

Volume:	LP	Page No.:	57 - Table
Topic:	Loss Prevention		
<b>Sub Topic:</b>	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 <u>Enterprise Data Warehouse</u> 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) Manitoba Public Insurance recognizes the importance of critically evaluating data "to better understand trends relating to fatalities and serious injuries".

The information provided in response to  $\underline{BW\ (MPI)\ 1-5}$  is based upon the Traffic  $Collision\ Statistics\ Report$ . The dataset for this report is sourced from Traffic Accident Reports completed by law enforcement agencies and when a collision claim is registered with Manitoba Public Insurance. It is the official report of traffic collision statistics in Manitoba and uses data definitions that are consistent with other jurisdictions (provincially and nationally) in Canada. This query asks the same question as  $\underline{BW\ (MPI)\ 1-5}$  but requests that the answer be based upon a data search of the Enterprise Data Warehouse. The Enterprise Data Warehouse is the Corporation's storage facility for claims data.

Providing a rerun of the intervener's query from the Enterprise Data Warehouse dataset will not result in significantly different trends or proportionalities from those established through the *Traffic Collisions Statistics Report* dataset as they relate to fatalities and serious injuries. Statistical differences that may exist will not assist the Board in assessing the optimum size of the Corporation's road safety budget.

Preparation of responses as requested is estimated at 20 person hours which represents a considerable allocation of resources which are in high demand during the GRA rate setting process.

That said, the Corporation recognizes the importance of evaluating data. Should the intervener wish to pursue this request further, it is recommended that they submit it as a research project to the External Stakeholder Committee on Loss Prevention. The Corporation will provide the information requested to this Committee, as this would be the appropriate forum for such an undertaking.

- b) Please refer to a).
- c) Please refer to a).

Volume:	LP.4.13.1	Page No.:	56
Topic:	Loss Prevention		
Sub Topic:	Road Safety - Reducing Human Toll		
Issue:	MPI claims success		
Reference:	BW (MPI) 1-7 GRA 2017		

**Preamble:** MPI makes the following statement:

"The Corporation's efforts have, in conjunction with the work of all other relevant stakeholders in road safety, contributed to an overall downward trending in actual motor vehicle fatalities and fatal collisions [...] over the last two decades"

### Question:

- a) Please indicate the data source for the response provided in **BW (MPI) 1-7**
- b) Please provide each chart (graphs) in **BW (MPI) 1-7** for both fatalities and bodily injuries in a full page format, with "tick marks" on the horizontal axis for the year, and with the equation of the trend line clearly indicated.
- c) Please provide a chart (graph) of the number of fatal cyclists by year using the same data source and format as indicated above.
- d) Please provide a chart (graph) of the number of fatal pedestrians by year using the same data source and format as indicated above.
- e) Using data from the **Enterprise Data Warehouse**, please chart (graph) the number of fatal drivers (exclude passengers) and the number of fatal vulnerable road users (pedestrians, cyclists, motorcyclists, other (excluding passengers)), by year, for the last two decades. Please indicate the linear trend lines, including their formulas (equations) and R squared values (as provided in Excel.

- f) Using data from the **Enterprise Data Warehouse**, please chart (graph) the number of fatal drivers (exclude passengers) and the number of fatal cyclists by year, for the past 10 years. Please indicate the linear trend lines, including their formulas (equations) and R squared values (as provided in Excel).
- g) Using data from the **Enterprise Data Warehouse**, please chart (graph) fatal drivers (exclude passengers) and the number of fatal cyclists by year, for the past 10 years. Please indicate the linear trend lines, including their formulas (equation) and R squared values (as provided in Excel).
- h) Please repeat #3, #4, #5, #6 and #7 above for bodily injuries.

