

Photo : Vincent Jarry

# Guide to Counting Overtaking Manoeuvres

Supplementary Material to the Article:  
One metre it's not enough! Dangerous  
overtaking of cyclist in Montreal.

Objective: Identify the characteristics of  
overtaking manoeuvres over cyclists in  
Montreal, Quebec and Toronto.

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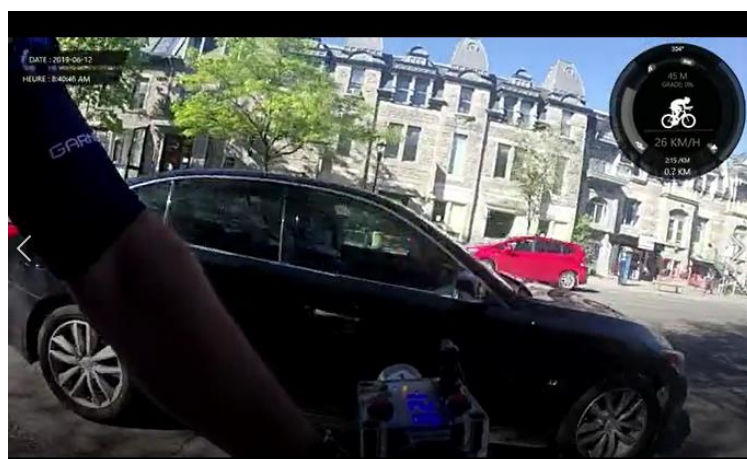
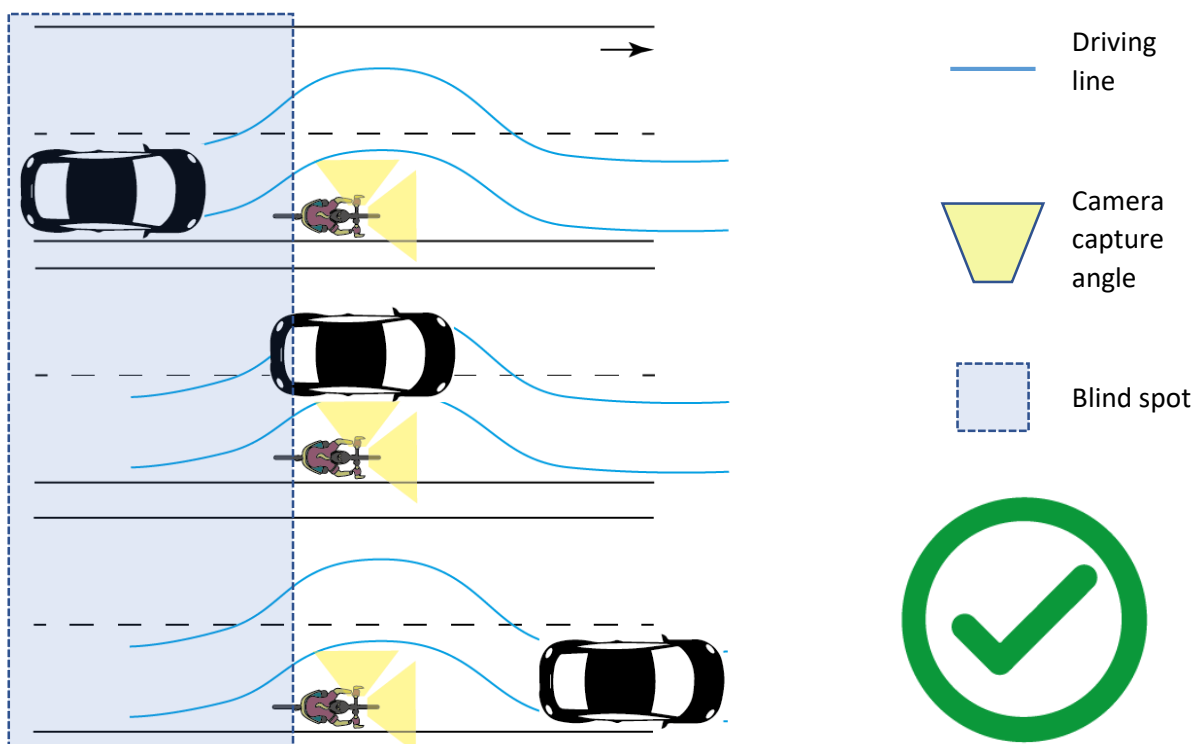
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## 1. Type of Overtaking Manoeuvres

