

**OLIVER WYMAN**  
A MARSH BUSINESS

# **CARE-FIRST: ACTUARIAL COSTING**

Automobile Insurance Rate Board

4 February 2026

**PRELIMINARY REPORT**

## Contents

<b>1.</b>	<b>Executive Summary .....</b>	<b>4</b>
1.1.	Purpose and Scope .....	4
1.2.	Actuarial Findings .....	4
1.3.	Report Structure.....	4
1.4.	Relevant Comments .....	7
<b>2.</b>	<b>Care-First: A Care-Based Approach to Automobile Insurance .....</b>	<b>9</b>
2.1.	Background .....	9
2.2.	Premium Savings and Market Stability Under Care-First.....	11
<b>3.</b>	<b>Care-First Benefits .....</b>	<b>15</b>
3.1.	Health Care and Treatment-Related Expenses .....	16
3.2.	Death Benefits and Related Expenses.....	18
3.3.	Permanent Impairment Benefits.....	19
3.4.	Income Replacement Benefit .....	20
3.5.	Compensation for Pain and Suffering (General Damages) .....	22
<b>4.</b>	<b>Tort .....</b>	<b>23</b>
4.1.	Tort Exposure .....	23
4.2.	Other Tort Considerations .....	26
<b>5.</b>	<b>Methodology Overview.....</b>	<b>28</b>
5.1.	Estimated Required Average Premium: Current Product .....	28
5.2.	Estimated Required Average Premium: Care-First .....	29
<b>6.</b>	<b>Accident Benefits Claim Cost Modeling .....</b>	<b>32</b>
6.1.	Accident Benefits Frequency.....	32
6.2.	Accident Benefits Severity .....	34
<b>7.</b>	<b>Bodily Injury, Underinsured Motorist and Top-up Claim Cost Modeling .....</b>	<b>37</b>
7.1.	Bodily Injury .....	37
7.2.	SEF 44 – Family Protection Endorsement (Underinsured Motorist).....	40
7.3.	Top-Up Coverage.....	40
<b>8.</b>	<b>Other Classes.....</b>	<b>42</b>
8.1.	Commercial Vehicles and Motorcycles .....	42
8.2.	Miscellaneous Classes .....	44

<b>9.</b>	<b>Loss Transfer .....</b>	<b>47</b>
<b>10.</b>	<b>Results for Private Passenger Vehicles .....</b>	<b>48</b>
<b>11.</b>	<b>Distribution and Use .....</b>	<b>49</b>
<b>12.</b>	<b>Considerations and Limitations .....</b>	<b>50</b>
<b>Appendix A.</b>	<b>Glossary.....</b>	<b>52</b>
<b>Appendix B.</b>	<b>Exhibits.....</b>	<b>55</b>
<b>Appendix C.</b>	<b>Reconciliation to Prior Review .....</b>	<b>57</b>
C.1.	Accident Benefits Frequency.....	58
C.2.	Accident Benefits Severity .....	59
C.3.	Bodily Injury .....	61
<b>Appendix D.</b>	<b>Tort Exposure Analysis.....</b>	<b>62</b>
<b>Appendix E.</b>	<b>Data Sources.....</b>	<b>64</b>

# 1. Executive Summary

## 1.1. Purpose and Scope

The Automobile Insurance Rate Board (AIRB or the Board) retained Oliver, Wyman Limited (Oliver Wyman) to support the implementation of Alberta's new automobile insurance system, Care-First. Specifically, in this report, we provide:

- Actuarial estimates of the *required* industry average premium under the Care-First system. *Required* premiums represent our estimate of the amount that insurers would need to collect to cover claims, expenses, and profit. We provide these estimates separately for the following vehicle classes:
  - Private passenger vehicles (PPV)
  - Commercial vehicles (CV)
  - Motorcycles (MC)
  - Other Miscellaneous Classes
- Actuarially indicated estimates of endorsement premiums for coverage in excess of the Care-First limits. We refer to the coverage provided under these endorsements as the "top-up" limits and coverage.

## 1.2. Actuarial Findings

In Table 1, we present our estimates of required premiums by vehicle class. We present our findings related to premium savings and market stability in Section 2. In Table 2, we present the loss costs underlying those premiums. We present indicated loss costs for top-up coverage in Table 3. These loss costs and required premiums will serve as benchmarks for AIRB in reviewing Care-First filings. The AIRB will provide further directions in the Care-First Filing Guidelines.

## 1.3. Report Structure

We summarize Care-First benefits in Sections 3 and 3.5. We describe the assumptions underlying the calculation of the required premium in Section 5. In Sections 6 and 7, we describe the adjustments we include in our modeling to determine the required Care-First accident benefits and bodily injury/top-up premiums, respectively. We discuss our modeling of other classes in Section 8, and summarize our estimates in Section 9.

We understand that the Board will post this preliminary report on its website. We will consider comments from interested parties before issuing a final report. The AIRB will also post the model underlying the estimates presented in this report to its website for review by interested stakeholders.

**Table 1: Summary of Required Premiums**

Section	Coverage	Subcoverage	PPV	CV	MC
A.	Third-Party Liability	Bodily Injury	46.77	34.38	19.15
		Property Damage	32.20		
A.1.	Direct Compensation for Property Damage		338.52	294.72	16.72
B.	Accident Benefits	Income Replacement & Other Monetary Benefits	264.58	40.83	416.08
		Health Care and Related Expenses	251.29	94.86	90.32
		Death Benefits and Related Expenses	15.56	14.99	22.38
		Permanent Impairment	55.26	53.25	302.82
		Uninsured Motorist	0.21	0.72	0.83
C.	Loss of or Damage to Insured Automobile	All Perils	1,193.45	929.32	220.23
		Collision or Upset	478.34	433.25	108.70
		Comprehensive	531.61	598.39	81.38
		Specified Perils	164.23	142.04	38.24
	SEF 44/Uninsured Motorist		0.19	0.46	2.02
	Subtotal Basic Coverage		1,004.11	533.76	868.31
	Full Coverage†		2,014.26	1,565.86	1,060.40

## Table Notes

\* Health levy (PPV = \$59.90, CV = \$48.98, MC = \$4.14) included with accident benefits, health care and related expenses in Care-First premiums

† See Section 1.4 for a definition of full coverage

**Table 2: Summary of Indicated Nominal Loss Costs**

Section	Coverage	Subcoverage	PPV	CV	MC
A.	Third-Party Liability	Bodily Injury	35.00	25.00	15.00
		Property Damage	21.79		
A.1.	Direct Compensation for Property Damage		229.07	193.77	11.84
B.	Accident Benefits	Income Replacement & Other Monetary Benefits	268.58	40.32	442.45
		Health Care and Related Expenses	203.00	70.34	80.07
		Death Benefits and Related Expenses	11.01	10.31	16.58
		Permanent Impairment	39.12	36.62	224.31
		Uninsured Motorist	0.20	0.64	0.80
C.	Loss of or Damage to Insured Automobile	All Perils	805.48	609.41	155.54
		Collision or Upset	321.99	283.36	76.57
		Comprehensive	358.35	391.91	57.40
		Specified Perils	110.64	92.94	26.95
	SEF 44/Uninsured Motorist		0.16	0.37	1.76
	Subtotal Basic Coverage		807.76	377.00	791.06
	Full Coverage†		1,488.26	1,052.64	926.78

## Table Notes

\* Health levy (PPV = \$32.29, CV = \$32.21, MC = \$2.93) included with accident benefits, health care and related expenses in Care-First premiums

† See Section 1.4 for a definition of full coverage

**Table 3: Top-Up Indicated Loss Costs**

Endorsement	Top Up Limit	Loss Cost per Vehicle
Earner Disability Income	150,000	295.28
	200,000	433.54
	250,000	596.19
	300,000	747.61
	400,000	947.38
Personal Care Assistance	\$20,343 per month	1.89
Funerals	\$17,500	0.36
Grief Counseling Limits	\$5,000	0.01
Family-Enterprise	TBD, Pending Endorsement	75.10

It is unclear how insurers will market and sell top-up coverage. Our estimates for top-up loss costs reflect a “cafeteria offering,” which allows insureds to “pick and choose” individual top-ups. Under this approach, there is no spread of risk in the top-ups for Earner Disability Income and Family Enterprise. If instead, insurers

offered an “all or none” top-up, indicated loss costs for Earner Disability Income and Family Enterprise would likely be materially lower, and would be based on the take-up rates by income category.

## 1.4. Relevant Comments

- The Government of Alberta previously retained Oliver Wyman to conduct a feasibility study on long-term automobile insurance reform options. An insurance system similar to Care-First (i.e., private delivery of the Manitoba product) was among the options reviewed. We issued our feasibility study in April 2024. Appendix C of this report presents a review of the differences between the estimates in this report and those in our April 2024 feasibility study. Section 2 provides additional context to the changes and differences in findings between this report and our April 2024 feasibility study.
- Unless noted otherwise, we define “full coverage” as including bodily injury, property damage, direct compensation property damage, accident benefits, underinsured motorists, collision, and comprehensive (rather than all perils or specified perils).
- This report includes an analysis of all vehicle classes. However, we focus our analysis on private passenger vehicles. Unless indicated otherwise, amounts, estimates, and comments relate to private passenger vehicles.
- Care-First results in changes in loss costs and premiums for injury coverages (accident benefits, bodily injury, and family protection endorsement (SEF44)). Care-First does not affect loss costs for other coverages. Changes to required premiums for coverages other than injury coverages result from the reallocation of fixed expenses.
- There is significant uncertainty in pricing a new insurance product. In addition to the lack of claims experience available for review, we note that the Government has not passed all the necessary regulations, and some aspects of the Care-First remain subject to change. Our actuarial and modeling assumptions incorporate a prudent level of conservatism to recognize that uncertainty.
- The AIRB established an Actuarial Advisory Committee (AAC) to support the development of the estimates presented in this report. In addition to Oliver Wyman and the AIRB, the AAC included representatives from seven private insurers and Facility Association. The AAC met regularly starting in late July 2025. AAC members had the opportunity to review our costing models and estimates and provide feedback and suggestions. In addition, the AIRB posted draft models on its website for other interested stakeholders to review. We reviewed suggestions from the AIRB, AAC members, and other stakeholders and modified our modeling as we considered appropriate.
- In this report, we present estimates of insurance industry loss costs and premiums. We expect to engage in discussions with the AAC and other industry stakeholders to develop guidance as to how to reflect risk differences in each insurer’s portfolio. We will include that guidance in our final report.
- We developed the estimates principally based on data from the following sources:
  - Insurance industry data published by the General Insurance Statistical Agency (GISA) as compiled by GISA’s service provider, IBM Canada (IBM).
  - Demographic and economic data compiled by Statistics Canada.
  - Manitoba Public Insurance’s (MPI) General Rate Application
  - Insurance Corporation of British Columbia’s (ICBC) Revenue Requirements Application

- Oliver Wyman reviews Alberta industry experience semi-annually. We developed the estimates in this analysis using data from our review of industry experience as of December 31, 2024, as presented in our 2025 Annual Review report dated September 15, 2025. We have completed our analysis of industry experience as of June 30, 2025. That report, our 2026 Semi-Annual Review dated January 15, 2026, remains in draft form pending industry and stakeholder comment.

We do not expect that the use of the estimates/assumptions from the 2026 Semi-Annual Review would result in materially different estimates of *Care-First required premiums* relative to our use of the 2025 Annual Review. However, due to volatility in industry experience for bodily injury, use of the 2026 Semi-Annual Review would result in materially lower (approx. \$275) estimates of *third-party liability current product required premiums*.

- We estimate a significant increase in motorcycle average premiums. This is primarily due to a higher likelihood of severe injury when a motorcycle accident occurs.



## 2. Care-First: A Care-Based Approach to Automobile Insurance

The Alberta Government established Care-First under the Automobile Insurance Act (formerly Bill 47), which received Royal Assent on May 15, 2025. The purpose of the Automobile Insurance Act was to reduce the cost of automobile insurance while providing more efficient delivery of care required to treat injuries sustained in automobile accidents.

Care-First introduces an entirely new insurance system focused on providing exceptional care at affordable costs. The Government is implementing Care-First to control costs, which have increased premiums for bodily injury coverage under the current tort-based system, while making substantial increases to the care and treatment available to Albertans injured in an automobile accident under accident benefits coverage. Care-First is also expected to provide rate stability over the longer term.

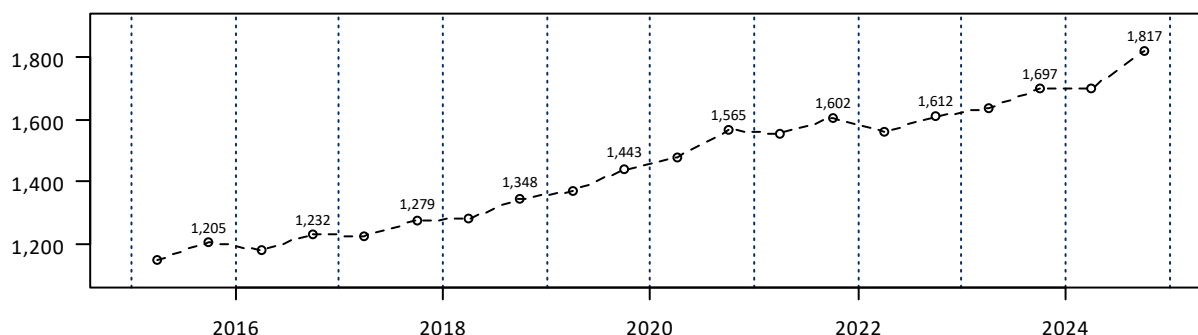
The Care-First system will start on January 1, 2027.

Additional information on Care-First is available at <https://care-first.alberta.ca/>.

### 2.1. Background

Automobile insurance premiums in Alberta have consistently risen over the past ten years. In Figure 1, we present the industry average written premiums by semester from 2015 to 2024 for PPV.

**Figure 1: Private Passenger Vehicle Industry Average Written Premiums**



Private passenger vehicle insurance premiums have risen approximately 57% over 10 years, from \$1,153 in early 2015 to \$1,817 in late 2024.

In response to the deterioration of affordability, the Alberta Government has issued several recent ministerial orders to limit rate changes.

- On January 25, 2023, Ministerial Order 11/2023 was issued, prohibiting the approval of any change to rating programs that would result in an increase in premium greater than 0.00% to any individual private passenger vehicle policyholder. This rate pause was in effect from January 25, 2023, to December 31, 2023.

- On October 30, 2023, Ministerial Order 38/2023 was issued, prohibiting the approval of any change to an insurer's rating program that would result in private passenger vehicle rates increasing more than the rate of Alberta Consumer Price Index (as calculated in September of the previous year), which was +3.7%, for any individual policyholder who met the definition of Good Driver. The Good Driver Rate Cap applied to rate approvals on or after January 1, 2024.
- On November 21, 2024, Ministerial Order 24/2024 was issued, which rescinded and replaced Ministerial Order 38/2023. The 2024 Order limited the approval of any change to an insurer's rating program that would result in private passenger vehicle rates increasing more than +7.5% for Good Drivers (including a +2.5% increase for catastrophic losses) in 2025. This Order required at least 12 months to have elapsed between rate increases for renewal business and limits the AIRB to approval of rate changes no greater than +10%, cumulatively, for any 12-month period for an insurer.
- On September 29, 2025, Ministerial Order 33/2025 was issued which rescinded and replaced Ministerial Order 24/2024. The 2025 Order limits the approval of any change to an insurer's rating program that would result in private passenger vehicle rates increasing more than +7.5% for Good Drivers (including a +2.5% increase for catastrophic losses) in 2026. This Order requires at least 12 months to have elapsed between rate increases for renewal business and limits the AIRB to approval of rate changes no greater than +12.5%, cumulatively, for any 12-month period for an insurer, and amends the definition of Good Driver.

The ministerial orders limited insurer rate changes, and those limitations may not have aligned with underlying cost changes. As a result, many insurers are not charging sufficient premiums to cover losses, expenses, and profit, leading to premium inadequacy. Using data as of June 30, 2025, we estimated that average premiums would need to increase by 24%<sup>1</sup> to achieve rate adequacy.

The Superintendent of Insurance 2024 Annual Report<sup>2</sup> stated,

Alberta's automobile insurance [Gross Insurance Service Ratio] GISR<sup>3</sup> deteriorated from approximately 93 per cent in 2023 to approximately 118 per cent in 2024. This clearly indicates an overall operational loss for the year. The Superintendent notes that a substantial majority of Alberta automobile insurers were unprofitable in 2024, with private passenger automobile insurance seeing the greatest pressure.

The industry Gross Combined Insurance Service Ratio<sup>3</sup> (GCISR) (IFRS 17) for 2023, which includes 5 percentage points of general expenses, was 123%.

<sup>1</sup> See Table 5. A comparison of the current street premium, adjusted for approved rate changes, and the required premium for filings submitted between April 1, 2026, and September 30, 2026, indicates a required increase of 26%.

<sup>2</sup> <https://open.alberta.ca/dataset/3d9d1330-365e-45b5-afbe-184bd20de918/resource/f8e9e5da-f5ad-49ce-9f9b-3aa1a0baf584/download/tbf-superintendent-of-insurance-annual-report-2024.pdf> (accessed 23 January 2026)

<sup>3</sup> From the Glossary of Superintendent of Insurance 2024 Annual Report:

**Gross Combined Insurance Service Ratio (GCISR) (IFRS 17)** The total of the GISR + (general expenses not included in insurance service expenses/Insurance Revenue). Any number greater than 100% represents an underwriting loss. The GCISR does not include reinsurance expenses and investment income.

**Gross Insurance Service Ratio (GISR) (IFRS 17)** The ratio is calculated by dividing Insurance Service Expenses by Insurance Revenue. The GISR provides a broader view of performance than the Claims Ratio because it includes a wider range of insurance service-related expenses. However, it does not include reinsurance expenses, IFE and general expenses.

These conditions resulted in market instability with Zenith Insurance Company, Sonnet Insurance Company, and S&Y Insurance Company phasing out of the market. In rationalizing the withdrawal, insurers cited the high cost of litigation.<sup>4</sup>

## 2.2. Premium Savings and Market Stability Under Care-First

Our analysis indicates that Care-First will decrease claim costs, as presented in Table 4.

**Table 4: PPV Claim Cost Comparison**

Coverage	Policy Year 2027: Care-First Estimated Loss Costs	Policy Year 2027: Tort-Product Estimated Loss Costs	Increase / (Reduction) in Estimated Loss Costs
Third Party Liability	\$285.85	\$1,408.17	(\$1,122.31)
Accident Benefits	482.62	157.88	324.74
Collision	321.99	321.99	0.00
Comprehensive	358.35	358.35	0.00
Underinsured Motorist	0.16	9.24	(9.08)
Industry Weighted Average*†	1,357.01	2,164.47	(807.46)
Full Coverage*	1,488.26	2,294.91	(806.65)

**Table Notes**

\* Includes the cost of the health levy.

† Industry weighted reflects take-up rates on optional coverages, and includes insureds' purchases of specified perils/all perils in place of comprehensive and collision

Although we expect *claim costs* to decrease under Care-First, the savings Albertans will experience result from changes in *premiums*. And, due to rate inadequacies, current insurance premiums do not reflect underlying claim costs. In Table 5, we compare the average written premium for policies written between January 1, 2025, and June 30, 2025,<sup>5</sup> the average premium required in that period, the average required policy year 2027 premium under the current tort product, and the average policy year 2027 required premium under Care-First. We estimate industry-weighted average premiums under Care-First, assuming the percentage of vehicles purchasing optional coverages remains unchanged.

<sup>4</sup> <https://www.cbc.ca/news/canada/edmonton/auto-insurance-companies-keep-leaving-alberta-here-s-why-1.7261145> (accessed 23 January 2026)

<sup>5</sup> This is the latest period for which GISA industry data is available.

**Table 5: PPV Premium Comparison**

<b>Coverage</b>	<b>January 1, 2025, to June 30, 2025: Tort Product Average Written Premium</b>	<b>January 1, 2025, to June 30, 2025: Tort Product Average Required Premium†</b>	<b>Policy Year 2027: Tort Product Average Required Premium</b>	<b>Policy Year 2027: Care-First Average Required Premium</b>
Third Party Liability	\$1,035	\$1,396	\$1,812	\$417
Accident Benefits	141	192	219	527
Collision	411	449	466	478
Comprehensive	359	407	518	532
Underinsured Motorist	28	11	11	0
Industry Weighted Average‡*	1,848	2,270	2,896	1,820
Full Coverage*	2,001	2,454	3,085	2,014

**Table Notes**

\* Includes the cost of the health levy

† Assumes an average accident date of October 1, 2025, for policies written between January 1, 2025, and June 30, 2025

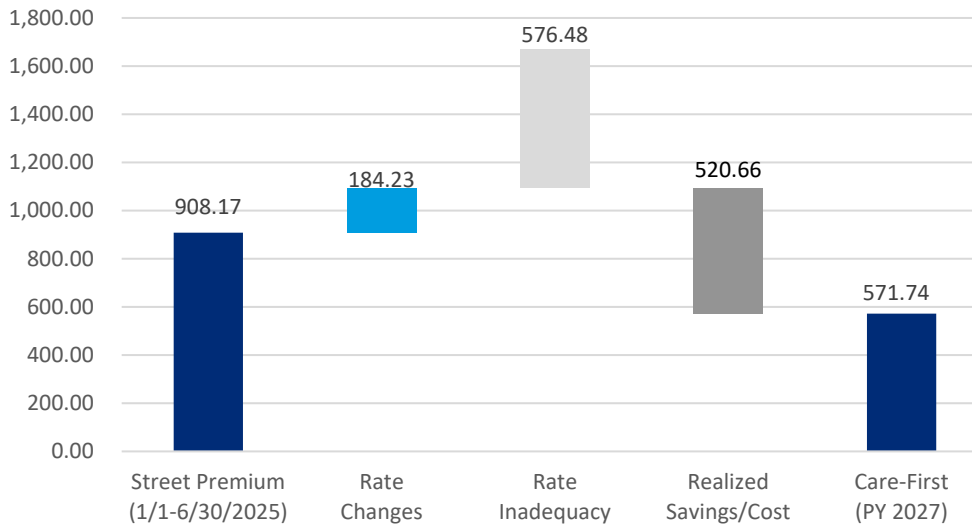
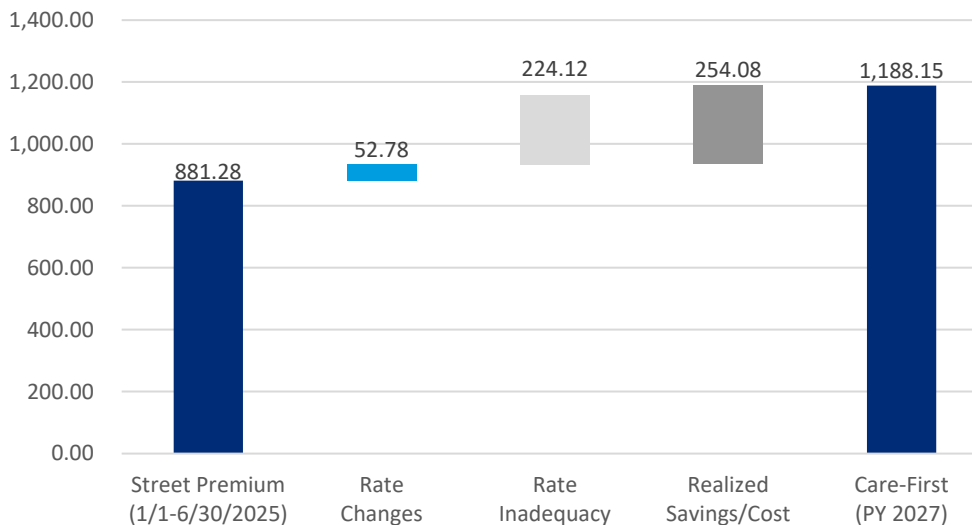
‡ Industry weighted reflects take-up rates on optional coverages, and includes insureds' purchases of specified perils/all perils in place of comprehensive and collision

We observe that our estimate of required full coverage premiums under Care-First (\$2,014) is not materially different from the average written premium for the period from January 1, 2025, to June 30, 2025 (\$2,001). However, this small difference is not indicative of the significant benefits of Care-First, as it does not recognize the following:

- There is a current rate level deficiency resulting in market instability. The required premium (\$2,454) is much higher than the average written premium for the period from January 1, 2025, to June 30, 2025 (\$2,001).
- Government actions notwithstanding, we expect increases in claims costs due to inflation over the 2¼ years<sup>6</sup> between the midpoints of the first half of 2025 and the 2027 policy year.

In Figure 2 and Figure 3, we summarize the change from current street premiums to projected premiums under Care-First. We project that rate changes from the current level to policy year 2027 levels would offset increases in claims costs and expenses, but not address the current rate inadequacy.

<sup>6</sup> Measured from the midpoint of the first half of 2025 (i.e., April 1, 2025) to the midpoint of policy year 2027 (i.e., July 1, 2027)

**Figure 2: Projected Changes – Injury Coverages (Bodily Injury and Accident Benefits)****Figure 3: Projected Changes – Damage Coverages (PD/DPCD, Collision, and Comprehensive)**

In Table 6, we summarize economic savings that result from the introduction of Care-First. There are two sources of savings that result from Care-First.

- **Elimination of rate inadequacies** – Although this does not represent a direct cost savings to Albertans, we expect that the continuation of significant rate inadequacies was an untenable situation for insurers in Alberta. Eventually, either Albertans' premiums would have needed to increase to offset those inadequacies, or more insurers would have withdrawn from the market. As noted in Section 1.4, use of assumptions from our 2026 Semi-Annual Review would reduce the magnitude of this benefit. Specifically, Table 5 reflects the analysis from our 2026 Semi-Annual Review and indicates a lower rate inadequacy than Figure 2, which is based on our 2025 Annual Review.

- Premium savings – We project that the implementation of Care-First will result in significant premium savings related to injury coverages. For physical damage coverages, allowing insurers to achieve rate adequacy will increase premiums.

**Table 6: Summary of Industry Average\* Care-First Economic Savings (Additional Costs)**

Savings	Injury Coverages (AB and BI)	Damage Coverages (PD/DCPD, CL, and CM)	Other (Health Levy and SEF 44)	Total
Rate Inadequacy	541.63	250.04	(7.89)	783.78
Premium	555.51	(280.00)	0.92	276.43
Total	1,097.14	(29.96)	(6.97)	1,060.21

Table Note

\* Industry average premiums reflect take-up rates on optional coverages

In Table 7, we present our estimates of the direct premium savings resulting from Care-First implementation.

**Table 7: Summary of Care-First Premium Savings (Additional Costs)**

	Basic	Full Coverage	Industry Average
January 1, 2025, to June 30, 2025: Average Written Premium	1,203.64	2,000.98	1,848.41
Projected Policy Year 2027 Street Premium	1,406.04	2,258.56	2,096.40
Projected Care-First Required Premiums	1,004.11	2,014.26	1,819.98
Projected Direct Premium Savings	401.93	244.30	276.43

We expect direct premiums for injury coverages to be approximately \$550. This will be offset by increases as insurers recover rate inadequacies for damage coverages. As a result, we project total realized premium savings of approximately \$275.

We also expect that more predictable premiums following the introduction of Care-First will result in market stability, as insurers will be rate adequate. Although premium increases on the physical damage coverages will erode some of the savings from reduced bodily injury and accident benefits costs, this will help achieve the goal of market stability following Care-First.

### 3. Care-First Benefits

Care-First benefits are similar to those provided under MPI policies. In the sections below, we compare coverages offered by Care-First, the current Alberta (tort) system, and MPI. Benefit levels in the tables below reflect the amounts included in the “Intentions Paper”<sup>7</sup> issued in August 2025, which provides details on the Care-First program. Care-First also ensures benefit levels for Albertans remain adequate and relevant by indexing certain benefit limits to the escalator established annually by the Alberta Personal Income Tax Act. As a result, benefit levels at the inception of Care-First are likely to be slightly higher than those included in the tables below.

Table 8 to Table 11 summarize Care-First benefits for Health Care and Treatment-Related Expenses, Death Benefit and Related Expenses, Permanent Impairment Treatment-Related Expenses, Death Benefit and Related Expenses, Permanent Benefits, and Income Replacement Benefits, respectively. As with the current product, Care-First will continue to provide coverage for injuries from accidents involving an uninsured driver.

Table 12 summarizes the elimination of pain and suffering (general) damages.

---

<sup>7</sup> <https://open.alberta.ca/publications/care-first-auto-insurance>, accessed 21 January 2026

### 3.1. Health Care and Treatment-Related Expenses

**Table 8: Medical and Rehabilitation Benefit Comparison**

	Care-First <sup>8</sup>	Current Alberta (Tort) <sup>9</sup>	Manitoba (MPI) <sup>10</sup>
<b>Priority of Payment</b>	[I]nsurer is, in the first instance, liable for the payment or reimbursement of an expense under this Division, unless the insured is entitled to payment or reimbursement of the expense under the <i>Alberta Health Care Insurance Act</i> or another Act, in which case the insurer is liable only for the portion of the expense not paid or reimbursed under that Act or the other Act.	The insurer is not liable for those portions of expenses payable or recoverable under any medical, surgical, dental or hospitalization plan or law ...	Reasonable and necessary expenses not covered by another universal government health plan.
<b>Common Injury</b>	Treatment is provided for as long as there is a “measurable benefit.”	Minor injuries subject to DTPR are limited in the number of treatments without prior insurer approval: <ul style="list-style-type: none"> <li>• For a 1st or 2nd degree strain/sprain, not more than a combined total of 10 medical, physical therapy, chiropractic, and adjunct therapy visits for treatment;</li> <li>• For a 3rd degree strain/sprain, a combined total of 21 medical, physical therapy, chiropractic, and adjunct therapy visits for treatment.</li> </ul>	Unlimited for all eligible medical and rehabilitation expenses

<sup>8</sup> Per <https://www.alberta.ca/automobile-insurance-reform>, accessed 11 August 2025

<sup>9</sup> Per Owner’s Automobile Policy, S.P.F. No. 1, approved by Alberta’s Superintendent of Insurance effective January 1, 2022 (<https://open.alberta.ca/dataset/2df20e09-0659-474b-a97a-058a81fd1b7c/resource/f01cfb6b-2550-4ddc-af8b-56e58bccd5ba/download/tbf-insurance-spf1-standard-automobile-policy-2022-01.pdf>, accessed 11 August 2025)

<sup>10</sup> Manitoba Public Insurance (MPI) - 2026 General Rate Application ([https://apps.mpi.mb.ca/Rate-Application/2026/GRA/2026\\_GRA.pdf](https://apps.mpi.mb.ca/Rate-Application/2026/GRA/2026_GRA.pdf), accessed 11 August 2025)



	Care-First <sup>8</sup>	Current Alberta (Tort) <sup>9</sup>	Manitoba (MPI) <sup>10</sup>
<b>Serious Injury</b>	No maximum or time limit for treatment that provides a measurable benefit.	Up to \$50,000 for 2 years, subject to sublimits for chiropractic, massage, and acupuncture. Additional treatments require legal action against the at-fault driver.	Unlimited for all eligible medical and rehabilitation expenses
<b>Catastrophic Injury</b>	No maximum or time limit for treatment that provides a measurable benefit. Ancillary supports for the rest of their life.	Up to \$50,000 for 2 years, subject to sublimits for chiropractic, massage, and acupuncture. Additional treatments require legal action against the at-fault driver.	Enhanced coverage for catastrophically injured claimants includes: <ul style="list-style-type: none"> <li>• Extraordinary expenses related to travel and accommodation</li> <li>• Attendant care to engage in employment</li> <li>• Adaptation of primary and secondary residences</li> <li>• Adaptation of more than one motor vehicle</li> <li>• Purchase of adapted motor vehicle for catastrophically injured claimant (no more than once every 5 years, up to \$55,458 per acquisition)</li> </ul>

## 3.2. Death Benefits and Related Expenses

**Table 9: Death Benefits and Related Expenses Comparison**

Benefit/Coverage	Care-First <sup>11</sup>	Current Alberta (Tort) <sup>9</sup>	Manitoba (MPI) <sup>10</sup> 2025 Coverage Limits
<b>Funeral</b>	Up to a maximum of \$10,308 per deceased person	\$6,150	Up to a maximum of \$10,308 per deceased person
<b>Death</b>	<ul style="list-style-type: none"> <li>Spouse: \$75,623 to \$600,000 based on the victim's gross annual income.</li> <li>Dependent: \$35,919 to \$66,170 based on the age of the dependent. If there is no spouse, that benefit amount is distributed to the dependents</li> <li>Non-Dependent Parent or Child: \$16,840 each</li> <li>Disabled dependent: \$33,085</li> </ul>	<ul style="list-style-type: none"> <li>Head of household: \$10,000 + (20% for each survivor other than the first) + (\$15,000 if spouse is living in the household + \$4,000 for each remaining survivor)</li> <li>Spouse: \$10,000</li> <li>Dependent relative: \$1,000 - \$3,000</li> </ul>	<ul style="list-style-type: none"> <li>Spouse: \$75,623 to \$600,000 based on the victim's age and income</li> <li>Dependent: \$35,919 to \$66,170 based on the dependent's age</li> <li>Non-Dependent Parent or Child: \$16,840 each</li> <li>Disabled Dependent: Additional sum of \$33,085</li> </ul>
<b>Grief Counseling</b>	\$4,310 maximum per eligible survivor	\$500 per family	<ul style="list-style-type: none"> <li>\$4,310 maximum per eligible survivor</li> <li>Travel, accommodations, and meals to obtain grief counseling</li> </ul>

<sup>11</sup> Per Care-First Auto Insurance Intentions Paper (<https://open.alberta.ca/dataset/05d7b6b1-ed14-40f6-8044-87f050b521b1/resource/a89fb33a-e4d2-4118-a982-2ee2cf465ac6/download/tbf-care-first-auto-insurance-2025-08.pdf>, accessed 11 August 2025)

### 3.3. Permanent Impairment Benefits

**Table 10: Permanent Impairment Benefit Comparison**

Benefit/Coverage	Care-First <sup>11</sup>	Current Alberta (Tort) <sup>12</sup>	Manitoba (MPI) <sup>10</sup>
<b>Permanent Impairment</b>	A lump-sum between \$934 and \$189,055 for non-catastrophic injuries. A lump sum of \$298,520 for catastrophic injuries.	No benefit; can only access through pain and suffering damages in the tort system.	A lump-sum between \$944 and \$189,055 for non-catastrophic injuries. A lump sum of \$298,520 for catastrophic injuries. Benefits are not payable if the victim dies within 89 days of the accident.

<sup>12</sup> Per Care-First Auto Insurance Intentions Paper (<https://open.alberta.ca/dataset/05d7b6b1-ed14-40f6-8044-87f050b521b1/resource/a89fb33a-e4d2-4118-a982-2ee2cf465ac6/download/tbf-care-first-auto-insurance-2025-08.pdf>, accessed 11 August 2025)

### 3.4. Income Replacement Benefit

**Table 11: Income Replacement Benefits Comparison**

Claimant Category	Care-First <sup>11</sup>	Current Alberta (Tort) <sup>9</sup>	Manitoba (MPI) <sup>10</sup>
<b>Earner</b>	90% of net income up to a maximum annual gross income of \$125,000, until the insured returns to work.	80% of the average gross weekly earnings, less any payments from an employer disability income plan, up to a maximum of \$600 per week. Limited to a maximum of 2 years	90% of net income earned, computed on a yearly basis. Net income is based on gross yearly employment income up to a maximum yearly insurable earnings of \$120,000, indexed annually.
<b>Non-Earner</b>	<p>Non-earner income replacement benefits provided for:</p> <ul style="list-style-type: none"> <li>• Minors</li> <li>• Students</li> <li>• Caregivers</li> <li>• Others that were deprived of the opportunity for employment</li> </ul> <p>Benefits vary by category.</p>	Limited to \$200 per week	May be entitled to caregiver weekly indemnity during the first 180 days. After 180 days, the benefit may change to a benefit based on full-time determined employment, or continue as a caregiver benefit.
<b>Retirement</b>	<p>Individuals receiving income replacement benefits before age 65 are entitled to 70% of their net income, less any pension income or disability benefits.</p> <p>For those 65 at the time of the accident, not entitled to benefits unless reasonable expectation of employment</p>	Entitled to non-earner benefit	70% of net income last used to calculate the IRI benefit, less any net pension income. Benefit payable for life and indexed annually.

<b>Claimant Category</b>	<b>Care-First<sup>11</sup></b>	<b>Current Alberta (Tort)<sup>9</sup></b>	<b>Manitoba (MPI)<sup>10</sup></b>
<b>Students</b>	<p>Entitled to a fixed lump-sum indemnity for each school year not completed.</p> <ul style="list-style-type: none"> <li>Kindergarten to Grade 8 – \$6,427 (maximum)</li> <li>Grade 9 to Grade 12 – \$11,910 (maximum)</li> <li>Post-Secondary - \$23,824 (maximum)</li> </ul>	Entitled to non-earner benefit	<p>Entitled to a fixed lump-sum indemnity for each school year or term not completed.</p> <ul style="list-style-type: none"> <li>Elementary – \$6,427</li> <li>Secondary – \$11,910 per school year</li> <li>Post-Secondary - \$11,910 per term</li> </ul> <p>If unable to resume studies AND hold employment at the end of the school year, entitled to an IRI based on the Industrial Average Wage for as long as unable to hold employment.</p>
<b>Caregiver</b>	<ul style="list-style-type: none"> <li>1 dependent: \$547 weekly</li> <li>2 dependents: \$606 weekly</li> <li>3 dependents: \$664 weekly</li> <li>4 or more dependents: \$719 weekly</li> </ul>	Entitled to non-earner benefit	<p>1 dependent: \$547 weekly  2 dependents: \$606 weekly  3 dependents: \$664 weekly  4 or more dependents: \$719 weekly</p>
<b>Childcare Expense Reimbursement</b>	<ul style="list-style-type: none"> <li>1 person: \$143 (weekly)</li> <li>2 people: \$188 (weekly)</li> <li>3 people: \$237 (weekly)</li> <li>4 or more people: \$283 (weekly)</li> </ul>	Entitled to non-earner benefit	<p>For expenses incurred for the purpose of caring for a child under 16 or adults unable to hold employment</p> <p>1 person: \$143 (weekly)  2 people: \$188 (weekly)  3 people: \$237 (weekly)  4 or more people: \$283 (weekly)</p>
<b>Family Enterprise</b>	Maximum \$944 weekly for the first 180 days after the accident	Entitled to non-earner benefit	Maximum \$944 weekly for the first 180 days after the accident

### 3.5. Compensation for Pain and Suffering (General Damages)

**Table 12: Comparison of General Damages**

<b>Benefit/Coverage</b>	<b>Care-First<sup>8</sup></b>	<b>Current Alberta (Tort)</b>	<b>Manitoba (MPI)<sup>10</sup></b>
<b>Common Injury</b>	No compensation for pain and suffering	Maximum of \$6,182 (effective January 1, 2025, and subject to annual adjustment <sup>13</sup> ) for pain and suffering damages.	No compensation for pain and suffering
<b>Serious Injury</b>	No compensation for pain and suffering	Pain and suffering damages, as determined by the courts	No compensation for pain and suffering
<b>Catastrophic Injury</b>	No compensation for pain and suffering	Pain and suffering damages may be awarded up to a maximum of \$475,000 (adjusted annually for inflation), as determined by the courts	No compensation for pain and suffering

<sup>13</sup> Escalator established annually in the *Alberta Personal Income Tax Act*.

## 4. Tort

### 4.1. Tort Exposure

Under the current tort product in Alberta, bodily injury costs comprise a large share of total costs in the system. Care-First eliminates the individuals' need to sue in many circumstances, thereby dramatically reducing bodily injury costs. However, there are circumstances in which an insured may still be sued, so Care-First does not eliminate the need for bodily injury coverage.

Section 16(1) of the Exclusions and Tort Bar Exceptions Regulation states,

If, under section 6(1) of the Act, an insurer offers a motor vehicle liability policy that provides an insured with compensation in amounts in excess of those prescribed for the purposes of Part 2 of the Act and the insured declines the excess coverage, the insured has no right of action under section 81 of the Act and is barred from commencing or maintaining proceedings under that section in respect of the benefits for which the insured declined the excess coverage

Therefore, if an insurer offers additional coverage in excess of the Care-First limits and the insured declines that coverage, they would be ineligible to sue for any out-of-pocket expenses for those coverages they declined. However, we understand that if an insurer did not offer top-up coverage to an insured, they would still be eligible to sue for out-of-pocket expenses in excess of the Care-First limits.

The draft tort bar regulations present three situations where an insured may be subject to tort claims:

- Accidents involving a criminal conviction
- Accidents with an out-of-province driver
- Out-of-pocket expenses in excess of Care-First limits

### Criminal Conviction Loss Cost

We do not include bodily injury claim costs for accidents involving a criminal conviction. Section 80(1) of Bill 47 states,

Subject to this section and the regulations, a person sustaining bodily injury caused by an accident has a right of action and may commence or maintain proceedings in respect of that bodily injury against the following:

- (a) a person whose use or operation of an automobile caused the bodily injury and results in the person's conviction under
  - (i) one or more Criminal Code (Canada) offences prescribed for the purposes of this section,
  - (ii) one or more Traffic Safety Act offences prescribed for the purposes of this section, or
  - (iii) one or more prescribed offences under a prescribed Act;

- (b) a person whose use or operation of an automobile caused the bodily injury and results in the person being found guilty under the Youth Criminal Justice Act (Canada) of one or more Criminal Code (Canada) offences referred to in clause (a)(i);
- (c) a third party described in subsection (2) if the acts or omissions of the third party caused or contributed to the bodily injury;
- (d) a person in a prescribed class of persons.

However, Section 14 of the Exclusions and Tort Bar Exceptions Regulation states,

An insurer shall not defend or indemnify a person referred to in section 80(1)(a), (b) and (d) of the Act in respect of liability imposed on the person by law or be liable for any legal expenses or disbursements or any other costs in respect of an action or proceeding commenced against the person under section 80(1) of the Act.

Bill 47 allows individuals to sue another at-fault driver who is convicted under the Criminal Code or certain Traffic Safety Act offences. However, the Exclusions and Tort Bar Exceptions Regulation states that the insurer of the at-fault driver is not required to defend their insured.

So, although the injured driver is eligible to sue, there are no bodily injury costs for the automobile insurer under these circumstances.

## **Out-of-Province Loss Cost**

Alberta is transitioning to a care-based insurance system; however, other jurisdictions in Canada and the United States have a tort-based compensation system. If an Alberta driver is driving outside Alberta and is involved in an accident, that driver may be subject to a tort action by the other driver. Bodily injury coverage under Care-First would cover that exposure.

## **Excess Out-of-Pocket Expenses Loss Cost**

Section 81(1) of Bill 47 states,

Subject to this section and the regulations, a person sustaining bodily injury or death in an accident has a right of action and may commence or maintain proceedings respecting that bodily injury or death to recover damages for the following pecuniary losses:

- (a) loss of earnings in excess of the maximum amount prescribed for the purposes of calculating an income replacement benefit, only if
  - (i) the person receives or is entitled to receive an income replacement benefit under Part 2, and
  - (ii) at the time of the accident the person was earning, as determined under the regulations, income in excess of the maximum amount;
- (b) any loss for a reasonably incurred expense in relation to health care services, equipment, medication, supplies and other services under section 10 in excess of the maximum amount that may be paid or reimbursed for that expense;



- (c) any loss for a reasonably incurred expense in relation to activities and measures under section 11 in excess of the maximum amount that may be paid or reimbursed for that expense;
- (d) any loss reasonably incurred in relation to transportation, lodging and other associated prescribed expenses referred to in section 12 in excess of the maximum amount that may be paid or reimbursed for that expense;
- (e) any loss for a reasonably incurred daily living assistance expense referred to in section 13 in excess of the maximum amount that may be paid or reimbursed for that expense;
- (f) any loss for a reasonably incurred expense for the cost of care of another person referred to in section 14 in excess of the maximum amount that may be paid or reimbursed for that expense;
- (g) any loss reasonably incurred to hire another person for a family enterprise referred to in section 15 in excess of the maximum amount that may be paid or reimbursed;
- (h) any loss for a reasonably incurred expense under section 16 in excess of the maximum amount that may be paid or reimbursed for that expense;
- (i) if the person dies as a result of the accident, any loss in respect of reasonably incurred funeral and interment expenses referred to in section 43 in excess of the maximum amount that may be paid or reimbursed for that expense;
- (j) a prescribed pecuniary loss.

We have reviewed the sections mentioned in this section of Bill 47, and have identified the following benefits as possible areas of tort exposure for insurers:

- Earner income replacement benefit for individuals with an income in excess of the Care-First limits
- Daily living assistance expenses/personal care assistance for individuals who require attendant care that costs more than the Care-First limits
- Expenses related to family enterprise/family business expense if a family cannot hire a replacement for the Care-First limit
- Funeral and internment expenses for funerals that cost more than the Care-First limit
- Grief counselling expenses for cases where total grief counseling costs for an individual exceed the Care-First limit

We present our analysis of the loss costs associated with each of these exposures in Section 7.

In Appendix D, we provide a table discussing our view of tort exposure by benefit. Our analysis considers the following:

- For various benefits (e.g., expenses for care of other person, medical equipment/supplies, etc.), the Care-First provides for reasonable and necessary costs without reference to a maximum limit. However, Section 81(1) of Bill 47 provides the right to sue for amounts in excess of the maximum.

We understand that if there is no established maximum sub-threshold, there is no option for tort. That is only benefits subject to a sublimit create tort exposure.

- The Tribunal will hear disputes over entitlement and quantum. We assume that this process will be effective in significantly reducing potential tort exposure.

## 4.2. Other Tort Considerations

### Minimum Limits

Insureds are currently required to purchase a minimum limit for bodily injury claims of \$200,000. We understand that Government is considering increasing this required minimum limit.

We don't expect this increase to have a significant impact. The majority of customers currently purchase higher limits. The GISA 2024 data indicate that approximately 45% of policies have a \$2 million limit, and the remaining 55% have a \$1 million limit. We expect that very few brokers sell policies with limits below \$1 million.

### Comparison to Tort Access in Manitoba

In Manitoba, drivers cannot sue the liable party under bodily injury coverage. The Care-First benefits resemble Manitoba's; however, Alberta's increased ability to sue means more bodily injury costs will remain in the system.

In Table 13, we summarize the access to tort between the different systems.

**Table 13: Tort Comparison**

	<b>Care-First</b>	<b>Current Alberta (Tort)</b>	<b>Manitoba (MPI)<sup>14</sup></b>
<b>Right to Sue</b>	<p>Injured drivers will still be able to sue if:</p> <ul style="list-style-type: none"> <li>The at-fault driver causes an accident and is convicted of a driver or murder related offence under the <i>Criminal Code</i> or has been convicted of impaired driving or failed to stop for a peace officer under the <i>Traffic Safety Act</i>, individuals will be able to sue the at-fault driver for pain and suffering damages.</li> <li>Out-of-pocket expenses exceed the benefit limits in the Care-First system.</li> </ul>	Subject to a cap on non-pecuniary damages.	No claim against the liable party for bodily injury
<b>Out of Province</b>	Protects against a claim for an accident outside of Alberta but within Canada and the United States	Protects against a claim for an accident outside of Alberta but within Canada and the United States	Protects against a claim for an accident outside of Manitoba but within Canada and the United States

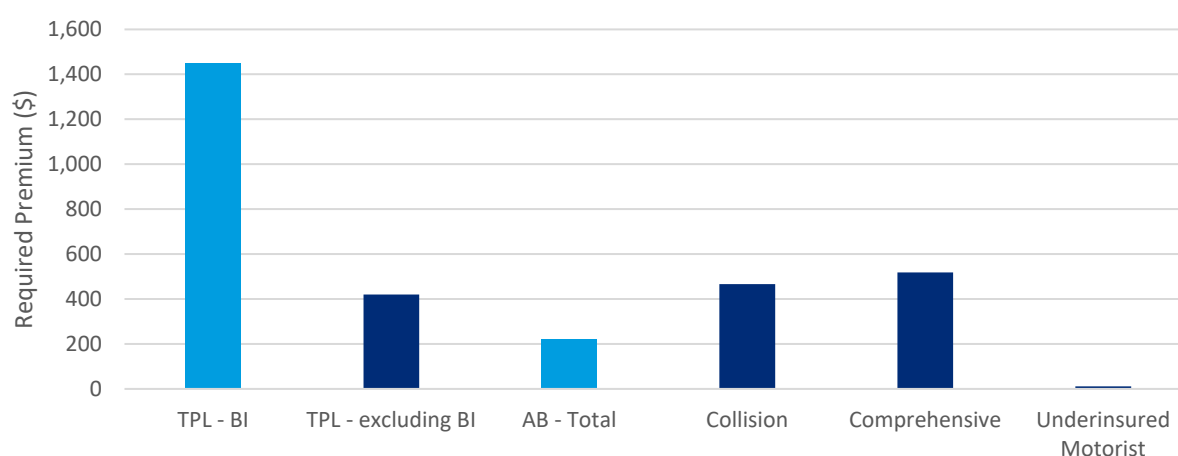
<sup>14</sup> Manitoba Public Insurance (MPI) - 2026 General Rate Application ([https://apps.mpi.mb.ca/Rate-Application/2026/GRA/2026\\_GRA.pdf](https://apps.mpi.mb.ca/Rate-Application/2026/GRA/2026_GRA.pdf), accessed 11 August 2025)

## 5. Methodology Overview

### 5.1. Estimated Required Average Premium: Current Product

The required average full coverage private passenger vehicle premium is \$3,085. In Figure 4, we present the estimated required premium for each coverage under the current Alberta tort system. We note Care-First will affect required premiums for bodily injury and accident benefits. There is no effect on required premiums for other coverages.

**Figure 4: Current Product, Estimated Required Average Premium**



We calculate the estimated required average premium for private passenger vehicles in Alberta under the current model based on the benchmarks included in the *Annual Review of Industry Experience as of December 31, 2024, Report* (Annual Review Report) as the sum of claim costs, non-claim expenses, and profit.

### Claim Costs

We develop our claim cost estimates using the following modelling process:

- **Experience Period:** We estimate ultimate claim costs and claim-related expenses for each of the ten accident years from 2015 to 2024, based on industry-aggregated experience as of December 31, 2024. We selected estimates of ultimate frequency, severity, and loss costs based on the average of projections for 2020 to 2024.<sup>15</sup>
- **Trend:** We calculate the required provision for claims costs for each coverage for policies incepting between January 1, 2027, and December 31, 2027. Those policies will expire between January 1, 2028, and December 31, 2028. As a result, the average accident date for those policies is January 1, 2028, and we trend claim costs to that average accident date. We project the claims experience to January 1, 2028, using the benchmark loss trend rates in the 2025 Annual Review Report.

<sup>15</sup> As the introduction of DCDP occurred in 2022, we apply equal weight to accident years 2022 to 2024.

