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Update from the Third Party Working Party

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This handout supports the research effort of the Institute and Faculty of Actuaries Third Party Working Party and is not written advice directed at the particular facts and circumstances of any given situation and/or data.

The materials contained in this presentation pack and any oral representation of it by the working party are explicitly outside the scope of the TAS.



Third Party Working Party

- Eleventh iteration of the Institute and Faculty of Actuaries Third Party Working Party (TPWP), which investigates motor claims (injury and property damage).
- Scope focussed on private car comprehensive (PCC) and includes accidental damage analysis for the second year.
- Data representing earned premium for accident year 2019 of £8.3 billion for private car comprehensive.
- This pack contains this year's research to be presented at the GIRO conference in November 2020.



Acknowledgements

Working Party:

Paulvir Bajwa
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Tesco Underwriting



Market statistics

Notes on data

- The collection of contributing insurers has changed materially over the years. Relative to last year's study this year's includes additional data from some contributors (generally relating to more accounts) and, in some cases, less data from other contributors.
- In addition, in each year it is common for a number of insurers to make relatively subtle changes to their definitions of claim statistics. In the aggregate, these lead to distortions when comparing the market studies between different years.
- Not all contributors are able to supply data to support every claim statistic in each study. There are generally (but not always) improvements in the availability of data from year to year, and as such, the results of the most recent study will be based upon data from an increased proportion of the contributor companies (and not just new contributors). Again, this introduces a material distortion into any analysis which attempts to compare the results across different studies.
- It is reasonably common for insurers to restate the claims statistics of prior accident years (and prior periods of development), particularly in the case where portfolios (including movements on prior year liabilities) have been acquired or disposed of by the contributor(s) in question. Other reasons for such changes can be changes in the availability of granular data pertaining to (potentially large) segments of portfolios (such as in the case where data is provided by bordereaux rather than being integrated in insurer administration systems) or in some cases changes in the mapping of data to classes.
- **For this reason, we would recommend that if the user of the research wishes to understand how trends have evolved over time, then they should focus on looking at trends by accident year within the latest study, rather than attempting to compare the results across studies. This is particularly true this year where there has been more movement in the data between studies than in previous years.**
- Likewise we do not consider statistically valid any back engineering of individual contributors' contributions.





1. 2019

- Market Environment

- AD

- TPPD

- Capped TPI

- Excess TPI

2. 2020 Market Environment

3. Conclusions

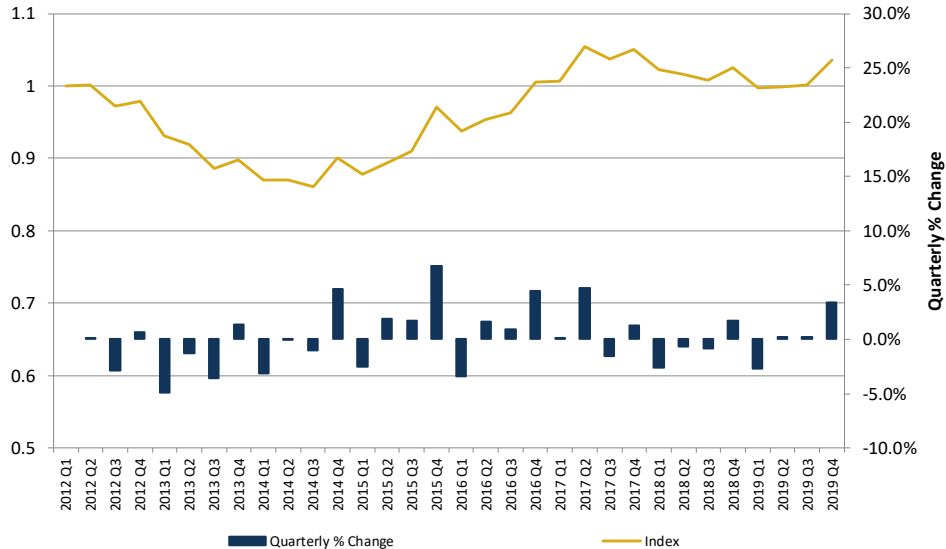
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2019 Market Environment

Premium Rates

ABI Premium Tracker (exc IPT)

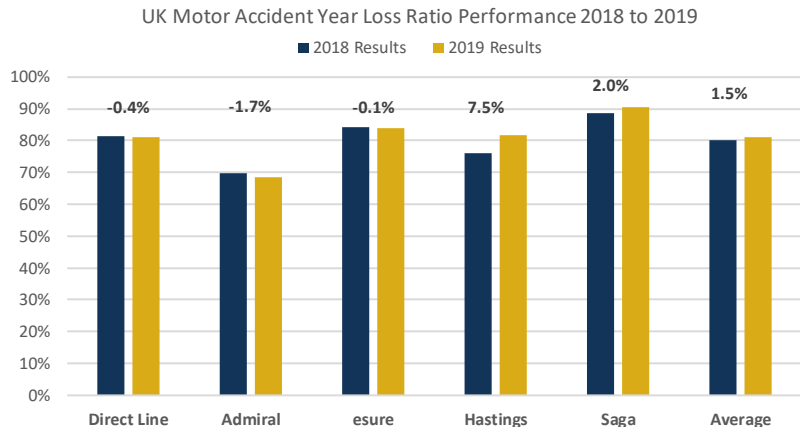


- Premium rates reduced from a high £440 exc IPT at 2017 Q2 to £418 exc IPT in 2019 Q3, a fall of 5%.
- In 2019 Q4 premiums increased by 3.4%, which was the largest increase in a single quarter since 2017 Q2.
- On an earned basis, premiums in 2019 were 2.1% lower than in 2018.



2019 Market Environment

Company performance



Note : Loss ratios derived from published company accounts and exclude prior year movements. Results for some companies include Commercial Motor and Other Personal Lines products.

- 2018 saw the loss ratio for most insurers deteriorate with the average deterioration 2.5% points (for the companies included).
- In 2019 there is less consistency in loss ratio movement but on average there has been a 1.5% increase.
- The ABI Premium Tracker shows premiums decreased by 2.1% for the 2019 accident year which will be contributing to the increase in loss ratios.

In 2019 the industry's Net Combined Ratio (NCR) was 100.8%; an increase of over 6% from 2018's record breaking year (94.7% NCR). A **lower than expected Ogden Discount Rate** for personal injury claims is one of the key reasons for a loss-making NCR, **exacerbated by low premium rates and high claims inflation**.

Source: EY press release June 2020

Underwriting **results** of motor insurers in 2019 were **hit by damage claims inflation** as well as the **change to the Ogden Discount Rate** from -0.75% to -0.25%

Source: Fitch Ratings UK Non-Life dashboard – 2019 results

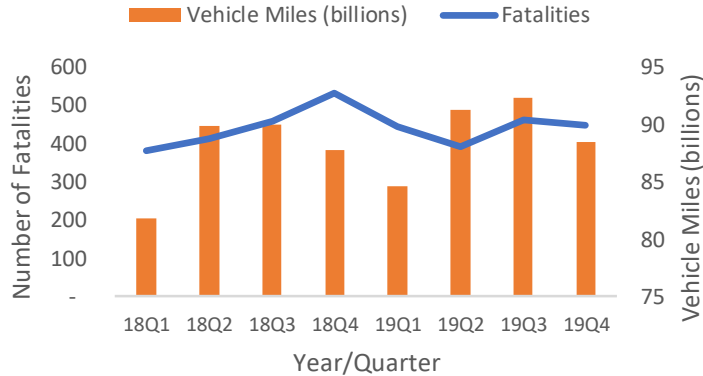


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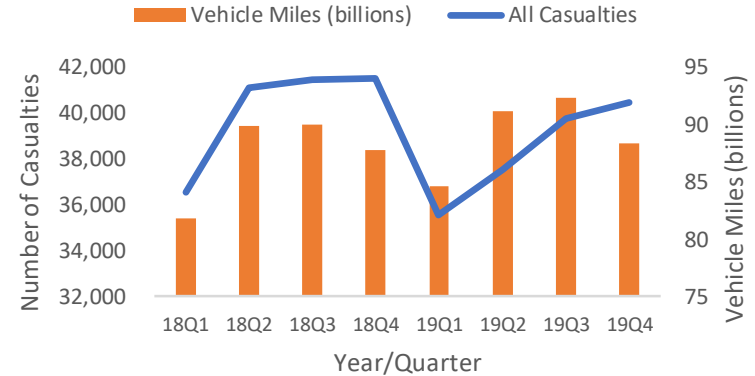
2019 Market environment

Casualty, Fatality and Mileage Statistics

Fatalities in Reported road accidents GB 2018Q1 - 2019Q4



All Casualties in Reported road accidents GB 2018Q1 - 2019Q4



Key Statistics:

- Overall, there were 1,748 reported **road deaths** in 2019 which was a reduction of 36 deaths compared to 2018, and similar to the level seen since 2012. By quarter, 2019Q1 observed a 16.5% increase in fatalities versus 2018Q1, with a corresponding reduction of 16% in 2019Q4 versus 2018Q4.
- There were also 153,315 **casualties** in reported road traffic accidents in 2019, a decrease of 5% compared to 2018. On a quarterly basis, there was an increase in the number of casualties from 2019Q1 to 2019Q4 in 2019.

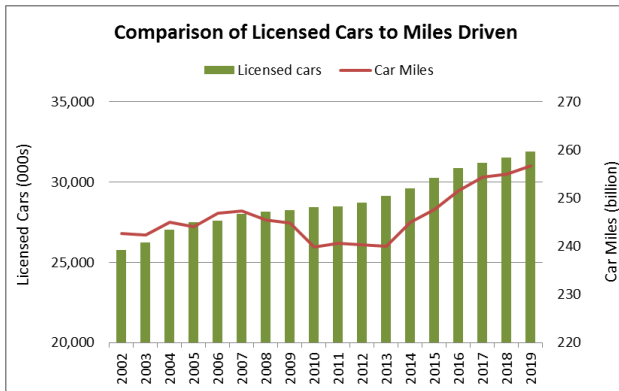
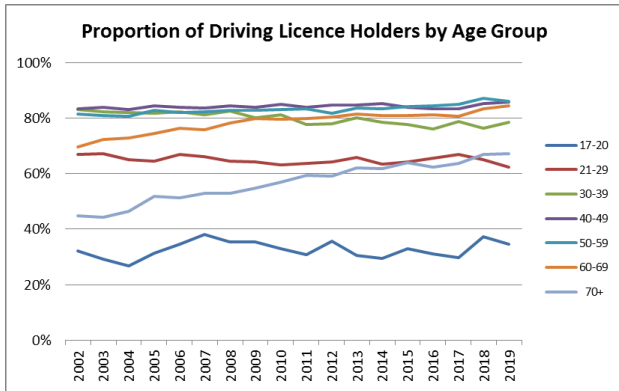
**Note: Department of transport latest release rebased traffic estimates in line with a benchmarking exercise carried out every 10 years for "minor roads". This results in a change in vehicle mileage estimates in relation to minor roads from 2010 onwards..*



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2019 Market environment

Changing driving habits



- National Travel Survey data was used to provide a view of the trends in the proportion of driving licences held over the period 2002-2019.
- The proportion of those over 70 with a licence has increased from 45% to 67% over the period.
- 17-20 year olds with a licence has increased since 2017, going from 30% to 35%.
- The average vehicle annual mileage has reduced by around 1% in each of 2018 and 2019.
- In total, the number of licenced vehicles has increased by 24% between 2002 and 2019 whilst the total number of vehicle miles has only increased by 6%.



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3. Conclusions

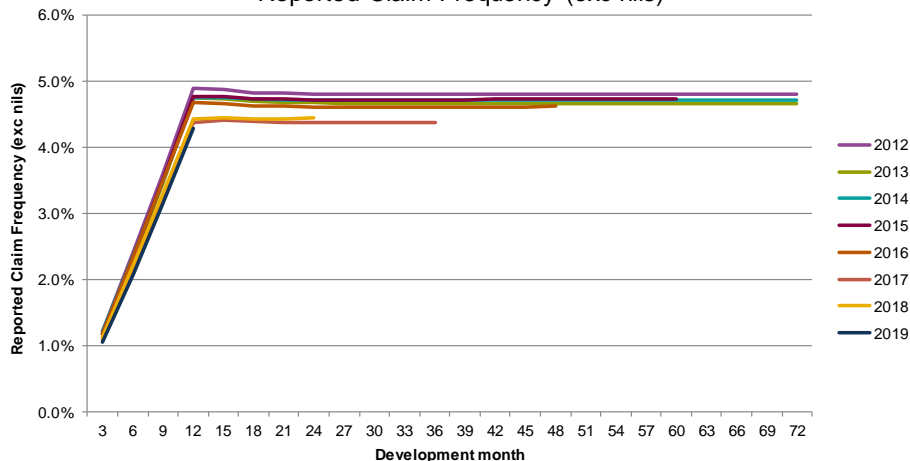
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2019 - AD

Frequency and Severity

Private Car Comp - AD
Reported Claim Frequency (exc nils)

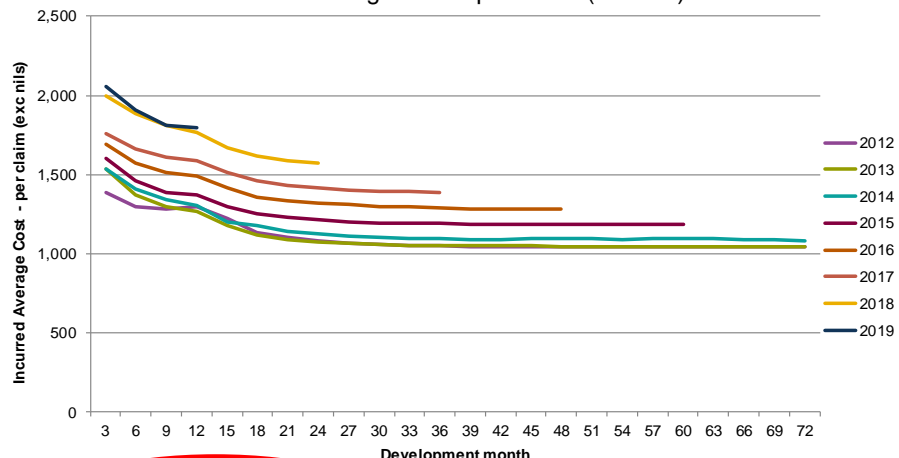


Annual Percentage Change

18-19: -3.4% 7-18: 1.7% 16-17: -5.2% 15-16: -2.3% 14-15: 0.3% 13-14: 1% 12-13: -2.9% 11-12: -3.9%

Frequency reduced by 3.4% in 2019.

Private Car Comp - AD
Incurred Average Cost - per claim (exc nils)



Annual Percentage Change

18-19: 1.9% 17-18: 10.9% 16-17: 7.8% 15-16: 8.3% 14-15: 8.4% 13-14: 4% 12-13: -0.1% 11-12: 5.7%

Severity inflation in 2019 at 1.9%, considerably lower than for 2017 and 2018



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2019 - AD

Projected AD Results

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate AD Claim Frequency (Non-nil claims per million vehicle years)	Ultimate AD Gross Claim Severity (£)	Ultimate AD Recovery Rate (%)	Ultimate AD Net Claim Severity (£)	Ultimate AD Net Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in AD Gross Severity (% pa)	Year-on-Year Change in AD Recovery Rate (% pa)	Year-on-Year Change in AD Net Severity (% pa)	Year-on-Year Change in AD Net Burning Cost (% pa)
2009	15.8	65,348	1,540	38.7%	944	61.7	-1.8%	3.9%	3.3%	1.9%	0.0%
2010	17.6	60,861	1,644	39.9%	987	60.1	-6.9%	6.7%	3.2%	4.6%	-2.6%
2011	17.6	50,130	1,673	41.4%	981	49.2	-17.6%	1.8%	3.6%	-0.7%	-18.2%
2012	17.7	48,212	1,775	41.7%	1,035	49.9	-3.8%	6.1%	0.8%	5.5%	1.5%
2013	17.6	46,767	1,805	42.8%	1,033	48.3	-3.0%	1.7%	2.6%	-0.2%	-3.2%
2014	17.8	47,251	1,897	43.4%	1,074	50.7	1.0%	5.1%	1.5%	4.0%	5.0%
2015	18.5	47,452	2,033	42.3%	1,173	55.7	0.4%	7.1%	-2.5%	9.2%	9.7%
2016	19.5	46,332	2,255	43.4%	1,278	59.2	-2.4%	10.9%	2.5%	8.9%	6.4%
2017	20.1	43,924	2,462	44.2%	1,375	60.4	-5.2%	9.2%	1.9%	7.6%	2.0%
2018	20.5	44,714	2,686	43.3%	1,524	68.2	1.8%	9.1%	-2.1%	10.9%	12.9%
2019	20.4	43,205	2,830	44.9%	1,558	67.3	-3.4%	5.3%	3.9%	2.2%	-1.2%
Average (2012 to 2019)							-1.6%	6.9%	1.1%	6.0%	4.4%
Average (2014 to 2019)							-1.8%	8.3%	0.7%	7.7%	5.8%
Average (2016 to 2019)							-2.3%	7.9%	1.2%	6.8%	4.4%

AD gross severity inflation in 2019 is 5% but recovery rates have also increased reducing the net inflation rates.

Severity inflation averages 7% over the last three years



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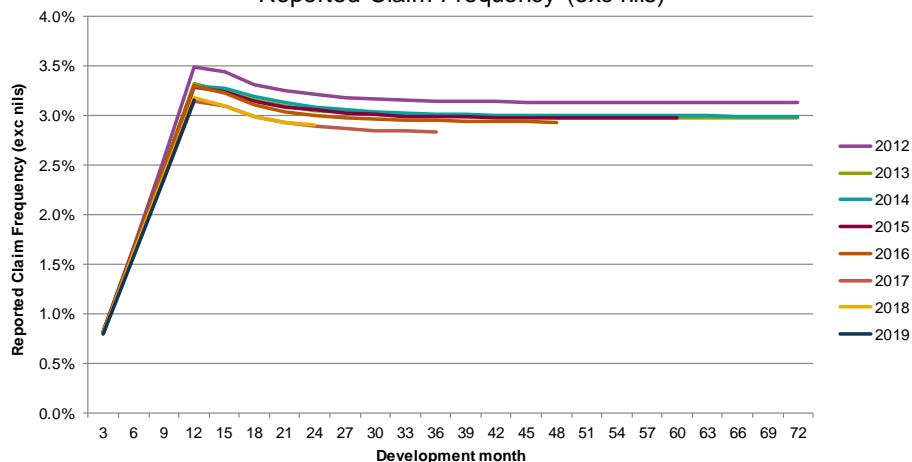
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2019 - TPPD

Frequency and Severity

Private Car Comp - TPPD
Reported Claim Frequency (exc nils)

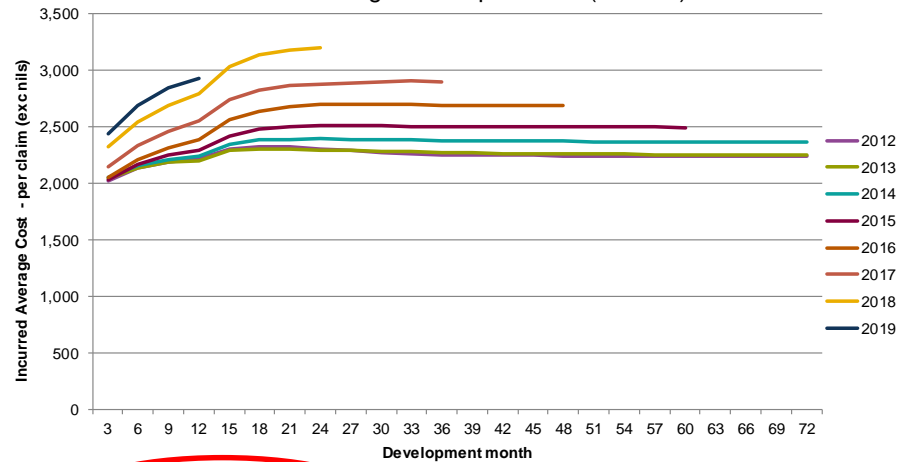


Annual Percentage Change

18-19: -0.8% 17-18: 0.4% 16-17: -3.9% 15-16: -1.5% 14-15: -0.6% 13-14: 0.7% 12-13: -4.9% 11-12: -6.1%

Frequency has reduced in 2019
but less than for AD.

Private Car Comp - TPPD
Incurred Average Cost - per claim (exc nils)



Annual Percentage Change

18-19: 4.9% 17-18: 11.2% 16-17: 7.7% 15-16: 7.7% 14-15: 5.3% 13-14: 5% 12-13: 0.9% 11-12: 9.3%

Severity inflation lower in 2019
than previously at 4.9%



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2019 - TPPD

Projected TPPD Results

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate TPPD Claim Frequency (Non-nil claims per million vehicle years)	Ultimate TPPD Claim Severity (£)	Ultimate TPPD Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in Severity (% pa)	Year-on-Year Change in Burning Cost (% pa)
2009	15.8	40,997	1,809	74.2	2.7%	4.7%	7.5%
2010	17.6	38,128	1,914	73.0	-7.0%	5.8%	-1.6%
2011	17.6	33,283	2,039	67.9	-12.7%	6.5%	-7.0%
2012	17.7	31,254	2,230	69.7	-6.1%	9.4%	2.7%
2013	17.6	29,721	2,250	66.9	-4.9%	0.9%	-4.1%
2014	17.8	29,898	2,361	70.6	0.6%	5.0%	5.6%
2015	18.5	29,741	2,488	74.0	-0.5%	5.1%	4.8%
2016	19.5	29,353	2,682	78.7	-1.3%	7.8%	6.4%
2017	20.1	28,240	2,890	81.6	-3.8%	7.8%	3.7%
2018	20.5	28,391	3,212	91.2	0.5%	11.2%	11.7%
2019	20.4	28,023	3,360	94.2	-1.3%	4.6%	3.2%
Average (2012 to 2019)					-1.5%	6.0%	4.4%
Average (2014 to 2019)					-1.3%	7.3%	5.9%
Average (2016 to 2019)					-1.5%	7.8%	6.2%

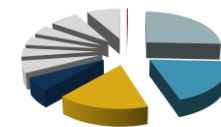
TPPD costs are £27 per policy higher in 2019 than 2013, an increase of 41%.

Over the last 4 years TPPD severity inflation has averaged 7.8% but 2019 has seen a reduction from the high levels seen in the preceding three years.

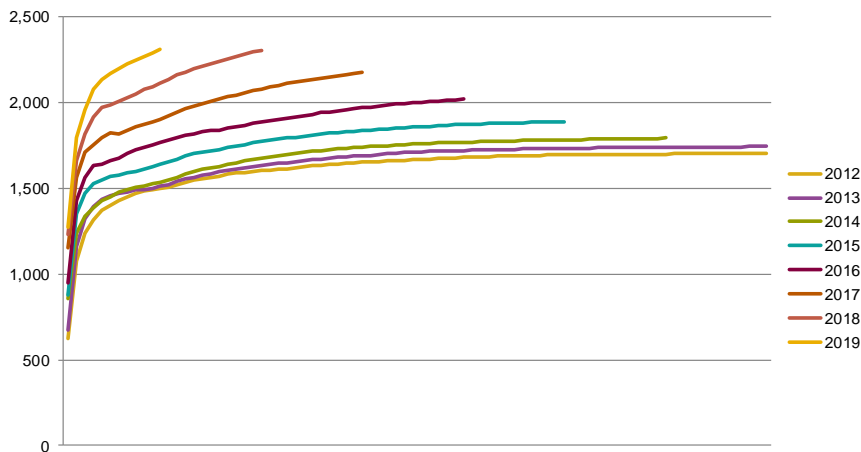


2019 - TPPD

Head of Damage



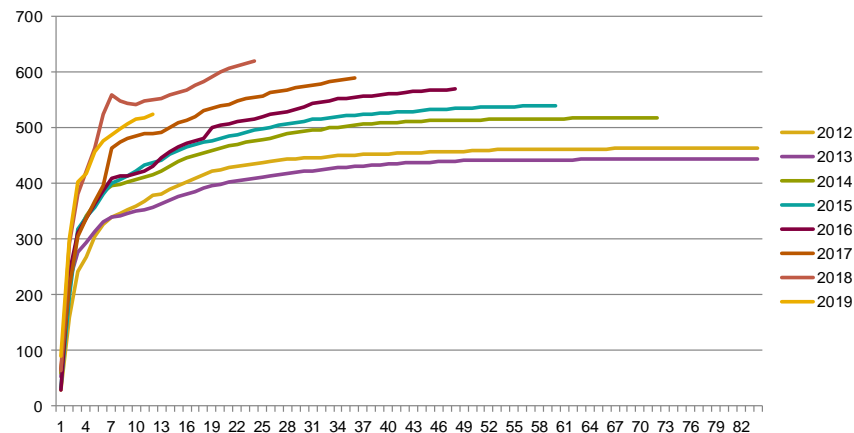
Non-Credit Hire Settled Average Cost



Annual Percentage Change
 18-19: 9.5% 17-18: 10.7% 16-17: 10.4% 15-16: 7.9% 14-15: 5.9% 13-14: 3%

Non-credit hire severity is the main driver of TPPD inflation and has been around 10% for the last three years.

