DRL

Daytime Running Lights: A systematic review of effects on road safety

Funding: National (Norway)
Duration: Jan 2003 - Nov 2003
Status: Complete with results

Background & policy context:
The European Commission wanted an update of estimates of the costs and benefits of mandatory use of daytime running lights on cars in the European Union (EU-15).

Objectives:
The objective of the project was to provide updated estimates of the effects of daytime running lights.

Methodology:
The project comprised a systematic review of current knowledge regarding the safety effects of daytime running lights (DRL). This included a meta-analysis of 25 studies that have evaluated DRL for cars and 16 studies that have evaluated DRL for motorcycles, and also a cost-benefit analysis of five policy options for the use of DRL in the European Union.

Parent Programmes:
META-ANALYSIS - Use of meta-analysis to summarise knowledge in transport research

Institute type: Non-profit organisation
Institute name: Institute of Transport Economics - TOI (on behalf of the Norwegian Research Council)
Funding type: Public (national/regional/local)

Partners:
TØI - Institute of Transport Economics

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Key Results:
The report presents a systematic review of current knowledge regarding the safety effects of daytime running lights (DRL). A meta-analysis has been made of 25 studies that have evaluated DRL for cars and 16 studies that have evaluated DRL for motorcycles. A cost-benefit analysis of five policy options for the use of DRL in the European Union has been made.

The use of DRL is found to reduce the number of multi-party daytime accidents for cars by 5 to 15%. For
motorcycles the reduction might be greater. The benefits of using DRL were found to be greater than the costs.

Policy implications

Five options for the introduction of mandatory use of daytime running lights in the European Union were developed and analysed.

Related Projects:

- STRIA Roadmaps: Other specified
  Transport mode: Road transport
  Transport sectors: Passenger transport, Freight transport
  Societal/Economic issues,
  Transport policies: Safety/Security
  Geo-spatial type: Infrastructure Node