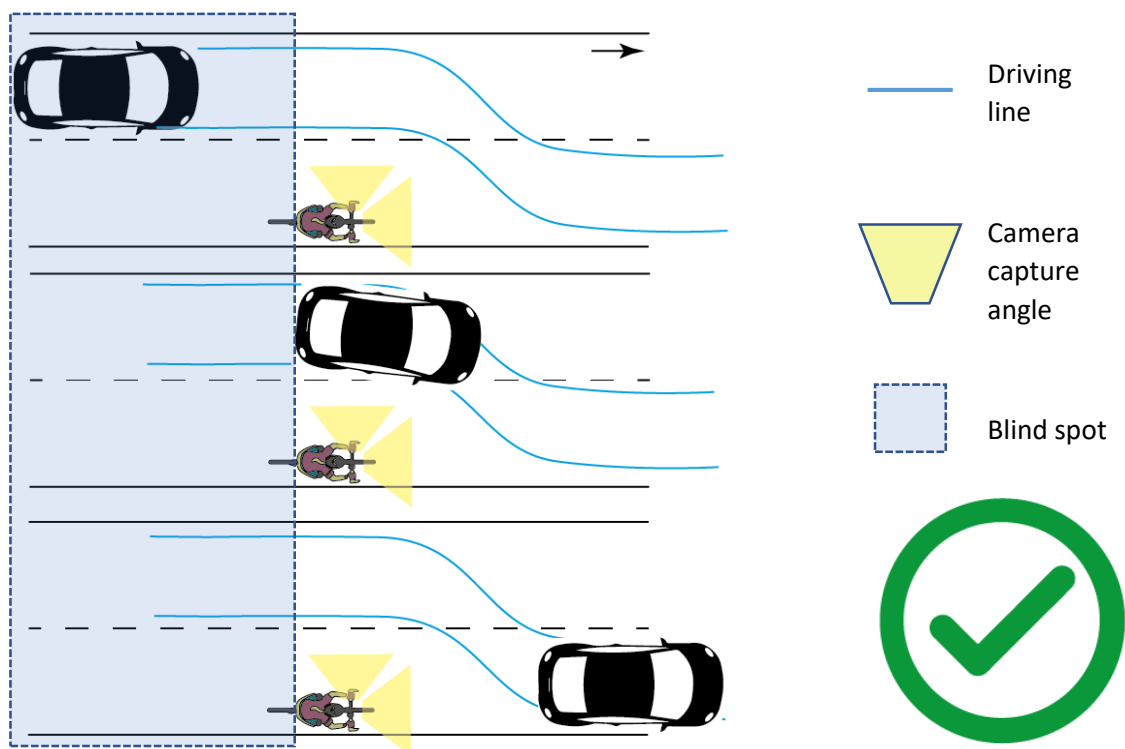
In this section, the different types of overtaking manoeuvres considered in the research project are described.

### 1.1. Type 1: Passing alongside and returning to the cyclist's line.

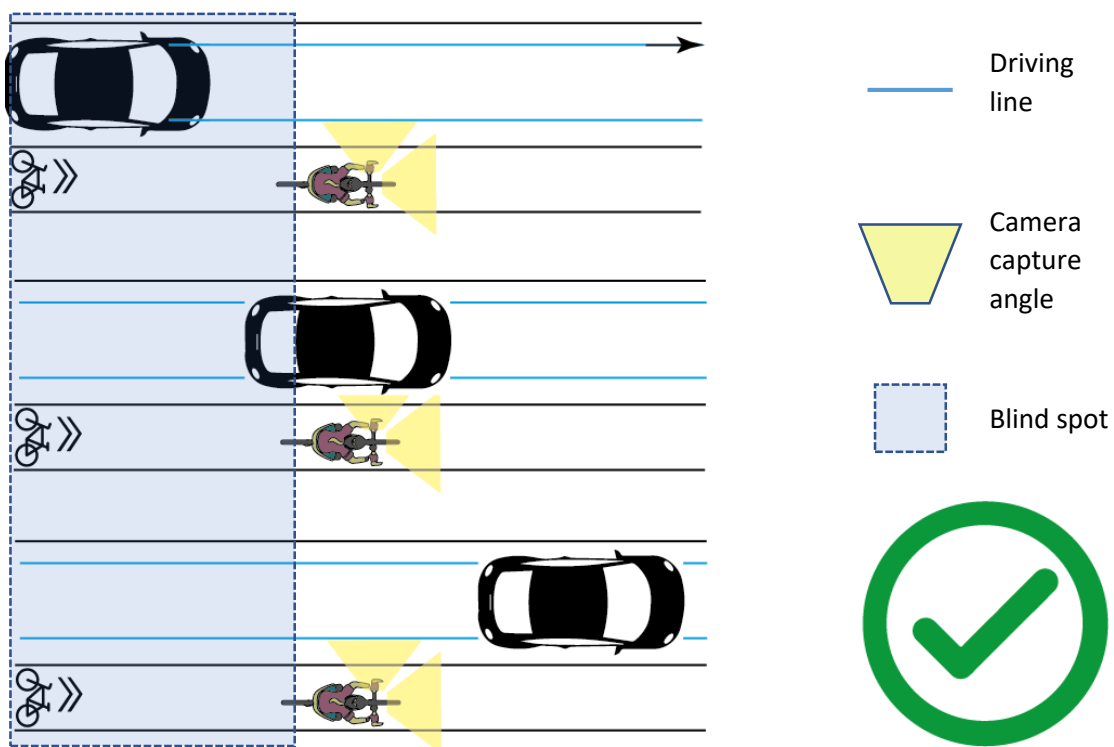




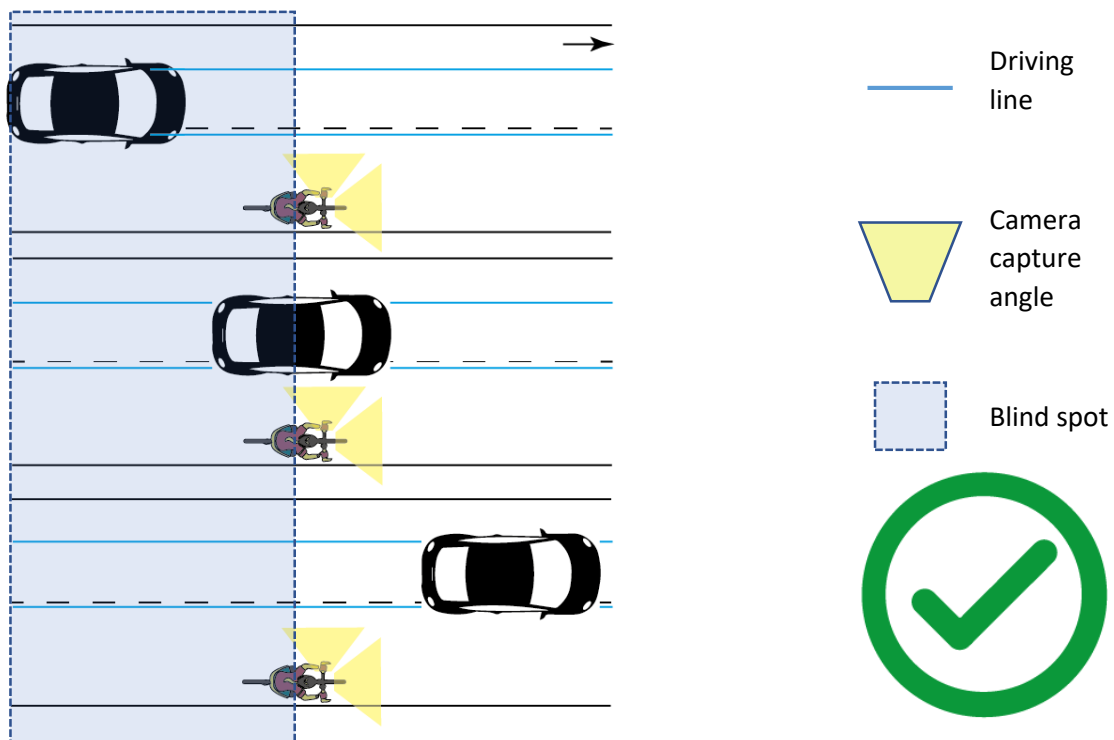
## 1.2. Type 2: Passing alongside and returning to the cyclist's line.