Credit Hire Settled Average Cost



Annual Percentage Change
 18-19: -4.8% 17-18: 11.7% 16-17: 6.3% 15-16: 6.5% 14-15: 4.5% 13-14: 16.6%

Credit hire inflation has generally been slightly lower than non-credit hire inflation. Proportion of credit hire spend has fallen from 22% in 2014 to 19% in 2019.



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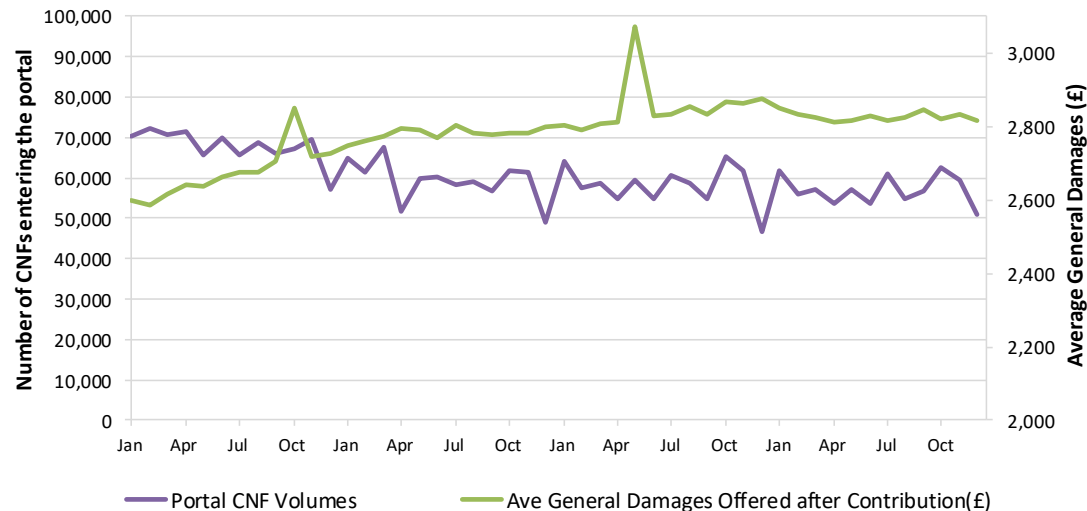
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2019 - Capped TPI

MoJ Portal Notifications and General Damages payments

- The number of claims reported through the portal has been reducing since mid-2015, possibly due to past and proposed reforms. The pace of the reduction has slowed considerably in 2019.
- General Damages payments are expected to increase following the publication of 15th edition of the JC guidelines in November. Past increases have also been in line with changes in the JC guidelines (see table).

MoJ Portal Notifications and GD payments



JCB Edition	Month Published	Average Uplift
8 th	Sep 2006	5.2%
9 th	Sep 2008	9.6%
10 th	Sep 2010	2.8%
11 th	Sep 2012	9.0%
Laspo	Apr 2013	10.0%
12 th	Sep 2013	2.3%
13 th	Sep 2015	4.7%
14 th	Sep 2017	4.8%
15 th	Nov 2019	7.0%



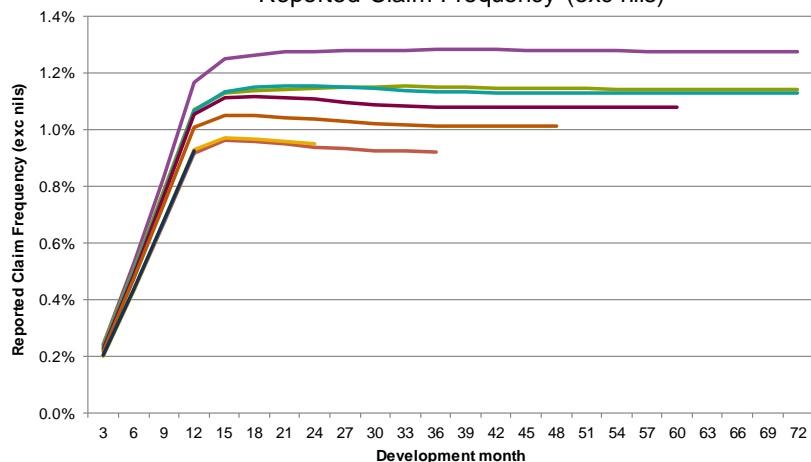
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Source: <https://www.claimsportal.org.uk/about/executive-dashboard/>

2019 - Capped TPI

Frequency and Severity

Private Car Comp - TPI Capped
Reported Claim Frequency (exc nils)

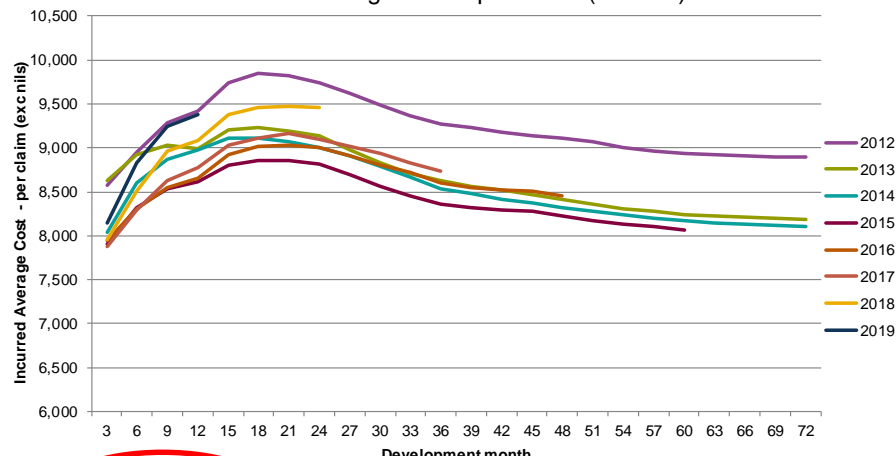


Annual Percentage Change

18-19: -0.3% 17-18: 1.5% 16-17: -9% 15-16: -6.2% 14-15: -4.5% 13-14: -1.2% 12-13: -10.5% 11-12: 3.7%

Small frequency reduction in 2019 similar to TPPD.

Private Car Comp - TPI Capped
Incurred Average Cost - per claim (exc nils)



Annual Percentage Change

18-19: 3.4% 17-18: 4% 16-17: 1.6% 15-16: 2.8% 14-15: -1.3% 13-14: -1% 12-13: -8% 11-12: 0.9%

Severity inflation 3% to 4% in the last two years following four years of low inflation.



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2019 - Capped TPI

Projected Capped TPI Results - Methodology

- As with previous iterations of the TPWP we have analysed Capped TPI in five bands. Last year we changed the level of indexation applied to the bands from that used previously. This year we have used the same capping definition as last year. We have used an indexation of 1% p.a. The exception is for the 100k limit which is still indexed at 7% p.a. The bands are defined as below in 2010 accident year years and indexed at 1% p.a.
 - £0 to £1k (*£1.1k in 2019 accident year*)
 - £1k to £10k (*£11k in 2019 accident year*)
 - £10k to £20k (*£22k in 2019 accident year*)
 - £20k to £50k (*£55k in 2019 accident year*)
 - £50k to £100k (*£172k in 2019 accident year*)
- We have maintained the same band definitions as previously for Excess TPI.



2019 - Capped TPI

Projected Capped TPI Results - Methodology

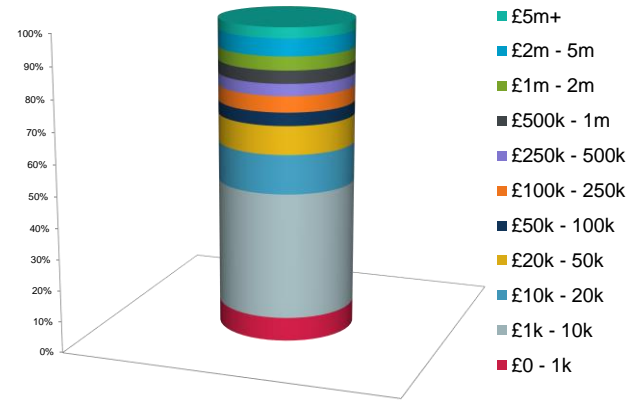
- When presenting results of a layered analysis, there is a choice in how to partition the claim amounts:
 - Type 1: In which claims that exhaust the width of a particular layer contribute an amount equal to the layer's width
 - Type 2: In which claims that exhaust the width of a particular layer are removed from that layer, and the full claim amounts “from ground up” (“FGU”) are allocated to the next layer up



2019 - Capped TPI

Projected Capped TPI Results - Methodology

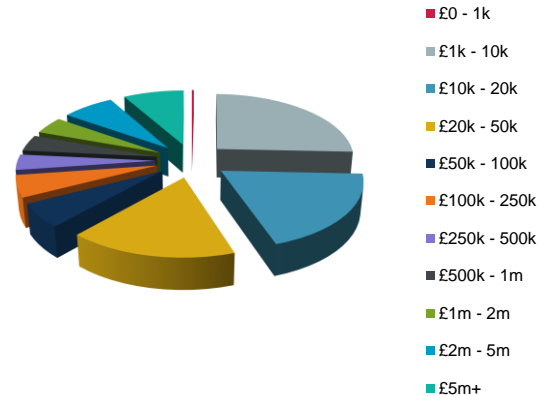
- Using the Type 1 definition, a claim of £15,000 from accident year 2010 contributes:
 - £1k to Layer 1 (0 – £1k)
 - £9k to Layer 2 (£1k – £10k)
 - £5k to Layer 3 (£10k – £20k)
 - £0 to all other layers
- The chart shows the projected total TPI burning cost split by layer using Type 1 definition.
- In this presentation, any charts which use this definition will be accompanied with a version of this graphic. Shading represents the portion(s) of the claim that is relevant to the given statistic.



2019 - Capped TPI

Projected Capped TPI Results - Methodology

- Using the Type 2 definition, a claim of £15,000 from accident year 2010 contributes:
 - £15k to Layer 3 (£10k – £20k)
 - £0 to all other layers
- The chart shows the projected total TPI burning cost split by layer using Type 2 definition.
- In this presentation, any charts which use this definition will be accompanied with a version of this graphic. Shading represents the portion(s) of the claim that is relevant to the given statistic.



2019 - Capped TPI

Projected Capped TPI Results

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate Capped TPI Claim Frequency (Non-nil claims per million vehicle years)	Ultimate Capped TPI Claim Severity (£)	Ultimate Capped TPI Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in Severity (% pa)	Year-on-Year Change in Burning Cost (% pa)
2010	9.5	12,141	8,529	103.5	6.1%	-0.9%	5.1%
2011	11.2	13,532	8,733	118.2	11.5%	2.4%	14.1%
2012	12.3	14,108	8,893	125.5	4.3%	1.8%	6.2%
2013	12.4	12,447	8,262	102.8	-11.8%	-7.1%	-18.0%
2014	15.0	11,756	8,175	96.1	-5.6%	-1.1%	-6.5%
2015	17.5	10,926	8,080	88.3	-7.1%	-1.2%	-8.1%
2016	18.6	10,302	8,240	84.9	-5.7%	2.0%	-3.8%
2017	19.1	9,417	8,262	77.8	-8.6%	0.3%	-8.3%
2018	19.5	9,632	8,529	82.1	2.9%	3.2%	5.6%
2019	19.4	9,531	8,831	84.2	-1.0%	3.5%	2.5%
Average (2012 to 2019)					-5.4%	-0.1%	-5.5%
Average (2014 to 2019)					-4.1%	1.6%	-2.6%
Average (2016 to 2019)					-2.6%	2.3%	-0.3%

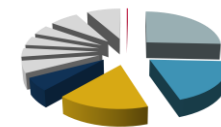
The cost of Capped TPI per policy has increased in 2019 but is still £41 less than in 2012.

2019 has seen frequency fall by 1% and severity inflation of 3.5%



2019 - Capped TPI

Projected Capped TPI Results



Private Car Comprehensive Capped TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k to £100k	< 100k
Frequency exc Nils (claims per million policy years)						
2010	1,280	7,925	1,990	771	107	12,073
2011	1,522	8,680	2,233	891	133	13,458
2012	1,673	8,939	2,329	946	144	14,032
2013	1,352	8,467	1,801	644	113	12,378
2014	1,182	8,222	1,668	511	105	11,688
2015	1,048	7,842	1,455	423	97	10,866
2016	1,073	7,352	1,340	378	98	10,241
2017	1,101	6,673	1,154	341	92	9,360
2018	1,135	6,821	1,166	343	106	9,570
2019	1,114	6,746	1,144	354	111	9,468

Top two layers are seeing an increasing proportion of claims in the last two years which is driving the increase in claims severity

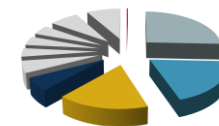
Private Car Comprehensive Capped TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k to £100k
Change in Frequency exc Nils					
2010	4.3%	8.0%	4.2%	-2.7%	3.9%
2011	18.9%	9.5%	12.2%	15.5%	24.4%
2012	9.9%	3.0%	4.3%	6.2%	8.9%
2013	-19.2%	-5.3%	-22.7%	-31.9%	-21.4%
2014	-12.5%	-2.9%	-7.4%	-20.8%	-7.3%
2015	-11.3%	-4.6%	-12.8%	-17.1%	-7.9%
2016	2.3%	-6.2%	-7.9%	-10.7%	1.3%
2017	2.6%	-9.2%	-13.9%	-9.8%	-6.7%
2018	3.1%	2.2%	1.0%	0.5%	15.7%
2019	-1.8%	-1.1%	-1.9%	3.3%	4.5%



2019 - Capped TPI

Projected Capped TPI Results



Private Car Comprehensive Capped TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k to £100k	< 100k
Average Cost (£)						
2010	317	5,007	13,751	28,571	67,849	8,011
2011	334	5,033	13,887	28,973	69,663	8,191
2012	367	5,066	14,021	29,345	72,032	8,319
2013	380	4,839	14,132	29,257	75,597	7,624
2014	365	4,844	14,154	29,463	79,106	7,463
2015	380	4,874	14,269	29,802	80,768	7,346
2016	366	4,951	14,394	30,363	83,308	7,395
2017	328	4,962	14,524	30,606	87,115	7,334
2018	310	5,008	14,636	30,706	89,253	7,477
2019	347	5,024	14,792	31,099	93,602	7,664

Severity inflation in the middle bands has been reasonably consistent around 1% to 2% post LASPO.

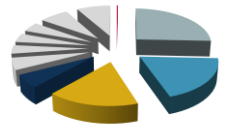
Private Car Comprehensive Capped TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k to £100k
Change in Average Cost					
2010	5.3%	2.1%	0.7%	1.2%	3.2%
2011	5.5%	0.5%	1.0%	1.4%	2.7%
2012	9.9%	0.7%	1.0%	1.3%	3.4%
2013	3.4%	-4.5%	0.0%	-0.3%	1.0%
2014	-3.8%	0.1%	0.2%	0.7%	4.6%
2015	4.0%	0.6%	0.8%	1.1%	2.1%
2016	-3.8%	1.6%	0.9%	1.9%	3.1%
2017	-10.4%	0.2%	0.9%	0.8%	4.6%
2018	-5.3%	0.9%	0.8%	0.3%	2.5%
2019	11.7%	0.3%	1.1%	1.3%	4.9%

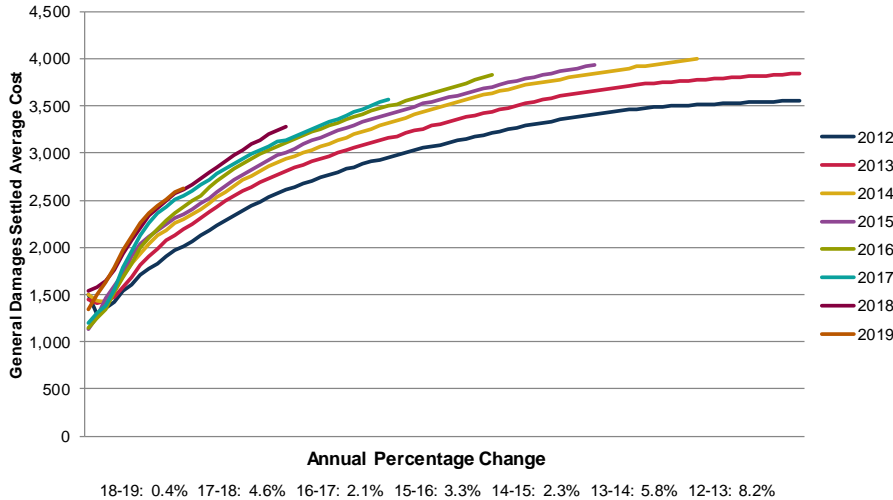
The £50k to £100k band has seen consistently higher inflation.



2019 - Capped TPI Head of Damage

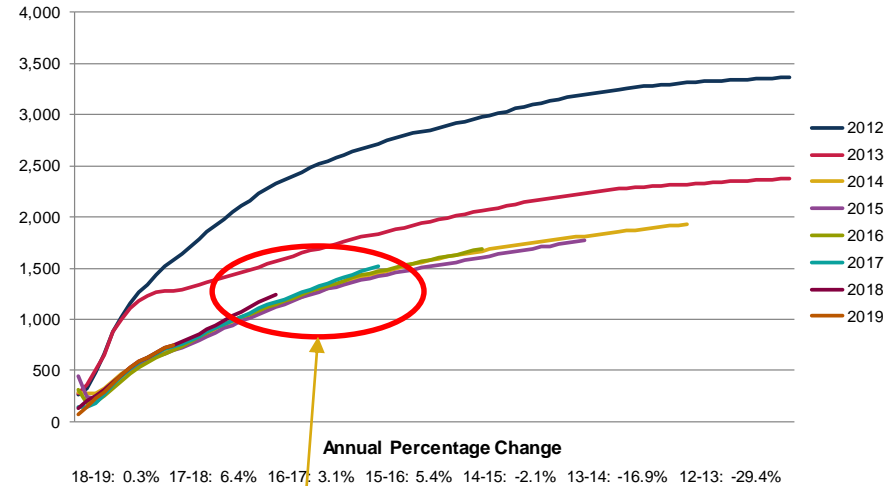


General Damages Settled Average Cost



General damages showing consistent levels of inflation averaging 3% from 2013 to 2019, although in 2019 inflation is lower at 0.4%.

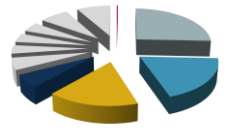
Third Party Legal Fees Settled Average Cost



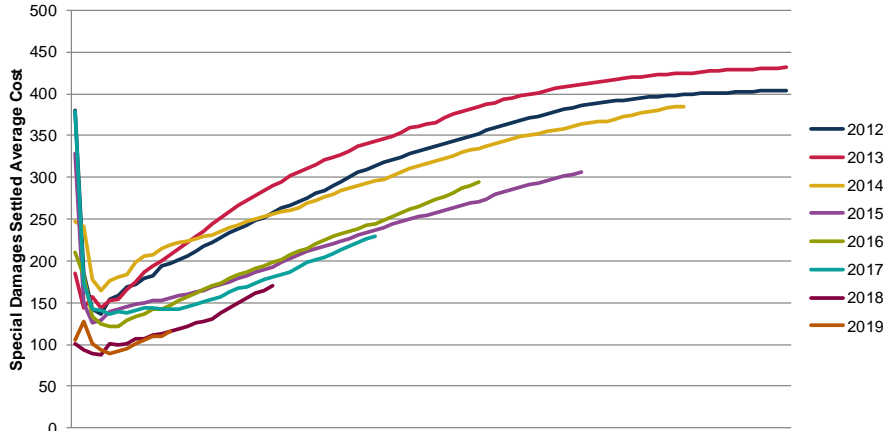
Third party legal fees showing some sign of inflation, albeit from a much lower starting point than pre-LASPO.



2019 - Capped TPI Head of Damage



Special Damages Settled Average Cost

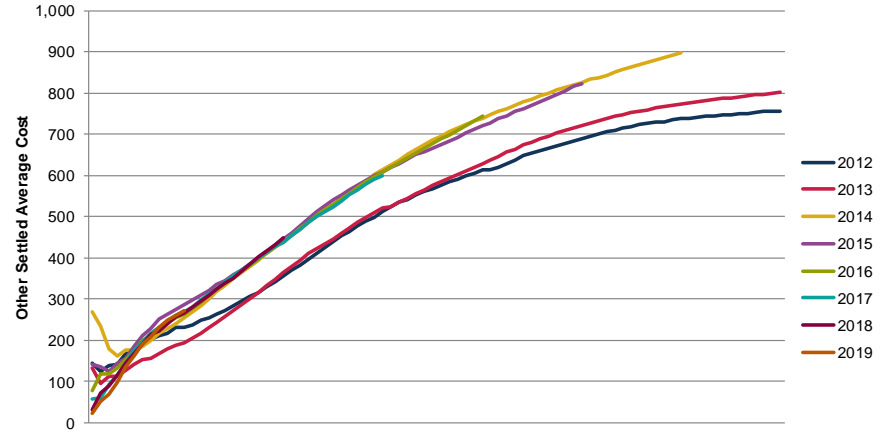


Annual Percentage Change

18-19: -0.3% 17-18: -5.1% 16-17: -6.3% 15-16: 8.5% 14-15: -15.9% 13-14: -9.3% 12-13: 6.9%

Special damages average costs continue to reduce albeit at a slower rate in 2019.

Other Settled Average Cost



Annual Percentage Change

18-19: 2% 17-18: 2.3% 16-17: -1.1% 15-16: 3.4% 14-15: -0.3% 13-14: 16.1% 12-13: 6%

Other costs have increased post LASPO but have remained reasonably consistent since then.



Institute and Faculty of Actuaries



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2019 - Excess TPI

Projected Excess TPI Results - Methodology

- We have maintained the same band definitions as previously for Excess TPI. The bands are defined as below in 2010 accident year years and indexed at 7% p.a.
 - £100 to £250k (*£460k in 2019 accident year*)
 - £250k to £500k (*£919k in 2019 accident year*)
 - £500k to £1m (*£1.8m in 2019 accident year*)
 - £1m to £2m (*£3.7m in 2019 accident year*)
 - £2m to £5m (*£9.2m in 2019 accident year*)
 - >£5m
- Projections undertaken by layer with companies grouped into three levels of case reserving strength.
- Open claims data at an Ogden -0.25% basis and hence results presented assuming future claim settlements are at Ogden -0.25%.
- The development profile is based on data up to Feb 2017. All data after this point is excluded from the assumed development (i.e. it is assumed that the development profile by layer pre Ogden still applies). This development profile is applied to the latest incurred position.
- For the > £5m layer there is a significant distortion from the change in Ogden rate and so chain-ladder models are no longer appropriate.
- Therefore the total TPI Excess has been projected in total by group.
- The >£5m layer is then calculated as the difference between the total and the sum of the other layers.



2019 - Excess TPI

Projected Excess TPI Results

Projected Ultimate Excess TPI Results for Private Car Comprehensive

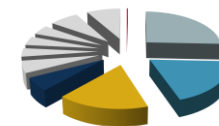
Accident Period	Earned Exposure (millions of vehicle years)	Ultimate Excess TPI Claim Frequency (Non-nil claims per million vehicle years)	Ultimate Excess TPI Claim Severity (£)	Ultimate Excess TPI Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in Severity (% pa)	Year-on-Year Change in Burning Cost (% pa)
2010	9.5	68	408,274	27.9	-8.7%	-17.7%	-24.9%
2011	11.2	74	483,169	35.8	8.4%	18.3%	28.3%
2012	12.3	76	523,684	40.0	3.0%	8.4%	11.6%
2013	12.4	69	654,761	45.2	-9.6%	25.0%	13.1%
2014	15.0	68	832,814	56.3	-2.0%	27.2%	24.6%
2015	17.5	60	770,687	46.5	-10.8%	-7.5%	-17.5%
2016	18.6	61	935,045	57.1	1.1%	21.3%	22.7%
2017	19.1	57	956,463	54.6	-6.5%	2.3%	-4.4%
2018	19.5	62	979,450	60.4	8.1%	2.4%	10.7%
2019	19.4	63	1,090,443	68.8	2.4%	11.3%	14.0%
Average (2012 to 2019)					-2.7%	11.0%	8.1%
Average (2014 to 2019)					-1.4%	5.5%	4.1%
Average (2016 to 2019)					1.1%	5.3%	6.4%

Frequency of large claims is edging up from 60 claims per million vehicle years in 2015 to 63 in 2019.

