

Volume:	LP 5.1	Page No.:
Reference:		
Topic:	Road Safety	
Sub Topic:	Statistics	
Issue:	Fatal / Serious Injury Tren	d Analysis

Preamble/Rationale: Bike Winnipeg seeks to continue reviewing long term MPI fatality and serious injury data in a disaggregated fashion to better understand the trends relating to fatalities and serious injuries. BW wishes to review the distribution of these fatalities and serious injuries amongst different road users including drivers, passengers and different categories of vulnerable road users including pedestrians, cyclists and motorcyclists.

In the request below, a working definition for the terms current and ultimate is:

Current (Current Fiscal Year Claims Incurred):

Current fiscal year claims incurred represent the accumulation or sum of all changes in claims dollar activity (paid, reserves, recoveries, IBNR, etc.) for all previous Insurance Accident Years.

Ultimate (Ultimate Claims Incurred):

Ultimate claims incurred for a year represent the sum of the dollar activity expected/projected/developed to be incurred for a particular Insurance Accident Year (for example what will be the ultimate claims incurred for collision for the Insurance Accident Year for 2012/13).

Question:

Please complete the tables provided in **Attachment A**, with regard to the victim type



and classifications for fatalities and serious injuries.

- 1. MPI Fatalities Count of Claims
- 2. MPI Serious Injuries Count of Claims
- 3. MPI Fatalities Cost Current value (\$000)
- 4. MPI Serious Injuries Cost Current value (\$000)
- 5. MPI data Fatalities -Cost per Claim (\$000)
- 6. MPI data Serious Injuries Cost per Claim (\$000)
- 7. MPI data Serious Injuries Ultimate value (\$000)
- 8. MPI Ratios Fatalities per Licensed Active Drivers
- 9. MPI Ratios Fatalities per Registered Vehicle (Commercial and Non-Commercial)
- 10. MPI Ratios Serious Injuries per Licensed Active Drivers
- 11. MPI Ratios Serious Injuries per Registered Vehicle (Commercial and Non-Commercial)

RESPONSE:

Refer to the following tables.

1. MPI Fatalities -	Count of Clair	ms										
			M	otor Vehicles (N	MV)	Calculated	Vulnerable F	Road Use	ers (VRU)	Calculated	Ratio	Ratio
Reported Insurance Year	All Fatalities	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Fatalities	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Fatalities	MV / All Fatalities	VRU/All Fatalities
2000	137	17	60	24	20	104	2	13	1	16	75.91%	11.68%
2001	129	15	52	27	15	94	3	13	4	20	72.87%	15.50%
2002	131	9	52	36	20	108	4	10	0	14	82.44%	10.69%
2003	117	5	56	24	19	99	1	10	2	13	84.62%	11.11%
2004	126	10	56	28	11	95	2	17	2	21	75.40%	16.67%
2005	110	5	44	31	14	89	5	9	2	16	80.91%	14.55%
2006	145	7	69	41	10	120	2	14	2	18	82.76%	12.41%
2007	124	10	54	22	12	88	1	21	4	26	70.97%	20.97%
2008	111	15	45	26	5	76	2	15	3	20	68.47%	18.02%
2009	105	5	58	18	8	84	4	12	0	16	80.00%	15.24%
2010	105	10	44	24	3	71	3	18	3	24	67.62%	22.86%
2011	124	18	57	28	1	86	1	16	3	20	69.35%	16.13%
2012	106	11	45	20	1	66	5	18	6	29	62.26%	27.36%
2013	108	14	47	32	0	79	5	6	4	15	73.15%	13.89%
2014	85	7	40	15	2	57	4	12	5	21	67.06%	24.71%
2015 YTD (June 30)	17	1	6	1	0	7	2	7	0	9	41.18%	52.94%
Total 2000 - 2015 YTD	1,780	159	785	397	141	1,323	46	211	41	298	74.33%	16.74%

2. MPI Serious Inj	juries - Count	of Claims										
			Мо	otor Vehicles (N	/IV)	Calculated	Vulnerable	Road Use	rs (VRU)	Calculated	Ratio	Ratio
Reported Insurance Year	All Serious Injuries	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Serious Injuries	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Serious Injuries	MV / All Serious Injuries	VRU/All Serious Injuries
2000	69	3	26	22	10	58	2	5	1	8	84.06%	11.59%
2001	65	7	31	12	10	53	3	2	0	5	81.54%	7.69%
2002	69	13	17	17	13	47	3	6	0	9	68.12%	13.04%
2003	67	7	32	10	11	53	2	5	0	7	79.10%	10.45%
2004	59	8	19	18	6	43	2	5	1	8	72.88%	13.56%
2005	73	7	34	11	10	55	3	8	0	11	75.34%	15.07%
2006	99	7	48	20	8	76	9	6	1	16	76.77%	16.16%
2007	94	4	54	23	3	80	5	2	3	10	85.11%	10.64%
2008	91	2	53	16	5	74	4	11	0	15	81.32%	16.48%
2009	95	6	54	18	5	77	4	6	2	12	81.05%	12.63%
2010	94	7	41	22	2	65	11	8	3	22	69.15%	23.40%
2011	85	4	40	21	4	65	5	9	2	16	76.47%	18.82%
2012	69	5	37	9	2	48	3	9	4	16	69.57%	23.19%
2013	42	4	15	9	2	26	4	5	3	12	61.90%	28.57%
2014	26	4	10	5	0	15	0	7	0	7	57.69%	26.92%
2015 YTD (June 30)	4	1	0	2	0	2	0	1	0	1	50.00%	25.00%
Total 2000 - 2015 YTD	1,101	89	511	235	91	837	60	95	20	175	76.02%	15.89%

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			Mo	tor Vehicles (M	(V)	Calculated	vuinerabl	e Road Users	s (VKU)	Calculated	Ratio	Ratio
Reported Insurance Year	All Fatalities	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Fatalities	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Fatalities	MV / All Fatalities	VRU/All Fatalities
2000	12,294	2,392	3,977	1,462	2,925	8,365	171	1,288	78	1,538	68.04%	12.51%
2001	9,570	1,271	4,348	1,471	1,285	7,104	425	613	158	1,195	74.23%	12.49%
2002	10,367	534	5,225	2,564	1,317	9,106	393	334	0	727	87.84%	7.01%
2003	8,572	421	4,509	1,442	1,475	7,426	82	580	63	725	86.63%	8.46%
2004	9,117	736	3,952	2,441	712	7,104	57	1,125	95	1,277	77.92%	14.00%
2005	12,482	1,400	4,529	3,800	1,260	9,589	876	582	35	1,493	76.83%	11.96%
2006	13,932	1,065	5,968	4,207	945	11,120	523	1,177	46	1,746	79.82%	12.54%
2007	10,818	624	4,432	2,379	1,225	8,036	382	1,328	449	2,159	74.28%	19.95%
2008	9,585	774	4,096	2,092	549	6,737	51	1,326	697	2,074	70.29%	21.63%
2009	10,676	558	5,210	2,237	831	8,278	637	1,203	0	1,840	77.54%	17.23%
2010	10,226	718	5,249	1,797	386	7,432	1,047	833	197	2,076	72.68%	20.30%
2011	9,948	1,490	5,490	1,470	213	7,173	137	1,006	142	1,285	72.11%	12.92%
2012	11,490	1,220	5,883	1,453	177	7,513	934	1,321	502	2,757	65.39%	23.99%
2013	10,393	743	4,742	3,675	0	8,416	725	317	192	1,234	80.98%	11.87%
2014	8,613	582	4,592	1,537	146	6,274	282	1,182	293	1,757	72.84%	20.40%
2015 YTD (June 30)	1,365	22	594	97	0	691	85	567	0	652	50.64%	47.78%
Total 2000 - 2015 YTD	159,447	14,549	72,795	34,123	13,446	120,364	6,805	14,782	2,946	24,534	75.49%	15.39%

4. MPI Serious Injuries - Cost - Current value (\$000) Motor Vehicles (MV) Calculated Vulnerable Road Users (VRU) Calculated Ratio Ratio Sub-total Reported Sub-total MV / All VRU/All All Serious Other Motorcycle VRU Insurance Unknown/errors Driver MV Serious Peds Cyclists Serious Serious Passenger Injuries Injured & Moped Serious Year Injuries Injuries Injuries Injuries 24,339 2000 62.645 2.417 19.774 11.058 55.171 1,429 3.236 393 5.057 88.07% 8.07% 2001 68,293 11,998 24,499 11,062 16,639 52,200 2,980 1,115 0 76.44% 6.00% 4,095 2002 74,191 13,402 17,652 13,570 22,593 53,815 1,729 5,245 0 6,974 72.54% 9.40% 2003 67.075 30.818 8,415 52.843 851 7.266 0 8,117 78.78% 12.10% 6,115 13,610 2,483 2004 65,665 6,716 4,382 51,638 4,413 415 78.64% 11.13% 15,612 31,645 7,310 2005 70,962 10,119 30,953 10,405 11,294 52,652 3,339 4,853 0 8,192 74.20% 11.54% 2006 105.775 8.232 38.596 30.545 13.072 82.213 9.697 5.144 489 15,329 77.72% 14.49% 2007 97,634 2,769 49,820 32,308 3,449 85,578 4,943 1,349 2,996 9,288 87.65% 9.51% 1,540 69,287 10,770 0 81.20% 2008 85,332 42,091 21,437 5,760 3,735 14,505 17.00% 8,235 12.207 6.506 3.548 71.94% 17.52% 2009 78.078 40.153 3.807 56.167 3,621 13,676 2010 85,232 7,563 33,436 24,682 1,116 59,234 9,614 7,209 1,612 18,435 69.50% 21.63% 2011 71,974 3,096 26,067 29,031 3,158 58,255 4,939 4,589 1,094 10,623 80.94% 14.76% 2012 67.051 9.547 29.208 10.633 1,423 41.264 1,465 10,880 3.895 16,241 61.54% 24.22% 1,244 2013 39,279 902 9,802 54.63% 1,957 12,452 8,106 21,460 4,815 15,862 40.38% 2014 18,875 4.096 5,747 3,655 0 9,402 0 5,377 0 5,377 49.81% 28.49% 2015 YTD 1.928 521 0 907 0 907 0 500 0 500 47.05% 25.93% (June 30)

15.05%

75.67%

Total 2000 -

2015 YTD

1.059.989

98.322

421.442

268.381

802.087

55.641

88.253

15.686

159.579

112.263

5. MPI Fatali	ties - Cost per C	Claim										
			Me	otor Vehicles (M	۸V)	Calculated	Vulneral	ble Road User	s (VRU)	Calculated	Ratio	Ratio
Reported Insurance Year	All Fatalities	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Fatalities	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Fatalities	MV / All Fatalities	VRU/All Fatalities
2000	89,735	140,679	66,284	60,923	146,266	80,428	85,623	99,102	78,043	96,101	89.63%	107.09%
2001	74,188	84,725	83,615	54,466	85,691	75,574	141,695	47,117	39,447	59,770	101.87%	80.57%
2002	79,134	59,324	100,475	71,212	65,870	84,312	98,202	33,408	0	51,920	106.54%	65.61%
2003	73,263	84,189	80,512	60,099	77,621	75,009	81,875	57,991	31,569	55,763	102.38%	76.11%
2004	72,355	73,609	70,563	87,165	64,706	74,778	28,381	66,200	47,303	60,798	103.35%	84.03%
2005	113,472	279,962	102,938	122,596	89,978	107,746	175,232	64,671	17,259	93,295	94.95%	82.22%
2006	96,082	152,142	86,490	102,622	94,514	92,670	261,420	84,083	23,245	97,027	96.45%	100.98%
2007	87,242	62,372	82,069	108,144	102,066	91,315	381,935	63,220	112,272	83,025	104.67%	95.17%
2008	86,348	51,618	91,026	80,453	109,772	88,642	25,260	88,391	232,413	103,681	102.66%	120.07%
2009	101,677	111,645	89,830	124,292	103,815	98,547	159,323	100,220	0	114,996	96.92%	113.10%
2010	97,391	71,800	119,285	74,886	128,757	104,677	348,833	46,253	65,642	86,499	107.48%	88.82%
2011	80,225	82,764	96,317	52,485	213,415	83,408	136,998	62,899	47,239	64,255	103.97%	80.09%
2012	108,395	110,933	130,742	72,633	176,975	113,834	186,726	73,382	83,679	95,054	105.02%	87.69%
2013	96,233	53,062	100,886	114,832	0	106,535	144,941	52,867	48,025	82,267	110.71%	85.49%
2014	101,333	83,201	114,798	102,440	72,813	110,073	70,522	98,508	58,507	83,654	108.63%	82.55%
2015 YTD (June 30)	80,299	21,607	99,045	96,985	0	98,751	42,488	81,034	0	72,468	122.98%	90.25%
Total 2000 - 2015 YTD	89,577	91,505	92,732	85,953	95,361	90,978	147,944	70,056	71,860	82,327	101.56%	91.91%

