OliverWyman

2024 ANNUAL INDUSTRY REVIEW PRELIMINARY FINDINGS PRIVATE PASSENGER AUTOMOBILE

PRESENTATION TO THE AUTOMOBILE INSURANCE RATE BOARD

15 August 2024

Rajesh Sahasrabuddhe | Jaylen Reichner

A business of Marsh McLennan

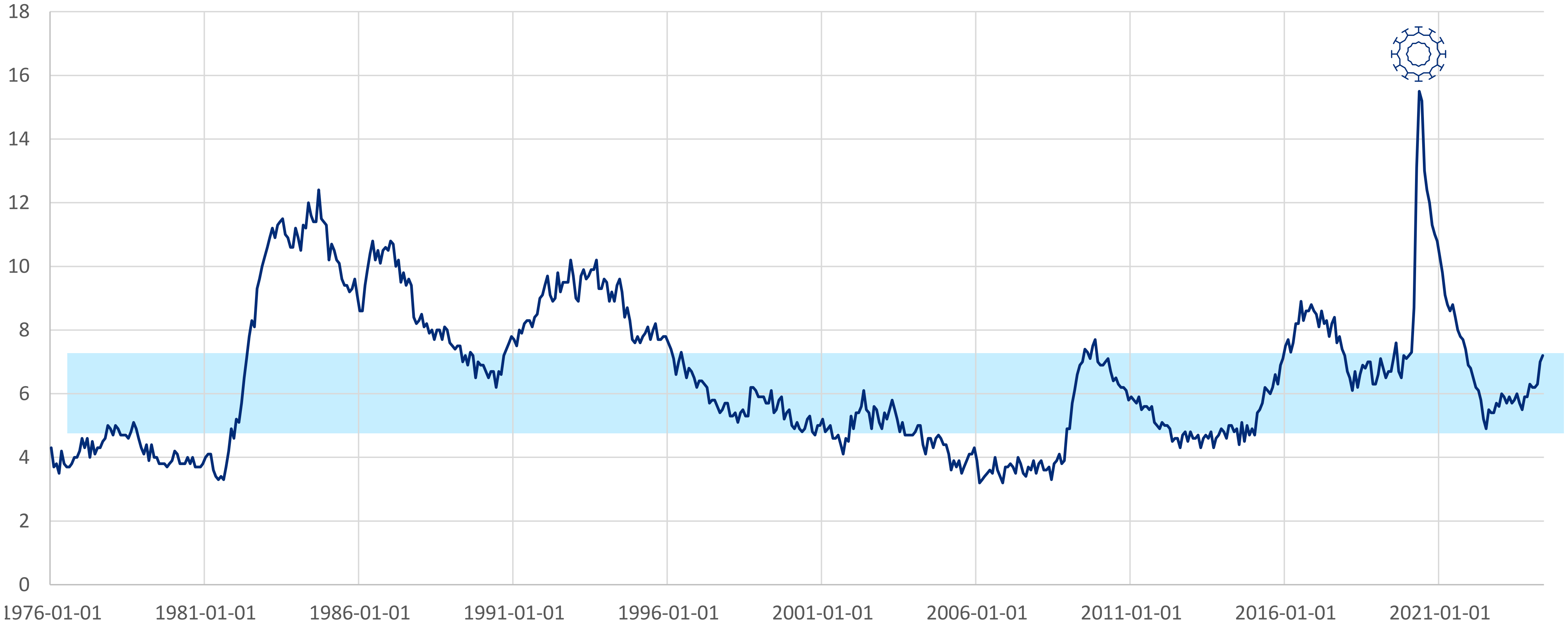
AGENDA

CHANGE IN ECONOMIC CONDITIONS

	Jun-18	Jun-19	Jun-20	Jun-21	Jun-22	Jun-23	Latest
Alberta Unemployment Rate	6.9%	7.1%	13.0%	8.4%	4.9%	6.0%	7.2%
Alberta CPI (Total, 2011-100)	140.7	142.7 (+1%)	145 (+2%)	148.9 (+3%)	161.4 (**8%**)	164.4 (+1.9%)	163.7 (+3.0%)
Alberta CPI (ex. Energy)	138.2	141.3 (+2%)	143.7 (+2%)	145.4 (+1%)	153.7 (+2.9%)	159.4 (+3.7%)	163.3 (+2.7%)
Alberta Gasoline CPI	194.6	159.8 (-18%)	145.4 (-9%)	197.9 (**+36%**)	289 (**+46%**)	218.9 (**-24.3%**)	242.8 (**+10.3%**)
Natural Gas Prices ($/GJ)	$1.14	$0.87 (-24%)	$1.62 (+86%)	$3.17 (+96%)	$5.44 (+72%)	$1.93 (-65%)	$1.48 (-46%)
3 Year Canada Benchmark Bond Rates	1.97%	1.43%	**0.31%**	**0.65%**	3.1%	4.24%	3.73%
Population (millions)	4.29	4.36 (+1.5%)	4.41 (+1.2%)	4.43 (+0.5%)	4.51 (+1.8%)	4.70 **(+4.1%)**	4.80 **(+4.4%)**

ALBERTA UNEMPLOYMENT RATE

https://economicdashboard.alberta.ca/dashboard/unemployment-rate/



BOND YIELDS

https://www.bankofcanada.ca/terms/

AGENDA

1 Economic Indicators

2 Industry Benchmarks

3 Loss Trend Benchmarks

4 Inflation

5 Policy Reform

6 COVID 19 / New Normal

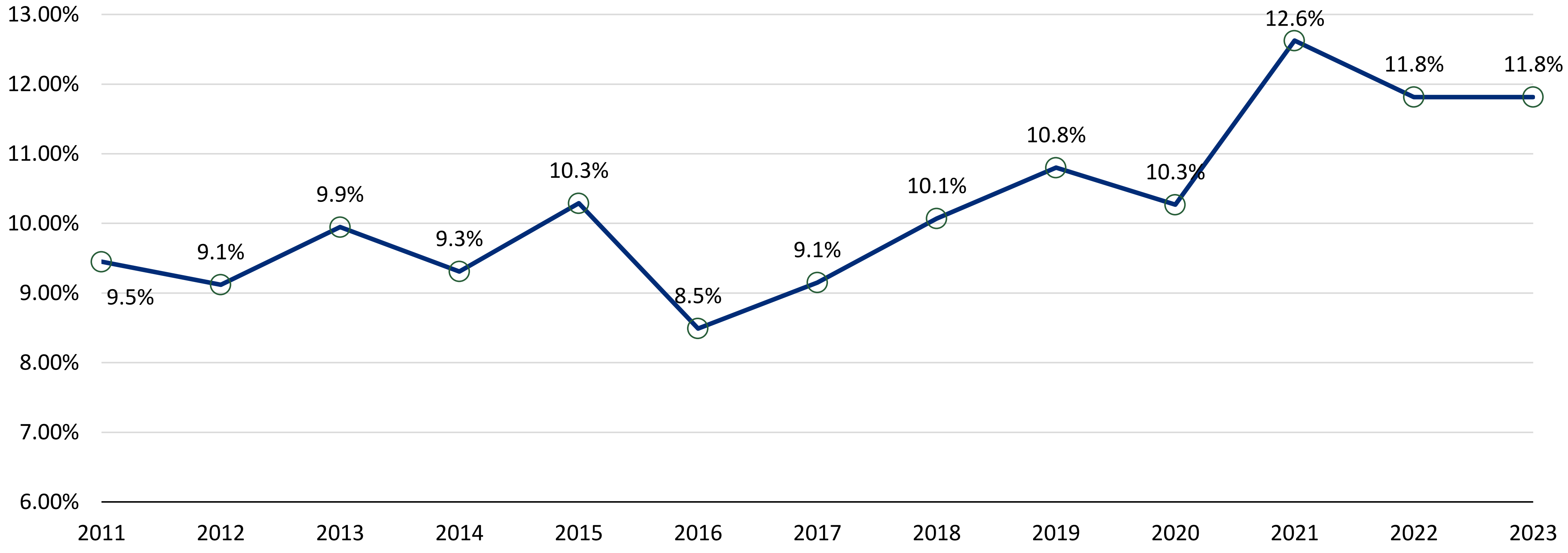
7 Profit

INDUSTRY BENCHMARKS

- 2024 Annual Review Benchmarks can be applied in rate filings submitted between October 1, 2024, and March 31, 2025.
- The 2024 Annual Review Benchmarks are based on an analysis of insurance industry private passenger vehicles loss and expense experience in Alberta reported as of December 31, 2023.
- Insurers using their company data may support loss trend rates that reflect the characteristics of their portfolio of risks.

UNALLOCATED LOSS ADJUSTMENT EXPENSES

- In determining their rate level needs, insurers should include provisions for loss adjustment expenses (LAE) that are based on their experience.
  - Allocated loss adjustment expenses (ALAE): legal expenses associated with an individual claim settlement
  - Unallocated loss adjustment expenses (ULAE): the claim and settlement-related expense that cannot be associated directly with an individual claim.
  - For the analysis we perform of loss development factors, ALAE is included with the reported Industry loss data.
- For the analysis we perform of trends, ALAE is included with the loss experience, and we provide for ULAE through the application of accident year factors that are published by GISA in the Automobile Insurance Statistical Plan Exhibits.



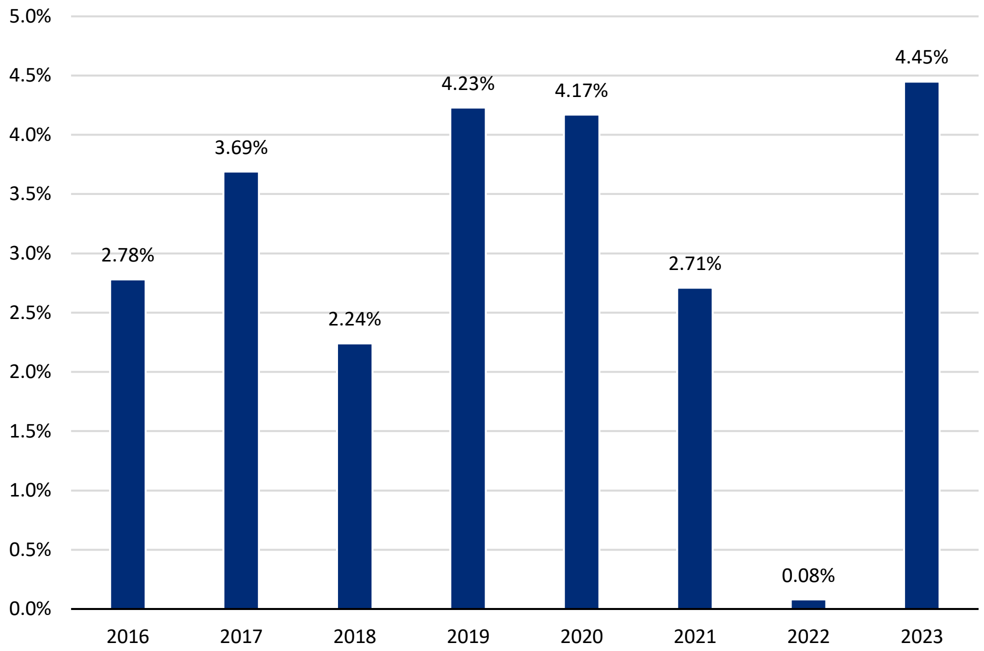
INVESTMENT INCOME RATE

- Insurers discount cash flow to account for the expected investment income on policyholder supplied funds.
  – Premium paid at policy inception (time = 0)
  – Expenses recognized at policy inception & during policy period (time < 1)
  – Claims may be settled several years after policy inception (t > 0)
- Insurers to use their own expected investment return when discounting cash flow in the filings submitted to the AIRB.