Year-on-year severity is volatile but the averages are in the range 5% to 11% p.a. Some of this will be due to the change in Ogden rate.

- Treatment of PPOs within our data varies by data contributor but in general they are included at an equivalent lump sum value based on the Ogden rate prevailing at the time.
- The uncertainty in projections of these claims is exacerbated by the changes in the Ogden discount rate and their impact on development trends, claims costs and settlement speeds.





2019 - Excess TPI

Projected Excess TPI Results

Private Car Comprehensive Excess TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 7% pa)

Accident Year	£100k - 250k	£250k - 500k	£500k - 1m	£1m - 2m	£2m to 5m	> £5m
Frequency exc Nils (finishing in layer) (claims per million policy years)						
2010	42.6	14.2	5.6	2.8	1.9	1.4
2011	45.7	13.5	7.2	4.2	2.0	1.5
2012	46.8	13.8	7.1	4.5	2.9	1.3
2013	42.6	12.8	5.7	3.8	2.3	1.9
2014	39.0	13.6	6.0	3.9	3.2	1.9
2015	34.5	14.1	5.0	3.0	2.5	1.3
2016	35.2	12.7	5.2	3.4	3.0	1.6
2017	32.7	11.9	5.3	2.9	2.8	1.5
2018	36.6	12.4	5.1	3.3	2.8	1.5
2019	37.5	12.9	4.6	3.4	3.1	1.7
Average Cost (£000s)						
2010	156	340	693	1,458	2,979	7,106
2011	162	361	703	1,441	3,628	8,669
2012	173	387	782	1,606	3,506	9,613
2013	187	412	837	1,664	3,617	11,260
2014	204	449	893	1,820	4,313	12,805
2015	209	487	995	1,910	4,831	13,741
2016	217	531	1,010	2,133	4,827	15,924
2017	239	576	1,093	2,203	4,870	15,147
2018	257	583	1,143	2,348	5,012	18,084
2019	269	614	1,173	2,565	5,761	17,765
Burning Cost (£)						
2010	6.6	4.8	3.9	4.1	5.6	9.7
2011	7.4	4.9	5.0	6.1	7.2	13.2
2012	8.1	5.4	5.5	7.2	10.0	12.5
2013	8.0	5.3	4.7	6.3	8.5	20.9
2014	8.0	6.1	5.3	7.1	13.8	24.8
2015	7.2	6.9	4.9	5.7	11.9	18.4
2016	7.7	6.7	5.2	7.2	14.5	24.9
2017	7.8	6.9	5.7	6.3	13.7	23.3
2018	9.4	7.2	5.9	7.7	14.2	26.6
2019	10.1	7.9	5.3	8.6	17.8	30.6

- Claims >£5m make up a significant part of the total TPI Excess cost. However, given the changes to the Ogden discount rate the level of uncertainty in results for the highest layers is even higher than would usually be the case.

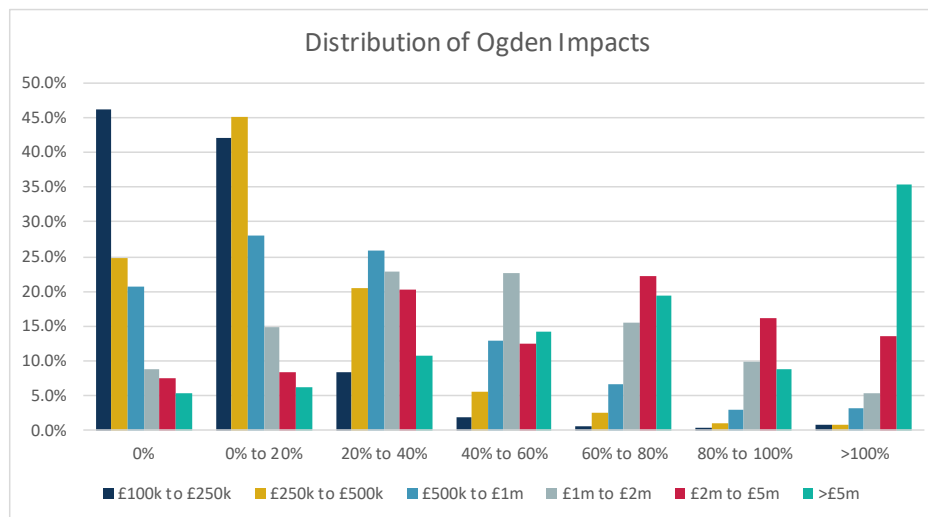


2019 - Excess TPI

Ogden

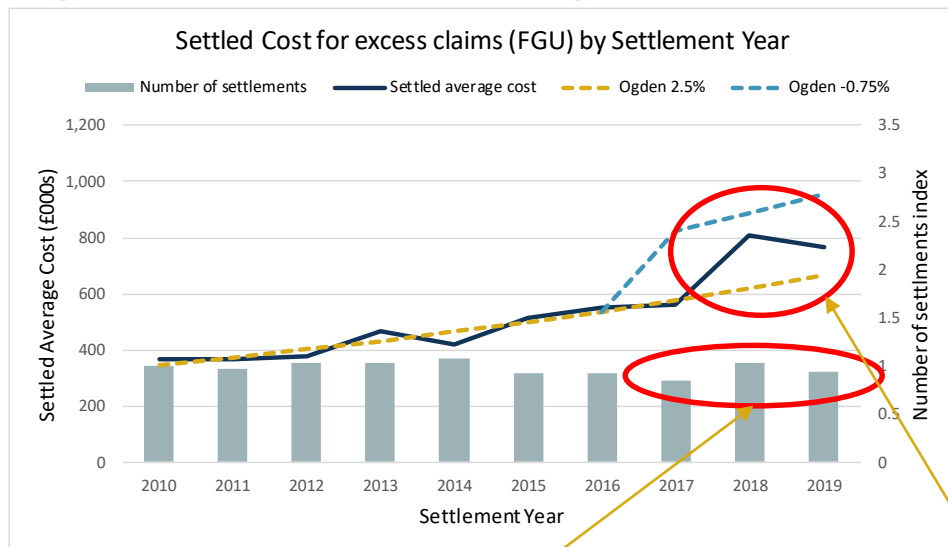
- The table below shows the impact on the FGU incurred amount by band from moving from Ogden 2.5% to Ogden -0.75% on open claims excluding PPOs. An open claim is defined as one where the paid is less than 80% of the incurred. The results below cover 6,000 open claims as at Feb 2017.
- Also shown is the distribution of the impact % by band.

Band	Ogden impact 2.5% to -0.75%
£100k to £250k	10.5%
£250k to £500k	16.8%
£500k to £1m	28.9%
£1m to £2m	47.4%
£2m to £5m	60.6%
>£5m	71.9%
Total Excess	42.9%



2019 - Excess TPI

Ogden – Settled average cost



- The graph shows the settled average cost of all excess claims by settlement year. Claims are defined as settled when paid is greater than 80% of incurred
- The dotted gold line shows a trend line fitted to the data from 2010 to 2016 and projected forward as an estimate of the expected Ogden 2.5% severity in 2017, 2018 and 2019. The fitted inflation rate is 7.5%.
- The blue dotted line is the gold line uplifted by 43% as shown on the previous slide.
- The grey bars are the number of settlements in the data indexed to 2010.

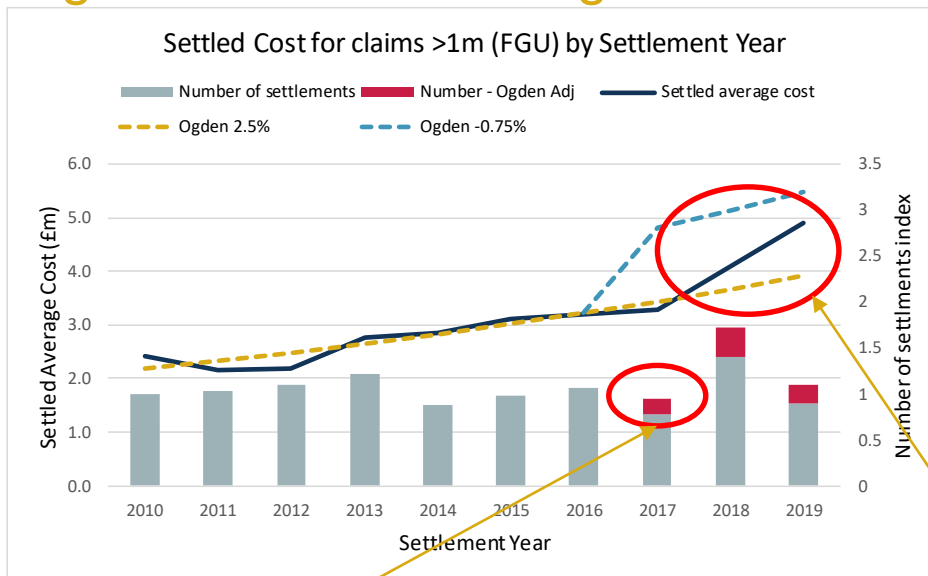
Number of settlements dropped in 2017 but appears to have caught back up in 2018

Actual settled severity in 2018 and 2019 is below the -0.75% estimate. Claims in 2018 and 2019 settled for 22% more than the 2.5% estimate.



2019 - Excess TPI

Ogden – Settled average cost



- The graph shows the settled average cost of all excess claims by settlement year.
- The estimated Ogden uplift to severity is 40%. This allows for the fact that at Ogden -0.75% there are more claims above £1m than at Ogden 2.5%.
- The red bars are the proportion of additional claims due to the change in Ogden rate to -0.75%.

Level of drop in settlements in 2017 above £1m is greater than for all excess claims.

Actual settled severity in 2018 and 2019 is below the -0.75% estimate. Claims in 2018 and 2019 settled for 17% more than the 2.5% estimate.





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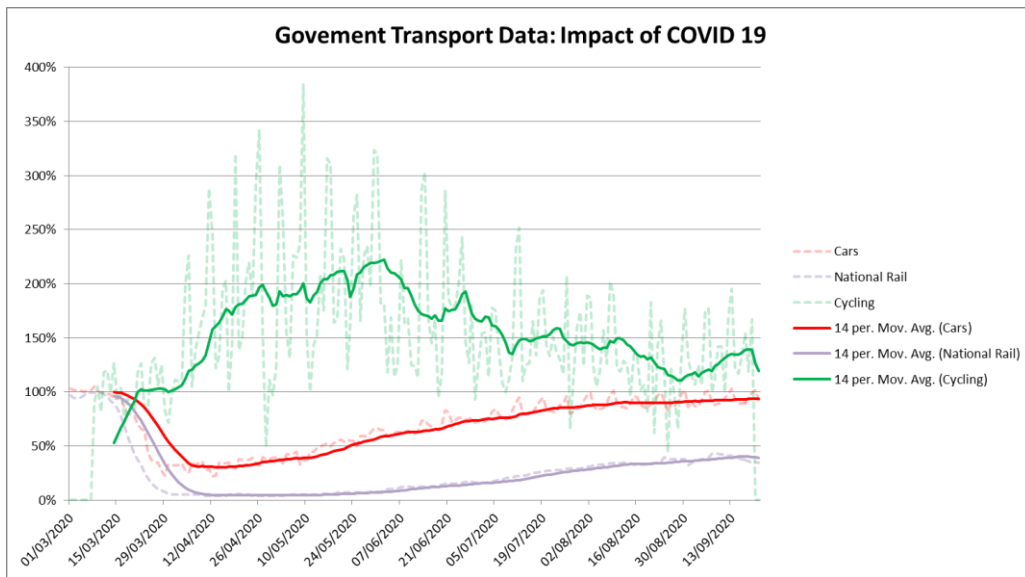
Expertise
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2020 Market environment

Driving Habits during COVID-19

Driving habits during 2020 have changed significantly. Key findings:

- Decrease in car usage up to end of Sept; currently running at 90% of February volumes.
- Significant increase in the number of cyclists.
- Significant reduction in use of public transport.



Month	Car Usage
March	76.8%
April	33.2%
May	49.6%
June	69.0%
July	83.3%
August	90.7%
September	92.5%

- Government data is indexed to the first week in February and so does not allow for any typical seasonality in car usage.

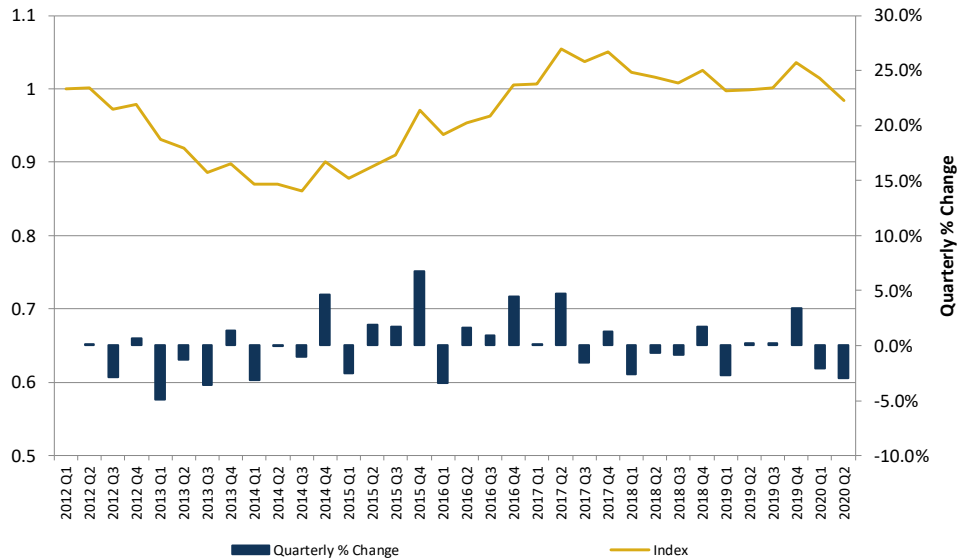


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2020 Market environment

Premium Rates

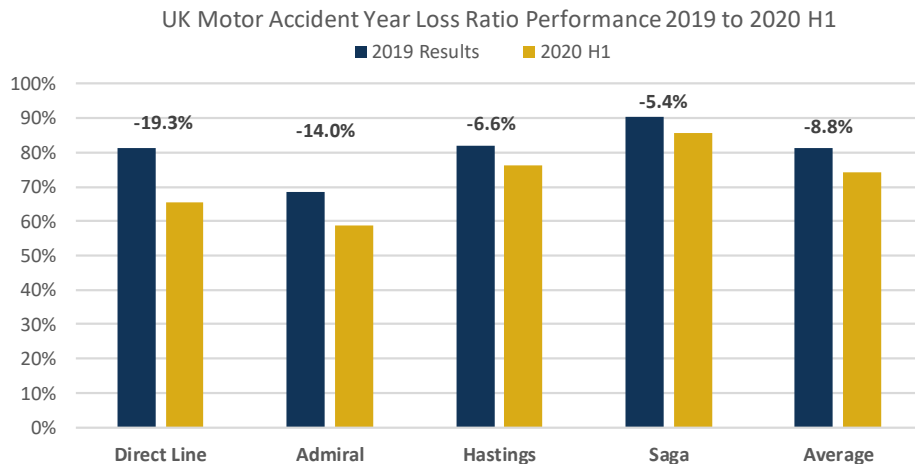
ABI Premium Tracker (exc IPT)



- Premiums have fallen by 2.1% in 2020 Q1 and 3.0% in 2020 Q2 due to the impact of COVID-19 on vehicle usage.
- ABI also states that the number of claims reported in 2020 Q2 was 48% lower than in 2020 Q1.

2020 Market Environment

Company Results



- Note : Loss ratios derived from published company accounts and exclude prior year movements. Results for some companies include Commercial Motor and Other Personal Lines products.

- Insurers reported reductions in loss ratio for 2020 H1 of between 5% and 20%.
- Some other comments from the results:
 - Direct Line commented that the loss ratio benefit from COVID-19 was 9.7% points.
 - Admiral returned £97m to policyholders in 2020 H1 ('Stay at Home refund').
 - Hastings commented '*reserving position reflects increased uncertainty*'.
 - Saga commented '*The Group has not recognised any COVID-19 related claims frequency upside in current year results or financial projections*'.



2020 Market Environment

Insurer Commentary

H1 2020 – Motor profitability to benefit from lower claim frequency as a result of lockdown

“**claims frequencies reduced** following the COVID-19 lockdown restrictions. **Claim severities continued to increase**”

Source Hastings H1 2020 report

“UK Personal Lines premiums were down... **frequency effects** overall will provide a **material offset to areas of negative COVID-19 impact on premiums, costs and claims**”

Source: RSA H1 2020 results

“In H1 2020, **Motor delivered an operating profit of £220.5 million ... due to Covid-19** restrictions **reducing claims frequency**. Covid-19 restrictions led to a **70% reduction in claims notifications** in April.... **Severity was higher** than usual due to a number of factors including repair capacity across the market and increased credit hire durations.

Source: Direct Line H1 2020 results

EY predicts that the **Net Combined Ratio (NCR) for 2020 will be 94.8% as a result of a lower volume of claims**, even when taking into account expected premium refunds and rate cuts.

Source: EY press release June 2020

“**Reduced premiums**, reflecting the premium rebate for customers, premium rate reductions **to reflect reduced claims frequency** as a result of Covid, **and reduced demand in early lockdown**”

Admiral H1 2020 results

“we have already seen **significant changes to driving patterns, an increase in vulnerable road users...**

This brings a continued **level of uncertainty for the months ahead.**”

Source: Ageas H1 2020 results

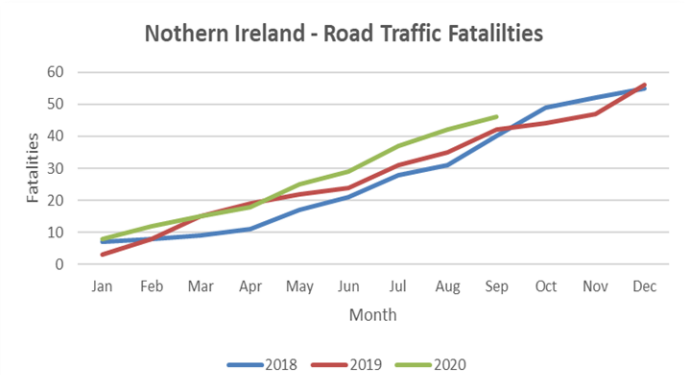


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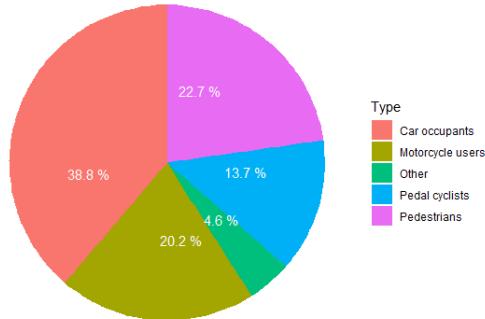
2020 Market Environment

Casualty, Fatality and Mileage Statistics

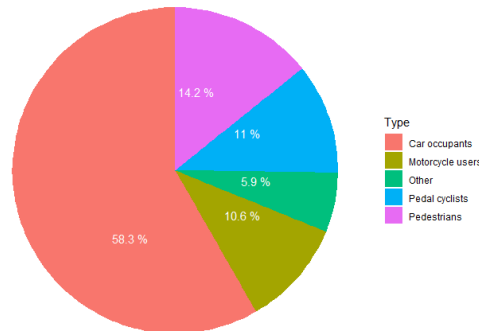
- In 2020Q1 vehicle mileage reduced by 8.5% versus 2019Q1. This is broadly in line with the reduction seen in March from the daily government statistics (slide 38).
- Latest fatalities data available from Police Service of Northern Ireland shows slightly higher number of deaths in 2020 (graph to the right) to date and no evident change versus prior years despite lower road usage.



Proportion of KSI in 2019 by road user type



Proportion of all casualties in 2019 by road user type



- Vulnerable road users account for a disproportionate number of KSI compared to total casualties.
- The increase in levels of cycling in 2020 could therefore result in a higher proportion of larger claims than previously observed.



2020 Market Environment

Driving habits and the reduction of Rush Hour traffic?

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
0	0.4%	0.2%	0.1%	0.1%	0.1%	0.2%	0.3%
1	0.3%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
2	0.3%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
3	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
4	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
5	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
6	0.2%	0.3%	0.4%	0.3%	0.3%	0.3%	0.2%
7	0.2%	0.8%	0.8%	0.9%	0.9%	0.8%	0.2%
8	0.2%	1.2%	1.3%	1.3%	1.3%	1.2%	0.4%
9	0.4%	0.8%	0.8%	0.8%	0.8%	0.7%	0.5%
10	0.6%	0.6%	0.6%	0.6%	0.7%	0.6%	0.7%
11	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%	0.8%
12	0.8%	0.8%	0.7%	0.8%	0.8%	0.9%	1.0%
13	0.8%	0.8%	0.8%	0.7%	0.8%	1.0%	0.9%
14	0.8%	0.9%	0.8%	0.9%	0.9%	1.0%	0.9%
15	0.8%	1.2%	1.1%	1.3%	1.2%	1.3%	0.8%
16	0.8%	1.2%	1.3%	1.3%	1.3%	1.4%	0.9%
17	0.8%	1.3%	1.4%	1.4%	1.4%	1.4%	0.9%
18	0.7%	1.1%	1.1%	1.1%	1.2%	1.2%	0.8%
19	0.6%	0.7%	0.8%	0.8%	0.8%	0.9%	0.8%
20	0.5%	0.5%	0.5%	0.5%	0.5%	0.6%	0.7%
21	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
22	0.3%	0.3%	0.3%	0.4%	0.4%	0.5%	0.4%
23	0.3%	0.2%	0.2%	0.3%	0.3%	0.5%	0.5%

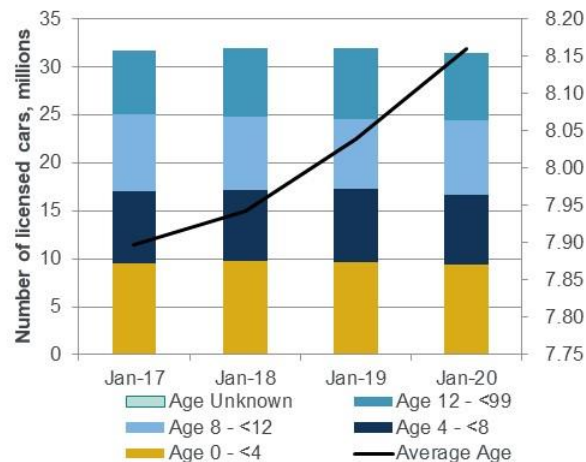
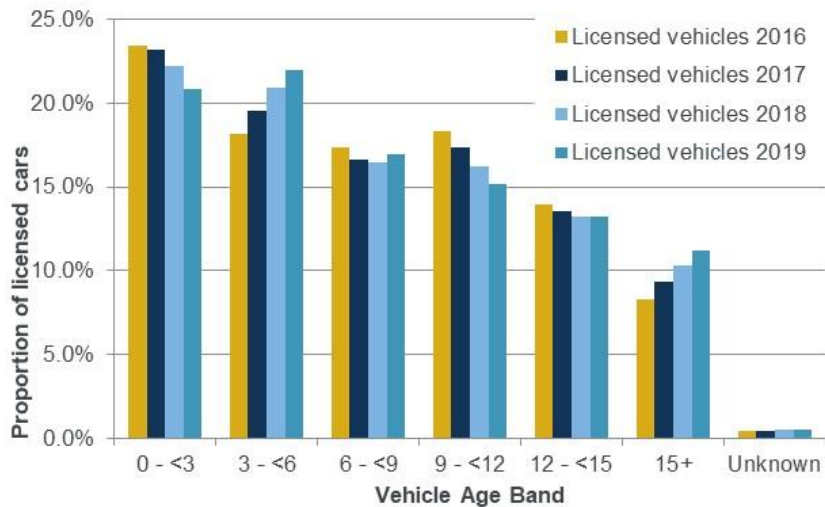
- COVID-19 and the increase in the level of home working is likely to change the distribution of traffic volumes during the day.
- What impact this will have on claim frequency is difficult to predict but looking at the STATS-19 data we can see the distribution of accidents by hour and day in 2019.
 - Peak accident time is 8am - 9am and 4pm - 6pm on a week day. 20% of accidents occur in this period (which is 9% of the week).
 - Most accidents happen on a Friday.
- Insurethebox comment on post COVID-19 driving patterns

'Whilst driving has resumed and the daily pattern remains fairly unchanged, the peaks usually seen in the morning hours have all but disappeared post-lockdown – a likely composition of the furlough scheme and the adoption of home working'



2020 Market Environment

Car park



- Trend towards vehicles aged between 3-6 years as new car sales are falling, resulting in an increasing average licensed vehicle age.
- In 2020 to date the number of new car registrations is down by 33% compared to 2019 with new car sales for the month of September 2020 the lowest in 21 years according to the SMMT.





