1998 NWT Traffic Accident Facts

Department of Transportation Motor Vehicles Division September, 1999

Northwest Territories Traffic Accident Facts, 1998



Acknowledgements

This report was prepared by the Motor Vehicles Division of the Department of Transportation, Government of the Northwest Territories, in cooperation with the Transportation Planning Division.

If you have any comments or questions related to the content of this report, please contact the Motor Vehicles Division at telephone (867) 920-3395, or by facsimile at (867) 873-0120.

1998 QUICK FACTS REPORT

(1998 Compared to 1997)

	<u>1997</u>	<u>1998 %</u>	Change
PROPERTY DAMAGE ONLY ACCIDENTS	504	525	4.2
PERSONAL INJURY ACCIDENTS	198	195	-1.5
FATAL ACCIDENTS	12	5	-58.3
TOTAL REPORTED ACCIDENTS	714	725	1.5
NUMBER OF DEATHS	14	5	-64.3
NUMBER OF PERSONS INJURED	282	285	1.1
NWT HIGHWAY SYSTEM ACCIDENTS	142	130	-8.5
RURAL ACCIDENTS	13	9	-30.8
ACCIDENTS IN COMMUNITIES	559	586	4.8
REGISTERED VEHICLES	28,371	29,134	2.7
LICENCED DRIVERS	30,680	31,755	3.5
NWT POPULATION	67,000	67,300	0.4
ACCIDENTS PER 100 LICENSED DRIVERS	2.33	2.28	-1.9
ACCIDENTS PER 100 REGISTERED VEHICLES	2.52	2.49	-1.1
ACCIDENTS PER 100 POPULATION	1.07	1.08	1.1

Introduction

The Traffic Accident Information System (TAIS) is a computer-based system that compiles information on traffic collisions occurring throughout the Northwest Territories. This information is obtained from the motor vehicle accident (MVA) report form that is completed by Royal Canadian Mounted Police detachments in accordance with Section 262 of the <u>Motor Vehicles Act</u>.

TAIS provides valuable information for many traffic collision countermeasure programs. TAIS, the MVA report form, and various collision publications are administered by the GNWT Department of Transportation, Motor Vehicles Division. The collection of this valuable data is made possible by the efforts and dedication of the many Royal Canadian Mounted Police officers across the Northwest Territories who complete MVA forms from their collision investigations.

TAIS Definitions

REPORTABLE MOTOR VEHICLE COLLISION - an incident involving one or more motor vehicles resulting in death, personal injury or a minimum of \$1,000 in property damage. TAIS only records reportable motor vehicle collisions which occur on or adjacent to roadways intended for use by the general public. The following is a list of words and terms used in reportable collisions:

INCIDENT - Any set of events not under human control which includes at least one occurrence of injury or damage. It originates when human control is lost and terminates when control is regained, or in the absence of persons who are able to regain control when all persons and property are at rest.

Excluded are events which are known to be the result of deliberate intent, legal intervention or natural disasters. As an example, if a vehicle catches fire due to mechanical failure and the driver is able to stop the car, this is not a traffic accident because control of the vehicle was never lost.

VEHICLE - is any vehicle designed to travel on land that is drawn, propelled or driven by any kind of power, including muscular power, but does not include a device designed to run exclusively on rails.

MOTOR VEHICLE - is a vehicle propelled or driven by power other than by wind, gravity or muscular power and includes a trailer, but does not include:

- (a) an aircraft or a marine vehicle,
- (b) a device that runs or is designed to run exclusively on rails,
- (c) a mechanically propelled wheelchair or mobility device.

PEDESTRIAN - is a person on foot, in a wheelchair or mobility device and includes a child in a carriage or carried by a person on foot, persons on ice skates, skis, roller blades, skate boards and persons pushing or pulling vehicles. A pedestrian does NOT include persons jumping or falling from a vehicle in motion.

DAMAGE - harm to property that reduces the monetary value of that property. It includes harm to animals that have monetary value. It excludes mechanical failure incurred by normal operation such as a tire blow out or broken fan belt.

ROADWAY - any highway, secondary road, rural road, street, avenue, parkway, lane, alley or bridge designed and intended for or used by the general public for the passage of vehicles and pedestrians. This includes sidewalks, boulevards and the immediate right-of-way adjacent to and parallel with the roadway. It also includes winter/ice roads, trails, privately maintained roads, driveways and parking lots on which the general public may travel.

PROPERTY DAMAGE ONLY COLLISION (Property Damage) - a motor vehicle collision resulting in total damages over the prescribed amount as defined in the <u>Motor Vehicles Act</u> (\$1,000) with no personal injuries or deaths.

TRAFFIC INJURY COLLISION (Personal Injury) - a motor vehicle collision resulting in a non-fatal injury to one or more persons. An injury is defined as any bodily harm resulting from the collision.

TRAFFIC FATALITY COLLISION (Fatal) - a motor vehicle collision resulting in death within 30 days to one or more involved persons. Death must be the result of injuries incurred from the collision. This excludes death from natural causes such as heart attacks.

Page

Quick Facts - 1	Inside Front	Cover
-----------------	--------------	-------

Section 1		Historical Trends	1
Figure	1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10	Trends in Licensed Drivers, Registered Vehicles and Collisions Trends in Collision Rates by Vehicles, Drivers and Population Trends in Injuries and Fatalities Trends in Property Damage Collisions Trends in Personal Injury Collisions Trends in Fatal Collisions Trends in All Reported Collisions Property Damage Collisions by Month and Year Personal Injury Collisions by Month and Year Fatal Collisions by Month and Year	3 3 4 5 5 6 6 7 7
	1.11	Total Collisions by Month and Year	8
Section 2		Time of Occurrence	9
Figure	2.1 2.2 2.3 2.4 2.5 2.6 2.7	Personal Injury Collisions by Month of Occurrence Fatal Collisions by Month of Occurrence Total Collisions by Month of Occurrence Collisions and Victims by Month of Occurrence Total Collisions by Time of Day Total Collisions by Day of Week Total Collisions by Time of Day and Day of Week	11 11 11 11 11 11 12
Section 3		Major Contributing Factors	13
Figure	3.1 3.2	Collision by Severity Where Human Condition Was a Major Contributing Factor Collisions by Severity Where Human Action Was a Major Contributing Factor	15 15
	3.3 3.4	Collisions by Severity Where Vehicle Condition Was a Major Contributing Factor Collisions by Severity Where Environmental Condition	15
	3.5 3.6	Was a Major Contributing Factor Collisions by Severity Where Major Contributing Factor Was Unspecified or Unknown Major Contributing Factors by Collision Severity	16 16 16
	3.7	Collisions by Road System Where Human Condition Was a Major Contributing Factor Collisions by Road System Where Human Action Was a	17
	3.9	Major Contributing Factor Collisions by Road System Where Vehicle Condition Was a Major Contributing Factor	17
	3.10	Collisions by Road System Where Environmental Condition Was a Major Contributing Factor	17
	3.11	Collisions by Road System Where Major Contributing Factor Was Unspecified or Unknown	18
	3.12	Major Contributing Factors in Collisions - Communities and NWT Highways	18

Section 4		Environmental Factors	Page 19
Figure	4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 4.10 4.11 4.12 4.13	Collisions by Road Surface Type and Severity Collisions by Road Surface Environmental Condition and Severity Collisions by Road Defect and Severity Collisions by Light Condition and Severity Collisions by Weather Condition and Severity Collisions by Configuration and Severity Collisions by Configuration and Road System Collisions by Collision Site and Severity Collisions by Collision Site and Road System Collisions by Roadway Alignment and Severity Collisions by Roadway Type and Severity Collisions by Sequence of Events and Road System	21 21 22 23 24 25 26 26 26 26 27 27 28
Section 5		Driver Factors	29
Figure	5.1 5.2 5.3 5.4 5.5	Drivers in Collisions and Relative Risk by Driver Age Collision Rates by Severity and Driver Age Number of Drivers in Collisions by Licence Class and Age Number of Drivers in Collisions by Driver Condition and Age Number of Drivers in Collisions by Driver Action and Age	31 31 32 32 33
Section 6		Vehicle Factors	35
Figure	6.1 6.2 6.3	Number of Vehicles in Collisions by Vehicle Type and Severity Number of Vehicles in Collisions by Vehicle Condition and Severity Number of Vehicles in Collisions by Vehicle Manoeuvre and	37 37
	6.4	Severity Number of Vehicles in Collisions by Vehicle Year and Severity	38 38
Section 7		Victims and Occupant Restraints	39
Figure	7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8 7.9	Fatalities Classification Injuries Classification Persons Injured by Road User Class and Age Group Persons Killed by Road User Class and Age Group Persons Injured or Killed by Road User Class and Gender Motor Vehicle Occupants by Injury Severity and Restraint Use Restraints Used/Not Used Motor Vehicle Occupants by Injury Severity and Age Group Victim Restraint Use Rate by Victim Age	41 41 42 42 42 43 43 43 44 44

Section 8		<u>Pedestrians</u>	45
Figure	8.1 8.2 8.3	Pedestrians Injured or Killed by Age Group Pedestrians Injured or Killed by Pedestrian Action and Age Group Pedestrians Injured or Killed by Place of Occurrence and Injury	47 47
	0 /	Severity Dedectring Initian on Killed by Assident Site	47
	8.4 8.5	Pedestrians Injured or Killed by Pedestrian Condition	48 48
Section 9		Alcohol	49
Figure	9.1 9.2 9.3 9.4 9.5 9.6 9.7	Drinking Drivers in Collisions by Driver Age and Gender Collisions Involving Alcohol by Day of Week Percentage of Collisions Involving Alcohol by Year and Severity Number of Collisions and Victims Involving Alcohol Number of Alcohol Related Collisions by Time of Day Injury Severity by Alcohol Involvement Alcohol-Involved Collisions by Month	51 51 51 51 52 52 52
Section 10		Off-Road Vehicles	53
Figure	10.1 10.2 10.3 10.4 10.5 10.6	Off-Road Vehicle Collisions by Month and Severity Off-Road Vehicle Collisions by Vehicle Type Off-Road Vehicle Drivers in Collisions by Driver Age & Gender Off-Road Vehicle Drivers in Collisions by Driver Condition and Severity Off-Road Vehicle Drivers in Collisions by Driver Action & Severity Off-Road Vehicle Occupants by Injury Severity and Helmet Use	55 55 56 56 57 57
Section 11		Geographic Distribution	59
Figure	11.1 11.2 11.3 11.4	Collisions by Region, RCMP Detachment and Severity Collisions on the NWT Highway System Collisions on the NWT Highway System - Map Collision Rates on the NWT Highway System - Map	61 63 68 69
<u>Appendix</u>			71
Section	A1 A2 A3	Northwest Territories Motor Vehicle Accident (MVA) Report Form Northwest Territories MVA Report Form Template Brief Description of Fatal Collisions	72 73 74

Historical Trends

Contents:

Figure

Page

1.1	Trends in Licensed Drivers, Registered Vehicles & Collisions	3
1.2	Trends in Collision Rates by Vehicles, Drivers & Population	3
1.3	Trends in Injuries and Fatalities	4
1.4	Trends in Property Damage Collisions	4
1.5	Trends in Personal Injury Collisions	5
1.6	Trends in Fatal Collisions	5
1.7	Trends in All Reported Collisions	6
1.8	Property Damage Collisions by Month and Year	6
1.9	Personal Injury Collisions by Month and Year	7
1.10	Fatal Collisions by Month and Year	7
1.11	Total Collisions by Month and Year	8

Historical Trends

This section illustrates the 10-year history of collisions, victims and licensed drivers and vehicles.

Reporting definitions have remained the same since the inception of TAIS in 1989. Trends in injuries, property damage collisions and total collisions have shown a steady decline since the early 1990's. This decline has taken place in spite of the increased population and number of licensed drivers and registered vehicles.

Because of the small number of fatal collisions in the Northwest Territories, trends are difficult to identify and subject to year-to-year fluctuations. The 5 traffic fatalities reported in 1998 is close to the 10-year average.









3 Year Summary

_	1996	1997	1998	% Change
Collisions/100 Registered Vehicles	2.65	2.52	2.49	-1.1
Collisions/100 Licensed Drivers	2.27	2.33	2.28	-1.9
Collisions/100 Population	1.12	1.07	1.08	1.1



Trends in Injuries & Fatalities

3 Year Summary

		Persons Injured				Persons	Killed	
	1996	1997	1998	% Change	1996	1997	1998	% Change
NWT Highways	85	100	83	-17.0	6	6	3	-50.0
Rural	4	5	3	-40.0	1	1	0	-100.0
Communities	178	177	199	12.4	8	7	2	-71.4
Total	267	282	285	1.1	15	14	5	-64.3



Trends in Property Damage Collisions

3 Year Summary

	Property Damage Collisions			
	1996	1997	1998 %	Change
NWT Highways	71	78	72	-7.7
Rural	3	8	7	-12.5
Communities	473	418	446	6.7
Total	547	504	525	4.2



Trends in Personal Injury Collisions

3 Year Summary

	Personal Injury Collisions				
	1996	1997	1998	% Change	
NWT Highways	50	60	55	-8.3	
Rural	3	4	2	-50.0	
Communities	131	134	138	3.0	
Total	184	198	195	-1.5	



Trends in Fatal Collisions

3 Year Summary

· · · · · · ,		Fatal C	ollisions	
	1996	1997	1998	% Change
NWT Highways	6	4	3	-25.0
Rural	1	1	0	-100.0
Communities	8	7	2	-71.4
Total	15	12	5	-58.3

Trends in All Reported Collisions

Figure 1.7



3 Year Summary

	1996	1997	1998	% Change
NWT Highways	127	142	130	-8.5
Rural	7	13	9	-30.8
Communities	612	559	586	4.8
Total	746	714	725	1.5

Property D	Property Damage Collisions by Month and Year											Figure 1.8
	•		•							Avg. 89		
Month	1989	1990	1991	1992	1993	1994	1995	1996	1997	to 97	1998 %	Change*
January	72	76	95	80	53	60	55	64	65	69	67	-2.7
February	74	74	76	77	60	80	51	64	53	68	59	-12.8
March	69	77	82	79	58	59	84	64	49	69	43	-37.7
April	58	38	57	66	39	35	38	38	35	45	27	-39.9
May	41	33	35	48	29	34	37	30	28	35	21	-40.0
June	44	46	61	40	28	36	25	34	32	38	32	-16.8
July	50	57	59	52	38	40	41	42	37	46	37	-20.0
August	52	61	46	55	39	48	41	30	39	46	42	-8.0
September	46	54	55	53	43	42	35	29	28	43	38	-11.2
October	82	76	75	69	59	66	47	57	54	65	48	-26.2
November	91	77	71	72	59	79	54	48	30	65	47	-27.2
December	78	90	84	65	63	56	65	47	54	67	64	-4.3
Total	757	759	796	756	568	635	573	547	504	655	525	-19.8