Premium Weighted Average Investment Return

8-year	3.03%
5-year	3.09%
3-year	2.45%

Industry Average Pre-Tax ROI



HEALTH COST RECOVERY

- The AIRB's position has been to accept the Government's most recent health cost recovery assessment as its Benchmark.
- The current Benchmark is based on the Government's 2024 assessment rate: 2.94%

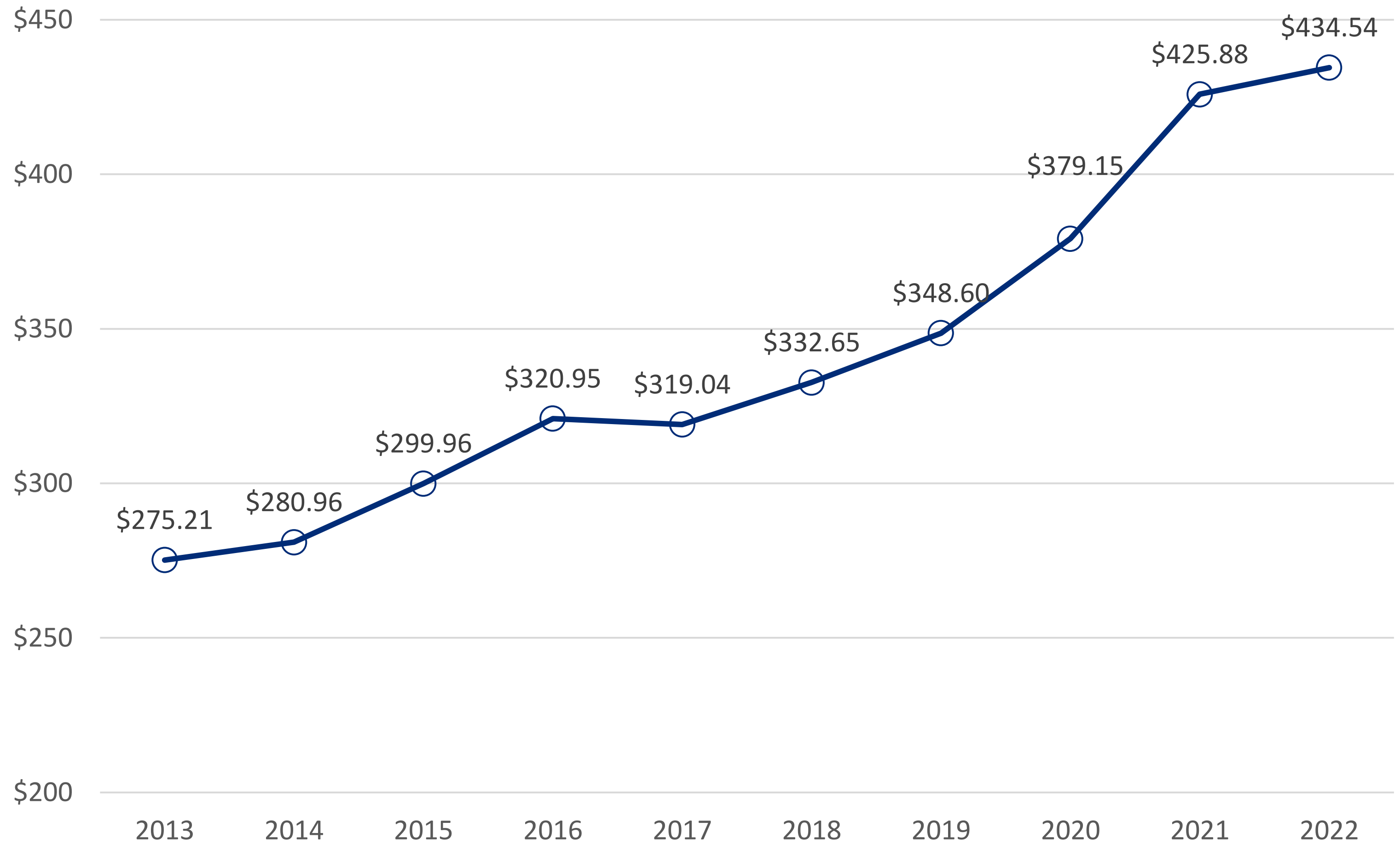
NON-CLAIM EXPENSES

- The AIRB's position has been to accept the latest Industry average operating expense ratio as published by GISA as the Benchmark for assessing the reasonableness of an insurer's expense provision.
- The current Benchmark, 27.8%, is based on GISA's 2022 expense report, with the general expense component based on a percentage of the earned premiums and other components as a percentage of written premiums.
- Oliver Wyman Preliminary Recommended Benchmark: **27.8%** is based on GISA's 2022 expense report.

Expense Component	Current Benchmark (2024 SAR)	Recommended Benchmark (2024 AR)
Direct Commissions	12.1%	11.7%
Contingent Commissions	1.4%	1.4%
Total Commissions	13.5%	13.1%
Premium and Fire Taxes	3.7%	3.8%
Other Acquisition Expenses	2.9%	3.0%
General Expenses	7.5%	7.8%
Total Expenses	27.6%	27.8%

NON-CLAIM EXPENSES

Expense Per Earned Vehicle



- Expenses as a percent of premium have remained relatively stable over the past 10-years, with most years between 25% and 28%.
- Expenses per earned vehicle have risen by approximately 5.2% per year over the 10-year period

Stakeholder Comments

- Acquisition and operating costs of the insurance industry continue to increase

PROFIT

- The Board’s current position remains unchanged at 6% of premium.
- Oliver Wyman presents a Preliminary Recommended Benchmark that is consistent with the Board’s current position.

AGENDA

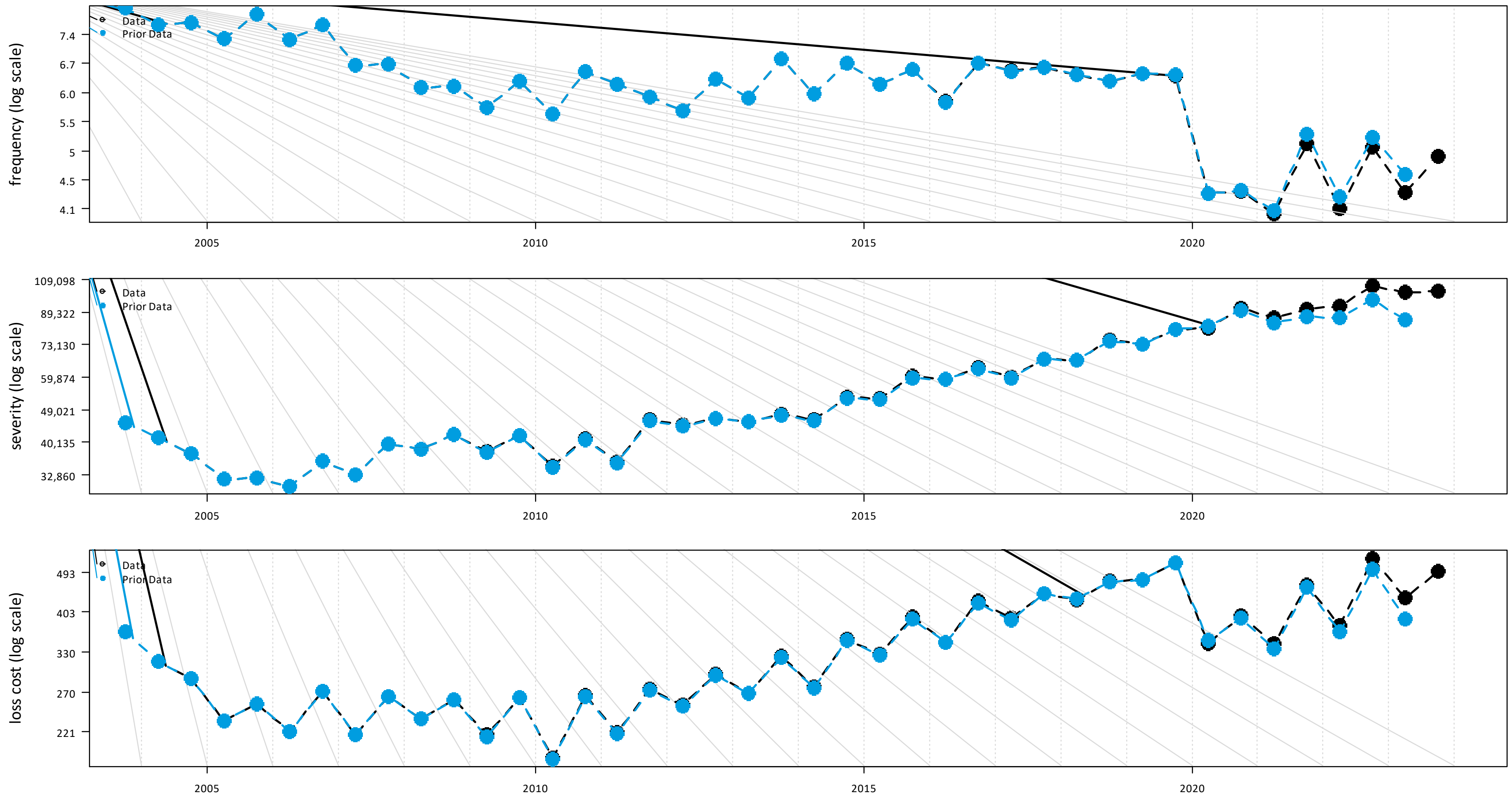
INDUSTRY BENCHMARKS – TREND RATES CHANGES SINCE PRIOR REVIEW

Coverages	2024 SAR 6/2023 Data	2024 AR 12/2023 Data
Bodily Injury	**+8.7%/5.0% (a)**	**+8.7%**
Property Damage	**+1.8%**	**+1.6%**
DCPD	**+1.8%**	**+1.6%**
Accident Benefits – Total	**+3.8%/+10.9% (b)**	**+2.2%/+13.2%/4.1% (c)**
Collision	**+2.3%**	**+2.4%**
Comprehensive	**+4.0%**	**+3.6%**
All Perils	+2.2%	+2.7%
Specified Perils	+3.3%	+3.7%
Underinsured Motorist	+4.4%	+4.4%

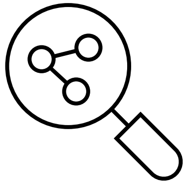
(a) Change in trend date begins November 1, 2020.
(b) Change in trend rate of +10.9% begins January 1, 2015; most rate applications consider data after 2015.
(c) Change in trend rate of +13.2% begins January 1, 2015, change in trend rate of 4.1% begins October 29, 2020; most rate applications will only consider data from 2015 and onward.

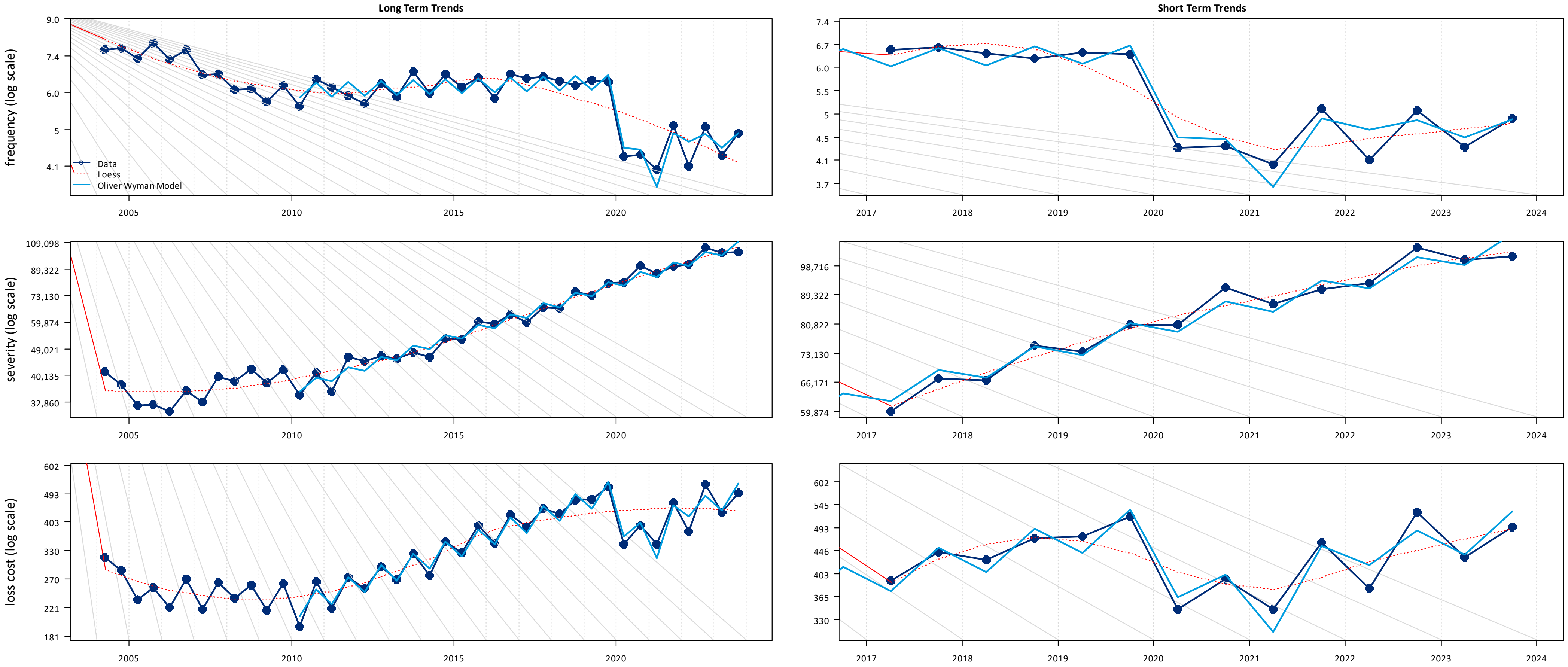
BODILY INJURY

- Our estimates using data as of June 30, 2023, showed a flatter trend in the recent bodily injury severity estimates
  – Previously, we selected a tempered future trend to recognize this flattening
- Our estimates using data as of December 31, 2023, have increased, and the flatter trend is no longer evident



