BW (MPI) 2-1

Volume:	**LP**	**Page No.:**	**57 - Table**
Topic:	**Loss Prevention**		
Sub Topic:	**Fatal Collisions and People Killed**		
Issue:	**Fatal Trend Analysis**		
Reference	**BW (MPI) 1-5 GRA 2017**		

Preamble: 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. In that regard Bike Winnipeg 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 use MPI's **Enterprise Data Warehouse** as the data source for the following questions. Please revise Calendar Year to Fiscal Year as per Attachment B

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 ("people killed")
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

c) Using the same data course, and similar table format as in Attachment B, please provide the annual percentage change in with regard to 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)

Rationale for Question:

Bike Winnipeg seeks to continue to assist with critically evaluating the optimum size of MPI's road safety budget, the adequacy of MPI's road safety programs with respect to vulnerable road users and the quality and clarity of MPI's data collection, analysis and accessibility regarding collisions involving vulnerable road users. The information requested is applicable and relevant to enable Bike Winnipeg to continue to assist in this manner.

RESPONSE:

a) Information about motor vehicle related fatalities and bodily injuries come to the Corporation through various avenues, most importantly claim and police reports. Once the information is received, it is channeled through different processes depending on how the information is used. This leads to two major pathways for information to travel.

In one pathway, information useful for the administration of bodily injury insurance claims goes into the BI^3 computer system, including the administration of Personal Injury Protection Plan "PIPP" benefits. All BI^3 bodily injury claims data is stored in the Corporation's Enterprise Data Warehouse system. The data warehouse also data captures the Pre-BI^3 claims (injury claims prior to BI^3 implementation in September 2010), which comes from the Claims Administration & Reporting System (CARs).

In the other pathway, information useful for road safety programming is processed as Traffic Accident Report (TAR) data. TAR data is the source data for the Traffic Collision Statistics Report (TCSR) to Transport Canada.

In most cases, data related to a fatality is used for both PIPP and road safety programming purposes. For example, if a Manitoba resident dies as the result of a motor vehicle accident at an intersection in Winnipeg, data related to the fatality will be used in both purposes. BI^3 will record the incident as a fatality for which PIPP benefits is paid. TAR will record it as a fatality on a Manitoba highway. Same incident but recorded for different purposes.

In order for a fatal collision to be included in the TCSR, the following criteria must be met:

- at least one person had to die as a result of the accident
- the death must have occurred within 30 days of the collision
- the collision must not have been the result of a suicide
- the collision must not have been the result of a medical condition
- the collision must have occurred on a public roadway (which excludes private property, parking lots and First Nation Reserves)

Once the Corporation is made aware of a fatality, the investigation will go down both pathways. From a road safety programming perspective the matter is thoroughly investigated to determine if the fatality should be reported in the TAR. From a PIPP perspective the matter is thoroughly investigated to ensure the claim is properly administered.

However, as will be noted when comparing the answers in BW (MPI) 1-5 and BW (MPI) 2-1 there are discrepancies between the two answers even though the same question is being asked. The reason for the discrepancies is that information is collected for different purposes and these purposes do not always align as they do in the example of the fatality at a Winnipeg intersection.

One example where the purposes do not align is in relation to Manitoba residents who die in a motor vehicle accident outside of Manitoba. Information is recorded for PIPP benefits because the Corporation requires data on all the PIPP claims it incurs. But any such fatalities will not be included in the TCSR because the fatality did not occur in Manitoba.

In summary, while the primary source data is the same for claims data and TAR data, it is the use of the information that determines the definitions applied (i.e., what is counted for what purpose). It is the different uses and definitions applied that ultimately leads to different reported counts produced by the different data.

The best data source for the purpose of assessing road safety issues is TAR data; i.e. the data source used to answer BW (MPI) 1-5.

b) Please see Attachment A.

c) Please see Attachment B.