* % change is a comparison between 1998 and the 1989-97 average.

i ci sonai n	.jui y 001		<i>y</i> monu									rigare ne
										Avg. 89		
Month	1989	1990	1991	1992	1993	1994	1995	1996	1997	to 97	1998 9	<u>% Change*</u>
January	15	10	18	22	19	16	23	25	19	19	13	-29.9
February	21	10	15	18	20	10	17	16	23	17	15	-10.0
March	18	19	20	16	21	12	22	15	21	18	17	-6.7
April	10	8	9	14	18	16	13	12	21	13	10	-25.6
May	15	6	20	19	15	13	15	10	16	14	7	-51.2
June	20	24	28	23	20	23	18	15	9	20	27	35.0
July	40	28	34	26	32	18	21	16	14	25	19	-25.3
August	24	21	25	29	21	26	25	13	17	22	20	-10.4
September	19	11	16	22	20	19	18	17	13	17	20	16.1
October	22	20	17	21	22	25	19	18	17	20	21	4.4
Total Collis	ions 267v	Month a	and Yea	r 17	18	27	16	12	14	16	10	Figure 3818
December	17	17	14	24	13	24	20	15	14	Ava. 89	16	-8.9
Tretat h	1 969	1990	1999	1 952	1999	1994	1995	1 996	1997	to299	1 995 9	% Changer.5
January	87	87	113	103	72	76	78	89	84	88	81	-7.6
February	96	84	91	95	80	90	68	81	76	85	75	-11.3
March	87	96	102	95	80	71	106	81	75	88	60	-31.9
April	69	47	66	82	58	51	53	51	56	59	37	-37.5
Mav	57	39	55	67	44	48	52	41	46	50	28	-43.9
June	67	70	91	66	48	59	43	50	42	60	59	-0.9
July	92	87	93	78	71	58	63	59	53	73	57	-21.6
August	76	82	72	85	60	74	66	47	58	69	62	-10.0
September	65	65	71	75	63	61	54	46	41	60	59	-1.8
October	104	99	92	91	81	92	66	77	71	86	70	-18.5
Fatah@collis	ions by	Mon&ha	and ¥ēai	• 91	78	106	71	61	44	82	57	Figure 3012
December	96	108	98	89	76	80	85	63	68	Ava. 89	80	-5.6
Tretat h	1989	1 940	1989	1992	1993	1994	1 99 5	1 996	1997	t0897	1995	% Chande7.9
January	0	1	0	1	0	0	0	0	0	0.2	1	350.0
February	1	0	0 *	% cha o ge i	s a compa n iso	on betwee	en 1998@an	d the 1989	9-97 avoei	age. 0.2	1	350.0
March	0	0	0	0	1	0	0	2	5	0.9	0	-100.0
April	1	1	0	2	1	0	2	1	0	0.9	0	-100.0
Mav	1	0	0	0	0	1	0	1	2	0.6	0	-100.0
June	3	0	2	3	0	0	0	1	1	1.1	0	-100.0
July	2	2	0	0	1	0	1	1	2	1.0	1	0.0
August	0	0	1	1	0	0	0	4	2	0.9	0	-100.0
September	0	0	0	0	0	0	1	0	0	0.1	1	0.0
October	0	3	0	1	0	1	0	2	0	0.8	1	28.6
November	1	0	1	2	1	0	1	1	ů 0	0.8	0	-100.0
December	1	1	0	0	0	0	0	1	0 0	0.3	0	-100.0
Total	10	8	4	10	4	2	5	15	12	7.8	5	-35.7

Personal Injury Collisons by Month and Year

Figure 1.9

* % change is a comparison between 1998 and the 1989-97 average.

Time of Occurrence

Contents:

Page

Figure	2.1	Personal Injury Collisions by Month of Occurrence	11
	2.2	Fatal Collisions by Month of Occurrence	11
	2.3	Total Collisions by Month of Occurrence	11
	2.4	Collisions and Victims by Month of Occurrence	11
	2.5	Total Collisions by Time of Day	11
	2.6	Total Collisions by Day of Week	11
	2.7	Total Collisions by Time of Day and Day of Week	12

Time of Occurrence

Figure 2.3 shows the highest number of collisions occurred during the winter months, November to March. Conversely Figure 2.1 shows more injury-producing collisions during the summer months.

Collisions are most likely to take place during the late afternoon and early evening. More collisions take place on Fridays and Saturdays than on Sunday and weekdays.

Figure 2.4



Collisions by Month of Occurrence



	Nun	nber of Coll		Number of Vie	ctims	
—	Property	Personal				
Month	Damage	Injury	Fatal	Total	Injured	Killed
January	67	13	1	81	18	1
February	59	15	1	75	18	1
March	43	17	0	60	24	0
April	27	10	0	37	19	0
May	21	7	0	28	9	0
June	32	27	0	59	37	0
July	37	19	1	57	34	1
August	42	20	0	62	26	0
September	38	20	1	59	33	1
October	48	21	1	70	30	1
November	47	10	0	57	16	0
December	64	16	0	80	21	0
Total	525	195	5	725	285	5



Total Collisions by Day of Week



Collisions by Time of Day & Day of Week*

Figure 2.7

Collision Hour	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total	%
12 to 1 a.m.	2	4	1	1	3	3	3	17	2.3
1 to 2 a.m.	3	1	3	1	0	0	3	11	1.5
<u>2 to 3 a.m.</u>	5	0	0	2	2	1	9	19	2.6
3 to 4 a.m.	1	0	0	2	0	0	3	6	0.8
4 to 5 a.m.	1	0	1	0	0	1	3	6	0.8
<u>5 to 6 a.m.</u>	1	0	0	1	0	1	2	5	0.7
6 to 7 a.m.	2	3	1	0	0	0	1	7	1.0
7 to 8 a.m.	2	2	1	1	2	3	2	13	1.8
<u>8 to 9 a.m.</u>	1	4	2	2	6	3	3	21	2.9
9 to 10 a.m.	2	4	2	3	1	4	0	16	2.2
10 to 11 a.m.	3	6	5	5	8	5	4	36	5.0
11 to 12 a.m.	2	5	3	8	7	8	7	40	5.5
12 to 1 p.m.	4	6	7	4	11	16	7	55	7.6
1 to 2 p.m.	6	12	9	6	3	11	5	52	7.2
<u>2 to 3 p.m.</u>	4	9	6	7	7	13	4	50	6.9
3 to 4 p.m.	7	8	11	8	6	12	6	58	8.0
4 to 5 p.m.	5	10	6	8	13	8	8	58	8.0
<u>5 to 6 p.m.</u>	4	10	6	10	11	6	7	54	7.5
6 to 7 p.m.	5	7	6	3	7	5	4	37	5.1
7 to 8 p.m.	4	5	4	3	6	5	3	30	4.1
<u>8 to 9 p.m.</u>	3	5	5	5	7	6	3	34	4.7
9 to 10 p.m.	3	4	3	7	4	5	7	33	4.6
10 to 11 p.m.	3	5	2	1	5	5	4	25	3.5
<u>11 to 12 p.m.</u>	0	2	8	4	4	3	4	25	3.5
Not Stated	4	3	3	1	2	0	3	16	2.2
Total	77	115	95	93	115	124	105	724	
%	10.6	15.9	13.1	12.8	15.9	17.1	14.5	100.0	

* Excludes collisions in which Day of Week was unknown.

MAJOR CONTRIBUTING FACTORS

Contents:

Page

Figure 3.1		Collision by Severity Where Human Condition was a Major Contributing Factor	15
	3.2	Collisions by Severity Where Human Action was a Major Contributing Factor	15
	3.3	Collisions by Severity Where Vehicle Condition was a Major Contributing Factor	15
	3.4	Collisions by Severity Where Environmental Condition was a Major Contributing Factor	16
	3.5	Collisions by Severity Where Major Contributing Factor was Unspecified or Unknown	16
	3.6	Major Contributing Factors by Collision Severity	16
	3.7	Collisions by Road System Where Human Condition was a Major Contributing Factor	17
	3.8	Collisions by Road System Where Human Action was a Major Contributing Factor	17
	3.9	Collisions by Road System Where Vehicle Condition was a Major Contributing Factor	17
	3.10	Collisions by Road System Where Environmental Condition was a Major Contributing Factor	18
	3.11	Collisions by Road System Where Major Contributing Factor was Unspecified or Unknown	18
	3.12	Major Contributing Factors in Collisions - Communities and NWT Highways	18

Major Contributing Factors

Contributing factors are those circumstances or factors that the reporting police officer perceives to have directly contributed to the collision or its severity. Factors can be selected from four categories: human condition, human action, vehicle condition or driving environment.

Police officers are encouraged to use their skilled judgement in reporting the likely factors, even if the collision scene was not attended.

Figure 3.6 shows that human condition is twice as prevalent in injury and fatal collisions (14%) than in all collisions (7%). Human factors account for 62% of all factors in collisions, as compared to vehicular (6%) and environmental (8%).

Figure 3.12 points out the difference between collisions occurring in communities and on the NWT Highway system. Environmental factors are more than four times as prevalent on NWT Highways (22%) than in communities (5%).

Collisions by Severity Where Human Condition Was a Major Contributing Factor

	Property	Personal			% of Total
Human Condition	Damage	Injury	Fatal	Total	Factors
Fatigued, Fell Asleep	1	1	0	2	0.3
Inexperience	0	0	0	0	0.0
Under Influence - Alcohol	19	25	0	44	6.1
Under Influence - Drugs	0	1	0	1	0.1
Sudden Illness, Lost Consciousness	0	1	0	1	0.1
Other Driver Condition	0	0	0	0	0.0
Total	20	28	0	48	6.6

Collisions by Severity Where Human Action Was a Major Contributing Factor

	Property	Personal			% of Total
Human Action	Damage	Injury	Fatal	Total	Factors
Following Too Closely	30	12	0	42	5.8
Distracted, Inattentive	0	0	0	0	0.0
Driving Too Fast for Conditions	27	27	1	55	7.6
Improper Turning or Passing	9	3	0	12	1.7
Failed to Yield Right-of-Way	58	25	0	83	11.4
Disobeyed Traffic Control/Officer	8	1	0	9	1.2
Driving on Wrong Side of Road	8	7	0	15	2.1
Driving in Wrong Direction	0	0	0	0	0.0
Backing Unsafely	102	5	0	107	14.8
Lost Control	84	43	1	128	17.7
Other Driver Action	0	0	0	0	0.0
Total	326	123	2	451	62.2

Collisions by Severity Where Vehicle Condition Was a Major Contributing Factor

	Property	Personal			% of Total
Vehicle Condition	Damage	Injury	Fatal	Total	Factors
Defective Brakes	2	1	0	3	0.4
Defective Steering	0	0	0	0	0.0
Defective Lights	0	0	1	1	0.1
Tire Blown Out	0	4	0	4	0.6
Unsecured Load, Spilled Load	1	0	0	1	0.1
Oversized Load, Overload	1	0	0	1	0.1
Visibility Obstructed	6	3	0	9	1.2
Other Vehicle Contributing Factor	21	3	0	24	3.3
Total	31	11	1	43	5.9

Figure 3.1

1998 NWT Traffic Accident Facts

Figure 3.2

Collisions by Severity Where Environmental Condition Was a Major Contributing Factor

	Property	Personal			% of Total
Environmental Condition	Damage	Injury	Fatal	Total	Factors
Animal on Roadway	10	2	0	12	1.7
Road Surface or Condition	22	7	0	29	4.0
Obstruction/Debris on Road	15	2	0	17	2.3
View Obstructed, Glare, Reflection	0	1	0	1	0.1
Weather or Other Acts of God	0	0	0	0	0.0
Other Environmental Factor	0	0	0	0	0.0
Total	47	12	0	59	8.1

Collisions by Severity Where Major Contributing Factor Was Unspecified or Unknown

	Property	Personal			% of Total
Factor	Damage	Injury	Fatal	Total	Factors
Unspecified	19	18	2	39	5.4
Unknown	82	3	0	85	11.7
Total	101	21	2	124	17.1
Total All Factors	525	195	5	725	100.0

Major Contributing Factors by Collision Severity

All Collisions

Figure 3.6

Figure 3.5



TAIS recognizes that a collision is usually the result of a chain of events. The collision data system accepts up to four contributing factors for each vehicle involved in a collision. During the analysis of collisions, knowledge of the factors is important. By removing any one of the factors, the collision may be avoided.

An example: Because of inattention, a driver may have failed to see a stop sign behind some trees and thereby reduced his/her stopping time. The car's brakes, being in poor condition, caused the car to spin out of control on ice and collide with another vehicle that was speeding through the intersection. The collision may not have occurred if any of these factors were not present.

