÓGICAS, SOCIAIS E DA VIDA



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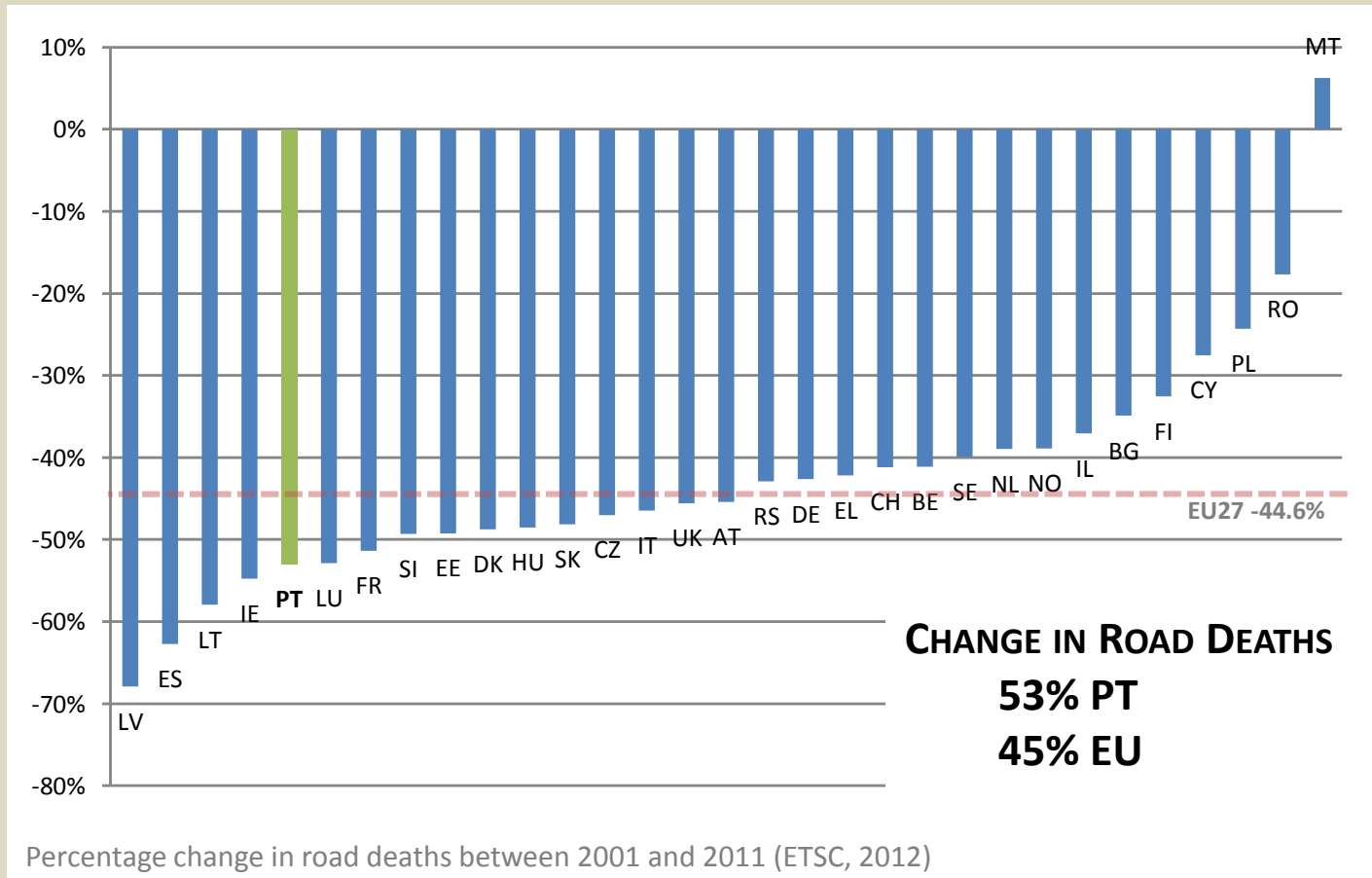