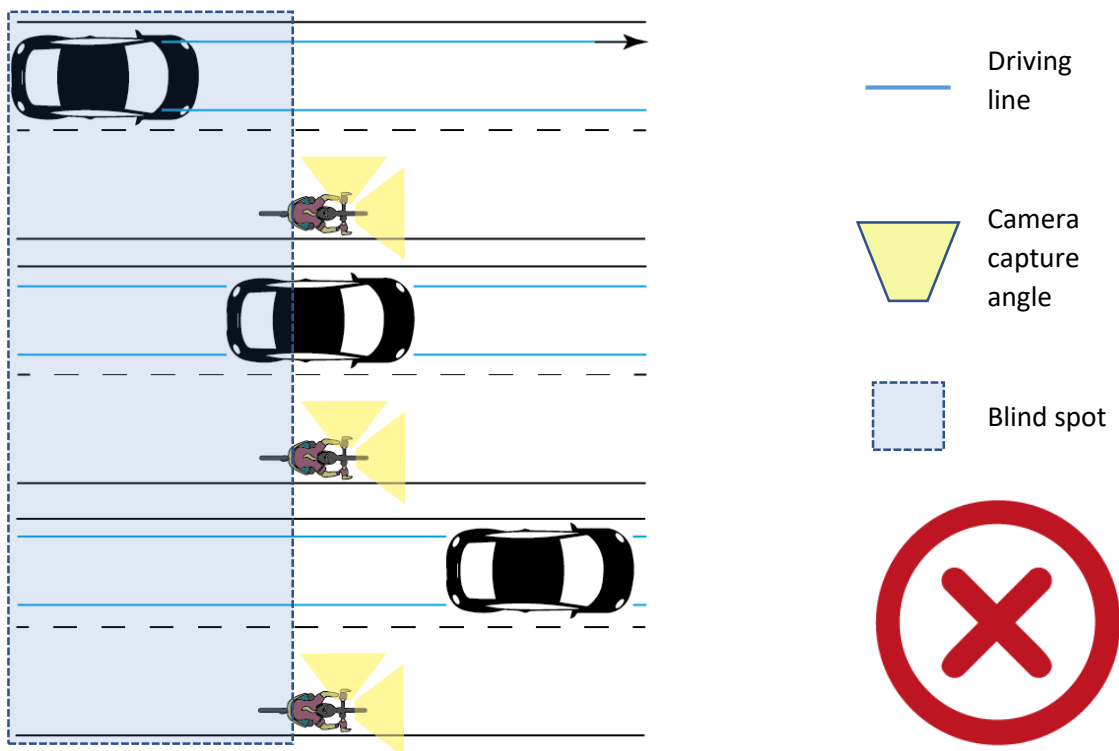
### 1.3. Type 3: Passing alongside a cycle lane.