- **COVID-19:** We unwind the impact of COVID-19 on claim costs using the factors presented in the 2025 Annual Review Report.
- **Combined New Normal Factors:** We apply factors to reflect differences in frequency between the pre- and post-pandemic periods, driven by both the Bill 41 reform and changes in commuting and driving patterns.
- **Unallocated Loss Adjustment Expenses:** We include an allowance for unallocated loss adjustment expenses (ULAE) based on the factors provided by the General Insurance Statistical Agency (GISA).
- **Health Levy:** We include an estimate of the Health Levy claim cost provision of \$39 per vehicle, based on our review of historical earned premiums and health levy rates.
- **Discounting:** We discount claim costs based on the 5-year industry-average return on investment (a pre-tax annual rate of 3.7%) and historical claims payment patterns by coverage.

## Non-Claim Expenses

We estimate non-claims expense provisions using an industry-average expense ratio of 27.2%<sup>16</sup> based on the average of GISA's reported expense data for 2020 to 2022.<sup>17</sup> We assume reported expenses are net of payment plan fee revenue. We include a 0.9% provision for delays in the receipt of premiums.

## Profit

We include a 6% provision for underwriting profit based on the AIRB's approved target profit benchmark for automobile insurers operating in the province.

## 5.2. Estimated Required Average Premium: Care-First

We also estimate required average premiums under Care-First as the sum of claim costs, non-claim expenses, and profit. As noted, there will be no difference as a result of the introduction of Care-First in estimated claims costs for coverages other than accident benefits and bodily injury. We also do not adjust the calculation of non-claim expenses or profit.

We provide an overview of the approach to developing claims costs for accident benefits and bodily injury below:

- **Expected Accident Benefit Claim Cost:** We develop estimates of claim costs using the Alberta industry-aggregated ultimate frequency and MPI ultimate severity for accident benefits, by subcoverage, as our starting point. We then apply adjustment factors to account for differences between the current Alberta (frequency) and Manitoba (severity) systems and the Care-First system, as well as economic and demographic differences between Alberta and Manitoba.
- **Expected Bodily Injury Claims Costs:** We develop estimates of the various sources of liability described in Section 3.5 using the following approaches:

<sup>16</sup> We assume a 4% premium tax rate, and a 3-year (2020-2022) average for all other general expenses (10.1%) and commissions (13.1%) based on data reported to GISA. We assume general expenses are split 50/50 between variable and fixed. Assigning some portion of general expenses as fixed (across coverages) results in those drivers with only mandatory coverages paying less in fixed expenses per vehicle than those with full coverage.

<sup>17</sup> For 2022 and prior, insurers reported under IFRS 4. For 2023 and 2024, insurers reported under IFRS 17. We elected to use IFRS 4 data to support our expense provision as it provides consistent long-term measure of expenses.

- **Excess Income Replacement:** Care-First provides income-replacement benefits for earners and non-earners.
  - For non-earners, this amount is a fixed lump-sum payment that varies by non-earner classification. Therefore, there is no basis for “excess” expenses that could result in a tort claim.
  - Earners are entitled to up to 90% of their net weekly income, subject to reductions from collateral sources (for example, employer disability plans), up to a maximum annual gross income of \$125,000.

We include claim costs for potential bodily injury claims from the injured individuals earning greater than \$125,000 gross annual income.

- **Family Enterprise:** Care-First includes income replacement for a claimant who was working in a family enterprise without pay but was injured in an automobile-related accident, necessitating the family business to hire a replacement. We include an estimate of loss costs when this expense exceeds the Care-First limit.
- **Excess Personal Care Assistance:** Personal care assistance provides amounts for an injured driver to hire help should the injuries sustained in an automobile accident limit the injured party’s ability to perform daily personal tasks. A monthly coverage limit of \$6,781 (\$5,671 for non-catastrophic injuries) for the cost of attendant care may be insufficient in some circumstances.

We include an estimate of the excess loss cost, based on injury types in the historical claims data presented in the 2025 MPI GRA, and assume that any claim requiring more than 8 hours of care per day would require 24-hour care.

- **Excess Funeral and Grief Counseling Benefits:** The Care-First funeral benefit limit is \$10,308. We include claim costs for out-of-pocket funeral expenses in excess of this limit based on Alberta funeral costs we reviewed from various sources.

In addition to funeral benefits, there are also death benefits paid to the spouse and/or dependants of the deceased, as well as amounts for grief counseling. Spousal and dependant death benefits are prescribed lump-sum payments, which would not result in excess out-of-pocket expenses. However, there may be a need for grief counseling services beyond the amounts included under Care-First.

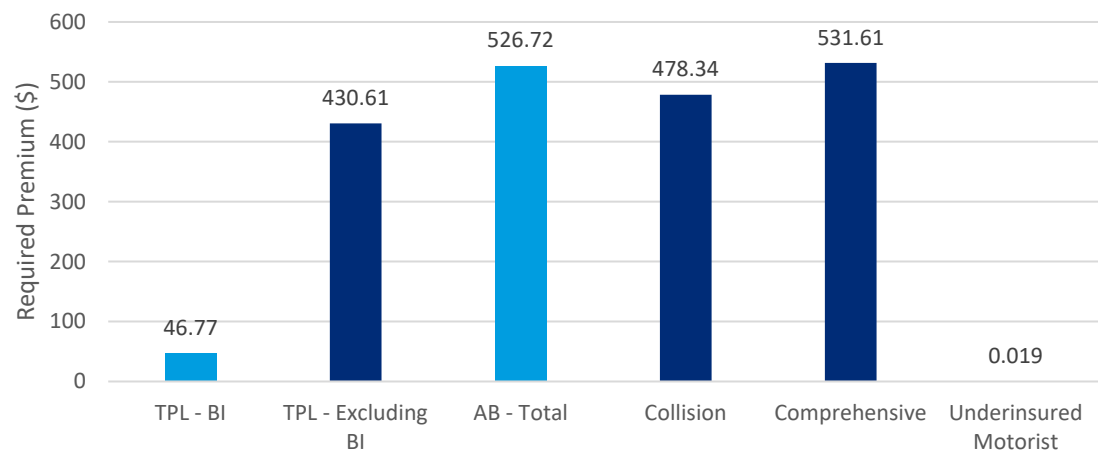
We include the estimated excess grief counseling in our estimate of bodily injury loss costs.

- **Unallocated Loss Adjustment Expenses** The current Alberta ULAE factor is not representative of the future ULAE, given the significant changes under Care-First. We believe the MPI ULAE factor is a more reasonable estimate given the similarities in the benefits provided by Manitoba and Alberta’s Care-First systems.

Based on these assumptions, we calculate the required average private passenger premium for each coverage at an average accident date of January 1, 2028. The required average full-coverage private passenger vehicle premium is \$2,014.

In Figure 5, we present the required premiums for each coverage under Care-First.

Figure 5: Care-First Estimated Required Average Premium



## 6. Accident Benefits Claim Cost Modeling

Care-First will significantly change the benefits Albertans receive after an automobile accident. As a result, the current accident benefits data in GISA Exhibit AUTO 7001 will not be entirely applicable to price the claim costs under Care-First.

We estimate claims costs under Care-First using a frequency-severity approach.

- We do not expect the underlying accident frequency to differ due to the insurance benefit structure. Therefore, the current frequency in Alberta is a reasonable starting point to estimate the frequency under Care-First. However, we expect there may be some changes to claimant behaviour due to the change in benefit structure. For example, given that the benefits under Care-First are more generous, a policyholder who did not file a claim for certain benefits under the tort system may file a claim under Care-First. Our methodology for estimating the frequency under Care-First is to use the current Alberta frequency as a starting point and apply adjustments to account for expected changes in policyholder behaviour.
- The current Alberta severity, however, is not a reasonable starting point for our analysis because the benefits offered under Care-First are significantly different than those under the current product. As the Care-First benefits are similar to the benefits in Manitoba, we use those severities as a starting point. We then apply adjustment factors to these severities to account for differences in the insurance environments in Alberta and Manitoba.

We discuss our methodology to estimate the Care-First frequency in Section 6.1 and the Care-First severity in Section 6.2.

### 6.1. Accident Benefits Frequency

In Section 5.1, we discuss our methodology for estimating the required average premium under the current tort product. We use the frequency from this analysis as the starting point for the Care-First frequency estimate.

#### Claimant/Claim Adjustment Factor

MPI presents severity values on a per-claim basis. Current Alberta GISA frequency data is on a per-claimant basis. We include a claimant/claim adjustment factor to address this mismatch. We consider adjustments based on the following:

- Effective May 1, 2021, British Columbia transitioned from a tort to a care-based model, similar to Alberta's transition. In the ICBC 2021 Revenue Requirements Application (RRA), Ernst & Young LLP/Canada (EY) performed an analysis for ICBC to estimate the costs for the Enhanced Accident Benefits product. In this analysis, EY calculated a claimant/claim factor to apply to the ICBC (tort) frequency data. We use the claimant-to-claim ratios from this analysis.

#### Additional Claims Adjustment Factor

Under the current tort system, we expect every bodily injury claim to have a corresponding accident benefits claim. If someone is injured and sues the other driver for damages, we would expect them also to collect



accident benefits from their own insurer. However, in our review of the 2019 Alberta Closed Claim Study, we found instances in which an individual filed a bodily injury claim but did not file an accident benefits claim.

Under Care-First, there is a significant reduction in tort access, so these individuals will very likely not be eligible to file a bodily injury claim. However, since they presumably sustained injuries, this should result in an accident benefits claim under Care-First. Therefore, the current frequency under the tort product understates the frequency under Care-First, as it does not include bodily injury-only claims that would result in an accident benefits claim under Care-First.

## **Tort-Based to Care-Based System Adjustment Factor**

Other provinces previously transitioned from a tort system to a care-based system. The changes that occurred in those provinces following their transition to a care-based system provide a basis for estimating changes that may occur in Alberta. One of these changes is regarding claimant behavior. We describe these changes for each Care-First benefit below.

### **Health Care and Treatment-Related Benefits**

For health care and treatment-related expenses, Care-First does not prescribe any limits or restrictions on treatments and will provide for all reasonable and necessary expenses until the insured achieves maximum medical recovery. While the benefits are more generous, the ability to receive medical treatment is already available under the current system, so we do not expect an increase in frequency due to the more generous benefits. Conversely, insureds may have filed some accident benefit claims to support their bodily injury claims.

We reviewed (i) the MPI frequency compared to the Alberta frequency<sup>18</sup> and (ii) the ICBC frequency before and after the transition to a care-based model. The data show that transitioning from a tort-based system to a care-based model reduces frequency as the focus shifts from monetary compensation to care and recovery. This outcome is also consistent with a finding in a report prepared for Saskatchewan related to whiplash-associated disorders.

### **Income Replacement Benefits**

The benefits under Care-First introduce classes of claimants who are eligible for income replacement benefits but are not eligible under the current tort product. This class expansion will lead to a higher frequency.

Additionally, the Care-First benefits are more generous than those currently offered under the tort product. For example, under the current product, disability income is limited to \$600 per week, well below Care-First benefits, which are calculated as 90% of net income with a gross income cap of \$125,000. Therefore, we expect some insureds under the current system may have decided not to go through the trouble of filing an insurance claim if the benefit they receive is small. However, with more generous benefits, insureds may now decide to file claims, leading to a higher frequency.

As the British Columbia transition was recent and very similar to the transition to Care-First in Alberta, we use the change in frequency from their tort product to the enhanced accident benefits product to support our adjustment of the current disability income frequency to the estimated frequency under Care-First.

---

<sup>18</sup> We reviewed both raw frequencies and frequencies adjusted for collision rates.

### Funeral and Death Benefits

We do not expect the frequency of death benefits and related expenses to differ under Care-First. Although the benefits are more generous under Care-First, we expect that everyone who would be eligible for death benefits and associated expenses under Care-First would have filed a claim under the tort product.

## 6.2. Accident Benefits Severity

The Care-First benefit limits are very similar to limits in Manitoba. Therefore, we use MPI severity as a starting point for severity in Alberta under Care-First. We use the MPI trend models in the 2026 General Rate Application (GRA) to estimate the severity at a January 1, 2028, cost level. We also apply an adjustment for future indexation to the Accident Benefits – Other (Indexed) and Weekly Indemnity severities. We then apply adjustments for the following differences between the provinces.

### Second Payer Adjustment Factor

For Weekly Indemnity, MPI is the first payer, meaning an insured will collect benefits from MPI for loss of income before collecting from an employer disability income plan. In Alberta, insurers are the second payer to employer disability plans. In the draft Care-First Income Replacement and Monetary Benefits Regulation, Section 4 (1) states,

For the purposes of section 77(3) of the Act and subject to subsections (4) and (5), an insurer is not liable to pay an income replacement benefit to an insured under Part 2, Division 3 of the Act if the insured is entitled to other compensation for the bodily injury similar to the income replacement benefit, except to the extent that the amount of the income replacement benefit exceeds the amount of the other compensation.

That is, automobile insurers will remain second payers for income replacement benefits under Care-First, as they are under the current tort product. Given the second payer status in Alberta, we expect the severity to be lower than MPI severity due to the coordination of benefits under private or employer disability plans.

For health care and treatment-related expenses, the automobile policy is the first payer for automobile-related injuries in both provinces, so we do not apply a priority-of-payment adjustment.

For death benefits and permanent impairment, the fatal/serious accident triggers a lump sum benefit, irrespective of collateral benefit sources.

### All-Vehicle Class Adjustment Factor

In the 2026 GRA, MPI presents severities reflecting all vehicle classes. We expect differences in severity between vehicle classes and considered including an adjustment factor to reflect these differences. Our analysis indicated that PPV *loss costs* are lower than the overall all-vehicle-class loss costs. We recognize that loss cost is a function of *frequency and severity* but find it to be a reasonable indicator to review when comparing the severity of different classes. Because the PPV class comprises approximately 90% of the total MPI written premium, we do not apply an adjustment to the estimated all-class severity for all accident benefits subcoverages.

## **Economic (Wage and Benefit Limit) Differences Adjustment Factor**

For income replacement, we adjust for economic differences between Manitoba and Alberta. Our adjustment factor considers the following differences between the two provinces: wage/income distribution of the population, differences in provincial taxation, distribution of the population across different income replacement claimant groups, and the associated benefits (earner, caregiver, student, minor, loss of studies, etc.). We develop our adjustment factor using demographic and economic data published by Statistics Canada.

Since health care and treatment-related expenses, death benefits and related expenses, and permanent impairment benefits do not vary by income or economic conditions, we do not expect the severity to differ significantly.

## **Return-to-Work Adjustment Factor**

The employers, industries, and job types available in Manitoba and Alberta vary. For the same injury, an injured individual may require an extended recovery period to return to a more physically demanding, labour-intensive role. That is, at the same level of recovery from an injury, some jobs may be performed adequately while others would require further recovery before one could return to work. This delay in returning to work results in greater severity as insurers will pay income replacement benefits over a longer period. We based our adjustment for this difference on the worker's compensation data for each province. This adjustment implicitly assumes that the severity differential between workplace and automobile accidents is similar.

We do not apply a return-to-work adjustment for health care and treatment-related expenses, death benefits, or permanent impairment.

- Under Care-First, health care and treatment-related expenses are unlimited until the insured achieves maximum medical recovery. So, whether an insured can return to work does not affect the benefits provided.
- Return-to-work considerations do not affect claims involving death benefits.
- Permanent impairment benefits are paid as a lump sum.

## **Health Care Cost Adjustment Factor**

We include an adjustment to the health care and treatment-related expenses severity to account for differences in health care costs and treatment fees between Manitoba and Alberta. We based this adjustment on average health care spending in each province and on a survey of fee schedules from various extended health care providers.

## **Vehicle Distribution Adjustment Factor**

We base our vehicle distribution adjustment on the vehicle registration data in Manitoba and Alberta, and the average severity presented in the Large Vehicle Study included in the MPI 2023 GRA.

As suggested in the Large Vehicle Study, we expect that accidents involving larger (heavier) vehicles will result in more severe injuries.

We do not expect differences in vehicle size or distribution between Manitoba and Alberta to affect death benefits.

We recognize that vehicle size and distribution can affect the severity of income replacement benefits. However, we concluded that the return-to-work adjustment captures this difference.

## **Death Benefit Wage Distribution Adjustment Factor**

The Care-First death benefit subcoverage includes some entitlements for surviving family members tied to the deceased's income. We estimate this adjustment using (i) household demographic data and income data from Statistics Canada, and (ii) vehicle collision and casualties data from Transport Canada. The adjustment accounts for the proportion of death benefit payments tied to income and the income differences between the Manitoba and Alberta populations.

## **Personal Injury Protection Plan (PIPP) Enhancement Adjustment Factor**

The automobile insurance product in Manitoba offers a lower basic limit, with the option to increase coverage limits. MPI refers to the increased limits as the Personal Injury Protection Plan (PIPP) Enhancement. Under Care-First, Alberta has opted to match the increased accident benefits limits. We include an adjustment for the increased costs. We based this adjustment on the relative claim cost differences between the basic and PIPP-enhanced coverages in the MPI 2026 GRA.

## **Other Adjustments and Considerations**

### **Health Care Wait Times Adjustment**

While the cost of health care and treatments directly affects automobile insurers' loss experience obligations, another factor to consider is the delay in receiving care. We expect that delays in receiving care will increase the effort and treatment required to achieve maximum recovery. In severe cases, a lengthy delay in receiving care may prevent an injured party from fully recovering and returning to their pre-injury condition.

The Canadian Institute for Health Information conducted a study on health care wait times by province for various procedures. This study suggests that health care wait times in Alberta are equal to those in Manitoba and, for some procedures, even lower.

Based on this study, we concluded that no adjustment for wait time was necessary.

### **Unallocated Loss Adjustment Expense**

Care-First marks a substantial shift in the approach and policy for automobile insurance in Alberta. We expect the unallocated loss adjustment expense (ULAE) to change with the transition to Care-First. While the ULAE for each insurer can vary, so too can the impact of Care-First on an individual insurer's ULAE. Given the similarities between the Manitoba system and Care-First, we find it reasonable to assume that the MPI ULAE factor is representative of the expected overall industry ULAE factor in Alberta under Care-First.

## 7. Bodily Injury, Underinsured Motorist and Top-up Claim Cost Modeling

### 7.1. Bodily Injury

When evaluating the potential for tort arising from out-of-pocket expenses exceeding the Care-First benefit limits, we considered data from various sources to estimate loss costs for each exposure. As presented in Section 5, we have identified the following benefits as possible areas of tort exposure for insurers:

- Claims involving an out-of-province driver that would allow the other driver to sue
- Earner income replacement benefit for individuals with an income in excess of the Care-First limits
- Daily living assistance expenses/personal care assistance for individuals who require attendant care that costs more than the Care-First limits
- Expenses related to family enterprise/family business expense if a family cannot hire a replacement for the Care-First limit
- Funeral and internment expenses for funerals that cost more than the Care-First limit
- Grief counselling expenses for cases where total grief counseling costs for an individual exceed the Care-First limit

For all excess benefits except earner income replacement, we conservatively assume all individuals are eligible to sue given the minimal indicated loss costs and lack of good information on expected top-up offerings by benefit.

#### Out-of-Province Claims

Although Care-First eliminates tort eligibility in most instances in Alberta, provinces and jurisdictions outside of Alberta still have a tort-based compensation system. If an Albertan driver is in an accident with a driver from another province, the other driver may decide to sue, creating bodily injury exposure. Using data from GISA Exhibit AUTO7001, we estimate the percentage of bodily injuries losses associated with out-of-province claims. We apply this percentage to our estimate of bodily injury claims under the tort product to estimate the loss cost associated with these out-of-province claims.

#### Earner Income Replacement

Care-First income replacement benefits are calculated as a percentage of net income, with a gross income cap of \$125,000. Therefore, individuals earning more than \$125,000 would be eligible to sue. This introduces potential bodily injury costs, as insurers are required to defend their insureds in such situations.

However, insurers may offer top-up coverage for incomes greater than the Care-First income cap. Individuals may purchase a higher limit sufficient to cover their income, thereby removing bodily injury costs. Additionally, eligibility to sue is removed for individuals who were offered top-up coverage but declined. As more insurers

offer top-up coverage, bodily injury costs will decrease, excess out-of-pocket costs will decline, and accident benefits premiums will increase due to additional top-up premiums.

Based on a Superintendent's Survey of twelve insurers, eleven insurers initially indicated they planned on offering top-up coverage for income replacement. However, following the initial results, the twelfth insurer indicated they also plan on offering top-up coverage for income replacement. We note these twelve insurers represent approximately 95% market share. We use this survey to develop assumptions to estimate tort exposure under Care-First, however, we note that actual exposure will depend on insurer offerings.

To estimate bodily injury costs, we estimate the income distribution above the Care-First limit using an exponential decay model for income. We estimate the excess benefits for this group of individuals by calculating benefits as 90% of net income without a gross income cap. We use this excess severity and the percentage of individuals earning more than the Care-First limit to estimate the excess loss costs for these individuals. Finally, we incorporate the Superintendent survey to only include costs for individuals who are not offered top-up coverage.

## Personal Care Assistance

Care-First provides reimbursement for individuals injured who require personal assistance to assist with activities of daily living. However, this benefit is limited to \$5,671 per month for non-catastrophic injuries and \$6,781 per month for catastrophic injuries. We reviewed meeting notes from the fourth session, thirty-fifth legislature of the Legislative Assembly of Manitoba Standing Committee on Economic Development, and note the following concern for the proposed attendant care limit in Manitoba,

You may recall that Mr. John Lane, I believe, head of a disability organization, pointed out that in terms of personal assistance, expenses of \$3,000 a month may not go very far, particularly if the person is a quadriplegic or has had a very serious accident and has heavy disabilities. He, I believe, suggested that \$3,000 was too constraining, so we are responding to that suggestion.

We understand the concern is that for serious injuries requiring 24-hour care, the attendant care limit may not be sufficient. We estimate bodily injury costs for personal care assistance, assuming that the current benefit limit provides coverage for 8 hours per day and that serious injuries require 24-hour care (i.e., three times as much coverage as the limit provides).

To estimate the frequency of claims that require 24-hour care, we assume 25% of health care and related expenses claimants require personal care assistance. We conservatively selected 25% based on our professional judgment. In the 2026 MPI GRA, MPI presents a table of injury type claim counts from 2014/15 to 2024/25. Using this table, we assume amputation, quadriplegic, and paraplegic injuries would require 24-hour care. These injuries approximately 0.041% of all injuries over this time period.

To estimate the excess severity for these claims, we use our assumption that the current benefit provides for 8 hours per day. We use a 3.0 relativity to calculate the total severity and subtract benefits covered by Care-First to estimate the per-month excess severity. We then assume this amount is paid over an average of 120 months based on actuarial judgment. We selected this assumption to be conservative and tested the sensitivity around this assumption.

## Funeral & Grief Counseling

Care-First provides reimbursement for funerals up to a maximum of \$10,308. Based on a review of funeral costs from various sources, we conservatively estimate that 40% of funerals will exceed the Care-First limit, and that the average total cost of these funerals is \$17,500.

Similarly, Care-First provides a maximum of \$4,310 per person for grief counseling costs. We conservatively select that 10% of claimants will have grief counseling costs greater than this limit, and the average total cost for these claimants is \$5,000.

## Family Enterprise

For situations where an individual is working in a family business without pay, and the business needs to hire a replacement, Care-First will provide compensation for this expense. The benefit for this coverage is \$944 per week for 180 days. We note three scenarios that would create excess out-of-pocket costs and lead to bodily injury exposure:

- Require assistance for fewer than 180 days, but at a cost that exceeds \$944 per week
- Require assistance for more than 180 days, but at a cost that is less than \$944 per week
- Require assistance for more than 180 days, at a cost that exceeds \$944 per week

We estimate Care-First will cover costs in 80% of claims, and we estimate the three situations above occur at equal rates. We conservatively estimate that for situations where the hired help will cost more than \$944 per week, the average total cost per week is \$1,500. We select this based on the industrial average wage of \$1,369. For situations where help is hired for more than 180 days, we estimate that assistance is required for one year. We estimate the excess severity in each scenario to estimate the average excess severity.

To estimate the frequency of family enterprise claimants, we reviewed population data to estimate the percentage of the population who may work for a family business at no cost. We conservatively estimate that approximately 7.5% of income replacement and other monetary benefits claims involve family enterprise claims.

## Summary

In Table 14, we present a summary of the estimated bodily injury loss costs by source. We select a bodily injury loss cost of \$35 to add conservatism for any uncertainty in our assumptions.

**Table 14: Summary of Bodily Injury Loss Costs**

Basis of Tort Claim	Loss Cost per Vehicle
Out of Province Claims	20.37
Excess Disability Income	3.92
Excess Out-of-Pocket Expenses for Personal Care Assistance	1.89
Excess Out-of-Pocket Expenses for Funerals	0.36

<b>Basis of Tort Claim</b>	<b>Loss Cost per Vehicle</b>
Excess Out-of-Pocket Expenses for Grief Counseling Limits	0.01
Excess of Care-First Family Enterprise Limits	1.13
<b>Total Bodily Injury Loss Cost</b>	<b>27.67</b>
<b>Selected Bodily Injury Loss Cost</b>	<b>35.00</b>

## 7.2. SEF 44 – Family Protection Endorsement (Underinsured Motorist)

This coverage, while separate from bodily injury, is closely tied to the bodily injury coverage as it provides protection against financial shortfalls due to the at-fault driver's liability coverage being insufficient to provide full compensation by allowing the insured to claim up to their own liability limit. With the introduction of Care-First, the avenues for tort are much more limited, with only specific scenarios where an insured can pursue tort against the at-fault driver. Given the generous Care-First benefits for recovery, we expect those claims related to an underinsured driver to be limited to out-of-province accidents. We assume that out-of-province underinsured motorist claims occur at a similar rate as out-of-province bodily injury claims. We estimate the SEF-44 loss cost by applying an out-of-province rate to the current product loss costs.

## 7.3. Top-Up Coverage

As mentioned in Section 4.1, top-up coverages offered by insurers will reduce industry tort exposure. By offering top-up coverages to increase Care-First limits for certain benefits, insurers will collect the costs associated with the coverage excess of Care-First limits through additional premiums. Moreover, insureds who are offered top-up coverage and decline it lose their ability to pursue a tort claim.

For personal care assistance, funerals, and grief counseling, we conservatively assume all individuals are eligible to sue. Therefore, the excess out-of-pocket costs and the top-up cost are equivalent. The distinction between top-up coverages and excess of limit tort claims is where the loss cost is allocated, with top-up coverages contributing to accident benefits and excess out-of-pocket tort claims contributing to bodily injury. We note that bodily injury loss costs would decrease as top-up coverage offerings and take-up rates increase, shifting those losses to accident benefits.

For income replacement and family enterprise top-ups, we assume an informed choice. That is, we only assume that individuals with incomes exceeding Care-First limits purchase higher income replacement limits, and only individuals involved in a family business with wages that will likely exceed Care-First limits will purchase a top-up for that benefit. As discussed in Section 1.3, it is unclear how insurers will sell top-up coverage. We present estimated loss costs assuming individuals will be able to purchase individual top-up options. If it is expected insurers will instead offer "all or none" top-up coverage, our final report will reflect this alternate assumption.

In Table 15, we present the top-up loss costs by benefit and assumed top-up limit.



**Table 15: Top-Up Loss Costs**

<b>Benefit Coverage</b>	<b>Top-Up Limit</b>	<b>Top-Up Loss Cost</b>
Income Replacement (Earner)	\$150,000 Gross Income Cap	295.28
	\$200,000 Gross Income Cap	433.54
	\$250,000 Gross Income Cap	596.19
	\$300,000 Gross Income Cap	747.61
	\$400,000 Gross Income Cap	947.38
Personal Care Assistance	\$20,343 per month	1.89
Funerals	\$17,500	0.36
Grief Counseling	\$5,000	0.01
Family Enterprise	TBD pending endorsement	75.10

## 8. Other Classes

We base our estimates of Care-First required premiums for other vehicle classes on the private passenger vehicle methodology and adjustments described in Section 5, Section 6, and Section 7. We perform a separate review of adjustments to determine whether the private passenger vehicle adjustments are appropriate or if an alternate estimate of each adjustment is required for each of the other classes.

In Section 8.1 we discuss the specific considerations for the commercial vehicle and motorcycle classes separately, and in Section 8.2 we discuss the estimates for the other miscellaneous vehicle classes.

### 8.1. Commercial Vehicles and Motorcycles

In Table 16, we present the adjustment factors for commercial vehicles and motorcycles and identify whether the adjustment should differ by class, indicated by “Yes,” or if the private passenger vehicle adjustment should be adopted.

**Table 16: Adjustment Factors for Commercial Vehicles and Motorcycles**

Adjustments	Commercial Vehicles	Motorcycles
<i>Frequency Adjustments</i>		
Claimant/Claim Adjustment	Same as PPV*	Yes
Additional Claims Adjustment	Same as PPV	Same as PPV
Tort-Based to Care-First Adjustment	Yes	Same as PPV
<i>Severity Adjustments</i>		
All-Vehicle Class to Other Class Adjustment	Yes	Yes
Second Payer Adjustment	Yes	Yes
Economic (Wage Distribution & Benefit Limit) Adjustment	Yes	Yes
Return to Work Adjustment (MB to AB)	Same as PPV	Same as PPV
Health Care Cost Adjustment (MB to AB)	Same as PPV	Same as PPV
Health Care Wait Times Adjustment (MB to AB)	Same as PPV	Same as PPV
Vehicle Distribution Adjustment (MB to AB)	Same as PPV	Same as PPV
Death Benefit Wage Distribution Adjustment (MB to AB)	Same as PPV	Yes
PIPP Enhancement Adjustment	Same as PPV	Same as PPV
Unallocated Loss Adjustment Expense	Yes	Yes

**Table Notes**

\* This assumption may have immaterial differences that are difficult to quantify. Not including those differences results in conservatism as described below.

## 8.1.1. Commercial Vehicles

### Bodily Injury

#### Income Replacement Adjustment

Bodily injury claims for excess income replacement may be higher than private passenger vehicles. Commercial vehicles are likely the larger and heavier vehicle in a collision, leading to more severe injuries to the third party involved in the collision. More severe injuries could lead to longer recovery and return to work times resulting in a longer duration of income replacement benefit payments. In situations where the commercial vehicle is at fault, and the third party retains the right to sue the at-fault driver, this may result in additional losses beyond the private passenger vehicle estimate.

We include an adjustment to the excess income replacement to account for this potential increase in severity. We base this adjustment on the Large Vehicle Study referenced in Section 6.2. We recognize that this adjustment reflects differences in injury severity. However, we view this as a reasonable proxy, considering the materiality of the indicated premiums.

### Accident Benefits

#### Claimant/Claim Adjustment Factor

We generally expect fewer occupants in commercial vehicles than in private passenger vehicles. Therefore, using the PPV claimant/claim adjustment factor introduces a slight conservative bias.

#### All-Vehicle Class Adjustment Factor

We develop this adjustment using vehicle class estimates from the MPI GRA. As a result, the adjustment factor for commercial vehicles will differ from that for private passenger vehicles. The MPI GRA indicates medical and rehabilitation loss costs for commercial vehicles are slightly lower than the all-class average. The other accident benefits subcoverages are relatively similar to the all-class average.

#### Tort to Care-First Adjustment

The PPV factor considers both the more generous benefits under Care-First and the expense of classes eligible for the benefit. For the CV adjustment, we only consider the former source of difference between the tort product and Care-First.

#### Second Payer Adjustment Factor

We developed our second-payer adjustment for private passenger vehicles considering the benefits offered by employer group disability plans. We expect that most individuals injured while occupying a commercial vehicle will also have access to workers compensation coverage, which has more generous benefits than employer group disability.

We adjust the following assumptions that differ from our private passenger vehicle analysis:

- Percentage of individuals who have an employer disability income plan
- Percentage of employed individuals

As workers compensation is required for almost all employers, we assume most individuals driving a commercial vehicle have either an employer disability income plan, workers compensation coverage, or both.

Therefore, we select a higher percentage for this assumption. We also assume 100% of individuals driving a commercial vehicle are employed.

We did not adjust our assumption for the percentage of net income covered by long term disability. We understand the workers compensation benefits cover 90% of net income up to a net income cap of 110,900 for 2026, which is more generous than the Care-First benefits. Therefore, we find that using the assumption that employer plans cover 60% of net income introduces a slight conservative bias.

### **Economic (Wage and Benefit Limit) Differences Adjustment Factor**

The adjustment factor for private passenger vehicles considers all possible claimant groups for income replacement, specifically earners, caregivers, students, and minors. However, this adjustment for commercial vehicles should only consider the earner class. Therefore, we use the estimated adjustment factor for only the earner class from our private passenger vehicle analysis, rather than the overall claimant group adjustment factor.

## **8.1.2. Motorcycles**

### **Claimant/Claim Adjustment Factor**

We reviewed the 2023 Alberta Traffic Collision Statistics Report and compared the ratio of casualties to number of motorcycles involved in the accident to estimate the adjustment for death benefits and permanent impairment.

For health care and related expenses and income replacement, we perform a similar analysis using the number of major injuries to the number of motorcycles involved to determine the adjustment factor.

We note both of these statistics may include injuries or casualties from another vehicle class, as the statistics include all injured parties for accidents involving a motorcycle. However, given that motorcycles are much lighter than other vehicles, we assume most of the injuries included in these statistics are the motorcycle occupants.

### **All-Vehicle Class Adjustment Factor**

We develop this adjustment using vehicle class estimates from the MPI GRA. As a result, the adjustment factor for commercial vehicles will differ from that for private passenger vehicles. The MPI GRA indicates motorcycle accident benefits loss costs are greater than the all-class average. We select a relativity of 3.0 for all subcoverages to apply to the all-class average severity.

### **Second Payer Adjustment Factor**

Based on an AAC comment, analysis is ongoing.

### **Economic (Wage and Benefit Limit) Differences Adjustment Factor**

Based on an AAC comment, analysis is ongoing.

## **8.2. Miscellaneous Classes**

Due to the limited availability of data for these additional coverages, we developed our estimates by applying a credibility-weighted class ratio to the estimated Care-First loss cost of the closest major class. We derive this

ratio using average incurred loss costs in each class and the average incurred loss costs of the corresponding base class (private passenger vehicle or commercial vehicle). We use the loss cost for the major vehicle classes as the complement of credibility.

In Table 17, we present the estimated accident benefits required premium for each class. Based on our analysis of PPV required premiums, we use a loss cost multiplier of 1.10 to adjust loss costs to a premium basis.

We expect interurban vehicles and trucks other than interurban may continue to have significant out-of-province exposure. Therefore, savings from Care-First for these vehicle classes will depend on the portion of total exposure within Alberta.

**Table 17: Miscellaneous Classes Accident Benefits Estimated Required Premium**

Vehicle Class	Credibility Weighted Loss Cost	Indicated Required Premium
All-Terrain Vehicles	231.69	254.86
PPV Farmers	268.24	295.07
Snow Vehicles	339.01	372.91
Motorhomes	392.36	431.60
Antique and Classic Cars	351.30	386.43
Interurban Trucks – Fleet Rated		
Trucks Other Than Interurban – Fleets		
Taxis – Fleet Rated		
Public Buses	659.17	725.09
School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	164.94	181.44
Funeral Carriages and Hearses	126.02	138.62
Ambulances	140.74	154.82
Miscellaneous Public Automobiles	337.64	371.40
Garages, Automobile Dealers and Manufacturers		

In Table 19, we present the estimated bodily injury required premium for each class. Based on our analysis of PPV required premiums, we use a loss cost multiplier of 1.35 to adjust loss costs to a premium basis.

**Table 18: Miscellaneous Classes Bodily Injury Estimated Required Premium**

Vehicle Class	Credibility Weighted Loss Cost	Indicated Required Premium
All-Terrain Vehicles	2.69	3.63
PPV Farmers	33.27	44.91
Snow Vehicles	35.00	47.25

<b>Vehicle Class</b>	<b>Credibility Weighted Loss Cost</b>	<b>Indicated Required Premium</b>
Motorhomes	31.55	42.59
Antique and Classic Cars	30.72	41.47
Interurban Trucks – Fleet Rated		
Trucks Other Than Interurban – Fleets		
Taxis – Fleet Rated		
Public Buses	56.49	76.26
School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	74.89	101.11
Funeral Carriages and Hearses	25.85	34.90
Ambulances	28.20	38.07
Miscellaneous Public Automobiles	32.30	43.61
Garages, Automobile Dealers and Manufacturers		

## 9. Loss Transfer

Analysis is ongoing.

## 10. Results for Private Passenger Vehicles

In Table 19, we present the estimated required premium by coverage, as well as the estimated required premium for mandatory coverages and full coverage. Readers should review Section 2 for a detailed discussion on the interpretation of amounts in Table 19.

**Table 19: Care-First Estimated Required PPV Premium by Coverage**

			Care-First	Current Product	
			PY 2027 Required Premium	PY 2027 Required Premium	2025 Street Premium
Section	Coverage	Subcoverage			
A	Third-Party Liability	Bodily Injury*	46.77	1,509.13	
		Property Damage	32.20	31.39	1,062.83
A.1.	Direct Compensation for Property Damage†		338.52	329.98	
B.	Accident Benefits	Income Replacement & Other Monetary Benefits	264.30		
		Health Care and Related Expenses*	251.29		
		Death Benefits and Related Expenses	15.56	218.86	140.81
		Permanent Impairment	52.26		
		Uninsured Motorist	0.21		
C.	Loss of or Damage to Insured Automobile‡	All Perils	1,193.45	1,163.35	900.14
		Collision or Upset	478.34	466.28	410.58
		Comprehensive	531.61	518.21	359.22
		Specified Perils	164.23	160.09	144.50
SEF 44/Underinsured Motorist			0.19	10.84	27.53
Subtotal Basic Coverage			1,004.11	2,089.36	1,203.64
Full Coverage†			2,014.26	3,084.69	2,000.98

### Table Notes

\* Health levy (\$59.90) included with bodily injury premiums under the current product. Health levy (\$59.90) included with accident benefits, health care, and related expenses in Care-First premiums.

† Full coverage includes bodily injury, property damage, direct compensation property damage, accident benefits, underinsured motorists, collision, and comprehensive. (All perils or specified perils coverages overlap with comprehensive and collision coverage.)

‡ Differences in the required premium for DCPD, all perils, collision, comprehensive, and specified perils are due to differences in the allocation of fixed expenses.



## 11. Distribution and Use

- **Usage and Responsibility of Client** – Oliver Wyman prepared this report for the sole use of the AIRB for the stated purpose. This report includes important considerations, assumptions, and limitations and, as a result, is intended to be read and used only as a whole. This report may not be separated into, or distributed, in parts other than by the client to whom this report was issued, as needed, in the case of distribution to such client's directors, officers, or employees. All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the client named herein.
- **Third Party Reliance and Due Diligence** – Oliver Wyman's consent to any distribution of this report (whether herein or in the written agreement pursuant to which we issued this report) to parties other than of the Government of Alberta does not constitute advice by Oliver Wyman to any such third parties. Any distribution to third parties shall be solely for informational purposes and not for purposes of reliance by any such parties. Oliver Wyman assumes no liability related to third-party use of this report or any actions taken or decisions made as a consequence of the results, advice or recommendations set forth herein. This report should not replace the due diligence on behalf of any such third party.

## 12. Considerations and Limitations

- **Data Verification** – For our analysis, we relied on data and information as described herein without independent audit. Though we have reviewed the data for reasonableness and consistency, we have not audited or otherwise verified this data. Our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions might therefore be unreliable.
- **Supplemental Data** – Where historical insurance industry data was either (i) not available, (ii) not appropriate or (iii) not sufficiently credible to develop our actuarial assumptions, we supplemented it with external information, as we deemed appropriate. Although we believe these external sources may be more predictive of future experience of the client named herein than any other data of which we are aware, the use of external data adds to the uncertainty associated with our projections.
- **Exclusion of Other Program Costs** – The scope of the project does not include the estimation of any costs other than those described herein.
- **Assumption of Valid Reinsurance** – We provide cost estimates on a direct basis.
- **Discounting** – Discounted estimates are subject to additional uncertainty that results from the following:
  - In addition to the risk of underestimating or overestimating the overall amount of the nominal claims and claims adjustment expenses, there is the additional risk that the timing of the future payments will differ from the expected payout.
  - There is the risk the actual future yield on the underlying assets (if any) will differ from the assumed yield rate used for determining present value factors.

We have not included any specific provision for this additional risk.

- **Rounding and Accuracy** – Our models may retain more digits than those displayed. Also, the results of certain calculations may be presented in the exhibits with more or fewer digits than would be considered significant. As a result, there may be rounding differences between the results of calculations presented in the exhibits and replications of those calculations based on displayed underlying amounts. Also, calculation results may not have been adjusted to reflect the precision of the calculation.
- **Unanticipated Changes** – We developed our estimates from the historical claim experience and covered exposure, with adjustments for anticipated changes. Our estimates make no provision for extraordinary future emergence of new types of losses not sufficiently represented in historical databases or which are not yet quantifiable.
- **Internal / External Changes** – The sources of uncertainty affecting our estimates are numerous and include factors internal and external to automobile insurance in Alberta. Internal factors include items such as changes in claim settlement practices. The most significant external influences include, but are not limited to, changes in the legal, social, or regulatory environment surrounding the claims process. Uncontrollable factors such as general economic conditions also contribute to the variability.
- **Uncertainty Inherent in Projections** – While this analysis complies with applicable Actuarial Standards of Practice, users of this analysis should recognize that our projections involve estimates of future events and are subject to economic and statistical variations from expected values. We have not anticipated any extraordinary changes to the legal, social, or economic environment that might affect the frequency or

severity of claims. For these reasons, we do not guarantee that the emergence of actual losses will correspond to the projections in this analysis.

- **COVID-19 Pandemic** – We included explicit adjustments in this report for the effect of the COVID-19 pandemic on loss experience only as specifically noted in this report.

## Appendix A. Glossary

**Accident Period**

The period in which the event giving rise to a claim occurred, regardless of when the claim is actually reported.

**Actuarial Central Estimate**

An estimate that represents an expected value over the range of reasonably possible outcomes. Such range of reasonably possible outcomes may not include all conceivable outcomes.

**Allocated Claim Adjustment Expense (ACAE)**

Expense costs associated with the handling and settling of an individual claim that can be directly attributed to the particular claim. Fees paid to outside defense attorneys and investigation firms are examples of this expense.

**Case Reserves**

The unpaid claim estimates established by adjusters on an individual claim basis.

**Claim Adjustment Expenses**

The costs of administering, determining coverage for, settling, or defending claims. Claim adjustment expenses include allocated claim adjustment expenses and unallocated claim adjustment expenses.

**Claim Frequency**

The number of claims that occur over a period of time per unit of exposure.

**Claim Reporting Pattern**

The rate at which claims are assumed to be reported over time.

**Claim Severity**

The average cost per claim.

**Credibility**

A measure of the predictive value of a body of data.

**Development**

The change between valuation dates in the observed values of certain fundamental quantities that may be used in the unpaid claim estimation process.

For example, the number of reported claims associated with events occurring within a particular period will change from one valuation date to the next until all claims have been reported. In a similar fashion, the paid claim amounts for events occurring within a particular period will change from one valuation date to the next until all claims have been reported and closed. The change in the number of reported claims or the change in the paid claim amounts is referred to as development. The concept of development also applies to reported incurred losses.

**Estimated Ultimate Claim Costs**

The estimated cost of claims during a period. The estimated cost at an accounting date is the sum of paid claim amounts, case reserves, and IBNR.

**Event**

The incident or activity that triggers potential for claim or allocated claim adjustment expense payment.

**Exposure**

A measure of the underlying potential for claim costs.

**IBNR**

The unpaid claim estimate for: (a) events that have occurred for which claims have not been reported as of the accounting date, (b) future development of the case reserves, (c) claims that have been reported but not yet recorded in the loss listing, and (d) claims that have been closed but that will be reopened.

**Loss Cost / Claims Cost**

The claims amount per exposure unit.

**Model Risk**

The risk that the methods are not appropriate to the circumstances or the models are not representative of the specified phenomenon.

**Paid Claims**

The total aggregate dollar amount paid on all reported claims as of a certain date.

**Parameter Risk**

The risk that the assumptions or parameters used in the methods or models are not representative of future outcomes.

**Payment Pattern**

The rate at which claims are paid over time.

**Process Risk**

The uncertainty associated with the projection of future contingencies that are inherently variable, even when the parameters are known with certainty.

**Report Date**

The date on which the claim is first reported or recorded (in practice it is often taken to be the recorded date).

**Report Period**

The period in which a claim is reported, regardless of the time period in which the event occurred.

**Reported Incurred Claim Amount**

The total of paid claim amounts and case reserves.

**Risk Margin**

An amount that may be added to the claim estimate to recognize the uncertainty in the estimate.

**Salvage**

Recoveries due to the sale of damaged or recovered property.

**Subrogation**

Recoveries from a third party responsible for the event for which a claim has already been paid.

**Unallocated Claim Adjustment Expense (UCAE)**

Claim adjustment expenses that cannot be attributed to an individual claim. Typically includes salaries, utilities, and rent apportioned to the claim adjustment expense function but not readily assignable to specific claims.

**Undiscounted Unpaid Claim Estimate**

The unpaid claim estimate presented on a basis that does not reflect the time value of money.

**Undiscounted Unpaid Loss Estimate**

The unpaid loss estimate presented on a basis that does not reflect the time value of money.

**Unpaid Claim Estimate**

The estimate of the obligation for future payments resulting from claims due to past events.

**Valuation Date**

The date through which transactions are included in the data used in the unpaid claim estimate analysis.