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Supporting

Conclusions

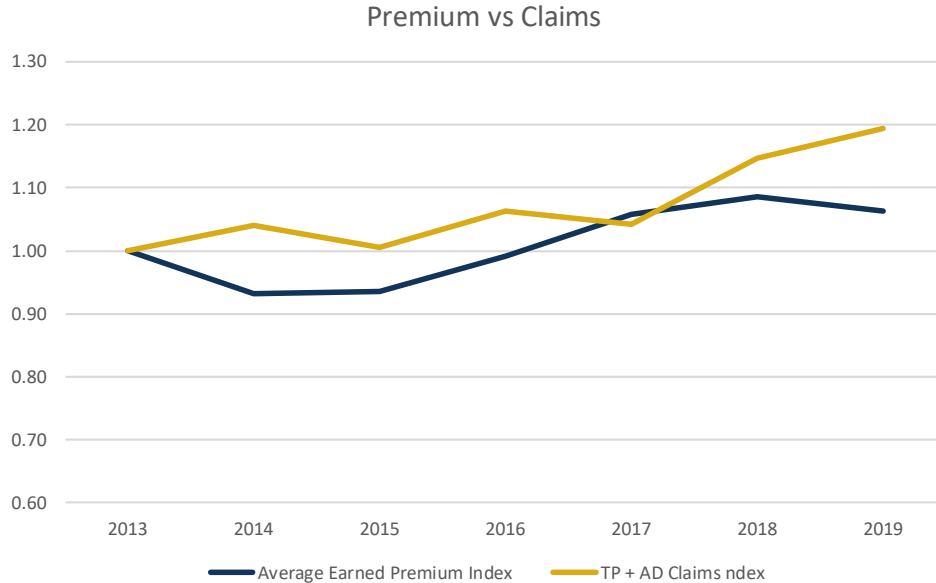
Accident Year	AD	TPD	Burning Cost (£)		Total AD + TP
			Capped TPI	Excess TPI*	
2010	60	73	104	28	265
2011	49	68	118	36	271
2012	50	70	125	40	285
2013	48	67	103	45	263
2014	51	71	96	56	274
2015	56	74	88	47	264
2016	59	79	85	57	280
2017	60	82	78	55	274
2018	68	91	82	60	302
2019	67	94	84	69	314

*Note – Excess TPI burning cost assumes future claims settle at Ogden -0.25%.

- The Total AD + TP burning cost is estimated to be reasonably flat from 2014 to 2017. Average premium trends in this period showed significant increases.
- In 2018 all claim types have seen increases with the total burning cost increasing by 10%.
- In 2019 the burning cost is estimated to increase by 4% with some reductions in frequency moderating higher claim severity inflation.



Conclusions



- Since 2013 claims cost (AD + TP) has increased by 20% whereas earned average premium has only increased by 6%.
- This gap has been generated in 2018 and 2019 where premium rates have not kept up with inflation.

Conclusions

- COVID-19 has already had a material impact on claims trends in the UK but has the potential to cause step changes in the underlying environment in the future.

Impact	Comments
How much people are driving?	<ul style="list-style-type: none">• Lower road usage leads to less exposure to accidents on the roads.• Or could less use of public transport result in more driving commutes?
Who is driving?	<ul style="list-style-type: none">• Over 70s with a licence has increased significantly but this cohort is most impacted by COVID-19.• Suspension of driving tests likely to lead to a reduction of young drivers in 2020.
When are they driving?	<ul style="list-style-type: none">• 20% of accidents occur in the rush hour. Will change in commuting patterns impact claims frequency?
What are they driving?	<ul style="list-style-type: none">• Reduction in new car registrations in 2020 will result in increase in age of car park.• Extension to MOTs could result in more unroadworthy cars.
How are people driving?	<ul style="list-style-type: none">• Less traffic could result in higher average speeds and increasing propensity for high impact/severity crashes.• Data from DfT highlighted increase in average speeds across Motorways/A Roads in 2020Q2.
Who else is on the road?	<ul style="list-style-type: none">• Will an increase in cyclists lead to more large claims or could the implementation of cycle schemes (e.g. Gear Change and walking programme) and improvements in areas such as new cycle lanes reduce the risk.
What is the impact of the recession?	<ul style="list-style-type: none">• Increased unemployment and tighter household budgets causing lower mileage?• Increased levels of fraud or compensation culture?• Reduction in police budgets impacting enforcement of road safety laws?
Other changes	<ul style="list-style-type: none">• Whiplash reforms delayed and currently due for implementation in April 2021.• Brexit

Contact Details

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1. 2019

- Market Environment
- AD
- TPPD
- Capped TPI
- Excess TPI

2. 2020 Market Environment

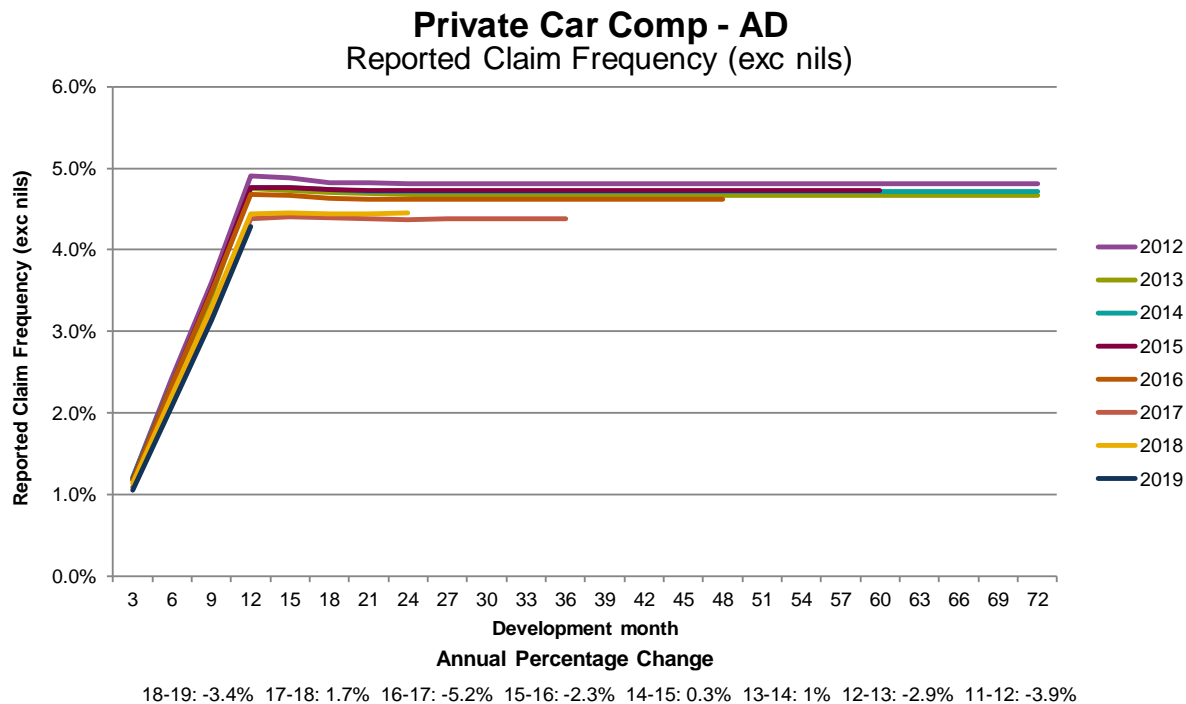
3. Conclusions

4. Appendix

Expertise
Sponsorship
Thought leadership
Progress
Community
Sessional Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Supporting

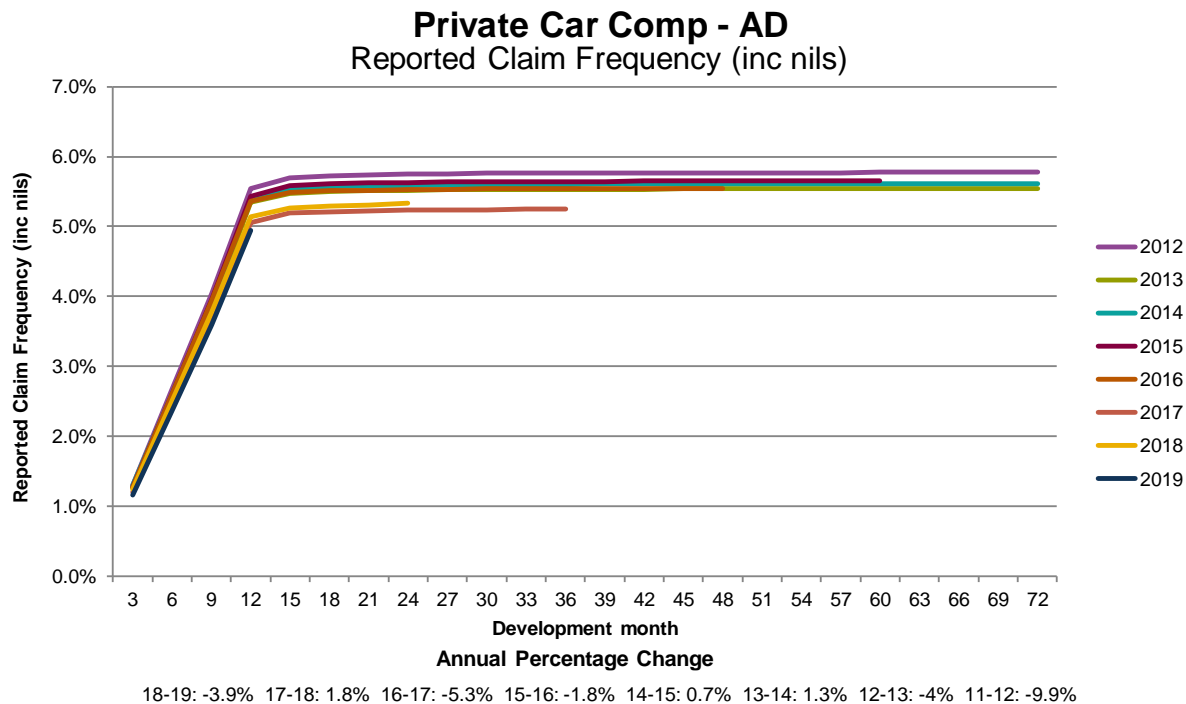
Appendix - AD

Claim frequency (excluding nils)



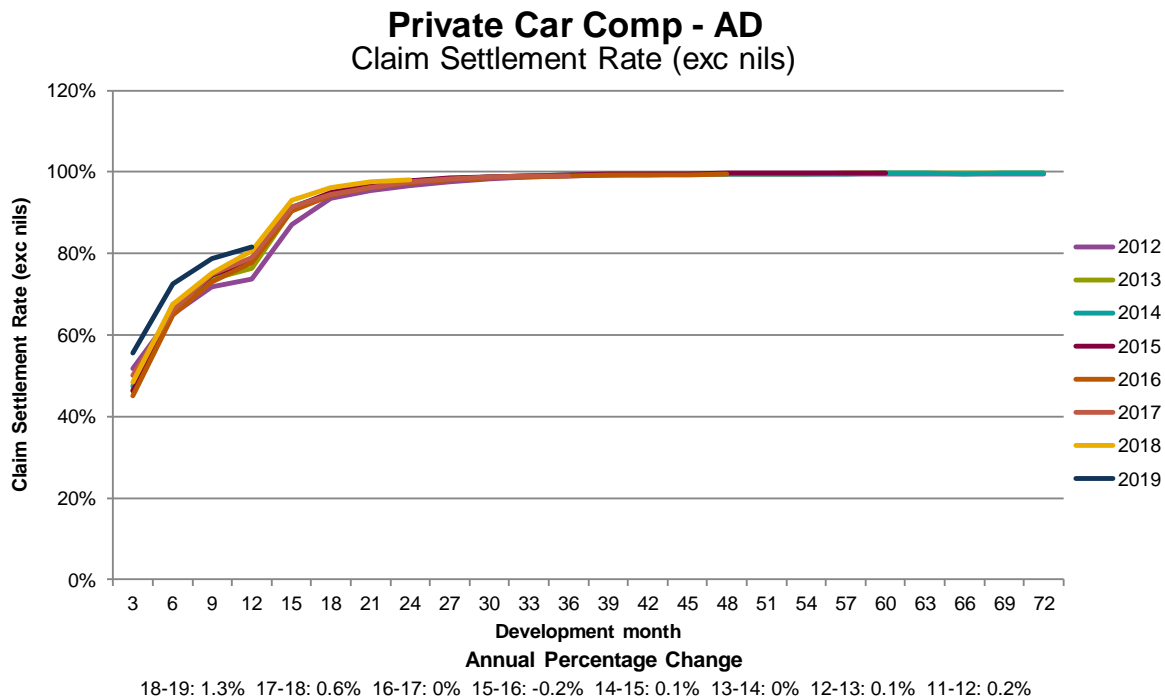
Appendix - AD

Claim frequency (including nils)



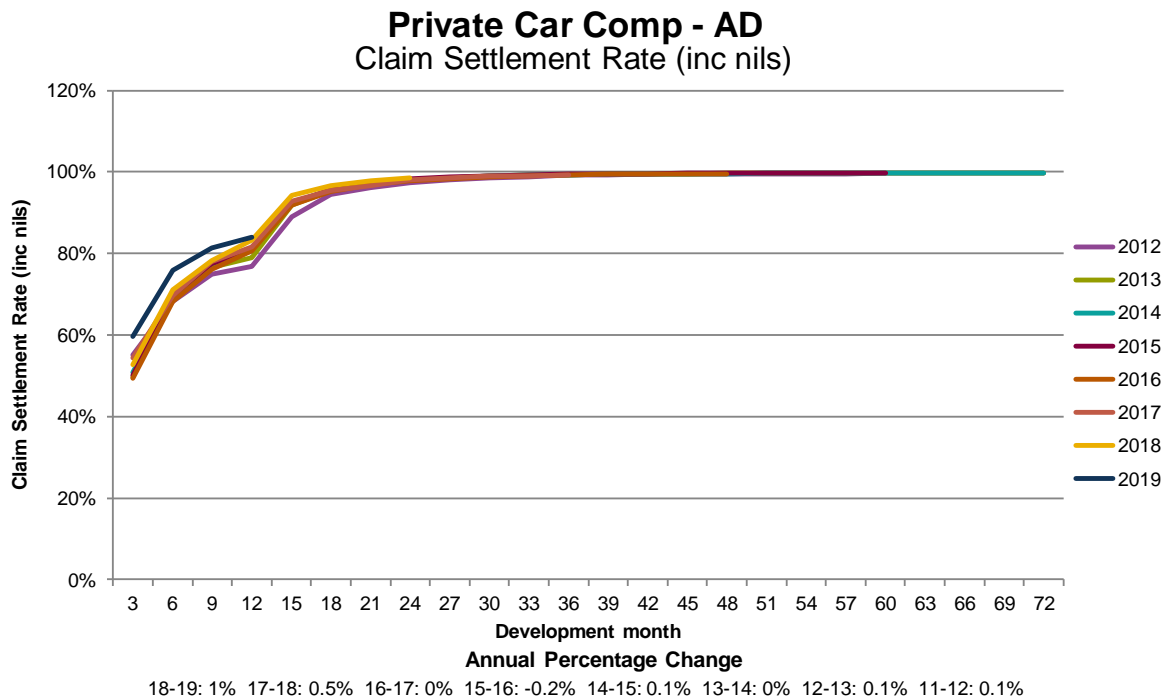
Appendix - AD

Settlement Rate (excluding nils)



Appendix - AD

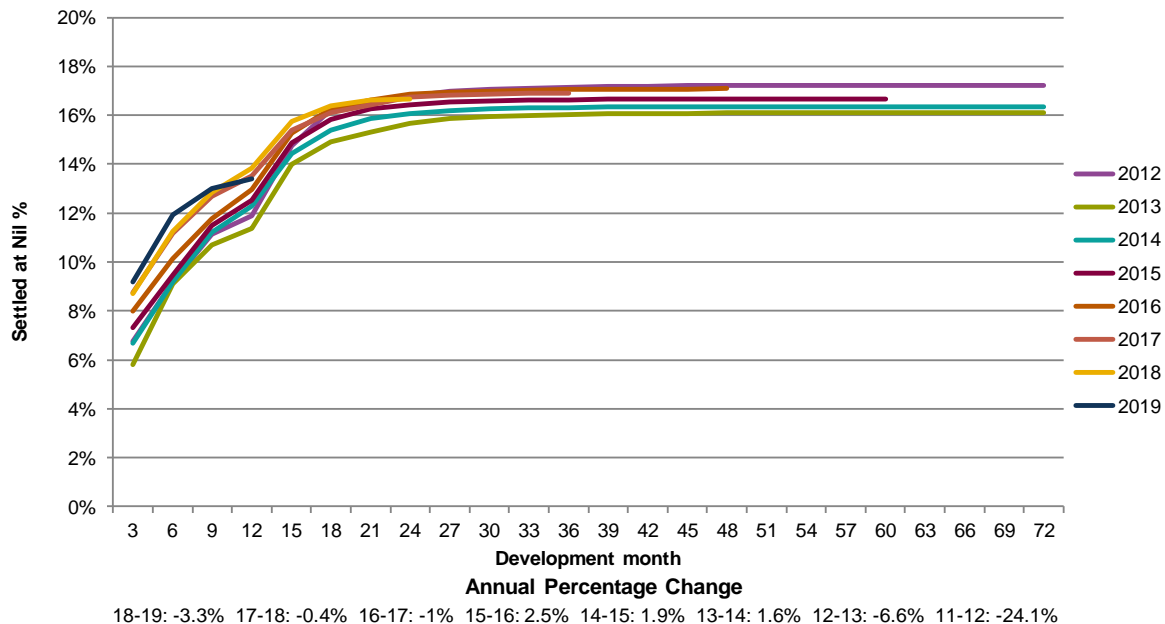
Settlement Rate (including nils)



Appendix - AD

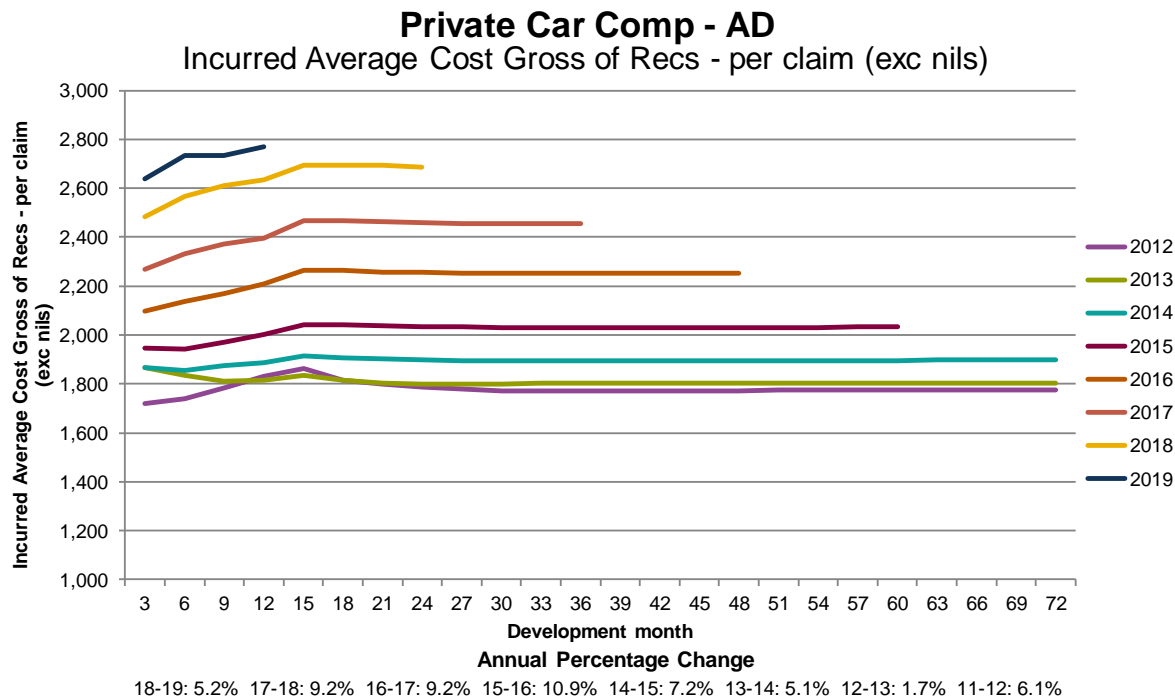
Settled at Nil %

Private Car Comp - AD
Settled at Nil %



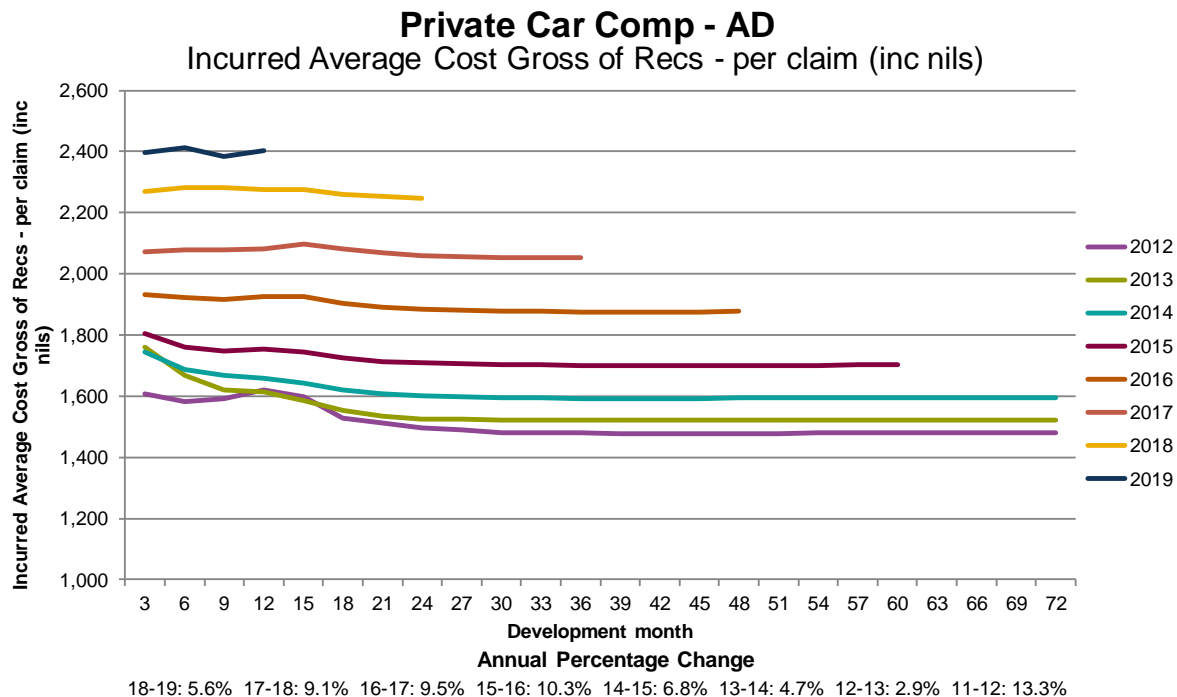
Appendix - AD

Incurred Average Cost Gross of Recs (excluding nils)