1.4. Type 4: Overtaking a cyclist by encroaching on their lane. The dividing line must be visible.

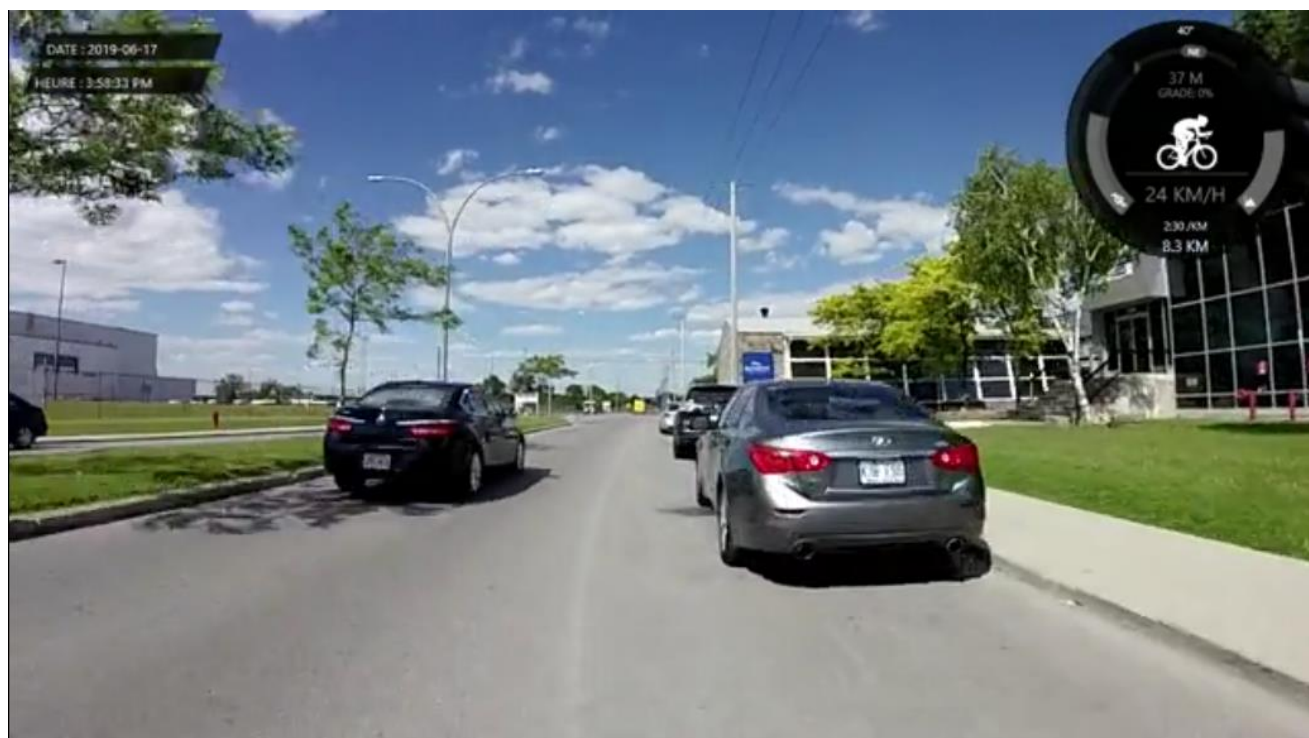
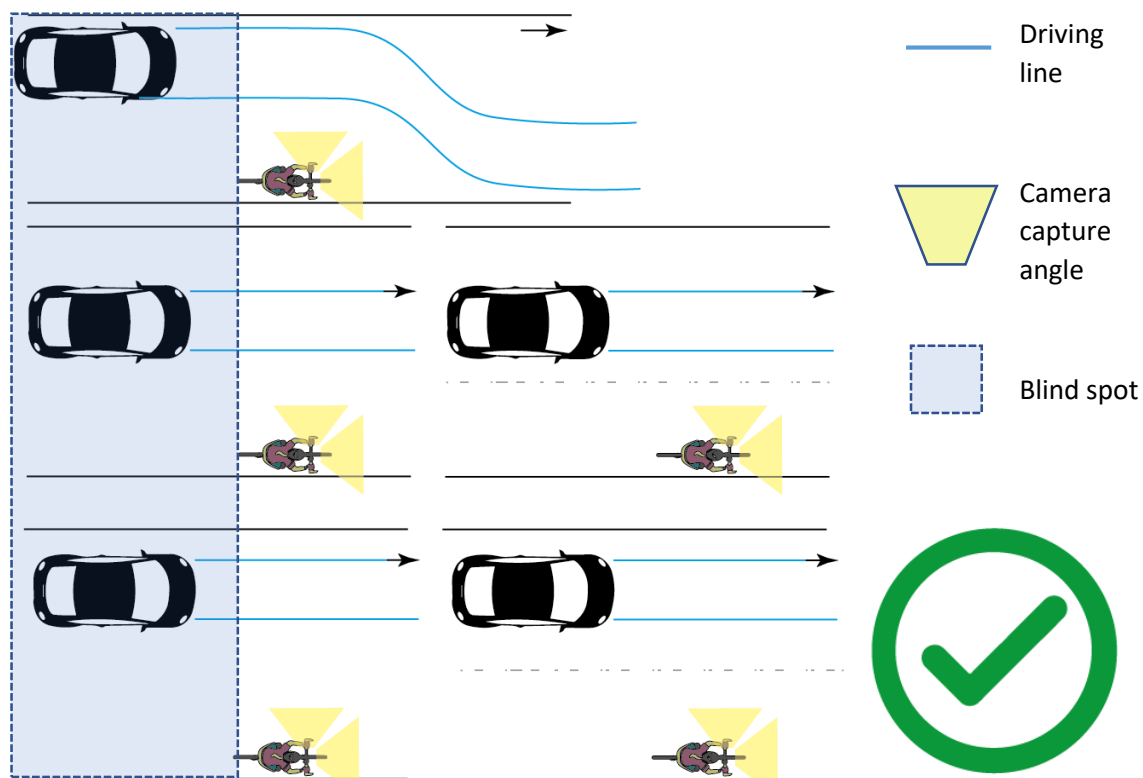


**1.5.** Passing a cyclist in the second lane is not considered an overtaking manoeuvre. The dividing line must be visible.

