BW (MPI)

BW (MPI) 1-1

Preamble: In accordance with the scope of its intervention, Bike Winnipeg ("BW") wants to determine the trend in collisions that result in bodily injuries to cyclists, in comparison to other victim types.

Please complete the form for collisions from 2000-2014 YTD by victim type attached as Schedule "A".

RESPONSE:

Refer to CAC (MPI) 1-201.

BW (MPI) 1-2 Reference: Volume 1, Pre-filed Testimony, p.3

Preamble: In accordance with the scope of its intervention, BW requires information regarding MPI's understanding of the future development of road transportation in Manitoba and its inherent risk for collisions and injuries.

a) Please provide the total number of registered vehicles in Manitoba by general class, since the inception of no-fault in 1994.

b) Please provide any estimates of total traffic volume in Winnipeg.

c) Please provide any and all analysis, reports or studies regarding the change in risk for property loss and/or bodily injuries linked to the volume of traffic in Winnipeg.

RESPONSE:

a) Refer to the attachment.

b) The Corporation has not conducted such analysis; however, the City of Winnipeg has posted 2012 traffic flow maps on their website. A link to this data is provided for reference:

http://winnipeg.ca/publicworks/PDF/Transportation/Traffic-Flow-Map-2012.pdf.

c) No such report or analysis is currently available.

Registration Class	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	**2012**
Vehicle Class (Non-Commercial)																			
Passenger	555,912	536,565	491,518	492,729	488,974	496,295	502,987	511,300	469,420	476,834	483,274	487,158	491,363	499,078	509,856	516,185	521,894	529,406	**539,384**
Antique	96	55	32	37	54	58	68	73	83	79	71	74	80	82	84	77	95	103	**131**
Motorcycle/Moped	9,932	9,542	4,431	4,435	5,128	4,893	5,217	5,694	6,677	7,210	7,339	7,605	8,357	9,143	10,059	10,413	10,732	11,229	**12,329**
Truck	131,926	125,232	105,914	110,381	113,777	116,054	115,740	116,702	112,549	113,302	114,818	115,755	117,278	120,217	123,766	127,154	133,057	139,530	**145,405**
Farm Truck	63,367	65,526	51,220	51,041	48,725	47,912	46,726	46,263	48,971	48,370	47,650	46,512	45,083	44,477	44,073	43,746	43,517	42,942	**43,384**
Snow Vehicle	76	77	28	29	26	27	25	22	59	55	52	49	48	49	47	49	50	48	**46**
Trailer	94,005	107,375	68,930	70,535	69,491	72,175	73,334	76,633	85,986	88,375	92,396	97,684	103,840	111,630	120,891	127,080	134,358	143,249	**154,603**
Tractor (non-farm)	194	197	75	85	84	78	73	80	144	140	131	122	125	120	117	122	123	120	**117**
Subtotal	748,450	756,286	722,148	729,272	726,259	737,492	744,170	756,767	723,889	734,365	745,731	754,959	766,174	784,796	808,892	824,824	843,825	866,628	**895,400**
Commercial Vehicle Class																			
Truck	28,904	26,424	15,020	15,588	16,002	16,249	16,196	16,372	22,798	23,130	23,520	23,833	24,305	24,987	26,123	26,851	27,690	28,928	**30,391**
PSV – Truck	5,253	5,091	2,544	2,964	3,289	3,646	3,776	5,686	6,907	7,366	8,313	8,988	9,526	10,115	9,863	9,818	9,849	10,244	**10,934**
Dealer/Repairer	5,853	6,141	3,634	3,977	4,142	4,538	4,814	5,015	7,238	6,987	6,644	6,561	6,512	6,511	6,546	6,347	6,229	6,185	**6,178**
Taxi/Livery	840	866	843	1,077	803	763	833	840	747	735	756	764	772	769	778	834	854	871	**885**
PSV-Bus	161	148	23	20	19	64	71	71	139	135	132	135	134	143	146	155	161	150	**143**
Trailers	24,936	26,920	27,893	29,383	25,628	29,062	31,134	34,017	32,273	30,022	33,073	33,453	37,226	38,183	42,304	41,846	45,249	45,221	**49,389**
PSV-Trailers	20	18	12	14	23	26	30	35	44	57	57	54	58	56	51	57	57	57	**71**
Subtotal	65,967	65,608	49,969	53,023	49,906	54,348	56,854	62,036	70,146	68,432	72,495	73,788	78,533	80,764	85,811	85,909	90,089	91,655	**97,991**
Total Registrations																			
Total Registrations	814,417	821,894	772,117	782,295	776,165	791,840	801,024	818,803	794,035	802,797	818,226	828,747	844,707	865,560	894,703	910,732	933,914	958,283	**993,390**

NOTE:

1994 and 1995 extracted from 1997 Traffic Collision Statistics Report

1998 to 2001 extracted from 2001 Traffic Collision Statistics Report

2002 to 2012 extracted from 2012 Traffic Collision Statistics Report

BW (MPI) 1-3 Reference: Volume 1, Pre-filed Testimony, p.19

Preamble: In accordance with its scope of intervention, BW is concerned with the extent and effectiveness of MPI's Road safety initiatives.

Further, in his pre-filed testimony, Mr. Guimond proposed to move from discussing "road safety" to discussing "a comprehensive loss prevention strategy".(p.19)

a) Please advise of the strengths and benefits of this proposed move from "road safety" to "a comprehensive loss prevention strategy"?

b) Please advise as to how it would change the discussion about road safety.

c) Please advise what sort of change in primary loss prevention initiatives would be likely to result from an MPI comprehensive loss prevention strategy?

d) Please advise if cost reduction is the only criterion for achieving better results in road safety?

e) Please advise if in addition to cost reduction MPI also has a legal responsibility and to effectively promote changes that will reduce the number of deaths and serious injuries on Manitoba roads? If so, how does MPI meet these responsibilities and obligations?

RESPONSE:

a) Refer to CAC (MPI) 1-186.

b) Refer to CAC (MPI) 1-186.

c) Details of the comprehensive loss prevention strategy are under consideration at this time and will be addressed in more detail with the 2016/17 GRA.

d) No.

e) The Corporation's legal responsibilities with respect to road safety are governed by legislation as addressed in Volume I Road Safety, section SM.3.1.

BW (MPI) 1-4 **Reference: Volume 1, Pre-filed Testimony, PowerPoint, p.32**

Preamble: MPI's Contribution to Manitoba's Economic Landscape" notes that $495.5 million for physical damages, 145.9 million for injury claims plus 26.3 million for Manitoba Health (total injury = $172.2 million (25.8% of total)

Please provide a detailed yearly break-out of the amounts provided for physical damage, injury claims and Manitoba Health from 1994 to 2014YTD.

RESPONSE:

The amounts incurred by the Corporation for physical damage claims, injury claims, and Manitoba Health payments are provided in detail in the Claims Incurred section of the 2015 Rate Application (Volume II). For example, CI.5, page 35 provides the ultimate claims incurred for Basic collision coverage by year from 2004/05 to 2013/14, while Claim Incurred (CI) Exhibit 5 provides a more detailed history on Basic collision payments and claims incurred from 1994/95 to 2013/14. There are similar exhibits for all other Basic coverages in the Claims Incurred section.