BODILY INJURY



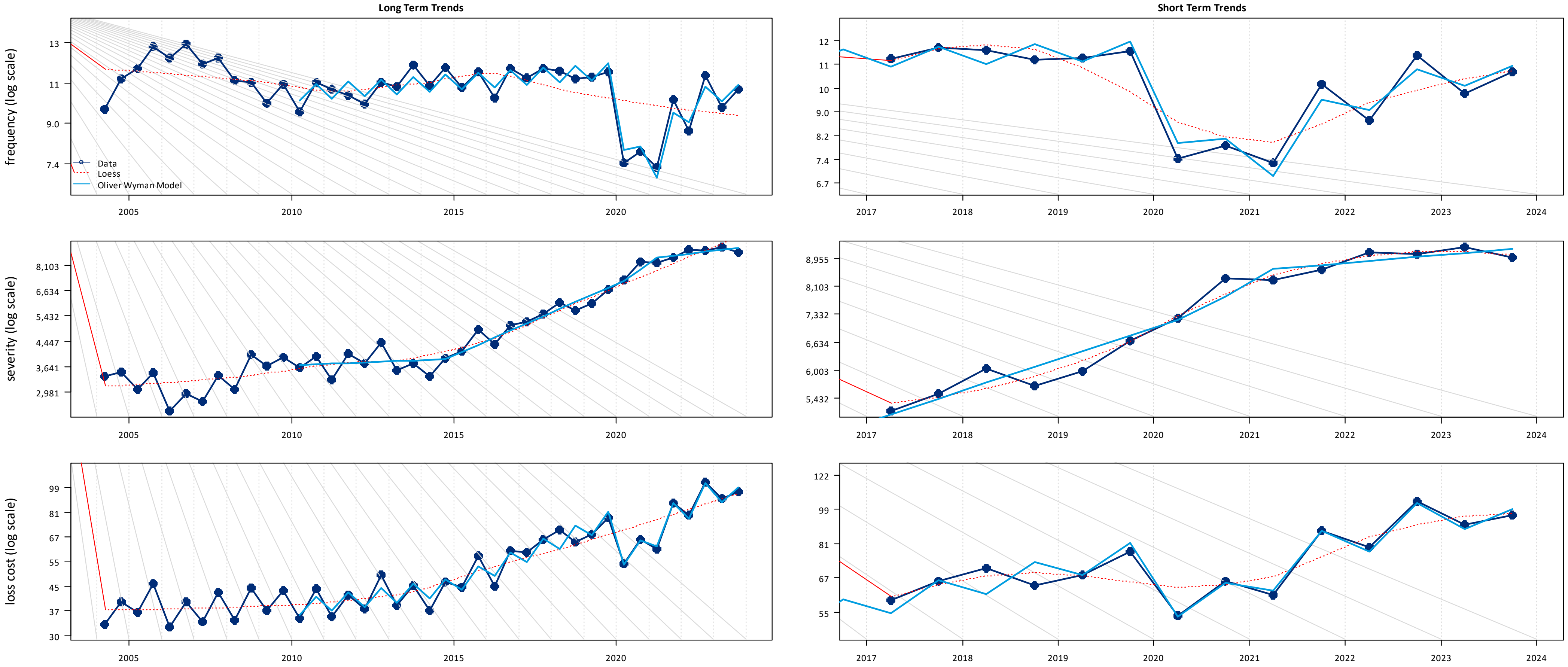


Stakeholder Comments

- Bodily injury loss costs have stabilized
- Question the validity of a reform scalar in the frequency and severity models

PROPERTY DAMAGE

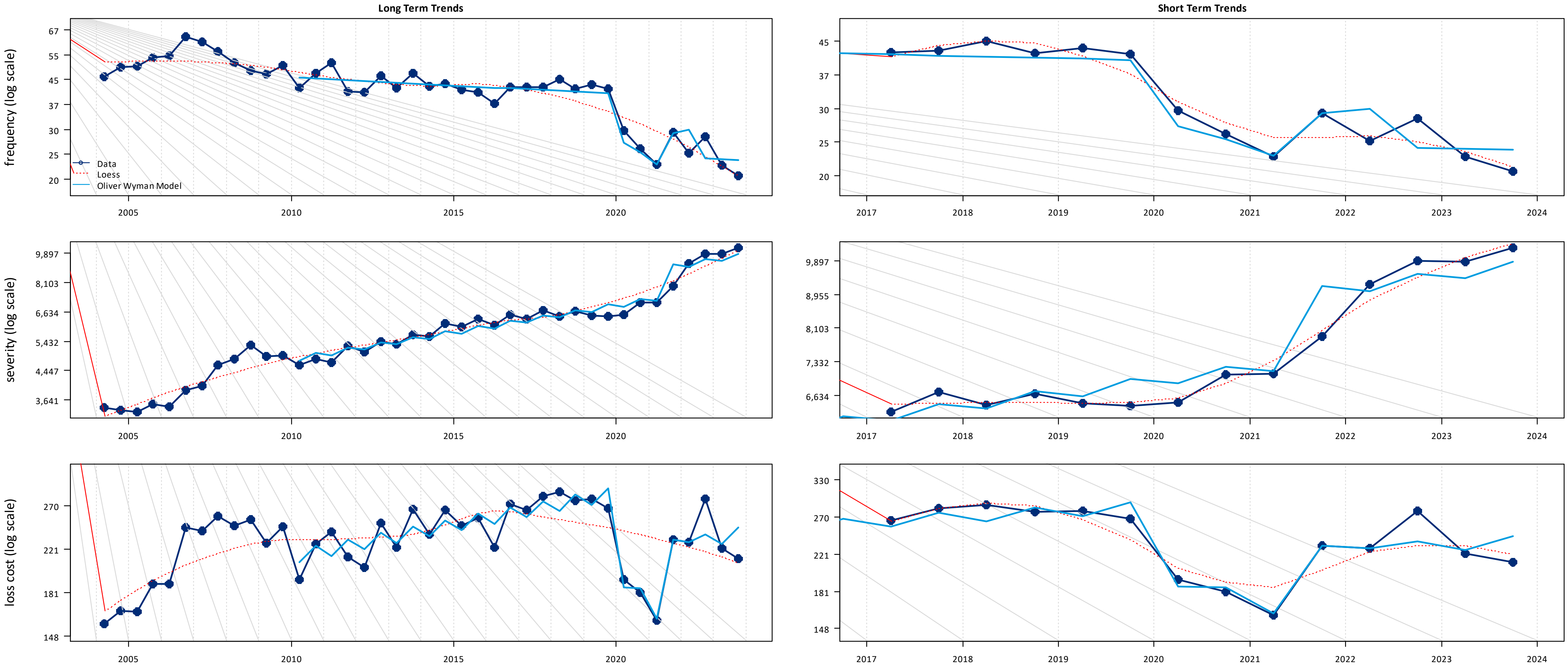
ACCIDENT BENEFITS



Stakeholder Comments

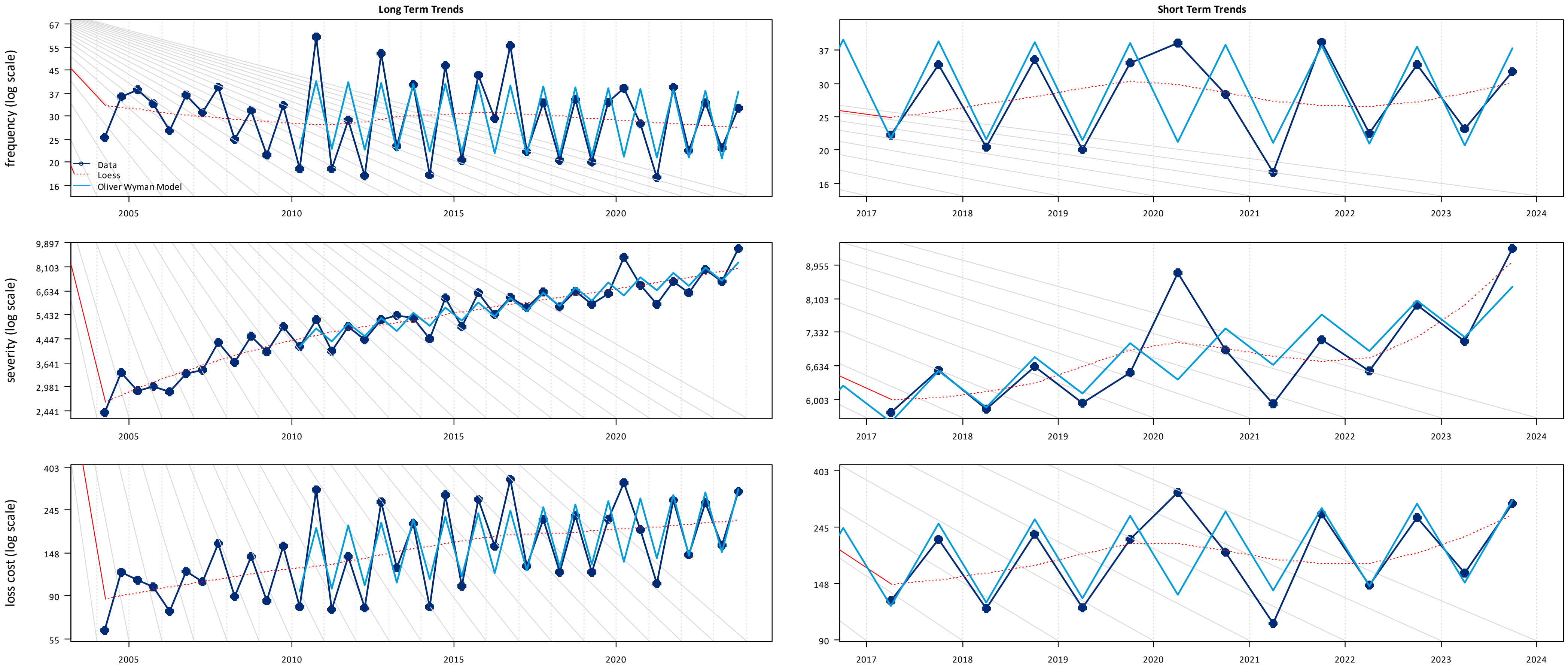
- Question the validity of a reform scalar in the severity model

COLLISION



Long Term Trends
Short Term Trends
frequency (log scale)
severity (log scale)
loss cost (log scale)
Data
Loess
Oliver Wyman Model
67
55
45
37
30
25
20
9,897
8,103
6,634
5,432
4,447
3,641
270
221
181
148
2005
2010
2015
2020
45
37
30
25
20
9,897
8,955
8,103
7,332
6,634
330
270
221
181
148
2017
2018
2019
2020
2021
2022
2023
2024