Manitoba Public Insurance

2017 Rate Application Information Requests - Round 2
BW (MPI) 2-1 (b) Attachment A

1. **Fatalities - Count**

			Motor Vehicles						Calculated			Vulnerable Road Users			Calculated	Ratio	Ratio
			Driver		Passenger		Other Injured		Sub-total Vehicle Fatals								
Reported Insurance Year	All Fatalities	Unknown/ errors*	Non-Commercial	Commercial	Non-Commercial	Commercial	Non-Commercial	Commercial	Non-Commercial	Commercial	Total	Motorcycle & Mopeds	Peds	Cyclists	Sub Total VRU Fatals	Motor Vehicles / All Fatals	VRU/All Fatals
2001	129	15	49	3	27	0	14	1	90	4	94	3	13	4	20	73%	16%
2002	131	9	49	3	35	1	18	2	102	6	108	4	10	0	14	82%	11%
2003	117	5	51	5	23	1	16	3	90	9	99	1	10	2	13	85%	11%
2004	126	10	52	4	26	2	9	2	87	8	95	2	17	2	21	75%	17%
2005	111	5	42	2	31	1	13	1	86	4	90	5	9	2	16	81%	14%
2006	145	7	65	4	40	1	10	0	115	5	120	2	14	2	18	83%	12%
2007	124	10	51	3	19	3	10	2	80	8	88	1	21	4	26	71%	21%
2008	112	15	44	2	25	1	4	1	73	4	77	2	15	3	20	69%	18%
2009	107	5	55	5	17	1	7	1	79	7	86	4	12	0	16	80%	15%
2010	106	10	42	3	22	2	3	0	67	5	72	3	18	3	24	68%	23%
2011	124	18	53	4	26	2	0	1	79	7	86	1	16	3	20	69%	16%
2012	106	11	44	1	20	0	1	0	65	1	66	5	18	6	29	62%	27%
2013	109	14	45	2	31	2	0	0	76	4	80	5	6	4	15	73%	14%
2014	89	7	37	4	14	1	3	0	54	5	59	4	14	5	23	66%	26%
2015	95	10	46	5	15	0	0	0	61	5	66	6	13	0	19	69%	20%
2016 YTD (June 30)	30	1	14	1	7	0	1	0	22	1	23	2	3	1	6	77%	20%
Total	**1,761**	**152**	**739**	**51**	**378**	**18**	**109**	**14**	**1226**	**83**	**1309**	**50**	**209**	**41**	**300**	74%	**17%**

** "unknown/errors" - means the data is missing, the role of the claimant was not identified or the vehicle type was unknown.*

Source: EDW, Basic claims and major use 1-4

2. Licensed Drivers - Count	
Fiscal Insurance Year	Licensed Drivers
2001	695,668
2002	701,061
2003	712,785
2004	721,305
2005	725,636
2006	728,518
2007	735,506
2008	748,304
2009	760,143
2010	772,922
2011	798,175
2012	810,755
2013	823,162
2014	833,446
2015	846,119
2016 YTD (June 30)	284,899
Total	**11,698,405**

2001-2006 rate app (earned driver units), 2007-2016 Classic data warehouse (CDW, earned driver units)

3. Registered Vehicles - Count			
Fiscal Insurance Year	Non-Commercial Registered Vehicles	Commercial Registered Vehicles	Total
2001	610,001	70,937	680,938
2002	620,289	72,567	692,856
2003	631,499	73,575	705,073
2004	638,820	74,844	713,664
2005	644,785	75,066	719,851
2006	652,695	75,786	728,480
2007	667,248	77,625	744,874
2008	680,992	78,134	759,126
2009	691,885	78,305	770,191
2010	704,489	79,154	783,643
2011	721,214	81,561	802,775
2012	735,238	84,285	819,523
2013	745,342	86,404	831,745
2014	754,735	88,739	843,474
2015	770,694	90,602	861,296
2016 YTD (June 30)	90,602	29,872	120,474
Total	**10,360,529**	**1,217,455**	**11,577,984**

Source: Classic data warehouse (CDW), Basic Earned Units and major use 1-4

4. Fatalities ("people killed") per 10,000 Licensed Active Drivers – by victim type

				Motor Vehicles			Calculated	Vulnerable Road Users			Calculated
Reported Insurance Year	Number Licensed Active Drivers	All Fatalities	Unknown/ errors*	Driver	Passenger	Other Injured	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals
2001	695,668	1.9	0.2	0.7	0.4	0.2	1.4	0.04	0.2	0.06	0.3
2002	701,061	1.9	0.1	0.7	0.5	0.3	1.5	0.06	0.1	0.00	0.2
2003	712,785	1.6	0.1	0.8	0.3	0.3	1.4	0.01	0.1	0.03	0.2
2004	721,305	1.7	0.1	0.8	0.4	0.2	1.3	0.03	0.2	0.03	0.3
2005	725,636	1.5	0.1	0.6	0.4	0.2	1.2	0.07	0.1	0.03	0.2
2006	728,518	2.0	0.1	0.9	0.6	0.1	1.6	0.03	0.2	0.03	0.2
2007	735,506	1.7	0.1	0.7	0.3	0.2	1.2	0.01	0.3	0.05	0.4
2008	748,304	1.5	0.2	0.6	0.3	0.1	1.0	0.03	0.2	0.04	0.3
2009	760,143	1.4	0.1	0.8	0.2	0.1	1.1	0.05	0.2	0.00	0.2
2010	772,922	1.4	0.1	0.6	0.3	0.0	0.9	0.04	0.2	0.04	0.3
2011	798,175	1.6	0.2	0.7	0.4	0.0	1.1	0.01	0.2	0.04	0.3
2012	810,755	1.3	0.1	0.6	0.2	0.0	0.8	0.06	0.2	0.07	0.4
2013	823,162	1.3	0.2	0.6	0.4	0.0	1.0	0.06	0.1	0.05	0.2
2014	833,446	1.1	0.1	0.5	0.2	0.0	0.7	0.05	0.2	0.06	0.3
2015	846,119	1.1	0.1	0.6	0.2	0.0	0.8	0.07	0.2	0.00	0.2
2016 YTD (June 30)	284,899	1.1	0.0	0.5	0.2	0.0	0.8	0.07	0.1	0.04	0.2
Total	**11,698,405**	**1.5**	**0.1**	**0.7**	**0.3**	**0.1**	**1.1**	**0.04**	**0.2**	**0.04**	**0.3**