Section CI.8.2 of the 2015 Rate Application provides a five year history of the payments made by the Corporation to Manitoba Health.

BW (MPI) 1-5 Reference: Road Safety - SM.3, p.9

Preamble: MPI stated: "With respect to evaluation of road safety programs and campaigns, it remains very difficult to attribute specific road safety initiatives directly to reductions in claims and claims costs due to the complexity of road safety issues. Many confounding variables or factors ultimately influence collision frequency and severity. There is also the inability to measure collisions that "do not occur" as a result of successfully influencing road user behavior."

a) Is the change in collisions in Manitoba difficult to measure because the programs are too small to make a measureable difference?

b) Please advise what tests or other metrics have MPI's statistical analysts run to determine whether there is likely to have been an impact on road behaviour and collisions from any one of your programs?

c) Which methodologies, programs, analyses and/or metrics has MPI explored and/or considered that have been successfully used to track changes in road behaviour in other jurisdictions?

RESPONSE:

a) Changes in collision frequency and severity are not difficult to measure. What is difficult to measure, for the reasons stated in Volume I Road Safety, section SM.3.3, is the extent to which specific road safety programs and initiatives can be directly attributed to reductions in collisions, claims and claims costs.

b) Examples of the evaluation methods used to assess road safety program effectiveness are addressed in Volume I Road Safety, section SM.3.3. Copies of previous program summary reports were provided in last year's GRA. 2013 program summary reports for Road Watch and Distracted Driving were also filed as Attachments D and E to Volume I SM.3 Road Safety of this year's GRA.

c) Refer to response to (b).

BW (MPI) 1-6 Reference: Road Safety - SM.3, p.9

a) Please Identify and explain MPI programs and campaigns aimed to influence driver behaviour towards cyclists.

b) Please specify the particular documents, ads, press releases or other MPI data aimed at changing driver behaviour towards cyclists.

c) Please provide any research or examples of ads from other jurisdictions that directed ads aimed at drivers about their behaviour towards cyclists or other vulnerable road users which MPI has examined, considered or used in Manitoba.

RESPONSE:

a) Please refer to the following table:

Program / Campaign	Audience	
I-Cycle Safely	Young cyclists	Website and print-based materials and community-based Bike Rodeo Events targeted to pre-school and elementary school aged cyclists
Bike Safely	Older Youth and Adult Cyclists	Website and print-based materials and presentations targeted to older youth and adult recreational and commuter cyclists
Cycling Champion Training	Drivers and cyclists	In-class and practical on-road cycling safety skills offered free of charge and delivered by certified Can-Bike instructors in partnership with Bike Winnipeg
High School Driver Education Program	New teen drivers	Extensive information on cycling safety and sharing the road safely. Information updated in 2013 specific to motor vehicle

		and cyclists interactions
Provincial Driver's Handbook	All new drivers	Extensive information on cycling safety and sharing the road safely. Information updated in 2013 specific to motor vehicle and cyclists interactions
"Share the Road" campaign	Drivers and cyclists	Full-scale awareness campaign featuring news releases, printed and electronic materials, 60-second driver segment, and advertisements on Winnipeg Transit and radio stations (June 2013 and June 2014)
60 Second Driver: "Cars and cyclists"	Drivers and cyclists	Aired on CTV and available at www.mpi.mb.ca
Presentations to community groups	New / experienced drivers and cyclists	Examples include Smart Start Program and Newcomers Employment and Education Development Services (NEEDS)
Information booths at community events	Drivers and cyclists	• "Try our Cycling Challenge" spinning wheel for drivers and cyclists • Helmet fitting displays
Winnipeg Free Press Driving Tips	Drivers and cyclists	Traffic tips featured in the Winnipeg Free Press.
Brian Barkley Traffic Tips	Drivers and cyclists	Traffic tips on CJOB and Power 97

b) See response to (a).

c) The requested information from other jurisdictions is not readily available.

BW (MPI) 1-7 Reference: Road Safety - SM.3, p.10

Preamble: MPI stated: "The Corporation's practices are consistent with other public insurers including the insurance Corporation of British Columbia and Saskatchewan Government Insurance (SGI).

a) Is MPI aware of other public insurers in Canada who have successful road safety programs?

b) Please specify and demonstrate how MPI's practices are consistent with other public insurers.

c) Please file all statistically significant reports provided by other public insurers demonstrating the impact of their programs on driver behaviour.

RESPONSE:

a) The other public insurer in Canada is the SAAQ in Quebec and information on their road safety evaluation practices is not readily available.

b) The provided reference was in relation to methods used to assess the effectiveness of road safety programs and initiatives. To this end, the Corporation is aware that ICBC and SGI both evaluate the effectiveness of individual road safety programs by measuring factors such as reach to target audience, message recall, and self-reported influences in driving behaviour as a result of messaging received.

c) No such reports are provided from SGI. Information on ICBC road safety programs have been filed with the BC regulator and are; therefore, a matter of public record.

BW (MPI) 1-8 Reference: Volume 2, Expenses, Appendix 6, p.34

Preamble: Basic's Share - "Vulnerable Road User Education Strategies"

a) Please outline the plans, projects, outputs and outcome measures for this category of expenditures.

b) Please identify the intended target (driver, motorcycle driver, cyclist, pedestrian) for behavioural change for each strategy.

RESPONSE:

a) This category includes expenditures for program delivery, sponsorship support, advertising, and evaluation related to cycling, pedestrian, Mini-cartown and off-road vehicle safety. Program delivery includes funding for the Manitoba School Patrol program, Cycling Champion Training, and Mini-cartown. Sponsorship support includes costs of promotional items to relay relevant safety messages.

   Current ouputs and outcome measures to assess program effectiveness are addressed in Volume I Road Safety, section SM.3.3. It is anticipated that completion and implementation of the road safety research and analytical frameworks will provide additional evaluation outcomes that may be useful in assessing the effectiveness of road safety portfolios and programs.

b) The Manitoba School Patrol program targets pedestrians and drivers. Cycling Champion training targets both cyclists and motorists. Mini-cartown provides early introduction to road rules, pedestrian and cycling safety. Cycling advertising targets motorists and cyclists. Promotional items are aimed at making pedestrians and cyclists more visible to motorists.

BW (MPI) 1-9

Reference: Volume 2 – Claims Incurred
– Appendix D Statistics by Injury Type, p.1

Preamble: In accordance with its scope of intervention, BW is concerned about the number of injury claims and physical severity (ICD10) of injury of cyclists in comparison to other victim types who are external to a motor vehicle ("vulnerable road users").

Please provide the chart in Volume 2, Appendix D – Claims Incurred regarding PIPP Claims Statistics by Injury Type (ICD10) for number of claims, $ Incurred, and Severity ($) with clear distinction of victim type by vulnerable road users, for each year from 2010 to 2014YTD.

RESPONSE:

Refer to response to CAC (MPI) 1-198.