Collisions by Road System Where Human Condition Was a Major Contributing Factor

	NWT	In			% of Total
Human Condition	Highways	Communities	Rural	Total	Factors
Fatigued, Fell Asleep	2	0	0	2	0.3
Inexperience	0	0	0	0	0.0
Under Influence - Alcohol	5	38	1	44	6.1
Under Influence - Drugs	0	1	0	1	0.1
Sudden Illness, Lost Consciousness	0	1	0	1	0.1
Other Driver Condition	0	0	0	0	0.0
Total	7	40	1	48	6.6

Collisions by Road System Where Human Action Was a Major Contributing Factor

NWT % of Total In Human Action **Highways** Communities Rural Total Factors Following Too Closely 42 5.8 3 39 0 0 0.0 Distracted, Inattentive 0 0 0 Driving Too Fast for Conditions 42 0 55 7.6 13 Improper Turning or Passing 4 8 0 12 1.7 78 0 Failed to Yield Right-of-Way 5 83 11.4 Disobeyed Traffic Control/Officer 0 9 0 9 1.2 Driving on Wrong Side of Road 2 12 1 15 2.1 0 Driving in Wrong Direction 0 0 0.0 0 Backing Unsafely 107 0 107 14.8 0 Lost Control 55 71 2 128 17.7 Other Driver Action 0 0 0 0 0.0 3 451 62.2 Total 82 366

Collisions by Road System Where Vehicle Condition Was a Major Contributing Factor

Figure 3.9

	NWT	In			% of Total
Vehicle Condition	Highways	Communities	Rural	Total	Factors
Defective Brakes	0	3	0	3	0.4
Defective Steering	0	0	0	0	0.0
Defective Lights	1	0	0	1	0.1
Tire Blown Out	3	1	0	4	0.6
Unsecured Load, Spilled Load	1	0	0	1	0.1
Oversized Load, Overload	0	1	0	1	0.1
Visibility Obstructed	1	8	0	9	1.2
Other Vehicle Contributing Factor	3	21	0	24	3.3
Total	9	34	0	43	5.9

Figure 3.7

Collisions by Road System Where Environmental Condition Was a Major Contributing Factor

	NWT	In			% of Total
Environmental Condition	Highways	Communities	Rural	Total	Factors
Animal on Roadway	11	1	0	12	1.7
Road Surface or Condition	13	16	0	29	4.0
Obstruction/Debris on Road	4	13	0	17	2.3
View Obstructed, Glare, Reflection	0	1	0	1	0.1
Weather or Other Acts of God	0	0	0	0	0.0
Other Environmental Factor	0	0	0	0	0.0
Total	28	31	0	59	8.1

Collisions by Road System Where Major Contributing Factor Was Unspecified or Unknown

NWT In % of Total Highways Communities Factors Factor Rural Total Unspecified 3 39 2 34 5.4 Unknown 2 81 2 85 11.7 Total 5 124 17.1 4 115 **Total All Factors** 586 9 130 725 100.0

Major Contributing Factors in Collisions - Communities and **NWT Highways**

Figure 3.12

NWT Highways

63%

5%



Communities

62%



Figure 3.10

Environmental Factors

Contents:

Page

Figure	4.1	Collisions by Road Surface Type and Severity	21
	4.2	Collisions by Road Surface Environmental Condition and Severity	21
	4.3	Collisions by Road Defect and Severity	22
	4.4	Collisions by Light Condition and Severity	22
	4.5	Collisions by Weather Condition and Severity	23
	4.6	Collisions by Configuration and Severity	24
	4.7	Collisions by Configuration and Road System	25
	4.8	Collisions by Collision Site and Severity	26
	4.9	Collisions by Collision Site and Road System	26
	4.10	Collisions by Roadway Alignment and Severity	26
	4.11	Collisions by Roadway Type and Severity	27
	4.12	Collisions by Sequence of Events and Severity	27
	4.13	Collisions by Sequence of Events and Road System	28

Environmental Factors

The driving environment consists of road, light and weather conditions, as well as events leading up to and during a collision. It is important to understand all of these factors to properly design effective countermeasures for reducing collisions.

This section of the report provides a breakdown of collisions for each of the different driving environments by severity and road system.

Figures 4.1 to 4.5 show that most collisions occur under near ideal conditions, such as clear weather, daylight and on a road surface that is free of defects. Figure 4.9 shows that intersection related collisions are far more frequent in communities than in rural areas or on the NWT Highway system.

Figures 4.6 and 4.7 provide a breakdown on the types of collisions that occur for both single and multiple vehicle configurations.

Figures 4.12 and 4.13 describe some of the events that occur in collisions, such as hitting a fixed or moveable object, overturning and jack-knifing.

Collisions by Road Surface Type and Severity

Figure 4.1

	Property	Personal	-		
Road Surface Type	Damage	Injury	Fatal	Total	%
Asphalt	296	71	0	367	50.6
Concrete	4	0	0	4	0.6
Gravel (Crushed Stone)	167	84	2	253	34.9
Earth, Dirt	22	19	1	42	5.8
Chip Seal	23	13	2	38	5.2
Brick, Cobblestone	0	0	0	0	0.0
Wooden	0	0	0	0	0.0
Steel	0	0	0	0	0.0
Ice Road	10	8	0	18	2.5
Unspecified	3	0	0	3	0.4
Total	525	195	5	725	100.0





Collisions by Road Surface Environmental Condition and Severity

Figure 4.2

	Property	Personal			
Surface Condition	Damage	Injury	Fatal	Total	%
Dry	160	61	3	224	30.9
Wet	35	22	0	57	7.9
Snow (Fresh, Loose)	0	0	0	0	0.0
Slush, Wet Snow	0	0	0	0	0.0
lcy	296	87	2	385	53.1
Loose Sand/Gravel/Dirt	28	21	0	49	6.8
Muddy	0	0	0	0	0.0
Fresh Oil	0	1	0	1	0.1
Flooded	0	0	0	0	0.0
Other	0	0	0	0	0.0
Unspecified	6	3	0	9	1.2
Total	525	195	5	725	100.0





Collisions by Road Defect and Severity

	Property	Personal			
Road Defect	Damage	Injury	Fatal	Total	%
No Defects	278	104	3	385	53.1
Potholes/Bumps/Ruts	16	20	0	36	5.0
Under Repair, Construction	5	4	0	9	1.2
Uneven PavementSurface	0	0	0	0	0.0
Worn	0	0	0	0	0.0
Obscured or Faded Markings	0	0	0	0	0.0
Other	209	60	2	271	37.4
Unspecified	17	7	0	24	3.3
Total	525	195	5	725	100.0



No Defects
Potholes/Bumps/Ruts
Under Repair, Construction
Uneven Surface
Worn
Obscured/Faded Markings
Other
Unspecified

Collisions by Light Condition and Severity

Figure 4.4

	Property	Personal	-		
Light Condition	Damage	Injury	Fatal	Total	%
Day	340	105	1	446	61.5
Dawn	18	6	0	24	3.3
Dusk	36	20	0	56	7.7
Dark	125	64	4	193	26.6
Unspecified	6	0	0	6	0.8
Total	525	195	5	725	100.0



61%

Figure 4.3

Collisons by Weather Condition and Severity

Figure 4.5

	Property	Personal			
Weather Condition	Damage	Injury	Fatal	Total	%
Clear (Sunny)	379	129	5	513	70.8
Overcast, Cloudy (No Precipitation)	64	30	0	94	13.0
Raining	18	12	0	30	4.1
Snowing	31	15	0	46	6.3
Freezing Rain/Sleet/Hail	2	1	0	3	0.4
Visibility Limitations (fog, dust, etc.)	5	3	0	8	1.1
Strong Winds	7	2	0	9	1.2
Other	1	1	0	2	0.3
Unspecified	18	2	0	20	2.8
Total	525	195	5	725	100.0



72%

Clear

Overcast, Cloudy

Raining

Snowing

Freezing Rain/Sleet/Hail

Fog, Smoke, Dust

Strong WindsOther

Unspecified

Collisions by Configuration and Severity

Figure 4.6

Configuration*	Property Damage	Personal Injury	Fatal	Total	% of Total
01. Hit Moving Object					
a) With Animal	10	2	0	12	1.7
b) With Pedestrian	0	32	2	34	4.7
c) Other	2	1	0	3	0.4
02. Hit Stationary Object	62	13	0	75	10.1
03. Off Road Left					
a) With Rollover	5	14	1	20	2.8
b) No Rollover	4	4	0	8	1.1
04. Off Road Right					
a) With Rollover	17	30	0	47	6.5
b) No Rollover	13	13	0	26	3.6
05. Rollover on Roadway	3	12	0	15	2.1
06. Other Single Vehicle	1	4	0	5	0.7
21. Rear End	61	18	0	79	10.9
22. Sideswipe -	10	5	0	15	2.1
Same Direction					
23. Passing - Left Turn	0	1	0	1	0.1
24. Passing - Right Turn	3	0	0	3	0.4
25. Other Multi-Vehicle	0	0	0	0	0.0
Same Direction					
31. Head-On	3	2	1	6	0.8
32. Sideswipe -	21	7	0	28	3.9
Opposite Direction					
33. Left Turn Across Path	14	7	0	21	2.9
34. Right Turn Including	6	1	0	7	1.0
Conflict					
35. Right Angle	79	20	0	99	13.7
36. Other Multi-Vehicle	27	4	0	31	4.3
Opposite Direction					
41. Hit Parked Vehicle	179	4	1	184	25.4
QQ. Other Collision Type	4	0	0	4	0.6
UU. Unknown Collision Type	1	1	0	2	0.3
Total	525	195	5	725	100.0

*Collision Configurations

01. Hit Moving Object	02. Hit Stationary Object	03. Off Road Left	04. Off Road Right	05. <u>Rollover on Ro</u> adway
06. Other Single Vehicle	21. Rear End	22. Sideswipe Same-	23. Passing -	24. Passing -
25. Other Multi-Vehicle Same Direction	31. Head-On	32. Sideswipe-Oppos-	33. Left Turn Across Path	34. Right Turn
35. Right Angle	36. Other Multi-Vehicle Opposite Direction	41. Hit Parked Vehicle	QQ. Other Collision Type	UU. Unknown Collision Type

Collisions by Configuration and Road System

Configuration*	NWT Highways	In Communities	Rural	Total	% of Total
01. Hit Moving Object					
a) With Animal	12	0	0	12	1.7
b) With Pedestrian	2	32	0	34	4.7
c) Other	1	2	0	3	0.4
02. Hit Stationary Object	8	66	1	75	10.3
03. Off Road Left					
a) With Rollover	14	6	0	20	2.8
b) No Rollover	5	2	1	8	1.1
04. Off Road Right					
a) With Rollover	37	10	0	47	6.5
b) No Rollover	15	11	0	26	3.6
05. Rollover on Roadway	5	9	1	15	2.1
06. Other Single Vehicle	1	4	0	5	0.7
21. Rear End	7	70	2	79	10.9
22. Sideswipe -	3	12	0	15	2.1
Same Direction					
23. Passing - Left Turn	1	0	0	1	0.1
24. Passing - Right Turn	0	3	0	3	0.4
25. Other Multi-Vehicle	0	0	0	0	0.0
Same Direction					
31. Head-On	2	4	0	6	0.8
32. Sideswipe -	5	21	2	28	3.9
Opposite Direction					
33. Left Turn Across Path	1	20	0	21	2.9
34. Right Turn Including	2	5	0	7	1.0
Conflict					
35. Right Angle	3	96	0	99	13.7
36. Other Multi-Vehicle	3	28	0	31	4.3
Opposite Direction					
41. Hit Parked Vehicle	2	181	1	184	25.4
QQ. Other Collision Type	1	2	1	4	0.6
UU. Unknown Collision Type	0	2	0	2	0.3
Total	130	586	9	725	100.0
	_				

*Collision Configurations

01. Hit Moving Object	02. Hit Stationary Object	03. Off Road Left	04. Off Road Right	05. Rollover on Roadway
06. Other Single Vehicle	21. Rear End	22. Sideswipe Same- Direction	23. Passing -	24. Passing -
25. Other Multi-Vehicle Same Direction	31. Head-On	32. Sideswipe-Oppos- ite Direction	33. Left Turn Across Path	34. Right Turn
35. Right Angle	36. Other Multi-Vehicle Opposite Direction	41. Hit Parked Vehicle	QQ. Other Collision Type	UU. Unknown Collision Type

Collisions by Collision Site and Severity

	Property	Personal			
Collision Site	Damage	Injury	Fatal	Total	%
Non-Intersection	158	100	4	262	36.1
Intersection - Two Public Roadways	99	53	0	152	21.0
Intersection - Parking Lot, Driveway	111	32	1	144	19.9
Railroad Level Crossing	0	0	0	0	0.0
Bridge, Overpass, Viaduct	3	3	0	6	0.8
Tunnel, Underpass	0	0	0	0	0.0
Passing, Climbing Lane	0	0	0	0	0.0
Ramp	1	0	0	1	0.1
Other	151	7	0	158	21.8
Unknown	2	0	0	2	0.3
Total	525	195	5	725	100.0

Collisions by Collision Site and Road System

NWT In Collision Site **Highways** Communities Rural Total % Non-Intersection 108 146 8 262 36.1 Intersection - Two Public Roadways 13 138 1 152 21.0 0 Intersection - Parking Lot, Driveway 3 141 144 19.9 0 Railroad Level Crossing 0 0 0 0.0 0 Bridge, Overpass, Viaduct 5 1 6 0.8 0 Tunnel, Underpass 0 0 0 0.0 0 Passing, Climbing Lane 0 0 0 0.0 Ramp 0 0 1 1 0.1 0 Other 0 158 158 21.8 Unknown 0 0 0.3 2 2 9 725 100.0 Total 130 586

Collisions by Roadway Alignment and Severity

Figure 4.10

Figure 4.9

	Property	Personal			
Road Alignment	Damage	Injury	Fatal	Total	%
Straight & Level	403	113	2	518	71.4
Straight with Grade	43	21	1	65	9.0
Curved and Level	37	33	1	71	9.8
Curve with Grade	24	18	1	43	5.9
Top of Hill or Grade	13	10	0	23	3.2
Bottom of Hill or Grade	0	0	0	0	0.0
Other	0	0	0	0	0.0
Unknown	5	0	0	5	0.7
Total	525	195	5	725	100.0

Collisions by Roadway Type and Severity

	Property	Personal			
Road Type	Damage	Injury	Fatal	Total	%
One-Way, Two Lane	7	1	0	8	1.1
One-Way, Multi Lane	0	0	0	0	0.0
Undivided, Two-Way, Two Lane	330	178	5	513	70.8
Undivided, Two-Way, Multi Lane	0	0	0	0	0.0
Divided, Barrier Median	8	3	0	11	1.5
Divided with Median, No Barrier	0	0	0	0	0.0
Divided, Divider Unspecified	15	4	0	19	2.6
Other	163	9	0	172	23.7
Unknown	2	0	0	2	0.3
Total	525	195	5	725	100.0

Collision Sequence of Events by Severity

Figure 4.12

	Property	Personal	_		,
Non-Moving Objects	Damage	Injury	Fatal	Total	%
Hit Parked Trailer	0	0	0	0	0.0
Hit Non-Fixed Object	0	0	0	0	0.0
Hit Building	13	2	0	15	2.1
Hit Ditch	1	0	0	1	0.1
Hit Embankment, Dirt Pile, Rock	9	1	0	10	1.4
Hit Culvert End, Drainage Structure	0	0	0	0	0.0
Hit Tree. Bush, Hedge	4	1	0	5	0.7
Hit Utility Pole, Lamp Pole	17	5	0	22	3.0
Hit Curb	4	1	0	5	0.7
Hit Post	5	0	0	5	0.7
Hit Traffic Barrier	7	0	0	7	1.0
Hit Fixed Object Part of Road Structure	0	2	0	2	0.3
Hit Fixed Object NOT Part of Road Structure	2	0	0	2	0.3
Hit Other Type Fixed Object	0	0	0	0	0.0
Sub Total Fixed Objects	62	12	0	74	10.2
Moveable Objects					
Another Road Vehicle	403	69	2	474	65.4
Animal	10	2	0	12	1.7
Pedestrian	0	32	2	34	4.7
Other Moveable Object	2	1	0	3	0.4
Sub Total Moveable Objects	415	104	4	523	72.1
Non-Collision Events					
Ran Off Road	17	17	0	34	4.7
Rollover	25	56	1	82	11.3
Jack Knife or Trailer Swing	0	0	0	0	0.0
Fire or Explosion	1	0	0	1	0.1
Load Spill	0	0	0	0	0.0
Load Shift	0	0	0	0	0.0
Submersion	0	0	0	0	0.0
Other Non-Collision Event	0	0	0	0	0.0
Sub Total Non-Collision Events	43	73	1	117	16.1
Other/Unknown Event	5	6	0	11	1.5
Grand Total	525	195	5	725	100.0
Collision Sequence of Events by Road System