6. MPI Seri	ous Injuries -	Cost per Claim										
			M	lotor Vehicles (N	ΛV)	Calculated	Vulnerab	ole Road Users	s (VRU)	Calculated	Ratio	Ratio
Reported Insurance Year	All Serious Injuries	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Serious Injuries	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Serious Injuries	MV / All Serious Injuries	VRU/All Serious Injuries
2000	907,903	805,714	936,104	898,823	1,105,823	951,225	714,377	647,129	392,724	632,140	104.77%	69.63%
2001	1,050,659	1,713,985	790,289	921,860	1,663,886	984,908	993,312	557,438	0	818,962	93.74%	77.95%
2002	1,075,230	1,030,918	1,038,328	798,248	1,737,949	1,145,003	576,353	874,128	0	774,870	106.49%	72.07%
2003	1,001,118	873,548	963,067	841,451	1,237,309	997,038	425,622	1,453,159	0	1,159,577	99.59%	115.83%
2004	1,112,959	839,487	821,674	1,758,050	730,297	1,200,895	1,241,347	882,593	414,529	913,774	107.90%	82.10%
2005	972,082	1,445,510	910,370	945,890	1,129,444	957,305	1,112,997	606,577	0	744,692	98.48%	76.61%
2006	1,068,437	1,176,053	804,080	1,527,250	1,634,024	1,081,750	1,077,496	857,287	488,699	958,118	101.25%	89.67%
2007	1,038,664	692,359	922,593	1,404,706	1,149,741	1,069,719	988,587	674,409	998,563	928,744	102.99%	89.42%
2008	937,717	770,043	794,171	1,339,796	1,151,937	936,317	933,738	979,067	0	966,979	99.85%	103.12%
2009	821,873	1,372,538	743,573	678,178	761,390	729,443	905,259	1,084,382	1,774,122	1,139,631	88.75%	138.66%
2010	906,719	1,080,365	815,519	1,121,915	557,831	911,293	874,001	901,135	537,296	837,953	100.50%	92.42%
2011	846,755	773,913	651,666	1,382,406	789,509	896,234	987,881	509,939	547,225	663,956	105.84%	78.41%
2012	971,751	1,909,343	789,413	1,181,413	711,266	859,657	488,469	1,208,885	973,805	1,015,037	88.46%	104.45%
2013	935,207	489,354	830,133	900,646	450,891	825,369	1,203,781	1,960,442	414,785	1,321,808	88.26%	141.34%
2014	725,971	1,023,903	574,735	731,016	0	626,828	0	768,173	0	768,173	86.34%	105.81%
2015 YTD (June 30)	482,068	521,070	0	453,600	0	453,600	0	500,000	0	500,000	94.09%	103.72%
Total 2000 - 2015 YTD	962,751	1,104,746	824,740	1,142,049	1,233,660	958,288	927,350	928,981	784,290	911,885	99.54%	94.72%

7. MPI Serious	s Injuries - Ultim	nate Value										
			Мо	otor Vehicles (M	1V)	Calculated	Vulnerable	e Road User	s (VRU)	Calculated	Ratio	Ratio
Reported Insurance Year	All Serious Injuries	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Serious Injuries	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Serious Injuries	MV / All Serious Injuries	VRU/All Serious Injuries
2000	64,141	2,475	24,920	20,246	11,322	56,488	1,463	3,313	402	5,178	88.07%	8.07%
2001	70,306	12,352	25,221	11,388	17,129	53,739	3,068	1,148	0	4,216	76.44%	6.00%
2002	75,442	13,628	17,949	13,799	22,974	54,723	1,758	5,333	0	7,091	72.54%	9.40%
2003	68,304	6,227	31,383	8,569	13,860	53,811	867	7,399	0	8,266	78.78%	12.10%
2004	66,981	6,851	15,925	32,279	4,470	52,674	2,532	4,501	423	7,457	78.64%	11.13%
2005	72,833	10,385	31,769	10,679	11,592	54,040	3,427	4,981	0	8,408	74.20%	11.54%
2006	108,426	8,439	39,563	31,310	13,400	84,273	9,940	5,273	501	15,714	77.72%	14.49%
2007	100,740	2,858	51,405	33,336	3,559	88,300	5,100	1,392	3,091	9,583	87.65%	9.51%
2008	88,852	1,604	43,827	22,321	5,997	72,146	3,889	11,214	0	15,103	81.20%	17.00%
2009	82,744	8,727	42,552	12,937	4,034	59,523	3,837	6,895	3,760	14,493	71.94%	17.52%
2010	91,842	8,149	36,029	26,596	1,202	63,828	10,360	7,768	1,737	19,865	69.50%	21.63%
2011	83,685	3,599	30,308	33,754	3,672	67,734	5,743	5,336	1,273	12,352	80.94%	14.76%
2012	83,101	11,832	36,200	13,178	1,763	51,141	1,816	13,484	4,828	20,128	61.54%	24.22%
2013	53,414	2,662	16,933	11,023	1,226	29,182	6,548	13,330	1,692	21,570	54.63%	40.38%
2014	23,557	5,112	7,173	4,562	0	11,735	0	6,711	0	6,711	49.81%	28.49%
2015 YTD (June 30)	4,953	1,338	0	2,330	0	2,330	0	1,284	0	1,284	47.05%	25.93%
Total 2000 - 2015 YTD	1,173,826	108,882	466,703	297,204	124,320	888,226	61,617	97,731	17,370	176,718	75.67%	15.05%

8. MPI Ratios	- Fatalities per 1	0,000 Licensed Act	ive Drivers								
				М	otor Vehicles (M	V)	Calculated	Vulnera	ble Road Users	s (VRU)	Calculated
Reported Insurance Year	Number Licensed Active Drivers	All Fatalities	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Fatalities	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Fatalities
2001	695,668	0.1854	0.0216	0.0747	0.0388	0.0216	0.1351	0.0043	0.0187	0.0057	0.0287
2002	701,061	0.1869	0.0128	0.0742	0.0514	0.0285	0.1541	0.0057	0.0143	0.0000	0.0200
2003	712,785	0.1641	0.0070	0.0786	0.0337	0.0267	0.1389	0.0014	0.0140	0.0028	0.0182
2004	721,305	0.1747	0.0139	0.0776	0.0388	0.0153	0.1317	0.0028	0.0236	0.0028	0.0291
2005	725,636	0.1516	0.0069	0.0606	0.0427	0.0193	0.1227	0.0069	0.0124	0.0028	0.0220
2006	728,518	0.1990	0.0096	0.0947	0.0563	0.0137	0.1647	0.0027	0.0192	0.0027	0.0247
2007	735,506	0.1686	0.0136	0.0734	0.0299	0.0163	0.1196	0.0014	0.0286	0.0054	0.0353
2008	748,304	0.1483	0.0200	0.0601	0.0347	0.0067	0.1016	0.0027	0.0200	0.0040	0.0267
2009	760,143	0.1381	0.0066	0.0763	0.0237	0.0105	0.1105	0.0053	0.0158	0.0000	0.0210
2010	772,922	0.1358	0.0129	0.0569	0.0311	0.0039	0.0919	0.0039	0.0233	0.0039	0.0311
2011	795,972	0.1558	0.0226	0.0716	0.0352	0.0013	0.1080	0.0013	0.0201	0.0038	0.0251
2012	810,697	0.1308	0.0136	0.0555	0.0247	0.0012	0.0814	0.0062	0.0222	0.0074	0.0358
2013	822,988	0.1312	0.0170	0.0571	0.0389	0.0000	0.0960	0.0061	0.0073	0.0049	0.0182
2014	833,376	0.1020	0.0084	0.0480	0.0180	0.0024	0.0684	0.0048	0.0144	0.0060	0.0252
2015 YTD (June 30)	423,980	0.0401	0.0024	0.0142	0.0024	0.0000	0.0165	0.0047	0.0165	0.0000	0.0212
Total 2001 - 2015 YTD	10,988,861	0.1620	0.0145	0.0714	0.0361	0.0128	0.1204	0.0042	0.0192	0.0037	0.0271

				M	lotor Vehicles (M	V)	Calculated	Vulneral	ole Road Users	(VRU)	Calculated
Reported Insurance Year	Registered Vehicles	All Fatalities	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Fatalities	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Fatalities
2000	670,184	0.2044	0.0254	0.0895	0.0358	0.0298	0.1552	0.0030	0.0194	0.0015	0.0239
2001	677,814	0.1903	0.0221	0.0767	0.0398	0.0221	0.1387	0.0044	0.0192	0.0059	0.0295
2002	688,604	0.1902	0.0131	0.0755	0.0523	0.0290	0.1568	0.0058	0.0145	0.0000	0.0203
2003	694,822	0.1684	0.0072	0.0806	0.0345	0.0273	0.1425	0.0014	0.0144	0.0029	0.0187
2004	703,612	0.1791	0.0142	0.0796	0.0398	0.0156	0.1350	0.0028	0.0242	0.0028	0.0298
2005	713,135	0.1542	0.0070	0.0617	0.0435	0.0196	0.1248	0.0070	0.0126	0.0028	0.0224
2006	721,360	0.2010	0.0097	0.0957	0.0568	0.0139	0.1664	0.0028	0.0194	0.0028	0.0250
2007	735,225	0.1687	0.0136	0.0734	0.0299	0.0163	0.1197	0.0014	0.0286	0.0054	0.0354
2008	751,937	0.1476	0.0199	0.0598	0.0346	0.0066	0.1011	0.0027	0.0199	0.0040	0.0266
2009	763,251	0.1376	0.0066	0.0760	0.0236	0.0105	0.1101	0.0052	0.0157	0.0000	0.0210
2010	774,765	0.1355	0.0129	0.0568	0.0310	0.0039	0.0916	0.0039	0.0232	0.0039	0.0310
2011	791,384	0.1567	0.0227	0.0720	0.0354	0.0013	0.1087	0.0013	0.0202	0.0038	0.0253
2012	811,247	0.1307	0.0136	0.0555	0.0247	0.0012	0.0814	0.0062	0.0222	0.0074	0.0357
2013	822,677	0.1313	0.0170	0.0571	0.0389	0.0000	0.0960	0.0061	0.0073	0.0049	0.0182
2014	834,238	0.1019	0.0084	0.0479	0.0180	0.0024	0.0683	0.0048	0.0144	0.0060	0.0252
2015 YTD (June 30)	424,418	0.0401	0.0024	0.0141	0.0024	0.0000	0.0165	0.0047	0.0165	0.0000	0.0212
Total 2000 - 2015 YTD	11,578,673	0.1537	0.0137	0.0678	0.0343	0.0122	0.1143	0.0040	0.0182	0.0035	0.0257

10. MPI Ratio	s - Serious Injuri	es per 10,000 Licen	sed Active Drivers			,				,	
				М	otor Vehicles (M	V)	Calculated	Vulnerat	ole Road Users	(VRU)	Calculated
Reported Insurance Year	Number Licensed Active Drivers	All Serious Injuries	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Serious Injuries	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Serious Injuries
2001	695,668	0.0934	0.0101	0.0446	0.0172	0.0144	0.0762	0.0043	0.0029	0.0000	0.0072
2002	701,061	0.0984	0.0185	0.0242	0.0242	0.0185	0.0670	0.0043	0.0086	0.0000	0.0128
2003	712,785	0.0940	0.0098	0.0449	0.0140	0.0154	0.0744	0.0028	0.0070	0.0000	0.0098
2004	721,305	0.0818	0.0111	0.0263	0.0250	0.0083	0.0596	0.0028	0.0069	0.0014	0.0111
2005	725,636	0.1006	0.0096	0.0469	0.0152	0.0138	0.0758	0.0041	0.0110	0.0000	0.0152
2006	728,518	0.1359	0.0096	0.0659	0.0275	0.0110	0.1043	0.0124	0.0082	0.0014	0.0220
2007	735,506	0.1278	0.0054	0.0734	0.0313	0.0041	0.1088	0.0068	0.0027	0.0041	0.0136
2008	748,304	0.1216	0.0027	0.0708	0.0214	0.0067	0.0989	0.0053	0.0147	0.0000	0.0200
2009	760,143	0.1250	0.0079	0.0710	0.0237	0.0066	0.1013	0.0053	0.0079	0.0026	0.0158
2010	772,922	0.1216	0.0091	0.0530	0.0285	0.0026	0.0841	0.0142	0.0104	0.0039	0.0285
2011	795,972	0.1068	0.0050	0.0503	0.0264	0.0050	0.0817	0.0063	0.0113	0.0025	0.0201
2012	810,697	0.0851	0.0062	0.0456	0.0111	0.0025	0.0592	0.0037	0.0111	0.0049	0.0197
2013	822,988	0.0510	0.0049	0.0182	0.0109	0.0024	0.0316	0.0049	0.0061	0.0036	0.0146
2014	833,376	0.0312	0.0048	0.0120	0.0060	0.0000	0.0180	0.0000	0.0084	0.0000	0.0084
2015 YTD (June 30)	423,980	0.0094	0.0024	0.0000	0.0047	0.0000	0.0047	0.0000	0.0024	0.0000	0.0024
Total 2001 - 2015 YTD	10,988,861	0.1002	0.0081	0.0465	0.0214	0.0083	0.0762	0.0055	0.0086	0.0018	0.0159