COMPREHENSIVE



Stakeholder Comments

- The recent severity trend is higher than the long-term trend

COMPREHENSIVE - THEFT

AGENDA

1 Economic Indicators

2 Industry Benchmarks

3 Loss Trend Benchmarks

4 Inflation

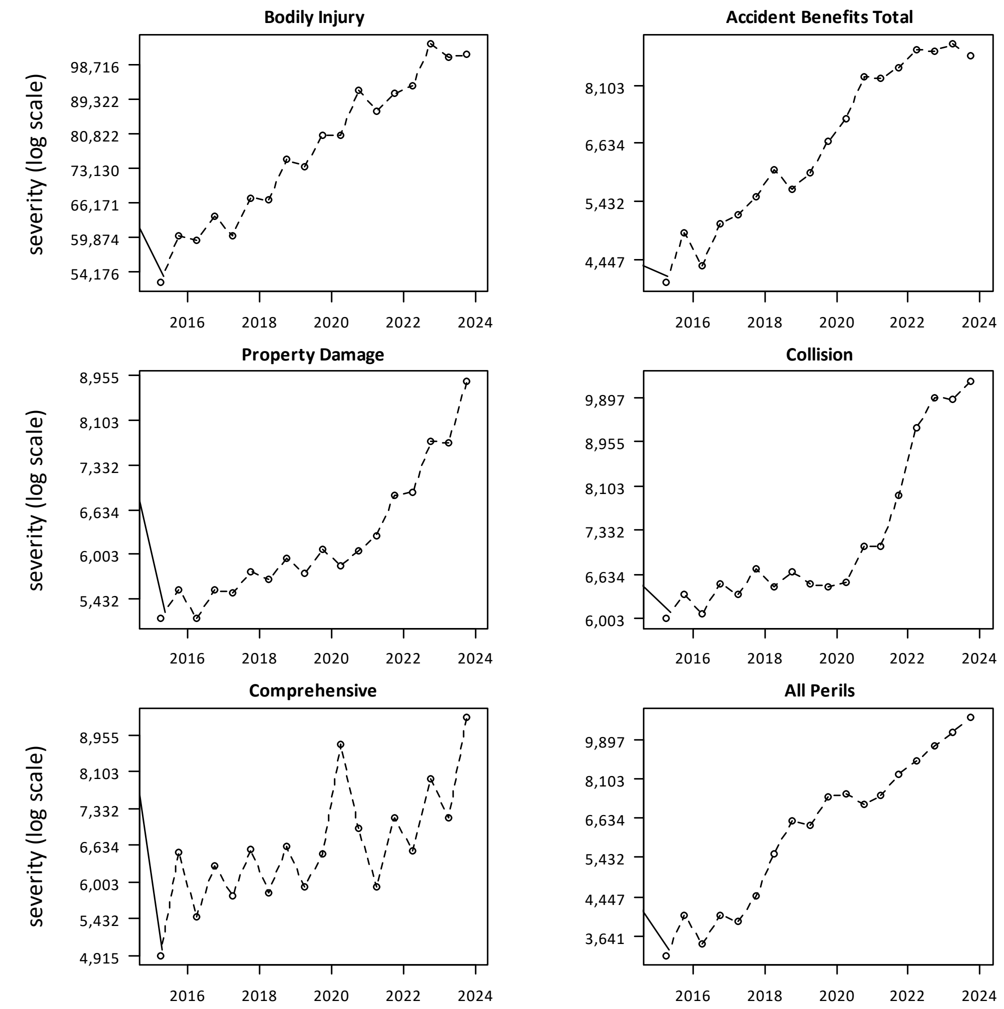
5 Policy Reform

6 COVID 19 / New Normal

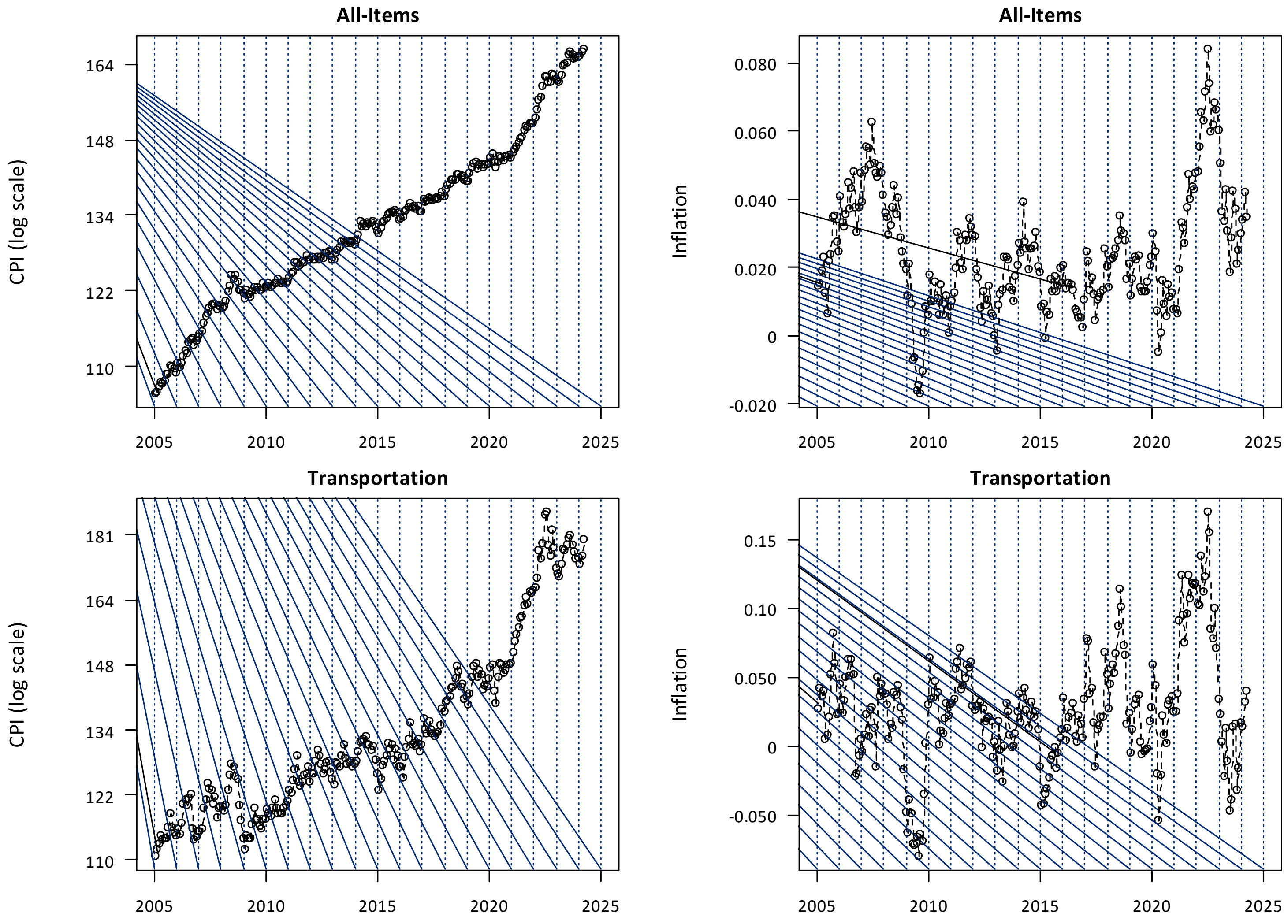
7 Profit

PAST LOSS TREND CONSIDERATIONS

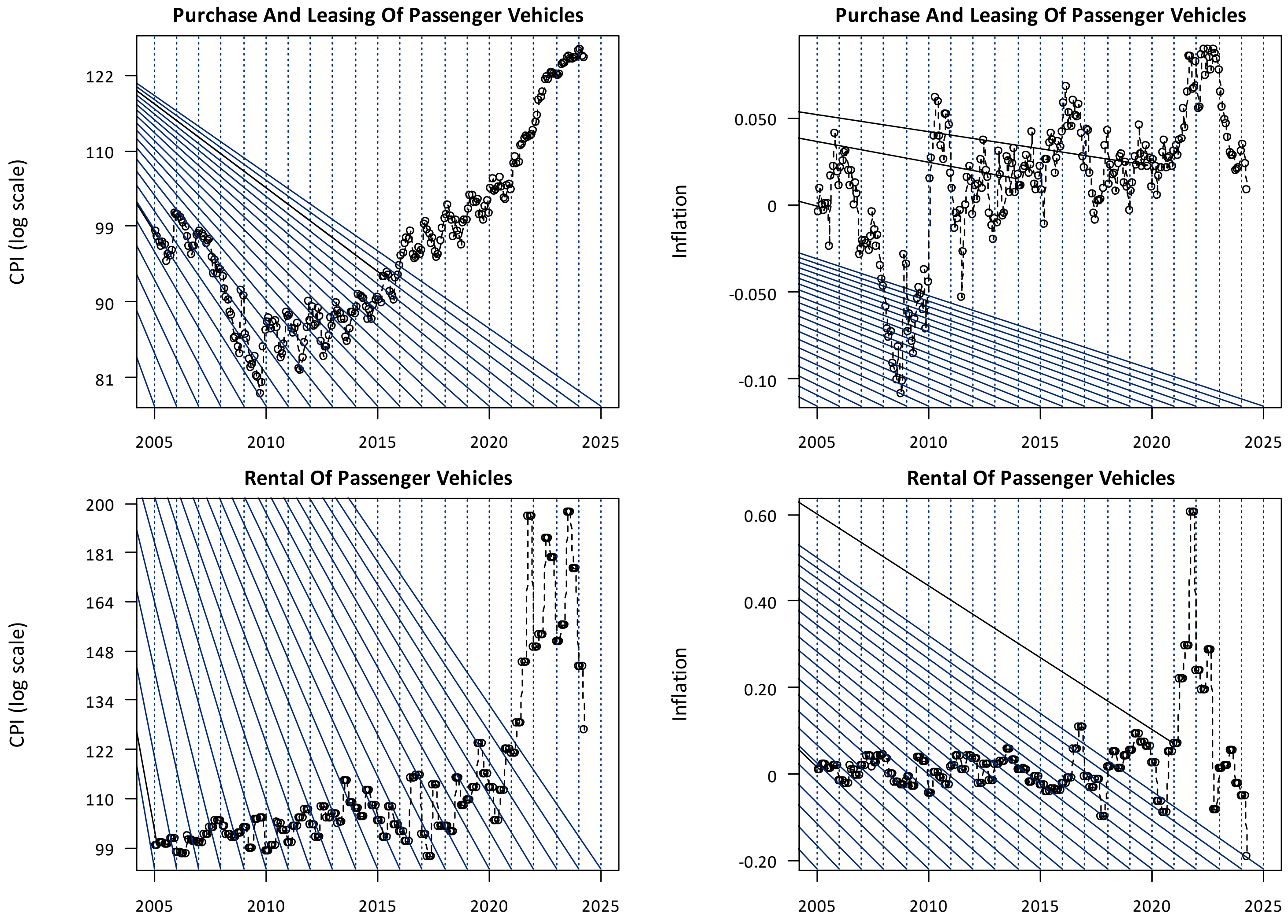
- Supply chain disruption, chip shortages, labour shortages, pent-up consumer demand have resulted in a recent increase in inflation.
- Significant increase in property damage and collision severity coincident with the inflation spike, affecting the latest observations in the experience period for our past loss trend
- An additional scalar parameter in the model isolates and quantifies the change in severity level to the extent that the change is apparent and statistically significant for a specific coverage.
- Inflationary pressures on physical damage coverages (e.g., vehicle purchase, rentals and passenger vehicle parts, maintenance and repair costs) have resulted in the highest inflation levels in the last 10 years.
  – Showing signs of moderation in 2023.
- Inflationary pressures on Health Care costs appear to have lagged the physical damage coverages, with a more modest rise beginning later in 2022.