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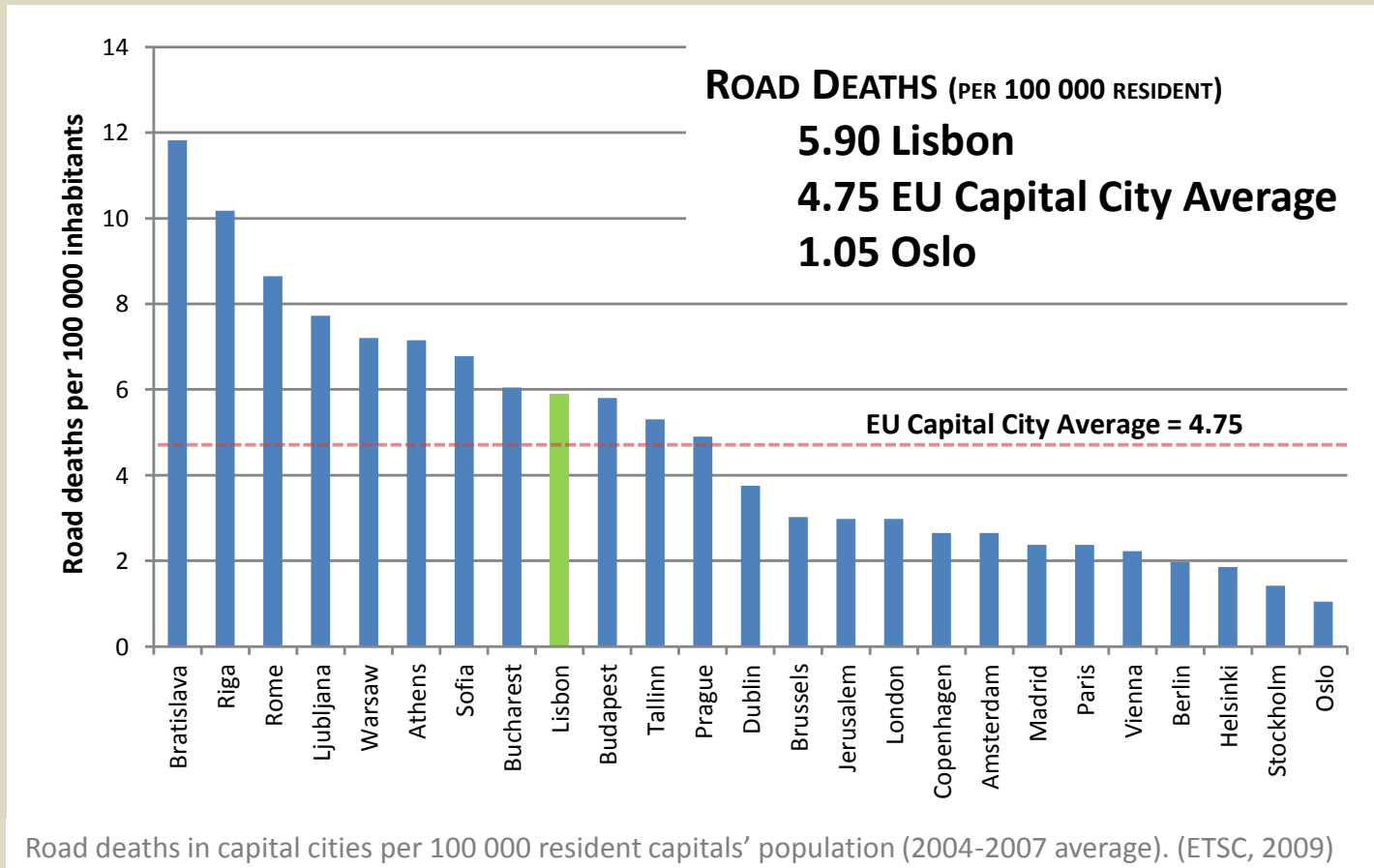
I. INTRODUCTION - PORTUGUESE CONTEXT