	NWT	In	-		
Non-Moving Objects	Highways	Communities	Rural	Total	%
Hit Parked Trailer	0	0	0	0	0.0
Hit Non-Fixed Object	0	0	0	0	0.0
Hit Building	0	15	0	15	2.1
Hit Ditch	1	0	0	1	0.1
Hit Embankment, Dirt Pile, Rock	4	5	1	10	1.4
Hit Culvert End, Drainage Structure	0	0	0	0	0.0
Hit Tree. Bush, Hedge	0	5	0	5	0.7
Hit Utility Pole, Lamp Pole	0	22	0	22	3.0
Hit Curb	0	5	0	5	0.7
Hit Post	0	5	0	5	0.7
Hit Traffic Barrier	2	5	0	7	1.0
Hit Fixed Object Part of Road Structure	1	1	0	2	0.3
Hit Fixed Object NOT Part of Road Structure	0	2	0	2	0.3
Hit Other Type Fixed Object	0	0	0	0	0.0
Sub Total Fixed Objects	8	65	1	74	10.2
Moveable Objects					
Another Road Vehicle	29	440	5	474	65.4
Animal	12	0	0	12	1.7
Pedestrian	2	32	0	34	4.7
Other Moveable Object	1	2	0	3	0.4
Sub Total Moveable Objects	44	474	5	523	72.1
Non-Collision Events					
Ran Off Road	20	13	1	34	4.7
Rollover	56	25	1	82	11.3
Jack Knife or Trailer Swing	0	0	0	0	0.0
Fire or Explosion	1	0	0	1	0.1
Load Spill	0	0	0	0	0.0
Load Shift	0	0	0	0	0.0
Submersion	0	0	0	0	0.0
Other Non-Collision Event	0	0	0	0	0.0
Sub Total Non-Collision Events	77	38	2	117	16.1
Unknown Event	1	9	1	11	1.5
Grand Total	130	586	9	725	100.0

Driver Factors

Contents:

Figure

Page

5.1	Drivers in Collisions and Relative Risk by Driver Age	31
5.2	Collision Rates by Severity and Driver Age	31
5.3	Number of Drivers in Collisions by Licence Class and Age	32
5.4	Number of Drivers in Collisions by Driver Condition and Age	32
5.5	Number of Drivers in Collisions by Driver Action and Age	33

Driver Factors

This section describes the characteristics of drivers involved in collisions. In 1998, 1,018 drivers were involved in 725 collisions. This is an average of 1.40 drivers per collision. Details on driver age, gender, condition, action and class of licence is presented.

Of particular interest and concern is the over-representation of young drivers in collisions. Drivers aged 15 to 20 years are 2.4 times as likely to be involved in a collision than drivers aged 35 to 44 years. Crash statistics involving young or inexperienced drivers is useful for developing graduated licensing programs.

Figure 5.1

					-		-			
	Under	16	20	25	35	45	55			
	15	to	to	to	to	to	to	65	Not	
		19	24	34	44	54	64	& Over	Stated	Total
Licensed Drivers	102	1331	2865	9464	9379	5927	2057	630	0	31,755
Drivers in Collisions	23	126	111	249	208	141	42	18	100	1,018

Licensed Drivers and Drivers in Collisions by Driver Age

Drivers in Collisions and Relative Risk by Driver Age



Collision Rates (Collisions Per 1,000 Licensed Drivers) Figure 5.2 by Severity and Driver Age

	15 to 20	21 to 25	26 to 35	36 to 45	46 to 55	56 to 65	Over 65	Average Rate
Property Damage Personal Injury & Fatal	57.9 29.0	23.8 12.4	18.7 8.2	20.8 5.4	23.1 8.5	22.8 5.4	30.5 6.1	26.5 9.6
Total	86.9	36.2	26.9	26.3	31.6	28.2	36.7	36.2
Relative Risk*	2.4	1.0	0.7	0.7	0.9	0.8	1.0	1.0

The age of drivers invovled in traffic collisions can form the basis of various analysis and countermeasure programs. The reason for this intertest is the over-involvement of young drivers in collisions and a disproportionately large number of charges laid as a result of collisions.

Figure 5.1 shows that the relative risk of drivers between the ages of 15 and 20 are 2.4 times more likely to be involved in a collision than the average driving population. On average, 9% of 15 to 20 year olds were involved in collisions, compared to 3% of 36 to 45 year olds.

Other factors such as exposure, risk, experience, alcohol, and vehicle type must be known to fully understand the relationship of driver age and collision involvement. Studies indicate that the risk of having a collision is a factor of driving experience, not just driver age.

Number of Drivers Involved in Collisions by Licence Class and Age

Figure 5.3

	Class	Class	Class	Class	Class	Class	Class	Not	No	Not	
Age Group	1	2	3	4	5	6	7	Reg'd.	Licence	Stated	Total
Under 16	0	0	0	0	0	0	0	21	12	0	33
16	0	0	0	0	14	0	0	3	1	0	18
17	0	0	0	0	16	0	1	3	4	0	24
18	0	0	0	0	23	0	1	3	3	0	30
19	1	0	0	1	22	0	1	1	1	0	27
20	0	0	1	0	7	0	1	1	7	0	17
21-24	5	0	1	2	66	0	1	7	9	1	92
25-34	6	3	5	20	172	2	3	12	14	5	242
35-44	21	3	11	14	144	1	1	3	6	6	210
45-54	16	2	5	11	103	0	1	2	4	10	154
55-64	6	1	2	8	29	0	1	2	1	2	52
65 and over	2	0	1	1	14	0	0	1	0	0	19
Not Stated	0	0	0	1	7	0	0	4	0	88	100
Drivers in Collisions	57	9	26	58	617	3	11	63	62	112	1,018
Total Licenced Drivers	1,439	282	1,157	1,536	25,694	6	1,641	N/A	N/A	N/A	31,755
Relative Risk*	1.24	1.00	0.70	1.18	0.75	15.60	0.21	N/A	N/A	N/A	1.00

* Relative Risk = (% of Total Collisions in Class)/(% of Total Licence Holders in Class)

Number of Drivers Involved in Collisions by Condition and Age

Figure 5.4

													Not		
Driver Condition	<16	16	17	18	19	20	21-24	25-34	35-44	45-54	55-64	65+	Stated	Total	%
Apparently Normal	32	16	19	26	26	11	71	201	190	141	48	17	8	806	79.2
Fatigued, Fell Asleep	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0.2
Inexperience	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Under Influence - Alcohol	1	1	3	4	0	4	17	30	14	8	1	0	2	85	8.3
Under Influence - Drugs	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.1
Sudden Illness, Lost Consciousness	0	0	0	0	0	1	0	1	1	1	0	0	0	4	0.4
Other Condition	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.1
Unknown	0	1	1	0	1	1	3	9	5	4	2	2	90	119	11.7
Total	33	18	24	30	27	17	92	242	210	154	52	19	100	1,018	
%	3.2	1.8	2.4	2.9	2.7	1.7	9.0	23.8	20.6	15.1	5.1	1.9	9.8		100.0

Number of Drivers Involved in Collisions by Driver Action and Age

Figure 5.5

													Not		%
Driver Action	<16	16	17	18	19	20	21-24	25-34	35-44	45-54	55-64	65+	Stated	Total	
Driving Properly	4	4	7	9	7	6	25	85	80	70	14	3	4	318	31.2
Following Too Closely	0	2	1	2	3	1	11	10	9	9	1	1	0	50	4.9
Distracted, Inattentive	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Driving Too Fast	6	2	4	4	2	2	14	16	8	2	4	2	2	68	6.7
Improper Turning or Passing	1	0	0	1	0	0	1	5	2	3	3	0	0	16	1.6
Failing to Yield Right of Way	7	5	1	3	2	1	5	22	26	15	7	2	2	98	9.6
Disobeying Traffic Control/Officer	0	0	1	0	1	1	0	3	1	2	0	0	0	9	0.9
Driving on Wrong Side of Road	2	0	1	0	1	0	1	3	4	2	0	0	2	16	1.6
Driving in Wrong Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Backing Unsafely	1	0	1	4	4	1	7	36	34	17	8	7	7	127	12.5
Lost Control	11	5	6	7	4	3	25	55	36	24	13	4	3	196	19.3
Other Driver Action	1	0	2	0	1	0	3	5	6	6	1	0	0	25	2.5
Unknown	0	0	0	0	2	2	0	2	4	4	1	0	80	95	9.3
Total	33	18	24	30	27	17	92	242	210	154	52	19	100	1,018	
%	3.2	1.8	2.4	2.9	2.7	1.7	9.0	23.8	20.6	15.1	5.1	1.9	9.8		100.0

Vehicle Factors

Contents:

Page

Figure	6.1	Number of Vehicles in Collisions by Vehicle Type and Severity	37
	6.2	Number of Vehicles in Collisions by Vehicle Condition and Severity	37
	6.3	Number of Vehicles in Collisions by Vehicle Manoeuvre and Severity	38
	6.4	Number of Vehicles in Collisions by Vehicle Year and Severity	38

Vehicle Factors

There were a total of 1,213 vehicles involved in 725 collisions in 1998. This is an average of 1.67 vehicles per collision. This section provides details on the different vehicle types involved in collisions.

While TAIS gives a fairly accurate account of the different types of vehicles involved in collisions, it is difficult to compare the relative involvement rate. For example, a highway transport truck, on average, travels 10 times more distance in a year than a passenger car. It is, therefore, necessary to determine the exposure of different types of vehicles. Obtaining accurate and useful information about the travel patterns and distances of different vehicles is a major challenge.

Number of Vehicles in Collisions by Vehicle Type and Severity

Figure 6.1

	Property	Personal			
Vehicle Type	Damage	Injury	Fatal	Total	%
Passenger Car	276	66	1	343	28.3
Passenger Van	110	23	0	133	11.0
Light Utility Vehicle	0	0	0	0	0.0
Pickup Truck	413	91	4	508	41.9
Panel/Cargo Van	0	0	0	0	0.0
Other Truck/Van <= 4536 kg	0	0	0	0	0.0
Unit Truck > 4536 kg	15	5	1	21	1.7
Road Tractor	19	7	0	26	2.1
School Bus	1	1	0	2	0.2
Small School Bus	0	0	0	0	0.0
Urban Transit Bus	0	0	0	0	0.0
Intercity Bus	0	0	0	0	0.0
Bus - Unspecified	0	0	0	0	0.0
Motorcycle	0	6	0	6	0.5
Limited Speed Motorcycle	0	0	0	0	0.0
Off Road Vehicles (ATV)	1	19	0	20	1.6
Bicycle	2	16	0	18	1.5
Motorhome	1	0	0	1	0.1
Farm Equipment	0	0	0	0	0.0
Construction Equipment	7	2	1	10	0.8
Fire Engine	0	0	0	0	0.0
Snowmobile	18	34	1	53	4.4
Streetcar	0	0	0	0	0.0
Other	0	0	0	0	0.0
Unknown	72	0	0	72	5.9
Total	935	270	8	1213	100.0

Number of Vehicles in Collisions by Vehicle Condition and Severity

Figure 6.2

	Property	Personal			
Vehicle Condition	Damage	Injury	Fatal	Total	%
No Apparent Defect	770	242	5	1017	83.8
Defective Brakes	2	3	0	5	0.4
Defective Steering	0	0	0	0	0.0
Defective Lighting	2	2	1	5	0.4
Tire Blown Out	4	4	0	8	0.7
Unsecured Load, Spilled Load	1	1	0	2	0.2
Oversized Load, Overload	2	1	0	3	0.2
Visibility Obstructed	17	3	0	20	1.6
Other Defective Vehicular Parts	26	4	0	30	2.5
Other Vehicular Factor	0	0	0	0	0.0
Unknown	111	10	2	123	10.1
Total	935	270	8	1213	100.0

	Property	Personal			
Vehicle Manoeuvre	Damage	Injury	Fatal	Total	%
Going Straight Ahead	326	177	3	506	41.7
Turning Left	53	17	0	70	5.8
Turning Right	49	11	1	61	5.0
Making U-Turn	4	2	0	6	0.5
Changing Lanes	3	2	0	5	0.4
Merging	1	0	0	1	0.1
Reversing	122	8	1	131	10.8
Overtaking	3	2	0	5	0.4
Negotiating Curve	0	0	0	0	0.0
Slowing or Stopped in Traffic	86	26	1	113	9.3
Starting in Traffic	3	2	0	5	0.4
Leaving Roadside	3	7	0	10	0.8
Stopped/Parked Legally	182	5	0	187	15.4
Stopped/Parked Illegally	4	0	2	6	0.5
Swerving to Avoid Collision	10	8	0	18	1.5
Run-away or Roll-away Vehicle	11	1	0	12	1.0
Unspecified Manoeuvre	0	0	0	0	0.0
Other	0	0	0	0	0.0
Unknown	75	2	0	77	6.3
Total	935	270	8	1213	100.0

Number of Vehicles in Collisions by Vehicle Manoeuvre and Severity

Number of Vehicles in Collisions by Vehicle Year and Severity

Figure 6.4

Figure 6.3

		Property	Personal			
Model Year		Damage	Injury	Fatal	Total	%
	1999	6	0	0	6	0.5
	1998	71	21	0	92	7.6
	1997	107	30	1	138	11.4
	1996	61	29	0	90	7.4
	1995	71	24	1	96	7.9
	1994	68	15	1	84	6.9
	1993	44	23	0	67	5.5
	1992	58	16	0	74	6.1
	1991	54	15	0	69	5.7
	1990	45	9	0	54	4.5
	1989	53	8	3	64	5.3
	1988	37	3	0	40	3.3
	1987 & Older	169	50	2	221	18.2
Unspe	ecified	91	27	0	118	9.7
Total		935	270	8	1213	100.0

Victims and Occupant Restraints

Contents:

Figure	7.1	Fatalities Classification	41
	7.2	Injuries Classification	41
	7.3	Persons Injured by Road User Class and Age Group	42
	7.4	Persons Killed by Road User Class and Age Group	42
	7.5	Persons Injured or Killed by Road User Class and Gender	42
	7.6	Motor Vehicle Occupants by Injury Severity and Restraint Use	43
	7.7	Restraints Used/Not Used	43
	7.8	Motor Vehicle Occupants by Injury Severity and Age Group	44
	7.9	Victim Restraint Use Rate by Victim Age	44

Page

Victims and Occupant Restraints

The Traffic Accident Information System (TAIS) attempts to capture information on all road users involved in collisions, whether they are injured or not. This data can be used to calculate exposure rates for road users by injury severity, age, road user class, gender and many other variables.