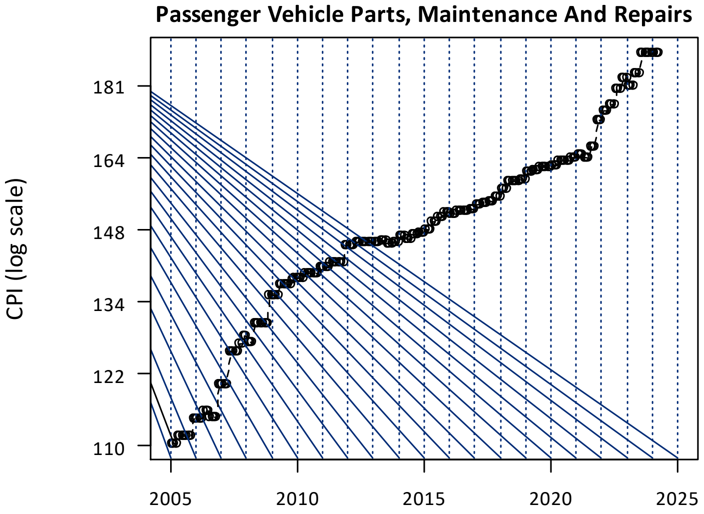
CONSUMER PRICE INDEX & INFLATION

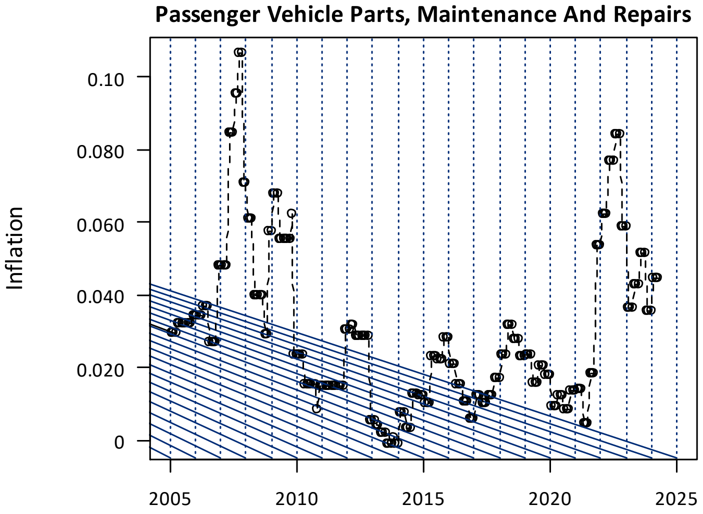


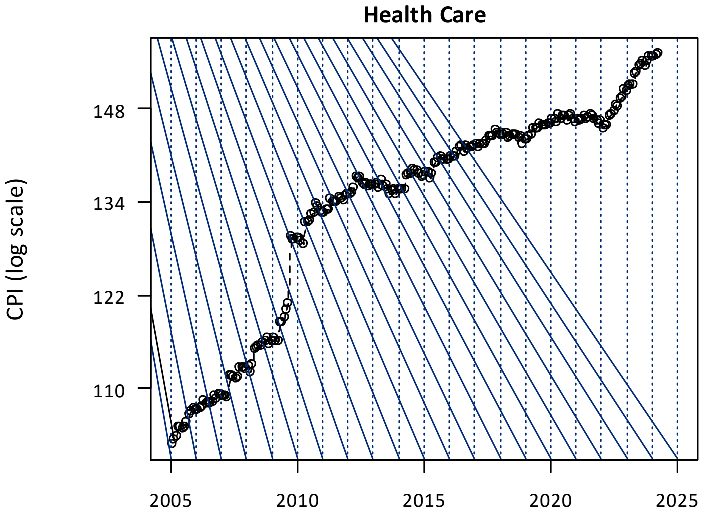
CONSUMER PRICE INDEX & INFLATION

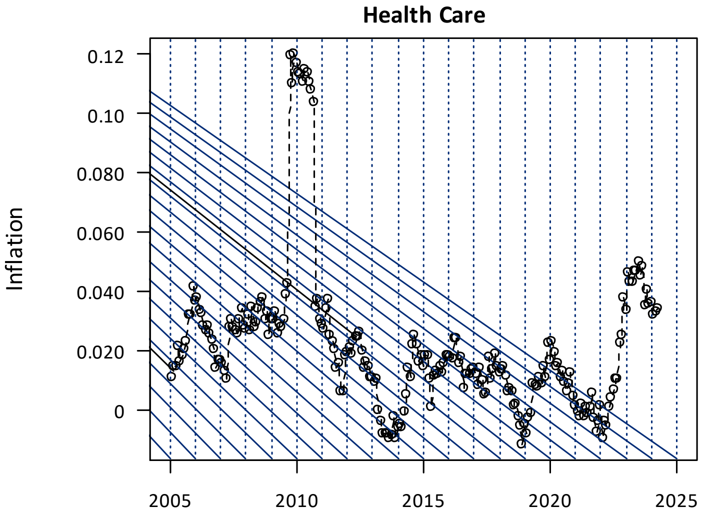


CONSUMER PRICE INDEX & INFLATION









FUTURE LOSS TREND CONSIDERATIONS

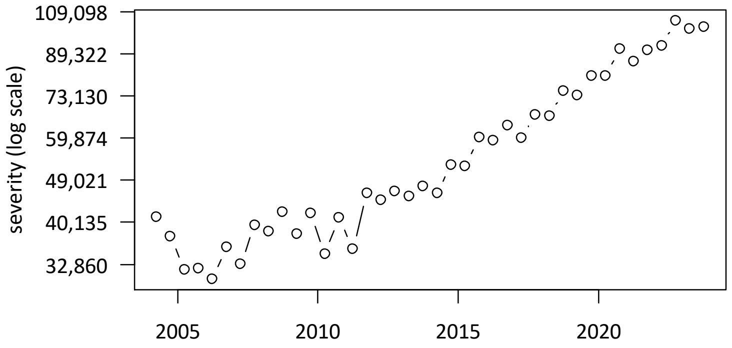
- Selected future loss trend rates consider both the cost level changes that occurred in the past (i.e., past trend) and the likelihood that those patterns may change.
  - In the absence of a significant change in experience, we find it is most reasonable to assume the past loss trend will persist into the future resulting in equivalent past and future trend rates.
  - However, inflation is rapidly changing. Future inflation may be different than historical inflation in our models up to **December 31, 2023.**
  - **Inflation may stabilize, fall, or rise…**
  - To the extent that an insurer finds an alternative trend rate more reasonable for the future, we recommend the insurer fully explain and provide support based on the most recent data available at the time of filing.

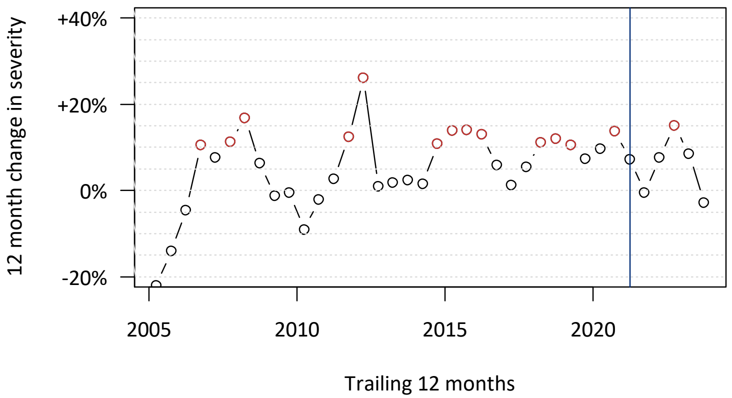
- Future trend begins at the mid-point of the latest accident half-year considered in the model that supports the selected loss trend rates.
  - The selected trends include the impact of changes in cost through the trend date.

- **We recommend flexibility for future period trend rates**; and this will include consideration of the inflation information available at the time of filing, along with the most recent experience data available.

