

Right Turn on Red:

Arguments for Abandoning the Measure Due to Traffic Safety Risks

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In 2021, the first traffic sign allowing motor vehicles to turn right when the traffic signals are at red (a green arrow) was installed in Ljubljana. Today, right turn on red is found in many Slovenian towns and cities. The measure is being introduced despite the fact that international research has long shown that it increases safety risks for pedestrians and cyclists; consequently, many foreign cities are abandoning right turn on red. The measure is in conflict with the strategic documents of Slovenian cities, which prioritize the safety of all road users—especially vulnerable groups—as well as improved conditions for walking, cycling, and public transport. It would therefore be reasonable to follow international research findings and discontinue the practice in Slovenia as well.

Right turn on red is permitted in the United States and Canada, and to some extent in certain European countries, although the rules governing its implementation differ from country to country. In the United States, it was first legalized in California in 1939 and became widespread after the 1973 energy crisis, when it was promoted at the federal level as a measure to reduce fuel consumption and improve intersection flow. Today in the US, right turn on red is generally allowed at most intersections without a specific sign. It is typically permitted after stopping, unless explicitly prohibited by means of a specific sign.

In most European countries, including Slovenia, the approach is more restrictive: right turn on red is allowed only where explicitly permitted by a supplementary green arrow or a specific traffic sign.

Reduced safety for pedestrians and cyclists

No comprehensive study has yet been conducted in Slovenia to analyse the impact of this traffic sign on road safety. Nor are there publicly accessible records of how many such signs are in use five years after their introduction.

For understanding the effects of the measure, findings from international research are therefore important. These studies have for decades highlighted that right turn on red increases the complexity of traffic movements at intersections and reduces safety, particularly for pedestrians and cyclists. Following the introduction of this measure, an increase in traffic accidents involving vulnerable users has been observed. A study conducted in the United States by Preusser and colleagues showed

that allowing right turn on red may lead to an increase in accidents involving pedestrians and cyclists (Preusser et al., 1982). “Estimates of increases ranged from 43% to 107% for pedestrian accidents and from 72% to 123% for bicycle accidents.” (Preusser et al., 1981, p. i)

Research on traffic behaviour shows that a large proportion of drivers do not comply with the requirement to come to a complete stop when turning right on red. Observations indicate that a significant share of drivers either do not stop fully or only stop due to traffic conditions. An additional safety risk is posed by vehicles encroaching into pedestrian crossing areas while waiting to turn (Retting et al., 2002). Drivers often focus primarily to the left—towards approaching motor traffic they intend to merge with—and may overlook pedestrians and cyclists approaching from the right or already crossing with a green signal. This endangers and obstructs pedestrians and cyclists, reduces the available time for crossing, and may influence their behaviour, such as avoiding such intersections or changing their crossing routes. Similar safety challenges for pedestrians and cyclists have been identified in studies across various US cities (Fleck and Yee, 2002).

Changes in vehicle design also increase risks for pedestrians and cyclists in right-turn-on-red situations. Since the 1990s, vehicles have become larger and taller, reducing visibility, increasing braking distances, and worsening outcomes in collisions with vulnerable users. This is particularly relevant in the United States, where large vehicles such as SUVs and pickup trucks accounted for 75% of the vehicle fleet in 2022. Due in part to these changes, some US cities are now restricting or abandoning right turn on red, prioritizing pedestrian and cyclist safety (Schultheiss and Colman, 2025). The number of large passenger vehicles is also increasing in Slovenia.

US cities are restricting this option

In recent years, many US cities have begun restricting right turn on red, primarily due to safety concerns for vulnerable road users. In Washington, DC, a full ban on such turns was introduced in 2025, while a similar ban has long been in place in New York City. Initiatives to ban or significantly restrict this measure are also underway in Denver, Cambridge, and San Francisco (The Guardian, 2023). In Seattle, a policy has been adopted whereby a ban on right turn on red is the default solution at all new or modified signalized intersections. This represents a shift in decision-making: prohibition becomes the baseline safety standard, and any deviation must be specifically justified. Delays to motor traffic are generally not considered sufficient grounds for exemption—thus, attention shifts from optimizing vehicle flow to ensuring the safety of pedestrians and cyclists (Packer, 2023).

A recent analysis of the introduction of right-turn-on-red bans at 100 pilot locations in Washington, DC, showed that abandoning this measure improves traffic safety. With the implementation of NTOR (No Turn on Red) signs, a measurable reduction in conflicts between road users was observed, along with fewer instances of drivers failing to yield to pedestrians (Wolfram et al., 2022).

Incompatibility with contemporary transport policies

Right turn on red is rooted in a paradigm focused on increasing motor traffic flow at the level of individual intersections. Its main benefit may be reduced waiting times for some drivers, although whether there is such a benefit, and if so its scale, has not been researched in the Slovenian context. Any benefit is delivered at the expense of introducing additional conflict points between motor vehicles, pedestrians, and cyclists. Therefore, the measure cannot be evaluated solely in terms of traffic flow but must also be examined in relation to safety, predictability of the traffic environment, and impacts on vulnerable road users. In addition, at busy junctions in denser urban environments, high pedestrian flows and few gaps in crossing vehicle flows significantly reduce any potential benefit because opportunities to turn on red are very few.

International research shows that right turn on red increases the complexity of traffic interactions, reduces drivers' awareness of pedestrians and cyclists, and raises the risk of conflict situations. It thus worsens both the perceived and actual safety of precisely those groups that today's transport policies prioritize.

The proposal to discontinue currently permitted right turn on red at intersections equipped with green arrows is not based solely on individual safety studies, but also on a broader paradigm shift in transport planning. Modern transport planning no longer evaluates measures primarily by whether they reduce drivers' waiting times, but by whether they contribute to a safer, more accessible, and more inclusive transport system (Plevnik et al., 2024; Handy, 2020; Litman, 2026). Measures that increase motor traffic flow at the expense of higher risks for pedestrians and cyclists are not aligned with long-term transport development goals or with the prioritization of the most vulnerable road users.

Practice abroad also shows that the understanding of this measure is changing. In many urban environments where right turn on red has long been established, there is now an increasing trend towards restricting or abolishing it. The measure is increasingly understood as a safety risk that must be assessed in line with the goal of protecting pedestrians, cyclists, and other vulnerable users.

In the Slovenian context, where integrated transport planning emphasizes improved accessibility, reduced dependence on cars, and increased traffic safety, the introduction of RTOR represents a deviation from these principles. Given international research findings, the absence of a comprehensive Slovenian evaluation, and the direction of contemporary transport policies, there is no sound justification for continuing the use of this traffic sign in Slovenia.

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