

PREFACE

This report was written primarily for partial fulfillment of the requirements for the M.Sc. in Construction Engineering and Management at the University of the West Indies. The author hopes that readers would also benefit and ultimately the designers and administrators of highways would be enlightened on potentials for road safety improvement.

The author was inspired to write on this topic by the wanton waste in human lives and property resulting from traffic accidents. The most vivid of such occurrence was when in 1977 the author saw three vehicles stringed on a w-beam railing on the Beetham Highway. One car hit the exposed end of the w-beam rail, which penetrated the passenger compartment through the windscreen. The rail ripped off the post supports, exited from the first car's rear windscreen and proceeded to similarly penetrate two other vehicles. Miraculously only two persons were killed.

In the report the author attempted as much as possible, to metricate all units of measurement. However, some reference figures and tables employ imperial units. These are reproduced with the imperial units and appropriate metric conversion factors are included.

Additionally, several of the reference documents from which illustrations are obtained are research reports done and published in the United States of America. Accordingly, the traffic flow indication would reflect right side driving, whereas in Trinidad and Tobago driving is on the left side.