Figures 7.6, 7.7 and 7.8 show the relationships between the severity of injury to motor vehicle occupants and seat belt use. The number of persons injured while using seat belts is much higher than those not using them. This is because nearly 75% of all motor vehicle occupants are belted in during a crash. The severity of injury is also lower for victims using seat belts. In the Northwest Territories, over 90% of victims wearing seat belts were not injured. On the other hand, nearly 20% of the victims who were not wearing seat belts were injured or killed.

The proper use of seat belts is an important factor when evaluating their effectiveness in reducing or preventing injuries. This is especially true of young children and the use of child restraints. In the Northwest Territories, less than 35% of children are restrained at all. It is estimated that only half of these are in a correctly installed device and in a device that is appropriate for the size and age of the child.

To combat the problem of child restraint misuse-use, child car seat inspection clinics are carried out by the Hay River, Inuvik and Yellowknife Fire Departments. The Car Seat Instructors Program is available to increase the number of qualified persons to conduct inspections at clinics and at occupant restraint checkstops.

For more information on the Car Seat Instructors Program, please call the Department of Transportation, Motor Vehicles Division at (867) 920-8918.



Figure 7.5

Persons Injured by Road User Class and Age Group

	0	5	15	20	25	35	45	55	65	Not		
Road User Class	to 4	to 14	to 19	to 24	to 34	to 44	to 54	to 64	& older	Stated	Total	%
Motor Vehicle Driver	0	0	8	19	31	14	9	6	2	3	92	32.3
Motor Vehicle Passenger	1	10	15	13	6	13	5	2	2	9	76	26.7
Pedestrian	1	16	3	3	4	1	1	2	1	0	32	11.2
Bicyclist	0	6	4	1	2	1	0	0	0	1	15	5.3
Motorcyclist (includes	0	0	1	0	3	1	0	0	0	1	6	2.1
passengers												
ATV Operators & Passengers	4	5	5	1	4	2	3	1	0	0	25	8.8
Snowmobile Operators	0	10	6	5	9	2	2	2	1	2	39	13.7
& Passengers												
Farm/Construction Equipment	0	0	0	0	0	0	0	0	0	0	0	0.0
Other	0	0	0	0	0	0	0	0	0	0	0	0.0
Unspecified	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	6	47	42	42	59	34	20	13	6	16	285	100.0

Persons Killed by Road User Class and Age Group

	0	5	15	20	25	35	45	55	65	Not		
Road User Class	to 4	to 14	to 19	to 24	to 34	to 44	to 54	to 64	& older	Stated	Total	%
Motor Vehicle Driver	0	0	0	1	0	0	0	0	0	0	1	20.0
Motor Vehicle Passenger	0	0	0	1	0	0	0	0	0	0	1	20.0
Pedestrian	0	1	0	0	0	0	0	1	0	0	2	40.0
Bicyclist	0	0	0	0	0	0	0	0	0	0	0	0.0
Motorcyclist (includes	0	0	0	0	0	0	0	0	0	0	0	0.0
passengers												
ATV Operators & Passengers	0	0	0	0	0	0	0	0	0	0	0	0.0
Snowmobile Operators	0	0	0	0	1	0	0	0	0	0	1	20.0
& Passengers												
Farm/Construction Equipment	0	0	0	0	0	0	0	0	0	0	0	0.0
Other	0	0	0	0	0	0	0	0	0	0	0	0.0
Unspecified	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	0	1	0	2	1	0	0	1	0	0	5	100.0

Persons Injured or Killed by Road User Class and Gender

		Persons	Injured			Person	Killed	
Road User Class	Male	Female	Unknown	Total	Male	Female	Unknown	Total
Motor Vehicle Driver	58	34	0	92	1	0	0	1
Motor Vehicle Passenger	39	36	1	76	1	0	0	1
Pedestrian	15	17	0	32	2	0	0	2
Bicyclist	8	7	0	15	0	0	0	0
Motorcyclist (includes	6	0	0	6	0	0	0	0
passengers)								0
ATV Operators & Passengers	12	13	0	25	0	0	0	0
Snowmobile Operators	23	15	1	39	1	0	0	1
& Passengers								
Farm/Construction Equipment	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Unspecified	0	0	0	0	0	0	0	0
Total	161	122	2	285	5	0	0	5

Figure 7.3

Figure 7.4

						Εiζ	gure 7.6
			Lap &	Child	Restraint		
	Not	Lap Belt	Torso	Restraint	Use		
Injury Severity	Restrained	Only	Belt	Device	Unknown	Total	%
Not Injured	208	39	652	0	367	1266	88.2
Minimal Injuries	27	3	33	0	6	69	4.8
Minor Injuries	35	0	41	0	8	84	5.8
Major (Hospital	6	0	3	0	0	9	0.6
Admission)							
Fatal	2	0	0	0	0	2	0.1
Injured - Extent	2	0	3	0	1	6	0.4
Unknown							
Total	280	42	732	0	382	1436	100.0

Motor Vehicle* Occupants by Injury Severity and Restraint Use

* Excludes occupants of motorcycles, mopeds, snowmobiles, all-terrain vehicles, and farm/construction equipment



Note: The totals used to calculate the percentages in Figures 7.2 and 7.3 do not include occupants where seat belt use was as "unknown".

Injury Classification

1 Not Injured - no visible signs or any complaint of injury

2 Minor - minor complaint of injury by victim, but no medical treatment required

3 Moderate - an injury requiring medical attention but not serious enough to require hospital admission

4 Major - an injury serious enough to require hospital admission

5 Fatal - death within 30 days as a result of injuries incurred in the traffic collision

6 Injured- Extent Unknown - victim sustained injuries, precise extent unknown

Motor Vehicle* Occupants by Injury Severity & Age Group

Restraints Used											
	0	5	15	20	25	35	45	55	65	Not	
Injury Severity	to 4	to 14	to 19	to 24	to 34	to 44	to 54	5 to 645	5 & older	Stated	Total
Not Injured	12	32	94	61	141	140	100	34	11	66	691
Minimal Injuries	0	0	4	6	9	5	3	3	3	3	36
Minor Injuries	0	2	7	9	7	7	5	3	0	1	41
Major (Hospital Admission)	0	0	0	0	1	0	1	0	0	1	3
Fatal	0	0	0	0	0	0	0	0	0	0	0
Injured - Extent Unknown	0	0	0	0	2	0	1	0	0	0	3
Total	12	34	105	76	160	152	110	40	14	71	774
Restraints Not Used											
	0	5	15	20	25	35	45	55	65	Not	
Injury Severity	to 4	to 14	to 19	to 24	to 34	to 44	to 54	to 64	& older	Stated	Total
Not Injured	6	28	26	22	42	32	28	6	5	13	208
Minimal Injuries	0	3	4	6	5	2	2	2	1	2	27
Minor Injuries	1	3	4	11	6	7	1	0	0	2	35
Major (Hospital Admission)	0	0	1	0	3	1	0	0	0	1	6
Fatal	0	0	0	2	0	0	0	0	0	0	2
Injured - Extent Unknown	0	0	0	0	1	1	0	0	0	0	2
Total	7	34	35	41	57	43	31	8	6	18	280

* Excludes occupants of motorcycles, mopeds, snowmobiles, all-terrain vehicles, and farm/construction equipment



Victim Restraint Use Rate by Victim Age

Figure 7.8

Pedestrians

Contents:

Page

Figure 8.1	Pedestrians Injured or Killed by Age Group	47
8.2	Pedestrians Injured or Killed by Pedestrian Action and Age Group	47
8.3	Pedestrians Injured or Killed by Place of Occurrence and Injury Severity	47
8.4	Pedestrians Injured or Killed by Accident Site	48
8.5	Pedestrians Injured or Killed by Pedestrian Condition	48

Pedestrians

1998 Quick Facts on Pedestrian Collisions

- \cdot 32 injured
- \cdot 2 killed

•

- 53% of the pedestrians injured were under the age of 15
- 94% of the pedestrians were injured within a community
- 14.7% of pedestrians had been drinking or were impaired by alcohol

Pedestrians Injured or Killed by Age Group

					Ag	ge Gro	oup					
	0	5	15	20	25	35	45	55	65	Not		
	to 4	to 14	to 19	to 24	to 34	to 44	to 54	to 64	& older	Stated	Total	%
Injured	1	16	3	3	4	1	1	2	1	0	32	94.1
Killed	0	1	0	0	0	0	0	1	0	0	2	5.9
Total	1	17	3	3	4	1	1	3	1	0	34	
%	2.9	50.0	8.8	8.8	11.8	2.9	2.9	8.8	2.9	0.0	100.0	100.0

Pedestrians Injured or Killed by Pedestrian Action and Age Group

					Ag	e Grou	up					
	0	5	15	20	25	35	45	55	65	Not		
Pedestrian Action	to 4	to 14	to 19	to 24	to 34	to 44	to 54	to 64	& older	Stated	Total	%
Crossing Intersection With Traffic Control, With Right-of-Way	0	0	2	2	1	0	0	0	0	0	5	14.7
Crossing Intersection With Traffic Control, Without Right-of-Way	0	0	0	0	1	0	0	0	0	0	1	2.9
Crossing Intersection - No Traffic Control	0	1	0	0	0	0	0	0	0	0	1	2.9
Crossing Roadway at Crosswalk	0	1	0	0	0	0	0	0	0	0	1	2.9
Crossing Roadway Not at Intersection	1	1	0	0	0	0	0	1	0	0	3	8.8
Walking Along Roadway Against Traffic	0	0	0	0	0	0	0	0	0	0	0	0.0
Walking Along Roadway With Traffic	0	0	1	0	0	0	0	1	0	0	2	5.9
OnSidewalk, Median, Safety Zone	0	0	0	0	0	0	0	0	0	0	0	0.0
Walking on Travelled Part of Roadway Against Traffic	0	0	0	0	0	0	0	0	0	0	0	0.0
Walking on Travelled Part of Roadway With Traffic	0	0	0	0	0	0	0	0	0	0	0	0.0
Coming from Behing Parked Vehicle/Object on Roadside	0	1	0	1	1	0	0	0	1	0	4	11.8
Coming from Behind Moving Vehicle	0	0	0	0	0	0	1	0	0	0	1	2.9
Running into Roadway	0	6	0	0	0	0	0	0	0	0	6	17.6
Getting On/Off School Bus	0	0	0	0	0	0	0	0	0	0	0	0.0
Getting On/Off Other Vehicles	0	0	0	0	0	0	0	0	0	0	0	0.0
Pushing Vehicle on Road	0	0	0	0	0	0	0	0	0	0	0	0.0
Working on Vehicle on Side of Road	0	0	0	0	0	0	0	0	0	0	0	0.0
Playing on Roadway	0	5	0	0	0	0	0	0	0	0	5	14.7
Working on Roadway	0	0	0	0	0	1	0	1	0	0	2	5.9
Lying on Road	0	0	0	0	0	0	0	0	0	0	0	0.0
Other	0	2	0	0	1	0	0	0	0	0	3	8.8
Unknown	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	1	17	3	3	4	1	1	3	1	0	34	100.0

Pedestrians Injured or Killed By Place of Occurrence and Injury Severity

Figure 8.3

Place of Occurrence	Killed	Injured	Total	%
Urban	1	31	32	94.1
Rural	1	1	2	5.9
Unspecified	0	0	0	0.0
Total	2	32	34	100.0

Figure 8.1

Figure 8.2

Pedestrians Injured or Killed by Accident Site

Accident Site	Killed	Injured	Total	%
Non-Intersection	2	9	11	32.4
At Intersection of At Least Two Roadways	0	9	9	26.5
Intersection With Parking Lot/Driveway/Alley	0	11	11	32.4
Railroad Level Crossing	0	0	0	0.0
Bridge/Overpass/Viaduct	0	0	0	0.0
Tunnel or Underpass	0	0	0	0.0
Passing Lane/Climbing Lane	0	0	0	0.0
Other	0	3	3	8.8
Unspecified	0	0	0	0.0
Total	2	32	34	100.0

Pedestrians Injured or Killed by Pedestrian Condition

Killed Injured Total Pedestrian Condition % 1 79.4 Apparently Normal 26 27 0 Fatigued, Fell Asleep 0 0 0.0 Inexperience 0 0 0 0.0 Under Influence - Alcohol 5 0 5 14.7 Under Influence - Drugs 0 0 0 0.0 Sudden Illness. Lost Conciousness 0 2.9 1 1 Other Condition 0 0 0.0 0 Unknown 1 0 1 2.9 Total 2 32 **34** 100.0

48

Figure 8.4

Figure 8.5

Alcohol

Contents:

			Page
Figure	9.1	Drinking Drivers in Collisions by Driver Age and Gender	51
	9.2	Collisions Involving Alcohol by Day of Week	51
	9.3	Percentage of Collisions Involving Alcohol by Year and Severity	51
	9.4	Number of Collisions and Victims Involving Alcohol	51
	9.5	Number of Alcohol Related Collisions by Time of Day	52
	9.6	Injury Severity by Alcohol Involvement	52
	9.7	Alcohol-Involved Collisions by Month	52

Alcohol

REDUCING ALCOHOL AS A FACTOR IN MOTOR VEHICLE COLLISIONS

The Department of Transportation believes too many people are being killed and injured as a result of drinking and driving in the Northwest Territories. In the fall of 1995, an inter agency committee was struck to develop recommendations to reduce drinking and driving. A draft report containing the recommendations was completed in the summer of 1996.

