Rising Auto Costs

CAS Ratemaking, Product and Modeling Seminar
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Rate Actions Helped Personal Auto Results. Not So for Commercial Auto.

Source: National Association of Insurance Commissioners data, sourced from S&P Global Market Intelligence; Insurance Information Institute.
## Results by Line

### Incurred Loss Ratios

<table>
<thead>
<tr>
<th>LOB</th>
<th>2018</th>
<th>2017</th>
<th>Change From Year Earlier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Auto Liab</td>
<td>66</td>
<td>70</td>
<td>-4.7</td>
</tr>
<tr>
<td>Homeowners</td>
<td>63</td>
<td>70</td>
<td>-7.1</td>
</tr>
<tr>
<td>PhysDam (PA, CA)</td>
<td>60</td>
<td>67</td>
<td>-7.0</td>
</tr>
<tr>
<td>GL (incl Products)</td>
<td>57</td>
<td>55</td>
<td>2.6</td>
</tr>
<tr>
<td>WC</td>
<td>48</td>
<td>54</td>
<td>-6.0</td>
</tr>
<tr>
<td>Fire &amp; Allied Lines</td>
<td>66</td>
<td>118</td>
<td>-51.9</td>
</tr>
<tr>
<td>CMP</td>
<td>58</td>
<td>63</td>
<td>-5.3</td>
</tr>
<tr>
<td>Comm Auto Liab</td>
<td>70</td>
<td>69</td>
<td>0.9</td>
</tr>
<tr>
<td>Other</td>
<td>44</td>
<td>50</td>
<td>-6.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>59</strong></td>
<td><strong>67</strong></td>
<td><strong>-7.6</strong></td>
</tr>
</tbody>
</table>

Through Q3. Differences may not add up due to rounding. Sources: NAIC data from S&P Global Intelligence, Insurance Information Institute.
Rising Accident Costs
All Coverages Affected
Increase in Loss Costs, 2016:Q3–2018:Q3

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Increase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bodily Injury</td>
<td>6.7%</td>
</tr>
<tr>
<td>Property Damage</td>
<td>3.8%</td>
</tr>
<tr>
<td>Personal Injury Protection</td>
<td>4.8%</td>
</tr>
<tr>
<td>Collision</td>
<td>3.5%</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>-4.0%</td>
</tr>
</tbody>
</table>

From 2016 to 2018, the cost of accidents has risen dramatically. By contrast, consumer prices overall rose 6.6 percent from 2016 to 2018.

Source: Fast Track Monitoring System.
Collision Claims Frequency

Claim Frequency Has Been Flat Since 2014.

*Four Quarters Ending in September.
Source: Fast Track Monitoring System.
Collision Claims: Severity Trending Higher

The Great Recession and High Fuel Prices Helped to Temper Claim Severity, But These Forces Have Clearly Reversed, Consistent with Experience from Past Recoveries.

*Four Quarters Ending in September. 
Source: Fast Track Monitoring System
Road Safety

- Better Economy = More Drivers = More Accidents
- Safety Devices Can Be Expensive
- Expensive auto parts
- Distracted driving
- Faster driving
- Legalized marijuana
- It's Not Funny
- 14 Percent of Injury Crashes
- Speed Still Kills
- Why rates go up

Source: Insurance Information Institute research.
America is Driving More Again

Tremendous Growth In Miles Driven. The More People Drive, The More Frequently They Get Into Accidents.

*Moving 12-month total vs. prior year through November. Sources: Federal Highway Administration; Insurance Information Institute.
The More Miles People Drive, the More Likely They are to Get in an Accident, Helping Drive Claim Frequency Higher.

Sources: Federal Highway Administration; Rolling four-quarter average frequency from Fast Track Monitoring System; Insurance Institute for Highway Safety; Insurance Information Institute.
Severity: Driving Fatalities Have Peaked

Annual Change in Motor Vehicle Deaths

Seatbelt Use Rose to 62% of Drivers, From 49% in ‘90

Big Drop-off Due to the Great Recession

Driving Has Been Getting Safer for Decades, But Recent Trend is Discouraging— over 40,000 Deaths in 2016

Sources: National Safety Council, Insurance Information Institute.
*2018 estimate of 40,000 deaths
Auto Repair: Complexity Grows

More Cool Stuff to Fix

More Parts, More Labor: Higher Costs

- Parts/Collision Claim on Current Year Car
  - 2001: 10.9
  - 2009: 11.9 (22% Increase)
  - 2017: 14.5

Electronics Add to Cost, Complexity

- Millions of Lines of Code
  - Ford F150: 150
  - Facebook: 60
  - Boeing 787: 7

Electronics: 40-50% of cost of vehicle
- Pre-repair scan: $63
- Post-repair scan: $93
- Calibration labor: sublet at $150
- OEM: 98% of camera/sensors

* Property Damage Only.
SOURCES: CCC Information Services; Ford Motor Co.;
Fixing a Bumper

... On an Entry-Level Luxury Car (~$35K)

2014 Cost vs. 2016 Cost

What Has Changed?

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grille: Distance Sensor</td>
<td>$0</td>
<td>$2,818</td>
</tr>
<tr>
<td>Headlamp Assembly</td>
<td>394</td>
<td>918</td>
</tr>
<tr>
<td>Mechanical Labor</td>
<td>0</td>
<td>108</td>
</tr>
</tbody>
</table>

Fewer Accidents, Higher Costs

- Parts: 130% Higher
- Labor: 18% Higher
- Total cost: $1,705 higher

2016 vehicle has LED headlights and adaptive cruise control.
SOURCE: Liberty Mutual Insurance.
What About Distractions?
It’s A Problem. Is It Growing?

What We Do Behind The Wheel

<table>
<thead>
<tr>
<th>Activity</th>
<th>2009</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talk on Phone</td>
<td>65%</td>
<td>51%</td>
</tr>
<tr>
<td>Text</td>
<td>31%</td>
<td>36%</td>
</tr>
<tr>
<td>Surf the Net</td>
<td>13%</td>
<td>29%</td>
</tr>
</tbody>
</table>

But Impact Is Not Clear

Percentage of Crashes Involving Distraction

- Talking
- Texting
- Surfing the Net

SOURCES: State Farm, National Highway Transportation Safety Administration (distraction.gov)
Weed Spreads Like Wildfire. Insurers Caught in the Middle

Current marijuana laws by state

- Fully legal
- Medical use legal and recreational use decriminalized
- Medical use legal
- Recreational use decriminalized
- Fully illegal

Sources: – Map - National Journal; Ballotpedia, 2019
Collision Frequency – IIHS, LEGAL POT: Crashes are up in states with retail sales, October 18, 2018
Thank you for your time and your attention!