** "unknown/errors" - means the data is missing, the role of the claimant was not identified or the vehicle type was unknown.*

5. Fatalities ("people killed") per 10,000 Non-Commercial Registered Vehicles – by victim type

				Motor Vehicles			Calculated	Vulnerable Road Users			Calculated
Reported Insurance Year	Number of Non-Commercial Registered Vehicles	All Fatalities (Non-Commercial)	Unknown/ errors*	Driver	Passenger	Other Injured	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals
2001	610,001	1.5		0.8	0.4	0.2	1.5	0.05	0.2	0.07	0.3
2002	620,289	1.6		0.8	0.6	0.3	1.6	0.06	0.2	0.00	0.2
2003	631,499	1.4		0.8	0.4	0.3	1.4	0.02	0.2	0.03	0.2
2004	638,820	1.4		0.8	0.4	0.1	1.4	0.03	0.3	0.03	0.3
2005	644,785	1.3		0.7	0.5	0.2	1.3	0.08	0.1	0.03	0.2
2006	652,695	1.8		1.0	0.6	0.2	1.8	0.03	0.2	0.03	0.3
2007	667,248	1.2		0.8	0.3	0.1	1.2	0.01	0.3	0.06	0.4
2008	680,992	1.1		0.6	0.4	0.1	1.1	0.03	0.2	0.04	0.3
2009	691,885	1.1		0.8	0.2	0.1	1.1	0.06	0.2	0.00	0.2
2010	704,489	1.0		0.6	0.3	0.0	1.0	0.04	0.3	0.04	0.3
2011	721,214	1.1		0.7	0.4	0.0	1.1	0.01	0.2	0.04	0.3
2012	735,238	0.9		0.6	0.3	0.0	0.9	0.07	0.2	0.08	0.4
2013	745,342	1.0		0.6	0.4	0.0	1.0	0.07	0.1	0.05	0.2
2014	754,735	0.7		0.5	0.2	0.0	0.7	0.05	0.2	0.07	0.3
2015	770,694	0.8		0.6	0.2	0.0	0.8	0.08	0.2	0.00	0.2
2016 YTD (June 30)	90,602	2.4		1.5	0.8	0.1	2.4	0.22	0.3	0.11	0.7
Total	**10,360,529**	**1.2**		**0.7**	**0.4**	**0.1**	**1.2**	**0.05**	**0.2**	**0.04**	**0.3**

*cannot break unknown/errors down into commercial and non-commercial

6. Fatalities ("people killed") per 10,000 Commercial Registered Vehicles – by victim type

				Motor Vehicles			Calculated	Vulnerable Road Users			Calculated
Reported Insurance Year	Number of Commercial Registered Vehicles	All Fatalities (Commercial)	Unknown/ errors*	Driver	Passenger	Other Injured	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals
2001	70,937	0.6		0.4	0.0	0.1	0.6	0.4	1.8	0.6	2.8
2002	72,567	0.8		0.4	0.1	0.3	0.8	0.6	1.4	0.0	1.9
2003	73,575	1.2		0.7	0.1	0.4	1.2	0.1	1.4	0.3	1.8
2004	74,844	1.1		0.5	0.3	0.3	1.1	0.3	2.3	0.3	2.8
2005	75,066	0.5		0.3	0.1	0.1	0.5	0.7	1.2	0.3	2.1
2006	75,786	0.7		0.5	0.1	0.0	0.7	0.3	1.8	0.3	2.4
2007	77,625	1.0		0.4	0.4	0.3	1.0	0.1	2.7	0.5	3.3
2008	78,134	0.5		0.3	0.1	0.1	0.5	0.3	1.9	0.4	2.6
2009	78,305	0.9		0.6	0.1	0.1	0.9	0.5	1.5	0.0	2.0
2010	79,154	0.6		0.4	0.3	0.0	0.6	0.4	2.3	0.4	3.0
2011	81,561	0.9		0.5	0.2	0.1	0.9	0.1	2.0	0.4	2.5
2012	84,285	0.1		0.1	0.0	0.0	0.1	0.6	2.1	0.7	3.4
2013	86,404	0.5		0.2	0.2	0.0	0.5	0.6	0.7	0.5	1.7
2014	88,739	0.6		0.5	0.1	0.0	0.6	0.5	1.6	0.6	2.6
2015	90,602	0.6		0.6	0.0	0.0	0.6	0.7	1.4	0.0	2.1
2016 YTD (June 30)	29,872	0.3		0.3	0.0	0.0	0.3	0.7	1.0	0.3	2.0
Total	**1,217,455**	**0.7**		**0.4**	**0.1**	**0.1**	**0.7**	**0.4**	**1.7**	**0.3**	**2.5**