11. MPI Ratios	s - Serious Injurie	s per 10,000 Regist	ered Vehicles								
				Me	otor Vehicles (M	IV)	Calculated	Vulnerat	ole Road Users	(VRU)	Calculated
Reported Insurance Year	Registered Vehicles	All Serious Injuries	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Serious Injuries	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Serious Injuries
2000	670,184	0.1030	0.0045	0.0388	0.0328	0.0149	0.0865	0.0030	0.0075	0.0015	0.0119
2001	677,814	0.0959	0.0103	0.0457	0.0177	0.0148	0.0782	0.0044	0.0030	0.0000	0.0074
2002	688,604	0.1002	0.0189	0.0247	0.0247	0.0189	0.0683	0.0044	0.0087	0.0000	0.0131
2003	694,822	0.0964	0.0101	0.0461	0.0144	0.0158	0.0763	0.0029	0.0072	0.0000	0.0101
2004	703,612	0.0839	0.0114	0.0270	0.0256	0.0085	0.0611	0.0028	0.0071	0.0014	0.0114
2005	713,135	0.1024	0.0098	0.0477	0.0154	0.0140	0.0771	0.0042	0.0112	0.0000	0.0154
2006	721,360	0.1372	0.0097	0.0665	0.0277	0.0111	0.1054	0.0125	0.0083	0.0014	0.0222
2007	735,225	0.1279	0.0054	0.0734	0.0313	0.0041	0.1088	0.0068	0.0027	0.0041	0.0136
2008	751,937	0.1210	0.0027	0.0705	0.0213	0.0066	0.0984	0.0053	0.0146	0.0000	0.0199
2009	763,251	0.1245	0.0079	0.0707	0.0236	0.0066	0.1009	0.0052	0.0079	0.0026	0.0157
2010	774,765	0.1213	0.0090	0.0529	0.0284	0.0026	0.0839	0.0142	0.0103	0.0039	0.0284
2011	791,384	0.1074	0.0051	0.0505	0.0265	0.0051	0.0821	0.0063	0.0114	0.0025	0.0202
2012	811,247	0.0851	0.0062	0.0456	0.0111	0.0025	0.0592	0.0037	0.0111	0.0049	0.0197
2013	822,677	0.0511	0.0049	0.0182	0.0109	0.0024	0.0316	0.0049	0.0061	0.0036	0.0146
2014	834,238	0.0312	0.0048	0.0120	0.0060	0.0000	0.0180	0.0000	0.0084	0.0000	0.0084
2015 YTD (June 30)	424,418	0.0094	0.0024	0.0000	0.0047	0.0000	0.0047	0.0000	0.0024	0.0000	0.0024
Total 2000 - 2015 YTD	11,578,673	0.0951	0.0077	0.0441	0.0203	0.0079	0.0723	0.0052	0.0082	0.0017	0.0151

Volume:	LP 5.1	Page No.:	28 – Table
Topic:	Road Safety		
Sub Topic:	Statistics		
Issue:	Fatal Trend Analysis		

Preamble/Rationale: Bike Winnipeg seeks to continue reviewing long term MPI injury data in a disaggregated fashion to better understand trends relating to fatalities and serious injuries. BW wishes to review the distribution of fatalities and serious injuries amongst different road users including drivers, passengers and different categories of vulnerable road users including pedestrians, cyclists and motorcyclists, and the distributions in relation to the quantity of licensed drivers and commercial and non-commercial registered vehicles.

Question:

- a) Please confirm the data source for the table referenced above.
- b) Using the same data source, please complete the tables provided in **Attachment** B, with regard to the victim type for fatalities ("people killed"), licensed drivers, and vehicles registered.
 - 1. Fatalities Count of Claims
 - 2. Licensed Active Drivers
 - 3. Registered Vehicle (Commercial and Non-Commercial)
 - 4. Fatalities per Licensed Drivers
 - 5. Fatalities per Non-Commercial Registered Vehicles
 - 6. Fatalities per Commercial Registered Vehicles

RESPONSE:

- a) The 2013 Traffic Collision Statistics Report (TCSR) is the source of the data in the table referenced above.
- b) Refer to the following tables.

b)

1.	Fatalities	("People Kille	ed") – Count -	- by victim type
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			Motor V	ehicles	Calculated	Vulnerable	Road User	s	Calculated	Ratio	Ratio
Calendar Year	All Fatalities	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals	Motor Vehicles / All Fatals	VRU/All Fatals
1993	134		n/a	n/a	n/a	n/a	17	n/a	17	n/a	n/a
1994	119		n/a	n/a	n/a	n/a	17	n/a	17	n/a	n/a
1995*	128		10)7	107	5	14	2	21	84%	16%
1996*	93		7:	3	73	1	16	3	20	78%	22%
1997	119		63	32	95	2	20	2	24	80%	20%
1998	121		59	32	91	2	24	4	30	75%	25%
1999	113		57	32	89	2	21	1	24	79%	21%
2000	111		62	30	92	4	15	0	19	83%	17%
2001	94		59	18	77	3	10	4	17	82%	18%
2002	109		53	36	89	6	14	0	20	82%	18%
2003	102		57	29	86	3	13	2	18	84%	18%
2004	99		54	25	79	3	15	2	20	80%	20%
2005	113		57	39	96	4	11	2	17	85%	15%
2006	119		67	34	101	2	14	2	18	85%	15%
2007	109		65	22	87	2	16	4	22	80%	20%
2008	92		50	19	69	5	15	3	23	75%	25%
2009	86		55	17	72	4	9	1	14	84%	16%
2010	87		43	23	66	3	14	4	21	76%	24%
2011	110		59	33	92	4	10	4	18	84%	16%
2012	96		46	26	72	5	13	5	23	75%	24%
2013	85		41	25	66	5	10	4	19	78%	22%
2014	n/a		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2015 YTD (June 30)	n/a		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total**	2,239		947	472	1,419	65	308	49	422	63%	19%

^{*} Driver / passenger fatality breakdown not available for 1995 and 1996.

^{**} Totals for driver and passenger fatalities exclude 1995 & 1996.



2. Licensed Drivers -	Count
Calendar Year	Licensed Drivers
1993	672,937
1994	675,659
1995	680,142
1996	684,798
1997	687,229
1998	692,941
1999	702,851
2000	706,512
2001	710,456
2002	700,169
2003	703,889
2004	711,488
2005	716,169
2006	724,330
2007	752,398
2008	765,060
2009	776,209
2010	790,331
2011	813,691
2012	838,481
2013	855,791
2014	n/a
2015 YTD (June 30)	n/a
Total	15,361,530

3. Registered Vehic	es - Count		
Calendar Year	Non-Commercial Registered Vehicles	Commercial Registered Vehicles	Total
1993	735,808	54,784	790,592
1994	748,450	62,244	810,694
1995	756,286	60,419	816,705
1996	722,148	49,969	772,117
1997	729,272	53,023	782,295
1998	726,259	49,906	776,165
1999	737,492	54,348	791,840
2000	744,170	56,854	801,024
2001	756,767	62,036	818,803
2002	723,889	70,146	794,035
2003	734,365	68,432	802,797
2004	745,731	72,495	818,226
2005	754,959	73,788	828,747
2006	766,174	78,533	844,707
2007	784,796	80,764	865,560
2008	808,892	85,811	894,703
2009	824,824	85,909	910,732
2010	843,825	90,089	933,914
2011	866,628	91,655	958,283
2012	895,400	97,991	993,390
2013	911,781	101,012	1,012,793
2014	n/a	n/a	n/a
2015 YTD (June 30)	n/a	n/a	n/a
Total	16,317,916	1,500,208	17,818,122

				Motor \	/ehicles	Calculated	Vulnerable	Road Users	8	Calculated
Calendar Year	Number Licensed Active Drivers	All Fatalities	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals
1993	672,937	2.0		n/a	n/a	n/a	n/a	0.3	n/a	0.3
1994	675,659	1.8		n/a	n/a	n/a	n/a	0.3	n/a	0.3
1995*	680,142	1.9		1	.6	1.6	0.07	0.2	0.03	0.3
1996*	684,798	1.4		1	.1	1.1	0.01	0.2	0.04	0.3
1997	687,229	1.7		0.9	0.5	1.4	0.03	0.3	0.03	0.3
1998	692,941	1.7		0.9	0.5	1.3	0.03	0.3	0.06	0.4
1999	702,851	1.6		0.8	0.5	1.3	0.03	0.3	0.01	0.3
2000	706,512	1.6		0.9	0.4	1.3	0.06	0.2	0.00	0.3
2001	710,456	1.3		0.8	0.3	1.1	0.04	0.1	0.06	0.2
2002	700,169	1.6		0.8	0.5	1.3	0.09	0.2	0.00	0.3
2003	703,889	1.4		0.8	0.4	1.2	0.04	0.2	0.03	0.3
2004	711,488	1.4		0.8	0.4	1.1	0.04	0.2	0.03	0.3
2005	716,169	1.6		0.8	0.5	1.3	0.06	0.2	0.03	0.2
2006	724,330	1.6		0.9	0.5	1.4	0.03	0.2	0.03	0.2
2007	752,398	1.4		0.9	0.3	1.2	0.03	0.2	0.05	0.3
2008	765,060	1.2		0.7	0.2	0.9	0.07	0.2	0.04	0.3
2009	776,209	1.1		0.7	0.2	0.9	0.05	0.1	0.01	0.2
2010	790,331	1.1		0.5	0.3	0.8	0.04	0.2	0.05	0.3
2011	813,691	1.4		0.7	0.4	1.1	0.05	0.1	0.05	0.2
2012	838,481	1.1		0.5	0.3	0.9	0.06	0.2	0.06	0.3
2013	855,791	1.0		0.5	0.3	0.8	0.06	0.1	0.05	0.2
2014	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2015 YTD (June 30)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	15,361,530									

^{*} Driver / passenger fatality breakdown not available for 1995 and 1996.

				Motor	Vehicles	Calculated	Vulnerable	Road User	s	Calculated
Calendar Year	Number of Non-Commercial Registered Vehicles	All Fatalities	Unknown/e rrors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries
1993	735,808	1.8		n/a	n/a	n/a	n/a	0.2	n/a	0.2
1994	748,450	1.6		n/a	n/a	n/a	n/a	0.2	n/a	0.2
1995*	756,286	1.7			1.4	1.4	0.07	0.2	0.03	0.3
1996*	722,148	1.3			1.0	1.0	0.01	0.2	0.04	0.3
1997	729,272	1.6		0.9	0.4	1.3	0.03	0.3	0.03	0.3
1998	726,259	1.7		0.8	0.4	1.3	0.03	0.3	0.06	0.4
1999	737,492	1.5		0.8	0.4	1.2	0.03	0.3	0.01	0.3
2000	744,170	1.5		0.8	0.4	1.2	0.05	0.2	0.00	0.3
2001	756,767	1.2		0.8	0.2	1.0	0.04	0.1	0.05	0.2
2002	723,889	1.5		0.7	0.5	1.2	0.08	0.2	0.00	0.3
2003	734,365	1.4		0.8	0.4	1.2	0.04	0.2	0.03	0.2
2004	745,731	1.3		0.7	0.3	1.1	0.04	0.2	0.03	0.3
2005	754,959	1.5		0.8	0.5	1.3	0.05	0.1	0.03	0.2
2006	766,174	1.6		0.9	0.4	1.3	0.03	0.2	0.03	0.2
2007	784,796	1.4		0.8	0.3	1.1	0.03	0.2	0.05	0.3
2008	808,892	1.1		0.6	0.2	0.9	0.06	0.2	0.04	0.3
2009	824,824	1.0		0.7	0.2	0.9	0.05	0.1	0.01	0.2
2010	843,825	1.0		0.5	0.3	0.8	0.04	0.2	0.05	0.2
2011	866,628	1.3		0.7	0.4	1.1	0.05	0.1	0.05	0.2
2012	895,400	1.1		0.5	0.3	0.8	0.06	0.1	0.06	0.3
2013	911,781	0.9		0.4	0.3	0.7	0.05	0.1	0.04	0.2
2014	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2015 YTD (June 30)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	16,317,916									

^{*} Driver / passenger fatality breakdown not available for 1995 and 1996.

				Motor	Vehicles	Calculated	Vulnerable	Road User	S	Calculated
Calendar Year	Number of Commercial Registered Vehicles	All Fatalities	Unknown/e rrors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries
1993	54,784	24.5		n/a	n/a	n/a	n/a	3.1	n/a	3.1
1994	62,244	19.1		n/a	n/a	n/a	n/a	2.7	n/a	2.7
1995*	60,419	21.2		1	17.7	17.7	0.8	2.3	0.3	3.5
1996*	49,969	18.6		1	14.6	14.6	0.2	3.2	0.6	4.0
1997	53,023	22.4		11.9	6.0	17.9	0.4	3.8	0.4	4.5
1998	49,906	24.2		11.8	6.4	18.2	0.4	4.8	0.8	6.0
1999	54,348	20.8		10.5	5.9	16.4	0.4	3.9	0.2	4.4
2000	56,854	19.5		10.9	5.3	16.2	0.7	2.6	0.0	3.3
2001	62,036	15.2		9.5	2.9	12.4	0.5	1.6	0.6	2.7
2002	70,146	15.5		7.6	5.1	12.7	0.9	2.0	0.0	2.9
2003	68,432	14.9		8.3	4.2	12.6	0.4	1.9	0.3	2.6
2004	72,495	13.7		7.4	3.4	10.9	0.4	2.1	0.3	2.8
2005	73,788	15.3		7.7	5.3	13.0	0.5	1.5	0.3	2.3
2006	78,533	15.2		8.5	4.3	12.9	0.3	1.8	0.3	2.3
2007	80,764	13.5		8.0	2.7	10.8	0.2	2.0	0.5	2.7
2008	85,811	10.7		5.8	2.2	8.0	0.6	1.7	0.3	2.7
2009	85,909	10.0		6.4	2.0	8.4	0.5	1.0	0.1	1.6
2010	90,089	9.7		4.8	2.6	7.3	0.3	1.6	0.4	2.3
2011	91,655	12.0		6.4	3.6	10.0	0.4	1.1	0.4	2.0
2012	97,991	9.8		4.7	2.7	7.3	0.5	1.3	0.5	2.3
2013	101,012	8.4		4.1	2.5	6.5	0.5	1.0	0.4	1.9
2014	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2015 YTD (June 30)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	1,500,208									

^{*} Driver / passenger fatality breakdown not available for 1995 and 1996.