BW (MPI) 1-10 Reference: Traffic Collision Statistics Report 2012

Preamble: In accordance with its scope of intervention, BW is concerned about MPI's collection, analysis and reporting of contributing factors when the victim is a cyclist, and in comparison, other vulnerable road user.

a) Please refer to Table 9-7 of the 2012 Traffic Collision Statistics Report, titled "Historical Summary of Contributing Factors Recorded for Victims of Collisions". Please list the contributing factor and total victims by year, but with clear distinction of the victims by vulnerable road user type or unknown.

b) With reference to Table 9-9 of the 2012 Traffic Collision Statistics Report, titled "Summary of Speed, Distracted, and Impaired as Contributing Factors". Relying on MPI's data and information on hand, please create this table for involvement of cyclists in collisions, cyclists as fatal or injury victims, and driver involvement ratio for cycling collisions or cyclist victims.

RESPONSE:

a) Refer to attachments 1 to 4.

b) Refer to attachment.

Summary of Contributing Factors for BICYCLIST Victims (Killed and Injured, Combined) of Collisions: 2007 to 2012

Contributing Factor	2007 Total Victims	% of 2007 Total Victims	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	**2012 Total Victims**	**% of 2012 Total Victims**
Driver Action - Driving Properly and Human Condition - Apparently Normal	141	48.8%	116	48.9%	82	37.1%	131	49.1%	102	52.0%	50	69.4%
Driver Action - Driving properly	**12**	**4.2%**	**18**	**7.6%**	**18**	**8.1%**	**29**	**10.9%**	**11**	**5.6%**	**7**	**9.7%**
Any At-fault Driver Action	**87**	**30.1%**	**70**	**29.5%**	**59**	**26.7%**	**75**	**28.1%**	**66**	**33.7%**	**26**	**36.1%**
Following too closely	1	0.3%	1	0.4%	0	-	2	0.7%	0	-	**0**	-
Turning improperly	4	1.4%	6	2.5%	4	1.8%	4	1.5%	6	3.1%	**8**	**11.1%**
Passing improperly	0	-	1	0.4%	3	1.4%	0	-	1	0.5%	**2**	**2.8%**
Changing lanes improperly	3	1.0%	1	0.4%	2	0.9%	1	0.4%	1	0.5%	**0**	-
Fail to yield right-of-way	22	7.6%	14	5.9%	20	9.0%	14	5.2%	18	9.2%	**10**	**13.9%**
Disobey traffic control device/officer	15	5.2%	11	4.6%	2	0.9%	6	2.2%	7	3.6%	**0**	-
Drive wrong way on roadway	5	1.7%	5	2.1%	2	0.9%	7	2.6%	2	1.0%	**0**	-
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	0	-	0	-	**0**	-
Back unsafely	0	-	1	0.4%	3	1.4%	2	0.7%	0	-	**0**	-
Parking improperly	0	-	0	-	0	-	0	-	0	-	**0**	-
Lost control/Drive off road	1	0.3%	2	0.8%	0	-	4	1.5%	1	0.5%	**0**	-
Driverless vehicle ran out of control	0	-	0	-	0	-	0	-	0	-	**0**	-
Leave stop sign before safe to do so	8	2.8%	3	1.3%	1	0.5%	5	1.9%	2	1.0%	**1**	**1.4%**
Failed to signal	0	-	0	-	0	-	0	-	0	-	**0**	-
Take avoiding action	1	0.3%	1	0.4%	1	0.5%	2	0.7%	3	1.5%	**0**	-
Driver inexperience	5	1.7%	8	3.4%	4	1.8%	4	1.5%	2	1.0%	**0**	-
Pedestrian error/confusion	19	6.6%	12	5.1%	16	7.2%	19	7.1%	24	12.2%	**3**	**4.2%**
NET Speed	5	1.7%	4	1.7%	4	1.8%	5	1.9%	1	0.5%	**3**	**4.2%**
Exceeding speed limit	0	-	0	-	1	0.5%	0	-	0	-	**0**	-
Driving too fast for conditions	0	-	4	1.7%	2	0.9%	2	0.7%	0	-	**2**	**2.8%**
Unsafe operating speed (Too fast or too slow)	5	1.7%	0	-	1	0.5%	3	1.1%	1	0.5%	**1**	**1.4%**
NET Distracted driving	31	10.7%	25	10.5%	27	12.2%	28	10.5%	14	7.1%	**7**	**9.7%**
Careless Driving	8	2.8%	9	3.8%	5	2.3%	9	3.4%	7	3.6%	**6**	**8.3%**
Distraction/Inattention	26	9.0%	17	7.2%	22	10.0%	21	7.9%	7	3.6%	**1**	**1.4%**
Human Condition - Apparently Normal	**75**	**26.0%**	**67**	**28.3%**	**55**	**24.9%**	**63**	**23.6%**	**40**	**20.4%**	**13**	**18.1%**
Any At-fault Human Condition	**34**	**11.8%**	**22**	**9.3%**	**27**	**12.2%**	**25**	**9.4%**	**7**	**3.6%**	**2**	**2.8%**
Loss of consciousness/Blackout prior to collision	1	0.3%	0	-	0	-	0	-	0	-	**0**	-
Extreme fatigue/Fell asleep	0	-	0	-	0	-	0	-	0	-	**0**	-
Defective eyesight	0	-	1	0.4%	0	-	0	-	0	-	**0**	-
Defective hearing	0	-	2	0.8%	0	-	1	0.4%	0	-	**0**	-
Medical disability	0	-	0	-	0	-	0	-	0	-	**0**	-
Physical disability	1	0.3%	0	-	1	0.5%	0	-	0	-	**0**	-
Mental disability	0	-	1	0.4%	0	-	2	0.7%	0	-	**0**	-
Mental confusion/Inability to remember	1	0.3%	0	-	0	-	0	-	0	-	**0**	-
Sudden illness	0	-	0	-	0	-	0	-	0	-	**0**	-
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	**0**	-
NET Impaired	5	1.7%	2	0.8%	4	1.8%	2	0.7%	0	-	**1**	**1.4%**
Ability impaired alcohol	1	0.3%	2	0.8%	2	0.9%	1	0.4%	0	-	**1**	**1.4%**
Ability impaired drugs	0	-	0	-	0	-	0	-	0	-	**0**	-
Had been drinking/Suspected alcohol use	4	1.4%	0	-	2	0.9%	1	0.4%	0	-	**0**	-

Summary of Contributing Factors for BICYCLIST Victims (Killed and Injured, Combined) of Collisions: 2007 to 2012