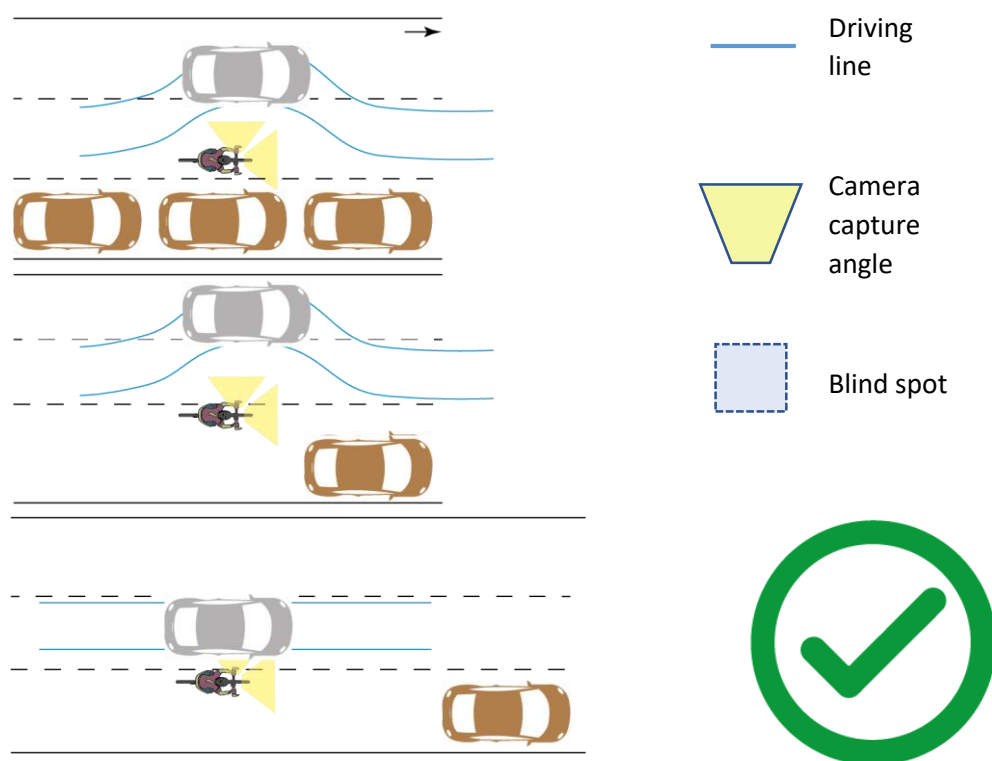




1.6. Type 5: In the absence of a demarcation line or a blurred demarcation, any passage is considered as an overtaking manoeuvre.

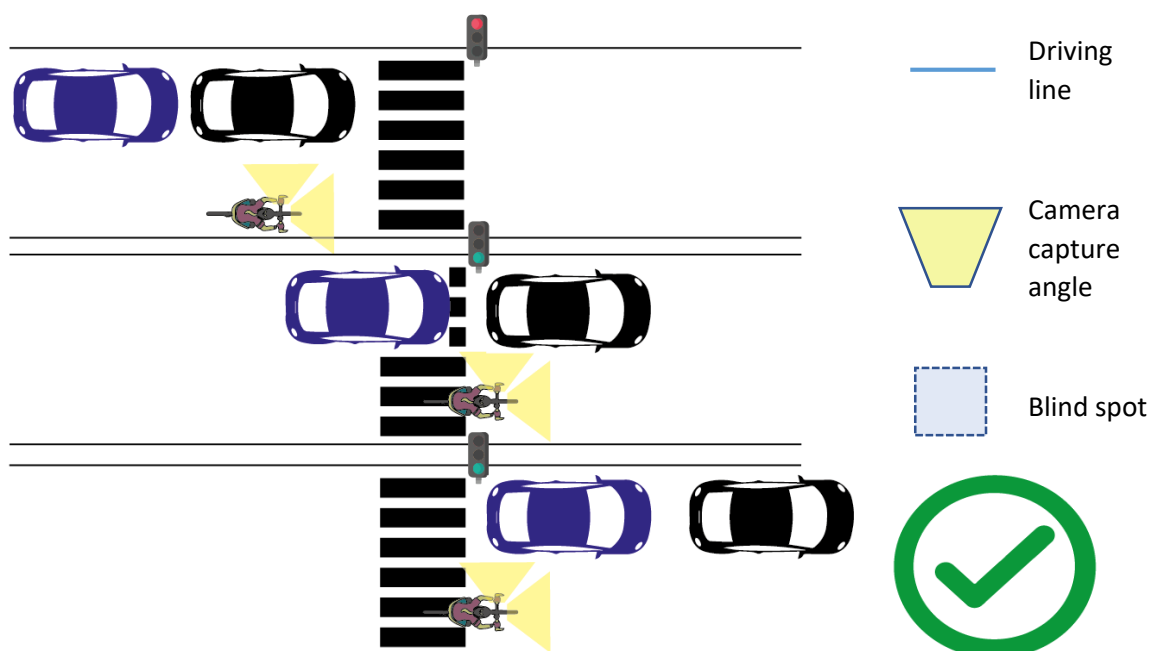


1.1. Type 6: When vehicles are parked on the road and a vehicle approaches a cyclist from the second or third lane: the examples in the figure should be considered as an overtaking manoeuvre.