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Reference:	BW (MPI) 2-1 2015 GRA; C	AC (MPI) 1-	201(a) 2015 GRA
Topic:	Road Safety		
Sub Topic:	Statistics		
Issue:	Bodily Injury Trend Analysi	s	

Preamble/Rationale: Bike Winnipeg seeks to continue reviewing long term MPI bodily injury data in a disaggregated fashion to better understand trends relating to fatalities and serious injuries. BW wishes to review the distribution of bodily injuries amongst different road users including drivers, passengers and different categories of vulnerable road users including pedestrians, cyclists and motorcyclists.

In the request below, a working definition for the terms current and ultimate is:

Current (Current Fiscal Year Claims Incurred):

Current fiscal year claims incurred represent the accumulation or sum of all changes in claims dollar activity (paid, reserves, recoveries, IBNR, etc.) for all previous Insurance Accident Years.

Ultimate (Ultimate Claims Incurred):

Ultimate claims incurred for a year represent the sum of the dollar activity expected/projected/developed to be incurred for a particular Insurance Accident Year (for example what will be the ultimate claims incurred for collision for the Insurance Accident Year for 2012/13).

Question:

Please complete the tables provided in **Attachment C**, with regard to the victim type and classifications for fatalities and serious injuries.



- 1. MPI Bodily Injuries Count of Claims
- 2. MPI Bodily Injuries Cost Current value (\$000)
- 3. MPI Bodily Injuries Cost Ultimate value (\$000)
- 4. MPI Bodily Injuries per Licensed Drivers

RESPONSE:

Refer to the following tables.

1. MPI Bodily Inju	ry (BI) Claims	- Count of Claims										
			Мо	tor Vehicles (M	IV)	Calculated	Vulnerable F	Road Use	ers (VRU)	Calculated	Ratio	Ratio
Reported Insurance Year	All BI Claims	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV BI Claims	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU BI Claims	MV / All BI Claims	VRU/All Bl Claims
2000	10,823	319	6,609	2,899	341	9,849	130	372	153	655	91.00%	6.05%
2001	11,215	320	6,893	2,945	437	10,275	154	314	152	620	91.62%	5.53%
2002	11,705	334	7,313	3,034	404	10,751	165	306	149	620	91.85%	5.30%
2003	11,730	236	7,537	2,984	301	10,822	168	324	180	672	92.26%	5.73%
2004	11,425	222	7,385	2,931	299	10,615	110	307	171	588	92.91%	5.15%
2005	10,929	188	7,067	2,731	343	10,141	142	292	166	600	92.79%	5.49%
2006	12,040	147	7,767	3,129	285	11,181	164	362	186	712	92.87%	5.91%
2007	11,993	193	7,936	2,966	165	11,067	157	383	193	733	92.28%	6.11%
2008	11,483	220	7,522	2,907	143	10,572	185	358	148	691	92.07%	6.02%
2009	11,383	223	7,299	2,997	149	10,445	169	369	177	715	91.76%	6.28%
2010	11,804	259	7,778	2,887	101	10,766	164	391	224	779	91.21%	6.60%
2011	11,488	246	7,457	2,836	115	10,408	164	476	194	834	90.60%	7.26%
2012	12,203	331	8,103	2,892	131	11,126	157	391	198	746	91.17%	6.11%
2013	12,400	689	8,146	2,770	133	11,049	148	344	170	662	89.10%	5.34%
2014	11,012	363	7,309	2,545	120	9,974	154	343	178	675	90.57%	6.13%
2015 YTD (June 30)	4,245	98	2,848	949	54	3,851	72	142	82	296	90.72%	6.97%
Total 2000 - 2015 YTD	177,878	4,388	114,969	44,402	3,521	162,892	2,403	5,474	2,721	10,598	91.58%	5.96%

			Mo	tor Vehicles (M	V)	Calculated	Vulnerable	e Road Users	(VRU)	Calculated	Ratio	Ratio
Reported Insurance Year	All BI Claims	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV BI Claims	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU BI Claims	MV / All Bl Claims	VRU/All BI Claims
2000	123,278	7,163	54,255	31,231	17,156	102,642	3,506	8,553	1,413	13,472	83.26%	10.93%
2001	127,643	16,997	54,562	23,060	21,362	98,984	5,463	4,968	1,231	11,662	77.55%	9.14%
2002	133,953	17,586	47,392	27,060	28,061	102,514	4,569	8,470	814	13,854	76.53%	10.34%
2003	127,651	9,172	61,197	21,280	18,896	101,373	4,325	11,229	1,553	17,107	79.41%	13.40%
2004	127,528	9,293	42,976	51,055	9,735	103,765	4,331	8,724	1,415	14,470	81.37%	11.35%
2005	134,429	13,660	63,025	23,444	16,512	102,982	7,441	9,162	1,184	17,787	76.61%	13.23%
2006	173,735	11,394	71,526	46,767	17,441	135,734	13,231	11,241	2,135	26,607	78.13%	15.31%
2007	163,088	5,496	81,464	46,976	5,668	134,109	9,143	8,843	5,496	23,483	82.23%	14.40%
2008	148,786	4,562	74,422	34,928	8,156	117,507	8,150	16,557	2,010	26,717	78.98%	17.96%
2009	143,140	10,603	73,082	27,384	5,962	106,428	8,265	12,419	5,426	26,109	74.35%	18.24%
2010	155,143	10,540	72,451	38,129	2,563	113,143	14,616	12,754	4,090	31,460	72.93%	20.28%
2011	144,693	6,755	65,742	42,256	4,338	112,336	8,610	13,598	3,394	25,602	77.64%	17.69%
2012	149,324	14,344	75,606	25,945	2,429	103,981	5,541	18,744	6,713	30,999	69.63%	20.76%
2013	121,144	7,331	56,672	24,688	2,151	83,512	10,420	16,562	3,319	30,302	68.94%	25.01%
2014	88,607	6,957	45,864	17,898	949	64,710	3,446	11,459	2,034	16,939	73.03%	19.12%
2015 YTD (June 30)	21,388	1,092	11,353	5,084	194	16,631	844	2,254	566	3,665	77.76%	17.14%
Total 2000 - 2015 YTD	2,083,530	152,946	951,591	487,186	161,574	1,600,350	111,902	175,539	42,793	330,233	76.81%	15.85%

			Mo	otor Vehicles (N	ΛV)	Calculated	Vulnerable	e Road User	s (VRU)	Calculated	Ratio	Ratio
Reported Insurance Year	All BI Claims	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV BI Claims	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU BI Claims	MV / All BI Claims	VRU/All Bl Claims
2000	126,220	7,334	55,550	31,977	17,565	105,092	3,590	8,757	1,447	13,794	83.26%	10.93%
2001	131,406	17,498	56,170	23,740	21,992	101,902	5,624	5,114	1,267	12,006	77.55%	9.14%
2002	136,213	17,883	48,192	27,517	28,535	104,243	4,647	8,613	828	14,087	76.53%	10.34%
2003	129,990	9,340	62,318	21,670	19,242	103,230	4,404	11,435	1,582	17,420	79.41%	13.40%
2004	130,085	9,479	43,837	52,078	9,930	105,846	4,418	8,899	1,443	14,760	81.37%	11.35%
2005	137,974	14,020	64,687	24,062	16,947	105,697	7,637	9,404	1,216	18,256	76.61%	13.23%
2006	178,089	11,680	73,319	47,939	17,878	139,136	13,563	11,523	2,188	27,273	78.13%	15.31%
2007	168,276	5,671	84,056	48,471	5,849	138,375	9,434	9,124	5,671	24,230	82.23%	14.40%
2008	154,923	4,750	77,492	36,369	8,493	122,354	8,486	17,240	2,093	27,819	78.98%	17.96%
2009	151,694	11,236	77,449	29,020	6,319	112,788	8,759	13,161	5,750	27,670	74.35%	18.24%
2010	167,175	11,358	78,070	41,086	2,762	121,918	15,750	13,743	4,407	33,900	72.93%	20.28%
2011	168,236	7,854	76,438	49,131	5,044	130,614	10,011	15,810	3,946	29,768	77.64%	17.69%
2012	185,069	17,778	93,705	32,156	3,011	128,872	6,868	23,231	8,320	38,419	69.63%	20.76%
2013	164,741	9,969	77,067	33,573	2,925	113,565	14,170	22,523	4,514	41,207	68.94%	25.01%
2014	110,587	8,683	57,241	22,338	1,184	80,763	4,301	14,302	2,538	21,141	73.03%	19.12%
2015 YTD (June 30)	54,937	2,805	29,162	13,058	498	42,719	2,169	5,790	1,455	9,414	77.76%	17.14%
Total 2000 - 2015 YTD	2,307,290	169,372	1,053,787	539,507	178,926	1,772,219	123,920	194,390	47,388	365,699	76.81%	15.85%

				М	otor Vehicles (M	V)	Calculated	Vulnera	ble Road Users	s (VRU)	Calculated
Reported Insurance Year	Number Licensed Active Drivers	All Bl Claims	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV BI Claims	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU BI Claims
2001	695,668	16.1212	0.4600	9.9085	4.2333	0.6282	14.7700	0.2214	0.4514	0.2185	0.8912
2002	701,061	16.6961	0.4764	10.4313	4.3277	0.5763	15.3353	0.2354	0.4365	0.2125	0.8844
2003	712,785	16.4566	0.3311	10.5740	4.1864	0.4223	15.1827	0.2357	0.4546	0.2525	0.9428
2004	721,305	15.8393	0.3078	10.2384	4.0635	0.4145	14.7164	0.1525	0.4256	0.2371	0.8152
2005	725,636	15.0613	0.2591	9.7390	3.7636	0.4727	13.9753	0.1957	0.4024	0.2288	0.8269
2006	728,518	16.5267	0.2018	10.6614	4.2950	0.3912	15.3476	0.2251	0.4969	0.2553	0.9773
2007	735,506	16.3058	0.2624	10.7899	4.0326	0.2243	15.0468	0.2135	0.5207	0.2624	0.9966
2008	748,304	15.3454	0.2940	10.0521	3.8848	0.1911	14.1279	0.2472	0.4784	0.1978	0.9234
2009	760,143	14.9748	0.2934	9.6021	3.9427	0.1960	13.7408	0.2223	0.4854	0.2329	0.9406
2010	772,922	15.2719	0.3351	10.0631	3.7352	0.1307	13.9290	0.2122	0.5059	0.2898	1.0079
2011	795,972	14.4327	0.3091	9.3684	3.5629	0.1445	13.0758	0.2060	0.5980	0.2437	1.0478
2012	810,697	15.0525	0.4083	9.9951	3.5673	0.1616	13.7240	0.1937	0.4823	0.2442	0.9202
2013	822,988	15.0671	0.8372	9.8981	3.3658	0.1616	13.4255	0.1798	0.4180	0.2066	0.8044
2014	833,376	13.2137	0.4356	8.7703	3.0538	0.1440	11.9682	0.1848	0.4116	0.2136	0.8100
2015 YTD (June 30)	423,980	10.0123	0.2311	6.7173	2.2383	0.1274	9.0830	0.1698	0.3349	0.1934	0.6981
Total 2001 - 2015 YTD	10,988,861	16.1871	0.3993	10.4623	4.0406	0.3204	14.8234	0.2187	0.4981	0.2476	0.9644

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Reference:	BW (MPI) 1-2 2015 GRA		
Topic:	Road Safety		
Sub Topic:	Statistics		
Issue:	Injury Trend Analysis		

Preamble/Rationale: 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.