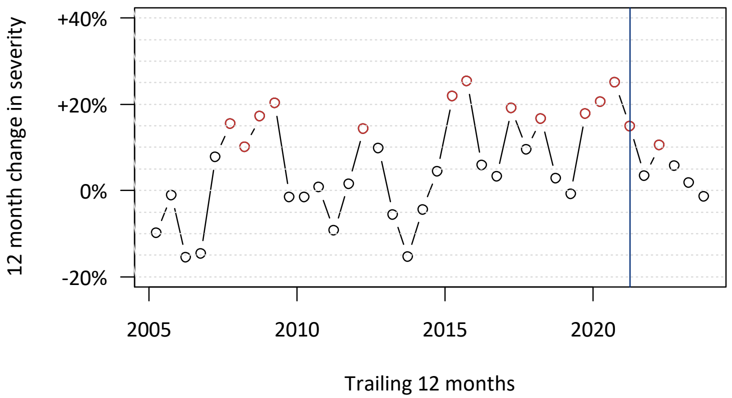
OBSERVED SEVERITY CHANGES

Bodily Injury



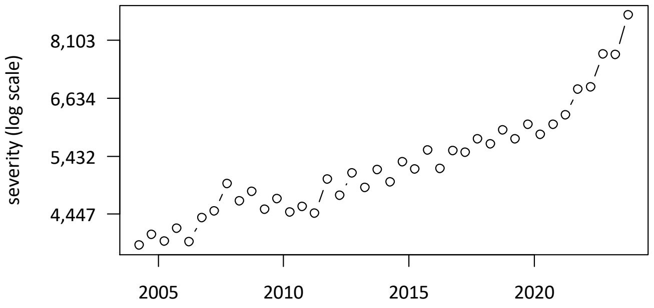


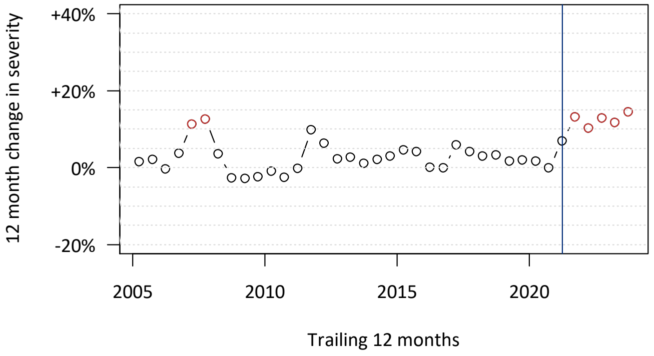
Accident Benefits



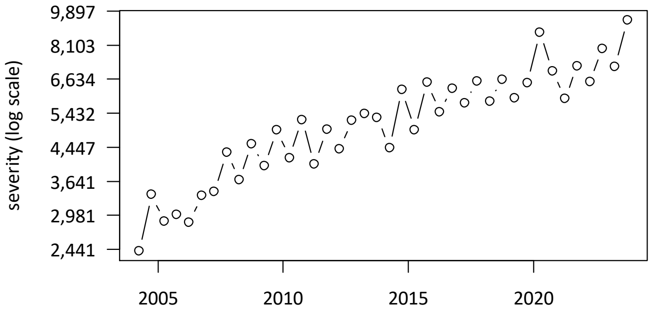
OBSERVED SEVERITY CHANGES

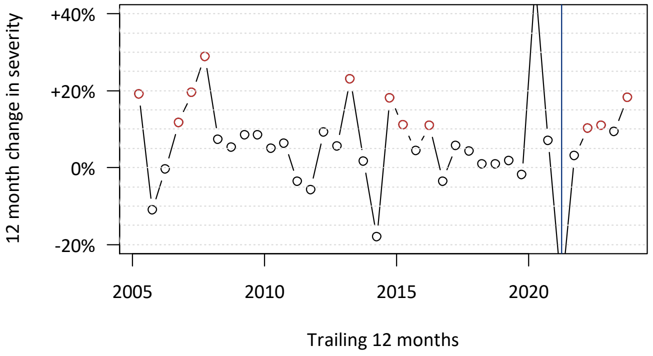
Property Damage



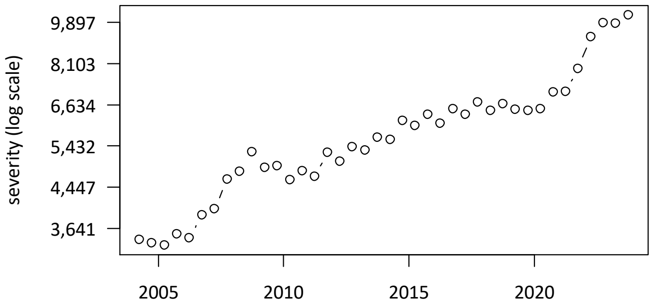


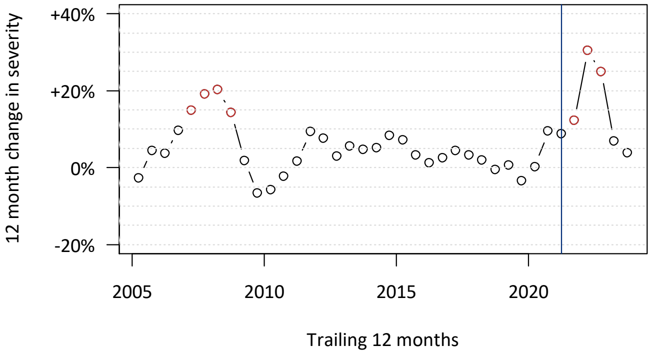
Comprehensive





Collision





AGENDA

BILL 41

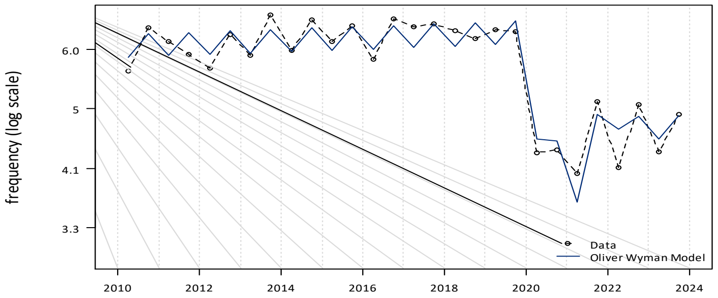
- Bodily injury and accident benefits severity models include an additional (scalar) parameter to measure the reform impact.
  - Bodily injury severity has decreased, and the accident benefits severity has increased.
  - The magnitudes of these changes indicate a smaller reduction in bodily injury and a larger increase in accident benefits.
    - Approximately 3-4 points of the originally estimated 18% reduction to bodily injury was associated with pre-judgement interest savings
    - The spike in inflation during 2021 offset most of this estimated reduction, resulting in a smaller reduction in loss costs
- Bill 41 may also influence frequency as a policyholder may be more/less likely to pursue a claim under the higher/lower benefits available.
  - We include a scalar in our bodily injury frequency model.

Stakeholder Comments

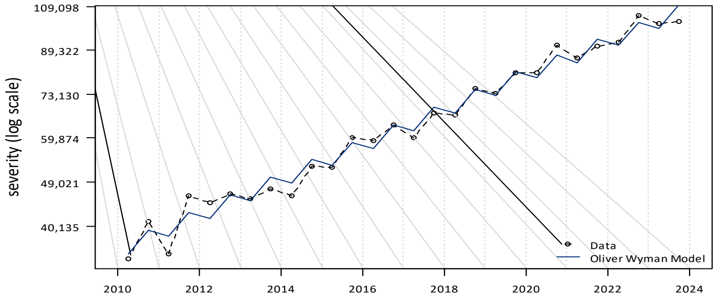
- The prejudgment interest rate jumped in 2023, creating upward pressure on loss costs.

BILL 41 REFORM IMPLICATIONS

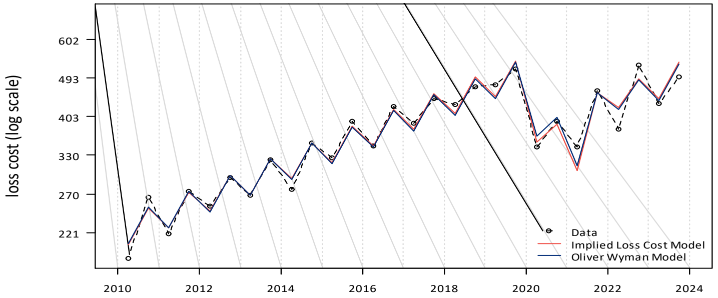
Bodily Injury



Parameter	Coefficient	p.value	Adj.R2
Trend	0.005	0.278	0.896
Mobility	0.014	0	
Seasonality	0.077	0.001	
New Normal Scalar	-0.252	0.001	
2020 Reform Scalar	-0.082	0.13	
Trend Rate	+0.5%		

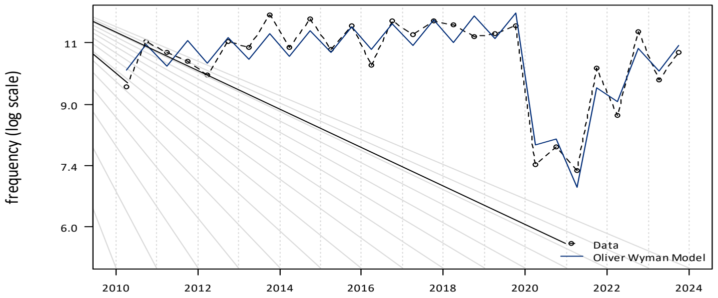


Parameter	Coefficient	p.value	Adj.R2
Trend	0.08	0	0.984
Seasonality	0.067	0	
2020 Reform Scalar	-0.012	0.669	
Trend Rate	+8.3%		

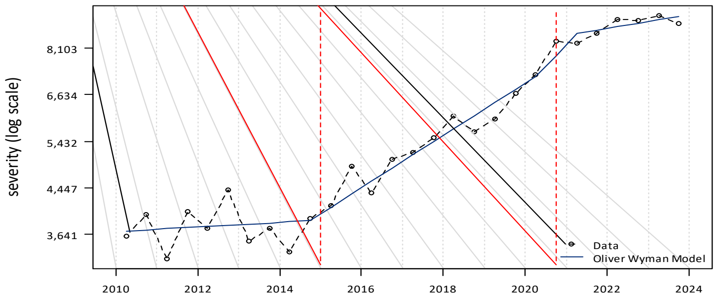


Parameter	Coefficient	p.value	Adj.R2
Trend	0.083	0	0.96
Mobility	0.012	0	
Seasonality	0.147	0	
New Normal Scalar	-0.225	0.001	
2020 Reform Scalar	-0.117	0.029	
Trend Rate	+8.7%		

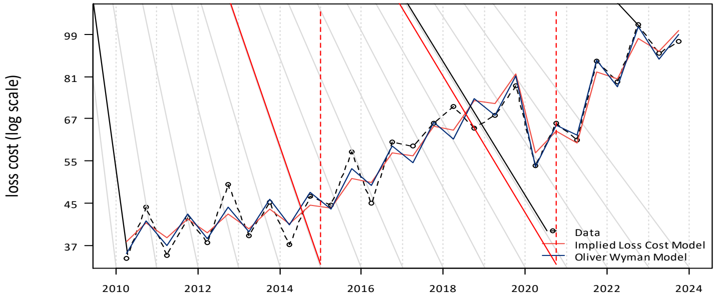
Accident Benefits



Parameter	Coefficient	p.value	Adj.R2
Trend	0.011	0.003	0.886
Mobility	0.016	0	
Seasonality	0.078	0	
New Normal Scalar	-0.15	0.001	
Trend Rate	+1.1%		



Parameter	Coefficient	p.value	Adj.R2
Trend	0.01	0.436	0.961
2015 Trend Change	0.103	0	
2020 Reform Scalar	0.127	0.131	
2020 Trend Change	-0.084	0.02	
Trend Rate (Period 1)	+1.0%		
Trend Rate (Period 2)	+11.9%		
Trend Rate (Period 3)	+3.0%		

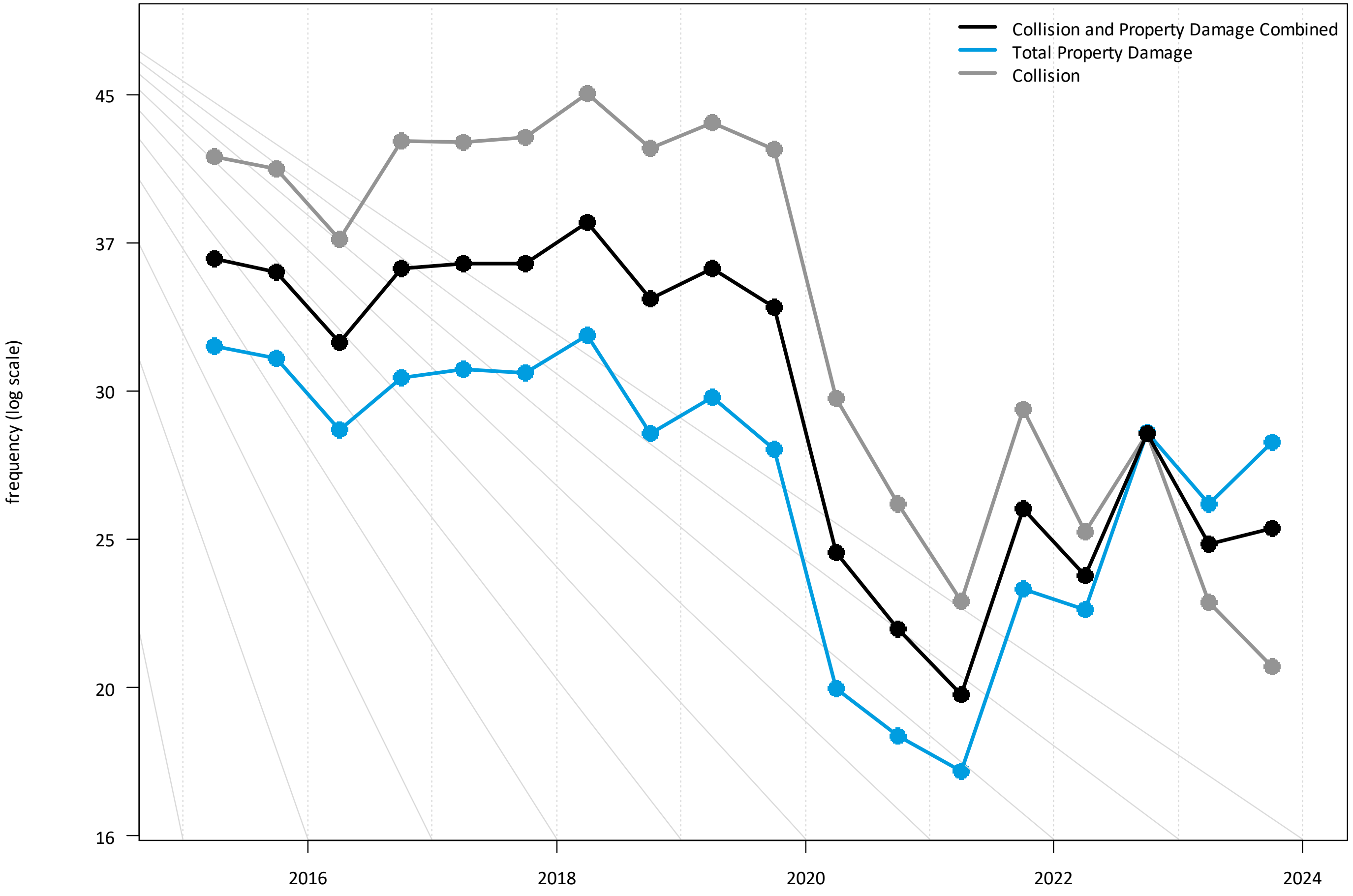


Parameter	Coefficient	p.value	Adj.R2
Trend	0.034	0.016	0.953
Mobility	0.016	0	
Seasonality	0.135	0	
2015 Trend Change	0.077	0.002	
New Normal Scalar	-0.068	0.579	
2020 Reform Scalar	0.289	0.031	
2020 Trend Change	-0.148	0.072	
Trend Rate (Period 1)	+3.4%		
Trend Rate (Period 2)	+11.7%		
Trend Rate (Period 3)	-3.6%		

INTRODUCTION OF DCPD

- DCPD was introduced in the Province on January 1, 2022
  - Due to a lack of data, DCPD and TPL-PD trend selections are based on the combined experience
  - There is some evidence that claims shifted from collision to DCPD

INTRODUCTION OF DCPD



- We observe a lower post-pandemic new normal frequency for the combined collision and total property damage experience
- Total property damage has returned approximately to the pre-pandemic level, but the collision frequency level is significantly lower than the pre-pandemic level

Stakeholder Comments

- Property damage claims costs have been the primary driver of cost increases

AGENDA

COMBINED EFFECT OF COVID-19 AND REFORMS ON CLAIMS COST

- "Stay-at-home" orders introduced to control the spread of COVID-19 dramatically reduced traffic
  - Significant reduction to reported frequency in 2020, 2021, and 2022
  - Apparent lower post-COVID frequency level starting in the second half of 2022
  - No material impact on reported severity apparent
- Expected reduction in bodily injury and accident benefits frequency resulting from Bill 41 reforms
- Since the introduction of DCPD in January 2022, there has been an apparent shift of claims from collision to DCPD. Resulting in an increase in the property damage (including DCPD) frequency and a reduction in the collision frequency.