## Appendix B. Exhibits

### List of Figures

Figure 1: Private Passenger Vehicle Industry Average Written Premiums.....	9
Figure 2: Projected Changes – Injury Coverages (Bodily Injury and Accident Benefits).....	13
Figure 3: Projected Changes – Damage Coverages (PD/DPCD, Collision, and Comprehensive) .....	13
Figure 4: Current Product, Estimated Required Average Premium .....	28
Figure 5: Care-First Estimated Required Average Premium.....	31

### List of Tables

Table 1: Summary of Required Premiums.....	5
Table 2: Summary of Indicated Nominal Loss Costs.....	6
Table 3: Top-Up Indicated Loss Costs.....	6
Table 4: PPV Claim Cost Comparison .....	11
Table 5: PPV Premium Comparison.....	12
Table 6: Summary of Industry Average* Care-First Economic Savings (Additional Costs).....	14
Table 7: Summary of Care-First Premium Savings (Additional Costs) .....	14
Table 8: Medical and Rehabilitation Benefit Comparison .....	16
Table 9: Death Benefits and Related Expenses Comparison .....	18
Table 10: Permanent Impairment Benefit Comparison .....	19
Table 11: Income Replacement Benefits Comparison .....	20
Table 12: Comparison of General Damages.....	22
Table 13: Tort Comparison .....	27
Table 14: Summary of Bodily Injury Loss Costs .....	39
Table 15: Top-Up Loss Costs.....	41
Table 16: Adjustment Factors for Commercial Vehicles and Motorcycles.....	42
Table 17: Miscellaneous Classes Accident Benefits Estimated Required Premium .....	45
Table 18: Miscellaneous Classes Bodily Injury Estimated Required Premium .....	45
Table 19: Care-First Estimated Required PPV Premium by Coverage .....	48
Table : Loss Cost Comparison .....	57
Table : Frequency Comparison .....	58
Table : Severity Comparison.....	59

### List of Exhibits

Forecasted Loss Cost By Coverage Under the Current (Tort) System.....	CP-1
Forecasted Expenses .....	CP-2

Forecasted Required Premium Under Current (Tort) System .....	CP-3
Care-First Bodily Injury Loss Cost Adjustments.....	CF-1
Estimated Care-First Bodily Injury Loss Cost .....	CF-1.10
Estimated Care-First Top-Up Loss Cost .....	CF-1.11
Care-First Accident Benefits Loss Cost Adjustments.....	CF-2 – CF-8
Loss Transfer .....	CF-9
Estimated Care-First Accident Benefits Loss Cost.....	CF-10
Estimated Required Premium Under Care-First .....	CF-11



Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Bodily Injury  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000				Oliver Wyman 2025 Annual Review					(4) * (8) * (9) * (10) * (11) * (12)	Selected
<b>Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	16,925	2,652,217	6.381	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	0.747	4.767	0%
2016	16,801	2,678,708	6.272	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	0.747	4.685	0%
2017	17,632	2,692,626	6.548	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	0.747	4.892	0%
2018	17,429	2,747,654	6.343	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	0.747	4.738	0%
2019	17,882	2,782,720	6.426	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	0.747	4.800	0%
2020	11,945	2,780,113	4.297	0.0%	0.0%	10/1/2024	1.000		1.000	1.434	0.747	4.602	20%
2021	12,834	2,806,683	4.573	0.0%	0.0%	10/1/2024	1.000		1.000	1.498	0.747	5.117	20%
2022	13,645	2,840,243	4.804	0.0%	0.0%	10/1/2024	1.000		1.000	1.321	0.747	4.742	20%
2023	13,293	2,907,049	4.573	0.0%	0.0%	10/1/2024	1.000		1.000	1.339	0.747	4.573	20%
2024	14,096	3,003,474	4.693	0.0%	0.0%	10/1/2024	1.000		1.000	1.339	0.747	4.693	20%
<b>A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>												4.745	Sum( (13) x (14) )
<b>Selected Severity at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	955,113,443	16,925	56,434	8.7%	8.7%	10/1/2024	2.838	1.344	1.000			215,256	0%
2016	1,036,064,786	16,801	61,668	8.7%	8.7%	10/1/2024	2.611	1.344	1.000			216,397	0%
2017	1,130,530,606	17,632	64,118	8.7%	8.7%	10/1/2024	2.402	1.344	1.000			206,986	0%
2018	1,252,319,043	17,429	71,854	8.7%	8.7%	10/1/2024	2.210	1.344	1.000			213,393	0%
2019	1,425,889,445	17,882	79,740	8.7%	8.7%	10/1/2024	2.033	1.344	1.000			217,859	0%
2020	1,087,144,116	11,945	91,012	8.7%	8.7%	10/1/2024	1.870	1.330	1.000			226,371	20%
2021	1,320,092,720	12,834	102,860	8.7%	8.7%	10/1/2024	1.720	1.336	1.000			236,425	20%
2022	1,739,317,349	13,645	127,466	8.7%	8.7%	10/1/2024	1.583	1.286	1.000			259,346	20%
2023	2,138,126,550	13,293	160,842	8.7%	8.7%	10/1/2024	1.456	1.103	1.000			258,319	20%
2024	2,517,671,311	14,096	178,610	8.7%	8.7%	10/1/2024	1.340	1.000	1.000			239,254	20%
<b>B. Selected Severity at 1/1/2028 Cost Level</b>												243,943	Sum( (13) x (14) )
<b>Selected Loss Cost at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	955,113,443	2,652,217	360	8.7%	8.7%	10/1/2024	2.838	1.344	1.000	1.000	0.747	1,026	0%
2016	1,036,064,786	2,678,708	387	8.7%	8.7%	10/1/2024	2.611	1.344	1.000	1.000	0.747	1,014	0%
2017	1,130,530,606	2,692,626	420	8.7%	8.7%	10/1/2024	2.402	1.344	1.000	1.000	0.747	1,012	0%
2018	1,252,319,043	2,747,654	456	8.7%	8.7%	10/1/2024	2.210	1.344	1.000	1.000	0.747	1,011	0%
2019	1,425,889,445	2,782,720	512	8.7%	8.7%	10/1/2024	2.033	1.344	1.000	1.000	0.747	1,046	0%
2020	1,087,144,116	2,780,113	391	8.7%	8.7%	10/1/2024	1.870	1.330	1.000	1.434	0.747	1,042	20%
2021	1,320,092,720	2,806,683	470	8.7%	8.7%	10/1/2024	1.720	1.336	1.000	1.498	0.747	1,210	20%
2022	1,739,317,349	2,840,243	612	8.7%	8.7%	10/1/2024	1.583	1.286	1.000	1.321	0.747	1,230	20%
2023	2,138,126,550	2,907,049	735	8.7%	8.7%	10/1/2024	1.456	1.103	1.000	1.339	0.747	1,181	20%
2024	2,517,671,311	3,003,474	838	8.7%	8.7%	10/1/2024	1.340	1.000	1.000	1.339	0.747	1,123	20%
<b>C. Initial Selected Loss Cost at 1/1/2028 Cost Level</b>												1,157	Sum( (13) x (14) )
<b>D. Frequency x Severity Method</b>												1,158	A * B
<b>E. Selected Loss Cost at 1/1/2028 Cost Level</b>												1,157	average(A * B, C)
<b>Notes</b>													
(8)	Future trend is equal to Past 2 Trend (6) and trended to 1/1/2028												
(9)	Factor for temporary increase in inflation												
(11)	Factor to adjust to pre-pandemic frequency levels												
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels												

Appendix  
Exhibit CP-1.2

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Property Damage  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000				Oliver Wyman 2025 Annual Review					(4) * (8) * (9) * (10) * (11) * (12)	Selected
<b>Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	83,696	2,652,217	31.557	-1.3%	-1.3%	10/1/2024	0.849		1.000	1.000	1.000	26.794	0%
2016	78,914	2,678,708	29.460	-1.3%	-1.3%	10/1/2024	0.860		1.000	1.000	1.000	25.343	0%
2017	82,825	2,692,626	30.760	-1.3%	-1.3%	10/1/2024	0.872		1.000	1.000	1.000	26.810	0%
2018	83,123	2,747,654	30.252	-1.3%	-1.3%	10/1/2024	0.883		1.000	1.000	1.000	26.715	0%
2019	79,822	2,782,720	28.685	-1.3%	-1.3%	10/1/2024	0.895		1.000	1.000	1.000	25.664	0%
2020	53,994	2,780,113	19.422	-1.3%	-1.3%	10/1/2024	0.906		1.000	1.456	1.000	25.633	0%
2021	57,493	2,806,683	20.484	-1.3%	-1.3%	10/1/2024	0.918		1.000	1.462	1.000	27.495	0%
2022	7,999	2,840,243	2.816	-1.3%	-1.3%	10/1/2024	0.931		1.000	1.130	1.000	2.961	33%
2023	5,364	2,907,049	1.845	-1.3%	-1.3%	10/1/2024	0.943		1.000	1.000	1.000	1.740	33%
2024	5,154	3,003,474	1.716	-1.3%	-1.3%	10/1/2024	0.955		1.000	1.000	1.000	1.639	33%
<b>A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>												2.113	Sum( (13) x (14) )
<b>Selected Severity at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	449,590,981	83,696	5,372	2.9%	2.9%	10/1/2024	1.430	1.218	1.000			9,354	0%
2016	424,222,994	78,914	5,376	2.9%	2.9%	10/1/2024	1.389	1.218	1.000			9,097	0%
2017	467,074,595	82,825	5,639	2.9%	2.9%	10/1/2024	1.350	1.218	1.000			9,274	0%
2018	482,340,592	83,123	5,803	2.9%	2.9%	10/1/2024	1.312	1.218	1.000			9,274	0%
2019	472,100,713	79,822	5,914	2.9%	2.9%	10/1/2024	1.275	1.218	1.000			9,186	0%
2020	321,671,412	53,994	5,958	2.9%	2.9%	10/1/2024	1.239	1.210	1.000			8,930	0%
2021	380,014,591	57,493	6,610	2.9%	2.9%	10/1/2024	1.204	1.214	1.000			9,660	0%
2022	61,142,140	7,999	7,644	2.9%	2.9%	10/1/2024	1.170	1.182	1.000			10,574	33%
2023	45,442,300	5,364	8,471	2.9%	2.9%	10/1/2024	1.137	1.068	1.000			10,286	33%
2024	46,519,007	5,154	9,025	2.9%	2.9%	10/1/2024	1.105	1.000	1.000			9,976	33%
<b>B. Selected Severity at 1/1/2028 Cost Level</b>												10,279	Sum( (13) x (14) )
<b>Selected Loss Cost at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	449,590,981	2,652,217	170	2%	2%	10/1/2024	1.214	1.218	1.000	1.000	1.000	251	0%
2016	424,222,994	2,678,708	158	2%	2%	10/1/2024	1.195	1.218	1.000	1.000	1.000	231	0%
2017	467,074,595	2,692,626	173	2%	2%	10/1/2024	1.177	1.218	1.000	1.000	1.000	249	0%
2018	482,340,592	2,747,654	176	2%	2%	10/1/2024	1.159	1.218	1.000	1.000	1.000	248	0%
2019	472,100,713	2,782,720	170	2%	2%	10/1/2024	1.141	1.218	1.000	1.000	1.000	236	0%
2020	321,671,412	2,780,113	116	2%	2%	10/1/2024	1.123	1.210	1.000	1.456	1.000	229	0%
2021	380,014,591	2,806,683	135	2%	2%	10/1/2024	1.106	1.214	1.000	1.462	1.000	266	0%
2022	61,142,140	2,840,243	22	2%	2%	10/1/2024	1.089	1.182	1.000	1.130	1.000	31	33%
2023	45,442,300	2,907,049	16	2%	2%	10/1/2024	1.072	1.068	1.000	1.000	1.000	18	33%
2024	46,519,007	3,003,474	15	2%	2%	10/1/2024	1.056	1.000	1.000	1.000	1.000	16	33%
<b>C. Initial Selected Loss Cost at 1/1/2028 Cost Level</b>												22	Sum( (13) x (14) )
<b>D. Frequency x Severity Method</b>												22	A * B
<b>E. Selected Loss Cost at 1/1/2028 Cost Level</b>												22	average(A * B, C)
Notes (8) Future trend is equal to Past 2 Trend (6) and trended to 1/1/2028 (9) Factor for temporary increase in inflation (11) Factor to adjust to pre-pandemic frequency levels (12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels													

Appendix  
Exhibit CP-1.3

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Direct Compensation  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000									(4) * (8) * (9) * (10) * (11) * (12)	Selected

Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level

Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	0	2,652,217	0.000	-1.3%	-1.3%	10/1/2024	0.849		1.000	1.000	1.000	0.000	0%
2016	0	2,678,708	0.000	-1.3%	-1.3%	10/1/2024	0.860		1.000	1.000	1.000	0.000	0%
2017	0	2,692,626	0.000	-1.3%	-1.3%	10/1/2024	0.872		1.000	1.000	1.000	0.000	0%
2018	0	2,747,654	0.000	-1.3%	-1.3%	10/1/2024	0.883		1.000	1.000	1.000	0.000	0%
2019	0	2,782,720	0.000	-1.3%	-1.3%	10/1/2024	0.895		1.000	1.000	1.000	0.000	0%
2020	0	2,780,113	0.000	-1.3%	-1.3%	10/1/2024	0.906		1.000	1.456	1.000	0.000	0%
2021	0	2,806,683	0.000	-1.3%	-1.3%	10/1/2024	0.918		1.000	1.462	1.000	0.000	0%
2022	64,360	2,840,243	22.660	-1.3%	-1.3%	10/1/2024	0.931		1.000	1.130	1.000	23.826	33%
2023	70,932	2,907,049	24.400	-1.3%	-1.3%	10/1/2024	0.943		1.000	1.000	1.000	23.004	33%
2024	78,709	3,003,474	26.206	-1.3%	-1.3%	10/1/2024	0.955		1.000	1.000	1.000	25.031	33%

A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level 23.954 Sum( (13) x (14) )

Selected Severity at 1/1/2028 Cost Level

Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	0	0	0	2.9%	2.9%	10/1/2024	1.430	1.218	1.000			0	0%
2016	0	0	0	2.9%	2.9%	10/1/2024	1.389	1.218	1.000			0	0%
2017	0	0	0	2.9%	2.9%	10/1/2024	1.350	1.218	1.000			0	0%
2018	0	0	0	2.9%	2.9%	10/1/2024	1.312	1.218	1.000			0	0%
2019	0	0	0	2.9%	2.9%	10/1/2024	1.275	1.218	1.000			0	0%
2020	0	0	0	2.9%	2.9%	10/1/2024	1.239	1.210	1.000			0	0%
2021	0	0	0	2.9%	2.9%	10/1/2024	1.204	1.214	1.000			0	0%
2022	468,888,965	64,360	7,285	2.9%	2.9%	10/1/2024	1.170	1.182	1.000			10,079	33%
2023	560,420,316	70,932	7,901	2.9%	2.9%	10/1/2024	1.137	1.068	1.000			9,593	33%
2024	643,027,574	78,709	8,170	2.9%	2.9%	10/1/2024	1.105	1.000	1.000			9,030	33%

B. Selected Severity at 1/1/2028 Cost Level 9,567 Sum( (13) x (14) )

Selected Loss Cost at 1/1/2028 Cost Level

Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	0	2,652,217	0	2%	2%	10/1/2024	1.214	1.218	1.000	1.000	1.000	0	0%
2016	0	2,678,708	0	2%	2%	10/1/2024	1.195	1.218	1.000	1.000	1.000	0	0%
2017	0	2,692,626	0	2%	2%	10/1/2024	1.177	1.218	1.000	1.000	1.000	0	0%
2018	0	2,747,654	0	2%	2%	10/1/2024	1.159	1.218	1.000	1.000	1.000	0	0%
2019	0	2,782,720	0	2%	2%	10/1/2024	1.141	1.218	1.000	1.000	1.000	0	0%
2020	0	2,780,113	0	2%	2%	10/1/2024	1.123	1.210	1.000	1.456	1.000	0	0%
2021	0	2,806,683	0	2%	2%	10/1/2024	1.106	1.214	1.000	1.462	1.000	0	0%
2022	468,888,965	2,840,243	165	2%	2%	10/1/2024	1.089	1.182	1.000	1.130	1.000	240	33%
2023	560,420,316	2,907,049	193	2%	2%	10/1/2024	1.072	1.068	1.000	1.000	1.000	221	33%
2024	643,027,574	3,003,474	214	2%	2%	10/1/2024	1.056	1.000	1.000	1.000	1.000	226	33%

C. Initial Selected Loss Cost at 1/1/2028 Cost Level 229 Sum( (13) x (14) )

D. Frequency x Severity Method 229 A \* B

E. Selected Loss Cost at 1/1/2028 Cost Level 229 average( A \* B, C )

Notes

- (8) Future trend is equal to Past 2 Trend (6) and trended to 1/1/2028  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Appendix  
Exhibit CP-1.4

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Accident Benefits - Total  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000					Oliver Wyman 2025 Annual Review				(4) * (8) * (9) * (10) * (11) * (12)	Selected
<b>Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	29,767	2,649,234	11.236	0.0%	0.0%	10/29/2020	1.000		1.000	1.000	0.947	10.640	0%
2016	29,619	2,677,477	11.062	0.0%	0.0%	10/29/2020	1.000		1.000	1.000	0.947	10.476	0%
2017	31,191	2,695,016	11.574	0.0%	0.0%	10/29/2020	1.000		1.000	1.000	0.947	10.960	0%
2018	31,550	2,750,311	11.471	0.0%	0.0%	10/29/2020	1.000		1.000	1.000	0.947	10.863	0%
2019	32,016	2,782,955	11.504	0.0%	0.0%	10/29/2020	1.000		1.000	1.000	0.947	10.894	0%
2020	21,208	2,780,403	7.628	0.0%	0.0%	10/29/2020	1.000		1.000	1.413	0.947	10.210	20%
2021	24,523	2,807,642	8.734	0.0%	0.0%	10/29/2020	1.000		1.000	1.417	0.947	11.721	20%
2022	28,631	2,834,558	10.101	0.0%	0.0%	10/29/2020	1.000		1.000	1.146	0.947	10.964	20%
2023	29,691	2,895,587	10.254	0.0%	0.0%	10/29/2020	1.000		1.000	1.056	0.947	10.254	20%
2024	33,442	2,993,746	11.171	0.0%	0.0%	10/29/2020	1.000		1.000	1.056	0.947	11.171	20%
<b>A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>												10.864	Sum( (13) x (14) )
<b>Selected Severity at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	133,925,430	29,767	4,499	11.9%	7.0%	10/29/2020	2.958	1.000	1.116			14,854	0%
2016	140,522,927	29,619	4,744	11.9%	7.0%	10/29/2020	2.644	1.000	1.116			13,997	0%
2017	168,534,364	31,191	5,403	11.9%	7.0%	10/29/2020	2.363	1.000	1.116			14,246	0%
2018	185,091,347	31,550	5,867	11.9%	7.0%	10/29/2020	2.111	1.000	1.116			13,823	0%
2019	203,919,475	32,016	6,369	11.9%	7.0%	10/29/2020	1.887	1.000	1.116			13,412	0%
2020	164,774,258	21,208	7,769	11.9%	7.0%	10/29/2020	1.686	1.000	1.116			14,620	20%
2021	208,890,932	24,523	8,518	11.9%	7.0%	10/29/2020	1.553	1.000	1.116			14,761	20%
2022	279,329,147	28,631	9,756	11.9%	7.0%	10/29/2020	1.451	1.000	1.097			15,527	20%
2023	315,272,610	29,691	10,619	11.9%	7.0%	10/29/2020	1.356	1.000	1.000			14,402	20%
2024	352,365,722	33,442	10,537	11.9%	7.0%	10/29/2020	1.268	1.000	1.000			13,356	20%
<b>B. Selected Severity at 1/1/2028 Cost Level</b>												14,533	Sum( (13) x (14) )
<b>Selected Loss Cost at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	133,925,430	2,649,234	51	12%	7%	10/29/2020	2.958	1.000	1.116	1.000	0.947	158	0%
2016	140,522,927	2,677,477	52	12%	7%	10/29/2020	2.644	1.000	1.116	1.000	0.947	147	0%
2017	168,534,364	2,695,016	63	12%	7%	10/29/2020	2.363	1.000	1.116	1.000	0.947	156	0%
2018	185,091,347	2,750,311	67	12%	7%	10/29/2020	2.111	1.000	1.116	1.000	0.947	150	0%
2019	203,919,475	2,782,955	73	12%	7%	10/29/2020	1.887	1.000	1.116	1.000	0.947	146	0%
2020	164,774,258	2,780,403	59	12%	7%	10/29/2020	1.686	1.000	1.116	1.413	0.947	149	20%
2021	208,890,932	2,807,642	74	12%	7%	10/29/2020	1.553	1.000	1.116	1.417	0.947	173	20%
2022	279,329,147	2,834,558	99	12%	7%	10/29/2020	1.451	1.000	1.097	1.146	0.947	170	20%
2023	315,272,610	2,895,587	109	12%	7%	10/29/2020	1.356	1.000	1.000	1.056	0.947	148	20%
2024	352,365,722	2,993,746	118	12%	7%	10/29/2020	1.268	1.000	1.000	1.056	0.947	149	20%
<b>C. Initial Selected Loss Cost at 1/1/2028 Cost Level</b>												158	Sum( (13) x (14) )
<b>D. Frequency x Severity Method</b>												158	A * B
<b>E. Selected Loss Cost at 1/1/2028 Cost Level</b>												158	average(A * B, C)
Notes (8) Future trend is equal to Past 2 Trend (6) and trended to 1/1/2028 (9) Factor for temporary increase in inflation (11) Factor to adjust to pre-pandemic frequency levels (12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels													

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Collision  
Data as of 12/31/2024

(1)	(2) Oliver Wyman Loss Trend Report	(3) GISA Report AUTO7001	(4) (2) / (3) * 1000	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13) (4) * (8) * (9) * (10) * (11) * (12)	(14) Selected
Oliver Wyman 2025 Annual Review													
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	80,386	1,971,290	40.778	-1.3%	-1.3%	10/1/2024	0.849		1.000	1.000	0.656	22.713	0%
2016	78,039	1,980,764	39.399	-1.3%	-1.3%	10/1/2024	0.860		1.000	1.000	0.656	22.234	0%
2017	83,744	1,989,813	42.087	-1.3%	-1.3%	10/1/2024	0.872		1.000	1.000	0.656	24.063	0%
2018	87,580	2,029,414	43.155	-1.3%	-1.3%	10/1/2024	0.883		1.000	1.000	0.656	24.999	0%
2019	86,483	2,046,144	42.266	-1.3%	-1.3%	10/1/2024	0.895		1.000	1.000	0.656	24.807	0%
2020	56,128	2,028,742	27.666	-1.3%	-1.3%	10/1/2024	0.906		1.000	1.527	0.656	25.116	20%
2021	52,778	2,032,471	25.968	-1.3%	-1.3%	10/1/2024	0.918		1.000	1.534	0.656	24.004	20%
2022	55,293	2,054,621	26.911	-1.3%	-1.3%	10/1/2024	0.931		1.000	1.410	0.656	23.163	20%
2023	49,295	2,110,795	23.354	-1.3%	-1.3%	10/1/2024	0.943		1.000	1.524	0.656	22.017	20%
2024	54,375	2,192,799	24.797	-1.3%	-1.3%	10/1/2024	0.955		1.000	1.524	0.656	23.686	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												23.597	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	495,823,667	80,386	6.168	3.7%	3.7%	10/1/2024	1.575	1.407	1.000			13.669	0%
2016	491,495,472	78,039	6.298	3.7%	3.7%	10/1/2024	1.519	1.407	1.000			13.459	0%
2017	546,230,605	83,744	6.523	3.7%	3.7%	10/1/2024	1.465	1.407	1.000			13.442	0%
2018	574,277,240	87,580	6.557	3.7%	3.7%	10/1/2024	1.412	1.407	1.000			13.031	0%
2019	558,883,966	86,483	6.462	3.7%	3.7%	10/1/2024	1.362	1.407	1.000			12.384	0%
2020	379,211,031	56,128	6.756	3.7%	3.7%	10/1/2024	1.313	1.390	1.000			12.335	20%
2021	398,005,896	52,778	7.541	3.7%	3.7%	10/1/2024	1.267	1.398	1.000			13.348	20%
2022	534,815,548	55,293	9.672	3.7%	3.7%	10/1/2024	1.221	1.337	1.000			15.795	20%
2023	528,765,743	49,295	10,727	3.7%	3.7%	10/1/2024	1.178	1.120	1.000			14,150	20%
2024	607,164,454	54,375	11,166	3.7%	3.7%	10/1/2024	1.136	1.000	1.000			12,682	20%
B. Selected Severity at 1/1/2028 Cost Level												13,662	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	495,823,667	1,971,290	252	2%	2%	10/1/2024	1.337	1.407	1.000	1.000	0.656	310	0%
2016	491,495,472	1,980,764	248	2%	2%	10/1/2024	1.307	1.407	1.000	1.000	0.656	299	0%
2017	546,230,605	1,989,813	275	2%	2%	10/1/2024	1.277	1.407	1.000	1.000	0.656	323	0%
2018	574,277,240	2,029,414	283	2%	2%	10/1/2024	1.247	1.407	1.000	1.000	0.656	326	0%
2019	558,883,966	2,046,144	273	2%	2%	10/1/2024	1.219	1.407	1.000	1.000	0.656	307	0%
2020	379,211,031	2,028,742	187	2%	2%	10/1/2024	1.191	1.390	1.000	1.527	0.656	310	20%
2021	398,005,896	2,032,471	196	2%	2%	10/1/2024	1.163	1.398	1.000	1.534	0.656	320	20%
2022	534,815,548	2,054,621	260	2%	2%	10/1/2024	1.136	1.337	1.000	1.410	0.656	366	20%
2023	528,765,743	2,110,795	251	2%	2%	10/1/2024	1.110	1.120	1.000	1.524	0.656	312	20%
2024	607,164,454	2,192,799	277	2%	2%	10/1/2024	1.085	1.000	1.000	1.524	0.656	300	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												322	Sum( (13) x (14) )
D. Frequency x Severity Method												322	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												322	average(A * B, C)
Notes													
(8)	Future trend is equal to Past 2 Trend (6) and trended to 1/1/2028												
(9)	Factor for temporary increase in inflation												
(11)	Factor to adjust to pre-pandemic frequency levels												
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels												

Appendix  
Exhibit CP-1.6

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Comprehensive - Total  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000	Oliver Wyman 2025 Annual Review								(4) * (8) * (9) * (10) * (11) * (12)	Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	75,205	2,371,088	31.718	0.6%	0.6%	10/1/2024	1.078		1.000	1.000	1.000	34.181	0%
2016	100,405	2,364,669	42.461	0.6%	0.6%	10/1/2024	1.071		1.000	1.000	1.000	45.486	0%
2017	65,912	2,368,100	27.833	0.6%	0.6%	10/1/2024	1.065		1.000	1.000	1.000	29.638	0%
2018	66,455	2,403,965	27.644	0.6%	0.6%	10/1/2024	1.059		1.000	1.000	1.000	29.261	0%
2019	64,990	2,400,116	27.078	0.6%	0.6%	10/1/2024	1.052		1.000	1.000	1.000	28.491	0%
2020	78,958	2,378,392	33.198	0.6%	0.6%	10/1/2024	1.046		1.000	1.000	1.000	34.722	20%
2021	66,310	2,359,081	28.108	0.6%	0.6%	10/1/2024	1.040		1.000	1.000	1.000	29.223	20%
2022	66,073	2,359,533	28.003	0.6%	0.6%	10/1/2024	1.033		1.000	1.000	1.000	28.940	20%
2023	66,802	2,398,690	27.850	0.6%	0.6%	10/1/2024	1.027		1.000	1.000	1.000	28.610	20%
2024	110,935	2,469,196	44.928	0.6%	0.6%	10/1/2024	1.021		1.000	1.000	1.000	45.879	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												33.475	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	451,862,049	75,205	6,008	4.5%	4.5%	10/1/2024	1.734	1.000	1.000			10,418	0%
2016	602,783,512	100,405	6,004	4.5%	4.5%	10/1/2024	1.659	1.000	1.000		9,961	0%	
2017	411,978,141	65,912	6,250	4.5%	4.5%	10/1/2024	1.588	1.000	1.000		9,925	0%	
2018	420,508,469	66,455	6,328	4.5%	4.5%	10/1/2024	1.519	1.000	1.000		9,615	0%	
2019	408,530,910	64,990	6,286	4.5%	4.5%	10/1/2024	1.454	1.000	1.000		9,140	0%	
2020	630,078,158	78,958	7,980	4.5%	4.5%	10/1/2024	1.391	1.000	1.000		11,103	20%	
2021	449,627,137	66,310	6,781	4.5%	4.5%	10/1/2024	1.331	1.000	1.000		9,028	20%	
2022	491,676,648	66,073	7,441	4.5%	4.5%	10/1/2024	1.274	1.000	1.000		9,481	20%	
2023	561,318,668	66,802	8,403	4.5%	4.5%	10/1/2024	1.219	1.000	1.000		10,245	20%	
2024	1,236,932,590	110,935	11,150	4.5%	4.5%	10/1/2024	1.167	1.000	1.000		13,010	20%	
B. Selected Severity at 1/1/2028 Cost Level												10,574	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	451,862,049	2,371,088	191	5%	5%	10/1/2024	1.869	1.000	1.000	1.000	1.000	356.1	0%
2016	602,783,512	2,364,669	255	5%	5%	10/1/2024	1.777	1.000	1.000	1.000	1.000	453.1	0%
2017	411,978,141	2,368,100	174	5%	5%	10/1/2024	1.691	1.000	1.000	1.000	1.000	294.1	0%
2018	420,508,469	2,403,965	175	5%	5%	10/1/2024	1.608	1.000	1.000	1.000	1.000	281.3	0%
2019	408,530,910	2,400,116	170	5%	5%	10/1/2024	1.530	1.000	1.000	1.000	1.000	260.4	0%
2020	630,078,158	2,378,392	265	5%	5%	10/1/2024	1.455	1.000	1.000	1.000	1.000	385.5	20%
2021	449,627,137	2,359,081	191	5%	5%	10/1/2024	1.384	1.000	1.000	1.000	1.000	263.8	20%
2022	491,676,648	2,359,533	208	5%	5%	10/1/2024	1.317	1.000	1.000	1.000	1.000	274.4	20%
2023	561,318,668	2,398,690	234	5%	5%	10/1/2024	1.253	1.000	1.000	1.000	1.000	293.1	20%
2024	1,236,932,590	2,469,196	501	5%	5%	10/1/2024	1.191	1.000	1.000	1.000	1.000	596.9	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												362.7	Sum( (13) x (14) )
D. Frequency x Severity Method												353.9	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												358.3	average(A * B, C)
Notes													
(8)	Future trend is equal to Past 2 Trend (6) and trended to 1/1/2028												
(9)	Factor for temporary increase in inflation												
(11)	Factor to adjust to pre-pandemic frequency levels												
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels												

Appendix  
Exhibit CP-1.7

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
All Perils  
Data as of 12/31/2024

(1)	(2) Oliver Wyman Loss Trend Report	(3) GISA Report AUTO7001	(4) (2) / (3) * 1000	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13) (4) * (8) * (9) * (10) * (11) * (12)	(14) Selected
Oliver Wyman 2025 Annual Review													
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	2,796	24,320	114.968	-8.2%	-8.2%	10/1/2024	0.345		1.000	1.000	1.000	39.630	0%
2016	2,923	22,596	129.360	-8.2%	-8.2%	10/1/2024	0.375		1.000	1.000	1.000	48.556	0%
2017	2,379	21,967	108.300	-8.2%	-8.2%	10/1/2024	0.409		1.000	1.000	1.000	44.265	0%
2018	1,875	22,216	84.398	-8.2%	-8.2%	10/1/2024	0.445		1.000	1.000	1.000	37.563	0%
2019	1,480	23,032	64.259	-8.2%	-8.2%	10/1/2024	0.485		1.000	1.000	1.000	31.142	0%
2020	1,193	22,014	54.192	-8.2%	-8.2%	10/1/2024	0.528		1.000	1.414	1.000	40.424	20%
2021	1,416	25,438	55.652	-8.2%	-8.2%	10/1/2024	0.575		1.000	1.418	1.000	45.332	20%
2022	1,968	32,783	60.037	-8.2%	-8.2%	10/1/2024	0.626		1.000	1.119	1.000	42.019	20%
2023	2,568	45,615	56.300	-8.2%	-8.2%	10/1/2024	0.681		1.000	1.000	1.000	38.361	20%
2024	4,143	56,258	73.651	-8.2%	-8.2%	10/1/2024	0.742		1.000	1.000	1.000	54.645	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												44.156	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	10,383,844	2,796	3,714	12.9%	12.9%	10/1/2024	4.569	1.000	1.000			16,970	0%
2016	11,185,193	2,923	3,827	12.9%	12.9%	10/1/2024	4.047	1.000	1.000			15,484	0%
2017	9,962,525	2,379	4,188	12.9%	12.9%	10/1/2024	3.584	1.000	1.000			15,007	0%
2018	11,318,138	1,875	6,036	12.9%	12.9%	10/1/2024	3.174	1.000	1.000			19,156	0%
2019	10,323,562	1,480	6,975	12.9%	12.9%	10/1/2024	2.810	1.000	1.000			19,604	0%
2020	8,776,131	1,193	7,356	12.9%	12.9%	10/1/2024	2.489	1.000	1.000			18,309	20%
2021	11,393,570	1,416	8,048	12.9%	12.9%	10/1/2024	2.204	1.000	1.000			17,739	20%
2022	18,813,064	1,968	9,558	12.9%	12.9%	10/1/2024	1.952	1.000	1.000			18,657	20%
2023	28,062,483	2,568	10,927	12.9%	12.9%	10/1/2024	1.729	1.000	1.000			18,888	20%
2024	48,009,641	4,143	11,587	12.9%	12.9%	10/1/2024	1.531	1.000	1.000			17,737	20%
B. Selected Severity at 1/1/2028 Cost Level												18,266	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	10,383,844	24,320	427	4%	4%	10/1/2024	1.575	1.000	1.000	1.000	1.000	673	0%
2016	11,185,193	22,596	495	4%	4%	10/1/2024	1.519	1.000	1.000	1.000	1.000	752	0%
2017	9,962,525	21,967	454	4%	4%	10/1/2024	1.465	1.000	1.000	1.000	1.000	664	0%
2018	11,318,138	22,216	509	4%	4%	10/1/2024	1.412	1.000	1.000	1.000	1.000	720	0%
2019	10,323,562	23,032	448	4%	4%	10/1/2024	1.362	1.000	1.000	1.000	1.000	611	0%
2020	8,776,131	22,014	399	4%	4%	10/1/2024	1.313	1.000	1.000	1.414	1.000	740	20%
2021	11,393,570	25,438	448	4%	4%	10/1/2024	1.267	1.000	1.000	1.418	1.000	804	20%
2022	18,813,064	32,783	574	4%	4%	10/1/2024	1.221	1.000	1.000	1.119	1.000	784	20%
2023	28,062,483	45,615	615	4%	4%	10/1/2024	1.178	1.000	1.000	1.000	1.000	725	20%
2024	48,009,641	56,258	853	4%	4%	10/1/2024	1.136	1.000	1.000	1.000	1.000	969	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												804	Sum( (13) x (14) )
D. Frequency x Severity Method												807	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												805	average(A * B, C)
Notes													
(8)	Future trend is equal to Past 2 Trend (6) and trended to 1/1/2028												
(9)	Factor for temporary increase in inflation												
(11)	Factor to adjust to pre-pandemic frequency levels												
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels												

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Specified Perils  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000				Oliver Wyman 2025 Annual Review					(4) * (8) * (9) * (10) * (11) * (12)	Selected
<b>Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	183	17,332	10.559	-1.0%	-1.0%	10/1/2024	0.880		1.000	1.000	1.000	9.292	0%
2016	211	17,832	11.833	-1.0%	-1.0%	10/1/2024	0.889		1.000	1.000	1.000	10.520	0%
2017	196	19,125	10.248	-1.0%	-1.0%	10/1/2024	0.898		1.000	1.000	1.000	9.205	0%
2018	181	21,493	8.421	-1.0%	-1.0%	10/1/2024	0.907		1.000	1.000	1.000	7.642	0%
2019	194	21,800	8.902	-1.0%	-1.0%	10/1/2024	0.917		1.000	1.000	1.000	8.161	0%
2020	275	23,284	11.817	-1.0%	-1.0%	10/1/2024	0.926		1.000	1.000	1.000	10.945	20%
2021	226	24,086	9.388	-1.0%	-1.0%	10/1/2024	0.936		1.000	1.000	1.000	8.784	20%
2022	247	24,511	10.086	-1.0%	-1.0%	10/1/2024	0.945		1.000	1.000	1.000	9.534	20%
2023	221	24,446	9.046	-1.0%	-1.0%	10/1/2024	0.955		1.000	1.000	1.000	8.639	20%
2024	342	24,236	14.099	-1.0%	-1.0%	10/1/2024	0.965		1.000	1.000	1.000	13.603	20%
<b>A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>												10.301	Sum( (13) x (14) )
<b>Selected Severity at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	870,391	183	4,756	6.4%	6.4%	10/1/2024	2.167	1.000	1.000			10,309	0%
2016	1,156,010	211	5,479	6.4%	6.4%	10/1/2024	2.037	1.000	1.000			11,163	0%
2017	1,142,697	196	5,830	6.4%	6.4%	10/1/2024	1.915	1.000	1.000			11,166	0%
2018	1,215,881	181	6,718	6.4%	6.4%	10/1/2024	1.800	1.000	1.000			12,094	0%
2019	1,054,675	194	5,435	6.4%	6.4%	10/1/2024	1.692	1.000	1.000			9,197	0%
2020	1,578,544	275	5,737	6.4%	6.4%	10/1/2024	1.591	1.000	1.000			9,126	20%
2021	1,485,487	226	6,569	6.4%	6.4%	10/1/2024	1.495	1.000	1.000			9,823	20%
2022	1,874,815	247	7,584	6.4%	6.4%	10/1/2024	1.406	1.000	1.000			10,660	20%
2023	2,025,936	221	9,162	6.4%	6.4%	10/1/2024	1.321	1.000	1.000			12,106	20%
2024	3,267,892	342	9,563	6.4%	6.4%	10/1/2024	1.242	1.000	1.000			11,878	20%
<b>B. Selected Severity at 1/1/2028 Cost Level</b>												10,719	Sum( (13) x (14) )
<b>Selected Loss Cost at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	870,391	17,332	50	5%	5%	10/1/2024	1.907	1.000	1.000	1.000	1.000	96	0%
2016	1,156,010	17,832	65	5%	5%	10/1/2024	1.811	1.000	1.000	1.000	1.000	117	0%
2017	1,142,697	19,125	60	5%	5%	10/1/2024	1.720	1.000	1.000	1.000	1.000	103	0%
2018	1,215,881	21,493	57	5%	5%	10/1/2024	1.634	1.000	1.000	1.000	1.000	92	0%
2019	1,054,675	21,800	48	5%	5%	10/1/2024	1.551	1.000	1.000	1.000	1.000	75	0%
2020	1,578,544	23,284	68	5%	5%	10/1/2024	1.473	1.000	1.000	1.000	1.000	100	20%
2021	1,485,487	24,086	62	5%	5%	10/1/2024	1.399	1.000	1.000	1.000	1.000	86	20%
2022	1,874,815	24,511	76	5%	5%	10/1/2024	1.329	1.000	1.000	1.000	1.000	102	20%
2023	2,025,936	24,446	83	5%	5%	10/1/2024	1.262	1.000	1.000	1.000	1.000	105	20%
2024	3,267,892	24,236	135	5%	5%	10/1/2024	1.198	1.000	1.000	1.000	1.000	162	20%
<b>C. Initial Selected Loss Cost at 1/1/2028 Cost Level</b>												111	Sum( (13) x (14) )
<b>D. Frequency x Severity Method</b>												110	A * B
<b>E. Selected Loss Cost at 1/1/2028 Cost Level</b>												111	average(A * B, C)
Notes (8) Future trend is equal to Past 2 Trend (6) and trended to 1/1/2028 (9) Factor for temporary increase in inflation (11) Factor to adjust to pre-pandemic frequency levels (12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels													



Appendix  
Exhibit CP-1.9

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Underinsured Motorist  
Data as of 12/31/2024

(1)	(2) Oliver Wyman Loss Trend Report	(3) GISA Report AUTO7001	(4) (2) / (3) * 1000	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13) (4) * (8) * (9) * (10) * (11) * (12)	(14) Selected
Oliver Wyman 2025 Annual Review													
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	68	2,616,047	0.026	4.6%	4.6%	10/1/2024	1.755		1.000	1.000	1.000	0.046	0%
2016	65	2,638,393	0.025	4.6%	4.6%	10/1/2024	1.678		1.000	1.000	1.000	0.041	0%
2017	67	2,650,721	0.025	4.6%	4.6%	10/1/2024	1.604		1.000	1.000	1.000	0.041	0%
2018	75	2,698,906	0.028	4.6%	4.6%	10/1/2024	1.533		1.000	1.000	1.000	0.042	0%
2019	76	2,717,179	0.028	4.6%	4.6%	10/1/2024	1.466		1.000	1.000	1.000	0.041	0%
2020	70	2,708,121	0.026	4.6%	4.6%	10/1/2024	1.401		1.000	1.000	1.000	0.036	20%
2021	55	2,728,005	0.020	4.6%	4.6%	10/1/2024	1.340		1.000	1.000	1.000	0.027	20%
2022	82	2,751,821	0.030	4.6%	4.6%	10/1/2024	1.281		1.000	1.000	1.000	0.038	20%
2023	78	2,808,186	0.028	4.6%	4.6%	10/1/2024	1.225		1.000	1.000	1.000	0.034	20%
2024	100	2,902,061	0.034	4.6%	4.6%	10/1/2024	1.171		1.000	1.000	1.000	0.040	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												0.035	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	19,591,790	68	286,044	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			286,044	0%
2016	17,398,932	65	266,862	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			266,862	0%
2017	15,085,798	67	223,929	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			223,929	0%
2018	18,133,978	75	243,200	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			243,200	0%
2019	19,631,326	76	257,898	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			257,898	0%
2020	18,280,360	70	260,034	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			260,034	20%
2021	19,709,465	55	356,334	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			356,334	20%
2022	24,225,107	82	296,628	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			296,628	20%
2023	19,005,212	78	244,218	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			244,218	20%
2024	17,201,426	100	172,731	0.0%	0.0%	10/1/2024	1.000	1.000	1.000			172,731	20%
B. Selected Severity at 1/1/2028 Cost Level												265,989	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	19,591,790	2,616,047	7	5%	5%	10/1/2024	1.755	1.000	1.000	1.000	1.000	13	0%
2016	17,398,932	2,638,393	7	5%	5%	10/1/2024	1.678	1.000	1.000	1.000	1.000	11	0%
2017	15,085,798	2,650,721	6	5%	5%	10/1/2024	1.604	1.000	1.000	1.000	1.000	9	0%
2018	18,133,978	2,698,906	7	5%	5%	10/1/2024	1.533	1.000	1.000	1.000	1.000	10	0%
2019	19,631,326	2,717,179	7	5%	5%	10/1/2024	1.466	1.000	1.000	1.000	1.000	11	0%
2020	18,280,360	2,708,121	7	5%	5%	10/1/2024	1.401	1.000	1.000	1.000	1.000	9	20%
2021	19,709,465	2,728,005	7	5%	5%	10/1/2024	1.340	1.000	1.000	1.000	1.000	10	20%
2022	24,225,107	2,751,821	9	5%	5%	10/1/2024	1.281	1.000	1.000	1.000	1.000	11	20%
2023	19,005,212	2,808,186	7	5%	5%	10/1/2024	1.225	1.000	1.000	1.000	1.000	8	20%
2024	17,201,426	2,902,061	6	5%	5%	10/1/2024	1.171	1.000	1.000	1.000	1.000	7	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												9	Sum( (13) x (14) )
D. Frequency x Severity Method												9	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												9	average(A * B, C)
Notes													
(8)	Future trend is equal to Past 2 Trend (6) and trended to 1/1/2028												
(9)	Factor for temporary increase in inflation												
(11)	Factor to adjust to pre-pandemic frequency levels												
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels												

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Non-Claim Expenses - Current Product  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
		GISA Report AUTO9502			(2) / (5)	(3) / (5)	(4) / (5)	
					as Percentage of Direct Written Premium			
Accident Year	Total Commissions (including CPC) (000)	Taxes (000)	Other Acquisition and General Expenses (000)	Written Premium (000)	Total Commissions (including CPC)	Taxes	Other Acquisition and General Expenses	
2015	383,224	89,901	322,421	3,082,662	12.4%	2.9%	10.5%	
2016	409,860	110,048	339,836	3,185,181	12.9%	3.5%	10.7%	
2017	410,837	123,977	324,246	3,283,702	12.5%	3.8%	9.9%	
2018	439,082	132,549	342,369	3,485,132	12.6%	3.8%	9.8%	
2019	472,382	141,452	356,228	3,777,861	12.5%	3.7%	9.4%	
2020	514,309	152,341	387,439	4,118,148	12.5%	3.7%	9.4%	
2021	596,336	163,803	435,174	4,300,800	13.9%	3.8%	10.1%	
2022	586,607	171,350	476,330	4,461,891	13.1%	3.8%	10.7%	
			A.1. Selected Expense Provision		13.2%	4.0%	10.1%	Selected
			A.2. Percent Variable		100%	100%	60%	Selected
			A.3. Percent Fixed		0%	0%	40%	1 - A.2
			B. Estimated Variable Expense Provision				23.2%	Sum[A.1 x A.2]
			C.1. Estimated Fixed Expense (as % of Premium)				4.0%	Sum[A.1 x A.3]
			C.2. 2024-2 Average Written Premium				1,817	GISA Report AUTO7001
			C.3. Estimated Fixed Expense (per Vehicle)				73	C.1 * C.2
			D.1. Fixed Expense Trend Rate				4.0%	Selected
			D.2. Trend From Date				10/1/2024	
			D.3. Trend To Date				1/1/2028	
			D.4. Fixed Expense Trend				1.136	(1 + D.1)^( [(D.3 - D.2) / 365.25] )
			D.5. Estimated Fixed Expense per Earned Vehicle				83	C.3 * D.4
Notes								
A.2., (8)	Assumes 50% of General expenses and 100% of other acquisition expenses are variable							
(2) ; (6)	CPC = contingent profit commission.							

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Health Levy - Current Product  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)
	See Note	GISA Report AUTO7001	(2) * (3)	GISA Report AUTO7001	(4) / (5)
Accident Year	Health Levy	TPL Earned Premium	Total Health Levy	Earned Vehicles	Health Levy Cost per Vehicles
2013	5.74%	1,283,938,976	73,633,900	2,480,356	29.69
2014	4.95%	1,390,864,304	68,847,783	2,576,725	26.72
2015	5.72%	1,502,185,743	85,925,025	2,652,217	32.40
2016	6.18%	1,624,275,549	100,299,015	2,678,708	37.44
2017	5.79%	1,741,812,971	100,763,880	2,692,626	37.42
2018	7.04%	1,892,471,053	133,229,962	2,747,654	48.49
2019	6.70%	2,075,786,247	139,077,679	2,782,720	49.98
2020	4.74%	2,305,524,974	109,281,884	2,780,113	39.31
2021	2.94%	2,518,434,703	74,041,980	2,806,683	26.38
2022	3.55%	2,569,993,828	91,234,781	2,840,243	32.12
2023	2.86%	2,687,547,491	76,863,858	2,907,049	26.44
2024	2.94%	2,909,363,830	85,535,297	3,003,474	28.48
2025	1.94%		94,088,826	3,048,526	30.86
2026			103,497,709	3,094,254	33.45
2027			113,847,480	3,140,668	36.25
2028			125,232,228	3,187,778	39.29
			Indicated Trend		
2013 - 2022			3.0%	1.3%	
2013 - 2019			12.9%	1.8%	
2015 - 2019			13.3%	1.2%	
2021 - 2024			2.6%	2.3%	
Selected			10.0%	1.5%	

Notes

(2)

(4) & (5)

Tax and Revenue Administration (TRA) - Health Cost Recovery Special Notice Vol. 6 No. 26

2025 - 2028 projected based on actual 2024 health levy and selected trend.

Health levy trend selection implicitly considers reduction in frequency observed during the pandemic.

2025 Earned premiums were not available for this review.

Given the decrease in the 2025 health levy rate, we expect that our estimate is slightly conservative.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Required Premium - Current Product  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			per (3)	Exhibit CP-1.1 - Exhibit CP-1.9	See Note	(5) * (6)	See Note	Exhibit CP-2.1	Board Benchmark	(7) * (8) / (1 - (9) - (10))	See Note	(11) + (12)
Coverage	Subcoverage	202402 Written Vehicles	Percent of Vehicles with Coverage	Selected Loss Cost at 1/1/2028 Cost Level	Claim Payment Pattern Factor	Projected Discounted Loss Cost per Vehicle	Delay in Receiving Premiums	Estimated Variable Expense Provision	Profit Provision	Estimated Required Premium (Excl. Fixed Expense)	Allocated Fixed Expense	Estimated Required Premium
Third Party Liability	Bodily Injury			1,157.31	0.843	976.09	1.009	23%	6%	1,391	59	1,450.75
Third Party Liability	Property Damage			21.79	0.969	21.12	1.009	23%	6%	30	1	31.39
Third Party Liability	DCPD			229.07	0.969	222.02	1.009	23%	6%	316	13	329.98
Third Party Liability	Health Levy			39.29	1.000	39.29	1.009	23%	6%	56	2	58.39
Third Party Liability	Total	1,547,977	100%	1,447.453	0.869	1,258.52	1.009	23%	6%	1,794	77	1,870.50
Accident Benefits	Accident Benefits - Total	1,542,827	100%	157.88	0.933	147.26	1.009	23%	6%	210	9	218.86
Collision	Collision	1,134,024	73%	321.99	0.974	313.72	1.009	23%	6%	447	19	466.28
Comprehensive	Comprehensive - Total	1,284,657	83%	358.35	0.973	348.66	1.009	23%	6%	497	21	518.21
All Perils	All Perils	31,734	2%	805.48	0.972	782.73	1.009	23%	6%	1,116	48	1,163.35
Specified Perils	Specified Perils	12,790	1%	110.61	0.974	107.71	1.009	23%	6%	154	7	160.09
Underinsured Motorists	Underinsured Motorist	1,500,527	97%	9.24	0.789	7.29	1.009	23%	6%	10	0	10.84
				Estimated Fixed Expense per Earned Vehicle			83	1.009	23%	6%	118	
							Exhibit CP-2.1					
Package	Basic Coverage			1,605	0.876	1,406	1.009	23%	6%	2,004	85	2,089.36
Package	Full Coverage			2,295	0.904	2,075	1.009	23%	6%	2,958	126	3,084.69
	(assumes insured purchases CM rather than AP/SP)											
Package	Industry Weighted Average			2,164	0.900	1,948	1.009	23%	6%	2,777	118	2,895.96
Notes												
(5)	Health Levy per Exhibit CP-2.2											
(6)	Based on 5-year industry average investment income rate of 3.70% and selected payment pattern											
	Reported Return on Investment			2020	2021	2022	2023	2024	Average	Selected		
	per P&C Financial Returns reported to OSFI			4.17%	2.71%	0.08%	4.45%	7.15%	3.71%	3.70%		
	2023 excludes a large insurer that reported an ROI of 72.03%											
(8)	Based on investment rate of 3.70% and assumed three month delay											
(12)	Allocation of total fixed expenses in (11) to coverage based on (11)											

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Out of Province Loss Cost**  
**Data as of 12/31/2024**

(1)	(2) AUTO-7001	(3) AUTO-7001	(4) SUM((2):(3))	(5) (2) / (4)	(6) (3) / (4)	(7) (4) / (4)
Accident Half Year	Reported Incurred Claims and ALAE			Distribution		
	Within Province	Out of Province	Total	Within Province	Out of Province	Total
202201	429,179,158	7,009,177	436,188,335	98.4%	1.6%	100.0%
202202	578,837,216	9,381,114	588,218,330	98.4%	1.6%	100.0%
202301	397,216,721	10,100,373	407,317,094	97.5%	2.5%	100.0%
202302	408,320,383	5,505,627	413,826,010	98.7%	1.3%	100.0%
202401	317,566,868	6,310,982	323,877,850	98.1%	1.9%	100.0%
202402	215,506,054	3,722,714	219,228,768	98.3%	1.7%	100.0%
A.	All-Year Weighted Average.....			98.2%	1.8%	
B.	Selected Out of Province Distribution.....			98.2%	1.8%	100.0%
C.	Selected Out of Province Severity Differential Factor.....				150.0%	
	Estimated ratio of average severity for out-of-province claims to in-province claims					
D.	Implied Frequency Adjustment.....				1.2%	
	B. / C.					
Notes						
(2)	Includes loss codes 5 and 6 from the kind of loss code field in Exhibit AUTO7001.					
(3)	Includes loss codes 3 and 4 from the kind of loss code field in Exhibit AUTO7001.					
C.	We note that out-of-province claims may be more complex due to jurisdictional differences. We judgmentally select a 150% severity adjustment factor.					