Question:

- a) Please provide the total number of registered vehicles in Manitoba by general class, since 2000.
- b) Please complete the tables provided in **Attachment D**, with regard to the victim type and injury by fatality, serious injury and bodily injury.
 - 1. MPI Fatal Injuries Count of Claims by non-Commercial class
 - 2. MPI Fatal Injuries Count of Claims by Commercial class
 - 3. MPI Serious Injuries Count of Claims by non-Commercial class
 - 4. MPI Serious Injuries Count of Claims by Commercial class
 - 5. MPI Bodily Injuries Count of Claims by non-Commercial class
 - 6. MPI Bodily Injuries Count of Claims by Commercial class

RESPONSE:

Refer to the following tables.

a)

Total number of registered vehicle	es.													
Registration Class	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
				Ve	hicle Class	(Non-Con	nmercial)							
Passenger	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	545,723
Antique	68	73	83	79	71	74	80	82	84	77	95	103	131	134
Motorcycle/Moped	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	12,658
Truck	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	149,295
Farm Truck	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	43,361
Snow Vehicle	25	22	59	55	52	49	48	49	47	49	50	48	46	43
Trailer	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	160,451
Tractor (non-farm)	73	80	144	140	131	122	125	120	117	122	123	120	117	116
Subtotal	744,170	756,767	723,889	734,365	745,731	754,959	766,174	784,796	808,893	824,826	843,826	866,627	895,399	911,781
					Commerc	ial Vehicle	Class							
Truck	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	31,407
PSV-Truck	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	11,337
Dealer/Repairer	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	6,210
Taxi/Livery	833	840	747	735	756	764	772	769	778	834	854	871	885	892
PSV-Bus	71	71	139	135	132	135	134	143	146	155	161	150	143	153
Trailers	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	50,936
PSV-Trailers	30	35	44	57	57	54	58	56	51	57	57	57	71	78
Subtotal	Subtotal 56,854 62,036 70,146 68,432 72,495 73,788 78,533 80,764 85,811 85,908 90,089 91,656 97,991 101,0													101,013
Total Registrations														
Total Registrations	801,024	818,803	794,035	802,797	818,226	828,747	844,707	865,560	894,704	910,734	933,915	958,283	993,390	1,012,794



b)

			Motor Vehicles (MV)			Calculated	Vulnerable Road Users (VRU)			Calculated	Ratio	Ratio
Calendar Year	All Fatalities	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Fatalities	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Fatalities	MV / All Fatalities	VRU/All Fatalities
2000	137	17	56	23	16	95	2	13	1	16	69.34%	11.68%
2001	129	15	49	27	14	90	3	13	4	20	69.77%	15.50%
2002	131	9	49	35	18	102	4	10	0	14	77.86%	10.69%
2003	117	5	51	23	16	90	1	10	2	13	76.92%	11.11%
2004	126	10	52	26	9	87	2	17	2	21	69.05%	16.67%
2005	110	5	42	30	13	85	5	9	2	16	77.27%	14.55%
2006	145	7	65	40	10	115	2	14	2	18	79.31%	12.41%
2007	124	10	51	19	10	80	1	21	4	26	64.52%	20.97%
2008	111	15	43	25	4	72	2	15	3	20	64.86%	18.02%
2009	105	5	53	17	7	77	4	12	0	16	73.33%	15.24%
2010	105	10	41	22	3	66	3	18	3	24	62.86%	22.86%
2011	124	18	53	26	0	79	1	16	3	20	63.71%	16.13%
2012	106	11	44	20	1	65	5	18	6	29	61.32%	27.36%
2013	108	14	45	30	0	75	5	6	4	15	69.44%	13.89%
2014	85	7	36	14	2	52	4	12	5	21	61.18%	24.71%
2015 YTD (June 30)	17	1	5	1	0	6	2	7	0	9	35.29%	52.94%
tal 2000 - 2015 YTD	1,780	159	735	378	123	1,236	46	211	41	298	69.44%	16.74%



YTD

2. MPI Fatal Injuri	es - Count of	Claims by Commer	cial class			1						
			М	Motor Vehicles (MV) Calculated Vulnerable Road Users (VRU)				Calculated	Ratio	Ratio		
Calendar Year	All Fatalities	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Fatalities	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Fatalities	MV / All Fatalities	VRU/All Fatalities
2000	137	17	4	1	4	9	2	13	1	16	6.57%	11.68%
2001	129	15	3	0	1	4	3	13	4	20	3.10%	15.50%
2002	131	9	3	1	2	6	4	10	0	14	4.58%	10.69%
2003	117	5	5	1	3	9	1	10	2	13	7.69%	11.11%
2004	126	10	4	2	2	8	2	17	2	21	6.35%	16.67%
2005	110	5	2	1	1	4	5	9	2	16	3.64%	14.55%
2006	145	7	4	1	0	5	2	14	2	18	3.45%	12.41%
2007	124	10	3	3	2	8	1	21	4	26	6.45%	20.97%
2008	111	15	2	1	1	4	2	15	3	20	3.60%	18.02%
2009	105	5	5	1	1	7	4	12	0	16	6.67%	15.24%
2010	105	10	3	2	0	5	3	18	3	24	4.76%	22.86%
2011	124	18	4	2	1	7	1	16	3	20	5.65%	16.13%
2012	106	11	1	0	0	1	5	18	6	29	0.94%	27.36%
2013	108	14	2	2	0	4	5	6	4	15	3.70%	13.89%
2014	85	7	4	1	0	5	4	12	5	21	5.88%	24.71%
2015 YTD (June 30)	17	1	1	0	0	1	2	7	0	9	5.88%	52.94%
otal 2000 - 2015 YTD	1,780	159	50	19	18	87	46	211	41	298	4.89%	16.74%

			M	otor Vehicles (M	۸V)	Calculated	Vulnerable I	Road Use	rs (VRU)	Calculated	Ratio	Ratio
Calendar Year	All Serious Injuries	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Serious Injuries	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Serious Injuries	MV / All Serious Injuries	VRU/All Serious Injuries
2000	69	3	24	22	9	55	2	5	1	8	79.71%	11.59%
2001	65	7	26	10	8	44	3	2	0	5	67.69%	7.69%
2002	69	13	13	16	12	41	3	6	0	9	59.42%	13.04%
2003	67	7	30	10	7	47	2	5	0	7	70.15%	10.45%
2004	59	8	15	16	6	37	2	5	1	8	62.71%	13.56%
2005	73	7	30	10	9	49	3	8	0	11	67.12%	15.07%
2006	99	7	44	18	8	70	9	6	1	16	70.71%	16.16%
2007	94	4	49	23	3	75	5	2	3	10	79.79%	10.64%
2008	91	2	47	15	5	67	4	11	0	15	73.63%	16.48%
2009	95	6	46	16	5	67	4	6	2	12	70.53%	12.63%
2010	94	7	37	21	2	60	11	8	3	22	63.83%	23.40%
2011	85	4	37	20	3	60	5	9	2	16	70.59%	18.82%
2012	69	5	31	8	0	39	3	9	4	16	56.52%	23.19%
2013	42	4	12	8	1	21	4	5	3	12	50.00%	28.57%
2014	26	4	8	5	0	13	0	7	0	7	50.00%	26.92%
2015 YTD (June 30)	4	1	0	2	0	2	0	1	0	1	50.00%	25.00%
Total 2000 - 2015 YTD	1,101	89	449	220	78	747	60	95	20	175	67.85%	15.89%

			Me	otor Vehicles (I	MV)	Calculated	Vulnerable	Road Use	rs (VRU)	Calculated	Ratio	Ratio
Calendar Year	All Serious Injuries	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV Serious Injuries	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU Serious Injuries	MV / All Serious Injuries	VRU/All Serious Injuries
2000	69	3	2	0	1	3	2	5	1	8	4.35%	11.59%
2001	65	7	5	2	2	9	3	2	0	5	13.85%	7.69%
2002	69	13	4	1	1	6	3	6	0	9	8.70%	13.04%
2003	67	7	2	0	4	6	2	5	0	7	8.96%	10.45%
2004	59	8	4	2	0	6	2	5	1	8	10.17%	13.56%
2005	73	7	4	1	1	6	3	8	0	11	8.22%	15.07%
2006	99	7	4	2	0	6	9	6	1	16	6.06%	16.16%
2007	94	4	5	0	0	5	5	2	3	10	5.32%	10.64%
2008	91	2	6	1	0	7	4	11	0	15	7.69%	16.48%
2009	95	6	8	2	0	10	4	6	2	12	10.53%	12.63%
2010	94	7	4	1	0	5	11	8	3	22	5.32%	23.40%
2011	85	4	3	1	1	5	5	9	2	16	5.88%	18.82%
2012	69	5	6	1	2	9	3	9	4	16	13.04%	23.19%
2013	42	4	3	1	1	5	4	5	3	12	11.90%	28.57%
2014	26	4	2	0	0	2	0	7	0	7	7.69%	26.92%
2015 YTD (June 30)	4	1	0	0	0	0	0	1	0	1	0.00%	25.00%
Total 2000 - 2015 YTD	1,101	89	62	15	13	90	60	95	20	175	8.17%	15.89%

			Mot	or Vehicles (M\	/)	Calculated	Vulnerable	Road Use	rs (VRU)	Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV BI Claims	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU BI Claims	MV / All Bl Claims	VRU/All Bl Claims
2000	10,823	319	6,387	2,835	314	9,536	130	372	153	655	88.11%	6.05%
2001	11,215	320	6,644	2,897	408	9,949	154	314	152	620	88.71%	5.53%
2002	11,705	334	6,992	2,951	379	10,322	165	306	149	620	88.18%	5.30%
2003	11,730	236	7,228	2,928	285	10,441	168	324	180	672	89.01%	5.73%
2004	11,425	222	7,113	2,881	278	10,272	110	307	171	588	89.91%	5.15%
2005	10,929	188	6,793	2,669	317	9,779	142	292	166	600	89.48%	5.49%
2006	12,040	147	7,497	3,072	267	10,836	164	362	186	712	90.00%	5.91%
2007	11,993	193	7,627	2,906	145	10,678	157	383	193	733	89.04%	6.11%
2008	11,483	220	7,279	2,852	136	10,267	185	358	148	691	89.41%	6.02%
2009	11,383	223	7,060	2,949	136	10,145	169	369	177	715	89.12%	6.28%
2010	11,804	259	7,517	2,826	96	10,439	164	391	224	779	88.44%	6.60%
2011	11,488	246	7,225	2,788	101	10,114	164	476	194	834	88.04%	7.26%
2012	12,203	331	7,827	2,847	121	10,795	157	391	198	746	88.46%	6.11%
2013	12,400	689	7,857	2,725	119	10,701	148	344	170	662	86.30%	5.34%
2014	11,012	363	7,091	2,495	111	9,697	154	343	178	675	88.06%	6.13%
2015 YTD (June 30)	4,245	98	2,764	933	49	3,746	72	142	82	296	88.24%	6.97%
Total 2000 - 2015 YTD	177,878	4,388	110,901	43,554	3,262	157,717	2,403	5,474	2,721	10,598	88.67%	5.96%

6. MPI Bodily Inj	uries - Count	of Claims by Comm	ercial class									
			Moto	or Vehicles (MV	')	Calculated	Vulnerable	Road User	s (VRU)	Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/errors	Driver	Passenger	Other Injured	Sub-total MV BI Claims	Motorcycle & Moped	Peds	Cyclists	Sub-total VRU BI Claims	MV / All BI Claims	VRU/All Bl Claims
2000	10,823	319	222	64	27	313	130	372	153	655	2.89%	6.05%
2001	11,215	320	249	48	29	326	154	314	152	620	2.91%	5.53%
2002	11,705	334	321	83	25	429	165	306	149	620	3.67%	5.30%
2003	11,730	236	309	56	16	381	168	324	180	672	3.25%	5.73%
2004	11,425	222	272	50	21	343	110	307	171	588	3.00%	5.15%
2005	10,929	188	274	62	26	362	142	292	166	600	3.31%	5.49%
2006	12,040	147	270	57	18	345	164	362	186	712	2.87%	5.91%
2007	11,993	193	309	60	20	389	157	383	193	733	3.24%	6.11%
2008	11,483	220	243	55	7	305	185	358	148	691	2.66%	6.02%
2009	11,383	223	239	48	13	300	169	369	177	715	2.64%	6.28%
2010	11,804	259	261	61	5	327	164	391	224	779	2.77%	6.60%
2011	11,488	246	232	48	14	294	164	476	194	834	2.56%	7.26%
2012	12,203	331	276	45	10	331	157	391	198	746	2.71%	6.11%
2013	12,400	689	289	45	14	348	148	344	170	662	2.81%	5.34%
2014	11,012	363	218	50	9	277	154	343	178	675	2.52%	6.13%
2015 YTD (June 30)	4,245	98	84	16	5	105	72	142	82	296	2.47%	6.97%
Total 2000 - 2015 YTD	177,878	4,388	4,068	848	259	5,175	2,403	5,474	2,721	10,598	2.91%	5.96%

Volume:	LP 5.1, 2013 Traffic Collision Statistics Report	Page No.:	27-28					
Reference:	Bike Winnipeg (MPI) 1-10	2014 GRA						
Topic:	Road Safety							
Sub Topic:	Statistics							
Issue:	Contributing Factors - Trend Analysis							

Preamble/Rationale: 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.

Question:

- a) Please refer to Table 9-7 of the 2013 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 for the latest 6 year period of data.
- b) With reference to Table 9-9 of the 2013 Traffic Collision Statistics Report, titled "Summary of Speed, Distracted, and Impaired as Contributing Factors". Relying on MPIs 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 for the latest 6 year period of data.
- c) Please re-create the table in (ii) above for pedestrians.

RESPONSE:

- a) Please refer to attachments A1, A2 and A3.
- b) Please refer to attachment B.
- c) Please refer to attachment C.



