

Executive Summary

Research Study on Front Turn Signal Light Road Projection (from a car driving out of parallel parked position on the side of a road)

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The study was executed on a real road with street lighting and cars parallel parked in a line on the righthand side of the road.

The test subjects were each riding a bicycle on the righthand side of the road along the parked cars.

The test vehicle was one of the cars parked along the side of the road. The test vehicle's left front lamp turn indicator was activated, along with the left front turn signal light road projection, to indicate that the test vehicle was going to exit the parking spot.

The turn signal light road projection used was an amber color, progressing style, chevron symbol, with a tilt angle of 45 degrees.

The purpose of the study was to assess the test subject's reaction to the front turn signal light road projection (e.g., awareness, understanding, appreciation, potential distraction, etc.).

Summary:

All subjects were able to see the turn indicator projection, but they continued their journey as they felt that they had priority.

In total, nearly all subjects riding the bicycle appreciated the information of the front turn signal light road projection, as it increases awareness to indicate that the test vehicle was going to exit the parking spot. All subjects also expected that the vehicle had to respect their priority as bicycle drivers, therefore only a slight reduction in speed was detected.

The chevron style with 45 degrees in inclination seemed suitable for optimal visibility of the front turn signal light road projection.

The use of a front turn signal light road projection in the context of the departure of a vehicle parallel parked in a line on the righthand side of the road can reduce accidents and improved safety.

No adverse effect was noticeable and the test subjects' response were positive. The test subjects significantly felt safer and less stressed.

The approval of the turn signal light road projection is highly recommended.

The complete research study available for further examination.