Estimating Reserving Uncertainty

32nd ANNUAL GIRO CONVENTION
The Imperial Hotel, Blackpool

Members of the Working Party

- Mohammad Khan
- Colum D’Auria
- Hanna Kam
- Jennifer Kang
- Christian Kortebein
- Anita Morton
- James Toller
- James Upson

What were we asked to do?

Broadly:

- Look at methods in use for estimating reserving uncertainty only
- Communicating reserving uncertainty would be covered by GRIT
Why were we asked?

Increasingly members of the Profession are being asked to quantify:

- what confidence level the held reserve is compared to the actuarial best estimate
- a reasonable range of outcomes around the actuarial best estimate
- how likely future payments will be X% higher than the held reserve

Ranges – some definitions from GRIT

**Range of reasonable best estimates:**

“The actuary’s view of the range of best estimates that a reasonable actuary could determine based on the available information…”

**Range of probable outcomes:**

“The range of possible outcomes falling between the 10th (or 5th) percentile and the 90th (or 95th) of the distribution of possible outcomes calculated by the actuary in his reserving work.”

Impromptu Survey – Motor BI
Survey - Range of reasonable best estimates for Motor BI

Survey Results – Reaction to other information

Anecdotal Survey - How many methods/models are people using?
Anecdotal Survey - What methods/models are people using?

What did we find?

- Limited
- Purpose of modelling
- Judgement
- Consistent framework (?)

Going forward

*Are we ready?*