



WORKING PAPER  
ITS-WP-96-12

*Accident Analysis and Investigation:  
the role of road safety engineering*

by  
**K W Ogden**

INSTITUTE OF TRANSPORT STUDIES  
The Australian Key Centre in Transport Management  
Monash University  
Clayton Vic 3168

**ISSN-015602116**

**No:** Working Paper ITS-WP-96-12

**Title:** Accident Analysis and Investigation : the role of road safety engineering

**Author:** Professor K W Ogden  
Institute of Transport Studies  
Department of Civil Engineering  
Monash University  
and

**Source:** This paper is based on material contained in the author's recent book *Safer Roads : A Guide to Road Safety Engineering* (Ashgate, London, 1996).

**Contact:** Institute of Transport Studies (Monash)  
The Australian Key Centre in Transport Management  
Department of Civil Engineering  
Monash University  
Clayton Vic 3168  
Tel. No. (03) 9905 9627  
Fax. No. (03) 9905 4944  
Email : [itsinfo@eng.monash.edu.au](mailto:itsinfo@eng.monash.edu.au)

**Date:** October, 1996

**Abstract:**

This paper was presented at a VicRoads Workshop for road safety engineers, held in Geelong on 2-5 June, 1996. It presents an overview of accident analysis and investigation, with particular emphasis on the role which the road safety engineer plays in road safety. The paper briefly reviews the road safety situation, highlighting different ways of viewing it, and then discusses generic approaches to road safety. The contribution of road safety engineering is discussed in terms of the road traffic system, hazardous road locations, identification of hazardous sites, diagnosis of accident problems, the development of countermeasures, and road safety audit. Brief mention is made of the appraisal of road safety programs, and monitoring and evaluation.

**Keywords:**

hazardous locations, diagnosis of safety problems, countermeasures, road safety audit, road trauma, public health, economic issues, property damage, road safety strategies, exposure control, behaviour modification, injury control, human error, human factors,.