Amongst the recommendations are:

- 0 BAC (blood alcohol concentration) for new drivers
- immediate roadside suspension for a BAC greater than .04%
- 30 to 90 day administrative licence suspension
- increase statutory licence suspensions
- mandatory education program for first and second offenders
- develop assessment and treatment programs for repeat offenders

The purpose of the recommendations are to reduce the extent of deaths and injuries on NWT roadways. The Department of Transportation, Motor Vehicles Division is working with other agencies to realize a 20% reduction in alcohol-related crashes by the year 2001.

Drinking Drivers in Collisions by Driver Age and

Figure 9.1

6 6 6

50



۵۵ a^o 28 52 **Driver Age**



Number of Collisions and Victims Involving



Figure 9.4

	Number of						Number	of	
Voar	Propert Damage	Personal	Fatal	Total	% of Total Collision	Injured	Killed	Total	% of Total
1989	59	50	2	111	11.0	77	2	79	22.5
1990 1991	60 55	41 53	2	103 112	10.9 10.9	56 03	2	58 97	21.5 30.5
1992	53	60	5	118	10.3	86	5	91	25.7
1993 1994	43 38	49 46	1	93 84	11.5 9 7	93 66	1	94 66	25.3 20.6
1995	38	52	0	90	11.2	78	0	78	25.7
1996	28	39	10	77	10.3	65	10	75	26.6
1997	36	32	4	72	10.1	52	4	56	18.9
1998	36	45	3	84	11.6	74	3	77	26.6
Average	45	47	3	94	10.9	74	3	77	24.4









Page

Off-Road Vehicles

Contents:

Figure	10.1	Off-Road Vehicle Collisions by Month and Severity	55
	10.2	Off-Road Vehicle Collisions by Vehicle Type	55
	10.3	Off-Road Vehicle Drivers in Collisions by Driver Age and Gender	56
	10.4	Off-Road Vehicle Drivers in Collisions by Driver Condition and Severity	56
	10.5	Off-Road Vehicle Drivers in Collisions by Driver Action and Severity	57
	10.6	Off-Road Vehicle Occupants by Injury Severity and Helmet Use	57

Off-Road Vehicles

Off-road vehicles, including snowmobiles and ATVs (All-Terrain Vehicles) are a common form of transportation throughout the Northwest Territories. The NWT is unique in that these types of vehicles are permitted to operate on roadways in communities. Despite their widespread use, relatively little is known about collisions involving snowmobiles and ATVs. Part of the problem lies with under-reporting to the police. Only those collisions that occur on or adjacent to a roadway are captured by TAIS. This section attempts to describe the details of collisions with off-road vehicles.

From the Figures, the following facts can be noted:

- 72% of off-road vehicle collisions result in injuries or death
- 57% of off-road vehicle drivers involved in collisions are 24 years of age or younger
- 26.2% of off-road vehicle drivers in collisions had been drinking or were impaired by alcohol
- only 21.4% of off-road vehicle drivers or passengers in collisions were wearing helmets

Off-Road Vehicle Collisions by Month and Severity

Figure 10.1

	Number of Collisions					of Victims
	Property	Personal				
Month	Damage	Injury	Fatal	Total	Injured	Killed
January	2	2	1	5	4	1
February	7	6	0	13	7	0
March	3	6	0	9	9	0
April	0	2	0	2	7	0
May	0	1	0	1	1	0
June	0	4	0	4	7	0
July	0	7	0	7	12	0
August	0	3	0	3	6	0
September	2	2	0	4	3	0
October	3	3	0	6	4	0
November	1	3	0	4	5	0
December	0	7	0	7	10	0
Total	18	46	1	65	75	1

Off-Road Vehicle Collisions by Vehicle Type

	•		Figure 10.2
	Snowmobile	ATV	Total
Total Victims	40	25	65
Killed	1	0	1
Injured	39	25	64
Total Vehicles			
Involved	53	20	73
Fatal	1	0	1
Injury	34	19	53
Property Damage	18	1	19

Off-Road Vehicle Collisions by Month



Off-Road Vehicle Drivers in Collisions by Driver Age and Gender

Figure 10.3

	Snowm	Snowmobile			гv				
Age Group	Male	Female	Unknown	Male	Female	Unknown	Total	%	
0 to 4	0	0	0	0	0	0	0	0.0	
5 to 14	4	5	0	1	2	0	12	18.5	
<u>15 to 19</u>	10	1	0	3	1	0	15	23.1	
20 to 24	7	0	0	3	0	0	10	15.4	
25 to 34	8	2	0	3	2	0	15	23.1	
35 to 44	2	0	0	1	0	0	3	4.6	
45 to 54	2	0	0	2	1	0	5	7.7	
55 to 64	1	1	0	0	1	0	3	4.6	
65 & Over	1	0	0	0	0	0	1	1.5	
Unknown	0	0	1	0	0	0	1	1.5	
Total	35	9	1	13	7	0	65	100.0	

Off-Road Vehicle Drivers in Collisions by Driver Condition and Severity

Figure 10.4

	Property	Personal			
Driver Condition	Damage	Injury	Fatal	Total	%
Apparently Normal	8	37	0	45	69.2
Fatigue/Fell Asleep	0	0	0	0	0.0
Inexperience	0	0	0	0	0.0
Under Influence - Alcohol	2	14	1	17	26.2
Under Influence - Drugsl	0	1	0	1	1.5
Sudden Illness, Lost Consiousness	0	1	0	1	1.5
Other Condition	0	0	0	0	0.0
Unknown	1	0	0	1	1.5
Total	11	53	1	65	100.0

				Fi	gure 10.5
	Property	Personal			
Driver Action	Damage	Injury	Fatal	Total	%
Driving Properly	2	11	0	13	20.0
Following Too Closely	0	0	0	0	0.0
Distracted, Inattentive	0	0	0	0	0.0
Driving Too Fast for Conditions	1	14	1	16	24.6
Improper Turning or Passing	0	1	0	1	1.5
Failed to Yield Right-of-Way	1	9	0	10	15.4
Disobeyed Traffic Control or Officer	0	0	0	0	0.0
Driving on Wrong Side of Road	1	2	0	3	4.6
Driving in Wrong Direction	0	0	0	0	0.0
Backing Unsafely	2	0	0	2	3.1
Lost Control	3	14	0	17	26.2
Other	0	1	0	1	1.5
Unknown	1	1	0	2	3.1
Total	11	53	1	65	100.0

Off-Road Vehicle Drivers in Collisions by Driver Action and Severity

Off-Road Vehicle Occupants by Injury Severity and Helmet Use

••••••••••••••••••••••••••••••••••••••		····, …						
				Fi	Figure 10.6			
	Helmet	Helmet						
Injury Severity	Worn	Not Worn	Unknown	Total	%			
Not Injured	7	31	4	42	39.3			
Minimal Injuries	5	8	0	13	12.1			
Minor Injuries	6	20	3	29	27.1			
Major (Hospital Admission)	3	17	0	20	18.7			
Fatal	0	1	0	1	0.9			
Injured - Extent Unknown	0	0	2	2	1.9			
Total	21	77	9	107	100.0			

Geographic Distribution

Contents:

Figure 11.1Collisions by Region, RCMP Detachment and
Severity6111.2Collisions on the NWT Highway System6311.3Collisions on the NWT Highway System – Map6811.4Collision Rates on the NWT Highway System – Map69

Page

Geographic Distribution

Figure 11.1 is a detailed summary of collisions by Region, RCMP detachment and severity. Not surprisingly, 69 % of the collisions took place in the North/South Slave Region. The North/South Slave Region also accounted for 51.2% of persons injured and two fifths of the fatalities.

Figure 11.2 describes collisions that occurred on the NWT Highway system. Collisions are summarized by location (along numbered highways), date, severity, configuration, and the number of persons injured and killed. Highway 3 (Yellowknife Highway) accounted for 36% of the collisions occurring on the numbered highway system.

Figure 11.3 is a map showing the number of collisions on various segments of the NWT Highway system, including Access and Winter roads. Figure 11.4 is a map showing the corresponding collision rates expressed in the number of collisions per million vehicle-kilometres of travel.

Collisions by Region, RCMP Detachment and Severity

Figure 11.1

A - Baffin Region

		Number	of Collisions	Number o	f Victims	
RCMP	Property	Personal				
Detachment	Damage	Injury	Fatal	Total	Injured	Killed
Broughton Island	5	2	0	7	4	0
Cape Dorset	2	0	0	2	0	0
Clyde River	0	1	0	1	4	0
Grise Fiord	0	0	0	0	0	0
Hall Beach	4	0	1	5	0	1
Igloolik	0	0	0	0	0	0
Iqaluit	31	14	0	45	17	0
Kimmirut	1	0	0	1	0	0
Nanisivik	4	3	1	8	7	1
Pangnirtung	4	2	1	7	3	1
Pond Inlet	0	1	0	1	2	0
Resolute	3	1	0	4	3	0
Sanikiluag	0	1	0	1	1	0
Sub Total						
Baffin Region	54	25	3	82	41	3

B - Inuvik Region

		Number of Collisions			Number o	of Victims
RCMP	Property	Personal				
Detachment	Damage	Injury	Fatal	Total	Injured	Killed
Aklavik	2	2	0	4	2	0
Deline	2	0	0	2	0	0
Fort Good Hope	2	0	0	2	0	0
Fort McPherson	6	5	0	11	9	0
Holman	0	1	0	1	2	0
Inuvik	33	19	0	52	30	0
Norman Wells	3	3	0	6	6	0
Paulatuk/Sachs Harbour	0	0	0	0	0	0
Tuktoyaktuk	7	0	0	7	0	0
Tulita	1	0	0	1	0	0
Sub Total						
Inuvik Region	56	30	0	86	49	0

C - Keewatin Region

		Number	Number of Victims			
RCMP	Property	Personal				
Detachment	Damage	Injury	Fatal	Total	Injured	Killed
Arviat	0	8	0	8	13	0
Baker Lake	1	2	0	3	2	0
Coral Harbour	1	0	0	1	0	0
Rankin Inlet	9	10	0	19	15	0
Sub Total						
Keewatin Region	11	20	0	31	30	0

D - Kitikmeot Region

		Number	of Collisions	Number of Victims		
RCMP	Property	Personal				
Detachment	Damage	Injury	Fatal	Total	Injured	Killed
Cambridge Bay	4	4	0	8	7	0
Gjoa Haven	1	1	0	2	1	0
Holman/Kugluktuk	2	6	0	8	7	0
Pelly Bay/Taloyoak	1	4	0	5	4	0
Sub Total						
Kitikmeot Region	8	15	0	23	19	0

E - North/South Slave Region

		Number of Victims				
RCMP	Property	Personal				
Detachment	Damage	Injury	Fatal	Total	Injured	Killed
Fort Liard	5	2	0	7	2	0
Fort Providence	10	6	0	16	13	0
Fort Resolution	7	2	0	9	3	0
Fort Simpson	15	3	0	18	3	0
Fort Smith	20	7	0	27	12	0
Hay River	50	22	1	73	31	1
Lutsel K'e	0	1	0	1	1	0
Rae/Wha Ti	17	12	1	30	15	1
Yellowknife	272	50	0	322	66	0
Sub Total						
North/South						
Slave Region	396	105	2	503	146	2
Total - All						
Regions	525	195	5	725	285	5

Collisions on the NWT Highway System

Collisions

8

Collisions

6

Figure 11.2

Highway #1	On Km	Collision	Collision	Collisio	on # Persons	# Persons
(Mackenzie)		Date	Severity	Configuration	on Injured	Killed
	98.0	18-Jul-1998	Injury	Single Vehicle Rollover	2	0
	99.0	28-Aug-1998	Injury	Single Vehicle Rollover	1	0
	124.0	8-Aug-1998	Property Damage	Single Vehicle Rollover	0	0
	127.0	12-Jan-1998	Property Damage	Single Vehicle Rollover	0	0
	178.0	11-Jul-1998	Injury	Single Vehicle Rollover	4	0
	189.0	15-May-1998	Property Damage	Ran Off Road	0	0
	281.0	9-Jun-1998	Property Damage	Single Vehicle Rollover	0	0
	360.0	22-Jun-1998	Property Damage	Animal Strike	0	0
	400.0	1-Jan-1998	Property Damage	Ran Off Road	0	0
	466.0	9-Mar-1998	Property Damage	Collision with Fixed Object	0	0
	506.0	7-Jul-1998	Property Damage	Single Vehicle Rollover	0	0
	680.0	14-Aug-1998	Injury	Ran Off Road	1	0
Summary	Property	Personal				
Highway #1	Damage	Injury	Fatal	Tota	al Persons	Persons
	Collisions	Collisions	Collisions	Collision	ns Injured	Killed
	8	4	()	12 8	0
Highway #2	On Km	Collision	Collision	Collisio	on # Persons	# Persons
(Hay River)		Date	Severity	Configuration	on Injured	Killed
	1.0	21-Jan-1998	Injury	Single Vehicle Rollover	1	0
	26.0	10-Nov-1998	Injury	Single Vehicle Rollover	1	0
	28.0	20-Sep-1998	Fatal	Single Vehicle Rollover	1	1
	37.0	8-Jul-1998	Property Damage	Other Multi-Vehicle Collision	0	0
	38.0	31-May-1998	Injury	Single Vehicle Rollover	1	0
	38.0	22-Dec-1998	Injury	Other Multi-Vehicle Collision	1	0
	38.3	27-Sep-1998	Property Damage	Single Vehicle Rollover	0	0
	38.8	9-Oct-1998	Property Damage	Right Angle	0	0
	39.1	10-Jul-1998	Property Damage	Other Multi-Vehicle Collision	0	0
	39.1	22-Sep-1998	Injury	Rear End	2	0
	39.7	19-Jun-1998	Property Damage	Other Multi-Vehicle Collision	0	0
	40.0	6-Jan-1998	Property Damage	Collision with Fixed Object	0	0
	40.0	17-Jan-1998	Property Damage	Collision with Fixed Object	0	0
	42.0	30-Oct-1998	Property Damage	Other Multi-Vehicle Collision	0	0
	45.2	27-Sep-1998	Injury	Ran Off Road	2	0
Summary	Property	Personal				