Road deaths – Change between 2001-2011



I. INTRODUCTION - LISBON CONTEXT

Road deaths in capital cities per 100 000 resident capitals' population



I. INTRODUCTION - INTERVENTION SITE



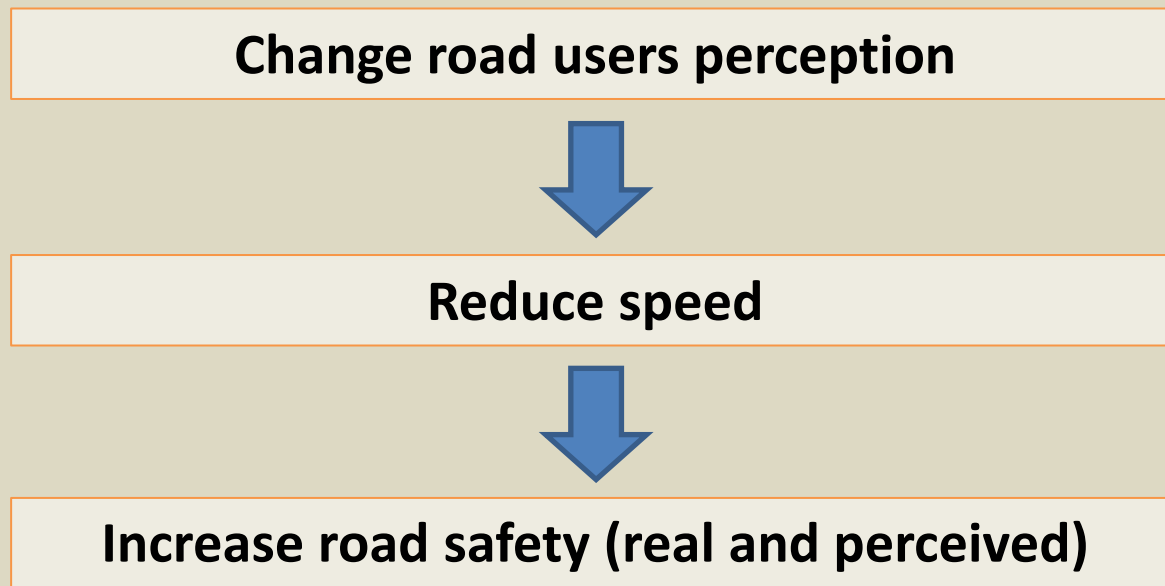
Picture of pedestrian crossing the street out of the pedestrian crossing



Picture from the beginning of the selected street section

I. INTRODUCTION - OBJECTIVES

1) Reduction of the speed in one particular street, *Rua Coelho da Rocha*, in Lisbon



2) Increase awareness to road safety issue in Portugal.

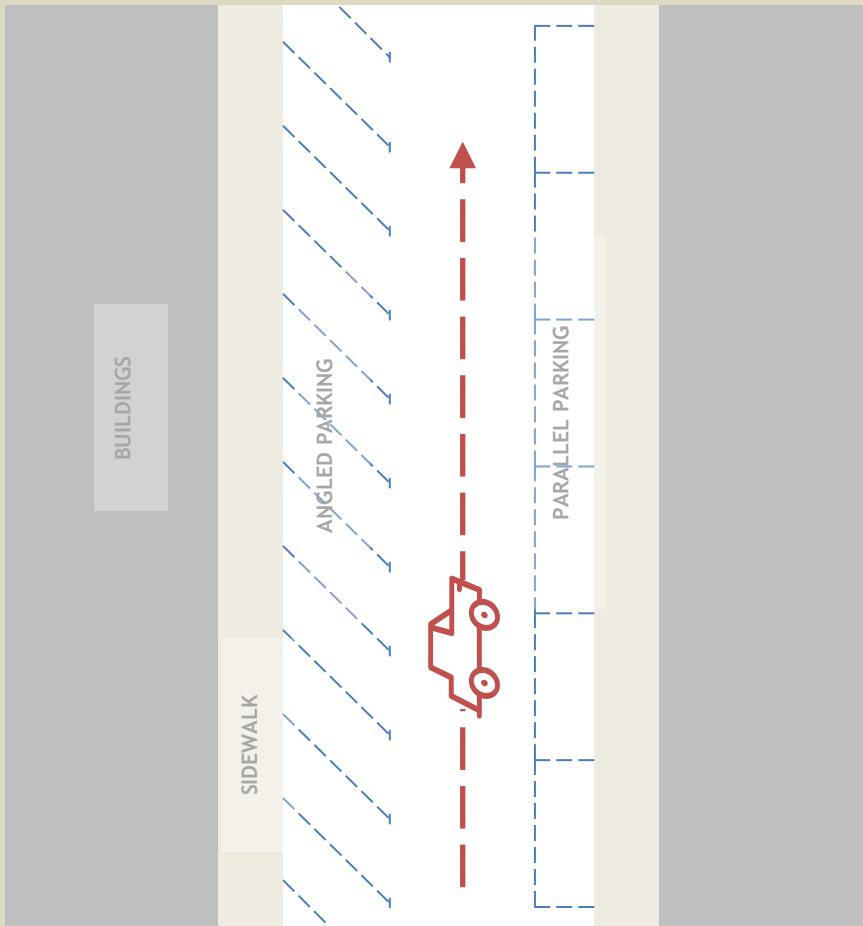
I. INTRODUCTION - PARTNERS

- **European Transport Safety Council**
- **Sílvia Shruballs** (supervision, Researcher at *Instituto Superior Técnico*)
- **Portuguese Association of Road Signs and Safety - AFESP**
- **TRAFIURBE**
- **Lisbon City Council (CML)**
- ***Santo Condestável Civil Parish (JFSC)***
- **Lisbon Public Security Police (PSP)**

