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# **Econometric models of road use, accidents, and road investment decisions**

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**Volume II:**

**An econometric model of car ownership, road use, accidents, and  
their severity (Essay 3)**

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## Preface

The present volume contains the last part of the author's dissertation for the *dr. polit.* degree at the Institute of Economics of the University of Oslo.

In total, the dissertation consists of an introductory overview and three accompanying essays.

The first essay – entitled «The barely revealed preference behind road investment priorities» and co-authored by Rune Elvik – has been published in *Public Choice* **92**: 145-168 (1997).

The second essay – entitled «Measuring the contribution of randomness, exposure, weather, and daylight to the variation in road accident counts» and co-authored by Jan Ifver, Siv Ingebrigtsen, Risto Kulmala and Lars Krogsgård Thomsen – can be found in *Accident Analysis and Prevention* **27**: 1-20 (1995). This paper is based on the report «*Explaining the variation in road accident counts*», by the same authors, issued by the Nordic Council of Ministers (Nord 1993:35).

Both of these essays are reprinted, together with the introductory overview, in a separate Volume I (TØI report 456/1999).

The third essay – entitled «An econometric model of car ownership, road use, accidents, and their severity» and printed in this Volume II – is by far the largest. Certain parts of this research were presented at the 8<sup>th</sup> World Conference on Transport Research (WCTR) in Antwerpen in July 1998, at the 9<sup>th</sup> International Conference «Road Safety in Europe» in Bergisch-Gladbach in September 1998, at the conference «The DRAG Approach to Road Safety Modelling» in Paris in November 1998, at the «2<sup>nd</sup> European Road Research Conference» in Brussels in June 1999, at the 10<sup>th</sup> International Conference «Traffic Safety on Two Continents» in Malmö in September 1999, in report 402/1998 from the Institute of Transport Economics (TØI) (in Norwegian), and in a series of articles in the journal *Samferdsel* (issues 4 through 10, 1998 and 1-2, 1999 – also in Norwegian). Additional documentation is forthcoming in the book «*Structural Road Accident Models: The International DRAG family*», edited by Marc Gaudry and Sylvain Lassarre and published by Elsevier, and in the final report from the COST 329 project («Models for traffic and safety development and interventions») of the European Commission.

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- And Eeyore whispered back: «I'm not saying there won't be an Accident *now*, mind you. They're funny things, Accidents. You never have them till you're having them.»  
A. A. Milne (1929): *The House at Pooh Corner*

# Preface Volume I

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