Collisions

1

Killed

1

Injured

9

Collisions

15
Highway #3 (Yellowknife)	On Km	Collision Date	Collision Collision Colli Date Severity Configura		# Persons Injured	# Persons Killed
	24.0	16-Feb-1998	Property Damage	Collision with Fixed Object	0	0
	26.0	30-Sep-1998	Property Damage	Animal Strike	0	0
	45.0	4-Sep-1998	Injury	Animal Strike	2	0
	58.0	27-Oct-1998	Property Damage	Animal Strike	0	0
	65.0	16-Sep-1998	Property Damage	Animal Strike	0	0
	66.0	14-Oct-1998	Injury	Animal Strike	1	0
	73.0	4-Sep-1998	Property Damage	Other Single Vehicle Collision	0	0
	75.0	16-Sep-1998	Property Damage	Animal Strike	0	0
	101.0	28-Jan-1998	Injury	Rear End	2	0
	103.0	30-Sep-1998	Property Damage	Animal Strike	0	0
	133.0	10-Apr-1998	Property Damage	Ran Off Road	0	0
	145.0	13-Oct-1998	Fatal	Collision with Parked Vehicle	1	1
	161.0	12-Sep-1998	Injury	Single Vehicle Rollover	3	0
	196.0	29-Oct-1998	Injury	Collision with Fixed Object	1	0
	227.0	27-May-1998	Property Damage	Ran Off Road	0	0
	251.0	27-Jul-1998	Property Damage	Ran Off Road	0	0
	255.0	8-Oct-1998	Property Damage	Single Vehicle Rollover	0	0
	258.0	13-Aug-1998	Injury	Other Single Vehicle Collision	1	0
	260.0	1-Feb-1998	Injury	Single Vehicle Rollover	1	0
	263.0	7-Mar-1998	Injury	Other Single Vehicle Collision	2	0
	265.0	4-Aug-1998	Injury	Single Vehicle Rollover	1	0
	275.0	27-Aug-1998	Injury	Single Vehicle Rollover	1	0
	284.0	8-Nov-1998	Property Damage	Ran Off Road	0	0
	295.0	9-Oct-1998	Property Damage	Ran Off Road	0	0
	299.0	24-Dec-1998	Property Damage	Animal Strike	0	0
	303.0	21-Mar-1998	Property Damage	Other Multi-Vehicle Collision	0	0
	303.0	14-Jun-1998	Injury	Collision with Fixed Object	1	0
	303.0	28-Jun-1998	Injury	Collision with Fixed Object	2	0
	308.0	8-Aug-1998	Property Damage	Sideswipe Same Direction	0	0
	314.0	5-Jun-1998	Injury	Single Vehicle Rollover	1	0
	314.0	27-Nov-1998	Property Damage	Ran Off Road	0	0
	330.0	16-Aug-1998	Injury	Single Vehicle Rollover	1	0
	332.0	6-Dec-1998	Property Damage	Other Multi-Vehicle Collision	0	0
	335.0	20-Oct-1998	Injury	Collision with Fixed Object	1	0
	335.0	20-Oct-1998	Injury	Ran Off Road	1	0
	336.7	11-Jun-1998	Injury	Left Turn Across Path	1	0
	336.7	2-Jul-1998	Injury	Sideswipe Same Direction	1	0
	336.7	23-Nov-1998	Property Damage	Other Multi-Vehicle Collision	0	0
	337.0	10-Apr-1998	Property Damage	Ran Off Road	0	0
	338.0	14-Nov-1998	Injury	Collision with Fixed Object	1	0
Summary	Property	Personal				
Highway #3	Damage	Injury	Fata	al Total	Persons	Persons
	Collisions	Collisions	Collision	ns Collisions	Injured	Killed
	20	19		1 40	26	1

Geographic Distribution – Section 11

Highway #4 (Ingraham Trail)	On Km	Collision Date	Collisio Severi	n Collision ty Configuration	# Persons Injured	# Persons Killed
	1.0	5-Feb-1998	Property Damage	Sideswipe - Opposite Direction	0	0
	4.0	23-Oct-1998	Property Damage	Ran Off Road	0	0
	9.8	28-Jul-1998	Injury	Collision with Pedestrian	1	0
	13.0	17-Mar-1998	Property Damage	Single Vehicle Rollover	0	0
	22.0	19-Feb-1998	Property Damage	Collision with Fixed Object	0	0
	31.0	8-Jun-1998	Property Damage	Single Vehicle Rollover	0	0
	33.0	6-Sep-1998	Property Damage	Single Vehicle Rollover	0	0
	46.0	10-Aug-1998	Property Damage	Collision with Fixed Object	0	0
	48.0	2-Aug-1998	Property Damage	Ran Off Road	0	0
	50.0	11-Feb-1998	Property Damage	Single Vehicle Rollover	0	0

Summary	Property	Personal					
Highway #4	Damage	Injury	Fatal		Total	Persons	Persons
	Collisions	Collisions	Collisions	6	Collisions	Injured	Killed
	9	1	()	10	1	0
Highway #5	On Km	Collision	Collision		Collision	# Persons	# Persons
(Fort Smith Highway)		Date	Severity	/	Configuration	Injured	Killed
	2.0	30-Oct-1998	Injury	Collision with Fi	xed Object	2	0
	2.5	13-Nov-1998	Property Damage	Ran Off Road		0	0
	2.5	31-Dec-1998	Property Damage	Sideswipe Sam	e Direction	0	0
	16.0	16-Jan-1998	Injury	Rear End		3	0
	16.0	29-Dec-1998	Injury	Single Vehicle F	Rollover	1	0
	18.0	27-Jun-1998	Injury	Single Vehicle F	Rollover	2	0
	18.0	12-Dec-1998	Property Damage	Single Vehicle F	Rollover	0	0
	140.0	24-Mar-1998	Injury Single Vehicle Rollover		Rollover	3	0
	158.0	6-Dec-1998	Injury	Single Vehicle F	Rollover	2	0
	161.0	30-Oct-1998	Injury Single Vehicle Rollover		Rollover	1	0
	200.0	5-Jun-1998	Injury Single Vehicle Rollover		Rollover	1	0
	246.0	4-Aug-1998	Property Damage	Property Damage Animal Strike		0	0
	264.6	6-Jan-1998	Property Damage	mage Other Multi-Vehicle Collision		0	0
Summarv	Property	Personal					
Highway #5	Damage	Iniury	Fatal		Total	Persons	Persons
5 . , .	Collisions	Collisions	Collisions	Collisions Collisions			
	5	8	()	13	15	0
Highway #6	On Km	Collision	Collision		Collision	# Persons	# Persons
(Fort Resolution		Date	Severity	rerity Configuration		Injured	Killed
	40.0	6-Jan-1998	Property Damage	Animal Strike		0	0
Summary	Property	Personal					
Highway #6	Damage	Injury	Fatal		Total	Persons	Persons
	Collisions Collisions Collisi		Collisions	6	Collisions	Injured	Killed
	1	0	()	1	0	0

Highway #7 <u>(Liard Highway)</u>	On Km	Collision Date	Collision Severit	Collision	# Persons Injured	# Persons Killed
	4.0	7-Feb-1998	Injury	Single Vehicle Rollover	1	0
	144.0	14-Jul-1998	Property Damage	Single Vehicle Rollover	0	0
	188.0	4-Jun-1998	Injury	Single Vehicle Rollover	1	0
Summary	Property	Personal				
Highway #7	Damage	Injury	Fata	Total	Persons	Persons
	Collisions	Collisions	Collision	s Collisions	Injured	Killed
	1	2		0 3	2	0
Highway #8 (Dempster Highway)	On Km	Collision Date	Collision Severit	Collision Configuration	# Persons Injured	# Persons Killed
	35.0	10-Sep-1998	Injury	Single Vehicle Rollover	1	0
	44.0	7-Jan-1998	Property Damage	Animal Strike	0	0
	71.0	25-Jan-1998	Property Damage	Single Vehicle Rollover	0	0
	72.1	14-Jul-1998	Injury	Single Vehicle Rollover	3	0
	85.4	10-Feb-1998	Property Damage	Other Multi-Vehicle Collision	0	0
	97.0	22-Nov-1998	Property Damage	Ran Off Road	0	0
	114.0	9-Oct-1998	Property Damage	Collision with Parked Vehicle	0	0
	115.0	8-Jun-1998	Injury	Single Vehicle Rollover	3	0
	158.0	29-Jun-1998	Injury	Single Vehicle Rollover	1	0
	160.0	13-Jun-1998	Injury	Collision with Fixed Object	1	0
	184.0	18-Aug-1998	Property Damage	Single Vehicle Rollover	0	0
	189.0	18-Aug-1998	Injury	Single Vehicle Rollover	2	0
	208.0	9-Jul-1998	Property Damage	Single Vehicle Rollover	0	0
	234.0	1-Sep-1998	Injury	Single Vehicle Rollover	1	0
	237.0	18-Oct-1998	Injury	Other Multi-Vehicle Collision	1	0
	254.0	16-Jun-1998	Property Damage	Collision with Fixed Object	0	0
	257.0	20-Oct-1998	Injury	Single Vehicle Rollover	1	0
	271.5	21-Apr-1998	Injury	Right Angle	2	0
Summary	Property	Personal				
Highway #8	Damage	Injury	Fata	Total	Persons	Persons
	Collisions	Collisions	Collision	S Collisions	Injured	Killed
	8	10		J 18	16	0

Access and Winter Roads	Collision Date	Collision Severit	n Collision y Configuration	# Persons Injured	# Persons Killed
Aklavik Winter Access Road	12-Apr-1998	Injury	Collision with Fixed Object	1	0
Dettah Access Road	15-Jul-1998	Injury	Single Vehicle Rollover	1	0
Dettah Access Road	25-Jul-1998	Injury	Single Vehicle Rollover	4	0
Dettah Access Road	17-Oct-1998	Injury	Ran Off Road	1	0
Dettah Access Road	14-Dec-1998	Property Damage	Ran Off Road	0	0
Dettah Winter Access Road	6-Feb-1998	Property Damage	Right Angle	0	0
Inuvik-Tuktoyaktuk Winter Road	19-Jan-1998	Property Damage	Collision with Fixed Object	0	0
Inuvik-Tuktoyaktuk Winter Road	11-Mar-1998	Property Damage	Collision with Fixed Object	0	0
Inuvik-Tuktoyaktuk Winter Road	15-Mar-1998	Property Damage	Single Vehicle Rollover	0	0
Inuvik-Tuktoyaktuk Winter Road	20-Dec-1998	Injury	Single Vehicle Rollover	1	0
Kakisa Lake Access Road	12-Aug-1998	Property Damage	Sideswipe - Opposite Direction	0	0
Prelude East Access Road	9-Nov-1998	Property Damage	Sideswipe - Opposite Direction	0	0
Rae Access Road	26-Feb-1998	Property Damage	Other Multi-Vehicle Collision	0	0
Rae Access Road	8-Nov-1998	Property Damage	Single Vehicle Rollover	0	0
Rae Lakes Winter Access Road	17-Feb-1998	Property Damage	Single Vehicle Rollover	0	0
Rae Lakes Winter Access Road	16-Mar-1998	Injury	Head-on	1	0
Trout Lake Winter Access Road	23-Jan-1998	Property Damage	Other Multi-Vehicle Collision	0	0
Vee Lake Access Road	2-Mar-1998	Injury	Sideswipe - Opposite Direction	2	0

Summary	Property	Personal				
Access and	Damage	Injury	Fatal	Total	Persons	Persons
Winter Roads	Collisions	Collisions	Collisions	Collisions	Injured	Killed
	11	7	0	18	11	0
Summary	Property	Personal				
All NWT	Damage	Injury	Fatal	Total	Persons	Persons
Highways	Collisions	Collisions	Collisions	Collisions	Injured	Killed
	71	57	2	130	88	2





Page

Appendix

Contents:

Section A1	Northwest Territories Motor Vehicle Accident (MVA) Report Form	72
A2	Northwest Territories MVA Report Form Template	73
A3	Brief Description of Fatal Collisions	74

Appendix A2 – MVA Report Form Template

					R.C.M.P. DETACHMENT	<u> </u>
1	Northwest Territories PAGE or	1. FATAL 2. INJURY DATE OF ACCIDENT	3. PROPERTY DAMAGE TIME (USE 2400 HRS.)	8. OTHER NO. OF NUM	EER NUMBER	0
2		CITY, TOWN, VIL	NRS. N	IN. O (Give County/Mun Dist, Special Area, Ind	0 0 III	0
, 0		2. NEAR STREET 1	1. NA 2. PROV. PRM		ROAD JURISDICTION	0
		STREET 2	1. PROVINCIAL SPECIAL ARI 4. MUNICIPAL CITY, TOWN STREET, HIGH	Y MANTANED A, LD, ROADS INCORPERATED 2R VILLAGE AVY, TOVIN, ETC.	5. LOCAL ROAD AUTHORITY (M.D. OR COUNTY) 6. PRIVATE PROPERTY 8. OTHER (SPECIFY) 9. UNINOVIN	27
۵		W OF				a 1
						29
5	ROAD SURFACE CONDITION	UNUSUAL ROV CONDITION			N STREET LISHTING	0
0	1. NA 1. NA 1. NA 2. UDOVIDED, ONE-WAY 2. ASPYALT 2. DRY 2. ASPYALT 2. DRY 3. UADOVIDED, ONE-WAY 3. CONCRITE 3. WET 4. DVDDD WHT 4. CRAREL 4. LDOSE SAND, DIRT	1. NA 2. UNDER CONST. 3. UNDER REPAIRS 4. HOLES, RUTS, DUMPS	1. NA 2. CLEAR 3. RAINING 5 4. CLOUDY	1. NA 2. DAYLIGHT 3. DAWN 4. DUSK	1. NA 2. NONE 3. PRESENT - ON 4. PRESENT - OFF	0
÷	RESTANAMOLAWING MARKER 5. DRYT OR GRAVEL S. DIVIDED 8. OTHER 5. SINOVIC) 6. RAMP 9. LINNOVIN 6. FREGRICUL 7. COLLECTOR LANC 8. OTHER 8. OTHER 8. OTHER 9. LINNOVIN 8. OTHER 9. IDINOVIN 9. LINNOVIN 9. LINNOVIN	5. DEFECTIVE SHOLLDE 6. CHANGING ROAD WIE 7. SLIPPERY 8. OTHER 9. UNKNOWN	1RS 5. SNOWING 21TH 6. SLEET, HAL, FREEZ 7. STROM WIND 8. DUST 11. FOG, SMOG, SMOR 98. DUST	5. DARINES NG RAIN 8. OTHER 9. UNINOVIN E	5. LIGHTFAL 8. OTHER 9. UNINOWN	31
7	OBJECT 1 MOTOR VENICLE D. PEDESTRUM VENICLE 4. FILLE VENICLE 4. FILLE	5. ANIMAL 8. OTHER	93. UNINDWN 1. MOTOR VEHICLE 2. VEHICLE	OBJECT 2 3. PEDESTRIAN 4. FUND OBJECT	5. ANIMAL 8. OTHER	10 32
0	DRIVER LICENCE NO. QLASS	2. UNINDWN PROVJSTATE NWT	DRIVER LICENCE NO.		CLASS PROVISTATE	0
6.1	LAST NAME DRIVER 1 FIRST NAME NUMBER AND STREET	INTIAL	LAST NAME DRIVER 2 NUMBER AND STREET	FIRST NAME	INTIAL	0 ~
	CITY PROV.	POSTAL CODE	CITY	PROV.	POSTALCODE	กเ
0	DATE OF YR. MO. DAY SEX PHONE ND.	DRIVER'S OCCUPATION	DATE OF BIRTH	DAY SEX PHONE NO.	DRIVER'S OCCUPATION	
0	SERIAL OF VINNUMBER	INTELBASE OR G.V.W.	VLATE NU. TI	NWT R. & VEHICLE MAKE	WHEELBASE OR G.V.W.	2
a	LAST NAME OWNER 1 FIRST NAME	NTIAL	LAST NAME OWNER 2	FRST NAME	INTIAL	0
12	INMER AND STREET SALIVE AS ABO	VE-	NUMBER AND STREET	SAME AS AB	OVE	0
13		POSTAL COME	INSURANCE/TINCIAL RESPONSIBILITY	PROT.	Patric case	0.1
	1 NON OR POLICY NO. COMPANY ADDRESS	EXPRY DATE	1 NON COMPANY ADDRESS	OR POLICY NO.	EXFRY DATE	0
14	1 DAMAGE YES NO YES NO DRIVER 11 DRIVER STCHER BRIVER 11 BRIVER 11 BRIVER BRIVER 10 10 BRIVER 10 BRIVER 10 <td< th=""><th>NCE NOS.</th><th>1. DAMAGE STICKER 1 DIRECT ODOMETER READING DIRECT (Barrie</th><th>YES ND DRIVER</th><th>ORVERS</th><th>** 8 </th></td<>	NCE NOS.	1. DAMAGE STICKER 1 DIRECT ODOMETER READING DIRECT (Barrie	YES ND DRIVER	ORVERS	** 8
15	DAMAGE SEVERITY DEFORE turn.) E W 1.0 Initiality 3. None COCLINATES V Approx 2. Functional 4. Other THIS VEHICLE 0 F	(DT street) 2	DAMAGE SEVERITY 1. Disabling 3. None 2. Functional 4. Other	TOTAL OCCUPANTS THES VEHICLE	(Or atset) 2	
	NAME AND ACCREESES OF INCREMENT WITHESSES	DIAGRAM - SCENE OF ACCIDENT	VISITED YES		MAGE TO PROPERY OTHER AN MOTOR VEHICLES	
						0
						" 0
						8
						46
						47
A	16 17 18 19 20 21 22 Z	3 24	NAMES - ADDRESSES	IF DECEASED ALSO INCLUDE DATE & TIME OF	DEATH	48
Ē						_
Ņ						
						_
SIGN HERE	CIFICERS RANK AND NAME	SHET	DWEJON	REVIEW OFFICER	DATE REVIEWED	=
	POLICE COMMENTS		PROPO	SED POLICE ACTION		_
						1