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Out of Province Loss Cost**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)
	Exhibit CP-1.1	Exhibit CF-1.1.1	(2) * (3)
Metric	Current Product	Out of Province Adjustment	Care-First
Frequency	4.7	1.2%	0.1
Severity	243,943	150.0%	365,914
BI Loss Cost: Out of Province Claims			20.37

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Underinsured Motorist - Ultimate Loss and ALAE Allocation**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)
	Exhibit CP-1.9	Exhibit CF-1.1.1	(2) * (3)
Accident Year	Loss Cost at 1/1/2028 Cost Level	Selected Out of Province Distribution	Estimated Loss Cost for Out of Province Accidents
2015	13.14	1.8%	0.23
2016	11.06	1.8%	0.19
2017	9.13	1.8%	0.16
2018	10.30	1.8%	0.18
2019	10.59	1.8%	0.19
2020	9.46	1.8%	0.17
2021	9.68	1.8%	0.17
2022	11.28	1.8%	0.20
2023	8.29	1.8%	0.15
2024	6.94	1.8%	0.12
	All-Year Average		0.18
	5-year average		0.16
	Selected Loss Cost at 1/1/2028 Cost Level		0.16

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Determination of Trended Income and Tax Bands  
Data as of 12/31/2024

(1)		(2)	(3)	(4)		(5)		(6)	
		See Note	See Note	See Note		See Note		See Note	
Income Band		Alberta	Manitoba	Alberta	Manitoba	Income Band			
Lower Limit	Upper Limit					Lower Limit	Upper Limit	Trended Income Band	
Cost Level		2023	2023	2023	2023			2027.5	
<b>A.1. Distribution of Incomes</b>									
		Percentage (Rounded)		Distribution					
Less than	5,000	11.0%	10.9%	11.0%	10.9%	1.021	1.021	Less than	5,488
5,000	to 10,000	6.1%	6.6%	6.1%	6.6%	1.021	1.021	5,488	to 10,976
10,000	to 20,000	10.7%	11.0%	10.7%	11.0%	1.021	1.021	10,976	to 21,951
20,000	to 30,000	8.4%	10.0%	8.4%	10.0%	1.021	1.021	21,951	to 32,927
30,000	to 40,000	7.9%	9.8%	7.9%	9.8%	1.021	1.021	32,927	to 43,902
40,000	to 50,000	7.9%	11.2%	7.9%	11.2%	1.021	1.021	43,902	to 54,878
50,000	to 60,000	7.6%	7.6%	7.6%	7.6%	1.021	1.021	54,878	to 65,853
60,000	to 80,000	12.5%	13.0%	12.5%	13.0%	1.021	1.021	65,853	to 87,804
80,000	to 100,000	9.1%	8.5%	9.1%	8.5%	1.021	1.021	87,804	to 109,755
100,000	and above	19.0%	11.5%	19.0%	11.5%	1.021	1.021	109,755	and above
Total		100.2%	100.1%	100.0%	100.0%				
<b>A.2. Allocation of \$100,000 and above Income Distribution</b>									
per A.1. and B.				Distribution					
100,000	to 150,000			11.3%	8.0%	1.021	1.021	109,755	to 164,633
150,000	to 200,000			3.8%	1.9%	1.021	1.021	164,633	to 219,510
200,000	to 250,000			1.7%	0.7%	1.021	1.021	219,510	to 274,388
250,000	and above			2.2%	0.9%	1.021	1.021	274,388	to +inf
Total				19.0%	11.5%				
<b>B. Distribution of Tax Filers (includes distribution greater than \$100,000)</b>									
		Number of Persons		Distribution					
Less than	5,000	209,770	67,720	6.0%	6.4%	1.021	1.021	Less than	5,488
5,000	to 10,000	138,430	46,020	4.0%	4.3%	1.021	1.021	5,488	to 10,976
10,000	to 15,000	156,960	54,960	4.5%	5.2%	1.021	1.021	10,976	to 16,463
15,000	to 20,000	170,780	66,420	4.9%	6.3%	1.021	1.021	16,463	to 21,951
20,000	to 25,000	211,910	66,990	6.1%	6.3%	1.021	1.021	21,951	to 27,439
25,000	to 35,000	430,160	142,480	12.3%	13.4%	1.021	1.021	27,439	to 38,414
35,000	to 50,000	489,300	176,330	14.0%	16.6%	1.021	1.021	38,414	to 54,878
50,000	to 75,000	632,550	210,690	18.1%	19.9%	1.021	1.021	54,878	to 82,316
75,000	to 100,000	407,650	112,270	11.7%	10.6%	1.021	1.021	82,316	to 109,755
100,000	to 150,000	383,440	81,210	11.0%	7.7%	1.021	1.021	109,755	to 164,633
150,000	to 200,000	127,490	19,360	3.7%	1.8%	1.021	1.021	164,633	to 219,510
200,000	to 250,000	56,500	6,610	1.6%	0.6%	1.021	1.021	219,510	to 274,388
250,000	and above	73,670	9,190	2.1%	0.9%	1.021	1.021	274,388	to +inf
Total		3,488,610	1,060,250	100.0%	100.0%				
Control		3,488,600	1,060,240	100.0%	100.0%				
Difference		(10)	(10)	0.0%	0.0%				
<b>C. CPP Contribution</b>									
Cost Level		2026						2027.5	
3,500	to 74,600	5.95%				1.000	1.026	3,500	to 77,582
74,600	to 85,000	4.00%				1.026	1.026	77,582	to 88,398
<b>D. EI Premium</b>									
0		2025						0	to 68,330
	to 65,700	1.61%				1.026	1.026		
<b>E. Provincial Income Tax</b>									
<b>E.1. Alberta</b>		2026						2027.5	
22,769	to 61,200	8.00%				1.019	1.021	23,427	to 63,131
61,200	to 154,259	10.00%				1.021	1.021	63,131	to 159,126
154,259	to 185,111	12.00%				1.021	1.021	159,126	to 190,951
185,111	to 246,813	13.00%				1.021	1.021	190,951	to 254,600
246,813	to 370,220	14.00%				1.021	1.021	254,600	to 381,901
370,220	and above	15.00%				1.021	1.021	381,901	to +inf
<b>E.2. Manitoba</b>		2026						2027.5	
15,780	to 47,000	10.80%				1.000	1.000	15,780	to 47,000
47,000	to 100,000	12.75%				1.000	1.000	47,000	to 100,000
100,000	and above	17.40%				1.000	1.000	100,000	to +inf
<b>F. Federal Income Tax</b>									
		2026							
16,129	to 58,523	14.00%				1.037	1.024	17,046	to 60,621
58,523	to 117,045	20.50%				1.024	1.024	60,621	to 121,241
117,045	to 181,440	26.00%				1.024	1.024	121,241	to 187,945
181,440	to 258,482	29.00%				1.024	1.027	187,945	to 267,754
258,482	and above	33.00%				1.027		268,926	to +inf
<b>G. Other Values</b>									
Manitoba Disability Income Benefit									2027
120,000		2026	Policy Year			1.022		122,684	
Care-First Maximum Disability Income Benefit									2027
125,000		2026	Policy Year			1.021		127,618	
Average employment income									2027.5
Alberta									
62,600		2023	Calendar Year			1.021		68,707	
Manitoba									
51,300		2023	Calendar Year			1.022		56,657	

Notes

- A.1. Distribution of Incomes per:  
Table 11-10-0240-01 Distribution of **employment income** of individuals by sex and work activity, Canada, provinces and selected census metropolitan areas emphasis added  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110024001>
- A.2. Allocation of 100,000 and above from A.1. using B.  
We make the simplifying assumption that the distribution of total income is proportional to the distribution of employment income and calculate the percent in based on the distribution of Statistics Canada Table 11-10-0008-01, applied to the 19.0% in Statistics Canada Table 11-10-0240-01.
- B. Distribution of Tax Filers (includes distribution greater than \$100,000) per:  
Statistics Canada, Table 11-10-0008-01 Tax filers and dependents with income by **total income**, sex and age (emphasis added)  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110000801> (accessed 8 January 2026)  
Includes non-earned income
- C. Rates per  
<https://www.canada.ca/en/revenue-agency/services/tax/businesses/topics/payroll/payroll-deductions-contributions/canada-pension-plan-cpp/cpp>
- D. Rates per  
<https://www.canada.ca/en/revenue-agency/services/tax/businesses/topics/payroll/payroll-deductions-contributions/employment-insurance-ei-ei-premium>  
Projected based on linear model
- E., F. Rates per  
<https://www.canada.ca/en/revenue-agency/services/tax/businesses/topics/payroll/payroll-deductions-contributions/income-tax/reducing-remuneration-subject-income-tax.html> (accessed 8 January 2026)  
Personal exemption per:  
<https://www.canada.ca/content/dam/cra-arc/forms/pubs/pbg/td1ab/td1ab-26e.pdf> (accessed 12 January 2026)  
<https://www.canada.ca/content/dam/cra-arc/migration/cra-arc/bsnss/tpts/pyr/14032/2026/14032-mb-1-26e.pdf> (accessed 12 January 2026)  
Note that Manitoba tax brackets are not indexed per:  
<https://www.canada.ca/en/revenue-agency/services/forms-publications/payroll/14032-payroll-deductions-tables/14032mb-jan/14032mb-jan-general-information.html#h1.2> (accessed 12 January 2026)  
See Provincial legislative updates under "What's new as of January 1, 2026"

(5) Based on linear model fit to historical data

(6) Includes minor correction factor to reflect the average of 2027 and 2028, rather than trend to the midpoint



Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Income Replacement: Excess of Limit Income Distribution Model  
Data as of 12/31/2024

(1) Exhibit CF-1.3.1	(2) (1), Normalized	(3) Exhibit CF-1.3.1	(4) See Note
Gross Income Level Adjusted to PY2027	Indexed Range	Percent in Level	Decay
109,755 to 164,633	1.000 to 1.500	11.3%	
164,633 to 219,510	1.500 to 2.000	3.8%	33.2%
219,510 to 274,388	2.000 to 2.500	1.7%	44.3%
274,388 to +Inf		2.2%	
		A1. Selected Decay	40.0% per 0.5 units
		A2. Decay Rate	16.0% (A1) <sup>2</sup> (over 2 * 0.5 = unit)
		B. Exponential Decay Parameter	1.833 -LN( A.2. )

(5)	(6)	(7)	(8)	(9)	(10) (3), Distributed per (9)
Right Tail					
Gross Income Level Adjusted to PY2027	Indexed Range	Lower Limit	Upper Limit	Distribution	Percent in Level
109,755 to 127,618	1.000 to 1.163	0.087	0.065	0.023	4.9%
127,618 to 150,000	1.163 to 1.367	0.065	0.045	0.020	4.4%
150,000 to 164,633	1.367 to 1.500	0.045	0.035	0.010	2.1%
164,633 to 200,000	1.500 to 1.822	0.035	0.019	0.016	2.8%
200,000 to 219,510	1.822 to 2.000	0.019	0.014	0.005	1.0%
219,510 to 250,000	2.000 to 2.278	0.014	0.008	0.006	1.1%
250,000 to 274,388	2.278 to 2.500	0.008	0.006	0.003	0.6%
274,388 to 300,000	2.500 to 2.733	0.006	0.004	0.002	0.8%
300,000 to 400,000	2.733 to 3.644	0.004	0.001	0.003	1.2%
400,000 to +Inf	3.644 to +Inf	0.001	0.000	0.001	0.3%

(10)	(11)	(12) per (10)	(13) EXP(-B. * (6))	(14) EXP(-B. * (7))	(15) (13) - (14)	(16) See Note	(17)	(18) (16) - (17)	(18) (18) / (15)	(19) (18) * 109,755	(20)
Right Tail											
Gross Income Level Adjusted to PY2027	Indexed Range	Percent in Level	Lower Limit	Upper Limit	In Layer	Evaluation of Integral		Conditional Layer Value	Unconditional Layer Value	Mean within Range	
109,755 to 127,618	1.000 to 1.163	4.9%	0.087	0.065	0.023	First Term	Second Term	0.135	0.111	0.024	1.077
127,618 to 150,000	1.163 to 1.367	4.4%	0.065	0.045	0.020	0.135	0.111	0.024	0.025	1.258	118,243
150,000 to 200,000	1.367 to 1.822	4.9%	0.045	0.019	0.025	0.111	0.085	0.025	0.039	1.563	119,258
200,000 to 250,000	1.822 to 2.278	2.1%	0.019	0.008	0.011	0.085	0.046	0.039	0.022	2.019	138,113
250,000 to 300,000	2.278 to 2.733	1.3%	0.008	0.004	0.005	0.046	0.024	0.022	0.012	2.474	139,298
300,000 to 400,000	2.733 to 3.644	1.2%	0.004	0.001	0.003	0.024	0.012	0.012	0.009	3.068	171,561
400,000 to +Inf	3.644 to +Inf	0.3%	0.001	0.000	0.001	0.012	0.003	0.009	0.003	4.190	173,033
										Indicated Mean Model	176,684
										Employment Data	178,200
										Balancing Factor	1.009

Notes  
(4) (3) row i / (3) row (i - 1)  
(16), (17) EXP(-B. \* (12)) \* (-B. \* (12) + 1) / (B.)<sup>2</sup>  
See also <https://www.wolframalpha.com/input?i=Integrate+xe%5E%28-cx%29+from+x+%3D+a+to+x%3D+b>

Appendix  
Exhibit CF-1.3.3

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Income Replacement Increased Limit Factors  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)						(7)					(8)	(9)	(10)	(11)	
Exhibit CF-1.3.2	Exhibit CF-1.3.2	Exhibit CF-1.3.2	See Note	See Note	See Note						See Note					(6) + (7)	(3) - (4) - (5) - (8)	(3) / 52	(9) / 52	
Gross Income Level Adjusted to 2028	Percent in Level	Mean Within Range	CPP Contribution	EI Premium	Provincial Income Tax						Federal Income Tax					Income Tax	Average Net Income	Average Gross Weekly Income	Average Net Weekly Income	
		Rate	5.95%	4.00%	1.61%	8.00%	10.00%	12.00%	13.00%	14.00%	15.00%	14.00%	20.50%	26.00%	29.00%	33.00%				
		Income Limit Adjusted 2028	77,582	88,398	68,330	63,131	159,126	190,951	254,600	381,901	999,999	60,621	121,241	187,945	268,926	999,999				
		Exhibit CF-1.3.1																		
		Basic Exemption Adjusted to 2028	3,500	77,582	0	23,427	63,131	159,126	190,951	254,600	381,901	17,046	60,621	121,241	187,945	268,926				
		Exhibit CF-1.3.1																		
109,755 to 127,618	4.9%	119,258	4,408	433	1,100	3,176	5,613	0	0	0	0	6,100	12,020	0	0	0	26,910	86,407	2,293	1,662
127,618 to 150,000	4.4%	139,298	4,408	433	1,100	3,176	7,617	0	0	0	0	6,100	12,427	4,695	0	0	34,015	99,342	2,679	1,910
150,000 to 200,000	4.9%	173,033	4,408	433	1,100	3,176	9,600	1,669	0	0	0	6,100	12,427	13,466	0	0	46,438	120,654	3,328	2,320
200,000 to 250,000	2.1%	223,462	4,408	433	1,100	3,176	9,600	3,819	4,226	0	0	6,100	12,427	17,343	10,300	0	66,992	150,530	4,297	2,895
250,000 to 300,000	1.3%	273,891	4,408	433	1,100	3,176	9,600	3,819	8,274	2,701	0	6,100	12,427	17,343	23,484	1,638	88,563	179,387	5,267	3,450
300,000 to 400,000	1.2%	339,581	4,408	433	1,100	3,176	9,600	3,819	8,274	11,897	0	6,100	12,427	17,343	23,484	23,316	119,438	214,203	6,530	4,115
over 400,000	0.3%	463,836	4,408	433	1,100	3,176	9,600	3,819	8,274	17,822	12,290	6,100	12,427	17,343	23,484	64,320	178,657	279,239	8,920	5,370
over 109,755	19.0%	178,200	4,408	433	1,100	3,176	9,600	2,289	0	0	0	6,100	12,427	14,809	0	0	48,402	123,858	3,427	2,382
A. Higher Limits Offered		127,618	4,408	433	1,100	3,176	6,449	0	0	0	0	6,100	12,427	1,658	0	0	29,811	91,867	2,454	1,767
		150,000	4,408	433	1,100	3,176	8,687	0	0	0	0	6,100	12,427	7,477	0	0	37,868	106,191	2,885	2,042
		200,000	4,408	433	1,100	3,176	9,600	3,819	1,176	0	0	6,100	12,427	17,343	3,496	0	57,138	136,922	3,846	2,633
		250,000	4,408	433	1,100	3,176	9,600	3,819	7,676	0	0	6,100	12,427	17,343	17,996	0	78,138	165,922	4,808	3,191
		300,000	4,408	433	1,100	3,176	9,600	3,819	8,274	6,356	0	6,100	12,427	17,343	23,484	10,254	100,835	193,225	5,769	3,716
		400,000	4,408	433	1,100	3,176	9,600	3,819	8,274	17,822	2,715	6,100	12,427	17,343	23,484	43,254	148,016	246,044	7,692	4,732

Notes

(2) & (3) Based on an exponential decay model.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Income Replacement Increased Limit Factors  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Exhibit CF-1.3.3	(2) / (2), total	Exhibit CF-1.3.3	Exhibit CF-1.3.3	A.1 * (5)	A.3 * MIN((5), A.4 / 52)	MAX((7) - (6),0)
						No Group LTD Plan	With Group Disability Plan
	Informed Choice Model: Unconditional Distribution of Insureds Electing Limit	Informed Choice Model: Conditional Distribution of Insureds Electing Limit	Average Gross Weekly Income	Average Net Weekly Income	Weekly Benefits from Collateral Source (Group Long-Term Disability (LTD)) Plan	Weekly Indemnity Benefit	Weekly Indemnity Benefit after Group Disability Plan Payments
Gross Income Level Adjusted to 2028							
127,618 to 150,000	4.4%	31.0%	2,679	1,910	1,146	1,590	444
150,000 to 200,000	4.9%	34.7%	3,328	2,320	1,392	1,590	198
200,000 to 250,000	2.1%	14.8%	4,297	2,895	1,737	1,590	0
250,000 to 300,000	1.3%	9.4%	5,267	3,450	2,070	1,590	0
300,000 to 400,000	1.2%	8.2%	6,530	4,119	2,472	1,590	0
over 400,000	0.3%	1.9%	8,920	5,370	3,222	1,590	0
Total	14.1%	100.0%	3,819	2,589	1,553	1,590	207
A.1 Percentage of net income long term disability covers	60% Selected based on Government of Canada website (long-term disability)						
A.2 Percentage of disability plans where Auto policy will be 1st payer							
A.2.1 ICBC 2021 RRA Assumption (Based on judgment)	50% See Note						
A.2.2 Selected Percentage of disability plans where Auto policy will be 1st payer	50% Current AB auto policy is 2nd payer						
A.3 Percentage of net income covered by plan benefits	90% Care-First benefits						
A.4 Gross Income Limit Purchased	127,618						
A.5 Maximum Net Income covered by plan benefits	91,867 Exhibit CF-1.3.3, Net Income at A.4.						
B.1 Employed Population (September, 2024)	2,510 Exhibit CF-5.2, Table: 14-10-0287-03						
B.2 Number of Individuals with Disability Plan	1,800 Exhibit CF-5.2, CLHIA 2024 Provincial Data Appendix ( <a href="https://www.clhia.ca/facts">https://www.clhia.ca/facts</a> )						
B.3 Percent of Employed Individuals with Disability Plan	71.7% B.2 / B.1						
C.1 Employed Population (September, 2025)	2,606 Table: 14-10-0287-03						
C.2 Total Population (September 2025)	4,077 Table: 14-10-0287-03						
C.3 Employment Rate	63.9% C.1 / C.2						
	(9)	(10)					
	Proportion of Employed Claimants	Severity Net of Collateral Benefits					
Employed Claimants without Group Disability Plan	28.3%	1,590	per (7)				
Employed Claimants with Group Disability Plan, Auto Ins. is 1st payer	35.9%	1,590	per (7)				
Employed Claimants with Group Disability Plan, Auto Ins. is 2nd payer	35.9%	207	per (8)				
Total	100.0%	1,094					
D. Base Severity, Net of Collateral Benefits		558	Exhibit CF-5.2				
Top-Up Limit	127,618	150,000	200,000	250,000	300,000	400,000	
Est. Weekly Severity for Individuals who Purchase Higher Limit	1,094	1,280	1,618	2,016	2,386	2,874	
Earned Disability Income Increased Limit Factor		2.293	2.899	3.612	4.275	5.150	

Notes

- (2),(3) We use an informed choice model where we assume individuals will only purchase a higher limit if their gross income is larger than the next highest limit.
- A.1 Short-term disability benefits generally exceed long-term disability benefits. We select the long-term disability benefit to be conservative. There may be a slight optimistic bias for claims that exceed the benefit period of employer disability plans.
- A.2.1 Per page 229 of the 2021 ICBC RRA, "Group or other private plans may state they are second payer when coverage is available under no fault automobile insurance plans. Judgmentally assumed to be the case 50% of the time."

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Excess of Care-First Disability Income Limits Severity**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Exhibit CF-1.3.3	(2) / (2), total	Exhibit CF-1.3.3	Exhibit CF-1.3.3	A.1 * (5)	A.3 * (5)	MAX((7) - (6),0)
						No Group Disability Plan	With Group Disability Plan
Gross Income Level Adjusted to 2028	Unconditional Distribution of Insureds with Incomes Exceeding Care-First Benefits	Conditional Distribution of Insureds with Incomes Exceeding Care-First Benefits	Average Gross Weekly Income	Average Net Weekly Income	Weekly Benefits from Collateral Source (Long-Term Disability) Plan	Weekly Indemnity Benefit	Weekly Indemnity Benefit after Group Disability Plan Payments
127,618 to 150,000	4.4%	31.0%	2,679	1,910	1,146	1,719	573
150,000 to 200,000	4.9%	34.7%	3,328	2,320	1,392	2,088	696
200,000 to 250,000	2.1%	14.8%	4,297	2,895	1,737	2,605	868
250,000 to 300,000	1.3%	9.4%	5,267	3,450	2,070	3,105	1,035
300,000 to 400,000	1.2%	8.2%	6,530	4,119	2,472	3,707	1,236
over 400,000	0.3%	1.9%	8,920	5,370	3,222	4,833	1,611
Total	14.1%	100.0%	3,819	2,589	1,553	2,330	777

A.1 Percentage of net income long term disability covers 60% Selected based on Government of Canada website (long-term disability)  
A.2 Percentage of disability plans where Auto policy will be 1st payer  
A.2.1 ICBC 2021 RRA Assumption (Based on judgment) 50% See Note  
A.2.2 Selected Percentage of disability plans where Auto policy will be 1st payer 50% Current AB auto policy is 2nd payer  
A.3 Percentage of net income covered by plan benefits 90% Care-First benefits  
A.4 Gross Income Limit Purchased Unlimited  
A.5 Maximum Net Income covered by plan benefits Unlimited

B.1 Employed Population (September, 2024) 2,510 Table: 14-10-0287-03  
B.2 Number of Individuals with Disability Plan 1,800 CLHIA 2024 Provincial Data Appendix (<https://www.clhia.ca/facts>)  
B.3 Percent of Employed Individuals with Disability Plan 71.7% B.2 / B.1  
C.1 Employed Population (September, 2025) 2,606 Table: 14-10-0287-03  
C.2 Total Population (September 2025) 4,077 Table: 14-10-0287-03  
C.3 Employment Rate 63.9% C.1 / C.2

	(9)	(10)	
	Proportion of Employed Claimants	Severity Net of Collateral Benefits	
Employed Claimants without Group Disability Plan	28.3%	2,330	(9) per B.3.,(10) per (7)
Employed Claimants with Group Disability Plan, Auto Ins. is 1st payer	35.9%	2,330	(9) per A.2.2. and B.3.,(10) per (7)
Employed Claimants with Group Disability Plan, Auto Ins. is 2nd payer	35.9%	777	(9) per B.3.,(10) per (8)
Total	100.0%	1,773	

Notes

- A.1 Short-term disability benefits generally exceed long-term disability benefits. We select the long-term disability benefit to be conservative. There may be a slight optimistic bias for claims that exceed the benefit period of employer disability plans.
- A.2.1 Per page 229 of the 2021 ICBC RRA, "Group or other private plans may state they are second payer when coverage is available under no fault automobile insurance plans. Judgmentally assumed to be the case 50% of the time."

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Excess of Care-First Disability Income Limits Loss Cost**

	(1)	(2)
A. Estimated Percent of Population with Gross Income Greater than 130,277.....	14.1%	per Exhibit CF-1.3.3 column (2)
B. Care-First Income Replacement & Other Monetary Benefits Estimated Claimant Frequency.....	2.4	Exhibit CF-10.1
C.1. Current Product Earner DI Claim Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level.....	1.2	Exhibit CF-2.3
C.2. ICBC Claimant/Claim Factor.....	1.12	Exhibit CF-10.1
C.3. Tort to No-Fault Frequency Adjustment Factor .....	1.75	Exhibit CF-2.7
C.4. Attributable to class expansion (points).....	0.60	Selected, See Note
C.5. Attributable to benefit changes (as a factor).....	1.10	C.3. - C.4
C.4. Care-First Earner DI Alberta Claimant Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level.....	1.5	C.1. * C.2. * C.5
D. Care-First Income Replacement & Other Monetary Benefits Final Loss Cost.....	268.58	Exhibit CF-10.3
E. Income Replacement Loss Cost Attributable to Earners.....	85%	See Note
F. Income Replacement & Other Monetary Benefits Earner Claimant Severity.....	149,654	(D. * E.) / (C.4.) * 1000
<b>Benefits Limited to Care-First Limits</b>		
G. Estimated Weekly Severity for Individuals with Gross Income Greater than 130,277.....	1,094	per Exhibit CF-1.4.1.D. for a 130,277 limit
H. Estimated Overall Weekly Severity (Limited to Care-First Limits).....	558	Exhibit CF-5.2
I. Severity Relativity for Individuals with Income Greater than 130,277.....	1,960	G. / H.
J. Estimated Severity for Individuals with Gross Income Greater than 130,277.....	293,332	F. * I.
<b>Unlimited Benefits</b>		
K. Estimated Weekly Severity for Individuals with Gross Income Greater than 130,277.....	1,773	Exhibit CF-1.5.1
L. Estimated Overall Weekly Severity (Limited to Care-First Limits).....	558	Exhibit CF-5.2
M. Severity Relativity for Individuals with Income Greater than 130,277.....	3,177	K. / L.
N. Estimated Severity for Individuals with Gross Income Greater than 130,277.....	475,386	F. * M.
O. Estimated Excess Severity for Individuals with Income Greater than 130,277.....	182,055	N. - J.
P. Estimated Excess Loss Cost for Individuals with Gross Income Greater than 130,277.....	39.12	A. * C.4. * O. / 1000
Q. Percentage of Insurers offering Top-Up Disability Income Benefits.....	90.0%	based on Superintendent Survey
R. BI Loss Cost: Excess Disability Income.....	3.91	P. * (1 - Q.)

**Notes**

- C.5 We expect most of the increase resulting from the transition to no-fault in the AB model (per Exhibit CF-2.7) is due to additional classes (e.g., students and caregivers) being eligible to receive benefits. However, we expect there may be a slight increase to the earner frequency due to the more generous benefits.
- E. GISA Exhibit 7001 for Ontario includes accident benefits losses by loss code for Accident Benefits. We recognize the benefits in Ontario differ than the Care-First benefit however, we consider the split in Ontario to be a reasonable starting point. Below, we present our loss cost estimates for earner disability income and total disability income from our May 17, 2025 Accident Benefits Reform Costing Report.
- |                                    |       |  |
|------------------------------------|-------|--|
| Earner Disability Income Loss Cost | 53.81 |  |
| Total Disability Income Loss Cost  | 63.07 |  |
| Ratio                              | 85%   |  |
| Selected                           | 85%   |  |
- As a reasonability check on our assumptions, we consider the following implications and comparisons:
- |  |         |                             |
|--|---------|-----------------------------|
| Implied Care-First Non earner Frequency (per 1,000 vehicles)   | 0.90    | B. * C.4.                   |
| Implied Care-First Non-Earner Loss Cost  | 40.29   | D.* (1 - E.)                |
| Implied Care-First Non-Earner Severity   | 44,693  | Freq * 1000 * Severity      |
| Current Product - Earner Severity  | 30,320  |                             |
| Higher Earner Severity   | 293,332 | J.                          |
| Higher Earner Frequency  | 0.21    | A. * C.4.                   |
| Proportion of Income Replacement & Other Monetary Benefits Loss Cost for individuals with income > \$130,2 | 23%     | Freq * 1000 * Severity / D. |
- Reasonability check on implication: The 14% highest earners make up 23% of disability income costs
- O. Individuals will only be eligible to sue for the portion of income above the Care-First limits.
- Q. Our selection considers situations where an individual purchases top-up coverage that is insufficient to cover their entire gross income. We assume in these situations, these individuals would be eligible to sue for the amount of income above the top-up limit.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Costs Excess of Care-First Personal Care Assistance Limits  
Data as of 12/31/2024**

	(1)	(2)	
A.	Health care and Related Expenses Final Selected Claimant Frequency	11.2	Exhibit CF-10.1
B.	Proportion of Health care and Related Expenses claims involving personal care assistance	25%	See Note
C.1	Personal Care Assistance Benefit Limit (Non-Catastrophic)	5,671 per month	Intentions Paper
C.2	Personal Care Assistance Benefit Limit (Catastrophic)	6,781 per month	
D.	Personal Care Assistance Severity Relativity for Events Causing Out-of-Pocket Expenses	3.0	See Note
E.	Percent of Personal Care Assistance Claims Requiring Around the Clock Care	0.041%	See Note
F.	Frequency of Personal Care Assistance Claims Requiring Around the Clock Care	0.00116	A. * B. * E.
G.	Monthly Benefit of Personal Care Assistance Claims Requiring Around the Clock Care	20,343	C.2 * D.
H.	Average Number of Months Requiring Around the Clock Personal Care Assistance	120	Selected
J.	BI Loss Cost: Excess Out-of-Pocket Expenses for Personal Care Assistance	1.89	F. * (G. - C.2) * H. / 1000

Notes

- B. Selected conservatively
- D. We assume the Care-First benefit covers care for 8 hours per day.  
To be conservative, we assume any claimant who would need more than 8 hours per day would require 24-hour care.
- E. In the 2026 MPI GRA, Part XI - EAR Appendix 2 presents historical claims by injury type.  
We assume injuries involving amputation, quadriplegic, and paraplegic would require attendant care beyond the Care-First limits.

Injury Type	Total Injury Counts from 14/15 to 24/25
<b>Amputation</b>	<b>46</b>
Burns	114
Dental	365
Internal Injury	157
Psychological	1,714
Sensory Loss	458
Fatal - Note 1	1,280
Brain Damage	1,546
<b>Quadriplegic</b>	<b>5</b>
<b>Paraplegic</b>	<b>14</b>
Broken Bones	8,305
Sprains & Strains	73,284
Whiplash	51,913
Bruising & Lacerations	9,635
Other	8,526
<b>Total</b>	<b>157,362</b>

- H. Selected conservatively

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Costs Excess of Care-First Funeral Limits  
Data as of 12/31/2024**

	(1)	(2)	
A.	Death Benefits and Related Expenses Final Selected Claimant Frequency	0.13	Exhibit CF-10.1
B.	Percent of Funerals with Costs Above Care-First Limit	40%	See Note
C.	Estimated Average Total Cost for Funerals that Exceed Care-First Limit	17,500	See Note
D.	Care-First Funeral Limit	10,308	Intentions Paper
E.	Average Excess Funeral Costs	7,192	C. - D.
F.	BI Loss Costs: Excess Out-of-Pocket Expenses for Funerals	0.36	A. * B. * E. / 1000

Notes:

- B., C. Selected conservatively after reviewing  
<https://canadianfunerals.com/funeral-guide/alberta/>  
<https://www.canadianlic.com/blog/how-much-does-a-funeral-cost-in-canada/>  
<https://www.calgaryfuneralhomes.com/prices.html> (accessed 8 January 2026)

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Costs Excess of Care-First Grief Counseling Limits  
Data as of 12/31/2024**

	(1)	(2)	
A.	Death Benefits and Related Expenses Final Selected Claimant Frequency	0.13	Exhibit CF-10.1
B.	Percent of Claims with Grief Counseling Costs Above Care-First Limit	10%	See Note
C.	Estimated Average Total Cost for Grief Counseling that Exceeds Care-First Limit	5,000	See Note
D.	Care-First Grief Counseling Limit	4,310	Intentions Paper
E.	Average Excess Grief Counseling Costs	690	C. - D.
F.	BI Loss Cost: Excess Out-of-Pocket Expenses for Grief Counseling Limits	0.01	A. * B. * E. / 1000

Notes:

- B., C. Selected conservatively after reviewing  
<https://www.bark.com/en/us/bereavement-counselling/how-much-does-grief-counseling-cost/> (Accessed 8 January 2026)



Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Costs Excess of Care-First Family Enterprise Limits**  
**Data as of 12/31/2024**

	(1)	(2)	
A. Income Replacement & Other Monetary Benefits Final Selected Claimant Frequency		2.4	Exhibit CF-10.1
B. Proportion of Income Replacement & Other Monetary Benefits claims involving Family Enterprise		7.5%	See Note
C. Family Enterprise Benefit Limit		\$944 per week for 180 days	Intentions Paper
D. Scenarios for tort claims	Scenario Distribution	Rate	Duration (weeks)
Costs covered by Care-First	80.0%	944	25.7
Only need help for < 180 days, but must hire for more than \$944 per week	6.7%	1,500	25.7
Need help for > 180 days but can hire for less than \$944 per week	6.7%	944	52.0
Need help for > 180 days and must hire for more than \$944 per week	6.7%	1,500	52.0
	100.0%		6,189
E. BI Loss Cost: Excess of Care-First Family Enterprise Limits		1.13	A. * B. * D. / 1000

Notes:

- B. Provides coverage when a claimant was working in a family business, without pay, but now needs to hire a replacement, this benefit will provide compensation.  
We assume that this would generally involve an individual between ages 15 and 24  
Selected conservatively after reviewing  
Table 17-10-0005-01 Population estimates on July 1, by age and gender (<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501>, accessed 9 January 2026)
- | Age              | Count     | Distribution |
|------------------|-----------|--------------|
| 15 to 19         | 307,410   | 6.1%         |
| 20 to 24         | 324,827   | 6.5%         |
| Total Population | 5,029,346 |              |
- D. Scenario Distribution, Rate and Duration selected conservatively  
Rate Considers Alberta Industrial Average Wage of 1,369

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury - Selected Loss Cost  
Data as of 12/31/2024**

(1)	(2)	(3)
Basis of Tort Claim	Loss Cost per Vehicle	Reference
Out of Province Claims	20.37	Exhibit CF-1.1.2
Excess Disability Income	3.91	Exhibit CF-1.5.2
Excess Out-of-Pocket Expenses for Personal Care Assistance	1.89	Exhibit CF-1.6
Excess Out-of-Pocket Expenses for Funerals	0.36	Exhibit CF-1.7
Excess Out-of-Pocket Expenses for Grief Counseling Limits	0.01	Exhibit CF-1.8
Excess of Care-First Family Enterprise Limits	1.13	Exhibit CF-1.9
Total Bodily Injury Loss Cost	27.66	
Selected Bodily Injury Loss Cost	35.00	

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Indicated Top-Up Loss Costs  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)
Endorsement	Top-Up Limit	Loss Cost per Vehicle	Increased Limit Factor	Top-Up Loss Cost	Reference
Earners Disability Income		228.29			Exhibit CF-1.5.2
	\$150,000 Gross Income Cap	523.57	2.29	295.28	See Note
	\$200,000 Gross Income Cap	661.83	2.90	433.54	See Note
	\$250,000 Gross Income Cap	824.48	3.61	596.19	See Note
	\$300,000 Gross Income Cap	975.90	4.27	747.61	See Note
	\$400,000 Gross Income Cap	1,175.67	5.15	947.38	See Note
Personal Care Assistance	\$20,343 per month			1.89	Exhibit CF-1.10
Funerals	\$17,500			0.36	Exhibit CF-1.10
Grief Counseling Limits	\$5,000			0.01	Exhibit CF-1.10
Family-Enterprise	TBD pending endorsement			75.10	Exhibit CF-1.9

Notes  
(5)

For Earners Disability Income: (3) per Exhibit CF-1.5.2, Base Loss Cost \* (4); (4) per Exhibit CF-1.4.1; (5) per (3)  
Family enterprise top-up loss cost reflects informed choice model. Informed choice multiplier is based on Exhibit CF-1.9 items B. and

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	GISA Report AUTO7001	Based on Oliver Wyman Analysis/Assumption underlying 2025 Annual Review				(5) + (6)	Based on Oliver Wyman Analysis/Assumption underlying 2025 Annual Review		(8) + (9)	(3) / (2) * 1000	(4) / (2) * 1000	(7) / (2) * 1000	(10) / (2) * 1000
		Alberta Ultimate Claim Counts								Alberta Frequency (per 1,000 Vehicles)			
Accident Year	Earned Vehicles	Medical Expenses	Income Replacement	Death Benefits	Funeral	Funeral and Death Benefits	Excess	Uninsured	Excess and Uninsured	Medical Expenses	Income Replacement	Funeral and Death Benefits	Excess and Uninsured
2015	2,649,234	26,638	2,849	97	166	263	0	17	17	10.1	1.1	0.1	0.0
2016	2,677,477	26,519	2,821	102	164	266	2	11	13	9.9	1.1	0.1	0.0
2017	2,695,016	27,895	3,072	81	136	217	0	7	7	10.4	1.1	0.1	0.0
2018	2,750,311	28,227	3,063	88	157	245	2	13	15	10.3	1.1	0.1	0.0
2019	2,782,955	28,657	3,147	73	129	202	2	8	10	10.3	1.1	0.1	0.0
2020	2,780,403	18,771	2,254	64	109	173	2	8	10	6.8	0.8	0.1	0.0
2021	2,807,642	21,482	2,829	77	127	204	0	7	7	7.7	1.0	0.1	0.0
2022	2,834,558	25,156	3,259	65	140	205	0	12	12	8.9	1.1	0.1	0.0
2023	2,895,587	26,076	3,412	67	131	198	2	2	4	9.0	1.2	0.1	0.0
2024	2,993,746	29,285	3,932	64	131	195	23	7	29	9.8	1.3	0.1	0.0

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Medical Expenses - Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Exhibit CF-2.1			Oliver Wyman 2025 Annual Review				(2) * (6) * (7) * (8)	Selected	MPI 2026 GRA Appendix 2a Table 1
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2/Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights	Manitoba Ultimate Accident Benefits - Other (Indexed) Frequency (per 1000 Vehicles)
2015	10.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	9.52	0%	13.59
2016	9.9	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	9.38	0%	13.66
2017	10.4	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	9.80	0%	13.60
2018	10.3	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	9.72	0%	12.96
2019	10.3	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	9.75	0%	11.57
2020	6.8	0.0%	0.0%	10/29/2020	1.000	1.413	0.947	9.04	20%	8.26
2021	7.7	0.0%	0.0%	10/29/2020	1.000	1.417	0.947	10.27	20%	8.69
2022	8.9	0.0%	0.0%	10/29/2020	1.000	1.146	0.947	9.63	20%	8.54
2023	9.0	0.0%	0.0%	10/29/2020	1.000	1.056	0.947	9.01	20%	8.21
2024	9.8	0.0%	0.0%	10/29/2020	1.000	1.056	0.947	9.78	20%	9.82
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								9.55	Sum [ (9) x (10) ]	

Accident Benefits Medical Expenses - Tort to No-Fault Frequency Adjustment Factor

	Alberta	Manitoba
A	Unadjusted Frequency (per 1,000 Vehicles) 8.4 Sum [ (2) x (10) ]	8.7 Sum [ (10) x (11) ]
B	ICBC Claimant/Claim Factor 1.25 Exhibit CF-10.1	
C	Claimant Frequency (per 1,000 Vehicles) 10.5 A * B	8.7 A * B
D	Average Reported Collisions per 10,000 Drivers (per Collision Statistics Report) 2019 - 2022 338.6 See Note	529.5 See Note
E	Accident Benefits : Collision Ratio 3.1% A * B / D.	1.6% A. / D.
F	Indicated Torr(Alberta) : No-Fault (Manitoba) Frequency Adjustment Factor Collision Adjusted 0.531 E., Manitoba / E., Alberta Unadjusted 0.831 C., Manitoba / C., Alberta	

Notes

- (7) Factor to adjust to pre-pandemic frequency levels  
(8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels  
B GISA captures Alberta data by claim. See Chapter 4 of the GISA Statistical Plan at "<https://gisassp.com/assets/data/GISASSPDocuments/AutomobileStatisticalPlanDataReportingRequirements-en.pdf>"  
MPI reports data by claimant.  
D Alberta :  
<https://open.alberta.ca/dataset/25020446-adfb-4b57-9aaa-751d13dab72d/resource/3c0e3c0c-a3f4-4fd8-8e37-f71b99d3fc1b/download/tec-alberta-collision-statistics-2023.pdf>  
Alberta data includes "A vehicle collision, which resulted in death, injury or property damage greater than \$5,000.00." (See pdf 9/73)  
  
Manitoba - <https://www.mpi.mb.ca/wp-content/uploads/TCSR2022.pdf>  
Prior to a change in the Highway Traffic Account (which took effect in October of 2011), motor vehicle collisions resulting in a fatality, injury or property damage in excess of \$1,000 were required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completed a Traffic Accident Report for the collision.  
Amendments to the Highway Traffic Act (which received Royal Assent in June 2011 and took effect in October of 2011) changed the definition of a reportable collision to require a police report be made if the driver is aware, has reason to believe, or is later made aware, that a collision involves: a fatality; an injury requiring admittance to hospital for observation or treatment; another driver not having a valid driver's licence; another vehicle not validly registered; the driver of another vehicle not providing the required particulars; the driver of another vehicle not stopping at the scene of the accident; or, alcohol or another intoxicating substance as a factor in the accident.  
As of October 2011, all accidents occurring on a public roadway where the above conditions are not met are reported through the claim registration process with Manitoba Public Insurance.  
As of 2012 and consistent with other jurisdictions in Canada, it is a requirement that a minimum of **\$2,000 damage (all vehicles combined) is necessary for property damage only (PDO) collisions** to be included in this report.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Income Replacement - Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Exhibit CF-2.1			Oliver Wyman 2025 Annual Review				(2) * (6) * (7) * (8)	Selected	MPI 2026 GRA Appendix 2a Table 1
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2/Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights	Manitoba Ultimate Accident Benefits - Weekly Indemnity Frequency (per 1000 Vehicles)
2015	1.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	1.02	0%	2.09
2016	1.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	1.00	0%	2.11
2017	1.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	1.08	0%	2.19
2018	1.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	1.05	0%	2.17
2019	1.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	1.07	0%	2.02
2020	0.8	0.0%	0.0%	10/29/2020	1.000	1.413	0.947	1.09	20%	1.57
2021	1.0	0.0%	0.0%	10/29/2020	1.000	1.417	0.947	1.35	20%	1.77
2022	1.1	0.0%	0.0%	10/29/2020	1.000	1.146	0.947	1.25	20%	1.78
2023	1.2	0.0%	0.0%	10/29/2020	1.000	1.056	0.947	1.18	20%	1.72
2024	1.3	0.0%	0.0%	10/29/2020	1.000	1.056	0.947	1.31	20%	1.84
A. Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								1.24		
								Sum [ (9) x (10) ]		

Accident Benefits Income Replacement - Tort to No-Fault Frequency Adjustment Factor

	Alberta	Manitoba
A Unadjusted Frequency (per 1,000 Vehicles)	1.1 Sum [ (2) x (10) ]	1.7 Sum [ (10) x (11) ]
B ICBC Claimant/Claim Factor	1.12 Exhibit CF-10.1	
C.1 Claimant Frequency (per 1,000 Vehicles)	1.2 A * B	1.7 A * B
C.2 Second Payer Adjustment		64.1% per Exhibit CF-5.2 (8)
C.3 Second Payer Claimant Frequency (per 1,000 Vehicles)		1.1 C.1 * C.2
D Average Reported Collisions per 10,000 Drivers (per Collision Statistics Report) 2019 - 2022	338.6 See Note	529.5 See Note
E Accident Benefits : Collision Ratio	0.362% A. * B / D.	0.328% A. / D.
F Indicated Torr(Alberta) : No-Fault (Manitoba) Frequency Adjustment Factor		
Collision Adjusted	0.906 E., Manitoba / E., Alberta	
Unadjusted (Raw)	1.417 C.1., Manitoba / C.1., Alberta	
Adjusted Second Payer	0.909 C.3., Manitoba / C.3., Alberta	

Notes

- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels
- B GISA captures Alberta data by claim.  
See Chapter 4 of the GISA Statistical Plan at <https://gisassp.com/assets/data/GISASSPDocuments/AutomobileStatisticalPlanDataReportingRequirements-en.pdf>  
MPI reports data by claimant.
- D Alberta - <https://open.alberta.ca/dataset/25020446-adfb-4b57-9aaa-751d13dab72d/resource/3c0e3c0c-a3f4-4fd8-8e37-f71b99d3fc1b/download/tec-alberta-collision-statistics-2023.pdf>  
**Alberta data includes "A vehicle collision, which resulted in death, injury or property damage greater than \$5,000.00." (See pdf 9/73)**
- Manitoba - <https://www.mpi.mb.ca/wp-content/uploads/TCSR2022.pdf>  
Prior to a change in the Highway Traffic Account (which took effect in October of 2011), motor vehicle collisions resulting in a fatality, injury or property damage in excess of \$1,000 were Amendments to the Highway Traffic Act (which received Royal Assent in June 2011 and took effect in October of 2011) changed the definition of a reportable collision to require a police As of October 2011, all accidents occurring on a public roadway where the above conditions are not met are reported through the claim registration process with Manitoba Public As of 2012 and consistent with other jurisdictions in Canada, it is a requirement that a minimum of **\$2,000 damage (all vehicles combined) is necessary for property damage only (PDO)**

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Funeral and Death Benefits - Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Exhibit CF-2.1			Oliver Wyman 2025 Annual Review				(2) * (6) * (7) * (8)	Selected	MPI 2026 GRA Appendix 2a Table 1
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2 Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights	Manitoba Ultimate Accident Benefits - Other (Non- Indexed) Frequency (per 1000 Vehicles)
2015	0.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.09	0%	1.44
2016	0.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.09	0%	1.53
2017	0.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.08	0%	1.48
2018	0.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.08	0%	1.30
2019	0.1	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.07	0%	1.19
2020	0.1	0.0%	0.0%	10/29/2020	1.000	1.413	0.947	0.08	20%	1.06
2021	0.1	0.0%	0.0%	10/29/2020	1.000	1.417	0.947	0.10	20%	1.02
2022	0.1	0.0%	0.0%	10/29/2020	1.000	1.146	0.947	0.08	20%	0.94
2023	0.1	0.0%	0.0%	10/29/2020	1.000	1.056	0.947	0.07	20%	1.08
2024	0.1	0.0%	0.0%	10/29/2020	1.000	1.056	0.947	0.07	20%	1.33
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								0.08	Sum [ (9) x (10) ]	

Accident Benefits Funeral and Death Benefits - Tort to No-Fault Frequency Adjustment Factor

		Alberta		Manitoba (P/I + F/D)	
A	Unadjusted Frequency (per 1,000 Vehicles)	0.07	Sum [ (2) x (10) ]	1.09	Sum [ (10) x (11) ]
B	ICBC Claimant/Claim Factor	1.60	Exhibit CF-10.1		
C	Selected (P/I + F/D) Frequency : F/D Frequency Factor			10.00	Exhibit CF-3
D	F/D Claimant Frequency (per 1,000 Vehicles)	0.11		0.11	
E	Average Reported Collisions per 10,000 Drivers (per Collision Statistics Report) 2019 - 2022	338.6	See Note	529.5	See Note
F	Accident Benefits : Collision Ratio	0.032%	A. * B / E.	0.021%	( A. / C ) / E.
G	Indicated Torr(Alberta) : No-Fault (Manitoba) Frequency Adjustment Factor				
	Collision Adjusted	0.640	F., Manitoba / F., Alberta		
	Unadjusted	1.000	D., Manitoba / D., Alberta		

Notes

- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels
- B GISA captures Alberta data by claim. See Chapter 4 of the GISA Statistical Plan at <https://gisassp.com/assets/data/GISASSPDocuments/AutomobileStatisticalPlanDataReportingRequirements.pdf> MPI reports data by claimant.
- E Alberta - <https://open.alberta.ca/dataset/25020446-adfb-4b57-9aaa-751d13dab72d/resource/3c0e3c0c-a3f4-4fd8-8e37-f71b99d3fc1b/download/tec-alberta-collision-statistics-2023.pdf>  
Alberta data includes "A vehicle collision, which resulted in death, injury or property damage greater than \$5,000.00." (See pdf 9/73)
- Manitoba - <https://www.mpi.mb.ca/wp-content/uploads/TCSR2022.pdf>
- Prior to a change in the Highway Traffic Account (which took effect in October of 2011), motor vehicle collisions resulting in a fatality, injury or property damage in excess of \$1,000 were Amendments to the Highway Traffic Act (which received Royal Assent in June 2011 and took effect in October of 2011) changed the definition of a reportable collision to require a police As of October 2011, all accidents occurring on a public roadway where the above conditions are not met are reported through the claim registration process with Manitoba Public As of 2012 and consistent with other jurisdictions in Canada, it is a requirement that a minimum of \$2,000 damage (all vehicles combined) is necessary for property damage only

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Excess and Uninsured - Frequency  
Data as of 12/31/2024

(1)	(2) Exhibit CF-2.1	(3)	(4)	(5) Oliver Wyman 2025 Annual Review	(6)	(7)	(8)	(9) (2) * (6) * (7) * (8)	(10) Selected
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2 Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	0.0	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.006	0%
2016	0.0	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.005	0%
2017	0.0	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.003	0%
2018	0.0	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.005	0%
2019	0.0	0.0%	0.0%	10/29/2020	1.000	1.000	0.947	0.003	0%
2020	0.0	0.0%	0.0%	10/29/2020	1.000	1.413	0.947	0.005	20%
2021	0.0	0.0%	0.0%	10/29/2020	1.000	1.417	0.947	0.004	20%
2022	0.0	0.0%	0.0%	10/29/2020	1.000	1.146	0.947	0.004	20%
2023	0.0	0.0%	0.0%	10/29/2020	1.000	1.056	0.947	0.001	20%
2024	0.0	0.0%	0.0%	10/29/2020	1.000	1.056	0.947	0.010	20%
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								0.005	
Sum [ (9) x (10) ]									

Notes

- (7) Factor to adjust to pre-pandemic frequency levels  
(8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels



Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

ICBC Tort to No-Fault Frequency Adjustment Factor

(1)	(2) Appendix C.1	(3) (2) / (2) BVDC	(4)	(5) Appendix C.0.1	(6) (5) / (5) BVDC	(7) $(5) / ((2) * (1 + (4))^{.2})$	(8) (6) / (3)
Coverage	ICBC 2021 RRA Frequency	Percent of BVDC	2021 RRA Frequency Trend	ICBC 2023 RRA Frequency	Percent of BVDC	Raw Frequency Adjustment Factor	Percent of BVDC Adjustment Factor
Medical Expenses	2.02%	54%	+0.0%	1.65%	45%	0.817	0.831
Income Replacement	0.13%	3%	+0.0%	0.25%	7%	1.923	1.957
Funeral and Death Benefits				0.02%	1%		
Permanent Impairment				0.17%	5%		
Permanent Impairment and Death Benefits	0.19%	5%	+0.0%	0.19%	5%	1.000	1.018
Normalizing Coverage: Basic Vehicle Damage Coverage (BVDC)	3.76%			3.69%			

**Notes:**

- (2) 2021 RRA assumptions are based on tort frequency; 2023 RRA based on no-fault frequency  
For medical expenses, we remove the additional EAB claimants adjustment from the frequency forecast.  
For income replacement, we remove the relative frequency adjustment from the frequency forecast.
- (7) & (8) Medical Expenses - reduction in frequency with the elimination of pain and suffering award via tort.  
Income Replacement - more generous benefits under Enhanced Accident Benefits and more groups are eligible for income replacement benefits.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Tort to No-Fault Frequency Adjustment Factor**

(1)	(2) Exhibit CF-2.2 - Exhibit CF-2.4	(3) Exhibit CF-2.2 - Exhibit CF-2.4	(4) Exhibit CF-2.6	(5) Exhibit CF-2.6	(6) See Note	(7)
Coverage	Indicated Frequency Adjustment Factor					Selected
	MPI Collision Adjusted	MPI Unadjusted	ICBC: Raw Frequency	ICBC: Percent of BVDC	SIGI (Whiplash)	
Health care and Related Expenses	0.531	0.831	0.817	0.831	0.72	0.90
Income Replacement & Other Monetary Benefits Second Payer Adjusted	0.906	1.417 0.909	1.923	1.957		1.75
Death Benefits and Related Expenses	0.640	1.000	1.000	1.018		1.00
Bias	<b>Low</b>					
Notes						
(6)	Effect of Eliminating Compensation for Pain and Suffering on the Outcome of Insurance Claims for Whiplash Injury (Cassidy et al. (2000)) <a href="https://pubmed.ncbi.nlm.nih.gov/10770984/">https://pubmed.ncbi.nlm.nih.gov/10770984/</a>					
(7)	Medical Expenses: Comparison of MPI vs Current Alberta, pre- and post- reform ICBC, and in the Cassidy et al. (2000) study all point to a reduction in frequency with the elimination of pain and suffering award via tort. Disability Income: Care-First's more generous benefits comparable to MPI and ICBC and more eligible groups expected to increase frequency Differences from MPI likely due to first-payer (MB) v second payer (current Alberta), which we expect will largely persist under Care-First (second-payer). Additionally, in the 2021 RRA, ICBC estimated the effect due to additional classes will increase frequency by 69.6%. Therefore, we selected principally based on the ICBC-based indications, with consideration to the initial ICBC expected increase.					