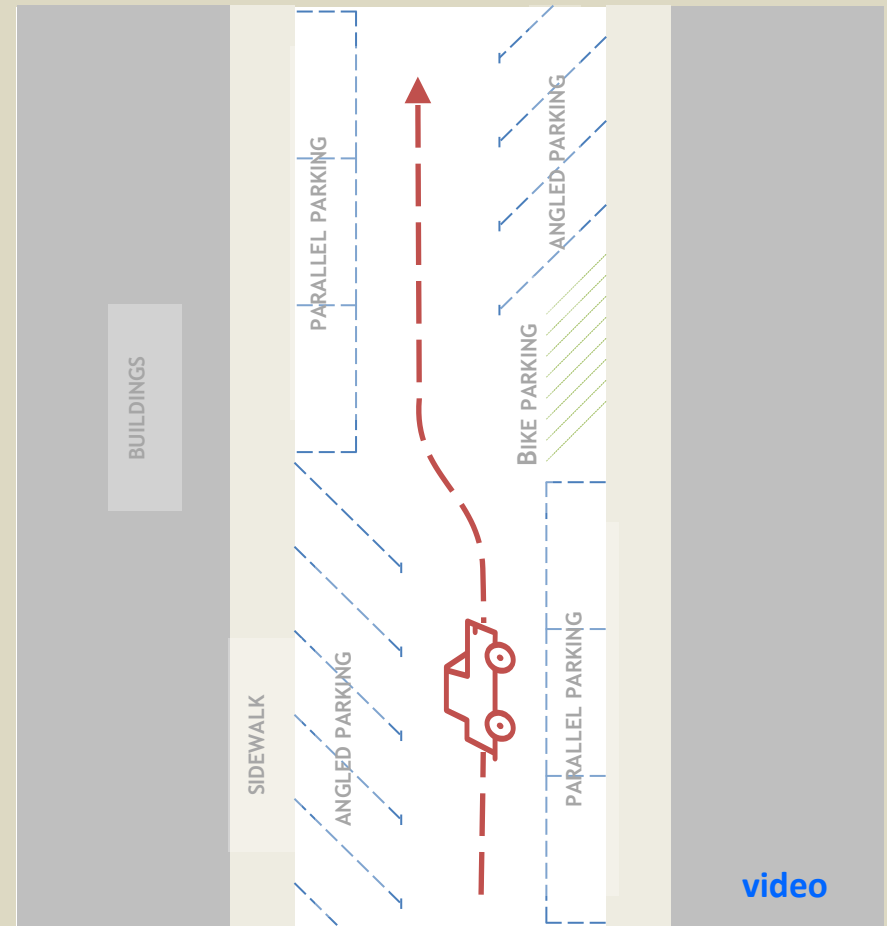
II. IMPLEMENTATION OF THE MEASURE - CONCEPT