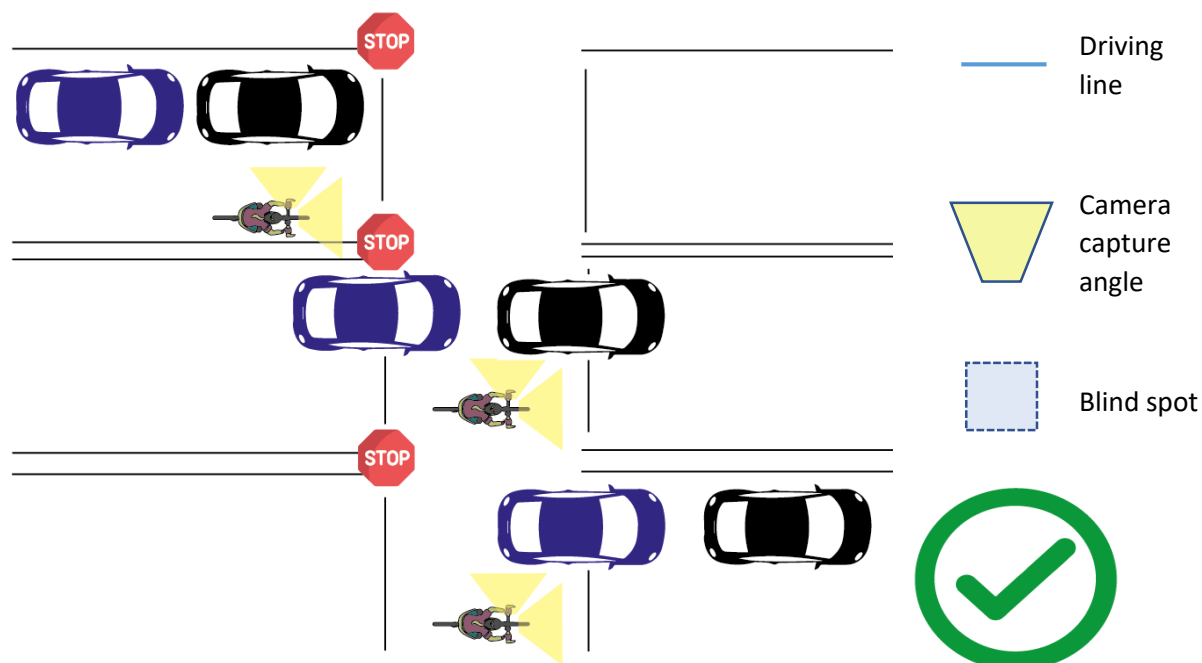




- 1.2. Overtaking during a red light: the passage of the parked car (the black vehicle in the figure) that starts to move alongside the cyclist is not considered as an overtaking manoeuvre. However, the passing of the second car (blue) is considered as overtaking, on the condition that the last car is outside the angle of vision of the side camera.

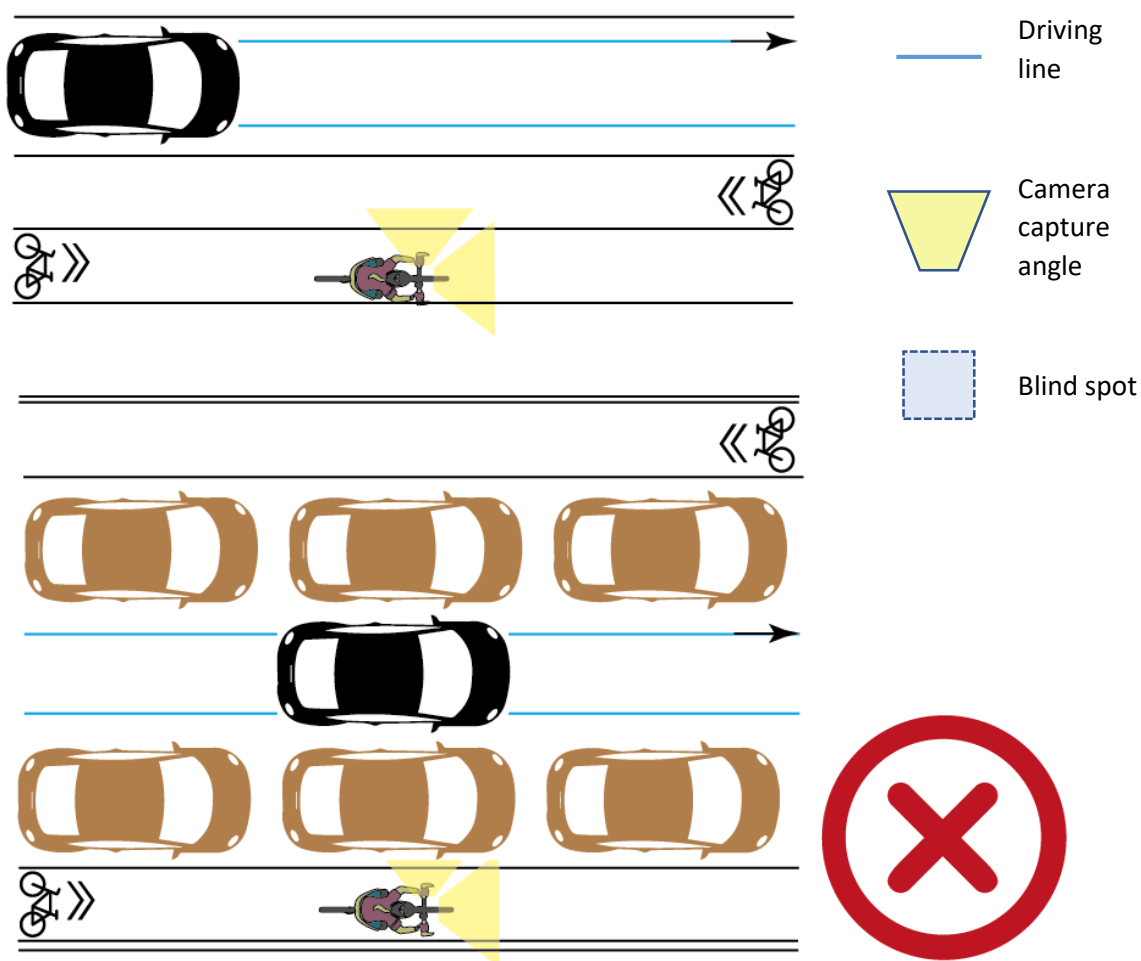


**1.1. Overtaking during an intersection:** If the cyclist is completely stopped at a stop-controlled intersection, the traffic light rule applies. A stopped car (in the figure, the black car), which then starts to move next to the cyclist, is not considered to be an overtaking manoeuvre. The passing of the second (blue) car is considered to be overtaking, on the condition that the last car is outside the angle of vision of the side camera.



## 1.2. Other Considerations

If the cyclist is riding in a double cycle lane or if the cyclist is surrounded by vehicles parked in the road, the passing of the vehicle is not considered an overtaking manoeuvre.