Contributing Factor	2007 Total Victims	% of 2007 Total Victims	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	**2012 Total Victims**	**% of 2012 Total Victims**
No Apparent (Vehicle) Defect	**171**	**59.2%**	**137**	**57.8%**	**104**	**47.1%**	**146**	**54.7%**	**116**	**59.2%**	**54**	**75.0%**
Any At-fault Vehicle Defect	**2**	**0.7%**	**3**	**1.3%**	**0**	**-**	**2**	**0.7%**	**1**	**0.5%**	**0**	**-**
Defective brakes	1	0.3%	2	0.8%	0	-	1	0.4%	1	0.5%	**0**	**-**
Defective steering	0	-	1	0.4%	0	-	0	-	0	-	**0**	**-**
Defective headlights	1	0.3%	0	-	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective suspension/wheels	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective tires	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Tow hitch/yoke defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	0	-	0	-	0	-	1	0.4%	0	-	**0**	**-**
Fire	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Jack-knife/trailer swing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hydroplaning tires	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Any At-fault Environmental Condition	**14**	**4.8%**	**8**	**3.4%**	**8**	**3.6%**	**7**	**2.6%**	**2**	**1.0%**	**5**	**6.9%**
Animal action - Wild	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Animal action - Domestic	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Slippery road surface	0	-	2	0.8%	0	-	0	-	1	0.5%	**0**	**-**
Snow drift	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Obstruction/debris on roadway	1	0.3%	1	0.4%	0	-	0	-	0	-	**0**	**-**
View obstructed/limited	6	2.1%	1	0.4%	5	2.3%	5	1.9%	1	0.5%	**2**	**2.8%**
Glare/reflection	6	2.1%	1	0.4%	1	0.5%	0	-	0	-	**0**	**-**
Construction zone	1	0.3%	0	-	0	-	0	-	0	-	**0**	**-**
Defective driving surface	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Shoulders defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Lane markings inadequate	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective/inoperative traffic control device	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Weather	0	-	0	-	0	-	2	0.7%	0	-	**1**	**1.4%**
Pedestrian corridor in use	0	-	1	0.4%	3	1.4%	0	-	0	-	**1**	**1.4%**
Uninvolved vehicle	1	0.3%	0	-	0	-	0	-	0	-	**0**	**-**
Uninvolved pedestrian	0	-	2	0.8%	0	-	0	-	0	-	**1**	**1.4%**
Presence of prior accident	0	-	0	-	0	-	0	-	0	-	**0**	**-**
No Contributing Factor(s) Identified	**173**	**59.9%**	**131**	**55.3%**	**140**	**63.3%**	**144**	**53.9%**	**121**	**61.7%**	**27**	**37.5%**
Not Applicable/Not Stated	**0**	**-**	**0**	**-**	**1**	**0.5%**	**0**	**-**	**2**	**1.0%**	**0**	**-**
Total	**289**	**100%**	**237**	**100%**	**221**	**100%**	**267**	**100%**	**196**	**100%**	**72**	**100%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each year will add to more than the total victims for that year.

Summary of Contributing Factors for PEDESTRIAN Victims (Killed and Injured, Combined) of Collisions: 2007 to 2012

Contributing Factor	2007 Total Victims	% of 2007 Total Victims	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	**2012 Total Victims**	**% of 2012 Total Victims**
Driver Action - Driving Properly and Human Condition - Apparently Normal	146	32.8%	134	30.6%	105	28.5%	144	36.1%	101	29.7%	**45**	**25.6%**
Driver Action - Driving properly	**15**	**3.4%**	**21**	**4.8%**	**19**	**5.2%**	**19**	**4.8%**	**10**	**2.9%**	**9**	**5.1%**
Any At-fault Driver Action	**150**	**33.7%**	**147**	**33.6%**	**110**	**29.9%**	**116**	**29.1%**	**76**	**22.4%**	**69**	**39.2%**
Following too closely	0	-	0	-	1	0.3%	0	-	0	-	**0**	**-**
Turning improperly	5	1.1%	3	0.7%	5	1.4%	7	1.8%	3	0.9%	**10**	**5.7%**
Passing improperly	3	0.7%	0	-	0	-	2	0.5%	0	-	**0**	**-**
Changing lanes improperly	1	0.2%	0	-	0	-	0	-	0	-	**1**	**0.6%**
Fail to yield right-of-way	32	7.2%	35	8.0%	17	4.6%	29	7.3%	24	7.1%	**22**	**12.5%**
Disobey traffic control device/officer	4	0.9%	10	2.3%	2	0.5%	5	1.3%	2	0.6%	**6**	**3.4%**
Drive wrong way on roadway	1	0.2%	0	-	0	-	0	-	1	0.3%	**0**	**-**
Passing a vehicle at pedestrian X-walk	1	0.2%	3	0.7%	3	0.8%	1	0.3%	1	0.3%	**2**	**1.1%**
Back unsafely	5	1.1%	2	0.5%	3	0.8%	2	0.5%	1	0.3%	**8**	**4.5%**
Parking improperly	1	0.2%	2	0.5%	0	-	0	-	0	-	**0**	**-**
Lost control/Drive off road	3	0.7%	1	0.2%	1	0.3%	0	-	0	-	**2**	**1.1%**
Driverless vehicle ran out of control	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Leave stop sign before safe to do so	2	0.4%	4	0.9%	1	0.3%	2	0.5%	1	0.3%	**2**	**1.1%**
Failed to signal	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Take avoiding action	6	1.3%	4	0.9%	2	0.5%	3	0.8%	1	0.3%	**5**	**2.8%**
Driver inexperience	2	0.4%	4	0.9%	3	0.8%	2	0.5%	1	0.3%	**0**	**-**
Pedestrian error/confusion	82	18.4%	71	16.2%	66	17.9%	55	13.8%	35	10.3%	**17**	**9.7%**
NET Speed	8	1.8%	9	2.1%	4	1.1%	7	1.8%	1	0.3%	**2**	**1.1%**
Exceeding speed limit	0	-	2	0.5%	1	0.3%	2	0.5%	0	-	**0**	**-**
Driving too fast for conditions	7	1.6%	7	1.6%	2	0.5%	7	1.8%	1	0.3%	**2**	**1.1%**
Unsafe operating speed (Too fast or too slow)	1	0.2%	0	-	2	0.5%	0	-	0	-	**0**	**-**
NET Distracted driving	56	12.6%	49	11.2%	33	9.0%	52	13.0%	30	8.8%	**25**	**14.2%**
Careless Driving	5	1.1%	12	2.7%	7	1.9%	6	1.5%	8	2.4%	**22**	**12.5%**
Distraction/Inattention	51	11.5%	38	8.7%	26	7.1%	47	11.8%	24	7.1%	**5**	**2.8%**
Human Condition - Apparently Normal	**106**	**23.8%**	**117**	**26.7%**	**104**	**28.3%**	**98**	**24.6%**	**57**	**16.8%**	**61**	**34.7%**
Any At-fault Human Condition	**88**	**19.8%**	**75**	**17.1%**	**55**	**14.9%**	**70**	**17.5%**	**41**	**12.1%**	**8**	**4.5%**
Loss of consciousness/Blackout prior to collision	2	0.4%	2	0.5%	2	0.5%	0	-	0	-	**0**	**-**
Extreme fatigue/Fell asleep	0	-	1	0.2%	0	-	0	-	1	0.3%	**0**	**-**
Defective eyesight	2	0.4%	0	-	1	0.3%	0	-	0	-	**0**	**-**
Defective hearing	0	-	1	0.2%	0	-	0	-	1	0.3%	**0**	**-**
Medical disability	2	0.4%	0	-	0	-	0	-	0	-	**0**	**-**
Physical disability	1	0.2%	0	-	2	0.5%	1	0.3%	0	-	**0**	**-**
Mental disability	2	0.4%	8	1.8%	0	-	1	0.3%	4	1.2%	**0**	**-**
Mental confusion/Inability to remember	1	0.2%	1	0.2%	1	0.3%	1	0.3%	1	0.3%	**0**	**-**
Sudden illness	2	0.4%	0	-	0	-	0	-	0	-	**0**	**-**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
NET Impaired	30	6.7%	28	6.4%	25	6.8%	22	5.5%	14	4.1%	**3**	**1.7%**
Ability impaired alcohol	18	4.0%	17	3.9%	11	3.0%	14	3.5%	10	2.9%	**2**	**1.1%**
Ability impaired drugs	1	0.2%	0	-	0	-	1	0.3%	0	-	**0**	**-**
Had been drinking/Suspected alcohol use	13	2.9%	11	2.5%	14	3.8%	8	2.0%	4	1.2%	**1**	**0.6%**