*cannot break unknown/errors down into commercial and non-commercial

Based on basic commercial vehicle registration classes

1. Fatalities ("People Killed") – Count – by victim type (PERCENT CHANGE)

			Motor Vehicles			Calculated	Vulnerable Road Users			Calculated
Reported Insurance Year	All Fatalities	Unknown/ errors*	Driver	Passenger	Other Injured	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals
2002	1.6%	-40.0%	0.0%	33.3%	33.3%	-30.0%	33.3%	-23.1%	-100.0%	-30.0%
2003	-10.7%	-44.4%	7.7%	-33.3%	-5.0%	-7.1%	-75.0%	0.0%	n/a	-7.1%
2004	7.7%	100.0%	0.0%	16.7%	-42.1%	61.5%	100.0%	70.0%	0.0%	61.5%
2005	-11.9%	-50.0%	-21.4%	14.3%	27.3%	-23.8%	150.0%	-47.1%	0.0%	-23.8%
2006	30.6%	40.0%	56.8%	28.1%	-28.6%	12.5%	-60.0%	55.6%	0.0%	12.5%
2007	-14.5%	42.9%	-21.7%	-46.3%	20.0%	44.4%	-50.0%	50.0%	100.0%	44.4%
2008	-9.7%	50.0%	-14.8%	18.2%	-58.3%	-23.1%	100.0%	-28.6%	-25.0%	-23.1%
2009	-4.5%	-66.7%	30.4%	-30.8%	60.0%	-20.0%	100.0%	-20.0%	-100.0%	-20.0%
2010	-0.9%	100.0%	-25.0%	33.3%	-62.5%	50.0%	-25.0%	50.0%	n/a	50.0%
2011	17.0%	80.0%	26.7%	16.7%	-66.7%	-16.7%	-66.7%	-11.1%	0.0%	-16.7%
2012	-14.5%	-38.9%	-21.1%	-28.6%	0.0%	45.0%	400.0%	12.5%	100.0%	45.0%
2013	2.8%	27.3%	4.4%	65.0%	-100.0%	-48.3%	0.0%	-66.7%	-33.3%	-48.3%
2014	-18.3%	-50.0%	-12.8%	-54.5%	n/a	53.3%	-20.0%	133.3%	25.0%	53.3%
2015	6.7%	42.9%	24.4%	0.0%	-100.0%	-17.4%	50.0%	-7.1%	-100.0%	-17.4%
2016 YTD (June 30)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total										

*"unknown/errors" - means the data is missing, the role of the claimant was not identified or the vehicle type was unknown.

2. Licensed Drivers - Count (% CHANGE)

Calendar Year	Licensed Drivers
2002	0.8%
2003	1.7%
2004	1.2%
2005	0.6%
2006	0.4%
2007	1.0%
2008	1.7%
2009	1.6%
2010	1.7%
2011	3.3%
2012	1.6%
2013	1.5%
2014	1.2%
2015	1.5%
2016 YTD (June 30)	n/a
Total	

3. Registered Vehicles - Count (% CHANGE)

Reported Insurance Year	Non-Commercial Registered Vehicles	Commercial Registered Vehicles	Total
2002	1.7%	2.3%	1.8%
2003	1.8%	1.4%	1.8%
2004	1.2%	1.7%	1.2%
2005	0.9%	0.3%	0.9%
2006	1.2%	1.0%	1.2%
2007	2.2%	2.4%	2.3%
2008	2.1%	0.7%	1.9%
2009	1.6%	0.2%	1.5%
2010	1.8%	1.1%	1.7%
2011	2.4%	3.0%	2.4%
2012	1.9%	3.3%	2.1%
2013	1.4%	2.5%	1.5%
2014	1.3%	2.7%	1.4%
2015	2.1%	2.1%	2.1%
2016 YTD (June 30)	n/a/	n/a	n/a
Total			