Table 9-7
Summary of Contributing Factors for BICYCLE Victims (Killed and Injured, Combined)
of Collisions: 2008 to 2013

	2008 Total	% of 2008 Total	2009 Total	% of 2009 Total	2010 Total	% of 2010 Total	2011 Total	% of 2011 Total	2012 Total	% of 2012 Total	2013 Total	% of 2013 Total
Contributing Factor	Victims	Victims										
Driver Action - Driving Properly and Human Condition - Apparently Normal	116	48.9%	82	37.1%	131	49.1%	102	52.0%	50	69.4%	37	45.1%
Driver Action - Driving properly	18	7.6%	18	8.1%	29	10.9%	11	5.6%	7	9.7%	8	9.8%
Any Driver Action	70	29.5%	59	26.7%	75	28.1%	66	33.7%	26	36.1%	35	42.7%
Following too closely	1	0.4%	0	-	2	0.7%	0	_	0	-	2	2.4%
Turning improperly	6	2.5%	4	1.8%	4	1.5%	6	3.1%	8	11.1%	8	9.8%
Passing improperly	1	0.4%	3	1.4%	0	-	1	0.5%	2	2.8%	0	-
Changing lanes improperly	1	0.4%	2	0.9%	1	0.4%	1	0.5%	0	-	2	2.4%
Fail to yield right-of-way	14	5.9%	20	9.0%	14	5.2%	18	9.2%	10	13.9%	6	7.3%
Disobey traffic control device/officer	11	4.6%	2	0.9%	6	2.2%	7	3.6%	0	-	2	2.4%
Drive wrong way on roadway	5	2.1%	2	0.9%	7	2.6%	2	1.0%	0	-	1	1.2%
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	0	_	0	•	0	-
Back unsafely	1	0.4%	3	1.4%	2	0.7%	0	_	0	-	0	-
Parking improperly	0	-	0	-	0	-	0	-	0	-	0	-
Lost control/Drive off road	2	0.8%	0	-	4	1.5%	1	0.5%	0	-	0	-
Driverless vehicle ran out of control	0	-	0	-	0	-	0	-	0	-	0	-
Leave stop sign before safe to do so	3	1.3%	1	0.5%	5	1.9%	2	1.0%	1	1.4%	5	6.1%
Failed to signal	0	-	0	-	0	-	0	_	0	-	0	-
Take avoiding action	1	0.4%	1	0.5%	2	0.7%	3	1.5%	0	-	0	-
Driver inexperience	8	3.4%	4	1.8%	4	1.5%	2	1.0%	0	-	0	-
Pedestrian error/confusion	12	5.1%	16	7.2%	19	7.1%	24	12.2%	3	4.2%	5	6.1%
NET Speed	4	1.7%	4	1.8%	5	1.9%	1	0.5%	3	4.2%	1	1.2%
Exceeding speed limit	0	-	1	0.5%	0	-	0	_	0	-	0	-
Driving too fast for conditions	4	1.7%	2	0.9%	2	0.7%	0	_	2	2.8%	0	-
Unsafe operating speed (Too fast or too slow)	0	-	1	0.5%	3	1.1%	1	0.5%	1	1.4%	1	1.2%
NET Distracted driving	25	10.5%	27	12.2%	28	10.5%	14	7.1%	7	9.7%	20	24.4%
Careless Driving	9	3.8%	5	2.3%	9	3.4%	7	3.6%	6	8.3%	13	15.9%
Distraction/Inattention	17	7.2%	22	10.0%	21	7.9%	7	3.6%	1	1.4%	8	9.8%
Human Condition - Apparently Normal	67	28.3%	55	24.9%	63	23.6%	40	20.4%	13	18.1%	30	36.6%
Any Human Condition	22	9.3%	27	12.2%	25	9.4%	7	3.6%	2	2.8%	9	11.0%
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	1	0.4%	0	-	0	-	0	-	0	-	0	•
Defective hearing	2	0.8%	0	-	1	0.4%	0	-	0	-	0	•
Medical disability	0	-	0	-	0	-	0	-	0	-	0	•
Physical disability	0	-	1	0.5%	0	-	0	-	0	-	0	•
Mental disability	1	0.4%	0	-	2	0.7%	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	2	0.8%	4	1.8%	2	0.7%	0		1	1.4%	1	1.2%
Ability impaired alcohol	2	0.8%	2	0.9%	1	0.4%	0		1	1.4%	1	1.2%
Ability impaired drugs	0	-	0		0		0		0		0	
Had been drinking/Suspected alcohol use	0	-	2	0.9%	1	0.4%	0	-	0	-	0	-

	2008	% of 2008	2009	% of 2009	2010	% of 2010	2011	% of 2011	2012	% of 2012		% of 2013
Contributing Factor	Total Victims											
No Apparent (Vehicle) Defect	137	57.8%	104	47.1%	146	54.7%	116	59.2%	54	75.0%	44	53.7%
Any Vehicle Defect	3	1.3%	0	47.170	2	0.7%	1	0.5%	0	7 3.0 70	0	33.7 70
Defective brakes	2		0		1	0.1%	1	0.5%	0		0	
Defective steering	1	0.4%	0		0	0.470	0	0.570	0		0	
Defective steering Defective headlights	0	0.470	0		0		0		0		0	
Defective headinghts	0	_	0	_	0	_	0		0		0	
Defective brake lights 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 suspension/whiceis	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		1	0.4%	0		0		0	
Fire	0	_	0	_	0	0.470	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 Environmental Condition	8	3.4%	8	3.6%	7	2.6%	2	1.0%	5	6.9%	3	3.7%
Animal action - Wild	0	- 0.170	0	- 0.070	. 0	2.070	0	1.070	0		0	
Animal action - Domestic	0	_	0	_	0	_	0	_	0		0	
Slippery road surface	2	0.8%	0	_	0	_	1	0.5%	0	_	0	
Snow drift	0	-	0	_	0	_	0	-	0	-	0	
Obstruction/debris on roadway	1	0.4%	0	_	0	_	0	_	0	-	0	-
View obstructed/limited	1	0.4%	5	2.3%	5	1.9%	1	0.5%	2	2.8%	0	
Glare/reflection	1	0.4%	1	0.5%	0	_	0	_	0	-	1	1.2%
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	_	2	0.7%	0	_	1	1.4%	2	2.4%
Pedestrian corridor in use	1	0.4%	3	1.4%	0	-	0	-	1	1.4%	0	-
Uninvolved vehicle	0	-	0	-	0	-	0	-	0	-	0	-
Uninvolved pedestrian	2	0.8%	0	_	0	-	0	-	1	1.4%	0	-
Presence of prior accident	0	-	0	-	0	-	0	-	0	-	0	-
No Contributing Factor(s) Identified	131	55.3%	140	63.3%	144	53.9%	121	61.7%	27	37.5%	29	35.4%
Not Applicable/Not Stated	0	-	1	0.5%	0	-	2	1.0%	0	-	0	-
Total	237	100%	221	100%	267	100%	196	100%	72	100%	82	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.

Table 9-7
Summary of Contributing Factors for PEDESTRIAN Victims (Killed and Injured, Combined)
of Collisions: 2008 to 2013

Contributing Factor	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	2013 Total Victims	% of 2013 Total Victims
Driver Action - Driving Properly and Human Condition - Apparently Normal	134	30.6%	105	28.5%	144	36.1%	101	29.7%	45	25.6%	24	20.7%
Driver Action - Driving properly	21	4.8%	19	5.2%	19	4.8%	10	2.9%	9	5.1%	1	0.9%
Any Driver Action	147	33.6%	110	29.9%	116	29.1%	76	22.4%	69	39.2%	53	45.7%
Following too closely	0	-	1	0.3%	0	-	0	-	0	-	0	-
Turning improperly	3	0.7%	5	1.4%	7	1.8%	3	0.9%	10	5.7%	7	6.0%
Passing improperly	0	-	0	-	2	0.5%	0	-	0	-	0	-
Changing lanes improperly	0	-	0	-	0	-	0	-	1	0.6%	2	1.7%
Fail to yield right-of-way	35	8.0%	17	4.6%	29	7.3%	24	7.1%	22	12.5%	8	6.9%
Disobey traffic control device/officer	10	2.3%	2	0.5%	5	1.3%	2	0.6%	6	3.4%	2	1.7%
Drive wrong way on roadway	0	-	0	-	0	-	1	0.3%	0	-	0	-
Passing a vehicle at pedestrian X-walk	3	0.7%	3	0.8%	1	0.3%	1	0.3%	2	1.1%	0	-
Back unsafely	2	0.5%	3	0.8%	2	0.5%	1	0.3%	8	4.5%	10	8.6%
Parking improperly	2	0.5%	0	-	0	-	0	-	0	-	2	1.7%
Lost control/Drive off road	1	0.2%	1	0.3%	0	-	0	-	2	1.1%	0	-
Driverless vehicle ran out of control	0	-	0	-	0	-	0	-	0	-	0	-
Leave stop sign before safe to do so	4	0.9%	1	0.3%	2	0.5%	1	0.3%	2	1.1%	2	1.7%
Failed to signal	0	-	0	-	0	-	0	-	0	-	0	-
Take avoiding action	4	0.9%	2	0.5%	3	0.8%	1	0.3%	5	2.8%	0	-
Driver inexperience	4	0.9%	3	0.8%	2	0.5%	1	0.3%	0	-	0	-
Pedestrian error/confusion	71	16.2%	66	17.9%	55	13.8%	35	10.3%	17	9.7%	17	14.7%
NET Speed	9	2.1%	4	1.1%	7	1.8%	1	0.3%	2	1.1%	2	1.7%
Exceeding speed limit	2	0.5%	1	0.3%	2	0.5%	0	-	0	-	1	0.9%
Driving too fast for conditions	7	1.6%	2	0.5%	7	1.8%	1	0.3%	2	1.1%	1	0.9%
Unsafe operating speed (Too fast or too slow)	0	-	2	0.5%	0	-	0	-	0	-	0	-
NET Distracted driving	49	11.2%	33	9.0%	52	13.0%	30	8.8%	25	14.2%	19	16.4%
Careless Driving	12	2.7%	7	1.9%	6	1.5%	8	2.4%	22	12.5%	13	11.2%
Distraction/Inattention	38	8.7%	26	7.1%	47	11.8%	24	7.1%	5	2.8%	7	6.0%
Human Condition - Apparently Normal	117	26.7%	104	28.3%	98	24.6%	57	16.8%	61	34.7%	63	54.3%
Any Human Condition	75	17.1%	55	14.9%	70	17.5%	41	12.1%	8	4.5%	17	14.7%
Loss of consciousness/Blackout prior to collision	2	0.5%	2	0.5%	0	-	0	-	0	-	0	-
Extreme fatigue/Fell asleep	1	0.2%	0	-	0	-	1	0.3%	0	-	0	-
Defective eyesight	0	-	1	0.3%	0	-	0	-	0	-	0	-
Defective hearing	1	0.2%	0	-	0	-	1	0.3%	0	-	0	-
Medical disability	0	-	0	-	0	-	0	-	0	-	0	-
Physical disability	0	-	2	0.5%	1	0.3%	0	-	0	-	1	0.9%
Mental disability	8	1.8%	0	-	1	0.3%	4	1.2%	0	-	0	-
Mental confusion/Inability to remember	1	0.2%	1	0.3%	1	0.3%	1	0.3%	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	28	6.4%	25	6.8%	22	5.5%	14	4.1%	3	1.7%	10	8.6%
Ability impaired alcohol	17	3.9%	11	3.0%	14	3.5%	10	2.9%	2	1.1%	5	4.3%
Ability impaired drugs	0	-	0	-	1	0.3%	0	_	0	-	0	-
Had been drinking/Suspected alcohol use	11	2.5%	14	3.8%	8	2.0%	4	1.2%	1	0.6%	5	4.3%

	2008		2009		2010		2011		2012		2013	% of 2013
	Total	% of 2008	Total	% of 2009	Total	% of 2010	Total	% of 2011	Total	% of 2012	Total	Total
Contributing Factor	Victims	Total Victims	Victims	Victims								
No Apparent (Vehicle) Defect	212	48.4%	148	40.2%	189	47.4%	134	39.4%	60	34.1%	42	36.2%
Any Vehicle Defect	0	-	2	0.5%	2	0.5%	0	-	0	-	2	1.7%
Defective brakes	0		0	-	1	0.3%	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	-	2	1.7%
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	-	1	0.3%	0	_	0	-	0	-
Defective glazing (obscured windows)	0	-	2	0.5%	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 Environmental Condition	39	8.9%	33	9.0%	26	6.5%	27	7.9%	24	13.6%	17	14.7%
Animal action - Wild	0	-	0	-	0	-	0	-	0	-	0	
Animal action - Domestic	0	_	0	_	0	-	1	0.3%	0	-	0	
Slippery road surface	13	3.0%	11	3.0%	6	1.5%	7	2.1%	3	1.7%	9	7.8%
Snow drift	1	0.2%	0	_	0	-	0	-	0	-	0	
Obstruction/debris on roadway	0	-	0	_	0	-	0	_	0	_	0	
View obstructed/limited	5	1.1%	4	1.1%	6	1.5%	3	0.9%	6	3.4%	7	6.0%
Glare/reflection	7	1.6%	4	1.1%	4	1.0%	7	2.1%	3	1.7%	0	
Construction zone	1	0.2%	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	3	0.7%	3	0.8%	3	0.8%	3	0.9%	3	1.7%	3	2.6%
Pedestrian corridor in use	10		10	2.7%	5	1.3%	7	2.1%	10	5.7%	3	2.6%
Uninvolved vehicle	0		1	0.3%	0		0		1		0	
Uninvolved pedestrian	0		2	0.5%	2		1	0.3%	1	0.6%	1	0.9%
Presence of prior accident	0		0	-	0		0		0		1	0.9%
No Contributing Factor(s) Identified	337	76.9%	279	75.8%	294	73.7%	287	84.4%	119	67.6%	52	44.8%
Not Applicable/Not Stated	0	-	1	0.3%	0	-	9	2.6%	0	-	0	
Total	438	100%	368	100%	399	100%	340	100%	176	100%	116	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.