Appendix - AD

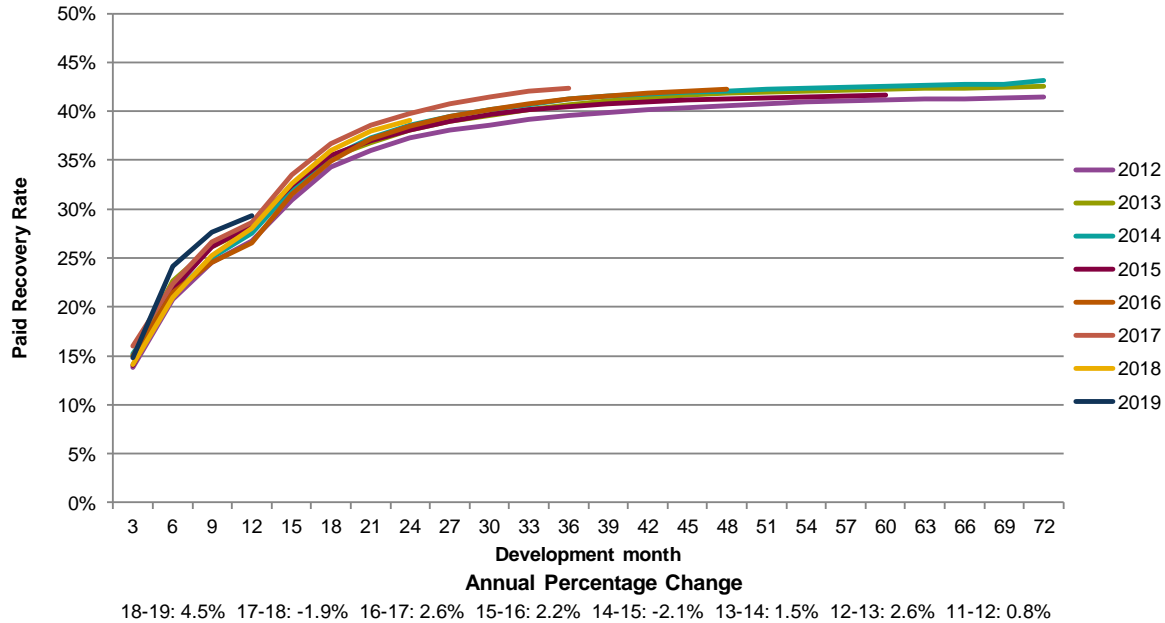
Incurred Average Cost Gross of Recs (including nils)



Appendix - AD

Paid Recovery Rate

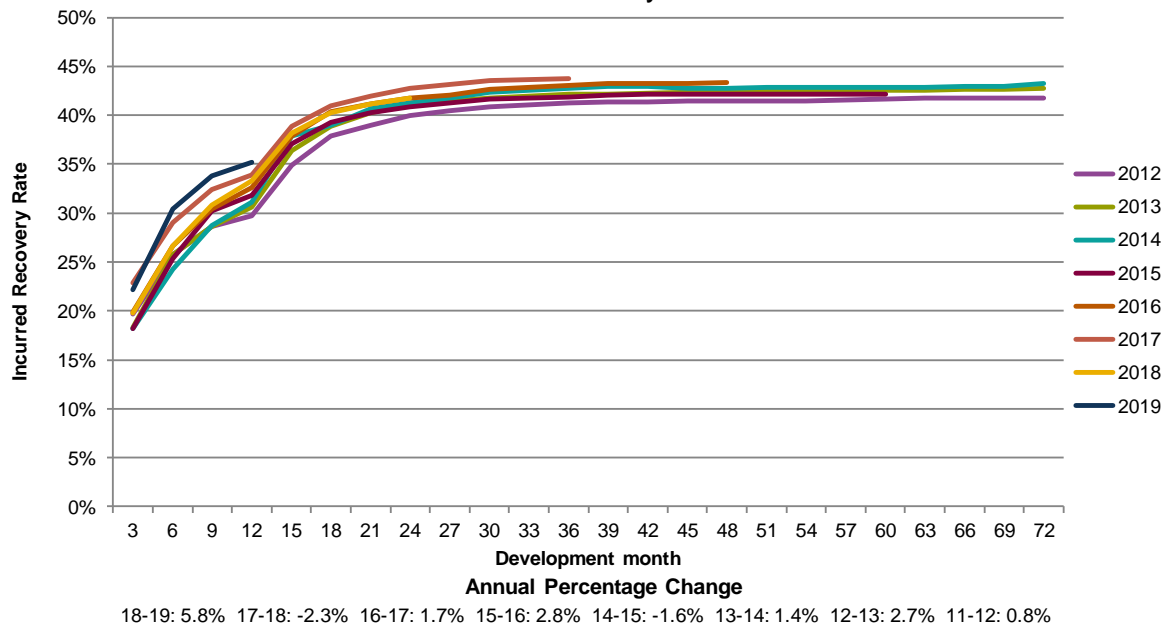
Private Car Comp - AD
Paid Recovery Rate



Appendix - AD

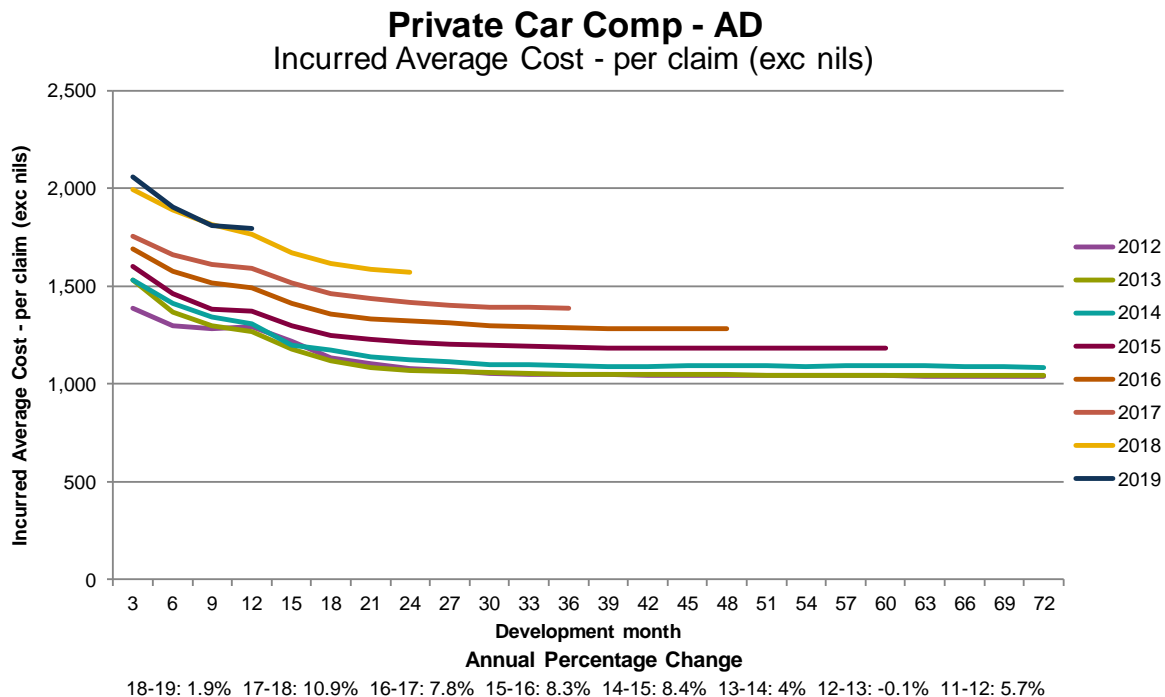
Incurred Recovery Rate

Private Car Comp - AD
Incurred Recovery Rate



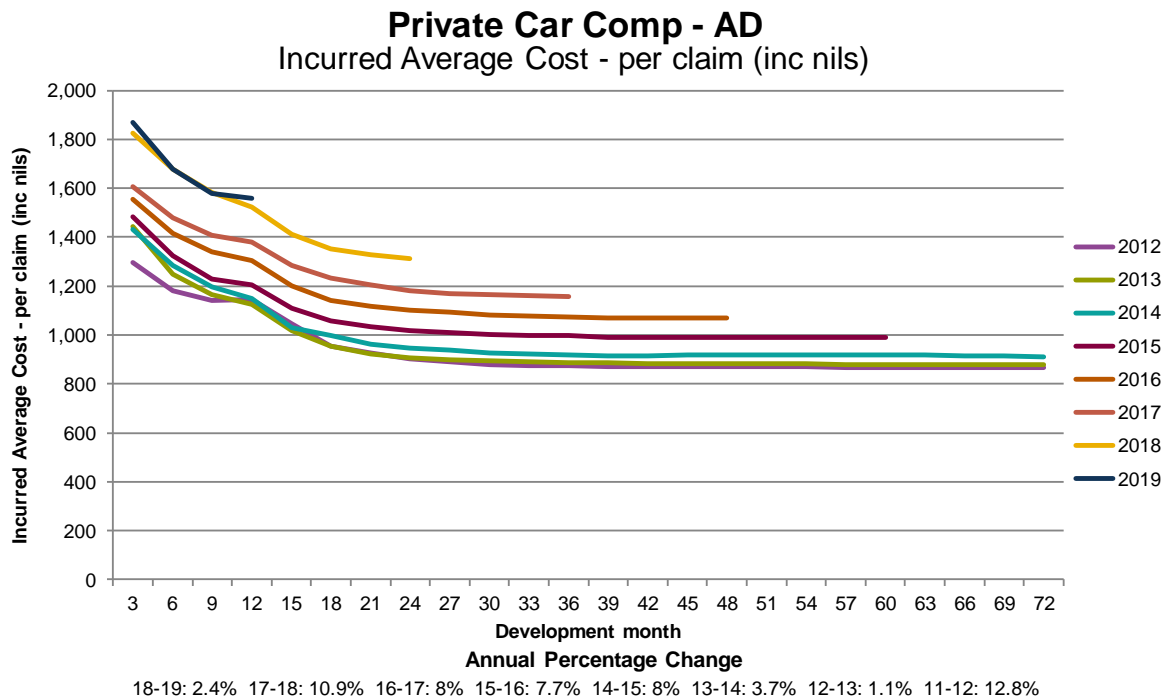
Appendix - AD

Incurred Average Cost Net of Recs (excluding nils)



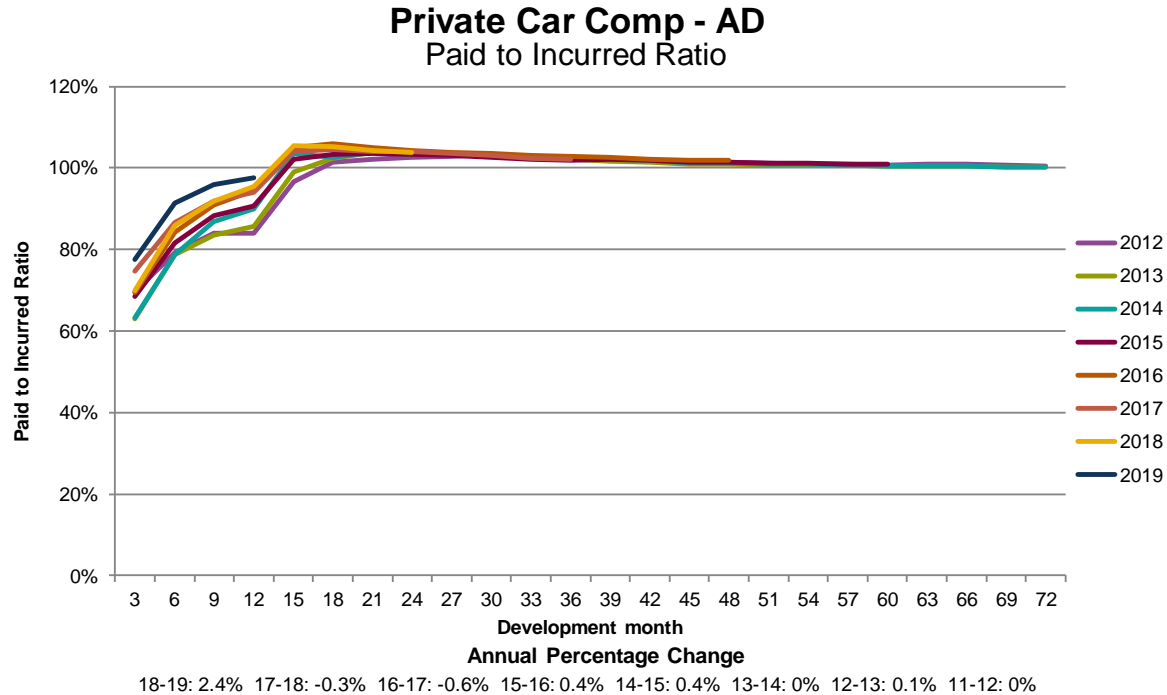
Appendix - AD

Incurred Average Cost Net of Recs (including nils)



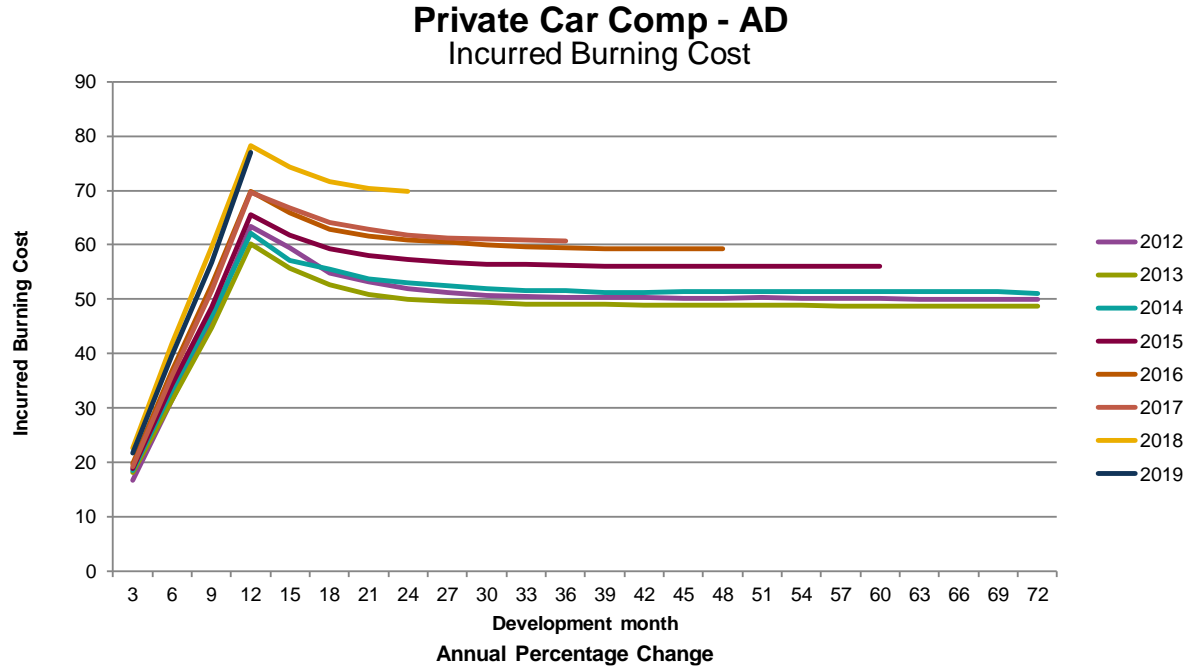
Appendix - AD

Paid to Incurred Ratio Net of Recs



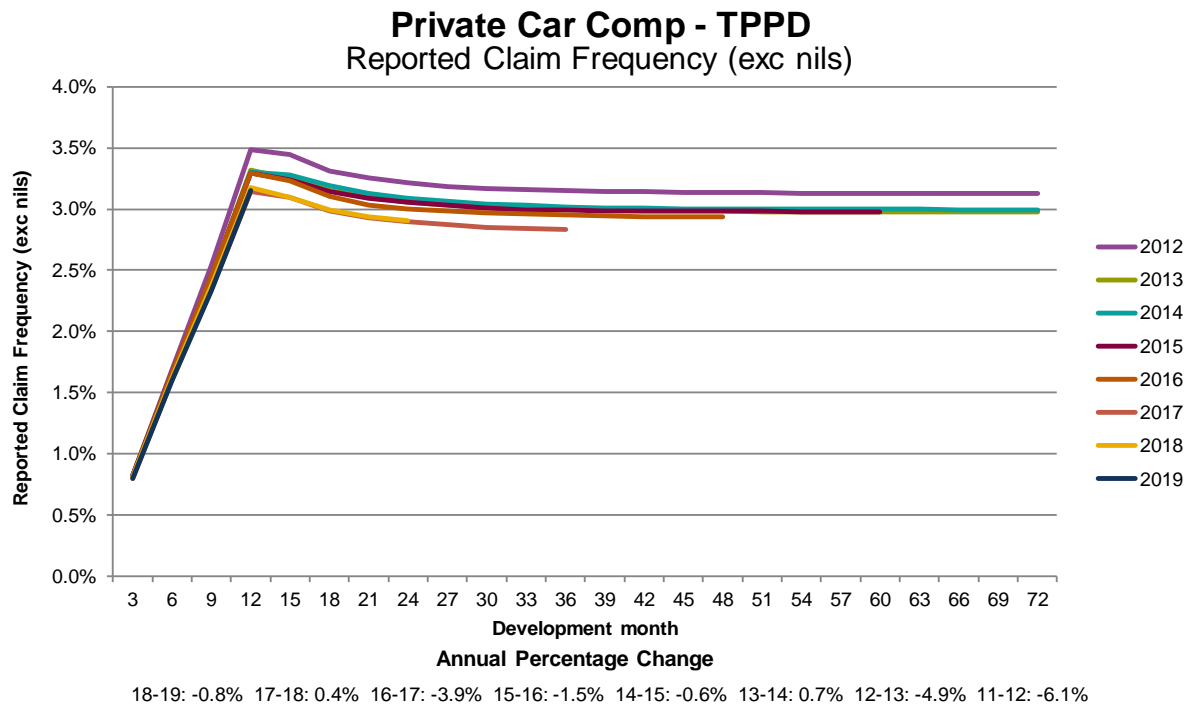
Appendix - AD

Incurred Burning Cost



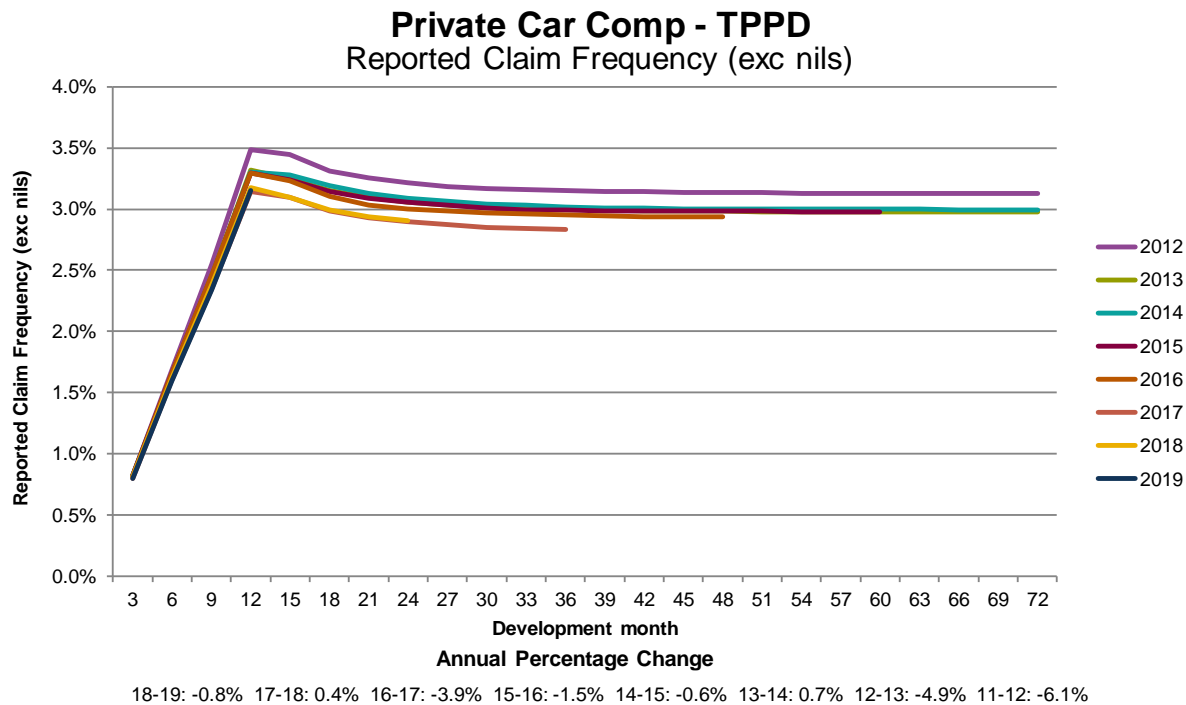
Appendix - TPPD

Claim frequency (excluding nils)



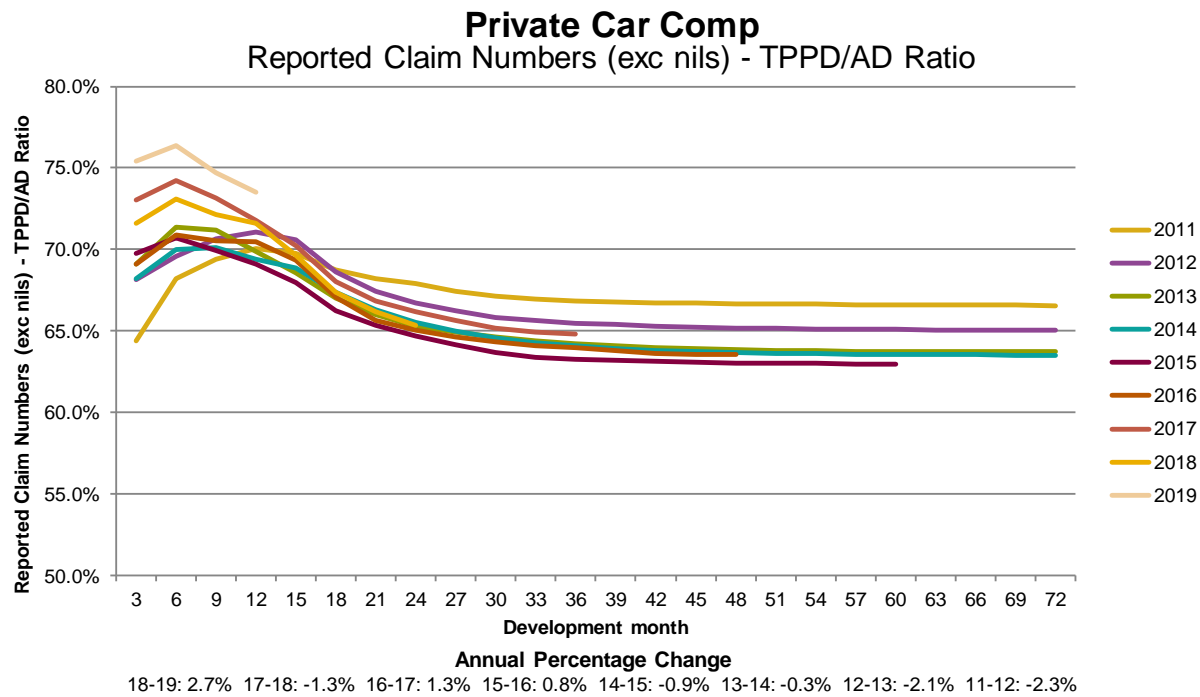
Appendix - TPPD

Claim frequency (including nils)



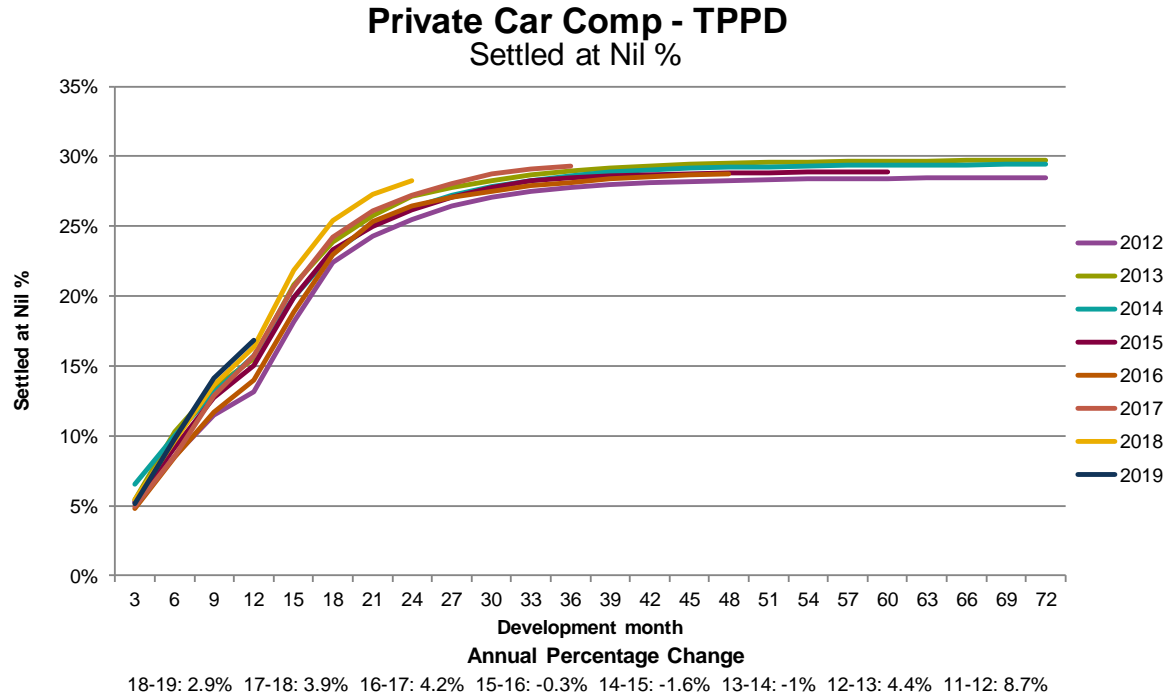
Appendix - TPPD

Ratio of TPPD to AD claim numbers (excluding nils)