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits: Funeral and Death v. Permanent Impairment  
Data as of 12/31/2024

(1)	(2) Exhibit CF-2.1	(3) GISA Report AUTO7001	(4) (2) / (3) * 1000	(5) Exhibit CF-10.1	(6) (4) * (5)	(7) MPI 2026 GRA	(8) (7) / (6)
	Alberta					Manitoba	
Accident Year	Death Benefits + Funeral Claim Counts	Earned Cars	Death Benefits + Funeral Frequency (per 1,000 Vehicles)	ICBC Claimant/Claim Factor	Death Benefits + Funeral Claimant Frequency (per 1,000 Vehicles)	Permanent Impairment + Death Benefits + Funeral Frequency (per 1,000 Vehicles)	(P/I + F/D) Frequency : F/D Frequency
2015	263	2,649,234	0.10	1.60	0.159		
2016	266	2,677,477	0.10	1.60	0.159	1.527	9.622
2017	217	2,695,016	0.08	1.60	0.129	1.475	11.471
2018	245	2,750,311	0.09	1.60	0.142	1.297	9.114
2019	202	2,782,955	0.07	1.60	0.116	1.191	10.271
2020	173	2,780,403	0.06	1.60	0.099	1.064	10.707
2021	204	2,807,642	0.07	1.60	0.116	1.024	8.822
2022	205	2,834,558	0.07	1.60	0.115	0.942	8.170
2023	198	2,895,587	0.07	1.60	0.109	1.081	9.876
2024	195	2,993,746	0.07	1.60	0.104	1.334	12.803

A. Ratios based on MB and AB Data

Average	
Pre-Pandemic (2016 - 2019)	10.119
In-Pandemic (2020 - 2022)	9.233
Post-Pandemic (Excl. 2024)	9.876

B. Ratios based on ICBC 2023 RRA

PY 2023 Rates summarized on Appendix C.0.1	
ICBC Permanent Impairment Frequency (Catastrophe Claims Only)	0.17%
ICBC Funeral & Death Benefit Frequency	0.02%
ICBC (P/I + F/D) Frequency : F/D Frequency	9.500

C. Selected (P/I + F/D) Frequency : F/D Frequency Factor 10.000

D. Selected Accident Benefits Death Benefits Frequency 0.08  
Exhibit CF-2.4

E. Selected Permanent Impairment Frequency 0.71  
(C - 1) \* D

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Manitoba Severity at 2028 Cost Level

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	MPI 2026 GRA Part VII Claims Forecasting Appendix 3			EXP[(4) + (3) * (-2.25)]	MPI 2026 GRA Part VIII RI Appendix 2 Table 2 Column [7] / Column [6]	(5) * (6)
	Appendix 3a Table 5	Appendix 3b Table 5	Appendix 3c Table 5			
Coverage	Starting Period for Model	Time Coefficient	Intercept	Fitted Value at 1/1/2028 Cost Level	Factor for Indexation	Fitted Value at 1/1/2028 Cost Level
Accident Benefits Weekly Indemnity	2012	(0.026)	10.916	58,431	1.313	76,701
Accident Benefits - Other (Indexed)	2012	(0.038)	8.913	8,098	1.178	9,543
Accident Benefits - Other (Non-Indexed)	2012	(0.025)	10.365	33,572	1.000	33,572
			Funeral and Death Benefits	70,873	1.000	70,873
			Permanent Impairment	29,183	1.000	29,183
			(5)AB-ONI * (9)			
Permanent Impairment / Funeral and Death Benefits Severity Relativity						
(6)	(7)	(8)	(9)			
	ICBC Frequency Exhibit CF-2.6	ICBC Severity 2023 RRA, Appendix C.0.2	Severity Relativity (8) / (8) Total			
Funeral and Death Benefits	0.020%	61,940	2.111			
Permanent Impairment	0.170%	25,505	0.869			
Total	0.190%	29,340	1.000			

Notes

Period Type	Period	Midpoint (Average Accident Date)
Accident Year	4/1/2025-3/31/2026	10/1/2025
Policy Year	2027	1/1/2028
	Offset	(2.250)

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Income Replacement Second Payer Adjustment (Severity)  
Data as of 12/31/2024  
Alberta Tax Assumptions

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Exhibit CF-1.3.1	Exhibit CF-1.3.1	Exhibit CF-1.3.1	See Note	Exhibit CF-1.3.1	Exhibit CF-1.3.1	Exhibit CF-1.3.1	Exhibit CF-1.3.1	(7) + (8)	(4) - (5) - (6) - (9)	(4) / 52	(10) / 52
Gross Income Level	Gross Income Level Adjusted to 2028	Percent in Level	Mid Point of Interval	CPP Contribution	EI Premium	Provincial Income Tax	Federal Income Tax	Income Tax	Average Net Income	Average Gross Weekly Income	Average Net Weekly Income
			Rate	5.95%	4.00%	1.61%	8.00%	10.00%	12.00%	13.00%	
			Income Limit Adjusted 2028	77,582	88,398	68,330	63,131	159,126	190,951	254,600	
			Exhibit CF-1.3.1								
			Basic Exemption Adjusted to 2028	3,500	77,582		23,427	63,131	159,126	190,951	
			Exhibit CF-1.3.1								
0 to 5,000	0 to 5,488	11.0%	2,744	0	0	44	0	0	0	0	0
5,000 to 10,000	5,488 to 10,976	6.1%	8,232	282	0	133	0	0	0	0	0
10,000 to 20,000	10,976 to 21,951	10.7%	16,463	771	0	265	0	0	0	0	0
20,000 to 30,000	21,951 to 32,927	8.4%	27,439	1,424	0	442	321	0	0	0	0
30,000 to 40,000	32,927 to 43,902	7.9%	38,414	2,077	0	618	1,199	0	0	0	0
40,000 to 50,000	43,902 to 54,878	7.9%	49,390	2,730	0	795	2,077	0	0	0	0
50,000 to 60,000	54,878 to 65,853	7.6%	60,365	3,383	0	972	2,955	0	0	0	0
60,000 to 80,000	65,853 to 87,804	12.5%	76,829	4,363	0	1,100	3,176	1,370	0	0	0
80,000 to 100,000	87,804 to 109,755	9.1%	98,780	4,408	433	1,100	3,176	3,565	0	0	0
over 100,000	over 109,755	19.0%	178,200	4,408	433	1,100	3,176	9,600	2,289	0	0
Total		100.0%	68,708								
100,000 to 125,000	109,755 to 127,618	4.9%	118,686	4,408	433	1,100	3,176	5,556	0	0	0
over 125,000	over 127,618	14.1%	198,595	4,408	433	1,100	3,176	9,600	3,819	994	0
A. Maximum Eligible Income Adjusted to 2028			127,618	4,408	433	1,100	3,176	6,449	0	0	0
			Exhibit CF-1.3.1								

Notes

- (4) Mid-point for over 100,000 level based on average income of \$68,707.  
A. \$125,000 indexed for inflation to 2028

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Income Replacement Second Payer Adjustment (Severity)  
Data as of 12/31/2024  
Manitoba Tax Assumptions

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		Exhibit CF-1.3.1	See Note	See Note	See Note	See Note	See Note	(7) + (8)	(4) - (5) - (6) - (9)	(4) / 52	(10) / 52
Gross Income Level	Gross Income Level Adjusted to 2028	Percent in Level	Mid Point of Interval	CPP Contribution	El Premium	Provincial Income Tax	Federal Income Tax	Income Tax	Average Net Income	Average Gross Weekly Income	Average Net Weekly Income
			Rate	5.95% 4.00%	1.61%	10.80% 12.75% 17.40%	14.00% 20.50% 26.00%				
			Income Limit Adjusted 2028	76,109 86,677	70,138	47,000 100,000 999,999	60,841 121,683 188,629				
			Basic Exemption Adjusted to 2028	3,500 76,109		15,780 47,000 100,000	17,685 60,841 121,683				
0 to 5,000	0 to 5,488	10.9%	2,744	0 0	44	0 0 0	0 0 0	0	2,700	53	52
5,000 to 10,000	5,488 to 10,976	6.6%	8,232	282 0	133	0 0 0	0 0 0	0	7,818	158	150
10,000 to 20,000	10,976 to 21,951	11.0%	16,463	771 0	265	74 0 0	0 0 0	74	15,353	317	295
20,000 to 30,000	21,951 to 32,927	10.0%	27,439	1,424 0	442	1,259 0 0	1,366 0 0	2,625	22,948	528	441
30,000 to 40,000	32,927 to 43,902	9.8%	38,414	2,077 0	618	2,445 0 0	2,902 0 0	5,347	30,372	739	584
40,000 to 50,000	43,902 to 54,878	11.2%	49,390	2,730 0	795	3,372 305 0	4,439 0 0	8,115	37,749	950	726
50,000 to 60,000	54,878 to 65,853	7.6%	60,365	3,383 0	972	3,372 1,704 0	5,975 0 0	11,051	44,959	1,161	865
60,000 to 80,000	65,853 to 87,804	13.0%	76,829	4,320 29	1,129	3,372 3,803 0	6,042 3,277 0	16,494	54,856	1,477	1,055
80,000 to 100,000	87,804 to 109,755	8.5%	98,780	4,320 423	1,129	3,372 6,602 0	6,042 7,777 0	23,793	69,115	1,900	1,329
over 100,000	over 109,756	11.5%	165,625	4,320 423	1,129	3,372 6,758 11,419	6,042 12,472 11,425	51,487	108,266	3,185	2,082
Total		100.0%	56,655						40,831	1,090	785
A.. Manitoba Maximum Eligible Income Adjusted to 2028			122,684	4,320 423	1,129	3,372 6,758 3,947	6,042 12,472 260	32,851	83,961	2,359	1,615

Note

(4) Mid-point for over 100,000 level based on average income of \$56,657.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Income Replacement Second Payer Adjustment (Severity)  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Exhibit CF-5.1.1	Exhibit CF-5.1.1	Exhibit CF-5.1.1	A.1 * (4)	A.3 * MIN((4) , A.4 / 52)	MAX((6) - (5),0)
					No Group Disability Plan	With Group Disability Plan
Gross Income Level Adjusted to 2028	Percent in Level	Average Gross Weekly Income	Average Net Weekly Income	Weekly Benefits from Collateral Source (Long-Term Disability) Plan	Weekly Indemnity Benefit	Weekly Indemnity Benefit after Group Disability Plan Payments
0 to 5,488	11.0%	53	52	31	47	16
5,488 to 10,976	6.1%	158	150	90	135	45
10,976 to 21,951	10.7%	317	297	178	267	89
21,951 to 32,927	8.4%	528	458	275	412	137
32,927 to 43,902	7.9%	739	606	364	546	182
43,902 to 54,878	7.9%	950	755	453	679	226
54,878 to 65,853	7.6%	1,161	904	542	813	271
65,853 to 87,804	12.5%	1,477	1,104	662	993	331
87,804 to 109,755	9.1%	1,900	1,388	833	1,249	416
109,755 to 127,618	4.9%	2,282	1,654	992	1,489	496
over 127,618	14.1%	3,819	2,677	1,606	1,590	0
Total	100.0%	1,321	982	589	769	182

A.1 Percentage of net income long term disability covers 60% Selected based on Government of Canada website (long-term disability)  
A.2 Percentage of disability plans where Auto policy will be 1st payer  
A.2.1 ICBC 2021 RRA Assumption (Based on judgment) 50% See Note  
A.2.2 Selected Percentage of disability plans where Auto policy will be 1st payer 50% Current AB auto policy is 2nd payer  
A.3 Percentage of net income covered by plan benefits 90% Care-First benefits  
A.4 Maximum Net Income covered by plan benefits 91,867 Exhibit CF-5.1.1

Table: 14-10-0287-03 (September, 2024)					CHLIA	
Population	Labour Force (Unemployed + Employed)	Not in labor force (Population - Labour Force)	Labour Force: Unemployed	Labour Force: Total Employed	No Disability Plan (Employed - Disability Plan)	Disability Plan
3,956.20	2,716.20	1,240.00	206.20	2,510.10	710.10	1,800.00
B.1 Employed Population (September, 2024)			2,510	Table: 14-10-0287-03		
B.2 Number of Individuals with Disability Plan			1,800	CLHIA 2024 Provincial Data Appendix ( <a href="https://www.clhia.ca/facts">https://www.clhia.ca/facts</a> )		
B.3 Percent of Employed Individuals with Disability Plan			71.7%	B.2 / B.1		
C.1 Employed Population (September, 2025)			2,606	Table: 14-10-0287-03		
C.2 Total Population (September 2025)			4,077	Table: 14-10-0287-03		
C.3 Employment Rate			63.9%	C.1 / C.2		

	(8)	(9)
	Proportion of Employed Claimants	Severity Net of Collateral Benefits
Employed Claimants without Group Disability Plan	28.3%	769
Employed Claimants with Group Disability Plan, Auto Ins. is 1st payer	35.9%	769
Employed Claimants with Group Disability Plan, Auto Ins. is 2nd payer	35.9%	182
Total	100.0%	558
D. Reduction Factor	-27.4%	per (9)
E. Percentage of costs where collateral benefits are applicable (Employment Rate)	63.9%	C.3
F. Severity Adjustment Factor	-18%	D. x E. + 0 * (1 - E.)
G. Second Payer Adjustment	82%	1 + F.

Notes:

- A.1 Short-term disability benefits generally exceed long-term disability benefits. We select the long-term disability benefit to be conservative. We understand collateral source calculations will compare net benefits, even in situations when the collateral disability benefit is based on gross income. There may be a slight optimistic bias for claims that exceed the benefit period of employer disability plans.
- A.2.1 Per page 229 of the 2021 ICBC RRA, "Group or other private plans may state they are second payer when coverage is available under no fault automobile insurance plans. Judgmentally assumed to be the case 50% of the time."

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Income Replacement Higher Benefit Limit Adjustment  
Data as of 12/31/2024

(1)	(2)	(3) Exhibit CF-1.3.1	(4) Exhibit CF-1.3.1	(5) per (2)	(6) Exhibit CF-5.1.1	(7) Exhibit CF-5.1.2	(8) 90% * min((6), A.)	(9) 90% * min((6), A.)
Average Net Income								
Gross Income Level	Gross Income Level Adjusted to PY2027	Percent in Level (Alberta)	Percent in Level (Manitoba)	Mid Point of Interval	Alberta	Manitoba	Alberta Benefits	Manitoba Benefits
A. Maximum Eligible Net Weekly Income Adjusted to PY 2027							1,767 Exhibit CF-5.1.1	1,615 Exhibit CF-5.1.2
0 to 5,000	0 to 5,488	11.0%	10.9%	2,744	52	52	47	47
5,000 to 10,000	5,488 to 10,976	6.1%	6.6%	8,232	150	150	135	135
10,000 to 20,000	10,976 to 21,951	10.7%	11.0%	16,463	297	295	267	267
20,000 to 30,000	21,951 to 32,927	8.4%	10.0%	27,439	458	441	412	412
30,000 to 40,000	32,927 to 43,902	7.9%	9.8%	38,414	606	584	546	546
40,000 to 50,000	43,902 to 54,878	7.9%	11.2%	49,390	755	726	679	679
50,000 to 60,000	54,878 to 65,853	7.6%	7.6%	60,365	904	865	813	813
60,000 to 80,000	65,853 to 87,804	12.5%	13.0%	76,829	1,104	1,055	993	993
80,000 to 100,000	87,804 to 109,755	9.1%	8.5%	98,780	1,388	1,329	1,249	1,249
over 100,000	over 109,756	19.0%	11.5%	178,200	2,382	2,082	1,590	1,453
Total		100.0%	100.0%	68,708	976		774 (6), weighted by (3)	678 (6), weighted by (4)
B. Adjustment Factor for Higher Limit for Employed Claimants							1.141	(8) Total / (9) Total



Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Income Replacement & Other Monetary Benefits Economic Differences Adjustment**  
**Data as of 12/31/2024**

(1)	(2)	(3)
Claimant Group	Estimated Manitoba to Alberta Severity Adjustment	Reference
Earner	1.141	Exhibit CF-5.3
Caregiver	1.000	See Note
Loss of Studies Benefit	1.000	See Note
Income Replacement Benefit for Working Students	1.152	See Note
Income Replacement Benefit for Minors	1.152	See Note
Income Replacement & Other Monetary Benefits Adjustment Factor	1.150	

Note

Caregiver - Alberta weekly caregiver benefit is equivalent to the Manitoba weekly benefit

Loss of Studies Benefit: We expect students to receive the lump sum indemnity amount in Manitoba and Alberta.

Income Replacement Benefit for Student/Minor - based on differences between Manitoba and Alberta average weekly earnings including overtime for all employees in Table: 14-10-0222-01. (See Sections 59 and 60 of Regulations)

AB Average weekly earnings including overtime for all employees	1,369	Table: 14-10-0222-01
MB Average weekly earnings including overtime for all employees	1,188	Table: 14-10-0222-01
Ratio	1.152	

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Accident Benefits - Average Claim Duration Adjustment**  
**Data as of 12/31/2024**

(1)	(2)	(3)
	Workers' Compensation Board of Manitoba 2024 Annual Report	Workers' Compensation Board of Alberta Annual Report
Year	Manitoba Average Claim Duration (average days paid)	Alberta Average Claim Duration
2020	34.3	42.6
2021	33.2	44.7
2022	30.6	44.7
2023	32.8	46.5
2024	37.8	45.1
5-year Average	33.7	44.7
Adjustment Factor		1.325

**Notes:**

- (2) [https://www.wcb.mb.ca/uploads/2025/06/WCB209b\\_2024\\_AnnualReport\\_Digital\\_FIN.pdf?x68713](https://www.wcb.mb.ca/uploads/2025/06/WCB209b_2024_AnnualReport_Digital_FIN.pdf?x68713)  
Assume "days paid" = weekdays
- (3) [https://www.wcb.ab.ca/annual-report-2021/assets/PDFs/AR\\_2021\\_web.pdf](https://www.wcb.ab.ca/annual-report-2021/assets/PDFs/AR_2021_web.pdf)  
[https://www.wcb.ab.ca/annual-report-2022/assets/PDFs/AR\\_2022\\_web.pdf](https://www.wcb.ab.ca/annual-report-2022/assets/PDFs/AR_2022_web.pdf)  
[https://www.wcb.ab.ca/annual-report-2023/assets/PDFs/AR\\_2023\\_web.pdf](https://www.wcb.ab.ca/annual-report-2023/assets/PDFs/AR_2023_web.pdf)  
[https://www.wcb.ab.ca/annual-report-2024/assets/PDFs/AR\\_2024\\_web.pdf](https://www.wcb.ab.ca/annual-report-2024/assets/PDFs/AR_2024_web.pdf)  
Adjusted by 5/7 for a comparable measure of weekdays

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

2025 reasonable and customary fees for Paramedical Services  
IA Financial Group

(1)	(2)	(3)	(4)
	<a href="https://files.ia.ca/-/media/files/iactuel/pdfs/2024/11-novembre/admin-frais-coutumiers-2025-en-acc.pdf">https://files.ia.ca/-/media/files/iactuel/pdfs/2024/11-novembre/admin-frais-coutumiers-2025-en-acc.pdf</a>		(2) / (3)
Treatment	Alberta	Manitoba	Ratio
<b>Acupuncturist</b>			
Initial Assessment	160	135	1.185
Subsequent Visits	120	110	1.091
<b>Audiologist</b>			
Assessment and treatment	175	160	1.094
<b>Chiropractor</b>			
Initial Assessment	150	110	1.364
Subsequent Visits	85	65	1.308
<b>Dietitian</b>			
Initial Assessment	215	195	1.103
Subsequent Visits	195	160	1.219
<b>Homeopath</b>			
Initial Assessment	150	135	1.111
Subsequent Visits	95	95	1.000
<b>Kinesiotherapist</b>			
Assessment and treatment	125	125	1.000
<b>Massage Therapist</b>			
Assessment and treatment (per hour)	170	155	1.097
<b>Naturopath</b>			
Initial Assessment	270	270	1.000
Subsequent Visits	190	190	1.000
<b>Occupational Therapist</b>			
Assessment and treatment (per hour)	185	155	1.194
<b>Optometrist</b>			
General eye exam	175	160	1.094
<b>Orthotherapist</b>			
Assessment and treatment	90	90	1.000
<b>Osteopath</b>			
Initial Assessment	180	170	1.059
Subsequent Visits	170	150	1.133
<b>Physiotherapist</b>			
Initial Assessment	165	120	1.375
Subsequent Visits	140	100	1.400
<b>Podiatrist</b>			
Initial Assessment	130	110	1.182
Subsequent Visits	110	90	1.222
<b>Psychologist/Psychotherapist/Counselling Therapist</b>			
Assessment and treatment (per hour)	265	250	1.060
<b>Social Worker</b>			
Assessment and treatment (per hour)	240	180	1.333
<b>Speech Therapist</b>			
Assessment and treatment (per hour)	170	165	1.030

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

2025 reasonable and customary fees for Paramedical Services  
Empire Life

(1)	(2) <a href="https://www.empire.ca/document/13496">https://www.empire.ca/document/13496</a>	(3)	(4) (2) / (3)
Treatment	Alberta	Manitoba	Ratio
Acupuncturist	120	85	1.412
Audiologist	134	115	1.165
Chiropodist	110	90	1.222
Chiropractor			
Initial Assessment	120	95	1.263
Subsequent Visits	75	60	1.250
Dietitian	180	160	1.125
Massage Therapist	120	95	1.263
Naturopath			
Initial Assessment	285	250	1.140
Subsequent Visits	200	180	1.111
Occupational Therapist	180	140	1.286
Osteopath	145	140	1.036
Physiotherapist			
Initial Assessment	145	108	1.343
Subsequent Visits	120	92	1.304
Podiatrist	113	90	1.256
Psychologist	225	200	1.125
Social Worker	200	155	1.290
Speech Therapist	160	160	1.000

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Accident Benefits - Health Care Cost Adjustment**  
**Data as of 12/31/2024**

(1)	(2)	(3)
	<a href="https://www.cihi.ca/en/national-health-expenditure-trends-2024-infographics">https://www.cihi.ca/en/national-health-expenditure-trends-2024-infographics</a>	Table 11-10-0222-01
Province	Health Care Spending per Person	2023 Average Household Healthcare Expenditure
Alberta	9,370	3,377
Manitoba	9,273	3,245
Ratio	1.010	1.041

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Accident Benefits - Health Care Cost Adjustment**  
**Data as of 12/31/2024**

(1)	(2)
Source	Indication
Health Care Spending per Person	1.010
2023 Average Household Healthcare Expenditure	1.041
IA Financial Group Fee Schedule	1.000 - 1.400
Empire Life Fee Schedule	1.125 - 1.412
Selected Adjustment Factor	1.200

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Wait Times by Case Type**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)	(5)	(6)
DAD and NACRS Provisional Data Timeliness, 2024–2025 — Data Tables					average((2) to (5))
Treatment	January - March	April - June	July - September	October - December	Average
Proportion of 2024–2025 acute cases available within 60 days after quarter end					
Alberta	99.9%	97.8%	97.9%	98.6%	98.6%
Manitoba	85.3%	37.6%	58.9%	64.1%	61.5%
Proportion of 2024–2025 ED cases available within 60 days after quarter end					
Alberta	100.0%	99.5%	99.7%	99.8%	99.8%
Manitoba	100.0%	98.8%	100.0%	99.9%	99.7%
Proportion of 2024–2025 day surgery cases available within 60 days after quarter end					
Alberta	100.0%	99.2%	99.4%	99.5%	99.5%
Manitoba	91.8%	50.4%	70.8%	77.1%	72.5%

Selected Wait-Time Adjustment Factor

1.000 Assumes that wait times in Alberta may increase, but not beyond Manitoba wait-times. Under these conditions, Manitoba severities would be conservative.

Notes

Link to Study <https://www.cihi.ca/en/access-data-and-reports/data-tables>

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Wait Times for Priority Procedures  
Data as of 12/31/2024

(1)	(2)	(3)	(4)
	Wait Times for Priority Procedures in Canada, 2008 to 2024 — Data Tables		(2) / (3)
Treatment	Alberta	Manitoba	Ratio
CT Scan (Days)			
50th Percentile	34	55	0.618
90th Percentile	116	162	0.716
Hip Fracture Repair (Hours)			
50th Percentile	21	19	1.105
90th Percentile	52	52	1.000
% Meeting Benchmark	88%	88%	1.000
MRI Scan (Days)			
50th Percentile	63	104	0.606
90th Percentile	217	352	0.616

Selected Wait-Time Adjustment Factor 1.000 Assumes that wait times in Alberta may increase, but not beyond Manitoba wait-times. Under these conditions, Manitoba severities would be conservative.

**Notes:**

Link to Study <https://www.cihi.ca/en/explore-wait-times-for-priority-procedures-across-canada#additional-resources>



Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Adjustment for Distribution of Vehicle Types

(1)	(2)	(3)	(4)	(5)	(6)		
		MPI Large Vehicle Study		(4) / (3)			
	Class of Vehicle	Number of Injuries	Total Injury Cost	Average Injury Cost	Relativity		
A.1	Overall Total	63,416	508,129,124	8,013			
A.2	Incidents where Pickup Trucks are involved	14,433	162,762,644	11,277	1.407		
A.3	Incidents where Compact Cars are involved	29,807	174,938,972	5,869	0.732		
A.4	Incidents where Sub-Compact Cars are involved	5,403	25,143,385	4,654	0.581		
A.5	Incidents where Mid/Full Size Cars are involved	16,797	125,329,383	7,461	0.931		
A.6	Incidents where Passenger/Cargo Vans are involved	10,675	81,085,417	7,596	0.948		
A.7	Incidents where SUVs are involved	29,914	175,234,055	5,858	0.731		
A.8	Incidents where Heavy Vehicles are involved	2,511	41,335,438	16,462	2.054		
(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	Class of Vehicle	Table: 23-10-0308-01 Registrations in Alberta	As a percent of B.1 Percent of Total Registrations	Table: 23-10-0308-01 Registrations in Manitoba	As a percent of B.1 Percent of Total Registrations	Assigned Severity	
B.1	Total, road motor vehicle registrations	3,694,433		968,751			
B.2	Total, vehicles weighing 4,536 kilograms or less	3,207,147		871,321			
B.3	Passenger cars, weighing 4,536 kilograms or less	834,819	22.6%	245,719	25.4%	6,257	Weighted Average of A.3, A.4, and A.5
B.4	Multi-purpose vehicles, weighing 4,536 kilograms or less	1,388,150	37.6%	356,443	36.8%	6,257	Weighted Average of A.3, A.4, and A.5
B.5	Pickup trucks, weighing 4,536 kilograms or less	785,988	21.3%	212,063	21.9%	11,277	A.2
B.6	Vans, weighing 4,536 kilograms or less	197,662	5.4%	56,961	5.9%	7,596	A.6
B.7	Other vehicles, weighing 4,536 kilograms or less	528	0.0%	135	0.0%	6,257	Weighted Average of A.3, A.4, and A.5
B.8	Total, vehicles weighing 4,536 to 11,793 kilograms	201,688	5.5%	19,891	2.1%	16,462	A.8
B.9	Total, vehicles weighing 11,794 kilograms or more	128,617	3.5%	44,374	4.6%	16,462	A.8
B.10	Buses	12,350	0.3%	3,549	0.4%		
B.11	Motorcycles and mopeds	144,631	3.9%	29,616	3.1%		
	Total		100.0%			100.0%	
	Weighted average, excluding buses, motorcycles and mopeds		8,400			8,177	
C.1	Implied Adjustment Factor	1.027	(9) Total / (11) Total				
C.2	Selected Adjustment Factor	1.050					

Notes

- (3) & (4) The Large Vehicle Study is included in Part IX - LP Appendix 1 in the 2023 General Rate Application
- C.2 Selection reflects the bias in C.1 due to the severities reflecting the average of all parties injured in an accident. We assume that increase will be born disproportionately by the driver and passenger of the private-passenger vehicle.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Estimation of Income-Based Funeral and Death Benefits  
Data as of 12/31/2024

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Table: 98-10-0080-01 (requires individual filters)				per C.			
	Couple With Children	Couple Without Children	One Parent Family	Single Person Households and Other	Total		Notes / Comments
A.	Household Size Distribution						
A.1.	1 person	0	0	0	839,546	839,546	
A.2.	2 persons	0	461,780	104,115	0	565,895	
A.3.	3 persons	190,235	0	50,750	0	240,985	
A.4.	4+ Persons	335,450	0	22,325	0	357,775	
A.5.	Total	525,685	461,780	177,190	839,546	2,004,201	
B.	Household Size						
B.1.	1 person						Oliver Wyman Assumption
B.2.	2 persons	2	2	2			Oliver Wyman Assumption
B.3.	3 persons	3		3			Oliver Wyman Assumption
B.4.	4+ Persons	4,377		4,489			B.4. calculated to balance to B.5.
B.5.	Average	3.878	2	2.600	1		
B.6.	Average for Couple Families	Calc'd to balance to B.5. 3.000	Oliver Wyman Assumption	Table: 98-10-0123-01 Oliver Wyman Assumption			
C.	Individuals in Household	2,038,835	923,560	460,694	839,546	4,262,635	
		B.5. * A.5.	B.5. * A.5.	B.5. * A.5.	by subtraction	per 2021 Census	
Adult / Child Distribution							
D.	Adults per Household	2	2	1	1		Oliver Wyman Assumption
E.	Children and Other Dependents per Household						Children and Other Dependents including dependent parents
E.1.	1 person					0.000	
E.2.	2 persons		0.000	1.000			
E.3.	3 persons	1.000		2.000			
E.4.	4+ Persons	2.377		3.489			
E.5.	Average Number of Other Dependents	1.878	0.000	1.600	0.000		
F.	Distribution of Fatalities						
F.1.	Adult	81.8%	Exhibit CF-7.2				
F.2.	Children and Other Dependents	18.2%	Exhibit CF-7.2				
G.	Unbalanced Fatalities						
G.1.	Adult Fatalities	1.636	1.636	0.818	0.818		D. * F.1.
G.2.	Children and Other Dependent Fatalities	0.342	0.000	0.291	0.000		E.5. * F.2.
G.3.	Adult Fatalities	Unbalanced Total 2,446,964	Sumproduct of G.1. and A.5.	Distribution 91.4%	Balance Factor 0.895		F.1. / G.3.
G.4.	Children and Other Dependent Fatalities	231,409	Sumproduct of G.2. and A.5.	8.6%	2.107		F.2. / G.4.
G.5.	Total Unbalanced Fatalities	2,678,373		100.0%			
H.	Rebalanced Fatalities						
H.1.	Adult Fatalities	1.465	1.465	0.732	0.732		G.1. * G.3.
H.2.	Children and Other Dependent Fatalities	0.721	0.000	0.614	0.000		G.2. * G.4.
H.3.	Adult Fatalities	Rebalanced Total 2,190,714	Sumproduct of H.1. and A.5.	Distribution 81.8%			
H.4.	Children and Other Dependent Fatalities	487,660	Sumproduct of H.2. and A.5.	18.2%			
H.5.	Total Unbalanced Fatalities	2,678,373		100.0%			
I.	Distribution of Fatalities within Family Type						
I.1.	Adult Fatalities	67.0%	100.0%	54.4%	100.0%		
I.2.	Children and Other Dependent Fatalities	33.0%	0.0%	45.6%	0.0%		
J.	Estimated Non-Dependents	1.850	2.250	1.850	1.950		
	Non-Dependent Parents	1.750	1.750	1.750	1.850		
	Non-Dependent Children	0.100	0.500	0.100	0.100		
K.	Count of Benefits per Fatality (not per Fatal Collision)						Benefit Amount
K.1.	Funeral	1	1	1	1	10,308	
K.2.	Grief Counseling	2.878	1.000	1.600	0.000	4,310	B.5. * K.1.
K.3.	Spouse Death Benefit	0.670	1.000	0.544	0.000	193,054	1 * I1.
K.4.	Dependent Death Benefit	1.259	0.000	0.870	0.000	50,000	E.5. * I1.
K.5.	Non Dependent Death Benefit	1.850	2.250	1.850	1.950	16,840	J.
L.	Income-Based Benefit	52.6%	78.6%	53.3%	0.0%	45.9%	
				Selected		45.0%	

Additional Notes

- J. Parents and adult children, subject to sensitivity testing
- K.2. We assume everyone in the family apart from the deceased will receive the grief counseling benefit.
- K.3. Dependents (even if not the spouse) will receive the "spousal death benefit" in addition to the dependent death benefit.
- K. Slightly conservative since we are not considering a related fatality which reduces the benefit count (multi-fatality events in same household)
- L. Calculated as the total spousal death benefit divided by the total funeral and death benefits per the number of claimants and the average benefit amount.
- Note that selection considers sensitivity testing of uncertain assumptions.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Distribution of Collisions that Result in a Fatality  
Data as of 12/31/2024

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		<a href="https://tc.canada.ca/en/road-transportation/statistics-data/canadian-motor-vehicle-traffic-collision-statistics/2023/canadian-motor-vehicle-traffic-collision-statistics-2023">https://tc.canada.ca/en/road-transportation/statistics-data/canadian-motor-vehicle-traffic-collision-statistics/2023/canadian-motor-vehicle-traffic-collision-statistics-2023</a>						Distribution by Road User Class	
Road User Class		2019	2020	2021	2022	2023	Total Excluding 2019	Adult	Children
A.	Fatalities								
A.1	Drivers	849	835	839	932	1,025	3,631		
A.2	Passengers	316	271	274	315	301	1,161		
A.3	Pedestrians	201	286	307	298	298	1,189		
A.4	Bicyclists	39	51	47	46	47	191		
A.5	Motorcyclists	195	242	230	251	229	952		
A.6	A.1 + ... + A.5 Total Fatalities	1,600	1,685	1,697	1,842	1,900	7,124		
B.	Fatal Collisions	1,620	1,602	1,628	1,762	1,768	6,760		
C.	Rate per Fatal Collision								
C.1	A.1 / B. Drivers	0.52	0.52	0.52	0.53	0.58	0.54	93.6%	6.4%
C.2	A.2 / B. Passengers	0.20	0.17	0.17	0.18	0.17	0.17	76.2%	23.8%
C.3	A.3 / B. Pedestrians	0.12	0.18	0.19	0.17	0.17	0.18	50.0%	50.0%
C.4	A.4 / B. Bicyclists	0.02	0.03	0.03	0.03	0.03	0.03	30.0%	70.0%
C.5	A.5 / B. Motorcyclists	0.12	0.15	0.14	0.14	0.13	0.14	93.6%	6.4%
D.	A.6 / B. Fatality Rate per Fatal Collision	0.988	1.052	1.042	1.045	1.075	1.054	0.862	0.192
E.	Distribution of Total Collisions							81.8%	18.2%

Notes

- (7) Excluded 2019 due to fatality rate < 1  
(8), (9) Percentage of Driver and Passenger Fatalities and Serious Injuries by Age Group - 2023 (Normalized for "Not Stated")  
Uncertain assumption: distributions for C.3 and C.4 subject to sensitivity testing.

		Fatality Distribution	
Age Group		Driver	Passenger
Children	0 - 4	0.0%	2.2%
Children	5 - 14	0.1%	6.7%
Children	15 - 19	6.3%	14.6%
Adult	20 - 24	8.6%	11.1%
Adult	25 - 34	18.4%	15.6%
Adult	35 - 44	15.8%	10.2%
Adult	45 - 54	14.6%	6.7%
Adult	55 - 64	15.6%	7.3%
Adult	65 +	20.7%	24.5%
	Not Stated	0.0%	1.0%
	Total	100.0%	100.0%

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Summary of Benefits  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Care-First Auto Insurance Intentions Paper									
Benefit Category	Benefit Amount	Selected	Note/Comment						
Funeral	10,308	10,308	Maximum						
Grief Counseling	4,310	4,310	Maximum						
Payment to Family									
Spouse	75,623 - 600,000	193,054	Based on income of deceased; Calculation						
Dependent	35,919 - 66,170	50,000	Selected; Based on age of dependent; uncertain assumption, subject to sensitivity testing						
Non-Dependent	16,840	16,840	Amount Established by Minister						
Spouse Death Benefit	193,054								
(5)	(6)	(7)	(8)	(9)	(10)				
	Table: 98-10-0132-01	per (6)	Income Replacement and Monetary Benefits Draft Regulation	Table: 37-10-0152-01	(8) * (9)				
Age Category	Age Distribution (Interval)	Age Distribution	Factor	Average Income	Spouse Death Benefit				
25 or under	41,840	41,840	1.00	26,226	26,226				
26		30,818	1.20	47,973	57,568				
27		30,818	1.40	47,973	67,162				
28	123,270	30,818	1.60	47,973	76,757				
29		30,818	1.80	47,973	86,351				
30		42,466	3.00	59,844	179,532				
31		42,466	2.20	59,844	131,657				
32	212,330	42,466	2.40	59,844	143,626				
33		42,466	2.60	59,844	155,594				
34		42,466	2.80	59,844	167,563				
35		49,884	3.00	67,364	202,092				
36		49,884	3.20	67,364	215,565				
37	249,420	49,884	3.40	67,364	229,038				
38		49,884	3.60	67,364	242,510				
39		49,884	3.80	67,364	255,983				
40		46,302	4.00	75,385	301,540				
41		46,302	4.20	75,385	316,617				
42	231,510	46,302	4.40	75,385	331,694				
43		46,302	4.60	75,385	346,771				
44		46,302	4.80	75,385	361,848				
45		41,471	5.00	79,454	397,270				
46		41,471	4.80	79,454	381,379				
47	207,355	41,471	4.60	79,454	365,488				
48		41,471	4.40	79,454	349,598				
49		41,471	4.20	79,454	333,707				
50		38,327	4.00	79,000	316,000				
51		38,327	3.80	79,000	300,200				
52	191,635	38,327	3.60	79,000	284,400				
53		38,327	3.40	79,000	268,600				
54		38,327	3.20	79,000	252,800				
55		39,000	3.00	79,549	238,647				
56		39,000	2.80	79,549	222,737				
57	195,000	39,000	2.60	79,549	206,827				
58		39,000	2.40	79,549	190,918				
59		39,000	2.20	79,549	175,008				
60		37,525	2.00	64,998	129,996				
61		37,525	1.80	64,998	116,996				
62	187,625	37,525	1.60	64,998	103,997				
63		37,525	1.40	64,998	90,997				
64		37,525	1.20	64,998	77,998				
65 or over	393,945	393,945	1.00	64,998	64,998				
Total	2,033,930	2,033,930							

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Population Distribution Adjustment  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)
		Exhibit CF-5.1.1	Exhibit CF-5.1.2	Exhibit CF-1.3.1	Exhibit CF-1.3.1
Gross Income Level	Gross Income Level Adjusted to 2028	Mid Point of Interval (Alberta)	Mid Point of Interval (Manitoba)	Percent in Level (Alberta)	Percent in Level (Manitoba)
0 to 5,000	0 to 5,488	2,744	2,744	11.0%	10.9%
5,000 to 10,000	5,488 to 10,976	8,232	8,232	6.1%	6.6%
10,000 to 20,000	10,976 to 21,951	16,463	16,463	10.7%	11.0%
20,000 to 30,000	21,951 to 32,927	27,439	27,439	8.4%	10.0%
30,000 to 40,000	32,927 to 43,902	38,414	38,414	7.9%	9.8%
40,000 to 50,000	43,902 to 54,878	49,390	49,390	7.9%	11.2%
50,000 to 60,000	54,878 to 65,853	60,365	60,365	7.6%	7.6%
60,000 to 80,000	65,853 to 87,804	76,829	76,829	12.5%	13.0%
80,000 to 100,000	87,804 to 109,755	98,780	98,780	9.1%	8.5%
over 100,000	over 109,756	178,200	165,625	19.0%	11.5%
Total				100.0%	100.0%
A. Income Metrics				Ratio	
Mean				68,708	56,655 1.213
25th percentile				17,430	16,841 1.035
50th percentile				47,595	41,563 1.145
70th percentile				86,703	72,269 1.200
80th percentile				97,714	79,969 1.222
B. Adjustment Factor for Higher Limit for Employed Claimants				1.213	Selected based on A.
C. Percent of Death Benefits Tied to Income				45%	Exhibit CF-7.1
D. Total Adjustment Factor for Higher Limit				1.096	1 + (B. - 1) * C.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - PIPP Enhancements Adjustment Factor  
Data as of 12/31/2024

(1)	(2) MPI 2026 GRA Appendix 4b Table 3	(3) MPI 2026 GRA Appendix 4o Table 2	(4) MPI 2026 GRA Appendix 4a Table 3	(5) MPI 2026 GRA Appendix 4o Table 1
	Medical Expenses		Income Replacement	
Accident Year	Ultimate Loss Cost	PIPP Enhancement Ultimate Loss Cost	Ultimate Loss Cost	PIPP Enhancement Ultimate Loss Cost
2011	76.74	6.22	102.70	1.20
2012	69.80	3.46	96.71	1.32
2013	63.78	2.81	84.82	1.65
2014	58.12	3.65	87.47	0.36
2015	71.72	4.81	95.41	0.39
2016	85.18	6.24	102.31	2.10
2017	76.61	6.47	99.94	2.79
2018	60.56	3.26	89.89	0.75
2019	65.61	3.92	90.01	0.67
2020	58.76	5.04	79.42	1.76
2021	61.97	6.24	90.60	2.08
2022	50.57	4.53	88.98	1.38
2023	58.30	5.18	91.27	1.52
2024	63.87	5.36	98.16	2.23
	921.59	67.19	1,297.70	20.21
Adjustment Factor		1.073		1.016

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Forecasted Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)
		ICBC 2021 RRA	Selected	Exhibit CF-2.7	PRODUCT((2) - (5))
Coverage	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	ICBC Claimant/Claim Factor	Additional Claims Factor	No-Fault Frequency Adjustment Factor	Final Selected Claimant Frequency
Health care and Related Expenses	9.5 Exhibit CF-2.2	1.25	1.050	0.90	11.2
Income Replacement & Other Monetary Benefits	1.2 Exhibit CF-2.3	1.12		1.75	2.4
Death Benefits and Related Expenses	0.1 Exhibit CF-2.4	1.60		1.00	0.1
Permanent Impairment	0.7 Exhibit CF-3	1.60			1.1
Uninsured Automobile	0.005 Exhibit CF-2.5	1.26			0.006

Notes:  
Uninsured Automobile Conservatively assumes current excess and uninsured claims aren't associated with current claims for other accident benefits subcoverages.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Forecasted Severity  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Exhibit CF-4	See Note	Exhibit CF-5.2	Exhibit CF-5.4	Exhibit CF-5.5	Exhibit CF-6.4	Exhibit CF-6.6	Exhibit CF-6.7	Exhibit CF-7.4	Exhibit CF-8	MPI 2026 GRA Figure RI-13	PRODUCT((2) - (12))
Accident Year	Severity at 1/1/2028 Cost Level	All-Vehicle Class to PPV Adjustment	Second Payer Adjustment	Economic (Wage Distribution & Benefit Limit) Adjustment	Average Time to Return to Work Adjustment	Healthcare Cost Adjustment	Wait-Time Adjustment Factor	Vehicle Distribution Adjustment	Wage Distribution Adjustment	PIPP Enhancement Adjustment	Unallocated Loss Adjustment Expense	Final Selected Claimant Severity
Health care and Related Expenses	9,543	1.000				1.200	1.000	1.050		1.073	1.130	14,578
Income Replacement & Other Monetary Benefits	76,701	1.000	0.825	1.150	1.325					1.016	1.130	110,669
Death Benefits and Related Expenses	70,873	1.000							1.096		1.130	87,753
Permanent Impairment	29,183	1.000						1.050			1.130	34,626
Uninsured Automobile												32,351

MPI severity reflects all vehicle classes. Based on 2026 MPI GRA Figure RI-12, PPV makes up approximately 90% of 2025/26 written premium. Below, we look at the indicated PPV to overall class loss cost relativity. We understand the loss cost relativity would include both frequency and severity effects; however, we find it a useful indication to review when comparing the PPV severity to the overall class severity. Due to the fact that PPV makes up a large percentage of the total and the indications are all close to 1.000, we select a factor of 1.000 for all Accident Benefits subcoverages.

	Acc. Benefits Other (Ind)	Acc. Benefits Other (Non-Ind)	Income Replacement Indemnity	
Balanced Pure Premium + "Pool" Claims Costs	66.26	33.24	81.01	MPI 2026 GRA Figure RI-11
Discounted Projected All Class Loss Cost	50.95	27.62	64.12	MPI 2026 GRA Part VIII - RI Appendix 2 Table 1 (Divide 2026/27 Rating Year Discounted Ultimate Claim Costs by Forecasted HTA Units of 1,359,974)
Discounted Projected Non-HTA Loss Cost	0.00	0.00	0.00	MPI 2026 GRA Figure RI-11
2026/27 Projected Units	1,359,974	1,359,974	1,359,974	MPI 2026 GRA Figure RI-13
2026/27 Projected HTA Units	1,011,631	1,011,631	1,011,631	MPI 2026 GRA Figure RI-13
HTA Adjusted Loss Cost	68.50	37.13	86.19	(B.1 * B.3 - B.2 * (B.3 - B.4) / B.4
Ratio of PPV to All Class Loss Cost	0.967	0.895	0.940	A / B.5

Reflects differences in severity due to differences in the distribution of vehicle weights.

For Income Replacement & Other Monetary Benefits we expect the effect of higher vehicle weights is captured through (6)

Severity adjustment not required for Death Benefits and Related Expenses

Reflects differences in injury severity, triggering a higher lump sum, due differences in vehicle weights.

Calculated as

Fixed Claims Expense Per Unit (Proportional)	40.10	A	MPI 2026 GRA, RI 2.2
Variable Claims Expense Per Unit (Proportional), PPV	139.29	B	MPI 2026 GRA, RI 2.2
Claims Cost per Unit (Discounted to End of the RY), PPV	1,071.46	C	MPI 2026 GRA, RI 2.2
ULAE Factor	1.130	1 + B / C	

We do not include the Fixed Claims Expense per unit as this amount consists of the Manitoba Health Levy and towing contract fees. We account for the Alberta Health Levy separately.

id Automobile - We assume the distribution of claims associated with uninsured automobiles is the same as the overall distribution. We use the weighted average severity of the other subcoverages.



Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Selected Loss Cost  
Data as of 12/31/2024

(1)	(2) Exhibit CF-10.1	(3) Exhibit CF-10.2	(4) (2) * (3) / 1000
<b>A. Health care and Related Expenses</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	11.2	14,578	163.72
MPI 2026 GRA			91.85
ICBC 2023 RRA	16.5	15,287	252.24
<b>B. Income Replacement &amp; Other Monetary Benefits</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	2.4	110,669	268.58
MPI 2026 GRA			139.79
ICBC 2023 RRA	2.5	77,765	194.41
<b>C. Death Benefits and Related Expenses</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	0.1	87,753	11.01
MPI 2026 GRA			Included in D.
ICBC 2023 RRA	0.2	61,940	12.39
<b>D. Permanent Impairment</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	1.1	34,626	39.12
MPI 2026 GRA			33.24
ICBC 2023 RRA	1.7	24,505	41.66
<b>E. Uninsured Automobile</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	0.01	32,351	0.20
<b>E. Total Accident Benefits</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Alberta - Care First	14.9	32,364	482.62
Alberta - Current (Tort)	10.9	14,533	157.88
MPI 2026 GRA			264.87
ICBC 2023 RRA	20.9	23,957	500.69

Notes:  
MPI 2026 GRA captures ULAE and PIPP Enhancement costs separately, which are included in the Care-First loss costs.

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Required Premium - Care-First  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			per (3)	See Note	See Note	(5) * (6)	See Note	Exhibit CP-2.1		(7) * (8) / (1 - (9) - (10))	See Note	(11) + (12)
Coverage	Subcoverage	202402 Written Vehicles	Percent of Vehicles with Coverage	Selected Loss Cost at 1/1/2028 Cost Level	Claim Payment Pattern Factor	Projected Discounted Loss Cost per Vehicle	Delay in Receiving Premiums	Estimated Variable Expense Provision	Profit Provision	Estimated Required Premium (Excluding Fixed)	Allocated Fixed Expense	Estimated Required Premium
Third Party Liability	Bodily Injury			35.00	0.876	30.67	1.009	23.2%	6%	43.73	3.04	46.77
Third Party Liability	Property Damage			21.79	0.969	21.12	1.009	23.2%	6%	30.10	2.10	32.20
Third Party Liability	DCPD			229.07	0.969	222.02	1.009	23.2%	6%	316.48	22.04	338.52
Third Party Liability	Health Levy			39.29	1.000	39.29	1.009	23.2%	6%	56.00	3.90	59.90
Third Party Liability	Total	1,547,977	100%	325.14	0.963	313.10	1.009	23.2%	6%	446.31	31.08	477.38
Accident Benefits	Income Replacement & Other Monetary Benefits			268.58	0.645	173.34	1.009	23.2%	6%	247.10	17.21	264.30
Accident Benefits	Health care and Related Expenses			163.72	0.767	125.52	1.009	23.2%	6%	178.93	12.46	191.39
Accident Benefits	Death Benefits and Related Expenses			11.01	0.927	10.21	1.009	23.2%	6%	14.55	1.01	15.56
Accident Benefits	Permanent Impairment			39.12	0.927	36.24	1.009	23.2%	6%	51.66	3.60	55.26
Accident Benefits	Uninsured Automobile			0.20	0.716	0.14	1.009	23.2%	6%	0.20	0.01	0.21
Accident Benefits	Accident Benefits - Total	1,542,827	100%	482.62	0.716	345.46	1.009	23.2%	6%	492.44	34.29	526.72
Collision	Collision	1,134,024	73%	321.99	0.974	313.72	1.009	23.2%	6%	447.20	31.14	478.34
Comprehensive	Comprehensive - Total	1,284,657	83%	358.35	0.973	348.66	1.009	23.2%	6%	497.01	34.61	531.61
All Perils	All Perils	31,734	2%	805.48	0.972	782.73	1.009	23.2%	6%	1,115.76	77.69	1,193.45
Specified Perils	Specified Perils	12,790	1%	110.61	0.974	107.71	1.009	23.2%	6%	153.54	10.69	164.23
Underinsured Motorists	Underinsured Motorist	1,500,527	97%	0.16	0.789	0.13	1.009	23.2%	6%	0.18	0.01	0.19
				D.5. Estimated Fixed Expense per Earned Vehicle		83	1.009	23.2%	6%	118.48		
Package	Basic Coverage			807.76	0.815	659	1.009	23.2%	6%	938.74	65.37	1,004.11
Package	Full Coverage			1,488.26	0.888	1,321	1.009	23.2%	6%	1,883.14	131.12	2,014.26

Notes

- (5) Bodily Injury per Exhibit CF-1.10  
Health Levy per Exhibit CP-2.2  
Accident Benefits per Exhibit CF-10.3  
Underinsured Motorist per Exhibit CF-1.2  
All other coverages per Exhibit CP-1.1 - Exhibit CP-1.9
- (6) Based on 5-year industry average investment income rate of 3.70% and selected payment pattern
- (8) Based on investment rate of 3.70% and assumed three month delay
- (12) Total fixed expense per Earned Vehicle from Exhibit CP-2.1. Fixed expenses allocated to coverages proportional to (11).

