

PREFACE

The 1992 traffic fatality count was 1,300, down 8.8 percent from the 1991 figure of 1,425. Compared with 1991, injuries were down 12.6 percent and total crashes were down 5.5 percent. These figures translated into a death rate of 1.5 per 100 million miles of travel, down 11.8 percent from the death rate of 1.7 reported in 1991.


Exposure factors in 1992 showed across the board increases. They included motor vehicle registrations up 1.1 percent to 7.41 million; vehicle travel mileage up 2.5 percent to 84.0 billion; and the number of licensed drivers up 2.3 percent to 7.78 million.

Substantial reductions in total reported crashes and increased travel were credited with the lowered death toll and rate in 1992. Restraint usage continues to be elusive and reads like fact and fiction: While direct observation studies report an approximate 57.0 percent usage rate, the usage rate gathered from accident reports came in at 76.6 percent. Alcohol involvement, especially in fatal crashes, still takes its toll.

Data on crashes in this booklet were obtained from 1992 Michigan Traffic Crash Report Forms (UD-10) submitted by local police departments, sheriff jurisdictions, and the Department of State Police. Other related information was obtained from the Departments of Transportation, State, and Public Health.

This publication was produced for the Office of Highway Safety Planning by the University of Michigan Transportation Research Institute with data on file at the Michigan Department of State Police as of July 19, 1994.

We acknowledge, with appreciation, all involved agencies for their assistance.


Co. Michael D. Robinson, Director
Michigan Department of State Police



INTRODUCTION

The data contained in this report was submitted by Michigan's 660+ law enforcement agencies on the revised Uniform Traffic Crash Report (UD-10). For several reasons, **the reader is cautioned to treat the 1992 data as "transitional." Direct comparisons and trends using data from this report should be made cautiously.**

The need to develop a more efficient way to process the 410,000+ crash forms received each year by the Michigan State Police, Criminal Justice Data Center, became apparent in the early 1990s. The UD-10 was drastically redesigned in 1992, the first time in some 20 years, allowing an optical scanning device to "read" data "bubbles" and store the information on computer. This greatly reduced the amount of time necessary to process each form.

Unfortunately, computer applications have their share of technical challenges. In some instances, the computer read the data and accepted the information verbatim, regardless of logic. Every effort was made to process all "readable" reports in the system. An estimated 6-10% of the UD-10 forms submitted for 1992 could not be processed due to physical damage to the form or technical problems with the data recorded on the form. However, a considerable amount of research was conducted on 1992 fatal crashes to assure that **fatal counts in this report accurately match those reported to the US Department of Transportation's Fatal Accident Reporting System (FARS).**

Inadvertent errors by the officer completing the form also contributed to the problem. The most frequent errors attributed to the investigating officer were, and continue to be, **incorrectly filled or unfilled bubbles; stray marks, marks outside a box or marks in the margin; incorrect or missing Override numbers and failure to correctly date the second page or corrected copy.**

Numerous computer software changes were made after 1992 as changes to the UD-10 form itself. We anticipate that 1993 data will be improved in quality over 1992 data. We are also reviewing the training material and *Instruction Manual*. Our commitment to the people of Michigan and to the many transportation-related agencies that rely on this data for improving traffic safety is to continue refining both the UD-10 form and computer software to obtain the highest quality crash data the process will allow.



BETTY J. MERCER
Executive Director
Office of Highway Safety Planning

TABLE OF CONTENTS

QUICK FACTS & FIGURES

1992 Quick Facts.....	3
-----------------------	---

HISTORICAL INFORMATION

Vehicle Registrations, 1983-1992.....	7
Vehicle Miles Traveled, 1983-1992	7
Total Crashes, 1983-1992	7
Motor Vehicle Deaths, 1983-1992	8
Injuries in Motor Vehicle Crashes, 1983-1992.....	8
Number of Fatal Crashes, 1983-1992	8
Restraint Usage, 1983-1992.....	9
Total Drivers, 1983-1992	9
Mileage Death Rate, 1983-1992.....	9
Vehicle-Train Crashes, 1983-1992.....	10
Vehicle-Deer Crashes, 1983-1992	10
Farm Equipment Crashes, 1983-1992	10
Death & Injury per Crash Involved Occupant, 1983-1992	11
Age of Persons Killed, Total; 1988-1992	12
Age of Persons Killed, Pedestrians; 1988-1992.....	13
Age of Drivers Involved, 1988-1992	13
Pedestrian Action, 1988-1992	13
Selected Holiday Data, 1988-1992	14
Motor Vehicle Deaths and Mileage by Month, 1988-1992.....	15
Summary Trends, 1991-1992.....	16
More Michigan Crash Facts, 1991-1992	17
Where Traffic Fatalities Occurred, 1991-1992	18

HIGHLIGHTS

All Crashes/HBD Crashes by Injury Severity.....	21
Death & Injury per Crash Involved Occupant	22
Alcohol Involvement in Fatal Crashes	23
Alcohol Involvement in Injury Crashes	25
All Crashes Injury Severity by Month	27
Vehicle Types in Crashes by Crash Severity.....	28
Driver Gender Information - All Crashes	29

CRASH

Crash Experience by Roadway Type	33
Crash Type	34
Relation to Roadway.....	34
Time and Severity.....	35
Road Condition.....	36
Weather Condition.....	37
Light Condition.....	38

VEHICLE/DRIVER

Vehicle Type Crash Involvement.....	41
Action Prior to Crash - Driver Action.....	42
Action Prior to Crash - Cyclist Action.....	43
Action Prior to Crash - Pedestrian Action	44
Most Harmful Event.....	45
Vehicle Defects in Crash Involvement.....	47
Hazardous Action	47
Michigan Bicycle Crashes.....	48
Michigan Pedestrian Crashes.....	49
Michigan Snowmobile Crashes	50
Michigan Motor Vehicle-Deer Involved/Associated Crashes.....	51
Michigan Farm Equipment Crashes	52
Michigan Vehicle-Train Crashes.....	52
Motorcycle and Motor Scooter Data	52
Driver Age.....	53
Driver - Not Ejected vs. Ejected.....	54
Driver Blood Alcohol Test Results	55

OCCUPANT/PERSON

Injury Severity and Restraint Use	59
Occupant - Not Ejected vs. Ejected.....	60
Occupant Injury Outcome by Vehicle Type	61
Principle Classes of Motor Vehicles Deaths.....	62

SUPPLEMENTAL INFORMATION

Glossary.....	65
Reported Statewide Crashes by County in Michigan	66
Fatal Crashes and Fatalities by County with Drinking Involvement.....	68
Traffic Crash Summary for Cities	70
Motor Vehicle Traffic Deaths in Michigan by Month	94
Motor Vehicle Traffic Crash and Related Data.....	95
Registration Transactions.....	96
References and Reporting Agencies.....	99
Support Documentation for the State of Michigan Traffic Crash Report.....	99