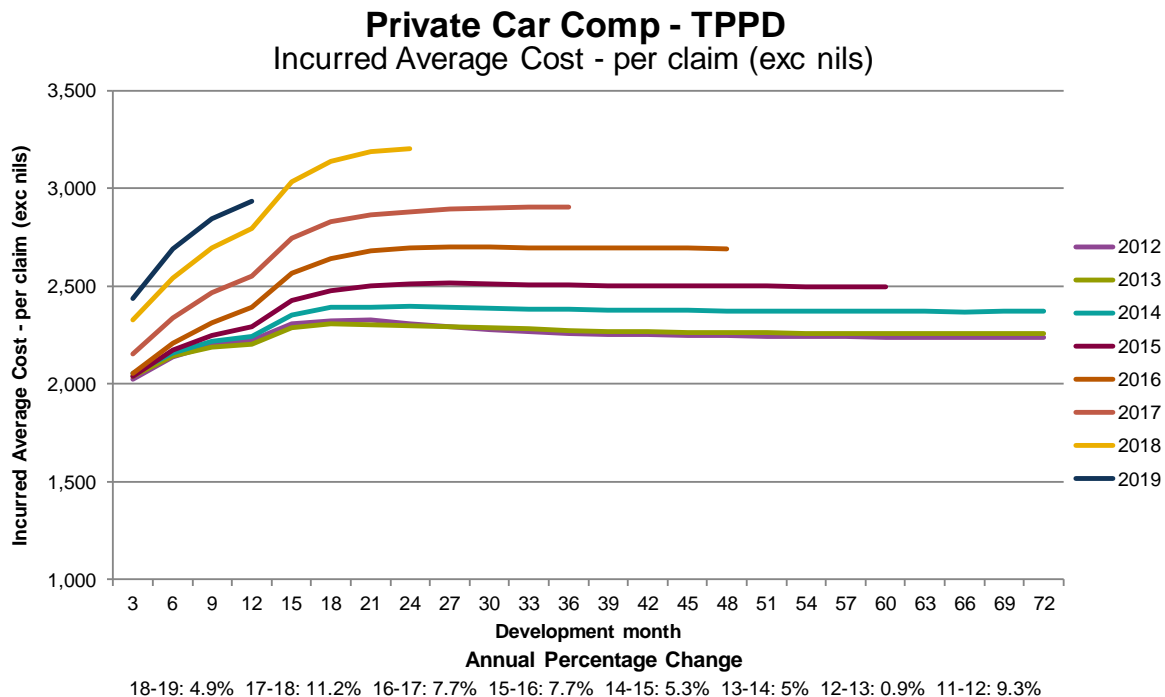
Appendix - TPPD

Settled at Nil %



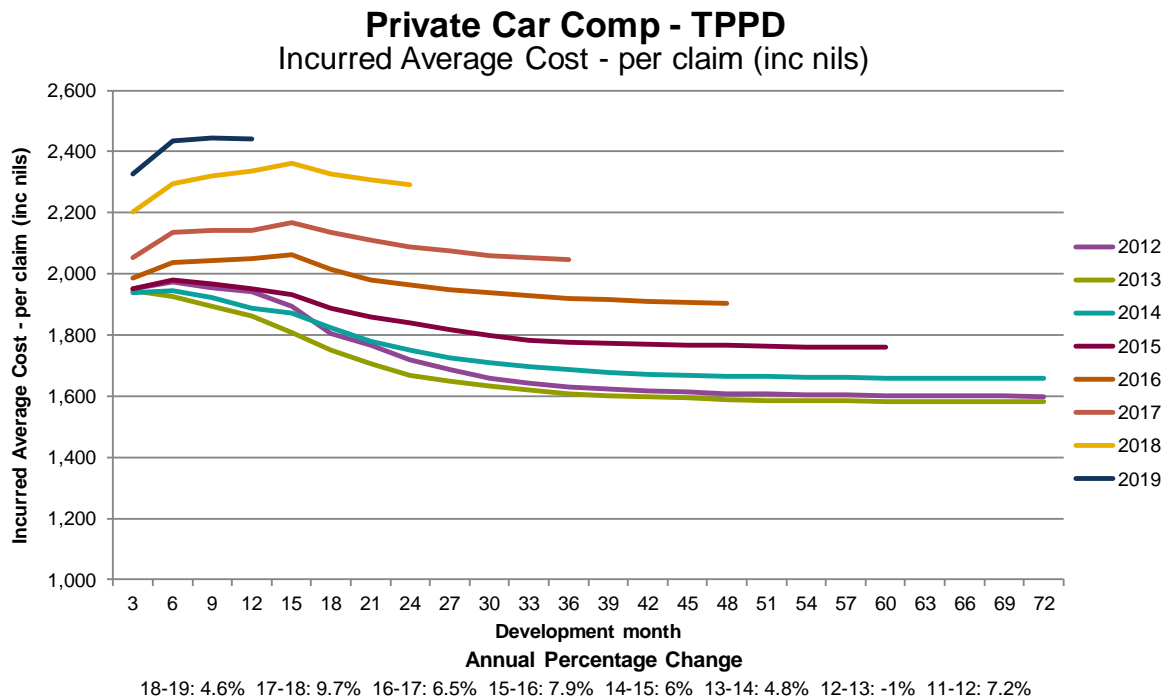
Appendix - TPPD

Incurred average Cost (excluding nils)



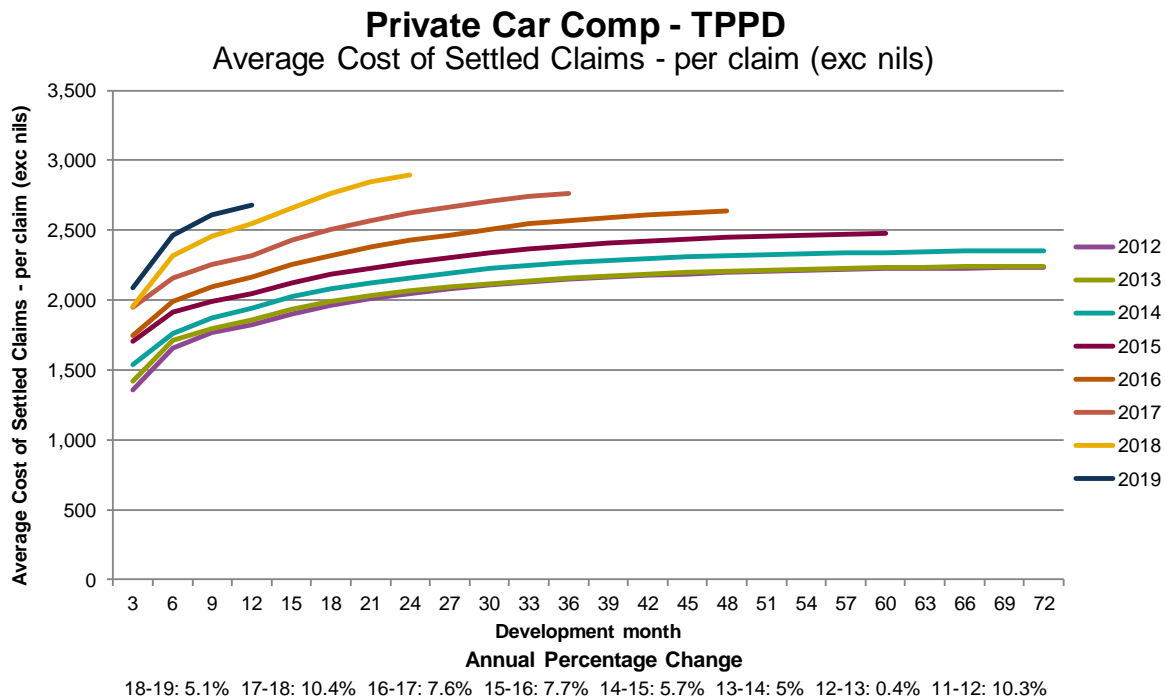
Appendix - TPPD

Incurred average Cost (excluding nils)



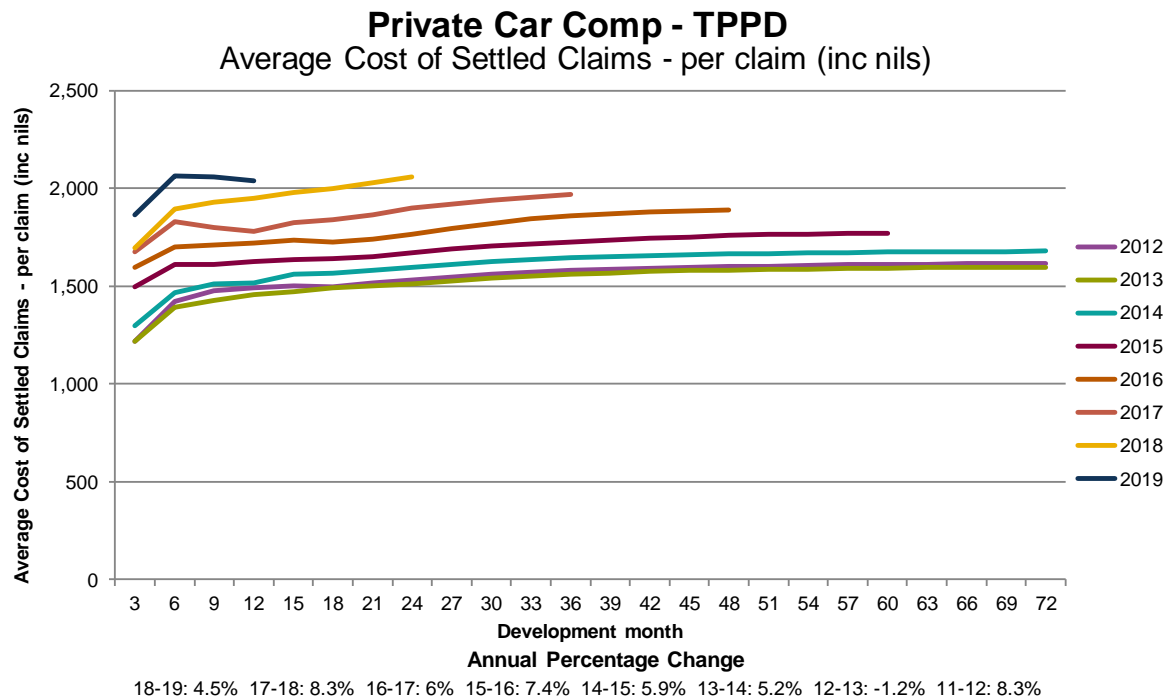
Appendix - TPPD

Settled average Cost (excluding nils)



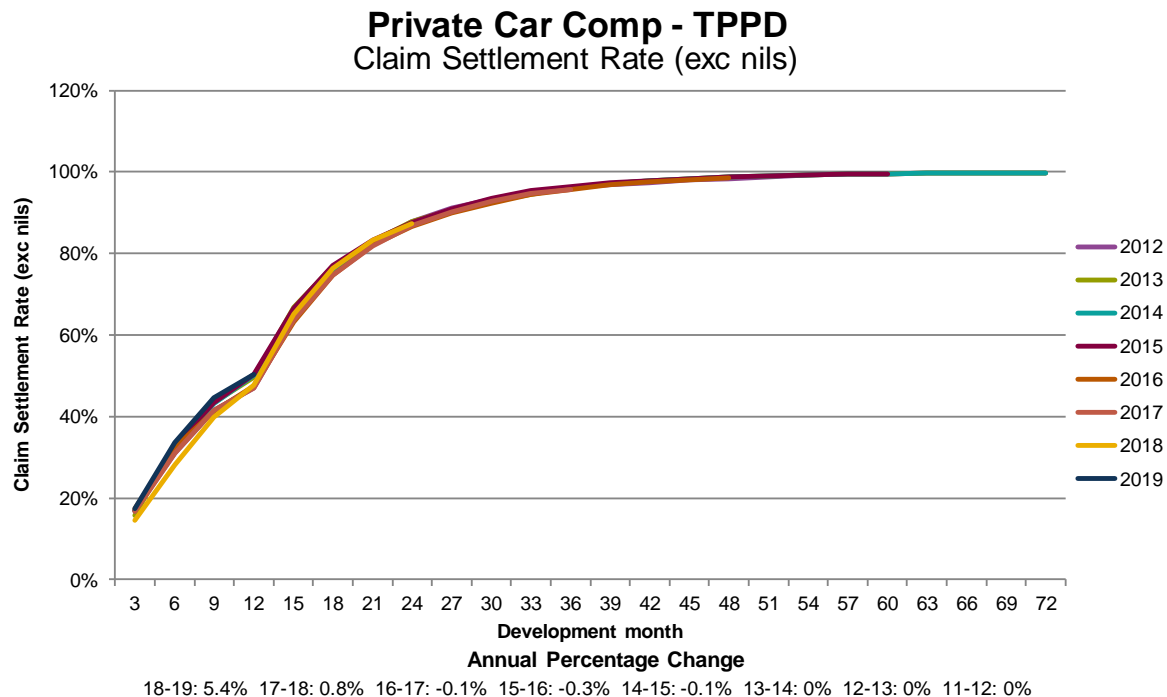
Appendix - TPPD

Settled average Cost (including nils)



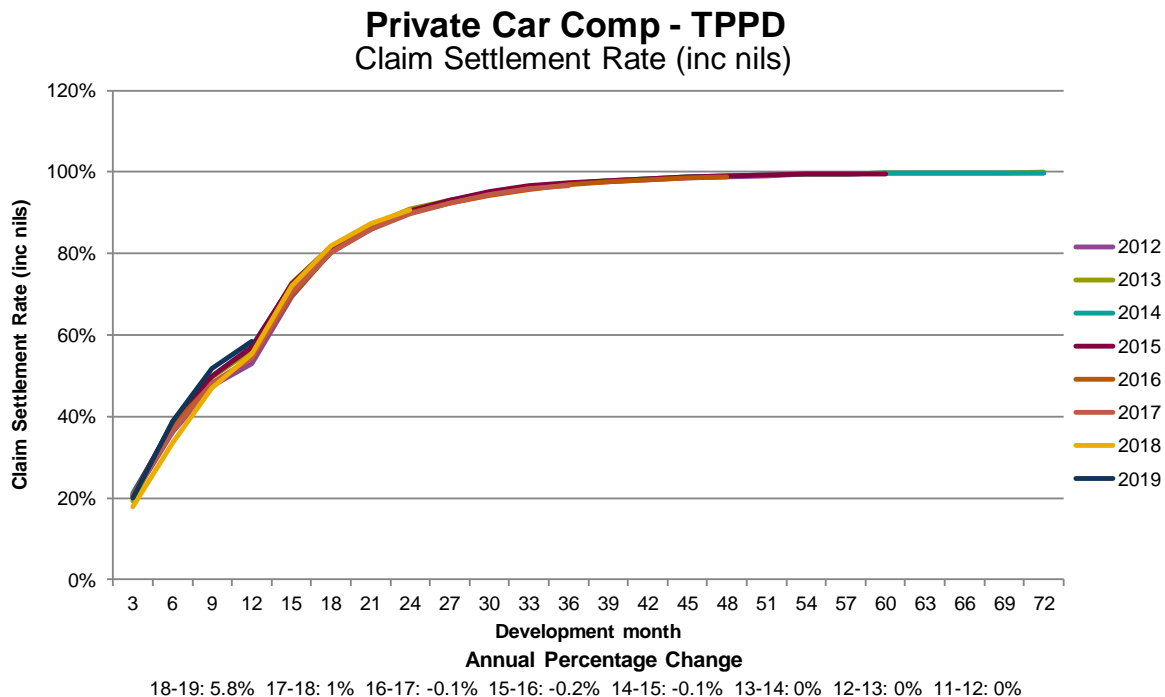
Appendix - TPPD

Settlement Rate (excluding nils)



Appendix - TPPD

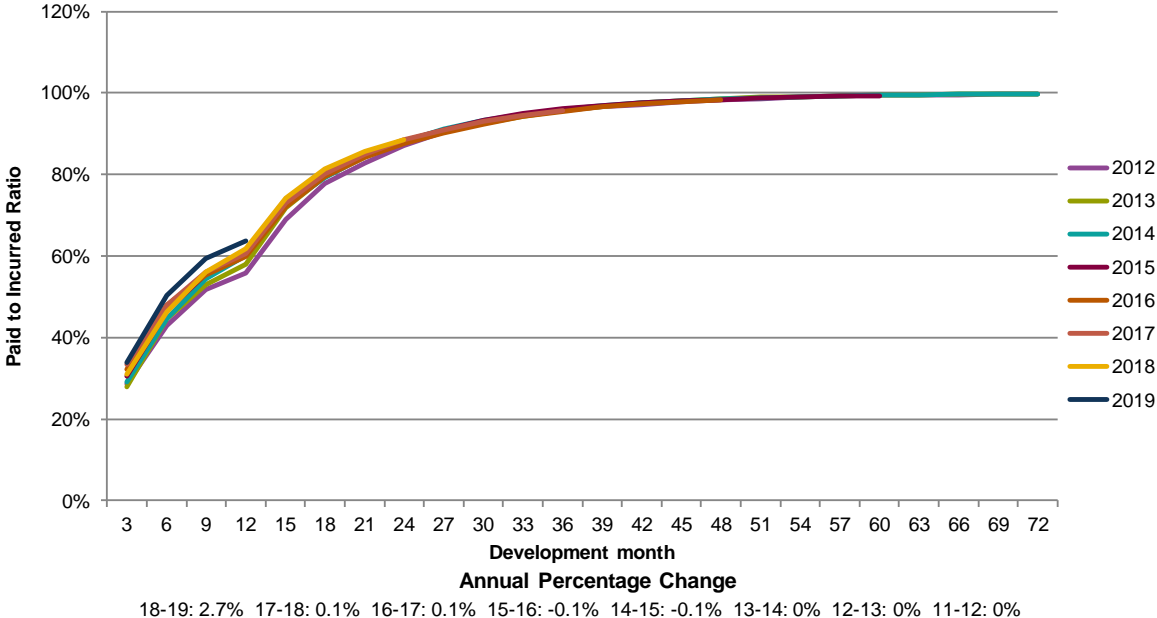
Settlement Rate (including nils)



Appendix - TPPD

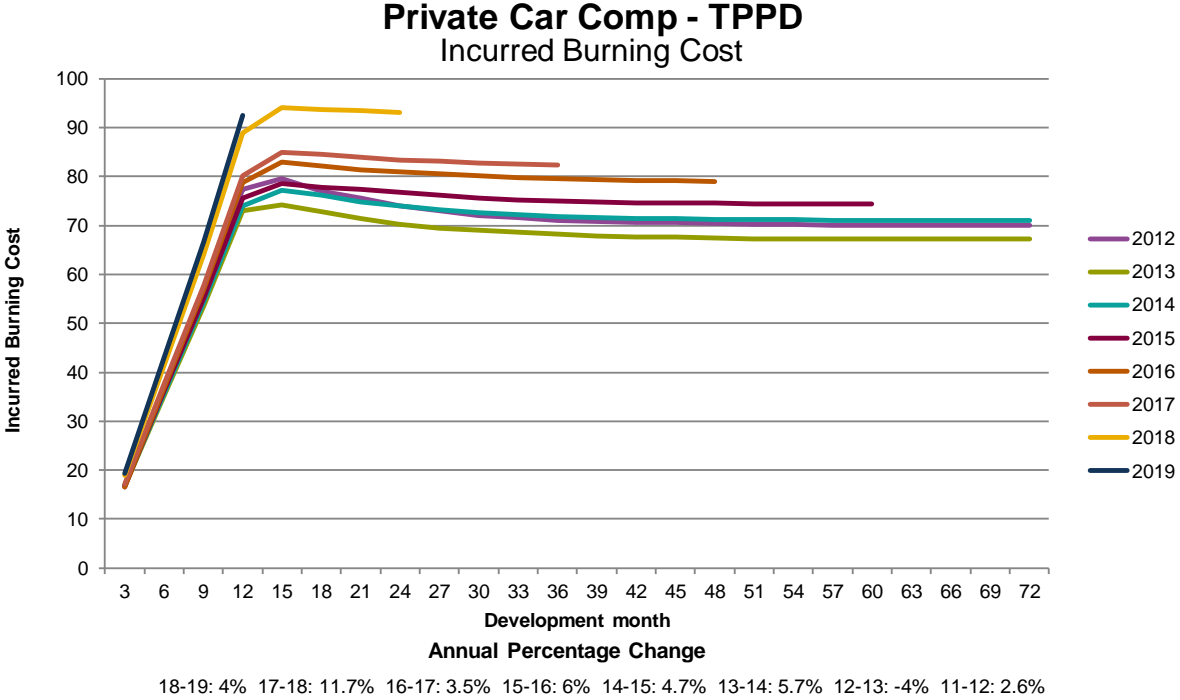
Paid to Incurred Ratio

Private Car Comp - TPPD
Paid to Incurred Ratio



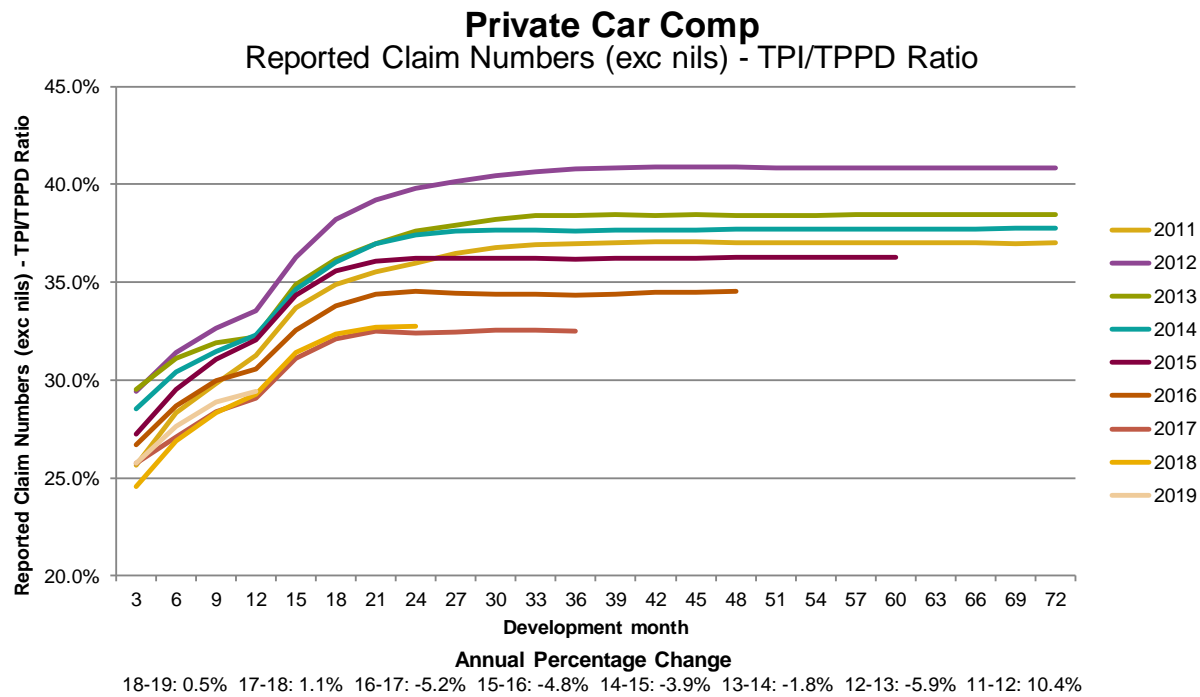
Appendix - TPPD

Incurred Burning Cost



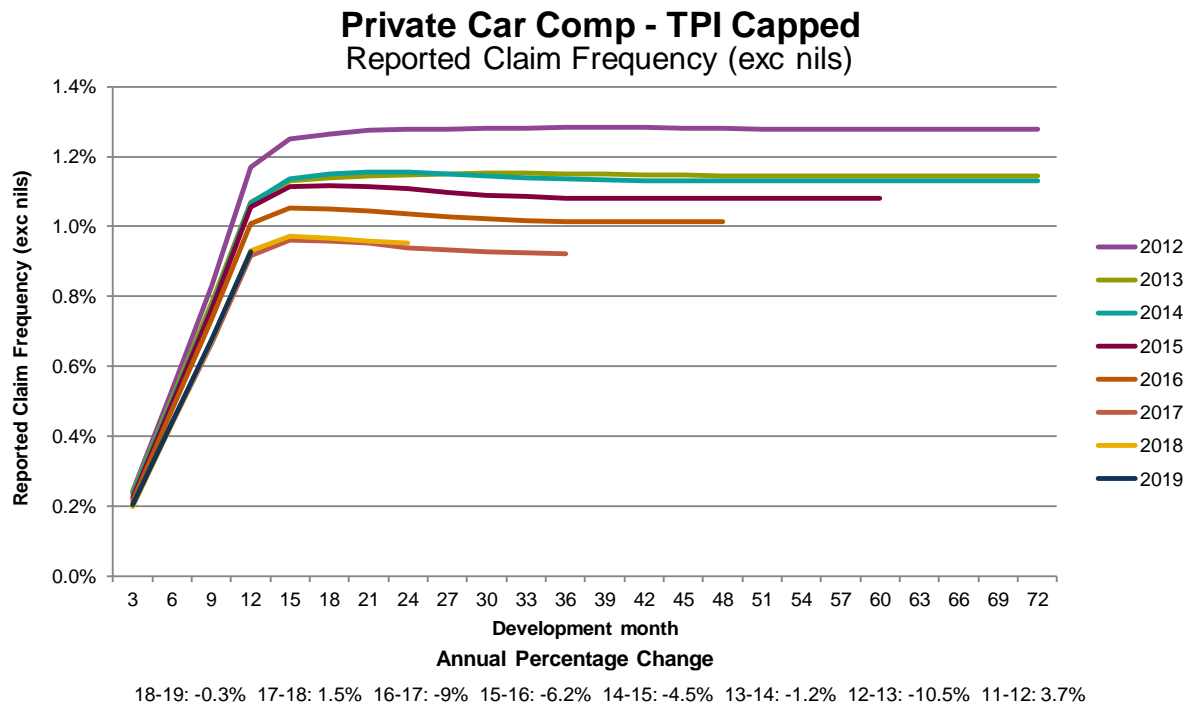
Appendix – TPI Capped

Ratio of TPI to TPD claim numbers (excluding nils)