Province of Alberta  
Private Passengers Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Premium Changes under Care-First  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8)	(8)	(8)
			per (3)	See Note	2026 SAR	Selected	See Note	See Note	Exhibit CP-3	Exhibit CF-11
Cost Level (Written Date) -->		4/1/2025			7/1/2027		7/1/2027	7/1/2027	7/1/2027	
Coverage	Subcoverage	202402 Written Vehicles	Percent of Vehicles with Coverage	202501 Avg Written Premium	Loss Cost Trend Rate	Fixed Expense Trend	Percent Fixed	Projected Street Premium	Current Product Required Premium	Care-First Required Premium
Third Party Liability	Bodily Injury			796.79	8.8%	3.0%	0.041	958.72	1,450.75	46.77
Third Party Liability	PD/DCPD			237.75	1.6%	3.0%	0.041	246.71	361.37	370.72
Third Party Liability	Health Levy			28.29	5.0%	3.0%	0.041	31.51	58.39	59.90
Third Party Liability	Total	1,547,977	100%	1,062.83			1.009	1,236.95	1,870.50	477.38
Accident Benefits	Income Replacement & Other Monetary Benefits									264.30
Accident Benefits	Health care and Related Expenses									191.39
Accident Benefits	Death Benefits and Related Expenses									15.56
Accident Benefits	Permanent Impairment									55.26
Accident Benefits	Uninsured Automobile									0.21
Accident Benefits	Accident Benefits - Total	1,542,827	100%	140.81	8.7%	3.0%	0.041	169.09	218.86	526.72
Collision	Collision	1,134,024	73%	410.58	2.4%	3.0%	0.041	433.32	466.28	478.34
Comprehensive	Comprehensive - Total	1,284,657	83%	359.22	3.6%	3.0%	0.041	388.77	518.21	531.61
All Perils	All Perils	31,734	2%	900.14	3.7%	3.0%	0.041	976.21	1,163.35	1,193.45
Specified Perils	Specified Perils	12,790	1%	144.50	5.3%	3.0%	0.041	161.99	160.09	164.23
Underinsured Motorists	Underinsured Motorist	1,500,527	97%	27.53	4.6%	3.0%	0.041	30.42	10.84	0.19
Package	Basic Coverage			1,203.64				1,406.04	2,089.36	1,004.11
Package	Full Coverage			2,000.98				2,258.56	3,084.69	2,014.26
Package	Industry Average			1,848.41				2,096.40	2,895.96	1,819.98
	Injury Coverages			937.13				1,127.25	1,668.88	571.74
	Damage Coverages			856.30				908.15	1,158.19	1,188.15
	Other (Health Levy + UM)			54.98				61.01	68.89	60.09
	Check			0.00				0.00	0.00	0.00
Notes										
Basic Coverage	Basic Coverage does not reflect take-up rates									
Full Coverage	Full Coverage reflect2 take-up rates									
Industry Average	Industry average does not reflect take-up rates									
(5)	per GISA, TPL and AB allocated to coverage using required premium estimates									
(6)	Street premium cost levels based on average written date; required premium levels based on average accident date									
(6)	Based on 5-year industry average investment income rate of 3.70% and selected payment pattern									
(8)	Based on investment rate of 3.70% and assumed three month delay									

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Bodily Injury  
Data as of 12/31/2024

(1)	(2) Oliver Wyman 2025 Annual Review	(3) GISA Report AUTO7001	(4) (2) / (3) * 1000	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13) (4) * (8) * (9) * (10) * (11) * (12)	(14) Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	1,375	418,861	3.284	-1.1%	-1.1%	10/1/2024	0.869		1.000	1.000	0.904	2.580	0%
2016	1,195	414,010	2.887	-1.1%	-1.1%	10/1/2024	0.879		1.000	1.000	0.904	2.293	0%
2017	1,317	396,469	3.323	-1.1%	-1.1%	10/1/2024	0.889		1.000	1.000	0.904	2.670	0%
2018	1,331	383,825	3.468	-1.1%	-1.1%	10/1/2024	0.899		1.000	1.000	0.904	2.818	0%
2019	1,209	366,587	3.297	-1.1%	-1.1%	10/1/2024	0.909		1.000	1.000	0.904	2.709	0%
2020	765	300,640	2.543	-1.1%	-1.1%	10/1/2024	0.919		1.000	1.270	0.904	2.685	20%
2021	720	295,188	2.437	-1.1%	-1.1%	10/1/2024	0.930		1.000	1.382	0.904	2.831	20%
2022	813	290,320	2.800	-1.1%	-1.1%	10/1/2024	0.940		1.000	1.187	0.904	2.825	20%
2023	806	297,255	2.711	-1.1%	-1.1%	10/1/2024	0.951		1.000	1.106	0.904	2.577	20%
2024	915	302,622	3.024	-1.1%	-1.1%	10/1/2024	0.961		1.000	1.106	0.904	2.907	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												2.765	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	102,023,158	1,375	74,172	9.1%	9.1%	10/1/2024	2.978	1.000	1.000			220,877	0%
2016	101,026,843	1,195	84,523	9.1%	9.1%	10/1/2024	2.729	1.000	1.000			230,667	0%
2017	108,474,056	1,317	82,336	9.1%	9.1%	10/1/2024	2.501	1.000	1.000			205,919	0%
2018	128,038,534	1,331	96,183	9.1%	9.1%	10/1/2024	2.292	1.000	1.000			220,448	0%
2019	118,112,876	1,209	97,729	9.1%	9.1%	10/1/2024	2.100	1.000	1.000			205,273	0%
2020	97,765,121	765	127,871	9.1%	9.1%	10/1/2024	1.925	1.000	1.000			246,139	20%
2021	94,844,894	720	131,820	9.1%	9.1%	10/1/2024	1.764	1.000	1.000			232,336	20%
2022	133,915,424	813	164,711	9.1%	9.1%	10/1/2024	1.617	1.000	1.000			266,275	20%
2023	165,081,274	806	204,840	9.1%	9.1%	10/1/2024	1.482	1.000	1.000			303,475	20%
2024	156,002,125	915	170,467	9.1%	9.1%	10/1/2024	1.358	1.000	1.000			231,445	20%
B. Selected Severity at 1/1/2028 Cost Level												255,974	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	102,023,158	418,861	244	7.9%	7.9%	10/1/2024	2.588	1.000	1.000	1.000	0.904	570	0%
2016	101,026,843	414,010	244	7.9%	7.9%	10/1/2024	2.398	1.000	1.000	1.000	0.904	529	0%
2017	108,474,056	396,469	274	7.9%	7.9%	10/1/2024	2.223	1.000	1.000	1.000	0.904	550	0%
2018	128,038,534	383,825	334	7.9%	7.9%	10/1/2024	2.060	1.000	1.000	1.000	0.904	621	0%
2019	118,112,876	366,587	322	7.9%	7.9%	10/1/2024	1.909	1.000	1.000	1.000	0.904	556	0%
2020	97,765,121	300,640	325	7.9%	7.9%	10/1/2024	1.769	1.000	1.000	1.270	0.904	661	20%
2021	94,844,894	295,188	321	7.9%	7.9%	10/1/2024	1.640	1.000	1.000	1.382	0.904	658	20%
2022	133,915,424	290,320	461	7.9%	7.9%	10/1/2024	1.520	1.000	1.000	1.187	0.904	752	20%
2023	165,081,274	297,255	555	7.9%	7.9%	10/1/2024	1.408	1.000	1.000	1.106	0.904	782	20%
2024	156,002,125	302,622	516	7.9%	7.9%	10/1/2024	1.305	1.000	1.000	1.106	0.904	673	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												705	Sum( (13) x (14) )
D. Frequency x Severity Method												708	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												707	average(A * B, C)
Notes													
(9)	Factor for temporary increase in inflation												
(11)	Factor to adjust to pre-pandemic frequency levels												
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels												

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing

Forecasted Loss Cost - Current Product  
Total Property Damage  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman 2025 Annual Review	GISA Report AU707001	(2) / (3) * 1000					Oliver Wyman Loss Trend Report			Selected	(4) * (8) * (9) * (10) * (11) * (12)	Selected
<b>A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	7,837	418,861	18.710	-2.0%	-2.0%	10/1/2024	0.777		1.000	1.000	0.780	11.336	0%
2016	6,544	414,010	15.806	-2.0%	-2.0%	10/1/2024	0.793		1.000	1.000	0.780	9.772	0%
2017	6,989	396,469	17.627	-2.0%	-2.0%	10/1/2024	0.809		1.000	1.000	0.780	11.120	0%
2018	7,046	383,825	18.357	-2.0%	-2.0%	10/1/2024	0.825		1.000	1.000	0.780	11.817	0%
2019	5,875	366,587	16.025	-2.0%	-2.0%	10/1/2024	0.842		1.000	1.000	0.780	10.527	0%
2020	3,614	300,640	12.022	-2.0%	-2.0%	10/1/2024	0.859		1.000	1.431	0.780	11.534	20%
2021	3,486	295,188	11.809	-2.0%	-2.0%	10/1/2024	0.877		1.000	1.435	0.780	11.593	20%
2022	3,462	290,320	11.925	-2.0%	-2.0%	10/1/2024	0.895		1.000	1.264	0.780	10.521	20%
2023	3,178	297,255	10.690	-2.0%	-2.0%	10/1/2024	0.913		1.000	1.282	0.780	9.760	20%
2024	3,950	302,622	13.051	-2.0%	-2.0%	10/1/2024	0.932		1.000	1.282	0.780	12.159	20%
<b>Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>												11.113	Sum( (13) x (14) )
<b>B. Selected Severity at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and ALAE Estimate	Ultimate Claim Counts	Severity	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	2021-2 Scalar (Inflation)	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	70,245,915	7,837	8,963	1.7%	1.7%	10/1/2024	1.235	1.501	1.000			16,611	0%
2016	56,152,537	6,544	8,581	1.7%	1.7%	10/1/2024	1.214	1.501	1.000			15,637	0%
2017	66,552,006	6,989	9,523	1.7%	1.7%	10/1/2024	1.194	1.501	1.000			17,063	0%
2018	65,162,571	7,046	9,248	1.7%	1.7%	10/1/2024	1.174	1.501	1.000			16,294	0%
2019	52,964,053	5,875	9,016	1.7%	1.7%	10/1/2024	1.154	1.501	1.000			15,618	0%
2020	31,505,922	3,614	8,717	1.7%	1.7%	10/1/2024	1.135	1.480	1.000			14,636	20%
2021	37,053,919	3,486	10,629	1.7%	1.7%	10/1/2024	1.116	1.489	1.000			17,661	20%
2022	49,836,698	3,462	14,395	1.7%	1.7%	10/1/2024	1.097	1.413	1.000			22,309	20%
2023	45,866,538	3,178	14,434	1.7%	1.7%	10/1/2024	1.079	1.145	1.000			17,823	20%
2024	56,075,153	3,950	14,198	1.7%	1.7%	10/1/2024	1.061	1.000	1.000			15,062	20%
<b>Selected Severity at 1/1/2028 Cost Level</b>												17,498	Sum( (13) x (14) )
<b>C. Selected Loss Cost at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and ALAE Estimate	Earned Vehicles	Loss Cost	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	2021-2 Scalar (Inflation)	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	70,245,915	418,861	168	0%	0%	10/1/2024	0.959	1.501	1.000	1.000	0.780	188	0%
2016	56,152,537	414,010	136	0%	0%	10/1/2024	0.962	1.501	1.000	1.000	0.780	153	0%
2017	66,552,006	396,469	168	0%	0%	10/1/2024	0.965	1.501	1.000	1.000	0.780	190	0%
2018	65,162,571	383,825	170	0%	0%	10/1/2024	0.969	1.501	1.000	1.000	0.780	193	0%
2019	52,964,053	366,587	144	0%	0%	10/1/2024	0.972	1.501	1.000	1.000	0.780	164	0%
2020	31,505,922	300,640	105	0%	0%	10/1/2024	0.975	1.480	1.000	1.431	0.780	169	20%
2021	37,053,919	295,188	126	0%	0%	10/1/2024	0.978	1.489	1.000	1.435	0.780	205	20%
2022	49,836,698	290,320	172	0%	0%	10/1/2024	0.982	1.413	1.000	1.264	0.780	235	20%
2023	45,866,538	297,255	154	0%	0%	10/1/2024	0.985	1.145	1.000	1.282	0.780	174	20%
2024	56,075,153	302,622	185	0%	0%	10/1/2024	0.988	1.000	1.000	1.282	0.780	183	20%
<b>Initial Selected Loss Cost at 1/1/2028 Cost Level</b>												193.1	Sum( (13) x (14) )
<b>Frequency x Severity Method</b>												194.5	A * B
<b>Selected Loss Cost at 1/1/2028 Cost Level</b>												194	average(A * B, C)

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Accident Benefits - Total  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman 2025 Annual Review	GISA Report AUTO7001	(2) / (3) * 1000					Oliver Wyman 2025 Annual Review				(4) * (8) * (9) * (10) * (11) * (12)	Selected
<b>Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	765	411,530	1.859	3.2%	3.2%	10/1/2024	1.483		1.141	1.000	1.141	3.588	0%
2016	731	412,802	1.771	3.2%	3.2%	10/1/2024	1.437		1.141	1.000	1.141	3.312	0%
2017	819	394,703	2.075	3.2%	3.2%	10/1/2024	1.392		1.141	1.000	1.141	3.761	0%
2018	750	382,923	1.958	3.2%	3.2%	10/1/2024	1.349		1.141	1.000	1.141	3.438	0%
2019	744	365,903	2.032	3.2%	3.2%	10/1/2024	1.307		1.141	1.000	1.141	3.458	0%
2020	520	299,983	1.734	3.2%	3.2%	10/1/2024	1.267		1.141	1.248	1.141	3.569	20%
2021	564	294,772	1.913	3.2%	3.2%	10/1/2024	1.227		1.141	1.121	1.141	3.424	20%
2022	758	290,902	2.604	3.2%	3.2%	10/1/2024	1.189		1.118	0.947	1.141	3.742	20%
2023	715	297,561	2.403	3.2%	3.2%	10/1/2024	1.152		1.000	0.876	1.141	2.769	20%
2024	857	302,827	2.829	3.2%	3.2%	10/1/2024	1.117		1.000	0.876	1.141	3.159	20%
<b>A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>												3.333	Sum( (13) x (14) )
<b>Selected Severity at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	5,251,505	765	6,865	7.6%	7.6%	10/1/2024	2.499	1.000	1.205			20,673	0%
2016	4,750,533	731	6,499	7.6%	7.6%	10/1/2024	2.323	1.000	1.205			18,188	0%
2017	5,750,256	819	7,021	7.6%	7.6%	10/1/2024	2.159	1.000	1.205			18,262	0%
2018	4,676,667	750	6,238	7.6%	7.6%	10/1/2024	2.006	1.000	1.205			15,080	0%
2019	5,803,575	744	7,806	7.6%	7.6%	10/1/2024	1.864	1.000	1.205			17,536	0%
2020	4,821,729	520	9,272	7.6%	7.6%	10/1/2024	1.733	1.000	1.205			19,359	20%
2021	5,984,399	564	10,615	7.6%	7.6%	10/1/2024	1.610	1.000	1.205			20,598	20%
2022	8,114,472	758	10,710	7.6%	7.6%	10/1/2024	1.497	1.000	1.171			18,767	20%
2023	9,487,832	715	13,269	7.6%	7.6%	10/1/2024	1.391	1.000	1.000			18,456	20%
2024	10,922,956	857	12,750	7.6%	7.6%	10/1/2024	1.293	1.000	1.000			16,481	20%
<b>B. Selected Severity at 1/1/2028 Cost Level</b>												18,732	Sum( (13) x (14) )
<b>Selected Loss Cost at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	5,251,505	411,530	13	11%	11%	10/1/2024	3.705	1.000	1.205	1.000	1.141	65	0%
2016	4,750,533	412,802	12	11%	11%	10/1/2024	3.337	1.000	1.205	1.000	1.141	53	0%
2017	5,750,256	394,703	15	11%	11%	10/1/2024	3.005	1.000	1.205	1.000	1.141	60	0%
2018	4,676,667	382,923	12	11%	11%	10/1/2024	2.706	1.000	1.205	1.000	1.141	45	0%
2019	5,803,575	365,903	16	11%	11%	10/1/2024	2.437	1.000	1.205	1.000	1.141	53	0%
2020	4,821,729	299,983	16	11%	11%	10/1/2024	2.195	1.000	1.205	1.248	1.141	61	20%
2021	5,984,399	294,772	20	11%	11%	10/1/2024	1.976	1.000	1.205	1.121	1.141	62	20%
2022	8,114,472	290,902	28	11%	11%	10/1/2024	1.780	1.000	1.171	0.947	1.141	63	20%
2023	9,487,832	297,561	32	11%	11%	10/1/2024	1.603	1.000	1.000	0.876	1.141	51	20%
2024	10,922,956	302,827	36	11%	11%	10/1/2024	1.443	1.000	1.000	0.876	1.141	52	20%
<b>C. Initial Selected Loss Cost at 1/1/2028 Cost Level</b>												58	Sum( (13) x (14) )
<b>D. Frequency x Severity Method</b>												62	A * B
<b>E. Selected Loss Cost at 1/1/2028 Cost Level</b>												60	average(A * B, C)

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Collision  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman 2025 Annual Review	GISA Report AUTO7001	(2) / (3) * 1000					Oliver Wyman 2025 Annual Review				(4) * (8) * (9) * (10) * (11) * (12)	Selected
<b>Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	4,523	210,855	21.452	-1.9%	-1.9%	10/1/2024	0.787		1.000	1.000	0.700	11.814	0%
2016	4,065	201,784	20.145	-1.9%	-1.9%	10/1/2024	0.802		1.000	1.000	0.700	11.309	0%
2017	4,425	195,968	22.580	-1.9%	-1.9%	10/1/2024	0.818		1.000	1.000	0.700	12.922	0%
2018	4,531	195,391	23.189	-1.9%	-1.9%	10/1/2024	0.833		1.000	1.000	0.700	13.527	0%
2019	4,295	188,578	22.777	-1.9%	-1.9%	10/1/2024	0.849		1.000	1.000	0.700	13.544	0%
2020	2,848	163,253	17.445	-1.9%	-1.9%	10/1/2024	0.866		1.000	1.303	0.700	13.777	20%
2021	2,379	157,927	15.062	-1.9%	-1.9%	10/1/2024	0.883		1.000	1.304	0.700	12.139	20%
2022	2,613	158,939	16.443	-1.9%	-1.9%	10/1/2024	0.900		1.000	1.302	0.700	13.486	20%
2023	2,074	164,077	12.638	-1.9%	-1.9%	10/1/2024	0.917		1.000	1.429	0.700	11.591	20%
2024	2,288	170,600	13.410	-1.9%	-1.9%	10/1/2024	0.935		1.000	1.429	0.700	12.538	20%
<b>A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>												12.706	Sum( (13) x (14) )
<b>Selected Severity at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	50,415,174	4,523	11,146	1.8%	1.8%	10/1/2024	1.250	1.596	1.000			22,234	0%
2016	44,862,451	4,065	11,036	1.8%	1.8%	10/1/2024	1.228	1.596	1.000			21,627	0%
2017	49,808,343	4,425	11,256	1.8%	1.8%	10/1/2024	1.206	1.596	1.000			21,667	0%
2018	50,202,417	4,531	11,080	1.8%	1.8%	10/1/2024	1.185	1.596	1.000			20,951	0%
2019	43,355,320	4,295	10,094	1.8%	1.8%	10/1/2024	1.164	1.596	1.000			18,749	0%
2020	30,270,777	2,848	10,629	1.8%	1.8%	10/1/2024	1.143	1.571	1.000			19,083	20%
2021	29,741,152	2,379	12,503	1.8%	1.8%	10/1/2024	1.123	1.582	1.000			22,206	20%
2022	44,063,589	2,613	16,861	1.8%	1.8%	10/1/2024	1.103	1.489	1.000			27,696	20%
2023	37,960,577	2,074	18,307	1.8%	1.8%	10/1/2024	1.084	1.168	1.000			23,172	20%
2024	41,545,990	2,288	18,161	1.8%	1.8%	10/1/2024	1.065	1.000	1.000			19,332	20%
<b>B. Selected Severity at 1/1/2028 Cost Level</b>												22,298	Sum( (13) x (14) )
<b>Selected Loss Cost at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	50,415,174	210,855	239	0%	0%	10/1/2024	0.983	1.596	1.000	1.000	0.700	263	0%
2016	44,862,451	201,784	222	0%	0%	10/1/2024	0.985	1.596	1.000	1.000	0.700	245	0%
2017	49,808,343	195,968	254	0%	0%	10/1/2024	0.986	1.596	1.000	1.000	0.700	280	0%
2018	50,202,417	195,391	257	0%	0%	10/1/2024	0.987	1.596	1.000	1.000	0.700	283	0%
2019	43,355,320	188,578	230	0%	0%	10/1/2024	0.989	1.596	1.000	1.000	0.700	254	0%
2020	30,270,777	163,253	185	0%	0%	10/1/2024	0.990	1.571	1.000	1.303	0.700	263	20%
2021	29,741,152	157,927	188	0%	0%	10/1/2024	0.991	1.582	1.000	1.304	0.700	270	20%
2022	44,063,589	158,939	277	0%	0%	10/1/2024	0.993	1.489	1.000	1.302	0.700	374	20%
2023	37,960,577	164,077	231	0%	0%	10/1/2024	0.994	1.168	1.000	1.429	0.700	269	20%
2024	41,545,990	170,600	244	0%	0%	10/1/2024	0.995	1.000	1.000	1.429	0.700	242	20%
<b>C. Initial Selected Loss Cost at 1/1/2028 Cost Level</b>												283	Sum( (13) x (14) )
<b>D. Frequency x Severity Method</b>												283	A * B
<b>E. Selected Loss Cost at 1/1/2028 Cost Level</b>												283	average(A * B, C)

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Comprehensive - Total  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman 2025 Annual Review	GISA Report AUTO7001	(2) / (3) * 1000					Oliver Wyman 2025 Annual Review				(4) * (8) * (9) * (10) * (11) * (12)	Selected
<b>Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	6,653	274,591	24.229	0.8%	0.8%	10/1/2024	1.105		1.000	1.000	1.000	26.767	0%
2016	7,278	268,252	27.130	0.8%	0.8%	10/1/2024	1.096		1.000	1.000	1.000	29.734	0%
2017	7,144	261,164	27.353	0.8%	0.8%	10/1/2024	1.087		1.000	1.000	1.000	29.741	0%
2018	5,972	258,191	23.131	0.8%	0.8%	10/1/2024	1.079		1.000	1.000	1.000	24.951	0%
2019	6,061	247,012	24.537	0.8%	0.8%	10/1/2024	1.070		1.000	1.000	1.000	26.258	0%
2020	5,881	216,459	27.169	0.8%	0.8%	10/1/2024	1.062		1.000	1.000	1.000	28.843	20%
2021	4,726	207,818	22.740	0.8%	0.8%	10/1/2024	1.053		1.000	1.000	1.000	23.950	20%
2022	5,129	206,664	24.817	0.8%	0.8%	10/1/2024	1.045		1.000	1.000	1.000	25.929	20%
2023	4,597	210,530	21.835	0.8%	0.8%	10/1/2024	1.037		1.000	1.000	1.000	22.632	20%
2024	6,584	216,077	30.469	0.8%	0.8%	10/1/2024	1.028		1.000	1.000	1.000	31.332	20%
<b>A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>												26.537	Sum( (13) x (14) )
<b>Selected Severity at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	63,619,956	6,653	9,563	3.1%	3.1%	10/1/2024	1.465	1.000	1.000			14,008	0%
2016	67,434,837	7,278	9,266	3.1%	3.1%	10/1/2024	1.421	1.000	1.000			13,165	0%
2017	70,268,617	7,144	9,837	3.1%	3.1%	10/1/2024	1.378	1.000	1.000			13,555	0%
2018	60,775,937	5,972	10,177	3.1%	3.1%	10/1/2024	1.337	1.000	1.000			13,602	0%
2019	60,802,535	6,061	10,032	3.1%	3.1%	10/1/2024	1.296	1.000	1.000			13,006	0%
2020	60,922,436	5,881	10,359	3.1%	3.1%	10/1/2024	1.257	1.000	1.000			13,026	20%
2021	51,167,389	4,726	10,827	3.1%	3.1%	10/1/2024	1.220	1.000	1.000			13,205	20%
2022	61,867,195	5,129	12,063	3.1%	3.1%	10/1/2024	1.183	1.000	1.000			14,270	20%
2023	64,285,736	4,597	13,985	3.1%	3.1%	10/1/2024	1.147	1.000	1.000			16,046	20%
2024	101,545,548	6,584	15,424	3.1%	3.1%	10/1/2024	1.113	1.000	1.000			17,165	20%
<b>B. Selected Severity at 1/1/2028 Cost Level</b>												14,743	Sum( (13) x (14) )
<b>Selected Loss Cost at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	63,619,956	274,591	232	4%	4%	10/1/2024	1.618	1.000	1.000	1.000	1.000	374.9	0%
2016	67,434,837	268,252	251	4%	4%	10/1/2024	1.557	1.000	1.000	1.000	1.000	391.5	0%
2017	70,268,617	261,164	269	4%	4%	10/1/2024	1.498	1.000	1.000	1.000	1.000	403.2	0%
2018	60,775,937	258,191	235	4%	4%	10/1/2024	1.442	1.000	1.000	1.000	1.000	339.4	0%
2019	60,802,535	247,012	246	4%	4%	10/1/2024	1.387	1.000	1.000	1.000	1.000	341.5	0%
2020	60,922,436	216,459	281	4%	4%	10/1/2024	1.335	1.000	1.000	1.000	1.000	375.7	20%
2021	51,167,389	207,818	246	4%	4%	10/1/2024	1.285	1.000	1.000	1.000	1.000	316.3	20%
2022	61,867,195	206,664	299	4%	4%	10/1/2024	1.236	1.000	1.000	1.000	1.000	370.0	20%
2023	64,285,736	210,530	305	4%	4%	10/1/2024	1.189	1.000	1.000	1.000	1.000	363.2	20%
2024	101,545,548	216,077	470	4%	4%	10/1/2024	1.144	1.000	1.000	1.000	1.000	537.8	20%
<b>C. Initial Selected Loss Cost at 1/1/2028 Cost Level</b>												392.6	Sum( (13) x (14) )
<b>D. Frequency x Severity Method</b>												391.2	A * B
<b>E. Selected Loss Cost at 1/1/2028 Cost Level</b>												391.9	average(A * B, C)

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels



Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
All Perils  
Data as of 12/31/2024

(1)	(2) Oliver Wyman 2025 Annual Review	(3) GISA Report AUTO7001	(4) (2) / (3) * 1000	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13) (4) * (8) * (9) * (10) * (11) * (12)	(14) Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	2,330	81,227	28.683	-1.1%	-1.1%	10/1/2024	0.872		1.000	1.000	1.000	25.009	0%
2016	2,171	85,309	25.447	-1.1%	-1.1%	10/1/2024	0.882		1.000	1.000	1.000	22.432	0%
2017	2,328	79,770	29.179	-1.1%	-1.1%	10/1/2024	0.891		1.000	1.000	1.000	26.006	0%
2018	2,182	74,266	29.383	-1.1%	-1.1%	10/1/2024	0.901		1.000	1.000	1.000	26.476	0%
2019	1,764	67,651	26.077	-1.1%	-1.1%	10/1/2024	0.911		1.000	1.000	1.000	23.756	0%
2020	846	38,215	22.147	-1.1%	-1.1%	10/1/2024	0.921		1.000	1.000	1.000	20.399	20%
2021	703	33,881	20.760	-1.1%	-1.1%	10/1/2024	0.931		1.000	1.000	1.000	19.331	20%
2022	840	35,748	23.490	-1.1%	-1.1%	10/1/2024	0.941		1.000	1.000	1.000	22.115	20%
2023	759	38,870	19.517	-1.1%	-1.1%	10/1/2024	0.952		1.000	1.000	1.000	18.577	20%
2024	1,066	39,586	26.939	-1.1%	-1.1%	10/1/2024	0.962		1.000	1.000	1.000	25.925	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												21.269	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	48,520,397	2,330	20,826	2.2%	2.2%	10/1/2024	1.311	1.000	1.000			27,305	0%
2016	41,176,979	2,171	18,968	2.2%	2.2%	10/1/2024	1.283	1.000	1.000			24,337	0%
2017	47,623,315	2,328	20,460	2.2%	2.2%	10/1/2024	1.256	1.000	1.000			25,688	0%
2018	49,290,333	2,182	22,588	2.2%	2.2%	10/1/2024	1.229	1.000	1.000			27,752	0%
2019	37,535,445	1,764	21,277	2.2%	2.2%	10/1/2024	1.202	1.000	1.000			25,581	0%
2020	17,373,630	846	20,528	2.2%	2.2%	10/1/2024	1.177	1.000	1.000			24,152	20%
2021	15,577,365	703	22,147	2.2%	2.2%	10/1/2024	1.151	1.000	1.000			25,498	20%
2022	21,232,438	840	25,285	2.2%	2.2%	10/1/2024	1.127	1.000	1.000			28,487	20%
2023	21,730,836	759	28,645	2.2%	2.2%	10/1/2024	1.102	1.000	1.000			31,581	20%
2024	32,613,736	1,066	30,582	2.2%	2.2%	10/1/2024	1.079	1.000	1.000			32,994	20%
B. Selected Severity at 1/1/2028 Cost Level												28,542	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	48,520,397	81,227	597	1%	1%	10/1/2024	1.144	1.000	1.000	1.000	1.000	684	0%
2016	41,176,979	85,309	483	1%	1%	10/1/2024	1.132	1.000	1.000	1.000	1.000	546	0%
2017	47,623,315	79,770	597	1%	1%	10/1/2024	1.120	1.000	1.000	1.000	1.000	669	0%
2018	49,290,333	74,266	664	1%	1%	10/1/2024	1.108	1.000	1.000	1.000	1.000	735	0%
2019	37,535,445	67,651	555	1%	1%	10/1/2024	1.096	1.000	1.000	1.000	1.000	608	0%
2020	17,373,630	38,215	455	1%	1%	10/1/2024	1.084	1.000	1.000	1.000	1.000	493	20%
2021	15,577,365	33,881	460	1%	1%	10/1/2024	1.073	1.000	1.000	1.000	1.000	493	20%
2022	21,232,438	35,748	594	1%	1%	10/1/2024	1.061	1.000	1.000	1.000	1.000	630	20%
2023	21,730,836	38,870	559	1%	1%	10/1/2024	1.050	1.000	1.000	1.000	1.000	587	20%
2024	32,613,736	39,586	824	1%	1%	10/1/2024	1.038	1.000	1.000	1.000	1.000	856	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												612	Sum( (13) x (14) )
D. Frequency x Severity Method												607	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												609	average(A * B, C)
Notes													
(9)	Factor for temporary increase in inflation												
(11)	Factor to adjust to pre-pandemic frequency levels												
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels												

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Specified Perils  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman 2025 Annual Review	GISA Report AUTO7001	(2) / (3) * 1000					Oliver Wyman 2025 Annual Review				(4) * (8) * (9) * (10) * (11) * (12)	Selected
<b>Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	177	23,371	7.569	0.8%	0.8%	10/1/2024	1.105		1.000	1.000	1.000	8.362	0%
2016	137	22,951	5.964	0.8%	0.8%	10/1/2024	1.096		1.000	1.000	1.000	6.536	0%
2017	146	21,951	6.645	0.8%	0.8%	10/1/2024	1.087		1.000	1.000	1.000	7.225	0%
2018	140	21,034	6.647	0.8%	0.8%	10/1/2024	1.079		1.000	1.000	1.000	7.170	0%
2019	132	20,674	6.374	0.8%	0.8%	10/1/2024	1.070		1.000	1.000	1.000	6.821	0%
2020	126	20,662	6.088	0.8%	0.8%	10/1/2024	1.062		1.000	1.000	1.000	6.463	20%
2021	95	20,666	4.589	0.8%	0.8%	10/1/2024	1.053		1.000	1.000	1.000	4.833	20%
2022	145	20,772	6.973	0.8%	0.8%	10/1/2024	1.045		1.000	1.000	1.000	7.285	20%
2023	111	20,150	5.527	0.8%	0.8%	10/1/2024	1.037		1.000	1.000	1.000	5.729	20%
2024	108	19,437	5.548	0.8%	0.8%	10/1/2024	1.028		1.000	1.000	1.000	5.705	20%
<b>A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level</b>												6.003	Sum( (13) x (14) )
<b>Selected Severity at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	1,559,774	177	8,818	3.1%	3.1%	10/1/2024	1.465	1.000	1.000			12,917	0%
2016	1,267,541	137	9,260	3.1%	3.1%	10/1/2024	1.421	1.000	1.000			13,157	0%
2017	1,287,101	146	8,824	3.1%	3.1%	10/1/2024	1.378	1.000	1.000			12,160	0%
2018	1,369,563	140	9,796	3.1%	3.1%	10/1/2024	1.337	1.000	1.000			13,093	0%
2019	1,531,529	132	11,622	3.1%	3.1%	10/1/2024	1.296	1.000	1.000			15,067	0%
2020	1,129,413	126	8,978	3.1%	3.1%	10/1/2024	1.257	1.000	1.000			11,290	20%
2021	1,256,495	95	13,248	3.1%	3.1%	10/1/2024	1.220	1.000	1.000			16,158	20%
2022	1,766,625	145	12,198	3.1%	3.1%	10/1/2024	1.183	1.000	1.000			14,430	20%
2023	1,698,031	111	15,247	3.1%	3.1%	10/1/2024	1.147	1.000	1.000			17,495	20%
2024	1,792,545	108	16,624	3.1%	3.1%	10/1/2024	1.113	1.000	1.000			18,501	20%
<b>B. Selected Severity at 1/1/2028 Cost Level</b>												15,575	Sum( (13) x (14) )
<b>Selected Loss Cost at 1/1/2028 Cost Level</b>													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	1,559,774	23,371	67	4%	4%	10/1/2024	1.618	1.000	1.000	1.000	1.000	108	0%
2016	1,267,541	22,951	55	4%	4%	10/1/2024	1.557	1.000	1.000	1.000	1.000	86	0%
2017	1,287,101	21,951	59	4%	4%	10/1/2024	1.498	1.000	1.000	1.000	1.000	88	0%
2018	1,369,563	21,034	65	4%	4%	10/1/2024	1.442	1.000	1.000	1.000	1.000	94	0%
2019	1,531,529	20,674	74	4%	4%	10/1/2024	1.387	1.000	1.000	1.000	1.000	103	0%
2020	1,129,413	20,662	55	4%	4%	10/1/2024	1.335	1.000	1.000	1.000	1.000	73	20%
2021	1,256,495	20,666	61	4%	4%	10/1/2024	1.285	1.000	1.000	1.000	1.000	78	20%
2022	1,766,625	20,772	85	4%	4%	10/1/2024	1.236	1.000	1.000	1.000	1.000	105	20%
2023	1,698,031	20,150	84	4%	4%	10/1/2024	1.189	1.000	1.000	1.000	1.000	100	20%
2024	1,792,545	19,437	92	4%	4%	10/1/2024	1.144	1.000	1.000	1.000	1.000	106	20%
<b>C. Initial Selected Loss Cost at 1/1/2028 Cost Level</b>												92	Sum( (13) x (14) )
<b>D. Frequency x Severity Method</b>												93	A * B
<b>E. Selected Loss Cost at 1/1/2028 Cost Level</b>												93	average(A * B, C)

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Underinsured Motorist  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman 2025 Annual Review	GISA Report AUTO7001	(2) / (3) * 1000									(4) * (8) * (9) * (10) * (11) * (12)	Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	6	404,314	0.015	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.015	0%
2016	5	392,801	0.014	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.014	0%
2017	5	372,446	0.013	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.013	0%
2018	5	366,813	0.013	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.013	0%
2019	4	349,160	0.012	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.012	0%
2020	3	286,555	0.009	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.009	20%
2021	4	280,603	0.014	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.014	20%
2022	2	278,921	0.008	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.008	20%
2023	7	282,083	0.023	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.023	20%
2024	5	288,581	0.017	0.0%	0.0%	10/1/2024	1.000		1.000	1.000	1.000	0.017	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												0.014	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	3,156,825	6	526,137	9.8%	9.8%	10/1/2024	3.219	1.000	1.000			1,693,540	0%
2016	1,152,671	5	210,093	9.8%	9.8%	10/1/2024	2.932	1.000	1.000			615,892	0%
2017	1,618,317	5	322,617	9.8%	9.8%	10/1/2024	2.670	1.000	1.000			861,348	0%
2018	1,546,424	5	334,197	9.8%	9.8%	10/1/2024	2.432	1.000	1.000			812,628	0%
2019	1,718,600	4	396,155	9.8%	9.8%	10/1/2024	2.215	1.000	1.000			877,308	0%
2020	1,008,089	3	385,531	9.8%	9.8%	10/1/2024	2.017	1.000	1.000			777,577	20%
2021	2,018,500	4	506,968	9.8%	9.8%	10/1/2024	1.837	1.000	1.000			931,242	20%
2022	6,757,697	2	3,130,893	9.8%	9.8%	10/1/2024	1.673	1.000	1.000			5,237,789	20%
2023	636,291	7	96,169	9.8%	9.8%	10/1/2024	1.524	1.000	1.000			146,525	20%
2024	8,975,270	5	1,851,520	9.8%	9.8%	10/1/2024	1.388	1.000	1.000			2,569,233	20%
B. Selected Severity at 1/1/2028 Cost Level												1,932,473	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	3,156,825	404,314	8	10%	10%	10/1/2024	3.219	1.000	1.000	1.000	1.000	25	0%
2016	1,152,671	392,801	3	10%	10%	10/1/2024	2.932	1.000	1.000	1.000	1.000	9	0%
2017	1,618,317	372,446	4	10%	10%	10/1/2024	2.670	1.000	1.000	1.000	1.000	12	0%
2018	1,546,424	366,813	4	10%	10%	10/1/2024	2.432	1.000	1.000	1.000	1.000	10	0%
2019	1,718,600	349,160	5	10%	10%	10/1/2024	2.215	1.000	1.000	1.000	1.000	11	0%
2020	1,008,089	286,555	4	10%	10%	10/1/2024	2.017	1.000	1.000	1.000	1.000	7	20%
2021	2,018,500	280,603	7	10%	10%	10/1/2024	1.837	1.000	1.000	1.000	1.000	13	20%
2022	6,757,697	278,921	24	10%	10%	10/1/2024	1.673	1.000	1.000	1.000	1.000	41	20%
2023	636,291	282,083	2	10%	10%	10/1/2024	1.524	1.000	1.000	1.000	1.000	3	20%
2024	8,975,270	288,581	31	10%	10%	10/1/2024	1.388	1.000	1.000	1.000	1.000	43	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												21	Sum( (13) x (14) )
D. Frequency x Severity Method												28	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												25	average(A * B, C)

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Non-Claim Expenses - Current Product  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	
	as Percentage of Direct Written Premium			
	Total Commissions (including CPC)	Taxes	Other Acquisition and General Expenses	
A.1. Selected Expense Provision	13.2%	4.0%	10.1%	PPV Analysis
A.2. Percent Variable	100%	100%	60%	PPV Analysis
A.3. Percent Fixed	0%	0%	40%	PPV Analysis
B. Estimated Variable Expense Provision			<b>23.2%</b>	Sum[A.1 x A.2]
C.1. Estimated Fixed Expense (as % of Premium)			4.0%	Sum[A.1 x A.3]
C.2. 2024-2 Average Written Premium			1,901	GISA Report AUTO7001
C.3. Estimated Fixed Expense (per Vehicle)			77	C.1 * C.2
D.1. Fixed Expense Trend Rate			4.0%	Selected
D.2. Trend From Date			10/1/2024	
D.3. Trend To Date			1/1/2028	
D.4. Fixed Expense Trend			1.136	$(1 + D.1)^{[(D.3 - D.2) / 365.25]}$
D.5. Estimated Fixed Expense per Earned Vehicle			87	C.3 * D.4

Notes

(2)

CPC = contingent profit commission.

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Health Levy - Current Product  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)
	See Note	GISA Report AUTO7001	(2) * (3)	GISA Report AUTO7001	(4) / (5)
Accident Year	Health Levy	TPL Earned Premium	Total Health Levy	Earned Vehicles	Health Levy Cost per Vehicles
2013	5.74%	214,503,380	12,301,769	361,411	34.04
2014	4.95%	227,182,550	11,245,536	392,117	28.68
2015	5.72%	234,656,965	13,422,378	418,861	32.04
2016	6.18%	226,666,260	13,996,642	414,010	33.81
2017	5.79%	224,366,545	12,979,605	396,469	32.74
2018	7.04%	228,705,735	16,100,884	383,825	41.95
2019	6.70%	234,119,364	15,685,997	366,587	42.79
2020	4.74%	207,456,365	9,833,432	300,640	32.71
2021	2.94%	220,317,156	6,477,324	295,188	21.94
2022	3.55%	234,394,340	8,320,999	290,320	28.66
2023	2.86%	248,723,995	7,113,506	290,320	24.50
2024	2.94%	266,679,250	7,840,370	290,320	27.01
2025	1.94%		8,193,187	290,320	28.22
2026			8,561,880	290,320	29.49
2027			8,947,165	290,320	30.82
2028			9,349,787	290,320	32.21
			Indicated Trend		
2013 - 2022			-5.0%	-3.6%	
2013 - 2019			5.2%	-0.2%	
2015 - 2019			4.6%	-3.4%	
2021 - 2024			4.2%	-0.5%	
Selected			4.5%	0.0%	

Note

- (2) Tax and Revenue Administration (TRA) - Health Cost Recovery Special Notice Vol. 6 No. 26
- (4) & (5) 2025 - 2027 projected based on actual 2024 health levy and selected trend.  
Health levy trend selection implicitly considers reduction in frequency observed during the pandemic.  
2025 Earned premiums were not available for this review.  
Given the decrease in the 2025 health levy rate, we expect that our estimate is slightly conservative.

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Required Premium - Current Product  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			per (3)	CV Exhibit CP-1.1 - CV Exhibit CP-1.8	See Note	(5) * (6)	See Note	CV Exhibit CP-2.1	Board Benchmark	(7) * (8) / (1 - (9) - (10))	See Note	(11) + (12)
Coverage	Subcoverage	202402 Written Vehicles	Percent of Vehicles with Coverage	Selected Loss Cost at 1/1/2028 Cost Level	Claim Payment Pattern Factor	Projected Discounted Loss Cost per Vehicle	Delay in Receiving Premiums	Estimated Variable Expense Provision	Profit Provision	Estimated Required Premium (Excl. Fixed Expense)	Allocated Fixed Expense	Estimated Required Premium
Third Party Liability	Bodily Injury			706.52	0.837	591.08	1.009	23%	6%	843	52	895
Third Party Liability	Total Property Damage			193.77	0.957	185.47	1.009	23%	6%	264	16	281
Third Party Liability	Health Levy			32.21	1.000	32.21	1.009	23%	6%	46	3	49
Third Party Liability	Total	143,408	100%	932.491	0.867	808.75	1.009	23%	6%	1,153	71	1,224
Accident Benefits	Accident Benefits - Total	143,412	100%	60.05	0.926	55.61	1.009	23%	6%	79	5	84
Collision	Collision	83,275	58%	283.36	0.971	275.23	1.009	23%	6%	392	24	417
Comprehensive	Comprehensive - Total	105,634	74%	391.91	0.969	379.90	1.009	23%	6%	542	34	575
All Perils	All Perils	18,093	13%	609.41	0.967	589.43	1.009	23%	6%	840	52	892
Specified Perils	Specified Perils	9,213	6%	92.94	0.975	90.60	1.009	23%	6%	129	8	137
Underinsured Motorists	Underinsured Motorist	136,836	95%	24.52	0.837	20.52	1.009	23%	6%	29	2	31
D.5. Estimated Fixed Expense per Earned Vehicle							87	1.009	23%	6%	124	
							CV Exhibit CP-2.1					
Package	Basic Coverage			993	0.871	864	1.009	23%	6%	1,232	76	1,308
Package	Full Coverage			1,692	0.910	1,540	1.009	23%	6%	2,195	136	2,331
	(assumes insured purchases CM rather than AP/SP)											
Package	Industry Weighted Average			1,552	0.904	1,404	1.009	23%	6%	2,001	124	2,125
Notes												
0	Health Levy per CV Exhibit CP-2.2											
(6)	Based on 5-year industry average investment income rate of 3.70% and selected payment pattern											
	Reported Return on Investment			2020	2021	2022	2023	2024	Average	Selected		
	per P&C Financial Returns reported to OSFI			2.24%	4.23%	4.17%	2.71%	0.08%	2.69%	3.70%		
	2023 excludes a large insurer that reported an ROI of 72.03%											
(8)	Based on investment rate of 3.70% and assumed three month delay											
(12)	Total fixed expense per Earned Vehicle from CV Exhibit CP-2.1. Fixed expenses allocated to coverages proportional to (11).											

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Out of Province Loss Cost**  
**Data as of 12/31/2024**

(1)	(2) AUTO-7001	(3) AUTO-7001	(4) SUM((2)-(3))	(5) (2) / (4)	(6) (3) / (4)	(7) (4) / (4)
Accident Half Year	Reported Incurred Claims and ALAE			Distribution		
	Within Province	Out of Province	Total	Within Province	Out of Province	Total
202201	33,588,363	174,073	33,762,436	99.5%	0.5%	100.0%
202202	45,623,623	683,252	46,306,875	98.5%	1.5%	100.0%
202301	33,732,072	1,161,115	34,893,187	96.7%	3.3%	100.0%
202302	31,826,198	335,064	32,161,262	99.0%	1.0%	100.0%
202401	21,666,977	661,851	22,328,828	97.0%	3.0%	100.0%
202402	15,880,086	186,701	16,066,787	98.8%	1.2%	100.0%
A.	All-Year Weighted Average.....			98.3%	1.7%	
B.	Selected Out of Province Distribution.....			98.3%	1.7%	100.0%
C.	Selected Out of Province Severity Differential Factor.....				150.0%	
	Estimated ratio of average severity for out-of-province claims to in-province claims					
D.	Implied Frequency Adjustment.....				1.2%	
	B. / C.					
Notes						
(2)	Includes loss codes 5 and 6 from the kind of loss code field in Exhibit AUTO7001.					
(3)	Includes loss codes 3 and 4 from the kind of loss code field in Exhibit AUTO7001.					
C.	We note that out-of-province claims may be more complex due to jurisdictional differences. We judgmentally select a 150% severity adjustment factor.					

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury: Out of Province Loss Cost**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)
	CV Exhibit CP-1.1	CV Exhibit CF-1.1.1	(2) * (3)
Metric	Current Product	Out of Province Adjustment	Care-First
Frequency	2.8	1.2%	0.032
Severity	255,974	150.0%	383,961
BI Loss Cost: Out of Province Claims			12.22



Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Underinsured Motorist - Ultimate Loss and ALAE Allocation**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)
	CV Exhibit CP-1.8	CV Exhibit CF-1.1.1	(2) * (3)
Accident Year	Loss Cost at 1/1/2028 Cost Level	Selected Out of Province Distribution	Estimated Loss Cost for Out of Province Accidents
2015	25.13	1.7%	0.43
2016	8.60	1.7%	0.15
2017	11.60	1.7%	0.20
2018	10.25	1.7%	0.18
2019	10.90	1.7%	0.19
2020	7.10	1.7%	0.12
2021	13.21	1.7%	0.23
2022	40.53	1.7%	0.70
2023	3.44	1.7%	0.06
2024	43.16	1.7%	0.74
	All-Year Average		0.30
	5-year average		0.37
	Selected Loss Cost at 1/1/2028 Cost Level		0.37

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury - Selected Loss Cost**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)	(5)	(6)
	PPV, Exhibit CF-1.10	PPV, Exhibit CP-1.1	CV Exhibit CP-1.1	See Note	(2) / (3) * (4) * (5)
Basis of Tort Claim	PPV Loss Cost per Vehicle	PPV Underlying Benefit Frequency	CV Bodily Injury Frequency	CV Severity Adjustment Factor	Loss Cost per Vehicle
Out of Province Claims				CV Exhibit CF-1.1.2 -->	12.22
Excess Disability Income	3.91	4.745	2.765	1.750	3.989
Excess Out-of-Pocket Expenses for Personal Care Assistance	1.89	4.745	2.765	1.000	1.100
Excess Out-of-Pocket Expenses for Funerals	0.36	4.745	2.765	1.000	0.210
Excess Out-of-Pocket Expenses for Grief Counseling Limits	0.01	4.745	2.765	1.000	0.005
Excess of Care-First Family Enterprise Limits	1.13	4.745	2.765	1.000	0.656
Total Bodily Injury Loss Cost					18.18
Selected Bodily Injury Loss Cost					25.00

**Note**

We assume that the loss cost for in-province tort claims is scaled by the relative frequency of bodily injury claims, as the claimant in the tort action will not differ between PPV and CV.

