Institute of Transport Economics
Norwegian Centre for Transport Research

ENGLISH Summary

Distance-based road pricing in practice

How do drivers adapt?

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- **Congestion and environmental damage from car traffic impose substantial costs on society.** An economically optimal solution is a **road pricing system** in which drivers pay per kilometre driven, with rates that reflect the costs imposed on society and vary by **vehicle type, time of day, and location**.
- **Road pricing reduces the societal costs of car travel.** In a randomized field experiment in the Oslo region, road pricing reduced the external costs of driving by approximately 5% compared with the control group. The effects were particularly pronounced for **non-work-related trips** and driving **outside peak hours**.
- **Drivers of petrol and diesel vehicles responded more strongly to road pricing, while electric vehicle drivers changed their behaviour less.** These differences are most likely explained by **structural factors**, such as greater **car dependence**, **less flexibility in commuting**, and fewer alternatives to driving.
- **Combining road pricing with subsidies for cycling and walking had a limited additional effect.** While financial rewards for cycling and walking can encourage **more cycling**, the results suggest that some of the increase in cycling may come at the expense of public transport use. While **financial rewards for cycling and walking can encourage more cycling**, some of that increase can come from public transport use.
- **The study documents the short-term effects of road pricing.** How travel behaviour evolves over longer periods, and the effects of combining road pricing with other measures, such as improved public transport services, remain uncertain.