2014-2015 BAS Case Competition

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Farmers Insurance Group

&

Casualty Actuarial Society
Automobile Insurance

Accidents Happen

1st Party Coverage Claims
Auto physical damage

3rd Party Coverage Claims
Auto bodily injury liability
Auto property damage liability
Scenario 1 - 1st Party Coverage

- UCLA Employee, driving a university vehicle, is involved in a single car accident
- Cost of Damages $5,000* to repair the vehicle
- Insurance Cost to UCLA
  - $5,000* in Auto physical damage

*costs provided as an example
Scenario 2 - 3rd Party Coverage

- UCLA Employee, driving a university vehicle, is at fault in an accident with another car
- Cost of damages to the university vehicle is estimated at $5,000 and $5,000 for the other vehicle in the accident
- Cost of injuries to the other party is $10,000

- Insurance Cost to UCLA*
  - Auto physical damage - $5,000
  - Auto property damage liability - $5,000
  - Auto bodily injury liability - $10,000
  - Total $20,000

*costs provided as an example
Claim Characteristics

1\textsuperscript{st} and 3\textsuperscript{rd} party claims

- 1\textsuperscript{st} party claims occur more frequently. Cost includes repairs on the first party’s own vehicle.
- 3\textsuperscript{rd} party claims occur less frequently but are more costly than 1\textsuperscript{st} party claims.
- 3\textsuperscript{rd} party claims include vehicle repair for the other party and possibly medical bills for any injuries.
- Both types of claims are included in the dataset supporting the insurance costs. The breakdown by claim dollars and number of claims are as follows:

<table>
<thead>
<tr>
<th>Auto Program includes the following coverages:</th>
<th>% of Total Loss</th>
<th>% of Total Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Auto physical damage</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>* Auto property damage liability</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>* Auto bodily injury liability</td>
<td>30%</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Why Self-Insure?

Here's a simple illustration of how a Fully-Insured and Self-Funded program might compare.

- **Fully-Insured**
  - Premium
  - Taxes
  - Profit
  - Reserves
  - Administrative Expenses
  - Claims

- **Self-funded**
  - Savings
  - Stop-Loss Premiums
  - Administrative Expenses
  - Claims
What is a property & casualty actuary?

From the CAS Student Central Website

The CAS defines a property and casualty actuary as “a professional skilled in the analysis, evaluation and management of the financial implications of future contingent events primarily with respect to general insurance, including property, casualty, and similar risk exposures. A [property and] casualty actuary has practical knowledge of how these various risks interact with each other and the environment in which these risks occur.”

To read about what other P&C actuaries say about our profession, please follow the link below:

[what is a P&C Actuary](#)