Summary of Contributing Factors for PEDESTRIAN Victims (Killed and Injured, Combined) of Collisions: 2007 to 2012

Contributing Factor	2007 Total Victims	% of 2007 Total Victims	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	**2012 Total Victims**	**% of 2012 Total Victims**
No Apparent (Vehicle) Defect	**221**	**49.7%**	**212**	**48.4%**	**148**	**40.2%**	**189**	**47.4%**	**134**	**39.4%**	**60**	**34.1%**
Any At-fault Vehicle Defect	**2**	**0.4%**	**0**	**-**	**2**	**0.5%**	**2**	**0.5%**	**0**	**-**	**0**	**-**
Defective brakes	0	-	0	-	0	-	1	0.3%	0	-	**0**	**-**
Defective steering	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective headlights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective suspension/wheels	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective tires	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Tow hitch/yoke defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	1	0.3%	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	2	0.5%	0	-	0	-	**0**	**-**
Vehicle modifications	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Fire	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	2	0.4%	0	-	0	-	0	-	0	-	**0**	**-**
Jack-knife/trailer swing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hydroplaning tires	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Any At-fault Environmental Condition	**38**	**8.5%**	**39**	**8.9%**	**33**	**9.0%**	**26**	**6.5%**	**27**	**7.9%**	**24**	**13.6%**
Animal action - Wild	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Animal action - Domestic	0	-	0	-	0	-	0	-	1	0.3%	**0**	**-**
Slippery road surface	12	2.7%	13	3.0%	11	3.0%	6	1.5%	7	2.1%	**3**	**1.7%**
Snow drift	0	-	1	0.2%	0	-	0	-	0	-	**0**	**-**
Obstruction/debris on roadway	0	-	0	-	0	-	0	-	0	-	**0**	**-**
View obstructed/limited	8	1.8%	5	1.1%	4	1.1%	6	1.5%	3	0.9%	**6**	**3.4%**
Glare/reflection	2	0.4%	7	1.6%	4	1.1%	4	1.0%	7	2.1%	**3**	**1.7%**
Construction zone	1	0.2%	1	0.2%	0	-	0	-	0	-	**0**	**-**
Defective driving surface	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Shoulders defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Lane markings inadequate	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective/inoperative traffic control device	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Weather	6	1.3%	3	0.7%	3	0.8%	3	0.8%	3	0.9%	**3**	**1.7%**
Pedestrian corridor in use	9	2.0%	10	2.3%	10	2.7%	5	1.3%	7	2.1%	**10**	**5.7%**
Uninvolved vehicle	1	0.2%	0	-	1	0.3%	0	-	0	-	**1**	**0.6%**
Uninvolved pedestrian	1	0.2%	0	-	2	0.5%	2	0.5%	1	0.3%	**1**	**0.6%**
Presence of prior accident	0	-	0	-	0	-	0	-	0	-	**0**	**-**
No Contributing Factor(s) Identified	**326**	**73.3%**	**337**	**76.9%**	**279**	**75.8%**	**294**	**73.7%**	**287**	**84.4%**	**119**	**67.6%**
Not Applicable/Not Stated	**0**	**-**	**0**	**-**	**1**	**0.3%**	**0**	**-**	**9**	**2.6%**	**0**	**-**
Total	**445**	**100%**	**438**	**100%**	**368**	**100%**	**399**	**100%**	**340**	**100%**	**176**	**100%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each year will add to more than the total victims for that year.

Summary of Contributing Factors for MOTORCYCLIST AND MOPED RIDER Victims (Killed and Injured, Combined) of Collisions: 2007 to 2012

Contributing Factor	2007 Total Victims	% of 2007 Total Victims	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	**2012 Total Victims**	**% of 2012 Total Victims**
Driver Action - Driving Properly and Human Condition - Apparently Normal	61	42.1%	59	40.4%	50	41.0%	63	50.0%	55	42.3%	**78**	**65.0%**
Driver Action - Driving properly	**7**	**4.8%**	**13**	**8.9%**	**13**	**10.7%**	**13**	**10.3%**	**5**	**3.8%**	**1**	**0.8%**
Any At-fault Driver Action	**53**	**36.6%**	**59**	**40.4%**	**44**	**36.1%**	**49**	**38.9%**	**44**	**33.8%**	**54**	**45.0%**
Following too closely	1	0.7%	3	2.1%	1	0.8%	5	4.0%	4	3.1%	**4**	**3.3%**
Turning improperly	3	2.1%	6	4.1%	3	2.5%	4	3.2%	3	2.3%	**3**	**2.5%**
Passing improperly	3	2.1%	0	-	1	0.8%	2	1.6%	3	2.3%	**1**	**0.8%**
Changing lanes improperly	4	2.8%	3	2.1%	4	3.3%	1	0.8%	2	1.5%	**10**	**8.3%**
Fail to yield right-of-way	13	9.0%	8	5.5%	8	6.6%	7	5.6%	2	1.5%	**10**	**8.3%**
Disobey traffic control device/officer	0	-	1	0.7%	1	0.8%	4	3.2%	3	2.3%	**0**	**-**
Drive wrong way on roadway	0	-	1	0.7%	0	-	0	-	0	-	**0**	**-**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	0	-	0	-	0	-	1	0.8%	**1**	**0.8%**
Parking improperly	0	-	0	-	0	-	0	-	1	0.8%	**0**	**-**
Lost control/Drive off road	8	5.5%	10	6.8%	12	9.8%	10	7.9%	7	5.4%	**8**	**6.7%**
Driverless vehicle ran out of control	0	-	0	-	0	-	0	-	0	-	**1**	**0.8%**
Leave stop sign before safe to do so	3	2.1%	2	1.4%	3	2.5%	2	1.6%	2	1.5%	**3**	**2.5%**
Failed to signal	0	-	0	-	2	1.6%	0	-	0	-	**0**	**-**
Take avoiding action	1	0.7%	6	4.1%	5	4.1%	3	2.4%	2	1.5%	**2**	**1.7%**
Driver inexperience	7	4.8%	7	4.8%	6	4.9%	3	2.4%	3	2.3%	**2**	**1.7%**
Pedestrian error/confusion	0	-	1	0.7%	0	-	1	0.8%	0	-	**0**	**-**
NET Speed	14	9.7%	10	6.8%	9	7.4%	5	4.0%	7	5.4%	**5**	**4.2%**
Exceeding speed limit	4	2.8%	2	1.4%	3	2.5%	1	0.8%	1	0.8%	**0**	**-**
Driving too fast for conditions	8	5.5%	3	2.1%	1	0.8%	2	1.6%	5	3.8%	**4**	**3.3%**
Unsafe operating speed (Too fast or too slow)	3	2.1%	6	4.1%	7	5.7%	2	1.6%	1	0.8%	**1**	**0.8%**
NET Distracted driving	13	9.0%	18	12.3%	10	8.2%	10	7.9%	8	6.2%	**9**	**7.5%**
Careless Driving	3	2.1%	13	8.9%	6	4.9%	6	4.8%	7	5.4%	**6**	**5.0%**
Distraction/Inattention	10	6.9%	7	4.8%	6	4.9%	4	3.2%	1	0.8%	**3**	**2.5%**
Human Condition - Apparently Normal	**44**	**30.3%**	**41**	**28.1%**	**23**	**18.9%**	**34**	**27.0%**	**26**	**20.0%**	**21**	**17.5%**
Any At-fault Human Condition	**17**	**11.7%**	**13**	**8.9%**	**8**	**6.6%**	**5**	**4.0%**	**3**	**2.3%**	**6**	**5.0%**
Loss of consciousness/Blackout prior to collision	1	0.7%	0	-	0	-	0	-	0	-	**0**	**-**
Extreme fatigue/Fell asleep	0	-	1	0.7%	0	-	0	-	0	-	**0**	**-**
Defective eyesight	2	1.4%	0	-	0	-	0	-	0	-	**0**	**-**
Defective hearing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Physical disability	1	0.7%	0	-	1	0.8%	1	0.8%	0	-	**0**	**-**
Mental disability	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Mental confusion/Inability to remember	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Sudden illness	0	-	0	-	0	-	0	-	2	1.5%	**0**	**-**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
NET Impaired	3	2.1%	5	3.4%	1	0.8%	1	0.8%	0	-	**4**	**3.3%**
Ability impaired alcohol	2	1.4%	3	2.1%	1	0.8%	0	-	0	-	**3**	**2.5%**
Ability impaired drugs	0	-	1	0.7%	0	-	0	-	0	-	**0**	**-**
Had been drinking/Suspected alcohol use	1	0.7%	2	1.4%	0	-	1	0.8%	0	-	**1**	**0.8%**