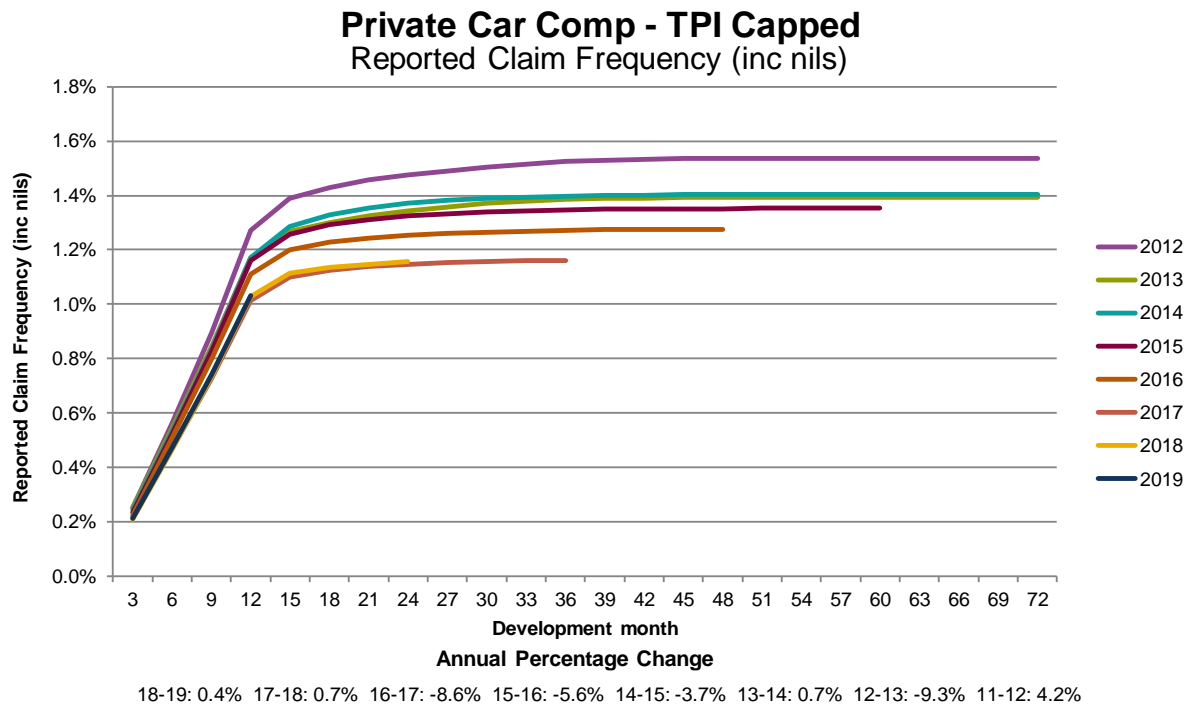
Appendix – TPI Capped

TPI Frequency (excluding nils)



Appendix – TPI Capped

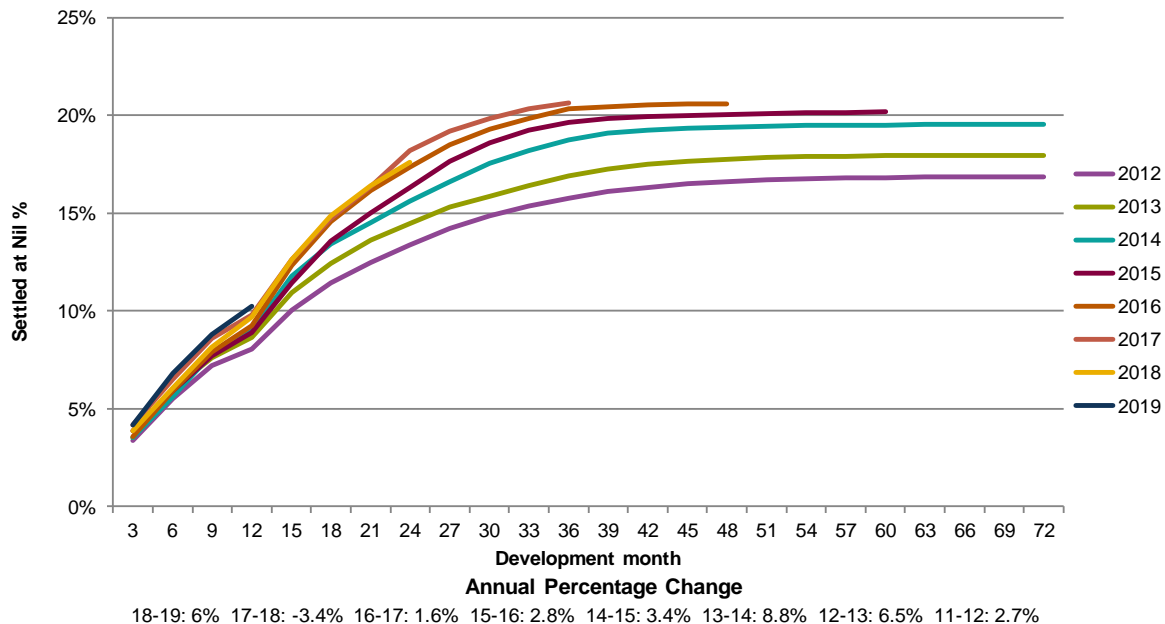
TPI Frequency (including nils)



Appendix – TPI Capped

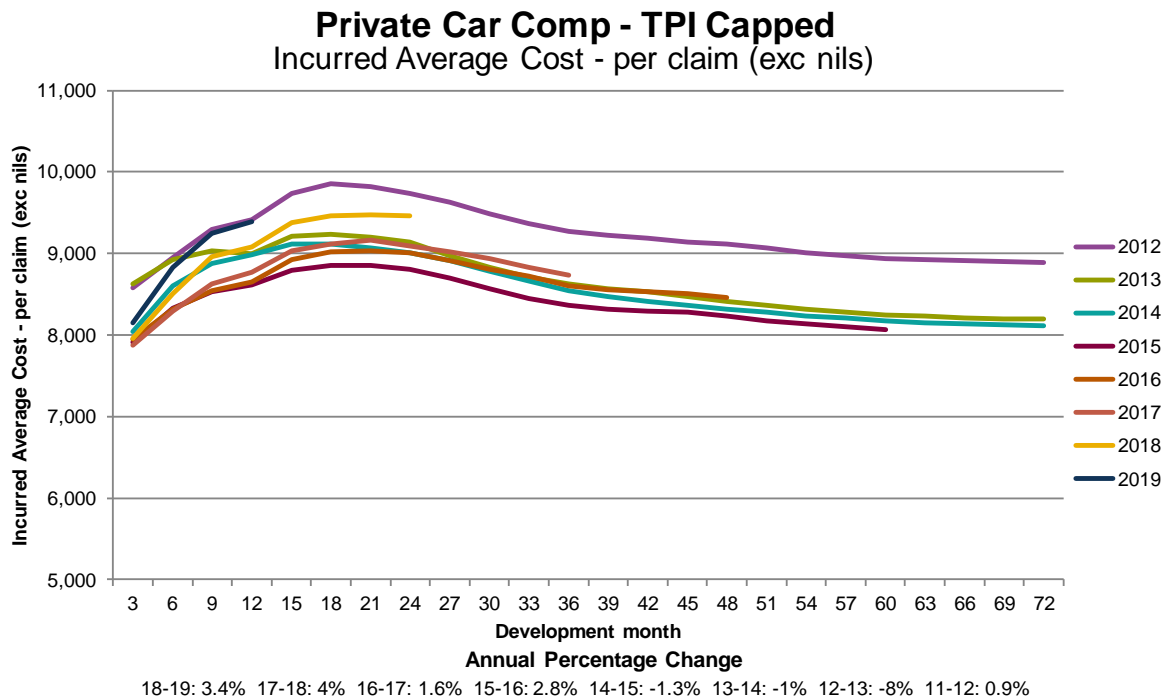
TPI Settled at Nil

Private Car Comp - TPI Capped
Settled at Nil %



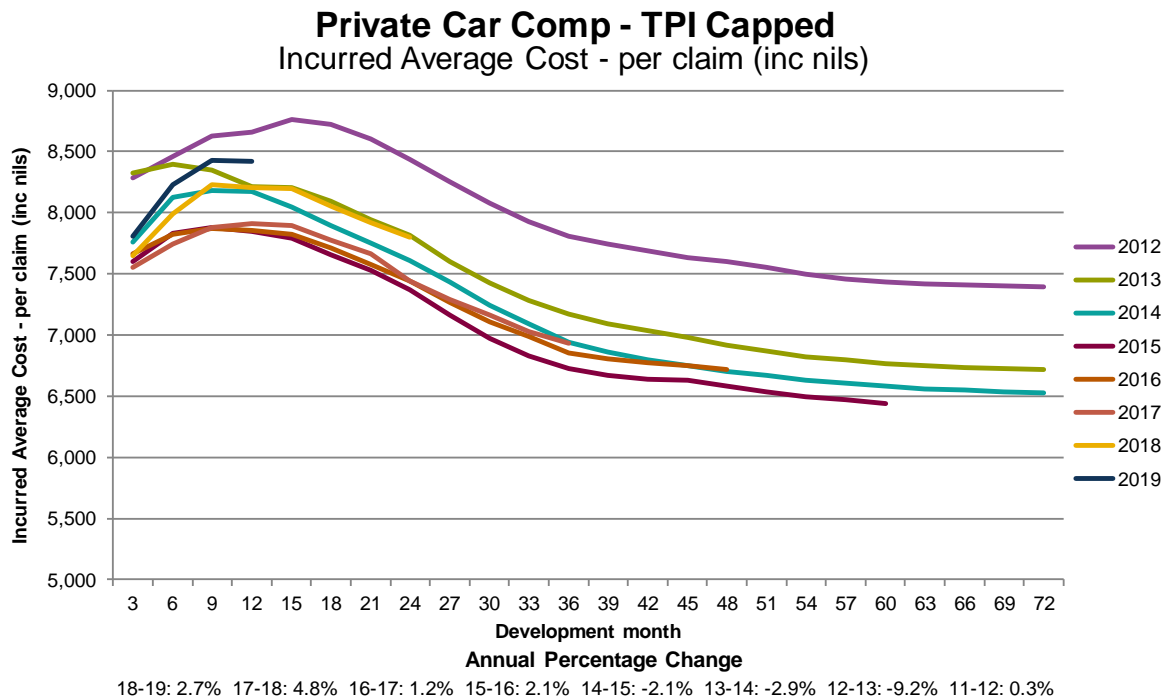
Appendix – TPI Capped

TPI Capped Incurred Average Cost (excluding nils)



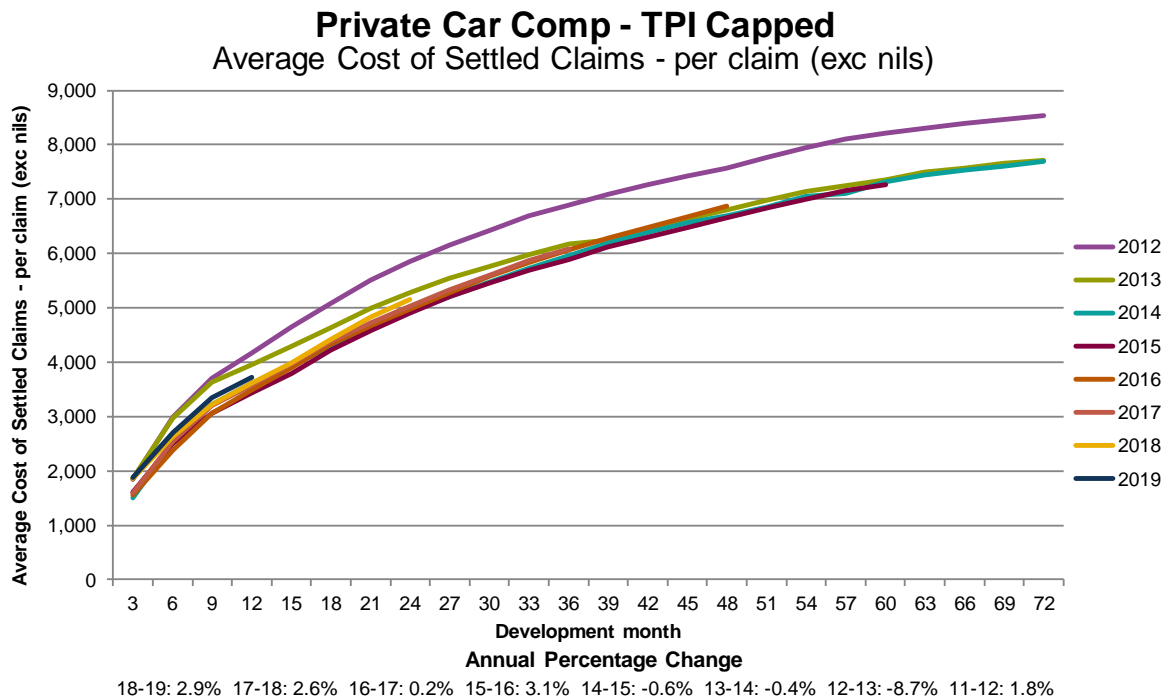
Appendix – TPI Capped

TPI Capped Incurred Average Cost (including nils)



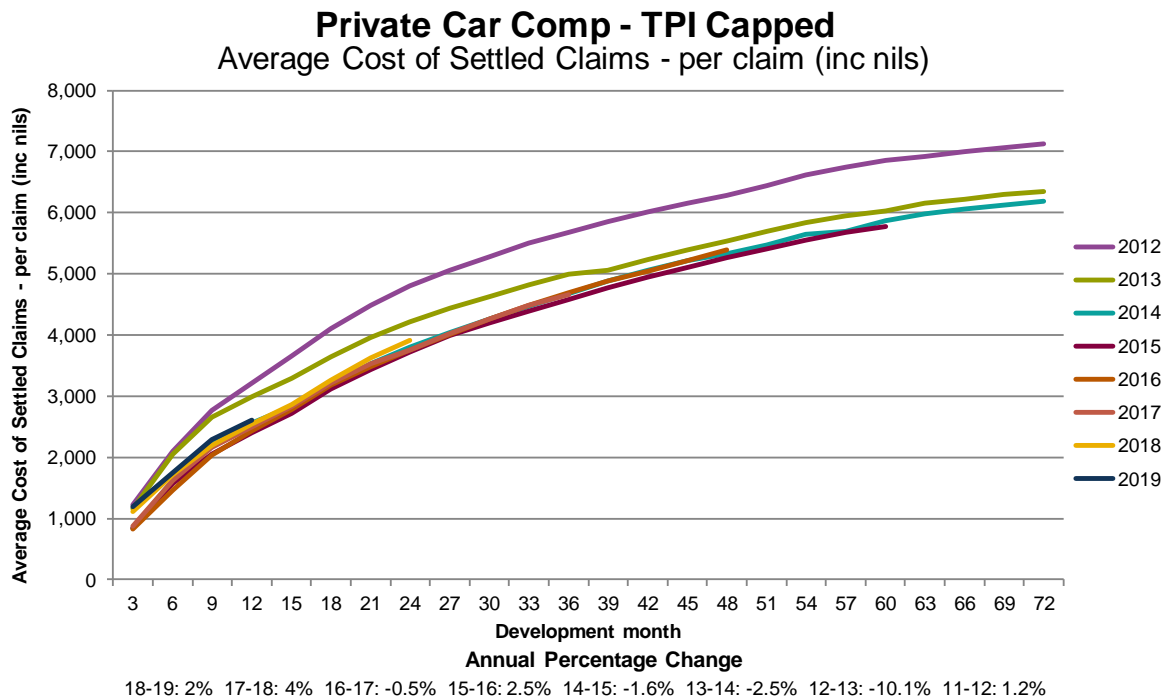
Appendix – TPI Capped

TPI Capped Settled Average Cost (excluding nils)



Appendix – TPI Capped

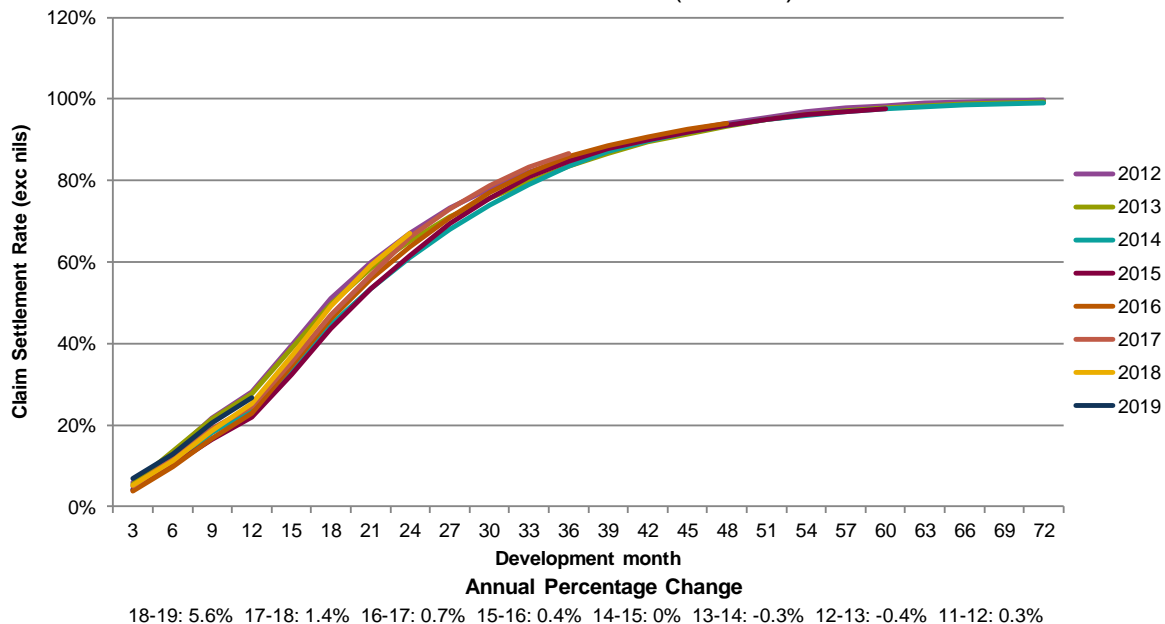
TPI Capped Settled Average Cost (including nils)



Appendix – TPI Capped

TPI Settlement Rate (excluding nils)

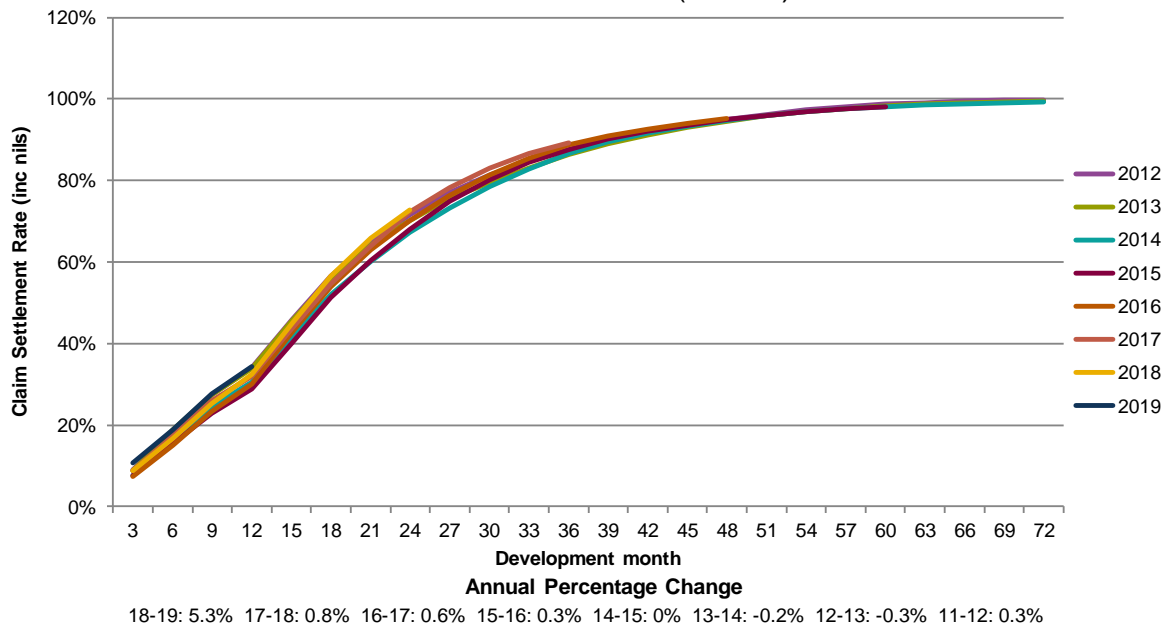
Private Car Comp - TPI Capped
Claim Settlement Rate (exc nils)



Appendix – TPI Capped

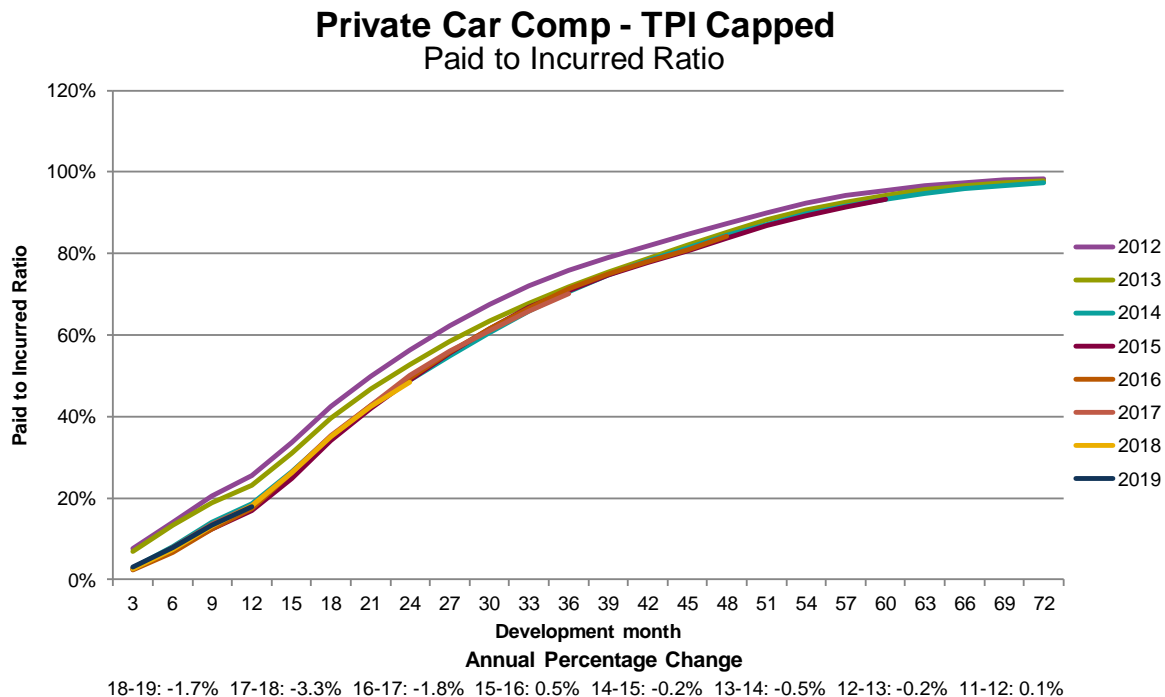
TPI Settlement Rate (including nils)