Traffic Calming Measure: Chicanes

Parking scheme without chicane



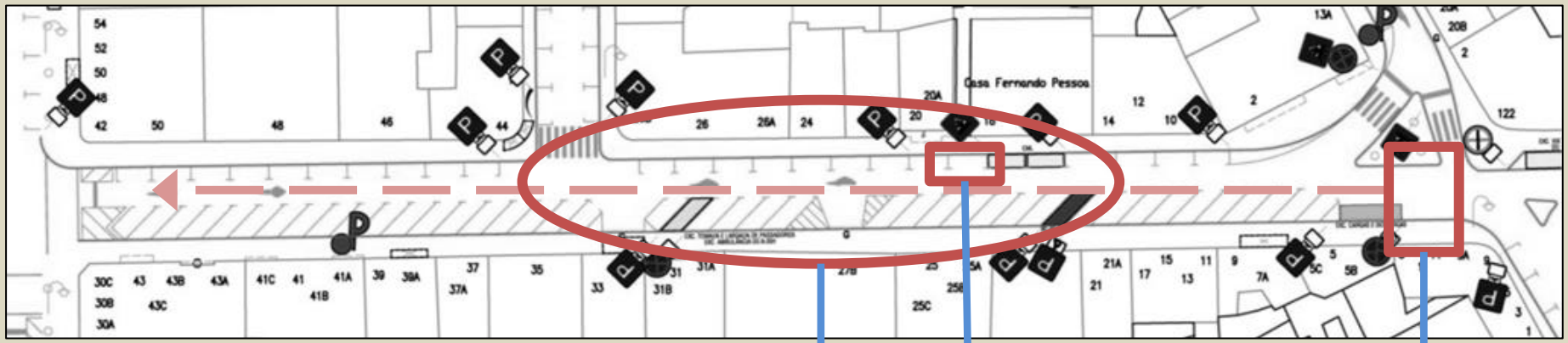
Parking scheme with chicane layout



video

II. IMPLEMENTATION OF THE MEASURE - PROJECT

BEFORE

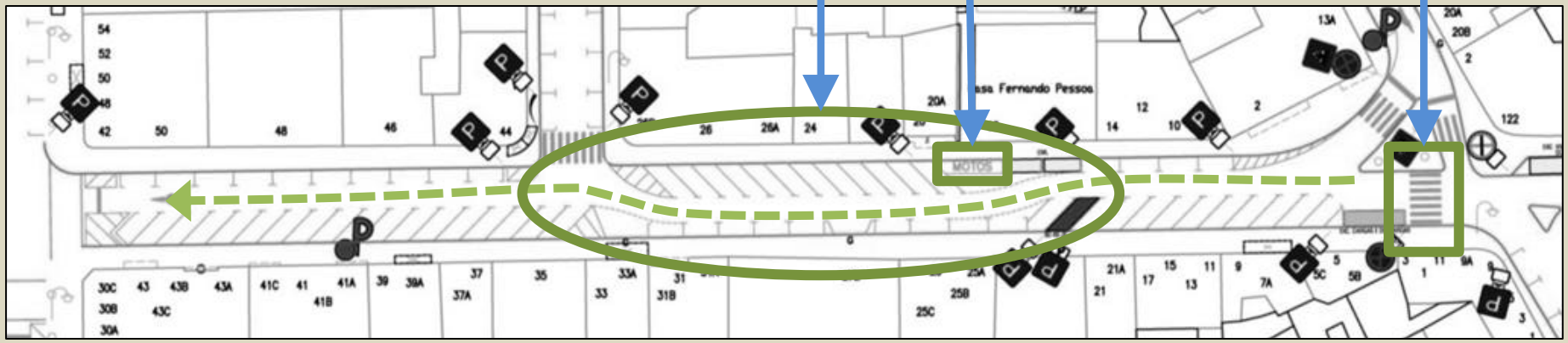


Chicanes

Motorcycles parking space

Pedestrian cross

AFTER



II. IMPLEMENTATION OF THE MEASURE - ROAD WORKS



Pictures of the road works (being carried out and finished)

