HOW TO MONITOR MOTORIST BEHAVIOR AT PEDESTRIAN CROSSINGS?

4th MEETING OF THE SAFER CITY STREETS NETWORK

INTRO & AIM

In BA, 24% of fatal crashes involving pedestrians are related to the violation of pedestrian priority.

In order to plan actions to increase pedestrian priority it is necesary to measure to what extent drivers lead pedestrians to cross and which circumstancies favour/ prevent this behaviour.

To objectively evaluate the prevalence of yielding to pedestrians among drivers in Buenos Aires City intersections.

INTRO & AIM

Universe: Vehicles that circulate around BA City

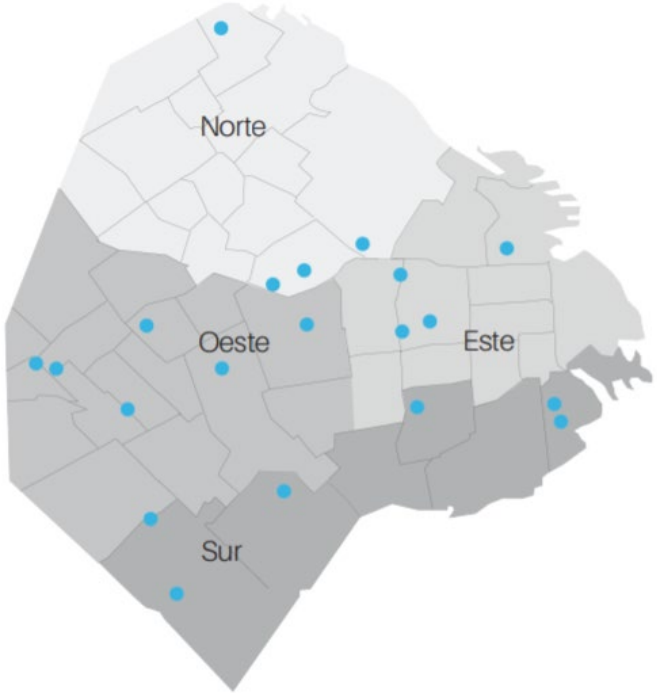
Probabilistic sampling design, stratified per conglomerates according to 4 geografical zones.
In two stages:

/ Primary sampling units: Residential street intersections with and without traffic lights

/ Final sampling units: light and heavy vehicles, taxis and buses that circulate by the selected intersections.

Sample: 2075 valid interactions between pedestrians and drivers (error: +/-2.23).

Data collection: Non-participant observation through video recordings.