# **Rationale for Question:**

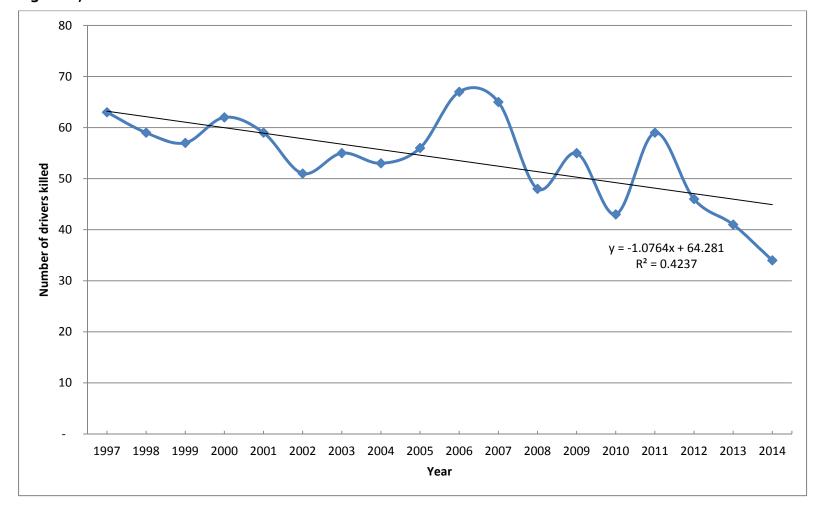
Bike Winnipeg seeks to continue to assist with critically evaluating the quality and clarity of MPI's data collection, analysis and accessibility regarding collisions involving vulnerable road users. The information requested is applicable and relevant to enable Bike Winnipeg to continue to assist in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

### **RESPONSE:**

a) The information provided in response to <u>BW (MPI) 1-7</u> is based upon the *Traffic Collision Statistics Report*. The dataset for this report is sourced from Traffic Accident Reports completed by law enforcement agencies and when a collision claim is registered with Manitoba Public Insurance. It is the official report of traffic collision statistics in Manitoba and uses data definitions that are consistent with other jurisdictions (provincially and nationally) in Canada.

b)

Figure 1, Number of drivers killed in motor vehicle collisions: 1997-2014



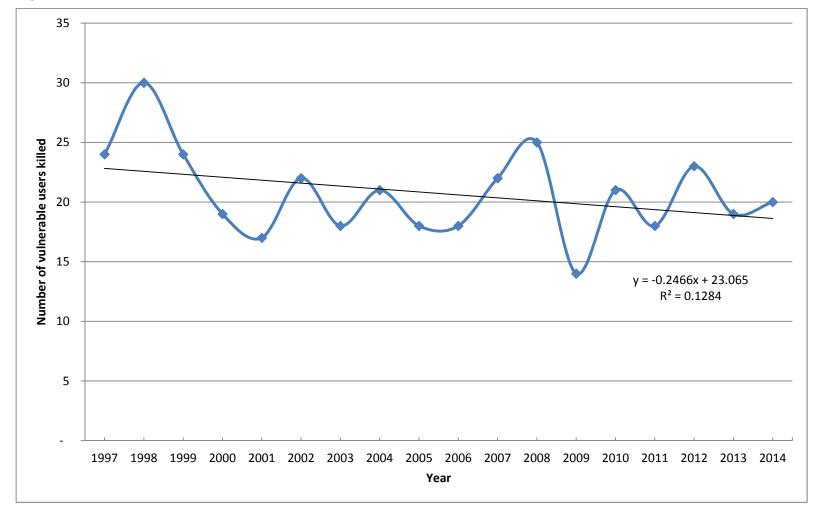


Figure 2, Number of vulnerable road users killed in motor vehicle collisions: 1997-2014