III. ASSESSMENT - METHODOLOGY

PROPOSED INDICATORS

TRAFFIC
Speed
Traffic demand
Pedestrian crossings

PERCEPTIONS
Pedestrian questionnaire
Drivers questionnaire
Traders questionnaire

PERCEPTIONS
Noise level
Gas emissions

ACTUAL INDICATORS

TRAFFIC
Speed
Traffic demand
Pedestrian crossings

PERCEPTIONS
Pedestrian questionnaire
Drivers questionnaire
Traders questionnaire

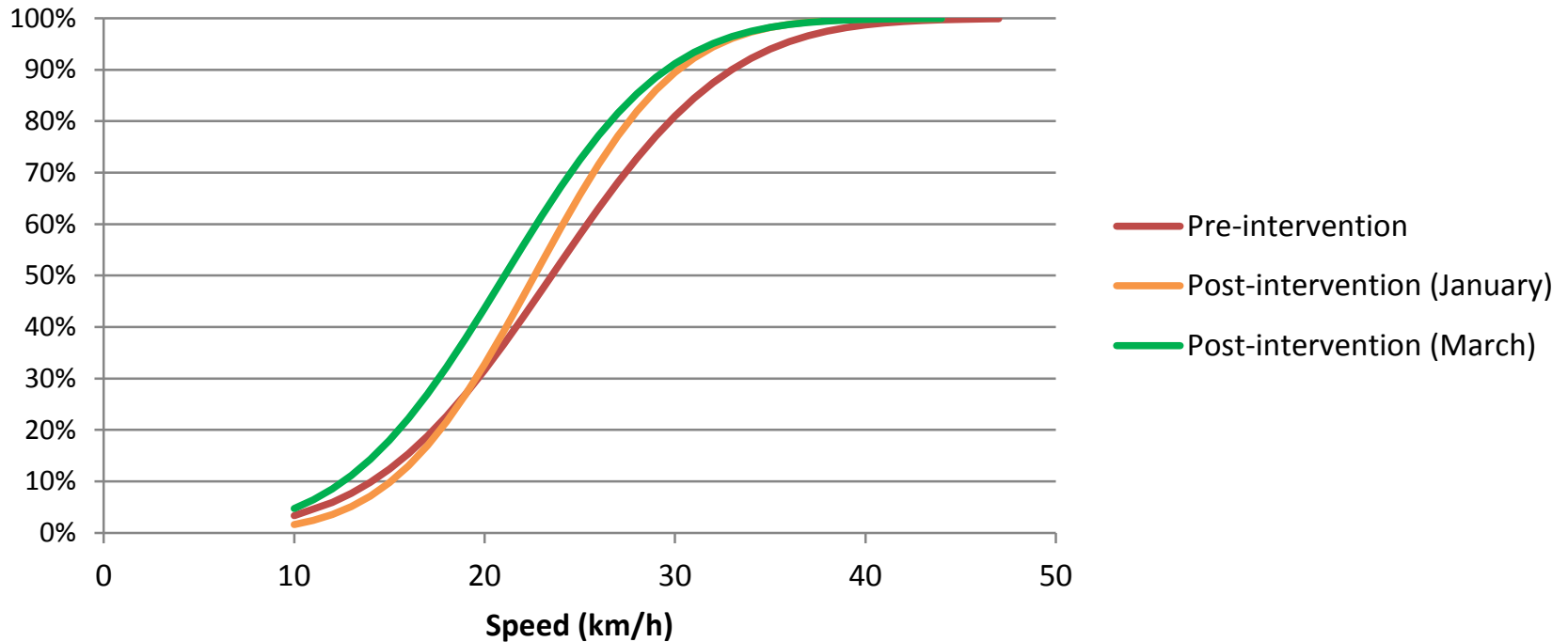


Questionnaire



Speed radar

III. ASSESSMENT – SPEED (BEFORE AND AFTER)

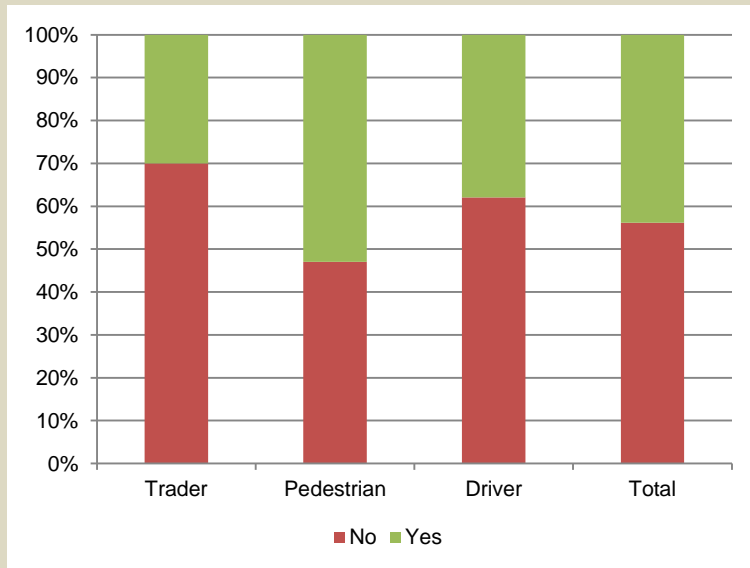


Cumulative frequencies of driving speeds

Speed (km/h)	Pre intervention	Post intervention (January)	Post intervention (March)	Differences pre vs post-intervention (March)	
				%	abs.
Max	47	44	44	-6.4%	-3.0
Ave	23.5	22.6	21.1	-10.5%	-2.5
V ₈₅	32	29	28	-12.5%	-4.0