Private Car Comp - TPI Capped
Claim Settlement Rate (inc nils)



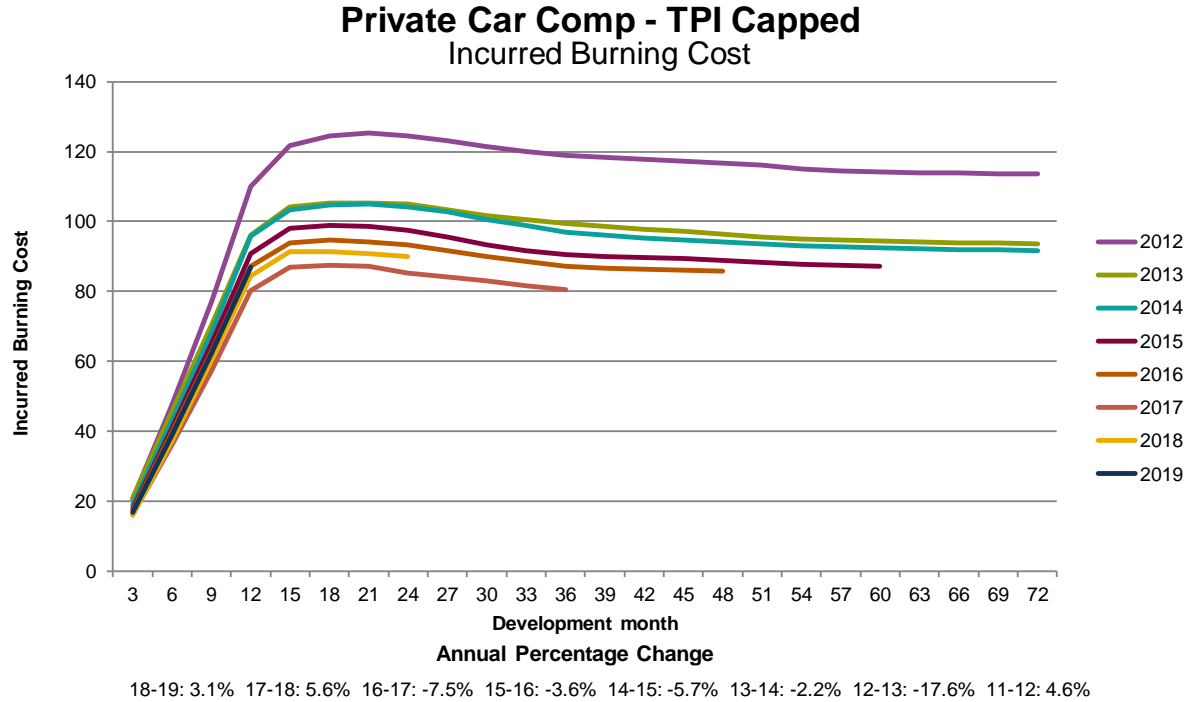
Appendix – TPI Capped

Paid to incurred ratio



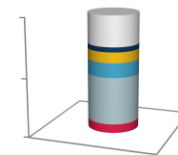
Appendix – TPI Capped

Incurred Burning Cost



Appendix – TPI Capped

Type 1 KPIs

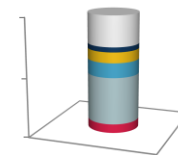


Private Car Comprehensive TPI Capped Results in Layer (all layers given in 2010 money, indexed at 7% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k - £100k	<100k
Frequency exc Nils (in layer and above) (claims per million vehicle years)						
2010	12,141	10,861	2,936	946	175	12,141
2011	13,532	12,010	3,330	1,097	207	13,532
2012	14,108	12,435	3,496	1,167	221	14,108
2013	12,447	11,095	2,628	827	183	12,447
2014	11,756	10,573	2,351	683	173	11,756
2015	10,926	9,878	2,035	580	157	10,926
2016	10,302	9,229	1,877	537	159	10,302
2017	9,417	8,317	1,644	490	149	9,417
2018	9,632	8,497	1,676	510	168	9,632
2019	9,531	8,418	1,672	528	174	9,531
Average Cost (£)						
2010	928	5,357	5,765	12,534	30,418	8,529
2011	934	5,428	5,868	12,827	32,559	8,733
2012	943	5,490	5,950	13,038	35,716	8,893
2013	960	5,103	5,866	13,564	41,827	8,262
2014	973	5,040	5,684	14,358	47,417	8,175
2015	987	4,984	5,684	14,942	51,055	8,080
2016	989	5,042	5,735	15,861	55,835	8,240
2017	985	5,028	5,863	16,144	61,713	8,262
2018	992	5,073	5,945	16,744	65,490	8,529
2019	1,006	5,104	6,091	16,989	71,691	8,831
Burning Cost (£)						
2010	11.3	58.2	16.9	11.9	5.3	103.5
2011	12.6	65.2	19.5	14.1	6.7	118.2
2012	13.3	68.3	20.8	15.2	7.9	125.5
2013	11.9	56.6	15.4	11.2	7.6	102.8
2014	11.4	53.3	13.4	9.8	8.2	96.1
2015	10.8	49.2	11.6	8.7	8.0	88.3
2016	10.2	46.5	10.8	8.5	8.9	84.9
2017	9.3	41.8	9.6	7.9	9.2	77.8
2018	9.6	43.1	10.0	8.5	11.0	82.1
2019	9.6	43.0	10.2	9.0	12.5	84.2



Appendix – TPI Capped Type 1 Change in KPIs



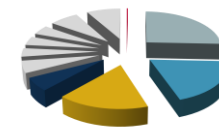
Private Car Comprehensive TPI Capped Results in Layer (all layers given in 2010 money, indexed at 7% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k - £100k	<100k
Frequency exc Nil's (in layer and above) (claims per million vehicle years)						
2010	6.1%	6.3%	1.9%	-2.5%	-1.4%	6.1%
2011	11.5%	10.6%	13.4%	16.0%	18.1%	11.5%
2012	4.3%	3.5%	5.0%	6.3%	6.8%	4.3%
2013	-11.8%	-10.8%	-24.8%	-29.1%	-17.3%	-11.8%
2014	-5.6%	-4.7%	-10.5%	-17.4%	-5.3%	-5.6%
2015	-7.1%	-6.6%	-13.4%	-15.1%	-9.1%	-7.1%
2016	-5.7%	-6.6%	-7.8%	-7.4%	1.2%	-5.7%
2017	-8.6%	-9.9%	-12.4%	-8.9%	-6.6%	-8.6%
2018	2.3%	2.2%	2.0%	4.2%	12.8%	2.3%
2019	-1.0%	-0.9%	-0.3%	3.4%	3.7%	-1.0%
Average Cost (£)						
2010	1.3%	0.7%	-1.1%	1.8%	8.9%	-0.9%
2011	0.6%	1.3%	1.8%	2.3%	7.0%	2.4%
2012	0.9%	1.1%	1.4%	1.6%	9.7%	1.8%
2013	1.8%	-7.0%	-1.4%	4.0%	17.1%	-7.1%
2014	1.4%	-1.2%	-3.1%	5.9%	13.4%	-1.1%
2015	1.4%	-1.1%	0.0%	4.1%	7.7%	-1.2%
2016	0.2%	1.1%	0.9%	6.1%	9.4%	2.0%
2017	-0.4%	-0.3%	2.2%	1.8%	10.5%	0.3%
2018	0.7%	0.9%	1.4%	3.7%	6.1%	3.2%
2019	1.5%	0.6%	2.5%	1.5%	9.5%	3.5%
Burning Cost (£)						
2010	7.5%	7.0%	0.8%	-0.7%	7.4%	5.1%
2011	12.2%	12.0%	15.4%	18.7%	26.4%	14.1%
2012	5.2%	4.7%	6.5%	8.1%	17.1%	6.2%
2013	-10.2%	-17.1%	-25.9%	-26.3%	-3.1%	-18.0%
2014	-4.3%	-5.9%	-13.3%	-12.5%	7.3%	-6.5%
2015	-5.7%	-7.6%	-13.4%	-11.6%	-2.1%	-8.1%
2016	-5.5%	-5.5%	-7.0%	-1.8%	10.7%	-3.8%
2017	-9.0%	-10.1%	-10.5%	-7.2%	3.2%	-8.3%
2018	3.0%	3.1%	3.4%	8.1%	19.7%	5.6%
2019	0.4%	-0.3%	2.2%	5.0%	13.5%	2.5%



Appendix – TPI Capped

Type 2 KPIs

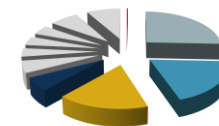


Private Car Comprehensive Capped TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k to £100k	< 100k
Frequency exc Nils (claims per million policy years)						
2010	1,280	7,925	1,990	771	107	12,073
2011	1,522	8,680	2,233	891	133	13,458
2012	1,673	8,939	2,329	946	144	14,032
2013	1,352	8,467	1,801	644	113	12,378
2014	1,182	8,222	1,668	511	105	11,688
2015	1,048	7,842	1,455	423	97	10,866
2016	1,073	7,352	1,340	378	98	10,241
2017	1,101	6,673	1,154	341	92	9,360
2018	1,135	6,821	1,166	343	106	9,570
2019	1,114	6,746	1,144	354	111	9,468
Average Cost (£)						
2010	317	5,007	13,751	28,571	67,849	8,011
2011	334	5,033	13,887	28,973	69,663	8,191
2012	367	5,066	14,021	29,345	72,032	8,319
2013	380	4,839	14,132	29,257	75,597	7,624
2014	365	4,844	14,154	29,463	79,106	7,463
2015	380	4,874	14,269	29,802	80,768	7,346
2016	366	4,951	14,394	30,363	83,308	7,395
2017	328	4,962	14,524	30,606	87,115	7,334
2018	310	5,008	14,636	30,706	89,253	7,477
2019	347	5,024	14,792	31,099	93,602	7,664
Burning Cost (£)						
2010	0.4	39.7	27.4	22.0	7.2	96.7
2011	0.5	43.7	31.0	25.8	9.2	110.2
2012	0.6	45.3	32.7	27.8	10.4	116.7
2013	0.5	41.0	25.5	18.9	8.6	94.4
2014	0.4	39.8	23.6	15.0	8.3	87.2
2015	0.4	38.2	20.8	12.6	7.8	79.8
2016	0.4	36.4	19.3	11.5	8.2	75.7
2017	0.4	33.1	16.8	10.4	8.0	68.6
2018	0.4	34.2	17.1	10.5	9.5	71.6
2019	0.4	33.9	16.9	11.0	10.4	72.6



Appendix – TPI Capped Type 2 Change in KPIs



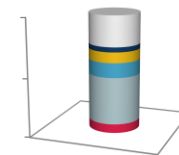
Private Car Comprehensive Capped TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k to £100k
Change in Frequency exc Nils					
2010	4.3%	8.0%	4.2%	-2.7%	3.9%
2011	18.9%	9.5%	12.2%	15.5%	24.4%
2012	9.9%	3.0%	4.3%	6.2%	8.9%
2013	-19.2%	-5.3%	-22.7%	-31.9%	-21.4%
2014	-12.5%	-2.9%	-7.4%	-20.8%	-7.3%
2015	-11.3%	-4.6%	-12.8%	-17.1%	-7.9%
2016	2.3%	-6.2%	-7.9%	-10.7%	1.3%
2017	2.6%	-9.2%	-13.9%	-9.8%	-6.7%
2018	3.1%	2.2%	1.0%	0.5%	15.7%
2019	-1.8%	-1.1%	-1.9%	3.3%	4.5%
Change in Average Cost					
2010	5.3%	2.1%	0.7%	1.2%	3.2%
2011	5.5%	0.5%	1.0%	1.4%	2.7%
2012	9.9%	0.7%	1.0%	1.3%	3.4%
2013	3.4%	-4.5%	0.8%	-0.3%	4.9%
2014	-3.8%	0.1%	0.2%	0.7%	4.6%
2015	4.0%	0.6%	0.8%	1.1%	2.1%
2016	-3.8%	1.6%	0.9%	1.9%	3.1%
2017	-10.4%	0.2%	0.9%	0.8%	4.6%
2018	-5.3%	0.9%	0.8%	0.3%	2.5%
2019	11.7%	0.3%	1.1%	1.3%	4.9%
Change in Burning Cost					
2010	9.9%	10.3%	4.9%	-1.5%	7.3%
2011	25.4%	10.1%	13.3%	17.1%	27.7%
2012	20.7%	3.7%	5.3%	7.6%	12.6%
2013	-16.4%	-9.5%	-22.1%	-32.1%	-17.5%
2014	-15.8%	-2.8%	-7.3%	-20.2%	-3.0%
2015	-7.8%	-4.0%	-12.1%	-16.2%	-6.0%
2016	-1.5%	-4.8%	-7.1%	-9.0%	4.5%
2017	-8.1%	-9.0%	-13.1%	-9.1%	-2.4%
2018	-2.4%	3.1%	1.8%	0.9%	18.5%
2019	9.7%	-0.8%	-0.8%	4.6%	9.6%



Appendix – TPI Excess

Type 1 KPIs



Private Car Comprehensive TPI Capped Results in Layer (all layers given in 2010 money, indexed at 7% pa)

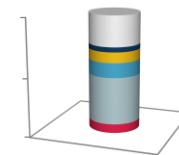
Accident Year	£100k - 250k	£250k - 500k	£500k - 1m	£1m - 2m	£2m to 5m	> £5m	>100k
Frequency exc Nils (in layer and above) (claims per million vehicle years)							
2010	68.4	25.8	11.7	6.1	3.3	1.4	68.4
2011	74.2	28.4	14.9	7.7	3.5	1.5	74.2
2012	76.3	29.6	15.7	8.6	4.2	1.3	76.3
2013	69.1	26.5	13.7	8.0	4.2	1.9	69.1
2014	67.6	28.6	15.1	9.1	5.1	1.9	67.6
2015	60.3	25.8	11.7	6.8	3.8	1.3	60.3
2016	61.0	25.8	13.1	7.9	4.6	1.6	61.0
2017	57.0	24.4	12.5	7.2	4.3	1.5	57.0
2018	61.7	25.1	12.7	7.6	4.3	1.5	61.7
2019	63.1	25.6	12.7	8.2	4.8	1.7	63.1
Average Cost (£000s)							
2010	91	162	353	748	1,827	2,106	408
2011	95	185	358	688	2,239	3,319	483
2012	103	199	409	790	1,912	3,889	524
2013	110	209	451	852	2,276	5,135	655
2014	125	230	489	964	2,535	6,251	833
2015	129	234	529	1,009	2,794	6,728	771
2016	134	267	556	1,133	2,739	8,420	935
2017	148	291	587	1,204	2,778	7,118	956
2018	155	293	627	1,250	2,798	9,493	979
2019	163	306	681	1,382	3,310	8,573	1,090
Burning Cost (£)							
2010	6.2	4.2	4.1	4.6	5.9	2.9	27.9
2011	7.1	5.2	5.3	5.3	7.8	5.1	35.8
2012	7.8	5.9	6.4	6.8	7.9	5.1	40.0
2013	7.6	5.5	6.2	6.8	9.6	9.5	45.2
2014	8.5	6.6	7.4	8.7	13.0	12.1	56.3
2015	7.8	6.0	6.2	6.8	10.6	9.0	46.5
2016	8.2	6.9	7.3	9.0	12.5	13.2	57.1
2017	8.4	7.1	7.3	8.7	12.1	11.0	54.6
2018	9.6	7.4	8.0	9.5	12.1	14.0	60.4
2019	10.3	7.8	8.7	11.3	16.0	14.8	68.8



Institute
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Appendix – TPI Excess

Type 1 Change in KPIs



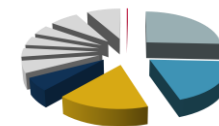
Private Car Comprehensive TPI Capped Results in Layer (all layers given in 2010 money, indexed at 7% pa)

Accident Year	£100k - 250k	£250k - 500k	£500k - 1m	£1m - 2m	£2m to 5m	> £5m	>100k
Frequency exc Nils (in layer and above) (claims per million vehicle years)							
2010	-8.7%	-18.3%	-23.5%	-27.0%	-35.0%	-23.0%	-8.7%
2011	8.4%	10.0%	27.7%	26.6%	7.4%	11.6%	8.4%
2012	3.0%	4.0%	5.6%	12.0%	18.8%	-14.5%	3.0%
2013	-9.6%	-10.4%	-13.1%	-7.4%	1.1%	42.5%	-9.6%
2014	-2.0%	8.0%	10.2%	13.6%	22.6%	4.4%	-2.0%
2015	-10.8%	-9.8%	-22.0%	-25.3%	-26.2%	-31.1%	-10.8%
2016	1.1%	0.0%	11.8%	17.0%	20.5%	16.9%	1.1%
2017	-6.5%	-5.5%	-5.0%	-9.0%	-5.0%	-1.4%	-6.5%
2018	8.1%	2.9%	1.8%	4.9%	-0.7%	-4.4%	8.1%
2019	2.4%	2.2%	0.3%	8.0%	11.8%	17.0%	2.4%
Average Cost (£000s)							
2010	6.2%	1.1%	0.1%	5.7%	6.6%	-35.7%	-17.7%
2011	4.3%	13.8%	1.5%	-8.0%	22.6%	57.6%	18.3%
2012	7.8%	7.9%	14.1%	14.8%	-14.6%	17.2%	8.4%
2013	7.4%	5.0%	10.4%	7.8%	19.1%	32.0%	25.0%
2014	13.7%	9.8%	8.4%	13.1%	11.4%	21.7%	27.2%
2015	3.2%	1.9%	8.1%	4.7%	10.2%	7.6%	-7.5%
2016	3.6%	14.2%	5.2%	12.3%	-1.9%	25.1%	21.3%
2017	10.3%	8.7%	5.5%	6.3%	1.4%	-15.5%	2.3%
2018	5.0%	0.9%	6.8%	3.8%	0.7%	33.4%	2.4%
2019	4.9%	4.4%	8.7%	10.6%	18.3%	-9.7%	11.3%
Burning Cost (£)							
2010	-3.0%	-17.3%	-23.4%	-22.8%	-30.7%	-50.5%	-24.9%
2011	13.1%	25.2%	29.5%	16.4%	31.6%	75.9%	28.3%
2012	11.0%	12.3%	20.5%	28.6%	1.5%	0.2%	11.6%
2013	-2.9%	-5.9%	-4.0%	-0.2%	20.3%	88.1%	13.1%
2014	11.4%	18.6%	19.5%	28.5%	36.6%	27.1%	24.6%
2015	-7.9%	-8.1%	-15.7%	-21.8%	-18.7%	-25.8%	-17.5%
2016	4.8%	14.2%	17.6%	31.4%	18.1%	46.3%	22.7%
2017	3.1%	2.7%	0.3%	-3.3%	-3.7%	-16.7%	-4.4%
2018	13.4%	3.9%	8.7%	8.8%	0.0%	27.6%	10.7%
2019	7.3%	6.7%	9.0%	19.4%	32.3%	5.6%	14.0%



Appendix – TPI Excess

Type 2 KPIs



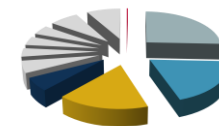
Private Car Comprehensive Excess TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 7% pa)

Accident Year	£100k - 250k	£250k - 500k	£500k - 1m	£1m - 2m	£2m to 5m	> £5m
Frequency exc Nils (finishing in layer) (claims per million policy years)						
2010	42.6	14.2	5.6	2.8	1.9	1.4
2011	45.7	13.5	7.2	4.2	2.0	1.5
2012	46.8	13.8	7.1	4.5	2.9	1.3
2013	42.6	12.8	5.7	3.8	2.3	1.9
2014	39.0	13.6	6.0	3.9	3.2	1.9
2015	34.5	14.1	5.0	3.0	2.5	1.3
2016	35.2	12.7	5.2	3.4	3.0	1.6
2017	32.7	11.9	5.3	2.9	2.8	1.5
2018	36.6	12.4	5.1	3.3	2.8	1.5
2019	37.5	12.9	4.6	3.4	3.1	1.7
Average Cost (£000s)						
2010	156	340	693	1,458	2,979	7,106
2011	162	361	703	1,441	3,628	8,669
2012	173	387	782	1,606	3,506	9,613
2013	187	412	837	1,664	3,617	11,260
2014	204	449	893	1,820	4,313	12,805
2015	209	487	995	1,910	4,831	13,741
2016	217	531	1,010	2,133	4,827	15,924
2017	239	576	1,093	2,203	4,870	15,147
2018	257	583	1,143	2,348	5,012	18,084
2019	269	614	1,173	2,565	5,761	17,765
Burning Cost (£)						
2010	6.6	4.8	3.9	4.1	5.6	9.7
2011	7.4	4.9	5.0	6.1	7.2	13.2
2012	8.1	5.4	5.5	7.2	10.0	12.5
2013	8.0	5.3	4.7	6.3	8.5	20.9
2014	8.0	6.1	5.3	7.1	13.8	24.8
2015	7.2	6.9	4.9	5.7	11.9	18.4
2016	7.7	6.7	5.2	7.2	14.5	24.9
2017	7.8	6.9	5.7	6.3	13.7	23.3
2018	9.4	7.2	5.9	7.7	14.2	26.6
2019	10.1	7.9	5.3	8.6	17.8	30.6



Appendix – TPI Excess

Type 2 Change in KPIs



Private Car Comprehensive Excess TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 7% pa)

Accident Year	£100k - 250k	£250k - 500k	£500k - 1m	£1m - 2m	£2m to 5m	> £5m
Change in Frequency exc Nilts (finishing in layer)						
2010	-1.7%	-13.4%	-19.2%	-15.1%	-41.5%	-23.0%
2011	7.4%	-4.5%	28.8%	48.6%	4.3%	11.6%
2012	2.3%	2.3%	-1.2%	6.3%	44.5%	-14.5%
2013	-9.0%	-7.4%	-19.9%	-15.3%	-17.9%	42.5%
2014	-8.3%	5.7%	5.5%	3.5%	37.1%	4.4%
2015	-11.5%	3.8%	-17.0%	-24.1%	-23.3%	-31.1%
2016	2.0%	-9.9%	4.6%	12.6%	22.4%	16.9%
2017	-7.2%	-6.1%	1.2%	-14.4%	-6.9%	-1.4%
2018	11.9%	4.1%	-2.5%	13.3%	1.3%	-4.4%
2019	2.5%	4.1%	-11.1%	3.1%	9.1%	17.0%
Change in Average Cost						
2010	11.3%	4.3%	1.6%	12.1%	-0.2%	-10.6%
2011	3.9%	6.2%	1.6%	-1.2%	21.8%	22.0%
2012	7.3%	7.1%	11.1%	11.5%	-3.4%	10.9%
2013	7.8%	6.6%	7.0%	3.6%	3.2%	17.1%
2014	9.2%	8.9%	6.7%	9.4%	19.2%	13.7%
2015	2.4%	8.6%	11.4%	4.9%	12.0%	7.3%
2016	4.0%	8.9%	1.5%	11.7%	-0.1%	15.9%
2017	9.9%	8.5%	8.2%	3.3%	0.9%	-4.9%
2018	7.4%	1.3%	4.5%	6.6%	2.9%	19.4%
2019	4.9%	5.3%	2.7%	9.2%	15.0%	-1.8%
Change in Burning Cost						
2010	9.5%	-9.7%	-17.9%	-4.8%	-41.6%	-31.2%
2011	11.6%	1.4%	30.9%	46.8%	27.1%	36.2%
2012	9.8%	9.6%	9.8%	18.5%	39.7%	-5.2%
2013	-2.0%	-1.3%	-14.3%	-12.2%	-15.3%	66.9%
2014	0.2%	15.1%	12.5%	13.2%	63.4%	18.7%
2015	-9.4%	12.7%	-7.5%	-20.3%	-14.1%	-26.0%
2016	6.0%	-1.8%	6.2%	25.8%	22.3%	35.5%
2017	2.0%	1.9%	9.5%	-11.6%	-6.1%	-6.3%
2018	20.2%	5.4%	1.9%	20.8%	4.2%	14.2%
2019	7.5%	9.7%	-8.7%	12.6%	25.4%	14.9%