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	GISA Report AUTO7001	Based on Oliver Wyman Analysis/Assumption underlying 2025 Annual Review				(5) + (6)	Based on Oliver Wyman Analysis/Assumption underlying 2025 Annual Review		(8) + (9)	(3) / (2) * 1000	(4) / (2) * 1000	(7) / (2) * 1000	(10) / (2) * 1000
		Alberta Ultimate Claim Counts								Alberta Frequency (per 1,000 Vehicles)			
Accident Year	Earned Vehicles	Medical Expenses	Income Replacement	Death Benefits	Funeral	Funeral and Death Benefits	Excess	Uninsured	Excess and Uninsured	Medical Expenses	Income Replacement	Funeral and Death Benefits	Excess and Uninsured
2015	411,530	652	98	5	9	14	0	1	1	1.6	0.2	0.0	0.0
2016	412,802	608	98	12	13	25	0	0	0	1.5	0.2	0.1	0.0
2017	394,703	700	93	11	14	25	0	1	1	1.8	0.2	0.1	0.0
2018	382,923	639	89	10	12	22	0	0	0	1.7	0.2	0.1	0.0
2019	365,903	627	93	9	15	24	0	0	0	1.7	0.3	0.1	0.0
2020	299,983	443	64	7	6	12	0	0	0	1.5	0.2	0.0	0.0
2021	294,772	477	75	6	5	11	0	1	1	1.6	0.3	0.0	0.0
2022	290,902	650	70	11	11	22	6	10	16	2.2	0.2	0.1	0.1
2023	297,561	594	103	9	9	18	0	0	0	2.0	0.3	0.1	0.0
2024	302,827	731	102	7	12	19	3	1	4	2.4	0.3	0.1	0.0

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Medical Expenses - Selected Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	CV Exhibit CF-2.1			Oliver Wyman 2025 Annual Review				(2) * (6) * (7) * (8)	Selected
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2 /Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	1.6	3.2%	3.2%	10/1/2024	1.483	1.000	1.141	2.7	0%
2016	1.5	3.2%	3.2%	10/1/2024	1.437	1.000	1.141	2.4	0%
2017	1.8	3.2%	3.2%	10/1/2024	1.392	1.000	1.141	2.8	0%
2018	1.7	3.2%	3.2%	10/1/2024	1.349	1.000	1.141	2.6	0%
2019	1.7	3.2%	3.2%	10/1/2024	1.307	1.000	1.141	2.6	0%
2020	1.5	3.2%	3.2%	10/1/2024	1.267	1.248	1.141	2.7	20%
2021	1.6	3.2%	3.2%	10/1/2024	1.227	1.121	1.141	2.5	20%
2022	2.2	3.2%	3.2%	10/1/2024	1.189	0.947	1.141	2.9	20%
2023	2.0	3.2%	3.2%	10/1/2024	1.152	0.876	1.141	2.3	20%
2024	2.4	3.2%	3.2%	10/1/2024	1.117	0.876	1.141	2.7	20%
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								2.6	Sum [ (9) x (10) ]

Notes

- (6) Future trend is equal to Past 2 trend
- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Income Replacement - Selected Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	CV Exhibit CF-2.1			Oliver Wyman 2025 Annual Review				(2) * (6) * (7) * (8)	Selected
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2/Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	0.2	3.2%	3.2%	10/1/2024	1.483	1.000	1.141	0.4	0%
2016	0.2	3.2%	3.2%	10/1/2024	1.437	1.000	1.141	0.4	0%
2017	0.2	3.2%	3.2%	10/1/2024	1.392	1.000	1.141	0.4	0%
2018	0.2	3.2%	3.2%	10/1/2024	1.349	1.000	1.141	0.4	0%
2019	0.3	3.2%	3.2%	10/1/2024	1.307	1.000	1.141	0.4	0%
2020	0.2	3.2%	3.2%	10/1/2024	1.267	1.248	1.141	0.4	20%
2021	0.3	3.2%	3.2%	10/1/2024	1.227	1.121	1.141	0.4	20%
2022	0.2	3.2%	3.2%	10/1/2024	1.189	0.947	1.141	0.3	20%
2023	0.3	3.2%	3.2%	10/1/2024	1.152	0.876	1.141	0.4	20%
2024	0.3	3.2%	3.2%	10/1/2024	1.117	0.876	1.141	0.4	20%
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								0.4	Sum [ (9) x (10) ]

Notes

- (6) Future trend is equal to Past 2 trend
- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Funeral and Death Benefits - Selected Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	CV Exhibit CF-2.1			Oliver Wyman 2025 Annual Review				(2) * (6) * (7) * (8)	Selected
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2/Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	0.0	3.2%	3.2%	10/1/2024	1.483	1.000	1.141	0.1	0%
2016	0.1	3.2%	3.2%	10/1/2024	1.437	1.000	1.141	0.1	0%
2017	0.1	3.2%	3.2%	10/1/2024	1.392	1.000	1.141	0.1	0%
2018	0.1	3.2%	3.2%	10/1/2024	1.349	1.000	1.141	0.1	0%
2019	0.1	3.2%	3.2%	10/1/2024	1.307	1.000	1.141	0.1	0%
2020	0.0	3.2%	3.2%	10/1/2024	1.267	1.248	1.141	0.1	20%
2021	0.0	3.2%	3.2%	10/1/2024	1.227	1.121	1.141	0.1	20%
2022	0.1	3.2%	3.2%	10/1/2024	1.189	0.947	1.141	0.1	20%
2023	0.1	3.2%	3.2%	10/1/2024	1.152	0.876	1.141	0.1	20%
2024	0.1	3.2%	3.2%	10/1/2024	1.117	0.876	1.141	0.1	20%
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								0.1	Sum [ (9) x (10) ]

Notes

- (6) Future trend is equal to Past 2 trend
- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Excess and Uninsured - Selected Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	CV Exhibit CF-2.1			Oliver Wyman 2025 Annual Review				(2) * (6) * (7) * (8)	Selected
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2/Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	0.002	3.2%	3.2%	10/1/2024	1.483	1.000	1.141	0.0	0%
2016	0.000	3.2%	3.2%	10/1/2024	1.437	1.000	1.141	0.0	0%
2017	0.003	3.2%	3.2%	10/1/2024	1.392	1.000	1.141	0.0	0%
2018	0.000	3.2%	3.2%	10/1/2024	1.349	1.000	1.141	0.0	0%
2019	0.000	3.2%	3.2%	10/1/2024	1.307	1.000	1.141	0.0	0%
2020	0.000	3.2%	3.2%	10/1/2024	1.267	1.248	1.141	0.0	20%
2021	0.003	3.2%	3.2%	10/1/2024	1.227	1.121	1.141	0.0	20%
2022	0.055	3.2%	3.2%	10/1/2024	1.189	0.947	1.141	0.1	20%
2023	0.000	3.2%	3.2%	10/1/2024	1.152	0.876	1.141	0.0	20%
2024	0.015	3.2%	3.2%	10/1/2024	1.117	0.876	1.141	0.0	20%
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								0.0185	Sum [ (9) x (10) ]
Excess and Unisured Factor								0.0033	

Notes

- (6) Future trend is equal to Past 2 trend
- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Accident Benefits - Frequency**  
**Data as of 12/31/2024**

	(1)	(2)	
	Funeral and Death Benefits Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	0.07	CV Exhibit CF-2.4
A.			
B.	Selected (P/I + F/D) Frequency : F/D Frequency Factor	10.000	PPV Analysis
C.	Selected Permanent Impairment Frequency	0.66	A. * (B. - 1)



Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Income Replacement Second Payer Adjustment (Severity)  
Data as of 12/31/2024

	(1)	(2)	(3)	(4)	(5)	
				No Group Disability Plan	With Group Disability Plan	
			Weekly Benefits from	Weekly Indemnity	Weekly Indemnity	
	Average Gross Weekly	Average Net Weekly	Collateral Source (Long-	Benefit	Benefit after Group	
	Income	Income	Term Disability) Plan		Disability Plan	
					Payments	
PPV, Exhibit CF-5.2 -->	1,321	982	589	769	182	
A.1 Percentage of disability plans where Auto policy will be 1st payer						
A.1.1 ICBC 2021 RRA Assumption (Based on judgment)				50%		
A.1.2 Selected Percentage of disability plans where Auto policy will be 1st payer				50%	Current AB auto policy is 2nd payer	
B. Percent of Employed Individuals with Disability Plan or Access to Workers Compensation				90%		
				(6)	(7)	
				Proportion of	Severity Net of	
				Employed Claimants	Collateral Benefits	
Employed Claimants without Group Disability Plan				10.0%	769	(6) per B.3.,(7) per (4)
Employed Claimants with Group Disability Plan, Auto Ins. is 1st payer				45.0%	769	(6) per A.1.2. and B.3.,(7) per (4)
Employed Claimants with Group Disability Plan, Auto Ins. is 2nd payer				45.0%	182	(6) per B.3.,(7) per (5)
Total				100.0%	504	
D. Reduction Factor for Employed					-34.4%	per (7)
E. Percentage of costs where collateral benefits are applicable (Employment Rate for CV Insureds)					100.0%	drivers are employed
F. Severity Adjustment Factor					-34%	D. x E. + 0 * (1 - E.)
G. Second Payer Adjustment					66%	1 + F.

Notes

A.1.2 Conservative as we expect workers compensation will be first payer in almost all circumstances

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Forecasted Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)
		ICBC 2021 RRA	PPV Analysis	PPV Analysis	(2) * (3) * (4) * (5)
Coverage	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	ICBC Claimant/Claim Factor	Additional Claims Factor	No-Fault Frequency Adjustment Factor	Final Selected Claimant Frequency
Health care and Related Expenses	2.6 CV Exhibit CF-2.2	1.25	1.050	0.90	3.1
Income Replacement & Other Monetary Benefits	0.4 CV Exhibit CF-2.3	1.12		1.10	0.5
Death Benefits and Related Expenses	0.1 CV Exhibit CF-2.4	1.60		1.00	0.1
Permanent Impairment	0.7 CV Exhibit CF-3	1.60			1.1
Uninsured Automobile	0.0185 CV Exhibit CF-2.5	1.30			0.0241

Note

(3)

(5)

We expect fewer occupants of commercial vehicles than private passenger vehicles, so we consider this factor to be conservative  
Income Replacement & Other Monetary Benefits - PPV Exhibit CF-1.5.2  
For CV, we only want to capture expected frequency increases due to more generous benefits, as the other income replacement benefit groups do not apply to CV.

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Forecasted Severity  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	PPV, Exhibit CF-10.2	See Note	CV Exhibit CF-4	PPV, Exhibit CF-5.3	PPV Analysis	PPV Analysis	PPV Analysis	PPV Analysis	PPV Analysis	PPV Analysis	MPI 2026 GRA Figure RI-13	PRODUCT((2) - (12))
Accident Year	Severity at 1/1/2028 Cost Level	All-Vehicle Class to CV Adjustment	Second Payer Adjustment	Wage Distribution & Benefit Limit Adjustment	Average Time to Return to Work Adjustment	Healthcare Cost Adjustment	Wait-Time Adjustment Factor	Vehicle Distribution Adjustment	Wage Distribution Adjustment	PIPP Enhancement Adjustment	Unallocated Loss Adjustment Expense	Final Selected Claimant Severity
Health care and Related Expenses	9,543	0.850				1.200	1.000	1.050		1.073	1.130	12,392
Income Replacement & Other Monetary Benefits	76,701	1.000	0.656	1.141	1.325					1.016	1.130	87,383
Death Benefits and Related Expenses	70,873	1.000							1.096		1.130	87,753
Permanent Impairment	29,183	1.000						1.050			1.130	34,626
Uninsured Automobile												26,600

Notes

- (3) MPI severity reflects all vehicle classes. Below, we review at the indicated CV to overall class loss cost relativity.  
We understand the loss cost relativity would include both frequency and severity effects; however, we find it a useful indication to review when comparing the CV severity to the overall class severity.  
We find the health care and related Expenses CV severity is lower than the overall class average, and the income replacement and funeral & death benefits severity does not materially differ from the all-class severity.

		Acc. Benefits Other (Ind)	Acc. Benefits Other (Non-Ind)	Income Replacement Indemnity	
A	Balanced Comm Pure Premium + "Pool" Claims Costs	55.98	38.58	84.20	MPI 2026 GRA Figure RI-11
B.1	Discounted Projected All Class Loss Cost	50.95	27.62	64.12	MPI 2026 GRA Part VIII - RI Appendix 2 Table 1 (Divide 2026/27 Rating Year Discounted Ultimate Claim Costs by Forecasted HTA Units of 1,359,974)
B.2	Discounted Projected Non-HTA Loss Cost	0.00	0.00	0.00	MPI 2026 GRA Figure RI-11
B.3	2026/27 Projected Units	1,359,974	1,359,974	1,359,974	MPI 2026 GRA Figure RI-13
B.4	2026/27 Projected HTA Units	1,011,631	1,011,631	1,011,631	MPI 2026 GRA Figure RI-13
B.5	HTA Adjusted Loss Cost	68.50	37.13	86.19	(B.1 * B.3 - B.2 * (B.3 - B.4) / B.4
	Ratio of CV to All Class Loss Cost	0.817	1.039	0.977	A / B.5

- (12) Calculated as
- |  |        |           |                      |
|--|--------|-----------|----------------------|
| Fixed Claims Expense Per Unit (Proportional)                   | 40.10  | A         | MPI 2026 GRA, RI 2.2 |
| Variable Claims Expense Per Unit (Proportional), Commercial    | 106.32 | B         | MPI 2026 GRA, RI 2.2 |
| Claims Cost per Unit (Discounted to End of the RY), Commercial | 817.87 | C         | MPI 2026 GRA, RI 2.2 |
| ULAE Factor  | 1.130  | 1 + B / C |                      |
- We do not include the Fixed Claims Expense per unit as this amount consists of the Manitoba Health Levy and towing contract fees. We account for the Alberta Health Levy separately.

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Selected Loss Cost  
Data as of 12/31/2024

(1)	(2) CV Exhibit CF-5.1	(3) CV Exhibit CF-5.2	(4) (2) * (3) / 1000
<b>A. Health care and Related Expenses</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	3.1	12,392	38.13
<b>B. Income Replacement &amp; Other Monetary Benefits</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	0.5	87,383	40.32
<b>C. Death Benefits and Related Expenses</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	0.1	87,753	10.31
<b>D. Permanent Impairment</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	1.1	34,626	36.62
<b>E. Uninsured Automobile</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	0.0	26,600	0.64
<b>F. Total Accident Benefits</b>			
Policy Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Alberta - Care First	4.7	26,600	126.02
Alberta - Current (Tort)	3.3	18,732	60.05

Province of Alberta  
Commercial Vehicles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Forecasted Required Premium - Care-First**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			per (3)	See Note	See Note	(5) * (6)	See Note	(7) + (8)
Coverage	Subcoverage	202402 Written Vehicles	Percent of Vehicles with Coverage	Selected Loss Cost at 1/1/2028 Cost Level	Loss Cost Multiplier	Estimated Required Premium (Excluding Fixed Expense)	Allocated Fixed Expense	Estimated Required Premium
Third Party Liability	Bodily Injury			25.00	1.249	31.23	3.15	34.38
Third Party Liability	Total Property Damage			193.77	1.382	267.71	27.01	294.72
Third Party Liability	Health Levy			32.21	1.382	44.49	4.49	48.98
Third Party Liability	Total	143,408	100%	250.975	1.368	343.44	34.65	378.09
Accident Benefits	Income Replacement & Other Monetary Benefits			40.32	0.920	37.09	3.74	40.83
Accident Benefits	Health care and Related Expenses			38.13	1.093	41.67	4.20	45.88
Accident Benefits	Death Benefits and Related Expenses			10.31	1.321	13.62	1.37	14.99
Accident Benefits	Permanent Impairment			36.62	1.321	48.37	4.88	53.25
Accident Benefits	Uninsured Automobile			0.64	1.020	0.65	0.07	0.72
Accident Benefits	Accident Benefits - Total	143,412	100%	126.02	1.122	141.41	14.26	155.67
Collision	Collision	83,275	58%	283.36	1.389	393.55	39.70	433.25
Comprehensive	Comprehensive - Total	105,634	74%	391.91	1.387	543.56	54.83	598.39
All Perils	All Perils	18,093	13%	609.41	1.385	844.16	85.16	929.32
Specified Perils	Specified Perils	9,213	6%	92.94	1.388	129.02	13.02	142.04
Underinsured Motorists	Underinsured Motorist	136,836	95%	0.37	1.125	0.42	0.04	0.46
	D.S. Estimated Fixed Expense per Earned Vehicle	87	1.009	23%	6%	124		
		CV Exhibit CP-2.1						
Package	Basic Coverage			377.00	1.286	484.85	48.91	533.76
Package	Full Coverage			1,052.64	1.351	1,422.38	143.49	1,565.86
	(assumes insured purchases CM rather than AP/SP)							
Notes								
(5)	Bodily Injury per CV Exhibit CF-1.3							
	Health Levy per CV Exhibit CP-2.2							
	Accident Benefits per CV Exhibit CF-5.3							
	Underinsured Motorist per CV Exhibit CF-1.2							
	All other coverages per CV Exhibit CP-1.1 - CV Exhibit CP-1.8							
(6)	Based on the PPV analysis, calculated as the ratio of estimated required premium excluding fixed expense to selected loss cost at 1/1/2028 cost level.							
(8)	Total fixed expense per Earned Vehicle from CV Exhibit CP-2.1. Fixed expenses allocated to coverages proportional to (11).							

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Bodily Injury  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000					Oliver Wyman 2025 Annual Review				(4) * (8) * (9) * (10) * (11) * (12)	Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	66	321,859	0.205	0.0%	0.0%	10/01/24	1.000		1.000	1.000	0.747	0.153	0%
2016	72	326,378	0.221	0.0%	0.0%	10/01/24	1.000		1.000	1.000	0.747	0.165	0%
2017	71	326,432	0.217	0.0%	0.0%	10/01/24	1.000		1.000	1.000	0.747	0.162	0%
2018	61	327,626	0.186	0.0%	0.0%	10/01/24	1.000		1.000	1.000	0.747	0.139	0%
2019	73	325,145	0.223	0.0%	0.0%	10/01/24	1.000		1.000	1.000	0.747	0.167	0%
2020	77	325,919	0.239	0.0%	0.0%	10/01/24	1.000		1.000	1.434	0.747	0.256	20%
2021	68	330,108	0.206	0.0%	0.0%	10/01/24	1.000		1.000	1.498	0.747	0.230	20%
2022	50	331,031	0.151	0.0%	0.0%	10/01/24	1.000		1.000	1.321	0.747	0.150	20%
2023	56	331,461	0.169	0.0%	0.0%	10/01/24	1.000		1.000	1.339	0.747	0.169	20%
2024	70	335,653	0.210	0.0%	0.0%	10/01/24	1.000		1.000	1.339	0.747	0.210	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												0.203	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	10,086,057	66	152,860	8.7%	8.7%	10/01/24	2.838	1.344	1.000			583,056	0%
2016	10,602,952	72	147,330	8.7%	8.7%	10/01/24	2.611	1.344	1.000			516,985	0%
2017	10,085,982	71	142,181	8.7%	8.7%	10/01/24	2.402	1.344	1.000			458,987	0%
2018	11,127,125	61	182,807	8.7%	8.7%	10/01/24	2.210	1.344	1.000			542,902	0%
2019	15,038,533	73	206,956	8.7%	8.7%	10/01/24	2.033	1.344	1.000			565,427	0%
2020	14,483,232	77	187,336	8.7%	8.7%	10/01/24	1.870	1.330	1.000			465,954	20%
2021	16,979,353	68	250,109	8.7%	8.7%	10/01/24	1.720	1.336	1.000			574,879	20%
2022	9,730,704	50	194,042	8.7%	8.7%	10/01/24	1.583	1.286	1.000			394,801	20%
2023	24,509,553	56	436,297	8.7%	8.7%	10/01/24	1.456	1.103	1.000			700,711	20%
2024	24,054,538	70	341,482	8.7%	8.7%	10/01/24	1.340	1.000	1.000			457,425	20%
B. Selected Severity at 1/1/2028 Cost Level												518,754	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	10,086,057	321,859	31	8.7%	8.7%	10/01/24	2.838	1.344	1.000	1.000	0.747	89	0%
2016	10,602,952	326,378	32	8.7%	8.7%	10/01/24	2.611	1.344	1.000	1.000	0.747	85	0%
2017	10,085,982	326,432	31	8.7%	8.7%	10/01/24	2.402	1.344	1.000	1.000	0.747	75	0%
2018	11,127,125	327,626	34	8.7%	8.7%	10/01/24	2.210	1.344	1.000	1.000	0.747	75	0%
2019	15,038,533	325,145	46	8.7%	8.7%	10/01/24	2.033	1.344	1.000	1.000	0.747	94	0%
2020	14,483,232	325,919	45	8.7%	8.7%	10/01/24	1.870	1.330	1.000	1.434	0.747	119	20%
2021	16,979,353	330,108	51	8.7%	8.7%	10/01/24	1.720	1.336	1.000	1.498	0.747	132	20%
2022	9,730,704	331,031	29	8.7%	8.7%	10/01/24	1.583	1.286	1.000	1.321	0.747	59	20%
2023	24,509,553	331,461	74	8.7%	8.7%	10/01/24	1.456	1.103	1.000	1.339	0.747	119	20%
2024	24,054,538	335,653	72	8.7%	8.7%	10/01/24	1.340	1.000	1.000	1.339	0.747	96	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												105	Sum( (13) x (14) )
D. Frequency x Severity Method												105	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												105	average(A * B, C)
Notes													
(9)	Factor for temporary increase in inflation												
(11)	Factor to adjust to pre-pandemic frequency levels												
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels												

MC  
Motorcycles  
Actuarial Analysis - Reform Costing

Forecasted Loss Cost - Current Product  
Total Property Damage  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUT07001	(2) / (3) * 1000				Oliver Wyman Loss Trend Report				Selected	(4) * (8) * (9) * (10) * (11) * (12)	Selected
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	275	321,859	0.854	-1.3%	-1.3%	10/01/24	0.849		1.000	1.000	1.000	0.725	0%
2016	298	326,378	0.913	-1.3%	-1.3%	10/01/24	0.860		1.000	1.000	1.000	0.785	0%
2017	295	326,432	0.904	-1.3%	-1.3%	10/01/24	0.872		1.000	1.000	1.000	0.788	0%
2018	266	327,626	0.812	-1.3%	-1.3%	10/01/24	0.883		1.000	1.000	1.000	0.717	0%
2019	247	325,145	0.760	-1.3%	-1.3%	10/01/24	0.895		1.000	1.000	1.000	0.680	0%
2020	249	323,919	0.769	-1.3%	-1.3%	10/01/24	0.906		1.000	1.456	1.000	1.014	20%
2021	236	330,108	0.715	-1.3%	-1.3%	10/01/24	0.918		1.000	1.462	1.000	0.959	20%
2022	354	331,031	1.069	-1.3%	-1.3%	10/01/24	0.931		1.000	1.130	1.000	1.124	20%
2023	401	331,461	1.209	-1.3%	-1.3%	10/01/24	0.943		1.000	1.000	1.000	1.140	20%
2024	420	335,653	1.251	-1.3%	-1.3%	10/01/24	0.955		1.000	1.000	1.000	1.195	20%
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												1.087	Sum( (13) x (14) )
B. Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and ALAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	2021-2 Scalar (Inflation)	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	1,473,313	275	5,358	2.9%	2.9%	10/01/24	1.430	1.218	1.000			9,330	0%
2016	1,569,422	298	5,267	2.9%	2.9%	10/01/24	1.389	1.218	1.000			8,913	0%
2017	1,498,372	295	5,080	2.9%	2.9%	10/01/24	1.350	1.218	1.000			8,354	0%
2018	1,712,240	266	6,438	2.9%	2.9%	10/01/24	1.312	1.218	1.000			10,289	0%
2019	1,936,947	247	7,843	2.9%	2.9%	10/01/24	1.275	1.218	1.000			12,182	0%
2020	1,868,161	249	7,504	2.9%	2.9%	10/01/24	1.239	1.210	1.000			11,248	20%
2021	1,483,247	236	6,287	2.9%	2.9%	10/01/24	1.204	1.214	1.000			9,188	20%
2022	3,068,876	354	8,671	2.9%	2.9%	10/01/24	1.170	1.182	1.000			11,996	20%
2023	3,976,013	401	9,920	2.9%	2.9%	10/01/24	1.137	1.068	1.000			12,045	20%
2024	3,765,130	420	8,965	2.9%	2.9%	10/01/24	1.105	1.000	1.000			9,909	20%
Selected Severity at 1/1/2028 Cost Level												10,877	Sum( (13) x (14) )
C. Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and ALAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	2021-2 Scalar (Inflation)	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	1,473,313	321,859	5	2%	2%	10/01/24	1.214	1.218	1.000	1.000	1.000	7	0%
2016	1,569,422	326,378	5	2%	2%	10/01/24	1.195	1.218	1.000	1.000	1.000	7	0%
2017	1,498,372	326,432	5	2%	2%	10/01/24	1.177	1.218	1.000	1.000	1.000	7	0%
2018	1,712,240	327,626	5	2%	2%	10/01/24	1.159	1.218	1.000	1.000	1.000	7	0%
2019	1,936,947	325,145	6	2%	2%	10/01/24	1.141	1.218	1.000	1.000	1.000	8	0%
2020	1,868,161	323,919	6	2%	2%	10/01/24	1.123	1.210	1.000	1.456	1.000	11	20%
2021	1,483,247	330,108	4	2%	2%	10/01/24	1.106	1.214	1.000	1.462	1.000	9	20%
2022	3,068,876	331,031	9	2%	2%	10/01/24	1.089	1.182	1.000	1.130	1.000	13	20%
2023	3,976,013	331,461	12	2%	2%	10/01/24	1.072	1.068	1.000	1.000	1.000	14	20%
2024	3,765,130	335,653	11	2%	2%	10/01/24	1.056	1.000	1.000	1.000	1.000	12	20%
Initial Selected Loss Cost at 1/1/2028 Cost Level												11.9	Sum( (13) x (14) )
Frequency x Severity Method												11.8	A * B
Selected Loss Cost at 1/1/2028 Cost Level												12	average(A * B, C)

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Accident Benefits - Total  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000					Oliver Wyman 2025 Annual Review				(4) * (8) * (9) * (10) * (11) * (12)	Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	914	321,714	2.841	0.0%	0.0%	10/29/20	1.000		1.000	1.000	0.947	2.691	0%
2016	843	326,599	2.581	0.0%	0.0%	10/29/20	1.000		1.000	1.000	0.947	2.444	0%
2017	785	326,840	2.402	0.0%	0.0%	10/29/20	1.000		1.000	1.000	0.947	2.274	0%
2018	723	328,041	2.203	0.0%	0.0%	10/29/20	1.000		1.000	1.000	0.947	2.087	0%
2019	649	325,567	1.993	0.0%	0.0%	10/29/20	1.000		1.000	1.000	0.947	1.887	0%
2020	702	324,195	2.164	0.0%	0.0%	10/29/20	1.000		1.000	1.413	0.947	2.897	20%
2021	721	330,562	2.180	0.0%	0.0%	10/29/20	1.000		1.000	1.417	0.947	2.925	20%
2022	766	331,413	2.310	0.0%	0.0%	10/29/20	1.000		1.000	1.146	0.947	2.507	20%
2023	762	331,887	2.295	0.0%	0.0%	10/29/20	1.000		1.000	1.056	0.947	2.295	20%
2024	770	335,927	2.291	0.0%	0.0%	10/29/20	1.000		1.000	1.056	0.947	2.291	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												2.583	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	9,147,116	914	10,008	11.9%	7.0%	10/29/20	2.958	1.000	1.116			33,040	0%
2016	9,064,625	843	10,753	11.9%	7.0%	10/29/20	2.644	1.000	1.116			31,726	0%
2017	8,460,468	785	10,779	11.9%	7.0%	10/29/20	2.363	1.000	1.116			28,419	0%
2018	7,819,172	723	10,817	11.9%	7.0%	10/29/20	2.111	1.000	1.116			25,488	0%
2019	9,503,414	649	14,648	11.9%	7.0%	10/29/20	1.887	1.000	1.116			30,844	0%
2020	10,968,692	702	15,632	11.9%	7.0%	10/29/20	1.686	1.000	1.116			29,416	20%
2021	12,723,615	721	17,657	11.9%	7.0%	10/29/20	1.553	1.000	1.116			30,599	20%
2022	12,554,049	766	16,399	11.9%	7.0%	10/29/20	1.451	1.000	1.097			26,100	20%
2023	19,443,397	762	25,527	11.9%	7.0%	10/29/20	1.356	1.000	1.000			34,622	20%
2024	13,321,806	770	17,312	11.9%	7.0%	10/29/20	1.268	1.000	1.000			21,944	20%
B. Selected Severity at 1/1/2028 Cost Level												28,536	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	9,147,116	321,714	28	12%	7%	10/29/20	2.958	1.000	1.116	1.000	0.947	89	0%
2016	9,064,625	326,599	28	12%	7%	10/29/20	2.644	1.000	1.116	1.000	0.947	78	0%
2017	8,460,468	326,840	26	12%	7%	10/29/20	2.363	1.000	1.116	1.000	0.947	65	0%
2018	7,819,172	328,041	24	12%	7%	10/29/20	2.111	1.000	1.116	1.000	0.947	53	0%
2019	9,503,414	325,567	29	12%	7%	10/29/20	1.887	1.000	1.116	1.000	0.947	58	0%
2020	10,968,692	324,195	34	12%	7%	10/29/20	1.686	1.000	1.116	1.413	0.947	85	20%
2021	12,723,615	330,562	38	12%	7%	10/29/20	1.553	1.000	1.116	1.417	0.947	90	20%
2022	12,554,049	331,413	38	12%	7%	10/29/20	1.451	1.000	1.097	1.146	0.947	65	20%
2023	19,443,397	331,887	59	12%	7%	10/29/20	1.356	1.000	1.000	1.056	0.947	79	20%
2024	13,321,806	335,927	40	12%	7%	10/29/20	1.268	1.000	1.000	1.056	0.947	50	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												74	Sum( (13) x (14) )
D. Frequency x Severity Method												74	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												74	average(A * B, C)

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels



Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Collision  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)					
OW Loss Trend Report			GISA Report AUTO7001		(2) / (3) * 1000		Oliver Wyman 2025 Annual Review										(4) * (8) * (9) * (10) * (11) * (12)	Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level																		
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights					
2015	911	103,382	8.811	-1.3%	-1.3%	10/01/24	0.849		1.000	1.000	0.656	4.908	0%					
2016	885	105,788	8.365	-1.3%	-1.3%	10/01/24	0.860		1.000	1.000	0.656	4.721	0%					
2017	781	106,918	7.304	-1.3%	-1.3%	10/01/24	0.872		1.000	1.000	0.656	4.176	0%					
2018	716	108,566	6.594	-1.3%	-1.3%	10/01/24	0.883		1.000	1.000	0.656	3.820	0%					
2019	633	107,874	5.866	-1.3%	-1.3%	10/01/24	0.895		1.000	1.000	0.656	3.443	0%					
2020	614	106,616	5.757	-1.3%	-1.3%	10/01/24	0.906		1.000	1.527	0.656	5.226	20%					
2021	569	107,808	5.275	-1.3%	-1.3%	10/01/24	0.918		1.000	1.534	0.656	4.877	20%					
2022	462	109,249	4.227	-1.3%	-1.3%	10/01/24	0.931		1.000	1.410	0.656	3.638	20%					
2023	462	111,080	4.159	-1.3%	-1.3%	10/01/24	0.943		1.000	1.524	0.656	3.921	20%					
2024	491	114,317	4.295	-1.3%	-1.3%	10/01/24	0.955		1.000	1.524	0.656	4.102	20%					
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												4.353	Sum( (13) x (14) )					
Selected Severity at 1/1/2028 Cost Level																		
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights					
2015	8,436,549	911	9,261	3.7%	3.7%	10/01/24	1.575	1.407	1.000			20,524	0%					
2016	8,011,512	885	9,053	3.7%	3.7%	10/01/24	1.519	1.407	1.000			19,347	0%					
2017	7,223,948	781	9,251	3.7%	3.7%	10/01/24	1.465	1.407	1.000			19,064	0%					
2018	7,153,452	716	9,992	3.7%	3.7%	10/01/24	1.412	1.407	1.000			19,858	0%					
2019	5,918,706	633	9,353	3.7%	3.7%	10/01/24	1.362	1.407	1.000			17,924	0%					
2020	5,789,549	614	9,433	3.7%	3.7%	10/01/24	1.313	1.390	1.000			17,221	20%					
2021	5,483,888	569	9,642	3.7%	3.7%	10/01/24	1.267	1.398	1.000			17,067	20%					
2022	5,536,756	462	11,989	3.7%	3.7%	10/01/24	1.221	1.337	1.000			19,578	20%					
2023	6,042,555	462	13,080	3.7%	3.7%	10/01/24	1.178	1.120	1.000			17,254	20%					
2024	7,361,021	491	14,993	3.7%	3.7%	10/01/24	1.136	1.000	1.000			17,028	20%					
B. Selected Severity at 1/1/2028 Cost Level												17,630	Sum( (13) x (14) )					
Selected Loss Cost at 1/1/2028 Cost Level																		
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights					
2015	8,436,549	103,382	82	2%	2%	10/01/24	1.337	1.407	1.000	1.000	0.656	101	0%					
2016	8,011,512	105,788	76	2%	2%	10/01/24	1.307	1.407	1.000	1.000	0.656	91	0%					
2017	7,223,948	106,918	68	2%	2%	10/01/24	1.277	1.407	1.000	1.000	0.656	80	0%					
2018	7,153,452	108,566	66	2%	2%	10/01/24	1.247	1.407	1.000	1.000	0.656	76	0%					
2019	5,918,706	107,874	55	2%	2%	10/01/24	1.219	1.407	1.000	1.000	0.656	62	0%					
2020	5,789,549	106,616	54	2%	2%	10/01/24	1.191	1.390	1.000	1.527	0.656	90	20%					
2021	5,483,888	107,808	51	2%	2%	10/01/24	1.163	1.398	1.000	1.534	0.656	83	20%					
2022	5,536,756	109,249	51	2%	2%	10/01/24	1.136	1.337	1.000	1.410	0.656	71	20%					
2023	6,042,555	111,080	54	2%	2%	10/01/24	1.110	1.120	1.000	1.524	0.656	68	20%					
2024	7,361,021	114,317	64	2%	2%	10/01/24	1.085	1.000	1.000	1.524	0.656	70	20%					
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												76	Sum( (13) x (14) )					
D. Frequency x Severity Method												77	A * B					
E. Selected Loss Cost at 1/1/2028 Cost Level												77	average(A * B, C)					

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Comprehensive - Total  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000					Oliver Wyman 2025 Annual Review				(4) * (8) * (9) * (10) * (11) * (12)	Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	966	155,922	6.195	0.6%	0.6%	10/01/24	1.078		1.000	1.000	1.000	6.677	0%
2016	1,477	163,039	9.059	0.6%	0.6%	10/01/24	1.071		1.000	1.000	1.000	9.704	0%
2017	884	167,246	5.285	0.6%	0.6%	10/01/24	1.065		1.000	1.000	1.000	5.628	0%
2018	805	170,979	4.708	0.6%	0.6%	10/01/24	1.059		1.000	1.000	1.000	4.983	0%
2019	754	170,568	4.420	0.6%	0.6%	10/01/24	1.052		1.000	1.000	1.000	4.650	0%
2020	688	169,253	4.064	0.6%	0.6%	10/01/24	1.046		1.000	1.000	1.000	4.251	20%
2021	569	170,624	3.334	0.6%	0.6%	10/01/24	1.040		1.000	1.000	1.000	3.466	20%
2022	684	171,874	3.980	0.6%	0.6%	10/01/24	1.033		1.000	1.000	1.000	4.113	20%
2023	756	173,333	4.361	0.6%	0.6%	10/01/24	1.027		1.000	1.000	1.000	4.480	20%
2024	848	177,191	4.786	0.6%	0.6%	10/01/24	1.021		1.000	1.000	1.000	4.887	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												4.239	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	8,741,048	966	9,049	4.5%	4.5%	10/01/24	1.734	1.000	1.000			15,690	0%
2016	15,511,332	1,477	10,502	4.5%	4.5%	10/01/24	1.659	1.000	1.000			17,426	0%
2017	7,768,160	884	8,788	4.5%	4.5%	10/01/24	1.588	1.000	1.000			13,953	0%
2018	7,264,359	805	9,025	4.5%	4.5%	10/01/24	1.519	1.000	1.000			13,712	0%
2019	6,666,815	754	8,843	4.5%	4.5%	10/01/24	1.454	1.000	1.000			12,858	0%
2020	6,635,078	688	9,646	4.5%	4.5%	10/01/24	1.391	1.000	1.000			13,421	20%
2021	5,739,624	569	10,090	4.5%	4.5%	10/01/24	1.331	1.000	1.000			13,434	20%
2022	6,726,919	684	9,834	4.5%	4.5%	10/01/24	1.274	1.000	1.000			12,531	20%
2023	8,506,343	756	11,254	4.5%	4.5%	10/01/24	1.219	1.000	1.000			13,721	20%
2024	10,533,308	848	12,421	4.5%	4.5%	10/01/24	1.167	1.000	1.000			14,492	20%
B. Selected Severity at 1/1/2028 Cost Level												13,520	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	8,741,048	155,922	56	5%	5%	10/01/24	1.869	1.000	1.000	1.000	1.000	104.8	0%
2016	15,511,332	163,039	95	5%	5%	10/01/24	1.777	1.000	1.000	1.000	1.000	169.1	0%
2017	7,768,160	167,246	46	5%	5%	10/01/24	1.691	1.000	1.000	1.000	1.000	78.5	0%
2018	7,264,359	170,979	42	5%	5%	10/01/24	1.608	1.000	1.000	1.000	1.000	68.3	0%
2019	6,666,815	170,568	39	5%	5%	10/01/24	1.530	1.000	1.000	1.000	1.000	59.8	0%
2020	6,635,078	169,253	39	5%	5%	10/01/24	1.455	1.000	1.000	1.000	1.000	57.1	20%
2021	5,739,624	170,624	34	5%	5%	10/01/24	1.384	1.000	1.000	1.000	1.000	46.6	20%
2022	6,726,919	171,874	39	5%	5%	10/01/24	1.317	1.000	1.000	1.000	1.000	51.5	20%
2023	8,506,343	173,333	49	5%	5%	10/01/24	1.253	1.000	1.000	1.000	1.000	61.5	20%
2024	10,533,308	177,191	59	5%	5%	10/01/24	1.191	1.000	1.000	1.000	1.000	70.8	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												57.5	Sum( (13) x (14) )
D. Frequency x Severity Method												57.3	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												57.4	average(A * B, C)
Notes													
(9)	Factor for temporary increase in inflation												
(11)	Factor to adjust to pre-pandemic frequency levels												
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels												

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
All Perils  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000	Oliver Wyman 2025 Annual Review									(4) * (8) * (9) * (10) * (11) * (12)	Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level														
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights	
2015	404	30,012	13.461	-8.2%	-8.2%	10/01/24	0.345		1.000	1.000	1.000	4.640	0%	
2016	437	31,139	14.034	-8.2%	-8.2%	10/01/24	0.375		1.000	1.000	1.000	5.268	0%	
2017	413	32,477	12.717	-8.2%	-8.2%	10/01/24	0.409		1.000	1.000	1.000	5.198	0%	
2018	348	33,941	10.253	-8.2%	-8.2%	10/01/24	0.445		1.000	1.000	1.000	4.563	0%	
2019	355	35,098	10.115	-8.2%	-8.2%	10/01/24	0.485		1.000	1.000	1.000	4.902	0%	
2020	342	35,762	9.563	-8.2%	-8.2%	10/01/24	0.528		1.000	1.414	1.000	7.133	20%	
2021	365	38,214	9.549	-8.2%	-8.2%	10/01/24	0.575		1.000	1.418	1.000	7.778	20%	
2022	335	40,512	8.261	-8.2%	-8.2%	10/01/24	0.626		1.000	1.119	1.000	5.782	20%	
2023	392	42,953	9.125	-8.2%	-8.2%	10/01/24	0.681		1.000	1.000	1.000	6.218	20%	
2024	399	45,415	8.775	-8.2%	-8.2%	10/01/24	0.742		1.000	1.000	1.000	6.511	20%	
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												6.685	Sum( (13) x (14) )	
Selected Severity at 1/1/2028 Cost Level														
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights	
2015	3,784,192	404	9,367	12.9%	12.9%	10/01/24	4.569	1.000	1.000			42,800	0%	
2016	4,257,477	437	9,743	12.9%	12.9%	10/01/24	4.047	1.000	1.000		39,423	0%		
2017	3,880,600	413	9,396	12.9%	12.9%	10/01/24	3.584	1.000	1.000		33,671	0%		
2018	3,354,862	348	9,640	12.9%	12.9%	10/01/24	3.174	1.000	1.000		30,594	0%		
2019	3,642,325	355	10,260	12.9%	12.9%	10/01/24	2.810	1.000	1.000		28,835	0%		
2020	3,187,961	342	9,322	12.9%	12.9%	10/01/24	2.489	1.000	1.000		23,200	20%		
2021	3,949,416	365	10,823	12.9%	12.9%	10/01/24	2.204	1.000	1.000		23,854	20%		
2022	4,259,284	335	12,726	12.9%	12.9%	10/01/24	1.952	1.000	1.000		24,840	20%		
2023	5,110,586	392	13,039	12.9%	12.9%	10/01/24	1.729	1.000	1.000		22,538	20%		
2024	5,709,193	399	14,325	12.9%	12.9%	10/01/24	1.531	1.000	1.000		21,929	20%		
B. Selected Severity at 1/1/2028 Cost Level												23,272	Sum( (13) x (14) )	
Selected Loss Cost at 1/1/2028 Cost Level														
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights	
2015	3,784,192	30,012	126	4%	4%	10/01/24	1.575	1.000	1.000	1.000	1.000	199	0%	
2016	4,257,477	31,139	137	4%	4%	10/01/24	1.519	1.000	1.000	1.000	1.000	208	0%	
2017	3,880,600	32,477	119	4%	4%	10/01/24	1.465	1.000	1.000	1.000	1.000	175	0%	
2018	3,354,862	33,941	99	4%	4%	10/01/24	1.412	1.000	1.000	1.000	1.000	140	0%	
2019	3,642,325	35,098	104	4%	4%	10/01/24	1.362	1.000	1.000	1.000	1.000	141	0%	
2020	3,187,961	35,762	89	4%	4%	10/01/24	1.313	1.000	1.000	1.414	1.000	165	20%	
2021	3,949,416	38,214	103	4%	4%	10/01/24	1.267	1.000	1.000	1.418	1.000	186	20%	
2022	4,259,284	40,512	105	4%	4%	10/01/24	1.221	1.000	1.000	1.119	1.000	144	20%	
2023	5,110,586	42,953	119	4%	4%	10/01/24	1.178	1.000	1.000	1.000	1.000	140	20%	
2024	5,709,193	45,415	126	4%	4%	10/01/24	1.136	1.000	1.000	1.000	1.000	143	20%	
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												156	Sum( (13) x (14) )	
D. Frequency x Severity Method												156	A * B	
E. Selected Loss Cost at 1/1/2028 Cost Level												156	average(A * B, C)	

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Specified Perils  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000	Oliver Wyman 2025 Annual Review								(4) * (8) * (9) * (10) * (11) * (12)	Selected	
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level														
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights	
2015	289	63,167	4.575	-1.0%	-1.0%	10/01/24	0.880		1.000	1.000	1.000	4.026	0%	
2016	312	60,956	5.118	-1.0%	-1.0%	10/01/24	0.889		1.000	1.000	1.000	4.551	0%	
2017	230	58,658	3.921	-1.0%	-1.0%	10/01/24	0.898		1.000	1.000	1.000	3.522	0%	
2018	185	56,576	3.270	-1.0%	-1.0%	10/01/24	0.907		1.000	1.000	1.000	2.967	0%	
2019	192	54,220	3.542	-1.0%	-1.0%	10/01/24	0.917		1.000	1.000	1.000	3.247	0%	
2020	140	52,361	2.675	-1.0%	-1.0%	10/01/24	0.926		1.000	1.000	1.000	2.478	20%	
2021	130	51,059	2.548	-1.0%	-1.0%	10/01/24	0.936		1.000	1.000	1.000	2.384	20%	
2022	113	49,182	2.299	-1.0%	-1.0%	10/01/24	0.945		1.000	1.000	1.000	2.174	20%	
2023	127	46,857	2.701	-1.0%	-1.0%	10/01/24	0.955		1.000	1.000	1.000	2.580	20%	
2024	114	44,695	2.553	-1.0%	-1.0%	10/01/24	0.965		1.000	1.000	1.000	2.463	20%	
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												2.416	Sum( (13) x (14) )	
Selected Severity at 1/1/2028 Cost Level														
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights	
2015	2,179,829	289	7,543	6.4%	6.4%	10/01/24	2.167	1.000	1.000			16,348	0%	
2016	2,197,800	312	7,044	6.4%	6.4%	10/01/24	2.037	1.000	1.000			14,352	0%	
2017	1,501,893	230	6,530	6.4%	6.4%	10/01/24	1.915	1.000	1.000			12,506	0%	
2018	1,304,723	185	7,053	6.4%	6.4%	10/01/24	1.800	1.000	1.000			12,697	0%	
2019	1,253,461	192	6,526	6.4%	6.4%	10/01/24	1.692	1.000	1.000			11,045	0%	
2020	875,882	140	6,253	6.4%	6.4%	10/01/24	1.591	1.000	1.000			9,947	20%	
2021	1,013,809	130	7,794	6.4%	6.4%	10/01/24	1.495	1.000	1.000			11,655	20%	
2022	967,243	113	8,553	6.4%	6.4%	10/01/24	1.406	1.000	1.000			12,022	20%	
2023	1,027,411	127	8,117	6.4%	6.4%	10/01/24	1.321	1.000	1.000			10,725	20%	
2024	1,056,975	114	9,264	6.4%	6.4%	10/01/24	1.242	1.000	1.000			11,507	20%	
B. Selected Severity at 1/1/2028 Cost Level												11,171	Sum( (13) x (14) )	
Selected Loss Cost at 1/1/2028 Cost Level														
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights	
2015	2,179,829	63,167	35	5%	5%	10/01/24	1.907	1.000	1.000	1.000	1.000	66	0%	
2016	2,197,800	60,956	36	5%	5%	10/01/24	1.811	1.000	1.000	1.000	1.000	65	0%	
2017	1,501,893	58,658	26	5%	5%	10/01/24	1.720	1.000	1.000	1.000	1.000	44	0%	
2018	1,304,723	56,576	23	5%	5%	10/01/24	1.634	1.000	1.000	1.000	1.000	38	0%	
2019	1,253,461	54,220	23	5%	5%	10/01/24	1.551	1.000	1.000	1.000	1.000	36	0%	
2020	875,882	52,361	17	5%	5%	10/01/24	1.473	1.000	1.000	1.000	1.000	25	20%	
2021	1,013,809	51,059	20	5%	5%	10/01/24	1.399	1.000	1.000	1.000	1.000	28	20%	
2022	967,243	49,182	20	5%	5%	10/01/24	1.329	1.000	1.000	1.000	1.000	26	20%	
2023	1,027,411	46,857	22	5%	5%	10/01/24	1.262	1.000	1.000	1.000	1.000	28	20%	
2024	1,056,975	44,695	24	5%	5%	10/01/24	1.198	1.000	1.000	1.000	1.000	28	20%	
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												27	Sum( (13) x (14) )	
D. Frequency x Severity Method												27	A * B	
E. Selected Loss Cost at 1/1/2028 Cost Level												27	average(A * B, C)	
Notes														
(9)	Factor for temporary increase in inflation													
(11)	Factor to adjust to pre-pandemic frequency levels													
(12)	Factor to adjust for differences pre-pandemic and post-pandemic frequency levels													

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Loss Cost - Current Product  
Underinsured Motorist  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Oliver Wyman Loss Trend Report	GISA Report AUTO7001	(2) / (3) * 1000					Oliver Wyman 2025 Annual Review				(4) * (8) * (9) * (10) * (11) * (12)	Selected
Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level													
Accident Year	Ultimate Claim Counts	Earned Vehicles	Frequency (per 1,000 Vehicles)	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	5	315,789	0.015	4.6%	4.6%	10/01/24	1.755		1.000	1.000	1.000	0.026	0%
2016	5	320,127	0.017	4.6%	4.6%	10/01/24	1.678		1.000	1.000	1.000	0.028	0%
2017	1	319,409	0.003	4.6%	4.6%	10/01/24	1.604		1.000	1.000	1.000	0.004	0%
2018	4	319,755	0.012	4.6%	4.6%	10/01/24	1.533		1.000	1.000	1.000	0.018	0%
2019	4	315,838	0.012	4.6%	4.6%	10/01/24	1.466		1.000	1.000	1.000	0.018	0%
2020	4	312,174	0.014	4.6%	4.6%	10/01/24	1.401		1.000	1.000	1.000	0.019	20%
2021	4	317,456	0.014	4.6%	4.6%	10/01/24	1.340		1.000	1.000	1.000	0.019	20%
2022	7	319,400	0.023	4.6%	4.6%	10/01/24	1.281		1.000	1.000	1.000	0.030	20%
2023	11	320,004	0.034	4.6%	4.6%	10/01/24	1.225		1.000	1.000	1.000	0.041	20%
2024	13	322,680	0.040	4.6%	4.6%	10/01/24	1.171		1.000	1.000	1.000	0.047	20%
A. Selected Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level												0.031	Sum( (13) x (14) )
Selected Severity at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Ultimate Claim Counts	Severity	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Severity at 1/1/2028 Cost Level	Weights
2015	965,095	5	203,309	0.0%	0.0%	10/01/24	1.000	1.000	1.000			203,309	0%
2016	1,593,519	5	297,888	0.0%	0.0%	10/01/24	1.000	1.000	1.000			297,888	0%
2017	84,088	1	98,942	0.0%	0.0%	10/01/24	1.000	1.000	1.000			98,942	0%
2018	574,870	4	154,276	0.0%	0.0%	10/01/24	1.000	1.000	1.000			154,276	0%
2019	3,721,126	4	947,023	0.0%	0.0%	10/01/24	1.000	1.000	1.000			947,023	0%
2020	3,648,046	4	855,503	0.0%	0.0%	10/01/24	1.000	1.000	1.000			855,503	20%
2021	2,175,726	4	489,153	0.0%	0.0%	10/01/24	1.000	1.000	1.000			489,153	20%
2022	3,881,921	7	518,197	0.0%	0.0%	10/01/24	1.000	1.000	1.000			518,197	20%
2023	3,755,253	11	347,436	0.0%	0.0%	10/01/24	1.000	1.000	1.000			347,436	20%
2024	6,461,352	13	498,076	0.0%	0.0%	10/01/24	1.000	1.000	1.000			498,076	20%
B. Selected Severity at 1/1/2028 Cost Level												541,673	Sum( (13) x (14) )
Selected Loss Cost at 1/1/2028 Cost Level													
Accident Year	Ultimate Loss and LAE Estimate	Earned Vehicles	Loss Cost	Past 1 Trend	Past 2 / Future Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	Excess Inflation Adjustment	Reform Impact	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Loss Cost at 1/1/2028 Cost Level	Weights
2015	965,095	315,789	3	5%	5%	10/01/24	1.755	1.000	1.000	1.000	1.000	5	0%
2016	1,593,519	320,127	5	5%	5%	10/01/24	1.678	1.000	1.000	1.000	1.000	8	0%
2017	84,088	319,409	0	5%	5%	10/01/24	1.604	1.000	1.000	1.000	1.000	0	0%
2018	574,870	319,755	2	5%	5%	10/01/24	1.533	1.000	1.000	1.000	1.000	3	0%
2019	3,721,126	315,838	12	5%	5%	10/01/24	1.466	1.000	1.000	1.000	1.000	17	0%
2020	3,648,046	312,174	12	5%	5%	10/01/24	1.401	1.000	1.000	1.000	1.000	16	20%
2021	2,175,726	317,456	7	5%	5%	10/01/24	1.340	1.000	1.000	1.000	1.000	9	20%
2022	3,881,921	319,400	12	5%	5%	10/01/24	1.281	1.000	1.000	1.000	1.000	16	20%
2023	3,755,253	320,004	12	5%	5%	10/01/24	1.225	1.000	1.000	1.000	1.000	14	20%
2024	6,461,352	322,680	20	5%	5%	10/01/24	1.171	1.000	1.000	1.000	1.000	23	20%
C. Initial Selected Loss Cost at 1/1/2028 Cost Level												16	Sum( (13) x (14) )
D. Frequency x Severity Method												17	A * B
E. Selected Loss Cost at 1/1/2028 Cost Level												16	average(A * B, C)

Notes  
(9) Factor for temporary increase in inflation  
(11) Factor to adjust to pre-pandemic frequency levels  
(12) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Non-Claim Expenses - Current Product  
Data as of 12/31/2024

(1) (2) (3) (4)

as Percentage of Direct Written Premium

Accident Year	Total Commissions (including CPC)	Taxes	Other Acquisition and General Expenses	
A.1. Selected Expense Prov	13.2%	4.0%	10.1%	PPV Analysis
A.2. Percent Variable	100%	100%	60%	PPV Analysis
A.3. Percent Fixed	0%	0%	40%	PPV Analysis
B. Estimated Variable Expense Provision			<b>23.2%</b>	Sum[A.1 x A.2]
C.1. Estimated Fixed Expense (as % of Premium)			4.0%	Sum[A.1 x A.3]
C.2. 2024-2 Average Written Premium			328	GISA Report AUTO7001
C.3. Estimated Fixed Expense (per Vehicle)			13	C.1 * C.2
D.1. Fixed Expense Trend Rate			4.0%	Selected
D.2. Trend From Date			10/01/24	
D.3. Trend To Date			01/01/28	
D.4. Fixed Expense Trend			1.136	$(1 + D.1)^{[(D.3 - D.2) / 365.25]}$
D.5. Estimated Fixed Expense per Earned Vehicle			15	C.3 * D.4

Notes

(2)

CPC = contingent profit commission.