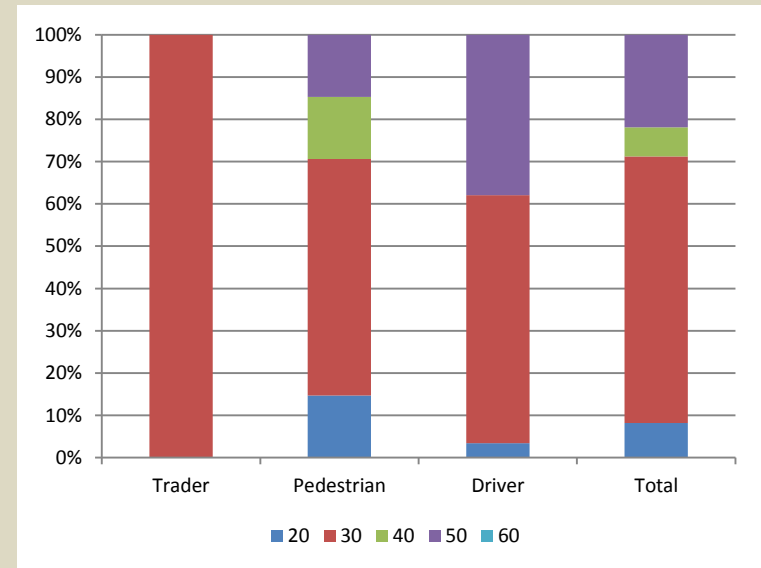
III. ASSESSMENT - SAFETY PERCEPTIONS (BEFORE)

Do you regard this street as a safe one?



- 70% of traders considered this street to be unsafe;
- 72% of Drivers answered that the street was unsafe;
- Pedestrian's perception seems to be more optimistic as 53% considered the street to be safe.
- Overall, the majority of street users (56%) considered the street as unsafe while the rest (44%) regards the street as a safe one.

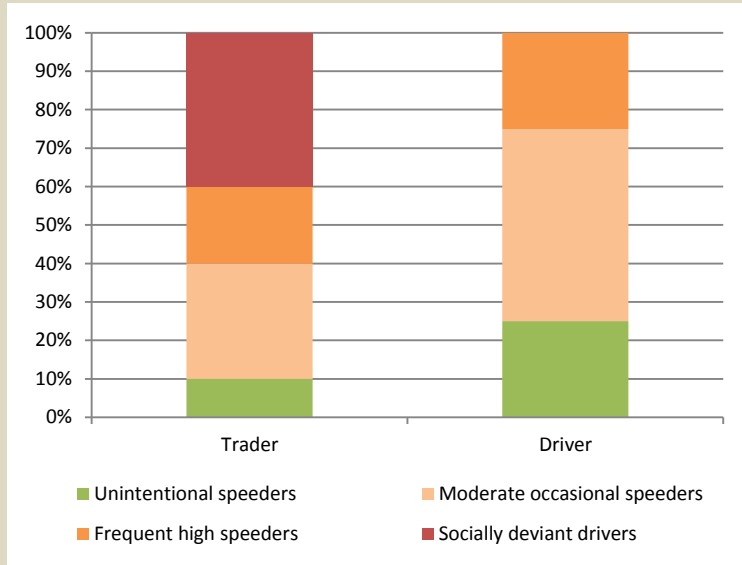
Which do you believe to be the appropriated speed limit for this street?



- 100% of the traders believed that the speed limit should be 30 km/h;
- 56% of the pedestrians considered that the speed limit should be 30 km/h;
- 59% of the drivers considered that the speed limit should be 30 Km/h;
- Overall 71% believed that the speed limit should be below 30 km/h.

III. ASSESSMENT - SAFETY PERCEPTIONS (BEFORE)

Type of drivers according to traders and drivers themselves



according to traders:

- only 10% of the drivers passing that street were “unintentional speeders”
- 30% were “moderate occasional speeders”
- 30% were “frequent high speeders”
- 40% were “socially deviant drivers”

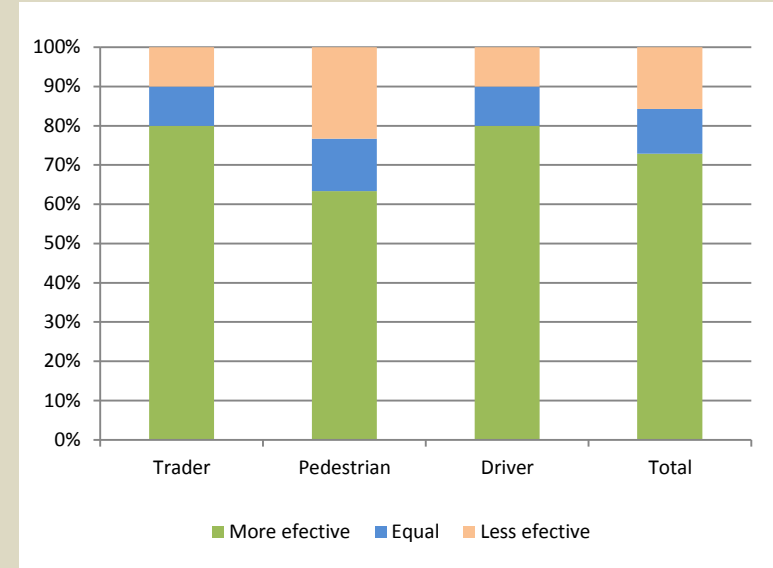
according to drivers:

- 25% considered themselves as “unintentional speeders”
- 50% as “moderate occasional speeders”
- 25% as “frequent high speeders”
- none of them considered to be “socially deviant drivers”.