Table 9-7
Summary of Contributing Factors for MOTORCYCLIST or MOPED Victims (Killed and Injured, Combined) of Collisions: 2008 to 2013

Contributing Factor	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	2013 Total Victims	% of 2013 Total Victims
Driver Action - Driving Properly and Human Condition - Apparently Normal	59	40.4%	50	41.0%	63	50.0%	55	42.3%	78	65.0%	55	41.7%
Driver Action - Driving properly	13	8.9%	13	10.7%	13	10.3%	5	3.8%	1	0.8%	5	3.8%
Any Driver Action	59	40.4%	44	36.1%	49	38.9%	44	33.8%	54	45.0%	81	61.4%
Following too closely	3	2.1%	1	0.8%	5	4.0%	4	3.1%	4	3.3%	14	10.6%
Turning improperly	6	4.1%	3	2.5%	4	3.2%	3	2.3%	3	2.5%	12	9.1%
Passing improperly	0	-	1	0.8%	2	1.6%	3	2.3%	1	0.8%	0	-
Changing lanes improperly	3	2.1%	4	3.3%	1	0.8%	2	1.5%	10	8.3%	2	1.5%
Fail to yield right-of-way	8	5.5%	8	6.6%	7	5.6%	2	1.5%	10	8.3%	5	3.8%
Disobey traffic control device/officer	1	0.7%	1	0.8%	4	3.2%	3	2.3%	0	-	1	0.8%
Drive wrong way on roadway	1	0.7%	0	-	0	-	0	-	0	-	0	-
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	0	-	0	-	0	-
Back unsafely	0	-	0	-	0	-	1	0.8%	1	0.8%	1	0.8%
Parking improperly	0	-	0	-	0	-	1	0.8%	0	-	1	0.8%
Lost control/Drive off road	10	6.8%	12	9.8%	10	7.9%	7	5.4%	8	6.7%	15	11.4%
Driverless vehicle ran out of control	0	-	0	-	0	-	0	-	1	0.8%	0	-
Leave stop sign before safe to do so	2	1.4%	3	2.5%	2	1.6%	2	1.5%	3	2.5%	3	2.3%
Failed to signal	0	-	2	1.6%	0	-	0	-	0	-	0	-
Take avoiding action	6	4.1%	5	4.1%	3	2.4%	2	1.5%	2	1.7%	3	2.3%
Driver inexperience	7	4.8%	6	4.9%	3	2.4%	3	2.3%	2	1.7%	3	2.3%
Pedestrian error/confusion	1	0.7%	0	-	1	0.8%	0	-	0	-	0	-
NET Speed	10	6.8%	9	7.4%	5	4.0%	7	5.4%	5	4.2%	5	3.8%
Exceeding speed limit	2	1.4%	3	2.5%	1	0.8%	1	0.8%	0	_	0	-
Driving too fast for conditions	3	2.1%	1	0.8%	2	1.6%	5	3.8%	4	3.3%	4	3.0%
Unsafe operating speed (Too fast or too slow)	6	4.1%	7	5.7%	2	1.6%	1	0.8%	1	0.8%	1	0.8%
NET Distracted driving	18	12.3%	10	8.2%	10	7.9%	8	6.2%	9	7.5%	23	17.4%
Careless Driving	13	8.9%	6	4.9%	6	4.8%	7	5.4%	6	5.0%	21	15.9%
Distraction/Inattention	7	4.8%	6	4.9%	4	3.2%	1	0.8%	3	2.5%	2	1.5%
Human Condition - Apparently Normal	41	28.1%	23	18.9%	34	27.0%	26	20.0%	21	17.5%	10	7.6%
Any Human Condition	13	8.9%	8	6.6%	5	4.0%	3	2.3%	6	5.0%	2	1.5%
Loss of consciousness/Blackout prior to collision	0	-	0	-	0	-	0	-	0	-	0	-
Extreme fatigue/Fell asleep	1	0.7%	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	-	1	0.8%	1	0.8%	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		2	1.5%	0		0	
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	0	-
NET Impaired	5	3.4%	1	0.8%	1	0.8%	0	-	4	3.3%	0	-
Ability impaired alcohol	3	2.1%	1	0.8%	0	-	0	-	3	2.5%	0	-
Ability impaired drugs	1	0.7%	0	-	0	-	0	-	0	-	0	-
Had been drinking/Suspected alcohol use	2	1.4%	0	-	1	0.8%	0	-	1	0.8%	0	-
No Apparent (Vehicle) Defect	84	57.5%	55	45.1%	77	61.1%	55	42.3%	81	67.5%	54	40.9%

Contributing Factor	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	2013 Total Victims	% of 2013 Total Victims
Any Vehicle Defect	2	1.4%	1	0.8%	3	2.4%	3	2.3%	0	-	4	3.0%
Defective brakes	2	1.4%	0	-	1	0.8%	0	-	0	-	1	0.8%
Defective steering	0	-	0	-	0	-	1	0.8%	0	-	0	-
Defective headlights	0	-	0	-	0	-	0	-	0	-	0	-
Defective brake lights	0	-	0	-	0	-	0	-	0	-	0	-
Defective lighting (unspecified)	0	-	0	-	1	0.8%	2	1.5%	0	-	0	-
Defective engine controls/drive train	0	-	0	-	1	0.8%	0	-	0	-	0	•
Defective suspension/wheels	0	-	0	-	0	-	0	•	0	-	1	0.8%
Defective tires	0	-	1	0.8%	0	-	0	-	0	-	2	1.5%
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 Environmental Condition	24	16.4%	26	21.3%	22	17.5%	24	18.5%	8	6.7%	17	12.9%
Animal action - Wild	15	10.3%	6	4.9%	13	10.3%	8	6.2%	6	5.0%	10	7.6%
Animal action - Domestic	2	1.4%	2	1.6%	0	-	0	-	0	-	0	-
Slippery road surface	2	1.4%	4	3.3%	1	0.8%	6	4.6%	0	-	0	-
Snow drift	0	-	0	_	0	-	0	-	0	-	0	-
Obstruction/debris on roadway	2	1.4%	1	0.8%	3	2.4%	2	1.5%	0	-	2	1.5%
View obstructed/limited	0	-	1	0.8%	3	2.4%	0	-	0	-	2	1.5%
Glare/reflection	1	0.7%	2	1.6%	0	-	0	-	0	-	0	-
Construction zone	0	-	2	1.6%	0	-	0	-	0	-	0	-
Defective driving surface	2	1.4%	6	4.9%	2	1.6%	6	4.6%	1	0.8%	1	0.8%
Shoulders defective	0	-	1	0.8%	1	0.8%	2	1.5%	0	-	0	
Lane markings inadequate	0	-	0	-	0	-	0	-	0	-	0	-
Defective/inoperative traffic control device	0	-	0	-	0	-	0	-	0	-	0	-
Weather	0	-	2	1.6%	0	-	1	0.8%	1	0.8%	2	1.5%
Pedestrian corridor in use	0	-	1	0.8%	0	-	0	-	0	-	0	-
Uninvolved vehicle	1	0.7%	1	0.8%	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	45	30.8%	35	28.7%	30	23.8%	45	34.6%	18	15.0%	17	12.9%
Not Applicable/Not Stated	0	-	0	-	0	-	2	1.5%	0	-	0	
Total	146	100%	122	100%	126	100%	130	100%	120	100%	132	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.

Table 9-9
Summary of 'Speed', 'Distracted driving' & 'Impaired' as Contributing Factors
TO BICYCLE RELATED CRASHES: 2008 to 2013

		2008	2009	2010	2011	2012	2008-2012 average	2013
NET Speed ('Exceed	ing speed limit', 'Driving too fa	st for condition	s' and 'Unsafe	operating spee	ed (too fast or t	oo slow)' comb	oined)	
	All collisions	4	4	5	1	3	3	1
		1.6%	1.7%	1.7%	0.4%	2.0%	1.4%	0.7%
Collisions	Fatal collisions	0	0	0	0	2	0	0
Comoiorio		0.0%	0.0%	0.0%	0.0%	40.0%	12.5%	-
	Injury collisions	4	4	5	1	1	3	1
		1.7%	1.8%	1.9%	0.5%	1.4%	1.5%	1.2%
	All victims (killed or injured)	4	4	5	1	3	3	1
		1.7%	1.8%	1.9%	0.5%	4.2%	1.7%	1.2%
Victims	People killed	0	0	0	0	2	0	0
		0.0%	0.0%	0.0%	0.0%	40.0%	11.8%	-
	People seriously injured	0	1	0	0	0	0	0
		0.0%	10.0%	0.0%	0.0%	0.0%	2.3%	-
Rider Involvement (/10,000 bicyclists)	All collisions Fatal collisions Injury collisions	The population	n of bicyclists in	Manitoba is not	known, therefor calculated	e involvement p	er 10,000 bicycl	ists cannot be
NET Distracted drivi	ng ('Distraction/ inattention' an	l d 'Careless driv	ina' combined					
	All collisions	22	29	31	17	18	23	22
		8.6%	12.1%	10.4%	7.1%	12.0%	9.9%	15.6%
.	Fatal collisions	2	1	2	1	1	1	1
Collisions		100.0%	100.0%	50.0%	25.0%	20.0%	43.8%	25.0%
	Injury collisions	20	27	26	13	7	19	19
		8.4%	12.2%	9.8%	6.7%	9.9%	9.4%	23.5%
	All victims (killed or injured)	25	27	28	14	7	20	20
		10.5%	12.2%	10.5%	7.1%	9.7%	10.2%	24.4%
Victims	People killed	3	1	2	1	1	2	1
VICUITIS		100.0%	100.0%	50.0%	25.0%	20.0%	47.1%	25.0%
	People seriously injured	4	1	1	1	2	2	1
		30.8%	10.0%	11.1%	50.0%	22.2%	20.9%	11.1%
Rider Involvement (/10,000 bicyclists)	All collisions Fatal collisions Injury collisions	The population of bicyclists in Manitoba is not known, therefore involvement per 10,000 bicyclists cannot be calculated						

		2008	2009	2010	2011	2012	2008-2012 average	2013
NET Impaired ('Impa	aired by alcohol', 'Impaired by d	rugs' and 'Had	been drinking/	Suspected alco	ohol use' comb	ined)		
	All collisions	3	4	3	1	1	2	1
		1.2%	1.7%	1.0%	0.4%	0.7%	1.0%	0.7%
Calliniana	Fatal collisions	0	0	0	0	1	0	1
Collisions		0.0%	0.0%	0.0%	0.0%	20.0%	6.3%	25.0%
	Injury collisions	3	4	2	0	0	2	0
		1.3%	1.8%	0.8%	0.0%	0.0%	0.9%	-
	All victims (killed or injured)	2	4	2	0	1	2	1
		0.8%	1.8%	0.7%	0.0%	1.4%	0.9%	1.2%
Victims	People killed	0	0	0	0	1	0	1
VICUITIS		0.0%	0.0%	0.0%	0.0%	20.0%	5.9%	25.0%
	People seriously injured	0	0	0	0	0	0	0
		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
Rider Involvement (/10,000 bicyclists) All collisions Fatal collisions Injury collisions The population of bicyclists in Manitoba is not known, therefore involvement per 10,000 bicyclists can calculated							lists cannot be	

NOTE: Proportions provided for each contributing factor in a specific category are for the count of contributing factor as a portion of all bicycle-related collisions in the specific category. E.g., the proportion of collisions where speed is a factor is derived from the count of collisions involving at least one bicyclist in the specific year where speed is a factor divided by the total bicycle-related collisions in that year.