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Health Levy - Current Product  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)
	See Note	GISA Report AUTO7001	(2) * (3)	GISA Report AUTO7001	(4) / (5)

Accident Year	Health Levy	TPL Earned Premium	Total Health Levy	Earned Vehicles	Health Levy Cost per Vehicles
2013	5.74%	30,169,284	1,730,208	301,597	5.74
2014	4.95%	31,278,938	1,548,307	312,355	4.96
2015	5.72%	32,610,130	1,865,299	321,859	5.80
2016	6.18%	32,499,671	2,006,855	326,378	6.15
2017	5.79%	32,117,831	1,858,017	326,432	5.69
2018	7.04%	31,791,318	2,238,109	327,626	6.83
2019	6.70%	31,528,675	2,112,421	325,145	6.50
2020	4.74%	31,503,006	1,493,242	323,919	4.61
2021	2.94%	32,219,235	947,245	330,108	2.87
2022	3.55%	32,220,181	1,143,816	331,031	3.46
2023	2.86%	32,391,177	926,388	334,342	2.77
2024	2.94%	33,644,393	989,145	337,685	2.93
2025	1.94%		999,037	341,062	2.93
2026			1,009,027	344,472	2.93
2027			1,019,117	347,917	2.93
2028			1,029,308	351,396	2.93

Indicated Trend		
2013 - 2022	-4.7%	0.8%
2013 - 2019	4.9%	1.2%
2015 - 2019	3.6%	0.2%
2021 - 2024	-0.8%	0.8%
Selected	1.0%	1.0%

Note

(2)  
(4 ) & (5)

Tax and Revenue Administration (TRA) - Health Cost Recovery Special Notice Vol. 6 No. 26  
2025 - 2027 projected based on actual 2024 health levy and selected trend.  
Health levy trend selection implicitly considers reduction in frequency observed during the pandemic.

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Required Premium - Current Product  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			per (3)	MC Exhibit CP-1.1 - MC Exhibit CP-1.8	See Note	(5) * (6)	See Note	MC Exhibit CP-2.1	Board Benchmark	(7) * (8) / (1 - (9) - (10))	See Note	(11) + (12)
Coverage	Subcoverage	202402 Written Vehicles	Percent of Vehicles with Coverage	Selected Loss Cost at 1/1/2028 Cost Level	Claim Payment Pattern Factor	Projected Discounted Loss Cost per Vehicle	Delay in Receiving Premiums	Estimated Variable Expense Provision	Profit Provision	Estimated Required Premium (Excl. Fixed Expense)	Allocated Fixed Expense	Estimated Required Premium
Third Party Liability	Bodily Injury			105.15	0.843	88.69	1.009	23%	6%	126	7	134
Third Party Liability	DCPD			11.75	0.969	11.38	1.009	23%	6%	16	1	17
Third Party Liability	Property Damage			1.17	0.969	1.13	1.009	23%	6%	2	0	2
Third Party Liability	Health Levy			2.93	1.000	2.93	1.009	23%	6%	4	0	4
Third Party Liability	Total	137,894	100%	120.996	0.861	104.13	1.009	23%	6%	148	8	157
Accident Benefits	Accident Benefits - Total	137,954	100%	73.84	0.933	68.87	1.009	23%	6%	98	6	104
Collision	Collision	44,956	33%	76.57	0.974	74.60	1.009	23%	6%	106	6	112
Comprehensive	Comprehensive - Total	71,875	52%	57.40	0.973	55.85	1.009	23%	6%	80	5	84
All Perils	All Perils	20,233	15%	155.54	0.972	151.15	1.009	23%	6%	215	12	228
Specified Perils	Specified Perils	19,914	14%	26.95	0.974	26.24	1.009	23%	6%	37	2	40
Underinsured Motorists	Underinsured Motorist	131,347	95%	16.36	0.789	12.92	1.009	23%	6%	18	1	19
				D.5. Estimated Fixed Expense per Earned Vehicle		15	1.009	23%	6%	21		
						MC Exhibit CP-2.1						
Package	Basic Coverage			195	0.888	173	1.009	23%	6%	247	14	261
Package	Full Coverage			345	0.917	316	1.009	23%	6%	451	26	477
Package	Industry Weighted Average			292	0.906	265	1.009	23%	6%	377	21	399

Notes

- (6) Based on 5-year industry average investment income rate of 3.70% and selected payment pattern  
(8) Based on investment rate of 3.70% and assumed three month delay  
(12) Total fixed expense per Earned Vehicle from MC Exhibit CP-2.1. Fixed expenses allocated to coverages proportional to (11).



Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury - Ultimate Loss and ALAE Allocation**  
**Data as of 12/31/2024**

(1)	(2) AUTO-7001	(3) AUTO-7001	(4) SUM((2):(3))	(5) (2) / (4)	(6) (3) / (4)	(7) (4) / (4)
Accident Half Year	Reported Incurred Claims and ALAE			Distribution		
	Within Province	Out of Province	Total	Within Province	Out of Province	Total
202201	1,804,409	783,331	2,587,740	69.7%	30.3%	100.0%
202202	2,967,258	198,174	3,165,432	93.7%	6.3%	100.0%
202301	4,672,944	233,452	4,906,396	95.2%	4.8%	100.0%
202302	3,672,292	885,530	4,557,822	80.6%	19.4%	100.0%
202401	1,330,049	0	1,330,049	100.0%	0.0%	100.0%
202402	3,064,613	92,300	3,156,913	97.1%	2.9%	100.0%

				Weighted Average		
A.	All-Year Weighted Average.....			88.9%	11.1%	
B.	Selected Out of Province Distribution.....			88.9%	11.1%	100.0%
C.	Selected Out of Province Severity Differential Factor.....				150.0%	
	Estimated ratio of average severity for out-of-province claims to in-province claims					
D.	Implied Frequency Adjustment.....				7.4%	
	B. / C.					

Notes:

- (2) Includes loss codes 5 and 6 from the kind of loss code field in Exhibit AUTO7001.  
(3) Includes loss codes 3 and 4 from the kind of loss code field in Exhibit AUTO7001.

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury - Ultimate Loss and ALAE Allocation**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)
	MC Exhibit CP-1.1	MC Exhibit CF-1.1.1	(2) * (3)
Metric	Current Product	Out of Province Adjustment	Care-First
Frequency	0.2029	7.4%	0.015
Severity	518,754	150.0%	778,131
BI Loss Cost: Out of Province Claims			11.71

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Underinsured Motorist - Ultimate Loss and ALAE Allocation**  
**Data as of 12/31/2024**

(1)	(2)	(3)	(4)
	MC Exhibit CP-1.8	MC Exhibit CF-1.1.1	(2) * (3)
Accident Year	Loss Cost at 1/1/2028 Cost Level	Selected Out of Province Distribution	Estimated Loss Cost for Out of Province Accidents
2015	5.36	11.1%	0.60
2016	8.35	11.1%	0.93
2017	0.42	11.1%	0.05
2018	2.76	11.1%	0.31
2019	17.27	11.1%	1.92
2020	16.38	11.1%	1.82
2021	9.18	11.1%	1.02
2022	15.57	11.1%	1.73
2023	14.37	11.1%	1.60
2024	23.44	11.1%	2.61
	All-Year Average		1.26
	5-year average		1.76
	Selected Loss Cost at 1/1/2028 Cost Level		1.76

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Bodily Injury - Selected Loss Cost**  
**Data as of 12/31/2024**

(1)	(2) <a href="https://mmcglobal.sharep">https://mmcglobal.sharep</a>	(3) <a href="https://mmcglobal.sharep">https://mmcglobal.sharep</a>	(4) MC Exhibit CP-1.1	(5) See Note	(6) (2) / (3) * (4) * (5)
Basis of Tort Claim	PPV Loss Cost per Vehicle	PPV Underlying Benefit Frequency	MC Bodily Injury Frequency	MC Severity Adjustment Factor	Loss Cost per Vehicle
Out of Province Claims				MC Exhibit CF-1.1.2 -->	11.71
Excess Disability Income	3.91	4.745	0.203	0.750	0.125
Excess Out-of-Pocket Expenses for Personal Care Assistance	1.89	4.745	0.203	1.000	0.081
Excess Out-of-Pocket Expenses for Funerals	0.36	4.745	0.203	1.000	0.015
Excess Out-of-Pocket Expenses for Grief Counseling Limits	0.01	4.745	0.203	1.000	0.000
Excess of Care-First Family Enterprise Limits	1.13	4.745	0.203	1.000	0.048
Total Bodily Injury Loss Cost					11.98
Selected Bodily Injury Loss Cost					15.00

Note

We assume that the loss cost for in-province tort claims is scaled by the relative frequency of bodily injury claims, as the claimant in the tort action will not differ between PPV and CV.

(5) Selected based on relativities from (6) of PPV, <https://mmcglobal.sharepoint.com/teams/CanadaRCareFirst/Analysis>,

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	GISA Report AUTO7001		Oliver Wyman Analysis			(5) + (6)	Oliver Wyman Analysis		(8) + (9)	(3) / (2) * 1000	(4) / (2) * 1000	(7) / (2) * 1000	(10) / (2) * 1000
Accident Year	Earned Vehicles	Alberta Ultimate Claim Counts								Alberta Frequency (per 1,000 Vehicles)			
		Medical Expenses	Income Replacement	Death Benefits	Funeral	Funeral and Death Benefits	Excess	Uninsured	Excess and Uninsured	Medical Expenses	Income Replacement	Funeral and Death Benefits	Excess and Uninsured
2015	321,714	578	275	22	37	59	0	2	2	1.8	0.9	0.2	0.0
2016	326,599	554	224	23	41	64	0	1	1	1.7	0.7	0.2	0.0
2017	326,840	521	223	12	28	40	0	1	1	1.6	0.7	0.1	0.0
2018	328,041	491	195	11	25	36	0	1	1	1.5	0.6	0.1	0.0
2019	325,567	420	177	14	36	50	0	2	2	1.3	0.5	0.2	0.0
2020	324,195	463	183	16	38	54	0	1	1	1.4	0.6	0.2	0.0
2021	330,562	467	204	18	31	49	0	1	1	1.4	0.6	0.1	0.0
2022	331,413	492	218	19	35	54	1	1	2	1.5	0.7	0.2	0.0
2023	331,887	507	198	22	35	56	1	0	1	1.5	0.6	0.2	0.0
2024	335,927	517	191	19	40	59	2	0	2	1.5	0.6	0.2	0.0

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Medical Expenses - Selected Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	MC Exhibit CF-2.1			Oliver Wyman Loss Trend Report				(2) * (6) * (7) * (8)	Selected
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2 /Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	1.8	0.0%	0.0%	10/29/20	1.000	1.000	0.947	1.7	0%
2016	1.7	0.0%	0.0%	10/29/20	1.000	1.000	0.947	1.6	0%
2017	1.6	0.0%	0.0%	10/29/20	1.000	1.000	0.947	1.5	0%
2018	1.5	0.0%	0.0%	10/29/20	1.000	1.000	0.947	1.4	0%
2019	1.3	0.0%	0.0%	10/29/20	1.000	1.000	0.947	1.2	0%
2020	1.4	0.0%	0.0%	10/29/20	1.000	1.413	0.947	1.9	20%
2021	1.4	0.0%	0.0%	10/29/20	1.000	1.417	0.947	1.9	20%
2022	1.5	0.0%	0.0%	10/29/20	1.000	1.146	0.947	1.6	20%
2023	1.5	0.0%	0.0%	10/29/20	1.000	1.056	0.947	1.5	20%
2024	1.5	0.0%	0.0%	10/29/20	1.000	1.056	0.947	1.5	20%
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								1.7	Sum [ (9) x (10) ]

Notes

- (6) Future trend is equal to Past 2 trend
- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Income Replacement - Selected Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	MC Exhibit CF-2.1			Oliver Wyman Loss Trend Report				(2) * (6) * (7) * (8)	Selected
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2 /Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	0.9	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.8	0%
2016	0.7	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.6	0%
2017	0.7	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.6	0%
2018	0.6	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.6	0%
2019	0.5	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.5	0%
2020	0.6	0.0%	0.0%	10/29/20	1.000	1.413	0.947	0.8	20%
2021	0.6	0.0%	0.0%	10/29/20	1.000	1.417	0.947	0.8	20%
2022	0.7	0.0%	0.0%	10/29/20	1.000	1.146	0.947	0.7	20%
2023	0.6	0.0%	0.0%	10/29/20	1.000	1.056	0.947	0.6	20%
2024	0.6	0.0%	0.0%	10/29/20	1.000	1.056	0.947	0.6	20%
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								0.7	Sum [ (9) x (10) ]

Notes

- (6) Future trend is equal to Past 2 trend
- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Funeral and Death Benefits - Selected Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	MC Exhibit CF-2.1			Oliver Wyman Loss Trend Report				(2) * (6) * (7) * (8)	Selected
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2 /Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	0.2	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.2	0%
2016	0.2	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.2	0%
2017	0.1	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.1	0%
2018	0.1	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.1	0%
2019	0.2	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.1	0%
2020	0.2	0.0%	0.0%	10/29/20	1.000	1.413	0.947	0.2	20%
2021	0.1	0.0%	0.0%	10/29/20	1.000	1.417	0.947	0.2	20%
2022	0.2	0.0%	0.0%	10/29/20	1.000	1.146	0.947	0.2	20%
2023	0.2	0.0%	0.0%	10/29/20	1.000	1.056	0.947	0.2	20%
2024	0.2	0.0%	0.0%	10/29/20	1.000	1.056	0.947	0.2	20%
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								0.2	Sum [ (9) x (10) ]

Notes

- (6) Future trend is equal to Past 2 trend
- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels



Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits Excess and Uninsured - Selected Frequency  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	MC Exhibit CF-2.1			Oliver Wyman Loss Trend Report				(2) * (6) * (7) * (8)	Selected
Accident Year	Alberta Frequency (per 1,000 Vehicles)	Alberta Past 1 Frequency Trend	Alberta Past 2 /Future Frequency Trend	Trend (Transition) Date	Trend Factor to 1/1/2028	COVID-19 (Unwinding) Factors	Post-COVID Adjustment	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	Weights
2015	0.0	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.0	0%
2016	0.0	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.0	0%
2017	0.0	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.0	0%
2018	0.0	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.0	0%
2019	0.0	0.0%	0.0%	10/29/20	1.000	1.000	0.947	0.0	0%
2020	0.0	0.0%	0.0%	10/29/20	1.000	1.413	0.947	0.0	20%
2021	0.0	0.0%	0.0%	10/29/20	1.000	1.417	0.947	0.0	20%
2022	0.0	0.0%	0.0%	10/29/20	1.000	1.146	0.947	0.0	20%
2023	0.0	0.0%	0.0%	10/29/20	1.000	1.056	0.947	0.0	20%
2024	0.0	0.0%	0.0%	10/29/20	1.000	1.056	0.947	0.0	20%
Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level								0.0	Sum [ (9) x (10) ]

Notes

- (6) Future trend is equal to Past 2 trend
- (7) Factor to adjust to pre-pandemic frequency levels
- (8) Factor to adjust for differences pre-pandemic and post-pandemic frequency levels

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

**Accident Benefits - Frequency  
Data as of 12/31/2024**

	(1)	(2)	
A.	Funeral and Death Benefits Selected Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	0.19	MC Exhibit CF-2.4
B.	Selected (P/I + F/D) Frequency : F/D Frequency Factor	10.000	PPV Analysis
C.	Selected Permanent Impairment Frequency	1.70	A. * (B. - 1)

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Forecasted Frequency  
Data as of 12/31/2024

(1)	(2)	(3) See Note	(4) PPV Analysis	(5) PPV Analysis	(6) PRODUCT((2) - (5))
Coverage	Alberta Frequency (per 1,000 Vehicles) at 1/1/2028 Cost Level	ICBC Claimant/Claim Factor	Additional Claims Factor	No-Fault Frequency Adjustment Factor	Final Selected Claimant Frequency
Health care and Related Expenses	1.7 MC Exhibit CF-2.2	1.10	1.050	0.90	1.8
Income Replacement & Other Monetary Benefits	0.7 MC Exhibit CF-2.3	1.10		1.75	1.3
Death Benefits and Related Expenses	0.2 MC Exhibit CF-2.4	1.00		1.00	0.2
Permanent Impairment	1.7 MC Exhibit CF-3	1.00			1.7
Uninsured Automobile	0.0050 MC Exhibit CF-2.5	1.06			0.0052

Notes:  
(3)

Below is a table from the 2023 Alberta Traffic Collision Statistics Report. We use the ratio of the number of casualties to the number of motorcycles involved to select the claimant/claim ratio for Death Benefits and Related Expenses and Permanent Impairment. We use the ratio of the number of major injuries to the number of motorcycles involved to select the claimant/claim ratio for Health care and Related Expenses and Income Replacement & Other Monetary Benefits.

<b>Number of Motorcycles</b>	2023	2022	2021	2020	
Fatal	30	34	35	30	
Major Injury	198	227	190	227	
<b>Casualties</b>	2023	2022	2021	2020	Ratio
Number Killed	30	33	31	31	0.97
Number of Major Injuries	221	244	218	244	1.10

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Forecasted Severity  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	PPV Analysis	See Note	PPV Analysis	PPV Analysis	PPV Analysis	PPV Analysis	PPV Analysis	PPV Analysis	PPV Analysis	PPV Analysis	MPI 2026 GRA Figure RI-13	PRODUCT((2) - (12))
Accident Year	Severity at 1/1/2028 Cost Level	All-Vehicle Class to PPV Adjustment	Second Payer Adjustment	Wage Distribution & Benefit Limit Adjustment	Average Time to Return to Work Adjustment	Healthcare Cost Adjustment	Wait-Time Adjustment Factor	Vehicle Distribution Adjustment	Wage Distribution Adjustment	PIPP Enhancement Adjustment	Unallocated Loss Adjustment Expense	Final Selected Claimant Severity
Health care and Related Expenses	9,543	3.000				1.200	1.000	1.050		1.073	1.130	43,735
Income Replacement & Other Monetary Benefits	76,701	3.000	0.825	1.150	1.325					1.016	1.130	332,006
Death Benefits and Related Expenses	70,873	1.000							1.096		1.130	87,753
Permanent Impairment	29,183	4.000									1.130	131,909

Notes

- (3) MPI severity reflects all vehicle classes. Below, we look at the indicated MC to overall class loss cost relativity.  
We understand the loss cost relativity would include both frequency and severity effects; however, we find it a useful indication to review when comparing the CV severity to the overall class severity.  
We find the medical & rehabilitation MC severity is lower than the overall class average, and the income replacement and funeral & death benefits severity does not materially differ from the all-class severity.  
We consider the MPI relativity below is based on loss costs, however, some of the difference is due to frequency which is captured in Exhibit CF-4.1.

	Acc. Benefits Other (Ind)	Acc. Benefits Other (Non-Ind)	Income Replacement Indemnity	
A Balanced Pure Premium + "Pool" Claims Costs	153.36	167.76	250.58	MPI 2026 GRA Figure RI-11
B.1 Discounted Projected All Class Loss Cost	50.95	27.62	64.12	MPI 2026 GRA Part VIII - RI Appendix 2 Table 1 (Divide 2026/27 Rating Year Discounted Ultimate Claim Costs by Forecasted HTA Units of 1,359,974)
B.2 Discounted Projected Non-HTA Loss Cost	0.00	0.00	0.00	MPI 2026 GRA Figure RI-11
B.3 2026/27 Projected Units	1,359,974	1,359,974	1,359,974	MPI 2026 GRA Figure RI-13
B.4 2026/27 Projected HTA Units	1,011,631	1,011,631	1,011,631	MPI 2026 GRA Figure RI-13
B.5 HTA Adjusted Loss Cost	68.50	37.13	86.19	(B.1 * B.3 - B.2 * (B.3 - B.4) / B.4
Ratio of MC to All Class Loss Cost	2.239	4.518	2.907	A / B.5

- (12) Calculated as  
Fixed Claims Expense Per Unit (Proportional), MC 40.10 A MPI 2026 GRA, RI 2.2  
Variable Claims Expense Per Unit (Proportional), MC 86.06 B MPI 2026 GRA, RI 2.2  
Claims Cost per Unit (Discounted to End of the RY), MC 662.02 C MPI 2026 GRA, RI 2.2  
ULAE Factor 1.130 1 + B / C

We do not include the Fixed Claims Expense per unit as this amount consists of the Manitoba Health Levy and towing contract fees. We account for the Alberta Health Levy separately.

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Accident Benefits - Selected Loss Cost  
Data as of 12/31/2024

(1)	(2) Exhibit CF-4.1	(3) Exhibit CF-4.2	(4) (2) * (3) / 1000
<b>A. Health care and Related Expenses</b>			
Accident Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	1.8	43,735	77.14
<b>B. Income Replacement &amp; Other Monetary Benefits</b>			
Accident Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	1.3	332,006	442.45
<b>C. Death Benefits and Related Expenses</b>			
Accident Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	0.2	87,753	16.58
<b>D. Permanent Impairment</b>			
Accident Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	1.7	131,909	224.31
<b>E. Uninsured Automobile</b>			
Accident Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Care-First 2027	0.0	152,525	0.80
<b>F. Total Accident Benefits</b>			
Accident Year	Selected Alberta Claimant Frequency (per 1000 Vehicles) at 1/1/2028 Cost Level	Selected Claimant Severity at 1/1/2028 Cost Level	Loss Cost per Vehicle
Alberta - Care First	5.0	152,685	761.29
Alberta - Current (Tort)	2.6	28,536	73.84

Province of Alberta  
Motorcycles  
Actuarial Analysis - Reform Costing  
DRAFT - For Discussion Only

Forecasted Required Premium - Care-First  
Data as of 12/31/2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			per (3)	See Note	See Note	(5) * (6)	See Note	(7) + (8)
Coverage	Subcoverage	202402 Written Vehicles	Percent of Vehicles with Coverage	Selected Loss Cost at 1/1/2028 Cost Level	Loss Cost Multiplier	Estimated Required Premium (Excluding Fixed Expense)	Allocated Fixed Expense	Estimated Required Premium
Third Party Liability	Bodily Injury			15.00	1.249	18.74	0.41	19.15
Third Party Liability	Total Property Damage			11.84	1.382	16.36	0.36	16.72
Third Party Liability	Health Levy			2.93	1.382	4.05	0.09	4.14
Third Party Liability	Total	137,894	100%	29.767	1.315	39.14	0.87	40.01
Accident Benefits	Income Replacement & Other Monetary Benefits			442.45	0.920	407.07	9.01	416.08
Accident Benefits	Health care and Related Expenses			77.14	1.093	84.31	1.87	86.18
Accident Benefits	Death Benefits and Related Expenses			16.58	1.321	21.90	0.48	22.38
Accident Benefits	Permanent Impairment			224.31	1.321	296.27	6.56	302.82
Accident Benefits	Uninsured Automobile			0.80	1.020	0.82	0.02	0.83
Accident Benefits	Accident Benefits - Total	137,954	100%	761.29	1.064	810.36	17.94	828.30
Collision	Collision	44,956	33%	76.57	1.389	106.34	2.35	108.70
Comprehensive	Comprehensive - Total	71,875	52%	57.40	1.387	79.62	1.76	81.38
All Perils	All Perils	20,233	15%	155.54	1.385	215.46	4.77	220.23
Specified Perils	Specified Perils	19,914	14%	26.95	1.388	37.41	0.83	38.24
Underinsured Motorists	Underinsured Motorist	131,347	95%	1.76	1.125	1.98	0.04	2.02
	D.5. Estimated Fixed Expense per Earned Vehicle	15	1.009	23%	6%	21		
	MC Exhibit CP-2.1							
Package	Basic Coverage			791.06	1.074	849.50	18.80	868.31
Package	Full Coverage			926.78	1.119	1,037.44	22.97	1,060.40
	(assumes insured purchases CM rather than AP/SP)							
Notes								
(5)	Bodily Injury per MC Exhibit CF-1.4							
	Health Levy per MC Exhibit CP-2.2							
	Accident Benefits per Exhibit CF-4.3							
	Underinsured Motorist per MC Exhibit CF-1.2							
	All other coverages per MC Exhibit CP-1.1 - MC Exhibit CP-1.8							
(6)	Based on the PPV analysis, calculated as the ratio of estimated required premium excluding fixed expense to selected loss cost at 1/1/2028 cost level.							
(8)	Total fixed expense per Earned Vehicle from MC Exhibit CP-2.1. Fixed expenses allocated to coverages proportional to (11).							

Province of Alberta  
Miscellaneous Vehicle Classes  
Actuarial Analysis - Reform Costing

Accident Benefits Credibility Weighted Loss Cost

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Claim Counts	AUTO1010	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101
Accident Year	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
2020	75	45	33	8	8	116	21	4	0	2	6	58
2021	91	73	21	10	15	151	10	10	0	0	8	65
2022	52	57	26	10	22	443	18	16	0	3	4	71
2023	74	78	23	7	20	615	31	8	0	3	15	70
2024	53	75	11	14	24	904	33	12	0	3	70	86
Total	345	327	114	49	89	2,229	113	50	0	11	102	349
Control	345	327	114	49	89	2,229	113	50	0	11	102	349
Difference	0	0	0	0	0	0	0	0	0	0	0	0
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
Incurred Loss Cost	6.07	14.82	6.38	9.26	3.87		309.21	53.53	0.00	47.76	141.89	
Closest Group	PPV	PPV	PPV	PPV	PPV	PPV	CV	CV	CV	CV	CV	PPV
Closest Group Tort Incurred Loss Cost	76.93	76.93	76.93	76.93	76.93		21.97	21.97	21.97	21.97	21.97	
Ratio to Group Loss Cost	7.9%	19.3%	8.3%	12.0%	5.0%		1407.3%	243.6%	0.0%	217.4%	645.8%	
Credibility Standard	1,082	1,082	1,082	1,082	1,082		1,082	1,082	1,082	1,082	1,082	
Credibility	56.4%	55.0%	32.4%	21.3%	28.7%		32.4%	21.5%	0.0%	10.0%	30.8%	
Complement of Credibility	1	1	1	1	1		1	1	1	1	1	
Credibility Weighted Ratio	48.0%	55.6%	70.2%	81.3%	72.8%		523.1%	130.9%	100.0%	111.7%	267.9%	
Closest Group Care-First Loss Cost	482.62	482.62	482.62	482.62	482.62		126.02	126.02	126.02	126.02	126.02	
Credibility Weighted Loss Cost	231.69	268.24	339.01	392.36	351.30		659.17	164.94	126.02	140.74	337.64	
Loss Cost Multiplier*	1.10	1.10	1.10	1.10	1.10		1.10	1.10	1.10	1.10	1.10	
Indicated Accident Benefits Required Premium	254.86	295.07	372.91	431.60	386.43		725.09	181.44	138.62	154.82	371.40	

Notes:  
\* Loss Cost Multiplier is based on PPV analysis.

Worksheet Control Difference  
0

Province of Alberta  
Miscellaneous Vehicle Classes  
Actuarial Analysis - Reform Costing

Accident Benefits Incurred Loss and Loss Adjustment Expenses												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	AUTO1010	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101
A. Incurred Loss and Loss Adjustment Expense												
Accident Year	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
2020	1,097,941	249,962	278,978	62,104	123,409	1,013,380	234,168	6,470	0	3,507	213,671	639,319
2021	950,975	516,148	234,421	123,621	115,033	1,024,219	106,930	33,594	0	77	26,332	755,188
2022	1,411,710	404,157	272,156	990,596	125,562	3,438,033	603,241	209,951	0	34,529	15,348	916,390
2023	908,218	630,042	1,005,518	52,000	188,318	7,300,700	362,097	93,313	0	20,340	138,520	1,146,342
2024	482,011	695,005	156,071	370,666	591,373	8,144,836	420,702	138,359	0	66,195	1,234,328	1,233,967
Total	4,850,855	2,495,314	1,947,143	1,598,987	1,143,694	20,921,169	1,727,137	481,686	0	124,647	1,628,199	4,691,206
Control	4,850,855	2,495,314	1,947,143	1,598,987	1,143,694	20,921,169	1,727,137	481,686	0	124,647	1,628,199	4,691,206
Difference	0	0	0	0	0	0	0	0	0	0	0	0
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
	AUTO1010	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101
B. Number of Earned Vehicles												
Accident Year	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
2020	159,537	35,620	60,902	34,464	51,972	0	865	1,212	125	535	1,761	0
2021	161,133	35,265	61,641	34,581	55,930	0	1,258	3,215	155	402	2,276	0
2022	160,085	34,422	61,365	34,377	59,402	0	973	2,668	166	463	2,295	0
2023	158,925	32,147	61,304	34,519	62,131	0	1,199	919	165	612	2,296	0
2024	159,216	30,945	59,785	34,784	65,829	0	1,290	983	150	598	2,847	0
Total	798,895	168,398	304,997	172,726	295,263	0	5,586	8,998	762	2,610	11,475	0
Control	798,895	168,398	304,997	172,726	295,263	0	5,586	8,998	762	2,610	11,475	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
C. Loss Cost per Earned Vehicle												
Accident Year	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
2020	6.88	7.02	4.58	1.80	2.37		270.62	5.34	0.00	6.56	121.33	
2021	5.90	14.64	3.80	3.57	2.06		85.00	10.45	0.00	0.19	11.57	
2022	8.82	11.74	4.44	28.82	2.11		620.20	78.68	0.00	74.51	6.69	
2023	5.71	19.60	16.40	1.51	3.03		301.90	101.56	0.00	33.26	60.33	
2024	3.03	22.46	2.61	10.66	8.98		326.07	140.68	0.00	110.65	433.49	
Total	6.07	14.82	6.38	9.26	3.87		309.21	53.53	0.00	47.76	141.89	
Control	6.07	14.82	6.38	9.26	3.87		309.21	53.53	0.00	47.76	141.89	
Difference	0	0	0	0	0		0	0	0	0	0	

Worksheet Control Difference  
0



Province of Alberta  
Miscellaneous Vehicle Classes  
Actuarial Analysis - Reform Costing

**Accident Benefits Major Vehicle Classes Incurred Loss Cost**

(1)	(2)	(3)	(4)
	AUTO7001	AUTO7001	(2) / (3)
<b>Private Passenger Vehicles</b>			
Accident Year	Incurred Loss and Loss Adjustment Expense	Earned Vehicles	Incurred Loss Cost per Earned Vehicle
2020	147,373,482	2,780,403	53.00
2021	181,074,566	2,807,642	64.49
2022	241,725,805	2,834,558	85.28
2023	270,981,228	2,895,587	93.58
2024	259,855,602	2,993,746	86.80
Total	1,101,010,683	14,311,937	76.93
Control	1,101,010,683	14,311,937	
Difference	0	0	
 <b>Commercial Vehicles</b>			
(5)	(6)	(7)	(8)
	AUTO7001	AUTO7001	(6) / (7)
Accident Year	Incurred Loss and Loss Adjustment Expense	Earned Vehicles	Incurred Loss Cost per Earned Vehicle
2020	4,181,204	299,983	13.94
2021	5,200,273	294,772	17.64
2022	7,030,558	290,902	24.17
2023	8,391,165	297,561	28.20
2024	7,847,465	302,827	25.91
Total	32,650,665	1,486,045	21.97
Control	32,650,665	1,486,045	
Difference	0	0	
 Worksheet Control Difference			
0			

Province of Alberta  
Miscellaneous Vehicle Classes  
Actuarial Analysis - Reform Costing

Bodily Injury Credibility Weighted Loss Cost

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Claim Counts	AUTO1010	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101
Accident Year	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
2022	792	24	0	4	5	51	10	11	0	5	5	41
2023	870	49	0	6	7	118	21	30	1	8	9	53
2024	795	36	0	6	7	68	30	36	0	6	33	66
Total	2,457	108	0	16	19	237	61	77	1	19	47	159
Control Difference	2,457	108	0	16	19	237	61	77	1	19	47	159
	(0)	0	0	0	0	0	0	0	0	0	0	0
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
Incurred Loss Cost	20.97	230.28	0.00	53.89	23.39		1,310.56	1,768.89	442.95	407.91	500.74	
Closest Group	PPV	PPV	PPV	PPV	PPV	PPV	CV	CV	CV	CV	CV	PPV
Closest Group Tort Incurred Loss Cost	272.97	272.97	272.97	272.97	272.97		208.40	208.40	208.40	208.40	208.40	
Ratio to Group Loss Cost	7.7%	84.4%	0.0%	19.7%	8.6%		628.9%	848.8%	212.5%	195.7%	240.3%	
Credibility Standard	1,082	1,082	1,082	1,082	1,082		1,082	1,082	1,082	1,082	1,082	
Credibility	100.0%	31.6%	0.0%	12.3%	13.4%		23.8%	26.7%	3.0%	13.4%	20.8%	
Complement of Credibility	1	1	1	1	1		1	1	1	1	1	
Credibility Weighted Ratio	7.7%	95.1%	100.0%	90.1%	87.8%		226.0%	299.6%	103.4%	112.8%	129.2%	
Closest Group Care-First Loss Cost	35.00	35.00	35.00	35.00	35.00		25.00	25.00	25.00	25.00	25.00	
Credibility Weighted Loss Cost	2.69	33.27	35.00	31.55	30.72		56.49	74.89	25.85	28.20	32.30	
Loss Cost Multiplier*	1.35	1.35	1.35	1.35	1.35		1.35	1.35	1.35	1.35	1.35	
Indicated Accident Benefits Required Premium	3.63	44.91	47.25	42.59	41.47		76.26	101.11	34.90	38.07	43.61	

Notes:  
\* Loss Cost Multiplier is based on PPV analysis.

Worksheet Control Difference  
(0)

Province of Alberta												
Miscellaneous Vehicle Classes												
Actuarial Analysis - Reform Costing												
Bodily Injury Incurred Loss and Loss Adjustment Expenses												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	AUTO1010	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101
A. Incurred Loss and Loss Adjustment Expense												
Accident Year	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
2022	941,596	5,092,955	0	1,243,369	426,593	3,311,325	473,454	1,277,209	0	217,688	370,159	6,589,812
2023	4,081,477	12,607,001	0	2,098,540	2,980,220	7,348,211	2,492,295	4,897,459	213,235	162,612	865,978	4,899,339
2024	5,001,231	4,751,224	0	2,197,861	976,668	4,351,844	1,446,952	1,908,487	0	301,478	2,498,168	6,028,803
Total	10,024,304	22,451,180	0	5,539,770	4,383,481	15,011,381	4,412,701	8,083,156	213,235	681,779	3,734,305	17,517,954
Control	10,024,304	22,451,180	0	5,539,770	4,383,481	15,011,381	4,412,701	8,083,156	213,235	681,779	3,734,305	17,517,954
Difference	0	0	0	0	0	0	0	0	0	0	0	0
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
	AUTO1010	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101	AUTO1101
B. Number of Earned Vehicles												
Accident Year	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
2022	160,032	34,442	61,333	34,342	59,420	0	971	2,669	167	461	2,300	0
2023	158,882	32,139	61,270	33,678	62,143	0	1,167	918	166	612	2,311	0
2024	159,210	30,915	59,783	34,773	65,847	0	1,229	982	149	598	2,847	0
Total	478,124	97,496	182,386	102,794	187,410	0	3,367	4,570	481	1,671	7,458	0
Control	478,124	97,496	182,386	102,794	187,410	0	3,367	4,570	481	1,671	7,458	0
Difference	0	0	0	0	0	0	0	0	0	0	0	0
(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
A. / B.												
C. Loss Cost per Earned Vehicle												
Accident Year	All-Terrain Vehicles	PPV Farmers	Snow Vehicles	Motorhomes	Antique and Classic Cars	Taxis - Fleet Rated	Public Buses	School, Hotel, Summer Camp, Resort, and Golf & Country Club Buses	Funeral Carriages and Hearses	Ambulances	Miscellaneous Public Automobiles	Garages, Automobile Dealers And Manufacturers
2022	5.88	147.87	0.00	36.21	7.18		487.64	478.51	0.00	472.43	160.92	
2023	25.69	392.26	0.00	62.31	47.96		2,136.17	5,333.27	1,287.35	265.50	374.80	
2024	31.41	153.69	0.00	63.21	14.83		1,176.95	1,943.08	0.00	504.03	877.58	
Total	20.97	230.28	0.00	53.89	23.39		1,310.56	1,768.89	442.95	407.91	500.74	
Control	20.97	230.28	0.00	53.89	23.39		1,310.56	1,768.89	442.95	407.91	500.74	
Difference	0	0	0	0	0		0	0	0	0	0	
Worksheet Control Difference												
0												

Province of Alberta  
Miscellaneous Vehicle Classes  
Actuarial Analysis - Reform Costing

**Bodily Injury Major Vehicle Classes Incurred Loss Cost**

(1)	(2)	(3)	(4)
	AUTO7001	AUTO7001	(2) / (3)
<b>Private Passenger Vehicles</b>			
Accident Year	Incurred Loss and Loss Adjustment Expense	Earned Vehicles	Incurred Loss Cost per Earned Vehicle
2022	1,024,406,665	2,840,243	360.68
2023	821,143,104	2,907,049	282.47
2024	543,106,618	3,003,474	180.83
Total	2,388,656,387	8,750,765	272.97
Control	2,388,656,387	8,750,765	
Difference	0	0	
(5)	(6)	(7)	(8)
	AUTO7001	AUTO7001	(6) / (7)
<b>Commercial Vehicles</b>			
Accident Year	Incurred Loss and Loss Adjustment Expense	Earned Vehicles	Incurred Loss Cost per Earned Vehicle
2022	80,069,311	290,320	275.80
2023	67,054,449	297,255	225.58
2024	38,395,615	302,622	126.88
Total	185,519,375	890,197	208.40
Control	185,519,375	890,197	
Difference	0	0	
Worksheet Control Difference	0		

## Appendix C. Reconciliation to Prior Review

As described in Section 1.4, we previously provided an estimate of claims costs for private passenger vehicles in the context of a feasibility study of various alternative insurance products. We refer to the feasibility study and underlying modeling as the “initial” report or model, and to this report and underlying model as the “current” report or model.

In this section, we discuss the changes to the estimates between the current and prior reviews. Developing a detailed reconciliation between the initial and current estimates is impractical.

Several factors are unrelated to the modeling approach:

- The purpose of our initial report was to provide the Alberta government with costing estimates under potential alternative systems. That is, the focus of the initial report was to compare cost estimates for several *theoretical* options, which were not fully specified. In the current report, we provide a more comprehensive analysis of the costing for a fully specified option.
- We developed the estimates in the initial report using Alberta insurance industry data through December 31, **2022**, and MPI’s **2024** GRA; estimates in the current report consider data through December 31, **2024**, and MPI’s **2026** GRA. Critically, the current report includes the experience two post-pandemic years.
- The estimates in the prior report assumed an average accident date of July 1, 2024; the estimates in the current report assume an average accident date of January 1, 2028 – a difference of 3.5 years. The (future) trend rates underlying our initial model were 5% for bodily injury and 11% for accident benefits. The future trend rates underlying our current model are 8.7% for bodily injury and 7% for accident benefits.

In Sections C.1, C.2, and C.3, we discuss modeling changes related to accident benefits frequency, accident benefits severity, and bodily injury, respectively.

In Table 20, we present the final selected PPV loss costs from the initial model (trended to January 1, 2028), the current model, and the percent change for each subcoverage.

**Table 20: Loss Cost Comparison**

Subcoverage	Initial Model, adjusted for trend (excl. excess inflation)	Current Model	% Change
Income Replacement & Other Monetary Benefits	84.01	268.58	+220%
Health Care and Related Expenses	181.18	163.72	-10%
Death Benefits and Related Expenses	80.58	11.01	-86%
Permanent Impairment		39.12	
Uninsured Motorist	Included in Accident Benefits	0.20	N/A
Bodily Injury	18.39	35.00	+90%
Total Accident Benefits and Bodily Injury	364.16	517.63	+42%
Health Levy	53.63	39.29	-27%
PD/DCPD	235.44	250.85	+7%

Subcoverage	Initial Model, adjusted for trend (excl. excess inflation)	Current Model	% Change
Comprehensive	260.91	358.35	+37%
Collision	328.59	321.99	-2%
Underinsured Motorist	0.19	0.16	-14%

## C.1. Accident Benefits Frequency

In Table 21, we present the final selected frequency from the initial model, the current model, and the percent change for each subcoverage. We discuss the differences between the initial and current reports in the sections below and provide commentary on changes in adjustments.

**Table 21: Frequency Comparison**

Subcoverage	Initial (2024) Model Selected Frequency	Current (2026) Model Selected Frequency	% Change
Income Replacement & Other Monetary Benefits	1.40	2.43	73%
Health care and Related Expenses	13.94	11.23	-19%
Death Benefits and Related Expenses	0.14	0.13	-12%
Permanent Impairment	1.14	1.13	-1%

### Starting Frequency

Comparing the most recent industry data used in our prior and current reports, we note that the starting frequencies for each subcoverage have remained relatively consistent. We observe an 8% decrease in death benefits and a 6% decrease in health care and treatment-related expenses.

### Claimant Basis Adjustment

The claim-to-claimant basis adjustment is slightly higher than the initial costing report.

### Collateral Benefits Adjustment

The collateral benefits adjustment remains mostly unchanged, except for a 1% decrease in health care and related expenses.

### New Adjustments

#### Tort-to-Care-Based System Adjustment

This is a new adjustment that we did not identify in the initial costing. Based on reviews of other jurisdictions, specifically Manitoba, British Columbia, and Saskatchewan, we incorporate expected changes in claimant behaviour following a transition to a care-based system. This adjustment factor accounts for almost all the

change in the income replacement frequency and approximately half of the reduction in the medical & rehabilitation frequency.

### Excess and Uninsured Adjustment

We have included a new adjustment in the current costing model to account for accidents occurring outside the province and for payments exceeding provincial benefits. This adjustment is relatively small and immaterial to the final selected frequency; however, we include it for a more comprehensive estimate of the Care-First frequency.

## C.2. Accident Benefits Severity

In Table 22, we present the final selected severity from the initial and current models, along with the percent change for each subcoverage. We discuss the differences between the initial and current reports in the sections below and provide commentary on changes in adjustments.

**Table 22: Severity Comparison**

Subcoverage	Initial (2024) Model Selected Severity	Current (2026) Model Selected Severity	% Change
Income Replacement & Other Monetary Benefits	41,998	110,669	164%
Health care and Related Expenses	9,108	14,578	60%
Death Benefits and Related Expenses	44,183	91,842	108%
Permanent Impairment	44,183	34,626	-22%

### Starting Severity

The most significant change from the initial costing report is our splitting of the MPI Accident Benefits – Other (Non-Indexed) severity between funeral & death benefits and permanent impairment. The MPI Accident Benefits – Other (Non-Indexed) coverage includes benefits for funeral expenses, death, and permanent impairment. In our initial costing report, we did not separate funeral & death benefits from permanent impairment.

The other contributing factor in the change to starting severity is due to the more recent severity data used in the current costing model from the MPI 2026 GRA.

The changes in starting severity are the most significant contributor to overall changes in severity, accounting for nearly all of the change in funeral benefits, almost half of the changes in permanent impairment, and a third of the changes in health care and related expenses.

### Second Payer Adjustment

The second payer adjustment is considered in both the initial and current model. This adjustment affects income replacement only and is the most significant contributor to the difference between the initial and current reports. Our updated adjustment includes more recent Statistics Canada data as well as additional considerations of the coordination of payments from other sources.

While the second payer adjustment represents a significant contributor of increase from our initial estimates, we note this adjustment decreases the estimate severity, so should not be interpreted as an increase to severity but rather a smaller decrease to severity compared to the initial model within the context of the reconciliation exercise.

## **Wage Distribution Adjustment**

In the initial costing, we applied a wage distribution adjustment to income replacement, death benefits, and permanent impairment.

- For death benefits, only a part of the severity is a function of income. We now only apply this adjustment to that portion.
- We now separately estimate the starting severity for death benefits and permanent impairment and no longer apply this adjustment to the permanent impairment severity.

## **Unallocated Loss Adjustment Expense**

We base our ULAE factor on the MPI GRA in both reports. The new ULAE factor obtained from the MPI 2026 GRA results in a modest decrease in the estimated severity.

## **New Adjustments**

### **All-Vehicle Class Adjustment**

We introduced this adjustment in the current report. As described in Section 6.2, the PPV adjustment is 1.0.

### **Economic (Wage and Benefit Limit) Differences Adjustment**

As noted above, in the initial model, the Wage Distribution Adjustment was applied separately to income replacement, funeral and death benefits, and permanent impairment. We discuss the changes in application to funeral and death benefits, and permanent impairment above. For income replacement, we introduce a revised Wage Distribution & Benefit Limit Adjustment to replace the wage distribution adjustment from the initial model. The new adjustment to income replacement is similar to the wage distribution adjustment from the initial model. The net effect is a 0.1% decrease in severity.

### **Return-to Work Adjustment**

Our initial costing implicitly assumed that return-to-work times were similar between Manitoba and Alberta. Recognizing differences in the industry composition of the labour market, we reviewed worker's compensation data, which supported differences in return-to-work times between the two provinces.

The return-to-work adjustment accounts for roughly 20% of the changes between the severity estimate from the initial costing and the severity estimate in the current costing.

### **Health Care Cost Adjustment**

In the current model, we include a new health care cost adjustment intended to capture the differences in health care costs and treatment fees between Manitoba and Alberta. We base this adjustment on various sources reporting average health care spending by province, as well as the fee schedules of health insurers we reviewed.



Applying only to health care and related expenses, this adjustment accounts for a third of the increase in severity for this subcoverage.

**Vehicle Distribution Adjustment**

In the current model, we include a new health care cost adjustment to reflect the differences in severity due to differences in vehicle size distribution between provinces. The greater share of larger vehicles in Alberta results in a modest increase in the severity of health care and related expenses.

**PIPP Enhancement Adjustment**

Under Care-First, the benefit limits match the Manitoba benefit limits under the PIPP Enhancement, rather than the basic level of benefits assumed in the initial model. The consideration of the enhanced benefit results in a minor increase to income replacement and a slightly larger increase to health care and related expenses.

### **C.3. Bodily Injury**

In our initial report, we only included bodily injury claim costs for out-of-province claims. The current model includes claim costs for other exposure categories.

## Appendix D. Tort Exposure Analysis

Benefit	Tort Exposure	Oliver Wyman Commentary
Income Replacement Benefit	YES	There will be tort exposure for this benefit for income exceeding the Care-First limits. The tort exposure here would include working retirement-eligible individuals.  Our accident benefits (and tort exposure) for IRB is slightly conservative as it doesn't consider that retirees are reimbursed at 70% (not 90%) and reduced for pension income.
Retirement Income Benefit	NO	We include these individuals in the earner analysis, which assumes a higher benefit level. We believe this adds conservatism to the bodily injury estimate.
Loss of Studies Benefit	NO	The loss of studies benefit is written as the greater of (i) the cost of tuition fees or (ii) the lump sum amount determined by the Minister. Therefore, we do not foresee a scenario in which the individual will not be fully indemnified and would be eligible to sue.  We believe tuition + ancillary costs would be covered by the lump sum.
Caregiver Benefit	NO	There are no out-of-pocket expenses related to this benefit.
Daily Living Assistance Expenses / Personal Care Assistance	YES	There may be tort eligibility if expenses exceed the specified monthly amounts. However, we expect these situations to occur for the most severe injuries requiring round-the-clock care.
Transportation, Lodging, Other Expenses / Travel and Accommodation	NO	The benefit states that an individual will receive compensation for travel or lodging if it is deemed necessary. Therefore, if the amounts are deemed necessary, the individual will receive compensation. If the amounts are not deemed necessary, the individual will not have the support necessary to sue.
Expenses for Care of Other Person / Childcare Expenses	NO	The benefit states that an individual will receive compensation for reasonable and necessary expenses. Therefore, if the amounts are deemed necessary, the individual will receive compensation. If the amounts are not deemed necessary, the individual will not have the support necessary to sue.
Expenses Respecting Family Enterprise / Family Business Expense	YES	The Manitoba benefit is set at a maximum of \$944 per week for the first 180 days after the accident. There would be potential tort exposure if the family is required to pay more than \$944 per week for replacement help or if the help is needed for longer than 180 days.

<b>Benefit</b>	<b>Tort Exposure</b>	<b>Oliver Wyman Commentary</b>
Permanent Impairment Benefit	NO	The benefit is calculated as a percent of a stated maximum amount. Top-up coverage would provide additional benefit and would require an additional premium. However, we do not believe the lack of top-up coverage creates a potential tort liability.
Funeral and Interment Expenses	YES	Potential expenses exceeding Care-First benefit limits.
Grief Counselling Expenses	YES	Potential expenses exceeding Care-First benefit limits.
Death Benefit	NO	Death benefits are calculated as amounts set by the Minister. We assume that the injured driver would not be able to sue for additional costs.
Health care and related expenses	NO	Bill 47 provides coverage of reasonable and necessary expenses. Therefore, we expect this will be a Tribunal issue and not a tort issue.
Rehabilitation	NO	Bill 47 provides coverage of reasonable and necessary expenses. Therefore, we expect this will be a Tribunal issue and not a tort issue.
Other expenses	NO	Bill 47 provides coverage of reasonable and necessary expenses. Therefore, we expect this will be a Tribunal issue and not a tort issue.

## Appendix E. Data Sources

We provide a summary of the sources used during our analysis.

- MPI 2026 General Rate Application
- ICBC 2021 Revenue Requirement Application
- ICBC 2023 Revenue Requirement Application
- GISA Exhibit AUTO7001 as of December 31, 2024
- GISA Exhibit AUTO7002 as of December 31, 2024
- GISA Exhibit AUTO7003 as of December 31, 2024
- Statistics Canada Table: 11-10-0050-01
- Statistics Canada Table: 11-10-0008-01
- Statistics Canada Table: 14-10-0017-02
- Statistics Canada Table: 11-10-0190-01
- Statistics Canada Table: 11-10-0222-01
- Statistics Canada Table: 11-10-0240-01
- Statistics Canada Table: 14-10-0287-03
- Statistics Canada Table: 17-10-0005-01
- Statistics Canada Table: 18-10-0005-01
- Statistics Canada Table: 23-10-0308-01
- Statistics Canada Table: 37-10-0120-01
- Statistics Canada Table: 37-10-0045-01
- Statistics Canada Table: 37-10-0152-01
- Statistics Canada Table: 98-10-0080-01
- Statistics Canada Table: 98-10-0123-01
- Statistics Canada Table: 98-10-0132-01
- Workers' Compensation Board of Manitoba 2024 Annual Report
- Workers' Compensation Board of Alberta Annual Reports (2021, 2022, 2023 & 2024)
- Canadian Institute for Health Information - Wait Times for Priority Procedures Across Canada
- Transport Canada - Canadian Motor Vehicle Traffic Collision Statistics: 2023



Oliver Wyman  
120 Bremmer Blvd  
Toronto, ON M5J 0A8

30 South 17th Street  
19th Floor  
Philadelphia, PA 19103