Summary of Contributing Factors for MOTORCYCLIST AND MOPED RIDER Victims (Killed and Injured, Combined) of Collisions: 2007 to 2012

Contributing Factor	2007 Total Victims	% of 2007 Total Victims	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	**2012 Total Victims**	**% of 2012 Total Victims**
No Apparent (Vehicle) Defect	**79**	**54.5%**	**84**	**57.5%**	**55**	**45.1%**	**77**	**61.1%**	**55**	**42.3%**	**81**	**67.5%**
Any At-fault Vehicle Defect	**4**	**2.8%**	**2**	**1.4%**	**1**	**0.8%**	**3**	**2.4%**	**3**	**2.3%**	**0**	**-**
Defective brakes	1	0.7%	2	1.4%	0	-	1	0.8%	0	-	**0**	**-**
Defective steering	0	-	0	-	0	-	0	-	1	0.8%	**0**	**-**
Defective headlights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	1	0.7%	0	-	0	-	1	0.8%	2	1.5%	**0**	**-**
Defective engine controls/drive train	1	0.7%	0	-	0	-	1	0.8%	0	-	**0**	**-**
Defective suspension/wheels	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective tires	0	-	0	-	1	0.8%	0	-	0	-	**0**	**-**
Tow hitch/yoke defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	1	0.7%	0	-	0	-	0	-	0	-	**0**	**-**
Fire	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Jack-knife/trailer swing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hydroplaning tires	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Any At-fault Environmental Condition	**33**	**22.8%**	**24**	**16.4%**	**26**	**21.3%**	**22**	**17.5%**	**24**	**18.5%**	**8**	**6.7%**
Animal action - Wild	16	11.0%	15	10.3%	6	4.9%	13	10.3%	8	6.2%	**6**	**5.0%**
Animal action - Domestic	1	0.7%	2	1.4%	2	1.6%	0	-	0	-	**0**	**-**
Slippery road surface	2	1.4%	2	1.4%	4	3.3%	1	0.8%	6	4.6%	**0**	**-**
Snow drift	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Obstruction/debris on roadway	4	2.8%	2	1.4%	1	0.8%	3	2.4%	2	1.5%	**0**	**-**
View obstructed/limited	1	0.7%	0	-	1	0.8%	3	2.4%	0	-	**0**	**-**
Glare/reflection	0	-	1	0.7%	2	1.6%	0	-	0	-	**0**	**-**
Construction zone	3	2.1%	0	-	2	1.6%	0	-	0	-	**0**	**-**
Defective driving surface	1	0.7%	2	1.4%	6	4.9%	2	1.6%	6	4.6%	**1**	**0.8%**
Shoulders defective	0	-	0	-	1	0.8%	1	0.8%	2	1.5%	**0**	**-**
Lane markings inadequate	1	0.7%	0	-	0	-	0	-	0	-	**0**	**-**
Defective/inoperative traffic control device	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Weather	3	2.1%	0	-	2	1.6%	0	-	1	0.8%	**1**	**0.8%**
Pedestrian corridor in use	0	-	0	-	1	0.8%	0	-	0	-	**0**	**-**
Uninvolved vehicle	1	0.7%	1	0.7%	1	0.8%	0	-	0	-	**0**	**-**
Uninvolved pedestrian	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Presence of prior accident	0	-	0	-	0	-	0	-	0	-	**0**	**-**
No Contributing Factor(s) Identified	**39**	**26.9%**	**45**	**30.8%**	**35**	**28.7%**	**30**	**23.8%**	**45**	**34.6%**	**18**	**15.0%**
Not Applicable/Not Stated	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**2**	**1.5%**	**0**	**-**
Total	**145**	**100%**	**146**	**100%**	**122**	**100%**	**126**	**100%**	**130**	**100%**	**120**	**100%**

*NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each year will add to more than the total victims for that year.

Summary of Contributing Factors for UNKNOWN Victims (Killed and Injured, Combined) of Collisions: 2007 to 2012