	1	ROAD CLASS 1. NA 2. Frankry/Primary Hay. 3. Advantal BL/Bace Rd. 4. Residential SL/Local-Datrict Rd.	5. Lanes 6. Service 8. Other 9. Urknow	Rds.		MOVEABLE OF	e ects			COLLISION WITH	H FIXED CBJECT	EVENT Type	First Event	22 D
	2	ACCOUNT LOCATION 1. NA 2. Non-Intersection 3. Intersection-Related 4. In Intersection Related 5. AllNet Comparison Devices 6. Advance Comparison Devices 6. Advance Comparison Devices	7. AtNear 10. AtNear 11. AtNear 12. AtNear 13. Ott Hn 96. Other 99. University	Service Road r Access to Field r Crossover-Divided Hwy. r R.R. Xing y.		2. Other motor 3. Other vehicl 4. Cyclat 5. Pedestrian 6. Railway Trai 7. Animal-dom 10. Animal-dom	n iticie n at tic			 Pole (Breaks Pole (Rigid) Post, Sign, P Trees Trees Brush, Hedg Curb Restraining I 	oonyy) Yarking Master na Damiar		● 08J	20 0
3 []	3	SPECIAL FACILITY 1. NA 2. Traffic Interchange-Through Hay. 3. Interchange-Esti Ramp 4. Interchange-Estimics Ramp 5. Traffic Circle	6. Bridgel 7. Turnel 10. Parkin 98. Other 99. Uhimo	Dverpass Underpass g Lot wn		NON-COLLISIC 52. FineExplos 53. Submersio 54. Rollover	v EVENT	s		32. Crash Cushi 33. Fence 34. Cutvert 35. Bridge Supp 36. Rock Face 37. Snow Bankt 40. Dtch	on Delt	SECOND EVENT	08.1 2	27
	-	TRAFFIC CONTROL 1. No control present 2. Traffic Formula	10. School Bus	17. Figma	n	55. Load shifts 98. Other Even 99. Unknown	(specify]			LOCATION OF FIRST EVENT	2. On Rd. 3. Of Rd. 9. Unknown		28
	4	2. Trantic graph Trantic graph fields 3. Factorial pro- 5. School Xing-Baking light 5. School Xing-school guard/partel 7. School Xing-school guard/partel	11. PRC Adver 12. Stop sign 13. Yald sign 14. Merge sign 15. Waning ladvisory light 16. Police control	20. No pair 21. R.R. XI 22. R.R. XI 23. R.R. XI 24. R.R. XI 26. Other 29. Unknow	ing zone ng-advisory signs/cross ng-fashing lights ng-gales or walchman n	buck		PRE-ACCIDENT 1. N/A 2. Going Ahead 3. Turning Righ 4. Turning Left	FVEHICLE MANCEUVRE		 Parked ilegally Avoiding object in Rd. Avoiding Annual in Rd. Avoiding PacL in Pd. 		081 1	29
5	5	TRAFFIC CONTROL CONDITION 1. NA 2. No controls 3. Traffic control functioning 4. Traffic control-missing/sandalized	5. Traffic c 8. Other 9. Urknow	ontrol present-not effective				5. Making U Tu 6. Starting from 7. Entering Part 10. Starting in t 11. Starting on 12. Stopped in 1 13. Parked lega	m parked position ked position artitic atopping traffic kly		20. Changing larens 22. Overstellung 23. Backing 23. Backing 24. Sabding or Swenving 56. Other 99. Unknown		08J 2	30
<u>u</u>	5	RCADWAY SPEED (posted) Code posted speed level in effect at location	PEDESTRIAN ACTI 1. NA 2. Crossing Inter. W 3. Crossing Inter. W 4. Crossing Inter. N 5. Crossing Inter. D 6. Crossing Inter. D	ON Ith R-O-W Valk Is R-O-W Valk Isotrol Isotrol Isotroly	7. Cros 10. Via 11. Via 12. Em a por 13. Em	aing Mid-Block/Hwy. Iking on Rd. Againat Traffi Iking on Rd. With Traffic arging in front or behind rived object arging in front or behind wing object		14. Ru 15. Ga 16. Ga 17. Pu 20. Wu 21. Pb	nning into Rd. Itting on/off school bus Itting on/off a vehicle shing/Working on vehicle soling on Hay. syling on Hay.		22. Lying on Hay. 23. Standing on Hay. 24. On Sidewalk/Shoulder Bouleward 38. Other 39. Unknown		PED.	31 3 1
7	7	ROADWAY ALIGNMENT 1. NIA 2. Straight f Lavel 3. Straight with Grade 4. Straight at Hiltrest 5. Carry & Level	6. Curve with Grade 7. Curve at Hiltmat 8. Other 9. Unknown		OBJECT IDENTI 1. NIA 2. Auto 3. Auto-Limo 4. Pickup Trucke	FICATION		10. Motorcycles 11. Mopeds 12. Power Bicyc 13. Bicycles	i Cien	17. Other Buses 20. Motor Home 21. Othey. Vehi 22. Snownobile	25. Pedestrian 27. Animal-domestic de 30. Animal-wild 31. Fluid oblact		08J. 1	32
	8 050.	. HAZARDOUS LOADS	7. Compressed Gas 10. Flam. Comp. G	163	5. Panel/Vana un 6. Trucks-8000 I 7. Tr. Tractor	nder 8000 km. ba. & over		14. Transt Bus 15. Intercity Bus 16. School Bus		23. Const. Equip 24. Farm Equip. 25. Train	 32. Play Vehicle 58. Orber 59. Unknown 		081 2	22
0	9 05J.	2. Explosives 3. Flam. Combust. Liquids 4. Flam. Solids 5. Oxidizing Mat. 6. Containe Mat.	11. Poisona 12. Radioschive Ma 96. Other (specify) 99. Unknown	L			SPECIA 1. NIA 2. Fam	- None 1 use	6. Police 7. Fire		13. Ambulance 14. Driver Training		081	м 0 1
°	2	1040 5811 FD	NORTHWES	TERRIT(DRIES		3. Corr 4. Taxi 5. Scho	al	10. Weeker 11. Governmer 12. Miltery		98. Other (specify) 99. Urknown		08J. 2	35
	05U. 1	1. (in accident) 1. NJA 2. Spited 3. Not Spited	MOTOR VE	HICLE BRAN	ICH	ATTACHMENT		5. UBIR 6. Holi	ty Trailer day Trailer		14. Mobile Home with plot vehicle assistance		OBJ. 1	36
	08J. 2	L 9. Unknown				1. NIA - None 2. Camper 3. Farm Equip. 4. Boat Trailer		7. Tow 10. Lo 11. Sin 12. Do 13. Per	ved Motor Vehicle wiHigh Boy rgle Trailer (semi) soble Trailer (semi) troleum or other tanker		 Mobile Home without plot vehicle assistance Wide load (over 12) Other toward object Unknown 		08J. 2	37
12	12 08J. 1	PONT OF INITIAL MPACT	11 12	2	HUMAN CONDIT	non							08J. 1	38
	13 05J. 2	9. Unknown	•	ā	 Piparanty R. Had been drin Ability Impaire Ability Impaire 	sking id, Alaphol id, Druga		App 6. Med 8. Oth 9. Not	erently fell asleep dical/Physical Defect er known				08J. 2	³⁹ (1
14	14 05J.	OCCUPANT PROTECTION 1. N/A 2. Not Equipped		HUMAN ACTION 20. NA 21. Backing Unsafet	,	30. O 31. fr	V Nrong S le ed to lear	de of Rd. ve Curb Safely		40. Ped 41. Pas 42. Ign	lestrian error/violation aud Vehicle Stopped for Ped. oved Traffic Control Device		08J. 1	40
		3. Petric Bets 4. Petric Bets & Torso Bets 5. Ar Bags 6. Proper Ciching 7. Halenata 8. Other (specify)		 Followed too Clo 23. R. Turn from We 24. R. Turn into We 25. L. Turn from We 26. L. Turn into Weo 27. L. Turn across P. 	sely ng tane ng Lane ng Lane g Lane sh	32 fi 33 in 34 fi 35 fi 36 fi 37 fi	le ed to Cha or oper Pa le ed to Yiel le ed to Yiel le ed to Yiel le ed to Yiel	inge Lanes Safely ssing Id R-O-W. Rules of Rd. Id R-O-W, at stop sign Id R-O-W, at yield sign Id R-O-W to ped.		43. Fail 44. Uns 45. Los 46. Ran 98. Ob 99. Unk	ed to Signal ain Spend I Control off Road ef maan		08J. 2	** 0
15	15 05J. 2					VEHIC	a lar fac	TORS		Defective			08J. 1	42
		1 Driver 2 thru 7 Passengers 8 Ridrig Hanging Dn Outside		1. NIA 2. None app 3. Minimal 4. Minor 5. Minimal	sarant	51. N 52. B 53. B 54. D	a ne Cont n ne Train k as Defe le schve He	rols/ Failed ctive ad Lights	55. Suspension 57. Seering Fa 60. The Failure Insdequate 61. Defective Tr	Failed led	 Heart Statistical Control of Co		08J. 2	4
		SAVETY EQUIP. USED	I - Partial I - Other	6. Futul 7. Net data 8. Other (sp 9. Unknown	mined secily)	EN/18 71. N 72. A	X NMENTA	n	76. Obstruction Not Lighted	Debris- Signed	83. Rd. Wors-travel polish 84. Shoulder drop-off 85. Sippery when wet	ed aurhace	08J. 1	" 0 1
		EJECTED FROM VEHICLE		TRANSPOR	TED TO PITAL	73. G 74. G 75. O Li	n e-antrica n e-bunigt at truction/ N techSign	al light 11 Debrie- ed	77. Weather 80. Maintenanc 81. Rd. Constr. 82. Rd rute, h	a on Rd. ction oles, bumps	85. Oly sufficient sight distan 87. Insufficient sight distan 98. Ober 99. Unknown	cas	08J. 2	45
5	•	1 - Yes 2 - No 3 - Partial	8 - Other 9 - Unknown	1. 2	nes 9. Unio No	5045					PRMARY CAUSE OF ACC FROM BOX 35 - 45	IDENTS		46
DCATION-CIALIEC	Code Obj.		SEX 1. Male 2. Female 9. Unknown		TREATED FOR INJURY, 1. Yes 2. No						SPECIAL	STUDES		47
	16	17 18 19	AGE 20 21	22 23	9. Unknown 24									48

The following is a brief description of the five fatal traffic collisions that took place in the Northwest Territories in 1998, resulting in five fatalities.

RCMP Detachment	Date	Description
Pangnirtung	23-Jan	Snowmobile collided head-on with pickup truck at uncontrolled intersection. The snowmobile driver, who had been drinking and was not wearing a helmet, sustained fatal injuries. The driver of the pickup truck suffered moderate injuries.
Nanisivik	15-Feb	Highway worker struck by snow plow on Nanisivik-Arctic Bay Access Road. The highway worker died at the scene. Alcohol was not involved.
Hall Beach	20-Jul	Young pedestrian struck by pickup truck. Alcohol not involved.
Hay River	19-Sept	Pickup truck involved in single vehicle rollover on Km 28 of Highway #2. The driver, who had been drinking and was unrestrained, was totally ejected and was pronounced dead at the scene. The passenger, who was restrained, remained in the vehicle and sustained serious injuries.
Rae	12-Oct	Alcohol-involved driver of sport utility vehicle struck two vehicles parked on the side of Highway #3 near Km 145. The collision occurred in darkness and both parked vehicles were poorly lit. The driver suffered serious injuries while the right front passenger died instantly. Neither driver nor passenger were restrained.