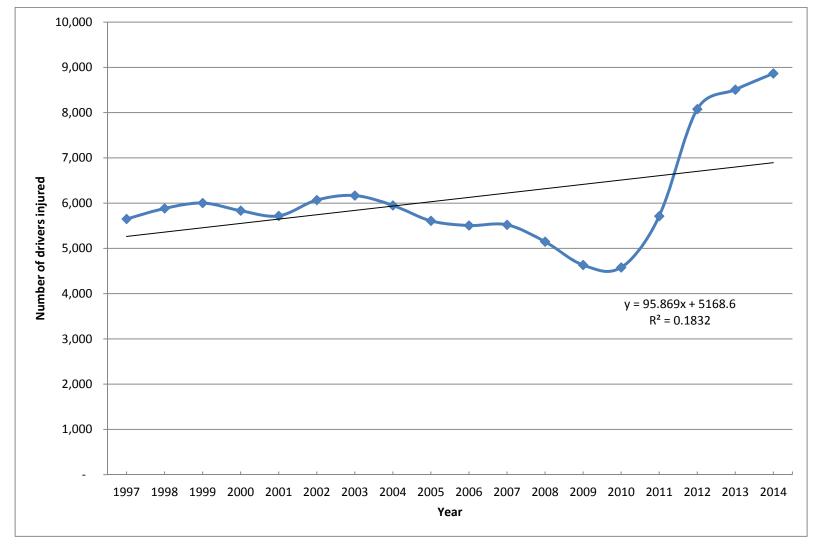


Figure 3, Number of drivers injured in motor vehicle collisions: 1997-2014



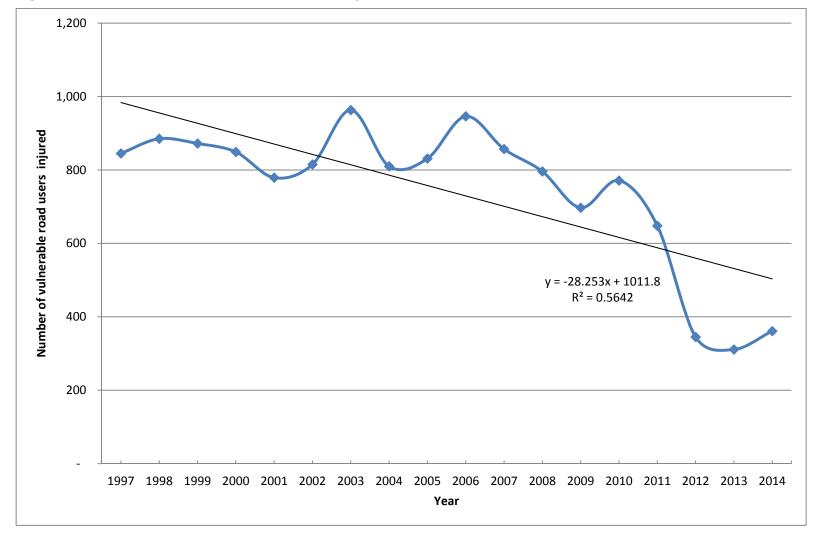
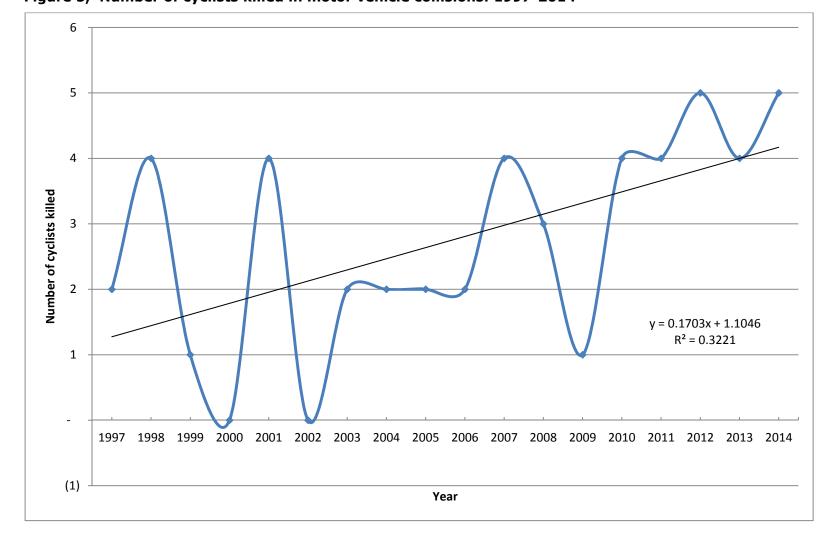
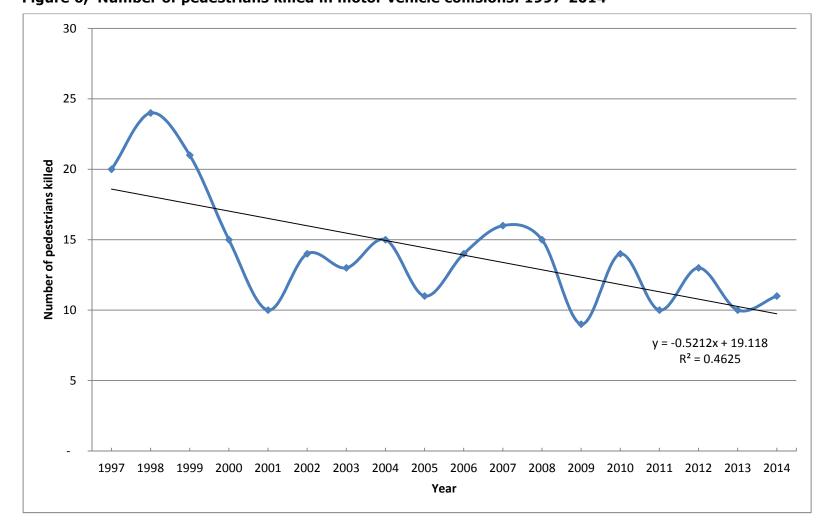


Figure 4, Number of vulnerable road users injured in motor vehicle collisions: 1997-2014

c)
Figure 5, Number of cyclists killed in motor vehicle collisions: 1997-2014



d)
Figure 6, Number of pedestrians killed in motor vehicle collisions: 1997-2014



e) This query asks the same question as <u>BW (MPI) 1-7</u> but requests that the charts be drawn from data sourced from the Enterprise Data Warehouse. The Enterprise Data Warehouse is the Corporation's storage facility for claims data.