Table 9-9
Summary of 'Speed', 'Distracted driving' & 'Impaired' as Contributing Factors
TO PEDESTRIAN RELATED CRASHES: 2008 to 2013

		2008	2009	2010	2011	2012	2008-2012	2013
NET Speed ('Exceeding sp	peed limit', 'Driving too fast for c	onditions' and	'Unsafe operat	ing speed (too	fast or too slo	w)' combined)		
	All collisions	10	8	7	5	6	7	7
		5.4%	4.9%	3.9%	2.9%	3.2%	4.1%	3.9%
Collisions	Fatal collisions	2	2	0	0	0	1	0
Collisions		40.0%	50.0%	0.0%	0.0%	0.0%	23.5%	-
	Injury collisions	6	6	5	5	5	5	5
		4.6%	5.3%	4.1%	4.2%	4.5%	4.5%	3.9%
	All victims (killed or injured)	10	9	5	7	5	7	5
		6.8%	7.4%	4.0%	5.4%	4.2%	5.6%	3.8%
Victims	People killed	3	2	0	1	0	1	0
Vicuitis		42.9%	50.0%	0.0%	25.0%	0.0%	26.1%	-
	People seriously injured	1	1	0	3	2	1	1
		4.0%	4.2%	0.0%	10.0%	12.5%	6.5%	4.5%
Pedestrian Involvement (/10,000 pedestrians)	All collisions Fatal collisions Injury collisions		·		is not known, the innot be calculate		nent per 10,000 p	pedestrians
NET Distracted driving ('D	istraction/ inattention' and 'Care							
	All collisions	18	12	12	8	27	15	33
		9.7%	7.3%	6.7%	4.7%	14.4%	8.7%	18.4%
Collisions	Fatal collisions	1	0	1	1	2	1	1
Completio		20.0%	0.0%	50.0%	50.0%	50.0%	29.4%	25.0%
	Injury collisions	15	9	9	4	7	9	23
		11.5%	8.0%	7.3%	3.4%	6.3%	7.4%	18.0%
	All victims (killed or injured)	18	10	10	_	9	11	23
		12.3%	8.2%	7.9%	6.2%	7.5%	8.5%	17.4%
Victims	People killed	1	0	1	2	2	1	1
Violino		14.3%	0.0%	33.3%	50.0%	40.0%	26.1%	20.0%
	People seriously injured	6	2	3	4	2	3	2
		24.0%	8.3%	25.0%	13.3%	12.5%	15.9%	9.1%
Pedestrian Involvement (/10,000 pedestrians)	All collisions Fatal collisions Injury collisions	The populat	tion of pedestria		is not known, the innot be calculate		nent per 10,000 p	oedestrians

		2008	2009	2010	2011	2012	2008-2012 average	2013
NET Impaired ('Impaired b	y alcohol', 'Impaired by drugs' a	and 'Had been o	drinking/Suspe	cted alcohol u	se' combined)			
	All collisions	3	2	1	1	4	2	0
		1.6%	1.2%	0.6%	0.6%	2.1%	1.2%	-
Collisions	Fatal collisions	2	0	0	0	2	1	0
Collisions		40.0%	0.0%	0.0%	0.0%	50.0%	23.5%	-
	Injury collisions	1	2	1	0	2	1	0
		0.8%	1.8%	0.8%	0.0%	1.8%	1.0%	-
	All victims (killed or injured)	5	1	1	0	4	2	0
		3.4%	0.8%	0.8%	0.0%	3.3%	1.7%	-
Victims	People killed	4	0	0	0	2	1	0
VICUITIS		57.1%	0.0%	0.0%	0.0%	40.0%	26.1%	
	People seriously injured	0	1	1	0	1	1	0
		0.0%	4.2%	8.3%	0.0%	6.3%	2.8%	
Pedestrian Involvement (/10,000 pedestrians) All collisions Fatal collisions Injury collisions The population of pedestrians in Manitoba is not known, therefore involvement per 10,000 pedestrians in Cannot be calculated							pedestrians	

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

Volume:	Pa	age No.:	
Reference:	IIHS Status Report, Vol. 50, No	o. 3, Mar	ch 31, 2015
Topic:	Road Safety		
Sub Topic:			
Issue:	Interventions to Improve Drive	er Behav	iour Towards Cyclists

Preamble/Rationale: Bike Winnipeg wishes to review MPI's analysis of incidents involving cyclists and other vulnerable road users and how such information leads to intervention under the Driver Improvement Control Program and the Driver Education Program

Question:

Please file and/or provide the following

- a) IIHS Status Report, Vol. 50, No. 3 | March 31, 2015, http://www.iihs.org/iihs/sr/statusreport/article/50/3/3 and
- b) The supporting paper, "Cyclist crash scenarios and factors relevant to the design of cyclist detection systems", MacAlister, Anna; Zuby, David S., Insurance Institute for Highway Safety, March 2015

Please indicate the details of how MPI has used the above information to develop interventions and driver training that strives to improve driver behaviour towards cyclists.



- a) The report is available to the public and available on the internet.
- b) The paper is available to the public and available on the internet.

Both of the reports provide information on cyclist detection systems while highlighting the common collision scenarios involving cyclists and motorists. The information regarding these scenarios is consistent with the Corporation's current cycling safety education material.

The Corporation gathers data and information from a variety of sources, including this and other studies from the Insurance Institute for Highway Safety, to inform future evidence-based, proven practice, program interventions. Refer to Loss Prevention and Road Safety Appendix 6: Operational Plan and Frameworks for Road Safety Programming (located in Volume III AI.13) for a detailed description of the program development and design process.

Volume:	Page No.:		
Reference:	Bike Winnipeg (MPI) 3-4 2014 GRA		
Topic:	Contribution to Manitoba's Economy		
Sub Topic:	Statistics		
Issue:	Tertiary Prevention		

Preamble/Rationale: Bike Winnipeg seeks to continue reviewing MPI's contribution to Manitoba's tertiary prevention network in comparison to its contribution to property loss.

Bike Winnipeg defines "tertiary prevention" as activities and support aimed at softening the impact of long-term impairment and disability and maximizing potential years or useful life through health and rehabilitation services and income replacement.

Question:

- a) With reference to the above IR and response in "d)", please provide "MPI's Contribution to Manitoba's Economic Landscape" for physical damage, injury claims, and Manitoba Health payments (including medical consultant fees) for 2014/15, and back 10 years. Please include a subtotal for injury claims and Manitoba Health payments, and a total column.
- b) Please provide a separate table with similar components as above with the percent share of the total amount for each component.

a)

<u>Year</u>	Physical Damage	Injury Claim	Manitoba Health	<u>Total</u>
2014/15	\$ 532.5	\$ 149.2	\$ 27.1	\$ 708.8
2013/14	\$ 495.5	\$ 145.9	\$ 26.3	\$ 667.7
2012/13	\$ 450.3	\$ 147.9	\$ 23.7	\$ 621.9
2011/12	\$ 458.4	\$ 138.2	\$ 23.7	\$ 620.3
2010/11	\$ 415.2	\$ 118.9	\$ 19.8	\$ 553.9
2009/10	\$ 384.2	\$ 189.5	\$ 15.0	\$ 588.7
2008/09	\$ 382.3	\$ 200.8	\$ 13.8	\$ 596.9
2007/08	\$ 411.6	\$ 173.3	\$ 12.3	\$ 597.2
2006/07	\$ 402.0	\$ 193.8	\$ 10.8	\$ 606.6
2005/06	\$ 360.0	\$ 217.1	\$ 10.2	\$ 587.3
	\$ 4,292.0	\$ 1,674.6	\$ 182.7	\$ 6,149.3

In millions of dollars

Source of Physical Damage and Injury Claims - MPI Annual Reports
Source of Manitoba Health Payments - internal accounts payable system

Physical damage claims include payments related to the following Basic coverages: collision, comprehensive and property damage. Injury claims include the following benefit types: Weekly Indemnity, Accident Benefits, PIPP Enhancements and Public Liability on bodily injury. Manitoba Health includes payment to Manitoba Health Services Commission and medical consultants.

b)

<u>Year</u>	Physical Damage	Injury Claim	Manitoba Health	<u>Total</u>
2014/15	75%	21%	4%	100%
2013/14	74%	22%	4%	100%
2012/13	72%	24%	4%	100%
2011/12	74%	22%	4%	100%
2010/11	75%	21%	4%	100%
2009/10	65%	32%	3%	100%
2008/09	64%	34%	2%	100%
2007/08	69%	29%	2%	100%
2006/07	66%	32%	2%	100%
2005/06	61%	37%	2%	100%

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Reference:	Bike Winnipeg (MPI) 3-12 2014 GRA; BW(MPI) 1-18 2014 GRA		
Topic:	Road Safety		
Sub Topic:	Budget Allocation		
Issue:	Priority Setting		

Preamble/Rationale: Consistent with the scope of its intervention, Bike Winnipeg seeks to review the optimum size and sufficiency of MPI's road safety budget in light of MPI's process for prioritizing road safety activities within the Loss Prevention portfolio.

Question:

- a) With reference to the above IR, please provide the expected ultimate costs saved by one less serious injury in 2016.
- b) Please indicate whether or not this expected cost would be different by victim types "Motor Vehicle" and "Vulnerable Road User".
- c) Please indicate the corporation's method for addressing income disparity (social gradient) in any cost benefit analyses of programs that concern bodily injury claims.
- d) Please outline MPI's definition of property loss categories that would be analogous to "fatal", "serious", or "minor" bodily injuries.
- e) Please provide the expected cost saved by one less serious property damage claim (Basic) in 2016.

- a) As per the response to BW (MPI) 1-1, over the 15-year period from 2000 to 2014, the cost per claim for "All Serious Injuries" was \$964,504. The Corporation expects the costs for 2016 to be close to this figure.
- b) The cost per claim for "Motor Vehicles" and "Vulnerable Road Users" over the same period were \$959,496 and \$965,561 respectively (with the cost per claim for "Unknown/Errors" at \$1,009,929). The Corporation does not view the cost per claim for "Motor Vehicles" and "Vulnerable Road Users" as being significantly different.

Differences in the cost of claim for serious injuries are not driven by victim type. Regardless of whether the claimant was a pedestrian or a driver in a motor vehicle, a serious injury is defined as the same thing in both situations.

- c) The PIPP benefits impacted by income disparity are income replacement indemnity (IRI) and spousal death benefits. IRI is based on 90% of net income (gross yearly employment income less notional deductions for income tax, CPP and EI). Spousal death benefits are based on the deceased claimant's gross year employment income at the time of the accident multiplied by a factor. Any program changes to these benefits are costed and evaluated based on potential impact to specific demographics.
- d) The Corporation does not have property loss categories that are analogous to the severity categories used to define injury claims.
- e) The expected cost that is saved by one less "serious property damage" is \$200,000 the maximum Third Party Liability coverage under Basic insurance.

Volume:	AI.13 Appendix	Page No.:	Page 3 of IBM Loss prevention framework & strategy
Reference:			
Topic:	Road Safety Societal costs		
Sub Topic:	Tabling of MPI societal cost calculations		
Issue:	Societal cost calculation		

Rationale/Preamble: Starting line 38, this report defines loss prevention at MPI as the "Loss Prevention initiatives undertaken by MPI seek to identify and implement programs to address the primary drivers of claims and claims costs with the intention of reducing the social and financial impact to rate payers". Further, the MPI filing provides information on MPI's quantitative methodology for relating claims costs to road safety, but not for determining social impacts of collisions involving motor vehicles.

Questions:

- a) Is MPI Currently using quantitative methods to determine the social impact of motor vehicle collisions?
- b) If so, please table documentation on MPI sponsored projects to quantify social impact
- c) If not, how does MPI quantify its success in meeting the social cost aspect of loss prevention?
- d) Does MPI believe that the social impacts of collisions are highly correlated to MPI claims costs?
- e) Given the extensive evidence of MPI designing and implementing the road safety program to achieve an ROI through claims cost reductions, can MPI produce any quantitative evidence to demonstrate that it is designing and operating its road safety program to minimize social costs of vehicle collisions to Manitobans?



- a) Manitoba Public Insurance relies on estimates generated by Transport Canada to estimate the social cost of motor vehicle collisions. The Transport Canada model employs quantitative methods to determine the social impact of motor vehicle collisions.
- b) Please see response to (a).
- c) The social cost aspect of loss prevention may be quantified in the reduction of lives lost and injuries occurring as a result of collisions on the roadway.
- d) Yes. There is a direct relationship between the reduction of fatality and injury collisions and a reduction in claims costs.
- e) No. The Corporation cannot quantify collisions that do not occur, therefore, it is impossible to know with certainty how many lives are saved by Manitoba Public Insurance programs.

Volume:	AI.13 Appendix 10	Page No.:	3-8
Reference:			
Topic:	Loss Prevention and Road Safety		
Sub Topic:	MPI goals and priorities v. international road safety goals and priorities		
Issue:	Additional Information and clarification		

Preamble/Rationale: In order to ensure that its road safety program is well aligned with the Corporate Strategic Plan, current road safety best practices, evidence-based strategies, Manitoba Public Insurance (MPI) has undertaken an independent assessment its road safety model. The review is also intended to advise on the appropriate size of a road safety budget for MPI and if the current budget is being optimally used. Finally, it presents an opportunity to consider MPI's road safety contribution in light of two new governance elements: the Loss Prevention Strategy and Framework and the Provincial Road Safety Committee.

Questions:

- a) Please provide a copy of the engagement letter sent to Sirius Strategic Solutions
 Ltd. ("Sirius")
- b) Please provide the expert's file with respect to the preparation of the Sirius Report.
- c) Please provide the names and CVs of all individuals at Sirius who worked on the Report.
- d) Please confirm whether MPI intends to call someone from Sirius as a witness in these proceedings.

- a) As per Board Order 98/14, page 112, a response to this question is not required. The Corporation is not required to produce operational information relating to the engagement of consultants and the related engagement letters [2015 GRA CAC (MPI) 1-55 (c)].
- b) The expert's file is the proprietary property of Sirius Strategic Solutions and is not the property of MPI to produce.
- c) Refer to Vol III AI.13 Loss Prevention and Road Safety Appendix 9.
- d) The Corporation has no plans to do so.