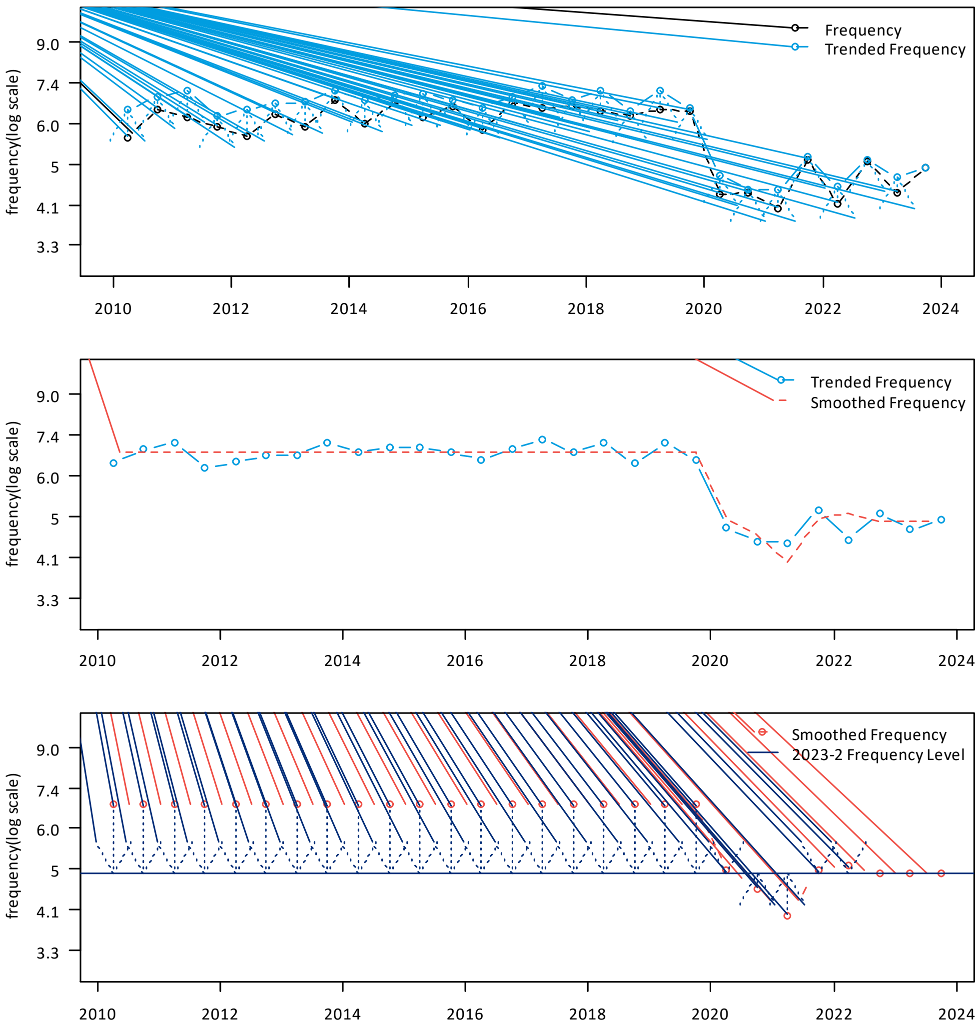
- Proposed rate programs should adjust historical claims experience to the current expected cost level by adjusting for:
  - The impact of COVID-19 pandemic on frequency
  - The November 2020 reforms
  - Commonplace hybrid and remote work options whereby post-COVID traffic patterns are different from pre-COVID patterns, resulting in lower frequency

  We refer to this combination of adjustments as the "**Combined New Normal**" factor.

Stakeholder Comments

- Stability of loss costs should be evaluated considering both new normal factors and loss cost trend rates.
- Asked for additional details related to the calculation of the combined new normal factors.

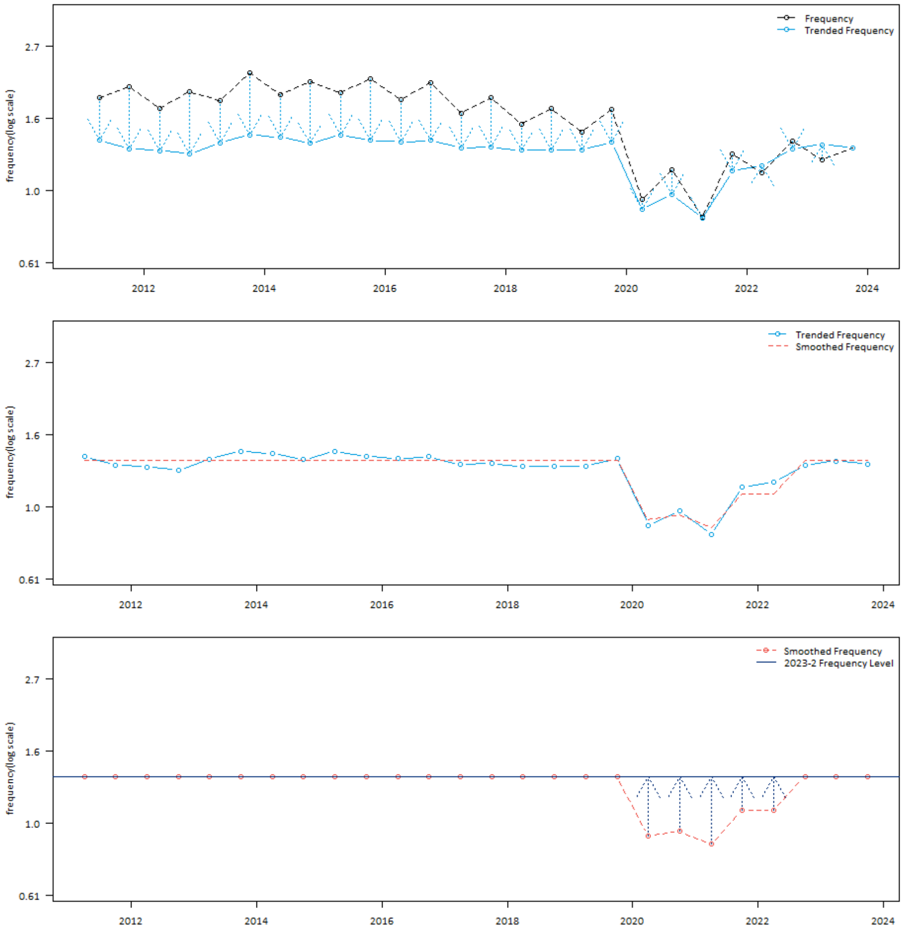
BODILY INJURY



Accident Semester	Combined New Normal Factor
201901	0.712
201902	0.712
202001	0.985
202002	1.076
202101	1.227
202102	0.987
202201	0.963
202202	1.000
202301	1.000
202302	1.000

BODILY INJURY

Ontario New Normal Frequency

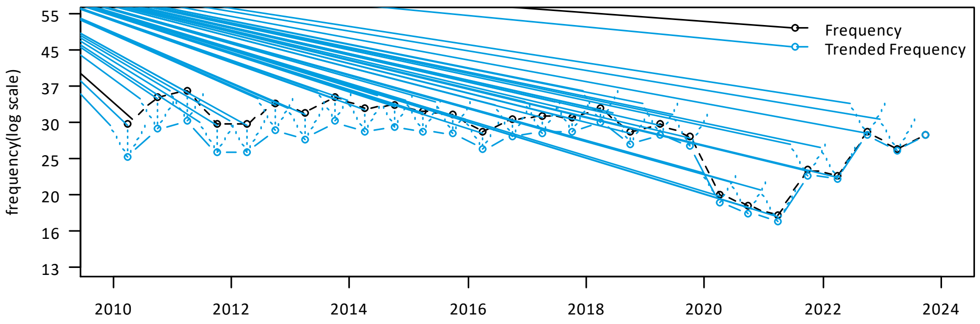


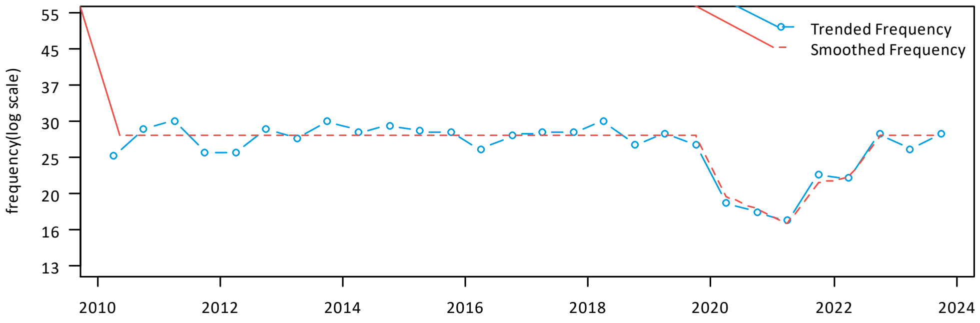
- The Ontario bodily injury frequency, after adjusted for trend, appears to have returned to pre-pandemic levels.
- The drop in frequency level apparent in Alberta main be mainly attributed to the reforms
- Our “Combined New Normal Factors” do not split out the effects of the reforms and of new driving patterns.
  - The impact of each individually is uncertain, but the combined effect has resulted in a lower frequency level.