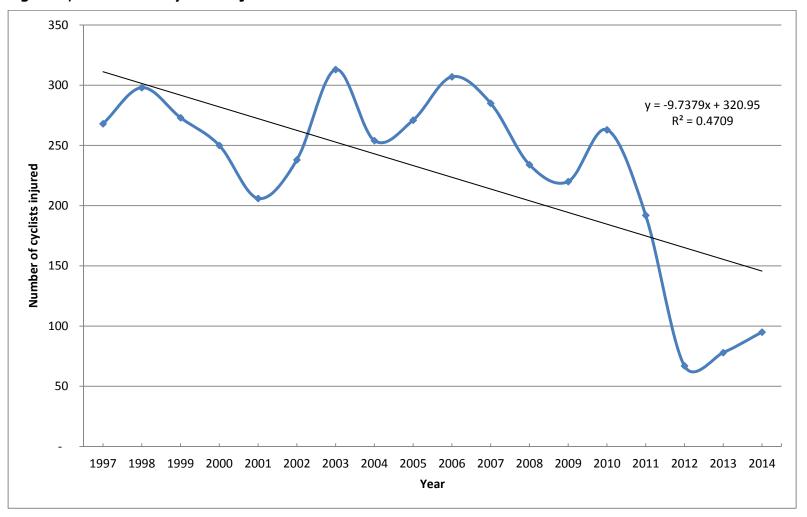
Providing a rerun of the intervener's query from the Enterprise Data Warehouse dataset will not result in significantly different trends from those established through the *Traffic Collisions Statistics Report* dataset as they relate to fatalities and bodily injuries.

The Corporation recognizes the importance of evaluating the clarity and quality of data. Should the intervener wish to pursue this request further, it is recommended that they submit it as a research project to the External Stakeholder Committee on Loss Prevention. The Corporation will provide the information requested to this Committee, as this would be the appropriate forum for such an undertaking.

- f) Please refer to response e).
- g) Please refer to response e).

h) For repeating of #5, #6, and #7, please refer to response e).

Figure 7, Number of cyclists injured in motor vehicle collisions: 1997-2014



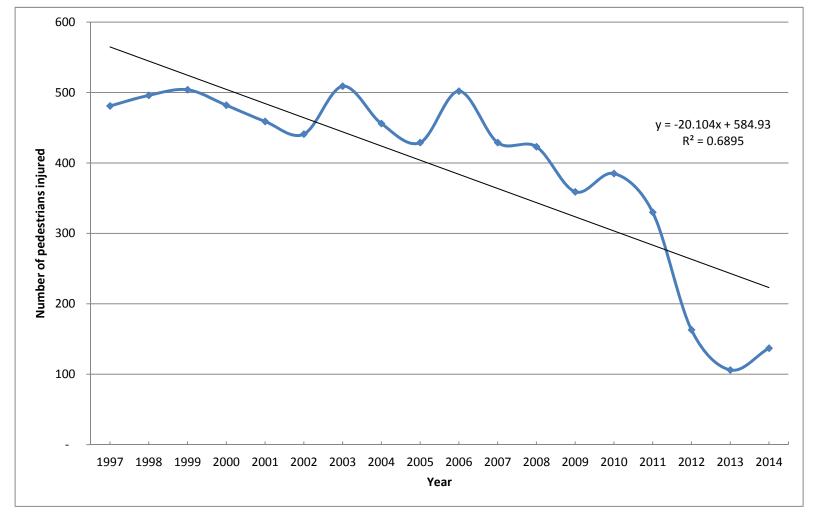


Figure 8, Number of pedestrians injured in motor vehicle collisions: 1997-2014

Volume:	1	Page No.:	OV p. 38 line 14-16
Topic:	Road safety		
<b>Sub Topic:</b>	Optimal budget		
Issue:	Methodologies reviewed		

**Preamble:** In PUB order 128/15 required, inter alia, the Board asked MPI to advise what percentage of its revenue should be allocated to road safety and loss prevention initiatives and why. MPI replied that it has not adopted a target percentage of revenue, or 'cap' on funding for road safety, but introduces and maintains programs that demonstrate a net benefit.