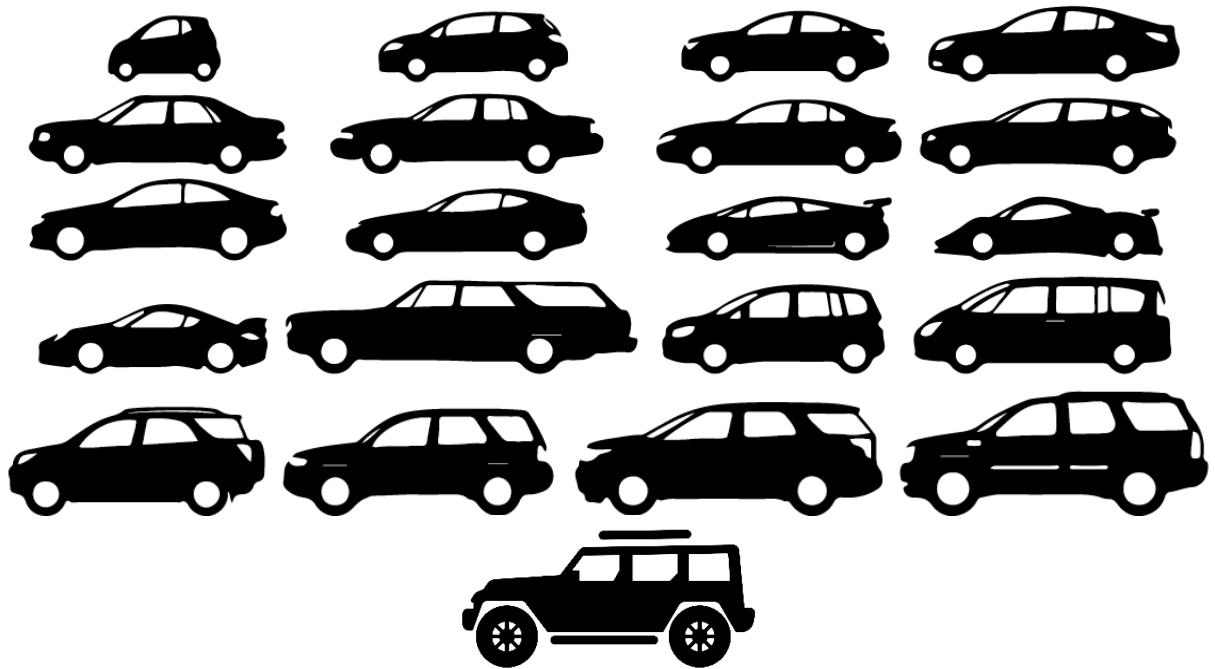
## 2. Type of Vehicle:

This section defines the five different types of vehicles in the research:

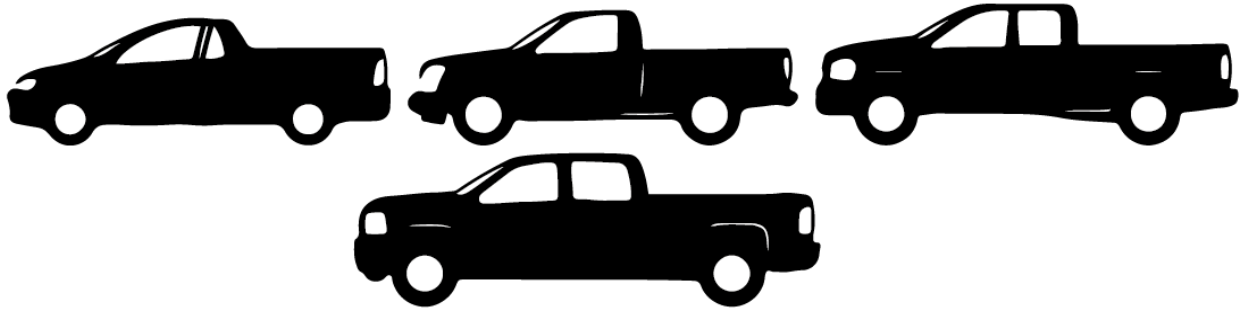
1. Standard car
2. Pick-up
3. Truck
4. Bus
5. Other

### 2.1. Standard Car

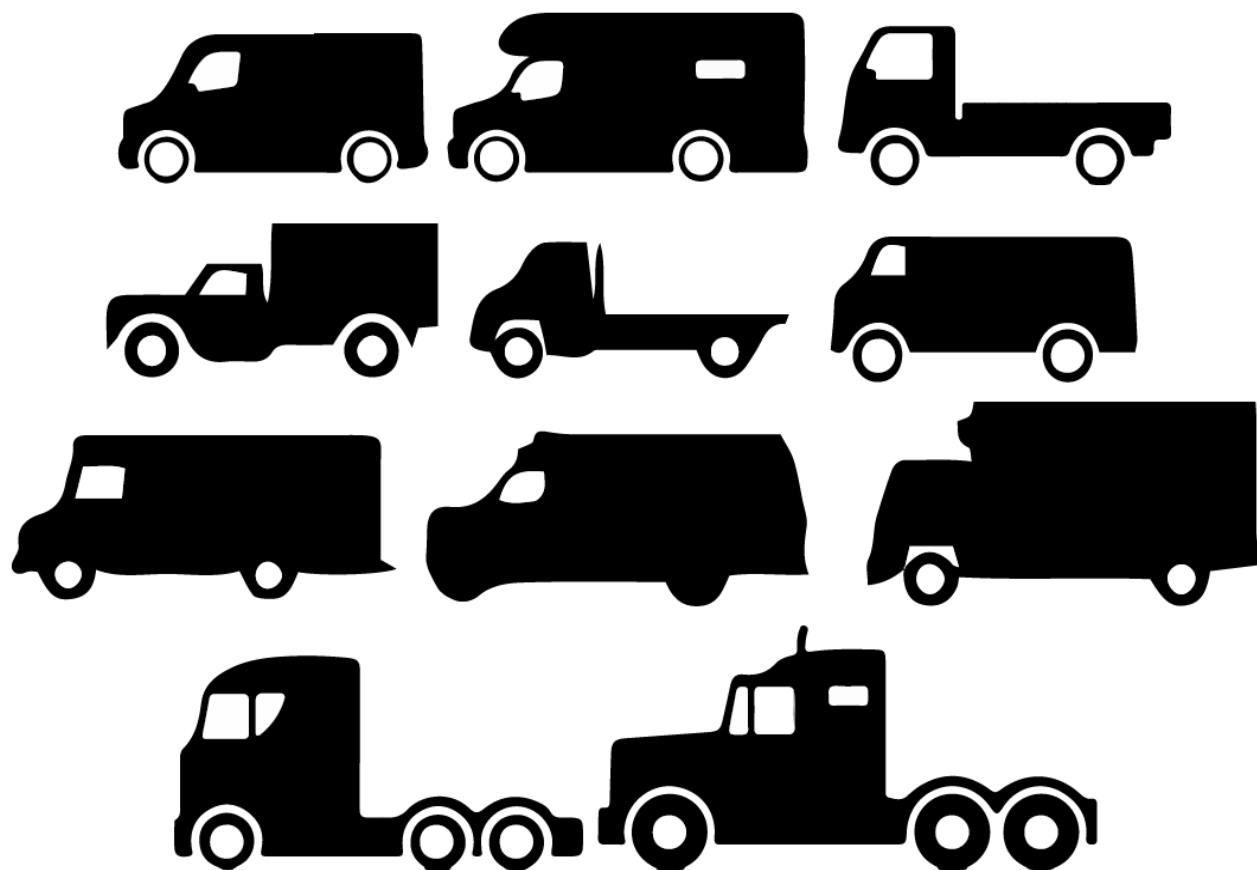
To facilitate the coding and classification system, we use the reference silhouettes to identify the type of car.