III. ASSESSMENT - SAFETY PERCEPTIONS (AFTER)

Do you consider that drivers are driving on a lower speed now? / Do you consider that your driving speed is lower now?

Concerning to speed humps how do you regard chicanes' effectiveness (in terms of speed reduction)?



- 80% of the traders believed that vehicle's speed lower;
- 80% of the pedestrians also agreed that vehicle's drive in a lower speed;
- 67% of the driver considered that they have slowed their speed on this street.
- In overall 74% of the street users had the perception that vehicles decreased their speed

- 80% of traders and drivers considered it more effective, 20% so effective or less effective;
- 64% of the pedestrians considered it more effective, 13% considered it so effective as speed humps and 23% less effective;
- Globally, 84% considered chicanes equally or more effective against 16% that believed speed humps.

IV. PROJECT DISSEMINATION AND AWARENESS

- Web page in a road safety [blog](#)
- Leaflets – about 300 were distributed to present the project and its scope and goals to the road users and authorities
- National conference – Association to the Promotion of Child Safety Conference, on 20th November 2012
- Newspaper article – On *Público* a National Newspaper with a wide circulation
- Scientific paper – to be published May/June 2013 in the Portuguese Journal of Signalization



Newspaper article

ADYSE PROJECT

Adapt Your Speed to the urban Environment

ADYSE project is an European Project developed under the STARS project coordinated by the European Transport Safety Council (ETSC).

The main aim of STARS is to increase the awareness of speed's consequences on collisions through the implementation of engineering measures or communication campaigns.

Casilha do Rocio Street, section between São Cosme Street and Ferreira Borges Street, was identified as a site where drivers speeding. At this location there have been collisions between vehicles and pedestrians.

The changes implemented in the scope of the ADYSE project are a traffic calming measure which aims to change the perception that drivers have of the road environment. This drivers naturally adjust their speed, increasing road safety for all users, in particular for the pedestrians.

PARKING SCHEME WITHOUT CHIBANES

PARKING SCHEME WITH CHIBANES

The distance required to stop a vehicle that drives at 50 km/h is about 20 meters, while 30 km/h is only 15 meters.

In a collision between a vehicle and a pedestrian at 50 km/h, the probability of its survival is only 20%, whereas if driving at 30 km/h the chances of pedestrian's survival increase to 90%.

More Information:
<http://www.etsc.eu/terupia>

Co-funded by:

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Leaflets

V. DIFFICULTIES & LESSONS LEARNED

DIFFICULTIES AND LIMITATIONS (Mainly related to time schedules problems and resources)

- Get the political approval to the intervention (mainly due to proximity of local elections)
- Lack of resources to assess the proposed indicators;
- Match schedules between partners;
- Weather conditions – delayed the road works;
- Meet deadlines (delay of 3 months according to the proposed project timeline)
- Lack of control site;
- Speed measurements of limited time ;
- Reduced questionnaires' sample size.

LESSONS LEARNED:

- Perseverance is a main key to the success, if we don't believe in our project no one will;
- Open-mindedness to change and adapt the project to the conditions of sponsors and local authorities, as long as our main purpose remains covered;
- Above all, we needed to captivate the interest of those we want to support us because;
- This project can be the beginning of something bigger, regarding the impact of road safety measurements in our City.

VI. CONCLUSIONS

PROJECT SUCCESS

- V_{85} Speed has decreased from 32 to 28 km/h and the overall number of drivers driving above 30km/h has decreased about 10%;
- Risk perceptions' assessment demonstrated that the performed intervention had a direct and positive effect on road users' perception;
- People in general considered this street safer after the implementation of the chicanes;
- No collision has been recorded so far;
- ADYSE clearly succeeded in demonstrating that few resources combined with serious commitment will secure success of well design projects;

FUTURE WORK

- Keep giving awareness to the road safety issue in Portugal, particularly amongst the most vulnerable groups;
- The potential of this project lies not only in its outcome - implementation of the measure - but also in its potential to contribute to further work despite adverse circumstance - it can be a source of inspiration.

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JFSC - Pedro Cegonho

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TRAFIURBE - Pedro Oliveira

THANKS FOR YOUR ATTENTION



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