## Question:

- a) Please advise which such methodologies for developing an optimal budget for road safety, if any, that MPI considered, and;
- b) Please advise of the specific reasons why MPI decided not to adopt and/or rejected these methodologies that were considered.

# **Rationale for Question:**

Bike Winnipeg seeks to continue to assist with the critical evaluation of the optimum size of MPI's road safety budget. The information requested is applicable and relevant to this task as it assists with understanding which methodologies were considered for developing an optimal amount to budget for road safety, and why MPI did not adopt and/or rejected these methodologies.

### **RESPONSE:**

a) Manitoba Public Insurance is aware of two approaches: (a) establish a
predetermined budgetary amount or formula for road safety programming; and
(b) determine and validate priority issues, seek evidence based interventions and
determine if an investment in such initiatives would provide a suitable benefit to
ratepayers of Manitoba and, if so, allocate funding accordingly. The Corporation



considers the second approach to be more appropriate and is not pursuing the former.

The Corporation has developed, operationalized and filed complete frameworks for establishing road safety priorities, developing and implementing new initiatives and evaluating existing programming (please refer to 2016 GRA, Volume III AI.13 Appendix 6). These frameworks, in turn, enable the Corporation to be both measured and strategic in the planning and execution of programming and the resources that are allocated to support it. These frameworks and their implementation drive the right priorities and programs and have been validated and supported by the external independent evaluation prescribed under Board order 135/14.

The Corporation's view is that a set road safety budget, based on a prescribed formula, has the potential to create an arbitrary cap on spending and does not provide the necessary flexibility to enable investment which is driven by emerging and evolving priorities and corresponding proven or promising programming that may help shape behaviours that contribute to a reduction in collisions.

b) Please refer to a).

Volume:	IR BW-(MPI) 1 - 8	Page No.:	
Topic:	Road safety		
<b>Sub Topic:</b>	Optimal budget		
Issue:	Top – Down Methodology		

**Preamble:** In PUB order 128/15 required, inter alia, the Board asked MPI to advise what percentage of its revenue should be allocated to road safety and loss prevention initiatives and why.

In BW (MPI) 1 - 8, MPI stated that high performing jurisdictions credit their traffic safety success to "the ongoing setting of aggressive goals for reducing the rate of fatalities".

### Question:

- a) Please identify and/or advise which aggressive goals Spain and Ireland (high performing jurisdictions) set which allowed them to go from worse fatality rates than Canada to better rates within the 13 years illustrated in the graph.
- b) In BW (MPI) 1 8 d) MPI states that "Manitoba has adopted a model that considers health, infrastructure and other safety contributors, where initiatives may be operationalized through the Provincial Road Safety Committee", please advise if it is MPI's position that this model does not allow or does not permit the setting of aggressive goals that are set in high performing jurisdictions. If so, why?
- c) If the Manitoba model does allow for the setting of such aggressive goals, please identify which aggressive goals MPI could and should set to achieve greater road safety success.
- d) With respect to MPI's answer to BW (MPI) 1-8 c, please provide a further and better explanation of what is meant by "it then considers the costs involved for the Manitoba context if it intends to pursue it within a business case".



- i. Please explain what is meant by the "Manitoba context" and please explain what are the factors and/or considerations that apply to the "Manitoba context";
- ii. In addition, explain what is meant by the "business case" and please advise what are the factors and considerations that apply to the "business case".
- iii. Please provide a recent concrete and descriptive example of this, if possible.

# **Rationale for Question:**

To develop an optimal budget for road safety, the PUB needs to understand what road safety goals result in more rapid reduction in road injuries and fatalities.

### **RESPONSE:**

a) The setting of aggressive goals in leading countries supports the public policy framework within which jurisdictions can take successive measures to drive the road safety agenda. The success of Spain and Ireland in reducing fatality rates is a product of many successful interventions implemented within the 13 years illustrated in the graph.

Prior to 2000, a small and narrow road network contributed to Spain's historically high traffic fatality rate. In early 2000s, Spain's improved economy and increase in immigration prompted continued efforts to improve and repair the road network. Further initiatives to improve traffic safety included lowering of Blood Alcohol Concentration (BAC) limits to 0.5 mg/ml, compulsory use of front and rear seatbelts, decreasing speed limits, use of mobile speed cameras and significant fines and bans for impaired driving.