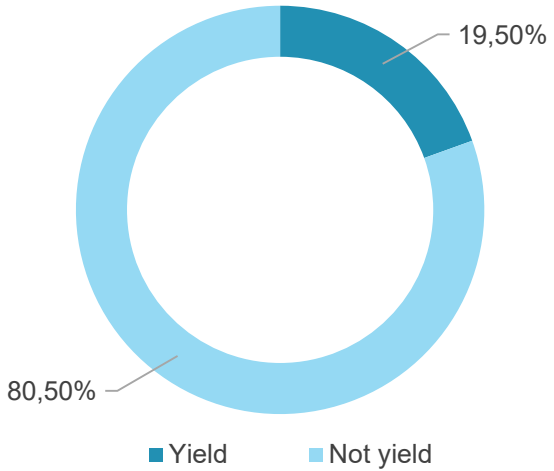
VALID INTERACTION: TURN

VALID INTERACTION: PASSING CAR

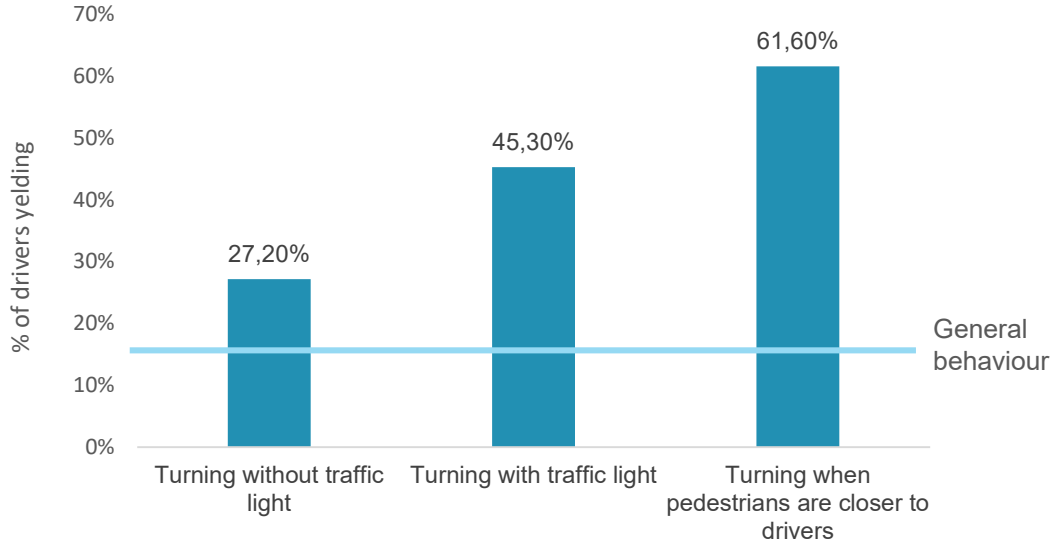
VIDEO EXAMPLE

RESULTS: PEDESTRIAN PRIORITY

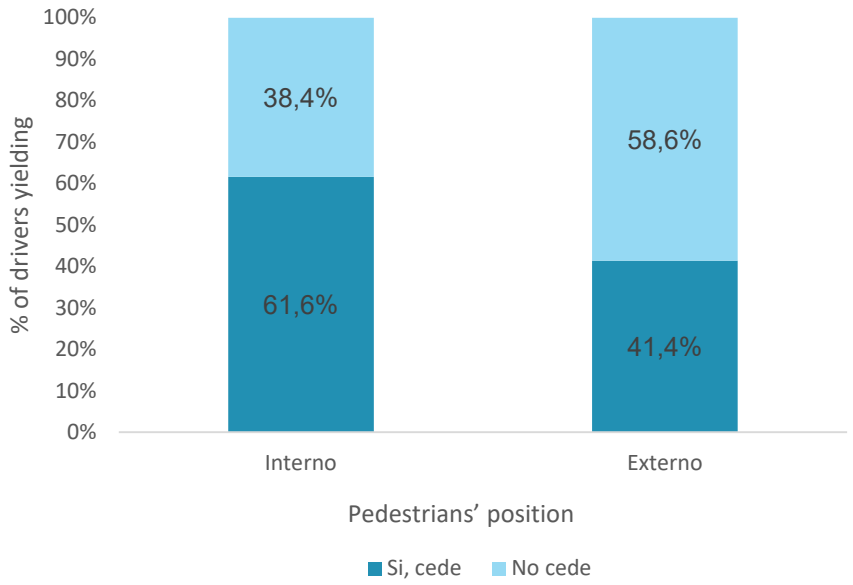
19,5% OF DRIVERS YIELD TO PEDESTRIANS



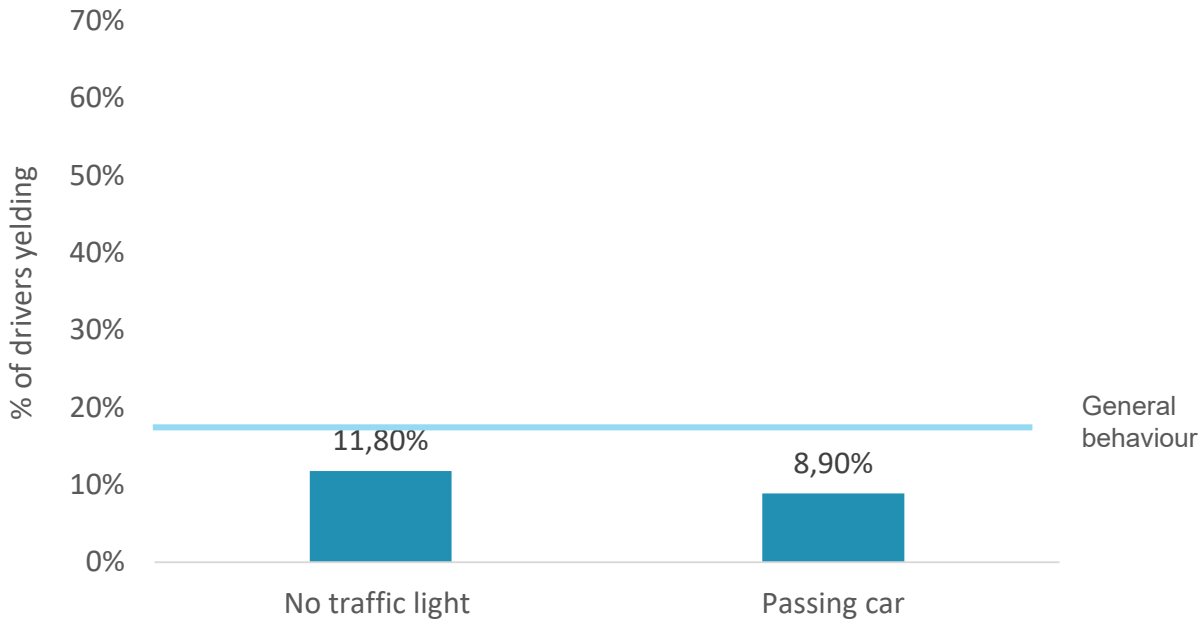
CONDITIONS THAT INCREASE YIELDING



TURNS: DRIVER'S BEHAVIOUR VARIES ACCORDING TO PEDESTRIANS DISTANCE.