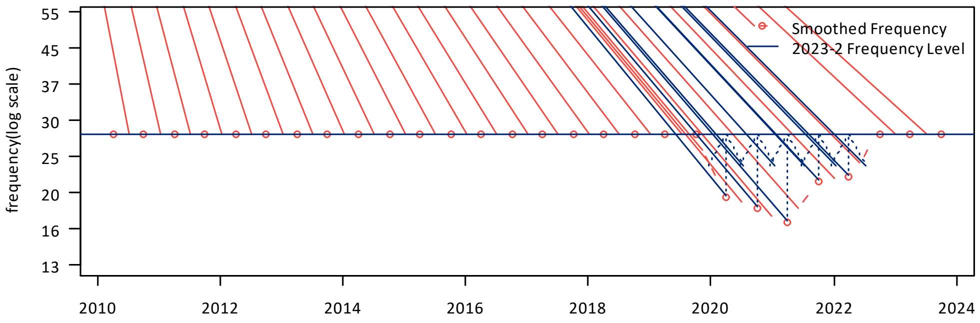
Stakeholder Comments

- Question the validity of a lower bodily injury post-pandemic frequency level

TOTAL PROPERTY DAMAGE

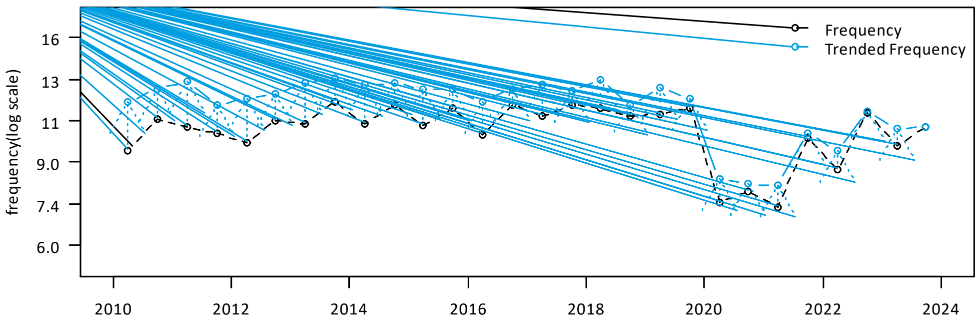


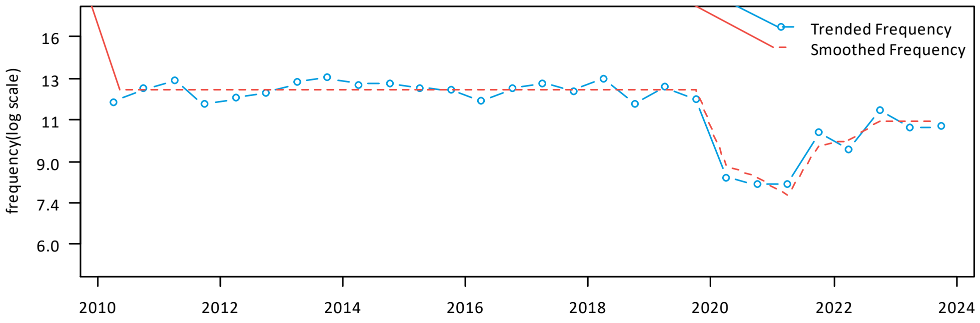


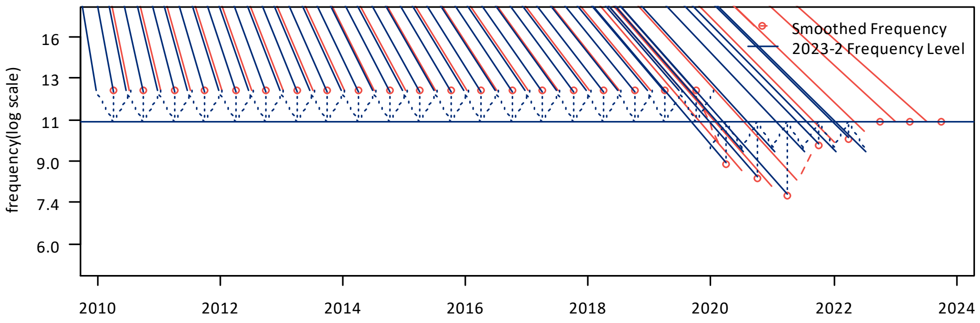


Accident Semester	Combined New Normal Factor
201901	1.000
201902	1.000
202001	1.409
202002	1.503
202101	1.628
202102	1.294
202201	1.259
202202	1.000
202301	1.000
202302	1.000

ACCIDENT BENEFITS TOTAL

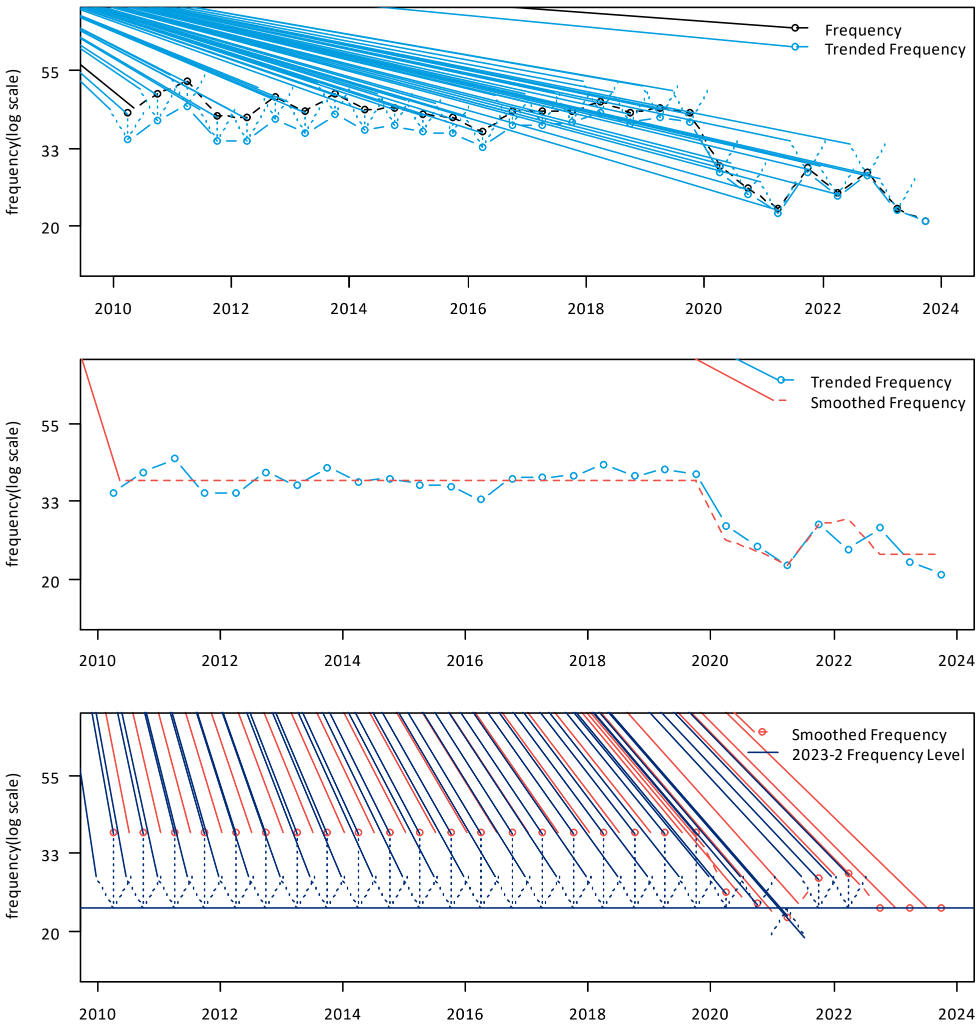






Accident Semester	Combined New Normal Factor
201901	0.859
201902	0.859
202001	1.229
202002	1.314
202101	1.429
202102	1.124
202201	1.093
202202	1.000
202301	1.000
202302	1.000

COLLISION



Accident Semester	Combined New Normal Factor
201901	0.618
201902	0.618
202001	0.910
202002	0.978
202101	1.070
202102	0.826
202201	0.801
202202	1.000
202301	1.000
202302	1.000

AGENDA

1 Economic Indicators

2 Industry Benchmarks

3 Loss Trend Benchmarks

4 Inflation

5 Policy Reform

6 COVID 19 / New Normal

7 Profit

PROFIT

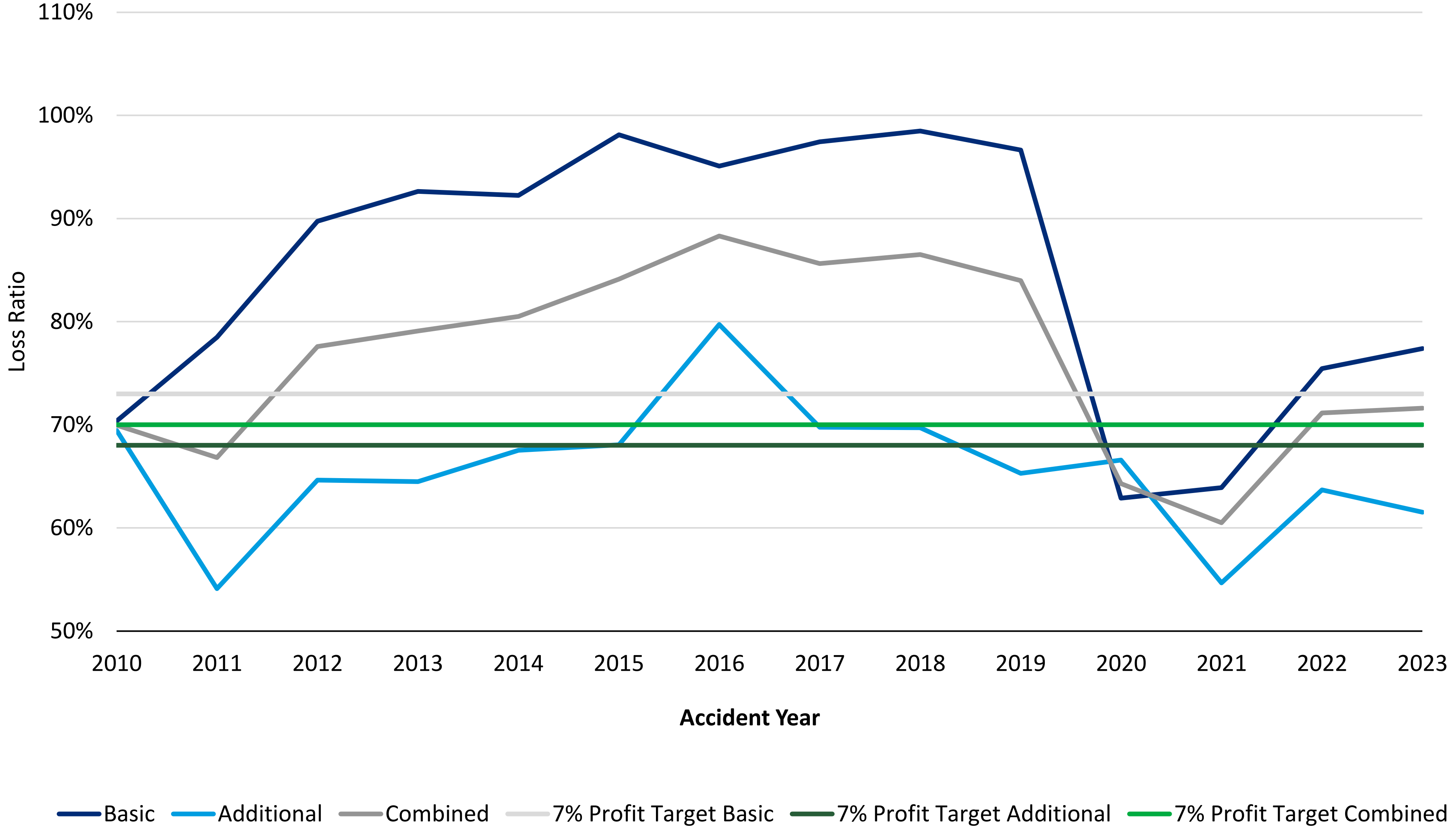
- The 2020 and 2021 profit results were exceptional and unexpected due to the COVID-19 pandemic.
  - 2020 and 2021 profit levels are not representative of profit levels achieved prior to 2020.
- On January 25, 2023, the Alberta government ordered the AIRB to pause new rate approvals that increase premium for Albertans. This order is in place until December 31, 2023
- On October 30, 2023, Ministerial Order 38/2023 was issued limiting the approval of any change to an insurer's rating program which resulted in private passenger vehicle rates increasing more than the rate of Alberta Consumer Price Index (as calculated in September of the previous year) for any individual policyholder who meets the definition of Good Driver.
  - The Good Driver Rate Cap is not reflected in 2023 data, as it took effect for rate approvals on or after January 1, 2024.

Stakeholder Comments

- The insurance industry achieved high profits in 2023, and by certain measures have done so in 4 of the past 5 years.
- Over the past 10 years, insurers have paid more in claims costs and expenses than they have received in premiums and investment income. This has resulted in two carriers leaving the market.

HISTORIC PROFITABILITY

Estimated Loss Ratios



RECENT PROFITABILITY

Accident Year	Estimated Loss & LAE Ratio	Discount Rate	Discount Factor	Expense Ratio	Estimated Profit Provision
2019	84.0%	4.2%	0.915	25.7%	-2.5%
2020	64.3%	4.2%	0.916	25.6%	15.5%
2021	60.5%	2.7%	0.944	27.8%	15.1%
2022	71.1%	0.1%	0.998	27.7%	1.3%
2023	71.6%	4.5%	0.911	27.7%	7.1%

QUALIFICATIONS, ASSUMPTIONS, AND LIMITING CONDITIONS