In Ireland, influential initiatives that have been attributed to their traffic fatality rate decline including visible and consistent enforcement, mandatory alcohol



testing, significant investment in building and repairing roads, advertising campaigns to develop a Road Safety Culture, and more appropriate speed limits with mobile speed camera enforcement.

Since 2008, a global financial crisis and severe recession in Western Europe has likely contributed to a further decline in kilometers driven and subsequent decline in traffic fatality rates. As European countries experience economic recovery, their traffic fatality rate may start to rise, as seen in Ireland beginning in 2013.

It is important to recognize that the same measures can be applied in an environment without specific targets and result in similar or better outcomes. A broad spectrum of variables in any jurisdiction will have an impact on its ability to move the marker on roadway fatalities and injuries.

Manitoba Public Insurance has aligned with the Canadian Council of Motor Transport Administrators (CCMTA) Road Safety Strategy 2025 in pursuit of a rate-based downward trend in traffic injuries and fatalities. The Corporation's frameworks for road safety are fully operationalized which provide an evidence based approach to priority setting, program development and program evaluation. Further, the Stakeholder Strategy and External Committee on Loss Prevention provide opportunity for key stakeholders to participate in the process and validate the findings and interventions that the Corporation discovers and pursues. This has resulted in a full range of new proven or promising programming initiatives and associated funding in 2016/17, 2017/18, and beyond which represents opportunities to change perceptions and behaviours of roadway users and reduce collisions in Manitoba. The Corporation is confident that this approach is sound and has the support of the road safety community of practice in Canada.

b) It is Manitoba Public Insurance's position that this model could potentially allow for the setting of aggressive goals. The development of a Provincial Road Safety Plan and associated targets and goals has been delegated by the Province to the Provincial Road Safety Committee. c) The Corporation's road safety goals align with Canada's Road Safety Strategy 2025, which seeks to achieve directional downward trends in the rate-based number of fatalities and serious injuries rather than in the actual numbers of fatalities and serious injuries. This approach enables provincial and territorial jurisdictions with small populations and low fatality numbers to measure progress in a meaningful way.

The Provincial Road Safety Committee, to which the Province has delegated the task of developing a Provincial Road Safety Plan, may elect to pursue aggressive goals with hard targets at a provincial level. As a Co-Chair of this Committee, the Corporation fully supports a holistic systems approach to reduce injuries and fatalities and would support efforts to coordinate efforts in pursuit of provincial targets and goals to eliminate the human toll on Manitoba roadways. This serves to support the Corporation's current road safety agenda from a loss prevention perspective as well as the public good.

- d) With respect to the quotation, "it then considers the costs involved for the Manitoba context if it intends to pursue it within a business case":
  - i. 'Manitoba context' means Manitoba, insofar as a road safety intervention that exists in another jurisdiction may or may not be economically feasible or physically practical in Manitoba. An example of the Corporation considering costs involved for the Manitoba context is demonstrated in the Wildlife Collision Mitigation Review and Cost-Benefit Analysis, filed with the 2017 General Rate Application (Volume I LP Attachment E).
  - ii. A business case is the Corporate instrument used to support and present projects and initiatives for funding, annual strategic planning inclusion, and executive approval. Components of a business case may include project or initiative background, description or approach, and overview; the business need or strategic importance; objectives; benefits; time, effort, and costs; timing; assumptions; risks; consultation; and impact analysis.

iii. Please refer to <u>CAC (MPI) 1-109</u>.

Volume:	BW-(MPI) 1-8	Page No.:	
Topic:	Road Safety		
<b>Sub Topic:</b>	Optimal budget		
Issue:	Costs of effective road safety programs		

**Preamble:** In BW-(MPI) 1-8 MPI indicated that the CCMTA gathers information on road safety initiatives in other jurisdictions that have proven effective.

# Question:

- a) Please provide cost information for road safety initiatives in other jurisdictions inventoried by the Canadian Council of Motor Vehicle Administrators which have proven effective in modifying unsafe driver behaviour.
- b) Please divide those costs by the respective driver population to produce high level per capita costs for such programs.

## **Rationale for Question:**

To provide a key element of bottom up costs required for establishing an optimal road safety budget.

### **RESPONSE:**

- a) The cost information requested is not collected by the Canadian Council of Motor Vehicle Administrators, nor is it provided in the inventory.
- b) Please refer to a).