## 2.2. Pick-Up



### 2.3. Truck

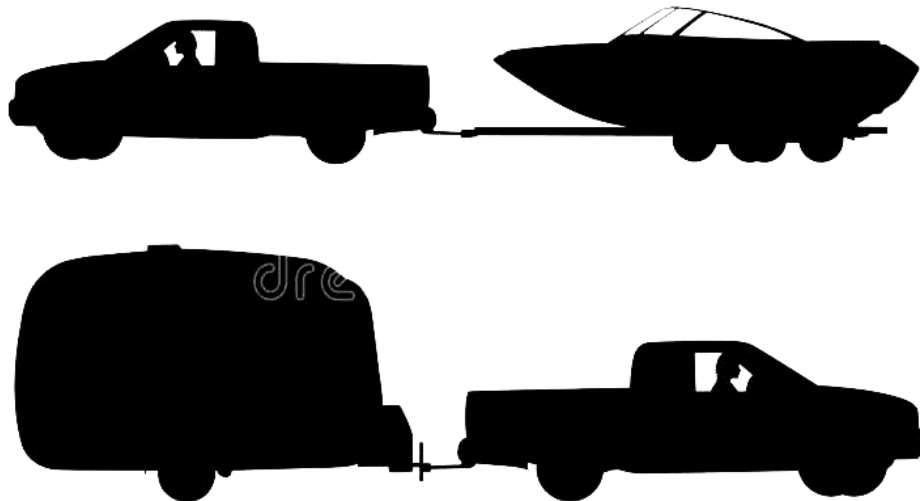




## 2.4. Bus



## 2.5. Other

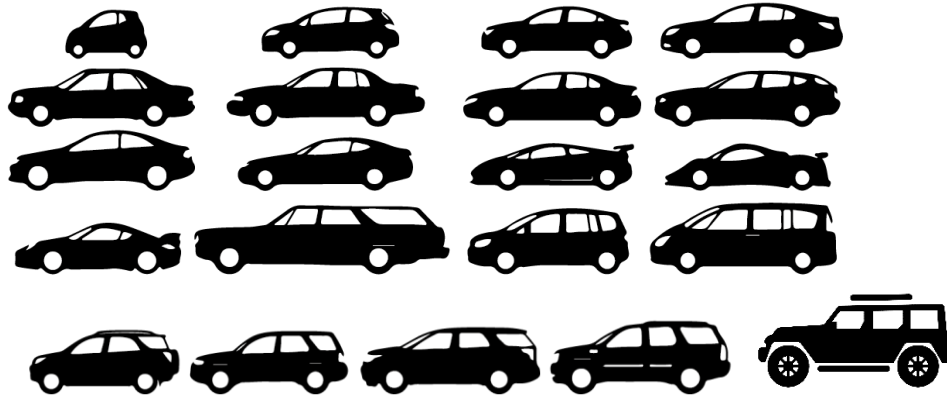


## Summary of the Guide to Counting Overtaking Manoeuvres– Andrés Henao et Philippe Apparicio

1. Identify whether there is an overtaking manoeuvre according to the defined criteria

2. Identify the type of vehicle passing the cyclist

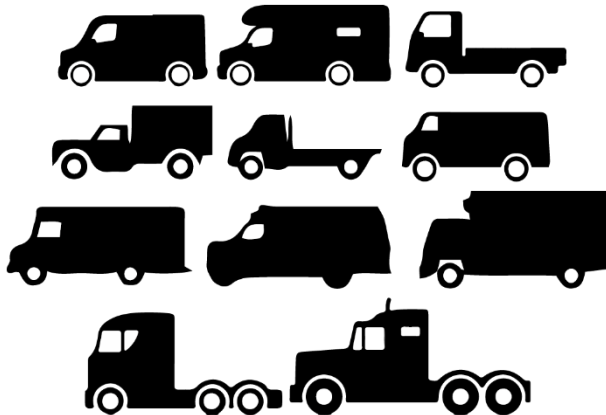
### Standard car



### Pick-up



### Truck



### Bus



### Other