CONDITIONS THAT DECREASE THE CONDUCT OF YIELDING



CONCLUSIONS

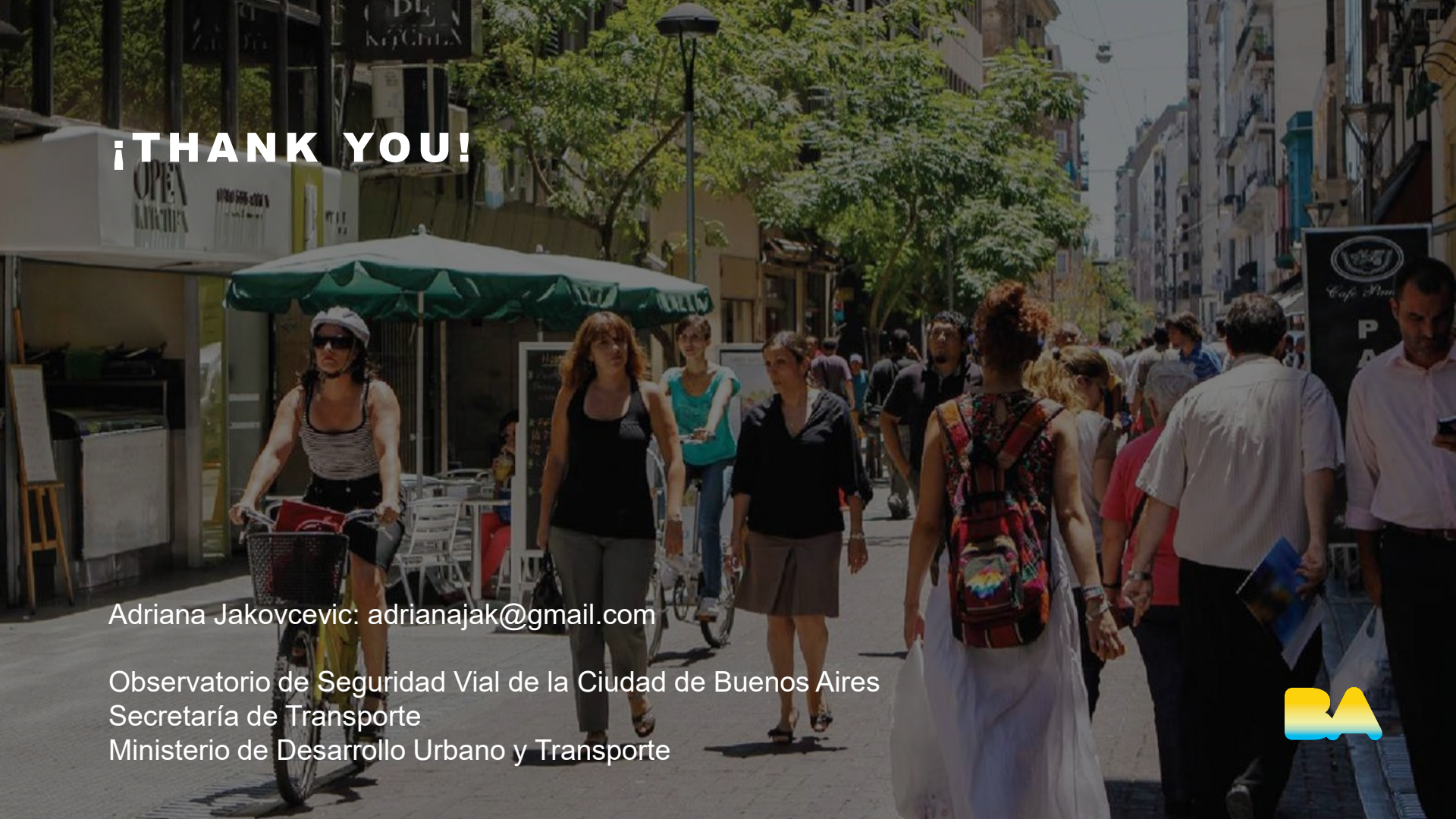
Only 19,5% of drivers yields to pedestrians in Buenos Aires.

Behaviour increases at turns and it is greater in presence of traffic lights.

Yielding to pedestrians is more frequent when the pedestrian is closer to the driver.

Pedestrian priority decreases when drivers do not turn as well as in intersections without traffic lights.

¡THANK YOU!



Adriana Jakovcevic: adrianajak@gmail.com

Observatorio de Seguridad Vial de la Ciudad de Buenos Aires
Secretaría de Transporte
Ministerio de Desarrollo Urbano y Transporte