Contributing Factor	2007 Total Victims	% of 2007 Total Victims	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	**2012 Total Victims**	**% of 2012 Total Victims**
Driver Action - Driving Properly and Human Condition - Apparently Normal	0	-	0	-	0	-	0	-	23	85.2%	**13**	**48.1%**
Driver Action - Driving properly	**0**	**-**	**0**	**-**	**1**	**100.0%**	**0**	**-**	**0**	**-**	**2**	**7.4%**
Any At-fault Driver Action	**1**	**50.0%**	**0**	**-**	**0**	**-**	**0**	**-**	**21**	**77.8%**	**18**	**66.7%**
Following too closely	0	-	0	-	0	-	0	-	6	22.2%	**2**	**7.4%**
Turning improperly	0	-	0	-	0	-	0	-	3	11.1%	**0**	**-**
Passing improperly	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Changing lanes improperly	0	-	0	-	0	-	0	-	1	3.7%	**0**	**-**
Fail to yield right-of-way	0	-	0	-	0	-	0	-	2	7.4%	**1**	**3.7%**
Disobey traffic control device/officer	1	50.0%	0	-	0	-	0	-	1	3.7%	**0**	**-**
Drive wrong way on roadway	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Passing a vehide at pedestrian X-walk	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	0	-	0	-	0	-	0	-	**2**	**7.4%**
Parking improperly	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Lost control/Drive off road	0	-	0	-	0	-	0	-	1	3.7%	**3**	**11.1%**
Driverless vehide ran out of control	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Leave stop sign before safe to do so	0	-	0	-	0	-	0	-	4	14.8%	**0**	**-**
Failed to signal	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Take avoiding action	0	-	0	-	0	-	0	-	0	-	**1**	**3.7%**
Driver inexperience	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Pedestrian error/confusion	0	-	0	-	0	-	0	-	0	-	**0**	**-**
NET Speed	0	-	0	-	0	-	0	-	3	11.1%	**5**	**18.5%**
Exceeding speed limit	0	-	0	-	0	-	0	-	0	-	**2**	**7.4%**
Driving too fast for conditions	0	-	0	-	0	-	0	-	2	7.4%	**2**	**7.4%**
Unsafe operating speed (Too fast or too slow)	0	-	0	-	0	-	0	-	1	3.7%	**1**	**3.7%**
NET Distracted driving	1	50.0%	0	-	0	-	0	-	5	18.5%	**7**	**25.9%**
Careless Driving	0	-	0	-	0	-	0	-	2	7.4%	**6**	**22.2%**
Distraction/Inattention	1	50.0%	0	-	0	-	0	-	3	11.1%	**1**	**3.7%**
Human Condition - Apparently Normal	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**3**	**11.1%**	**5**	**18.5%**
Any At-fault Human Condition	**1**	**50.0%**	**0**	**-**	**0**	**-**	**0**	**-**	**3**	**11.1%**	**7**	**25.9%**
Loss of consciousness/Blackout prior to collision	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Extreme fatigue/Fell asleep	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective eyesight	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective hearing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Physical disability	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Mental disability	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Mental confusion/Inability to remember	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Sudden illness	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
NET Impaired	0	-	0	-	0	-	0	-	0	-	**6**	**22.2%**
Ability impaired alcohol	0	-	0	-	0	-	0	-	0	-	**6**	**22.2%**
Ability impaired drugs	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Had been drinking/Suspected alcohol use	0	-	0	-	0	-	0	-	0	-	**0**	**-**

Summary of Contributing Factors for UNKNOWN Victims (Killed and Injured, Combined) of Collisions: 2007 to 2012

Contributing Factor	2007 Total Victims	% of 2007 Total Victims	2008 Total Victims	% of 2008 Total Victims	2009 Total Victims	% of 2009 Total Victims	2010 Total Victims	% of 2010 Total Victims	2011 Total Victims	% of 2011 Total Victims	**2012 Total Victims**	**% of 2012 Total Victims**
No Apparent (Vehicle) Defect	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**22**	**81.5%**	**18**	**66.7%**
Any At-fault Vehicle Defect	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**
Defective brakes	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective steering	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective headlights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective suspension/wheels	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective tires	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Tow hitch/yoke defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Fire	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Jack-knife/trailer swing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hydroplaning tires	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Any At-fault Environmental Condition	**1**	**50.0%**	**0**	**-**	**0**	**-**	**0**	**-**	**1**	**3.7%**	**1**	**3.7%**
Animal action - Wild	0	-	0	-	0	-	0	-	1	3.7%	**0**	**-**
Animal action - Domestic	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Slippery road surface	1	50.0%	0	-	0	-	0	-	0	-	**1**	**3.7%**
Snow drift	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Obstruction/debris on roadway	0	-	0	-	0	-	0	-	0	-	**0**	**-**
View obstructed/limited	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Glare/reflection	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Construction zone	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective driving surface	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Shoulders defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Lane markings inadequate	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective/inoperative traffic control device	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Weather	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Pedestrian corridor in use	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Uninvolved vehicle	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Uninvolved pedestrian	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Presence of prior accident	0	-	0	-	0	-	0	-	0	-	**0**	**-**
No Contributing Factor(s) Identified	**1**	**50.0%**	**0**	**-**	**1**	**100.0%**	**0**	**-**	**0**	**-**	**2**	**7.4%**
Not Applicable/Not Stated	**0**	**-**	**0**	**-**	**0**	**-**	**0**	**-**	**2**	**7.4%**	**0**	**-**
Total	**2**	**100%**	**0**	**-**	**1**	**100%**	**0**	**-**	**27**	**100%**	**27**	**100%**

NOTE: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each year will add to more than the total victims for that year.

Source: Traffic Accident Report Database, 2007-2012.

Summary of 'Speed', 'Distracted driving' & 'Impaired' as Contributing Factors IN BICYCLIST RELATED COLLISIONS (AT LEAST ONE OF THE VEHICLES OR VICTIMS WAS A BICYCLIST): 2007 to 2012

		2007	2008	2009	2010	2011	2007-2011 average	**2012**
NET Speed ('Exceeding speed limit', 'Driving too fast for conditions' and 'Unsafe operating speed (too fast or too slow)' combined)								
Collisions	All collisions	17	11	12	10	7	11	**8**
		3.8%	2.9%	3.4%	2.4%	1.9%	2.9%	**3.1%**
	Fatal collisions	1	2	2	0	1	1	**2**
		16.7%	33.3%	50.0%	0.0%	12.5%	20.7%	**25.0%**
	Injury collisions	15	9	10	10	6	10	**6**
		3.6%	2.5%	3.0%	2.6%	1.9%	2.8%	**3.4%**
Victims	All victims (killed or injured)	5	4	4	5	1	4	**3**
		1.7%	1.7%	1.8%	1.9%	0.5%	1.6%	**4.2%**
	People killed	1	0	0	0	0	0	**2**
		25.0%	0.0%	0.0%	0.0%	0.0%	6.3%	**40.0%**
	People seriously injured	1	0	1	0	0	0	**0**
		10.0%	0.0%	10.0%	0.0%	0.0%	4.5%	**-**
Driver Involvement (/10,000 drivers)	All collisions	0.2	0.1	0.2	0.1	<0.1	0.1	**<0.1**
	Fatal collisions	<0.1	<0.1	<0.1	-	<0.1	<0.1	**<0.1**
	Injury collisions	0.2	0.1	0.1	0.1	<0.1	0.1	**<0.1**
NET Distracted driving ('Distraction/ inattention' and 'Careless driving' combined)								
Collisions	All collisions	43	37	37	41	24	36	**26**
		9.6%	9.6%	10.6%	9.8%	6.7%	9.3%	**10.1%**
	Fatal collisions	1	3	1	3	3	2	**3**
		0.2%	0.8%	0.3%	0.7%	0.8%	37.9%	**37.5%**
	Injury collisions	42	34	35	35	18	33	**13**
		9.4%	8.8%	10.0%	8.4%	5.0%	9.1%	**7.4%**
Victims	All victims (killed or injured)	31	25	27	28	14	25	**7**
		10.7%	10.5%	12.2%	10.5%	7.1%	10.3%	**9.7%**
	People killed	1	3	1	2	1	2	**1**
		25.0%	100.0%	100.0%	50.0%	25.0%	50.0%	**20.0%**
	People seriously injured	1	4	1	1	1	2	**2**
		10.0%	30.8%	10.0%	11.1%	50.0%	18.2%	**22.2%**
Driver Involvement (/10,000 drivers)	All collisions	0.6	0.5	0.5	0.5	0.3	0.2	**0.2**
	Fatal collisions	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**<0.1**
	Injury collisions	0.6	0.4	0.5	0.4	0.2	0.2	**0.1**
NET Impaired ('Impaired by alcohol', 'Impaired by drugs' and 'Had been drinking/Suspected alcohol use' combined)								
Collisions	All collisions	8	4	5	4	1	4	**4**
		1.8%	1.0%	1.4%	1.0%	0.3%	1.1%	**1.6%**
	Fatal collisions	1	1	0	0	0	0	**2**
		16.7%	16.7%	0.0%	0.0%	0.0%	6.9%	**25.0%**
	Injury collisions	7	3	5	3	0	4	**2**
		1.7%	0.8%	1.5%	0.8%	0.0%	1.0%	**1.1%**
Victims	All victims (killed or injured)	5	2	4	2	0	3	**1**
		1.7%	0.8%	1.8%	0.7%	0.0%	1.1%	**1.4%**
	People killed	1	0	0	0	0	0	**1**
		25.0%	0.0%	0.0%	0.0%	0.0%	6.3%	**20.0%**
	People seriously injured	0	0	0	0	0	0	**0**
		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**-**
Driver Involvement (/10,000 drivers)	All collisions	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**<0.1**
	Fatal collisions	<0.1	<0.1	-	-	-	<0.1	**<0.1**
	Injury collisions	<0.1	<0.1	<0.1	<0.1	-	<0.1	**<0.1**

NOTE: Proportions provided for each contributing factor in a specific category are for the count of contributing factor as a portion of all collisions in the specific category. E.g., the proportion of fatal collisions where speed is a factor is derived from the count of fatal collisions in the specific year where speed is a factor divided by the total fatal collisions in that year.

BW (MPI) 1-11 Reference: Road Safety - SM.3. Page 9

a) Please identify the programs and campaigns aimed to influence driver behaviour towards cyclists.

b) Please specify the particular documents, ads or press releases aimed at changing driver behavior towards cyclists. Please provide any research or examples of ads from other jurisdictions that directed ads aimed at drivers about their behaviour towards cyclists or other vulnerable road users.

RESPONSE:

a) and b)

Refer to response to BW (MPI) 1-6 (a) and (b).

BW (MPI) 1-12 Reference: Road Safety - SM.3, Page 6

Preamble: MPI stated: "Complementary efforts are focused on educating Manitobans and raising awareness about key road safety risks that contribute to collisions, fatalities and serious injuries ... "

MPI is running the same "Sharing the road is a two-way street" in 2014 as in 2013.

a) Please advise and provide any supporting information, data or measurable that show the investment in the 2013 "Sharing the road is a two-way street" was effective in changing driver behaviour to reduce risks for cyclists.

b) Please advise what were the considerations, assumptions or reasons that lead to MPI's decision to re-run ad in 2014.

RESPONSE:

a) No such evaluation was done.

b) There were a number of factors that led to the decision to re-run the "Sharing the road is a two-way street" cycling safety campaign in 2014. These included the following:

- Running the campaign aligned to the key road safety priorities indentified in the Integrated Awareness and Enforcement calendar for 2014;
- Bike Winnipeg was consulted on key campaign messages, including "sharing the road is a two-way street",
- Running of major advertising campaigns for two years is a prudent means to control for production and advertising costs that would otherwise be expended on developing new creative and materials annually and effective in delivering the message in various ways over an extended period of time.

BW (MPI) 1-13 Reference: Road Safety - SM.3 Page 14

Preamble: MPI stated: "[...] two analysts have been added to focus on analytical research, program planning and evaluation of current and future road safety priorities and programs."

a) Please advise and/or provide the qualifications required for the analysts in these positions.

b) Please advise and provide the qualifications and experience of the analysts that have been added to focus on this analytical research.

RESPONSE:

a) and b)

In accordance with Board Order 98/14, a response to this question is not required. Please refer to the Board's Disposition related to CAC (MPI) 1-187.

BW (MPI) 1-14 **Reference: Volume 1, Pre-filed Testimony, Page 19**

a) Please indicate whether "develop better and safer drivers as measured by a two (2%) percent decrease in claims frequency and severity;" refers to physical damage claims or bodily injury claims.

b) If it is the latter, please indicate for whom the 2% reduction is expected - young drivers, other car occupants, vulnerable road users as a class of victims, or cyclists only.

RESPONSE:

a) Both.

b) The targeted reduction would apply to all collisions for which liability is assessed against drivers in the targeted age grouping currently over-represented. Please refer to the High School Driver Education Redevelopment project charter, filed in Volume III AI.10, for additional details.

BW (MPI) 1-15 **Reference:** **Volume 1, Pre-filed Testimony, Page 20**

a) Please advise whether the improvement in Class 5 road test pass rate from 50% to 75% means that the test will become harder or easier.

b) Please explain how a harder test would lead to collision and cost reductions. Please explain how an easier test would lead to collision and cost reductions.

RESPONSE:

a) There is no intent to make the Class 5 road test harder or easier.

b) Please refer to (a).

BW (MPI) 1-16 Reference: Overview OV.9, Page 22

Preamble: Road Safety – Emerging Technologies

Please indicate MPI's plans, if any, to subsidize the purchase of after-market collision avoidance technologies and text blocking technologies in comparison to previous programs that sought to reduce property theft.

RESPONSE:

No decisions have been made with respect to the subsidization of after-market collision avoidance or text blocking technologies.

BW (MPI) 1-17 Reference: Overview OV.9, Page 22

Preamble: Road Safety – Driver Improvement Control Program

Please provide details of the Driver Improvement Control Program and its expected behavioural changes that will lead to reduced injury frequency and severity of bodily injuries to cyclists, and in comparison, pedestrians.

RESPONSE:

The Driver Improvement & Control (DI&C) Program encourages problem drivers to drive more safely through early and proactive interventions designed to positively influence driver behavior. Interventions may include advisory and warning letters, remedial education or retesting, or quasi-judicial hearings to consider driver's licence suspension.

Interventions are determined based on the driver status (novice or experienced), incident frequency, incident severity, and any previous intervention(s).

Examples of driving incidents that may lead to DI&C intervention include:

- at-fault collisions
- traffic convictions
- 24-hour roadside suspensions
- Tiered roadside Administrative Licence Suspensions

Additional information on the Corporation's Driver Improvement and Control Program can be found on the Corporation's website at the following links:

http://www.mpi.mb.ca/en/DL/DL/Pages/dlfaq.aspx#DIC

http://www.mpi.mb.ca/en/PDFs/DriverImprovBro.pdf

BW (MPI) 1-18 Reference: Overview OV.9, Page22

Preamble: Road Safety

Please outline MPI's efforts and results to obtain documented evidence regarding value for money invested in road safety, both in general and particularly regarding injury to cyclists and other vulnerable road users.

RESPONSE:

Refer to Volume I SM.3 Road Safety.