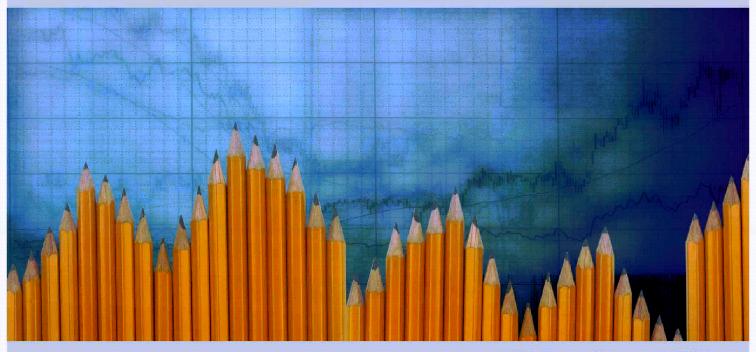
September 26, 2018

New Jersey School Insurance Group

Board of Directors Meeting

Presented by: Stacy L.T. Mina, FCAS, MAAA, CPCU



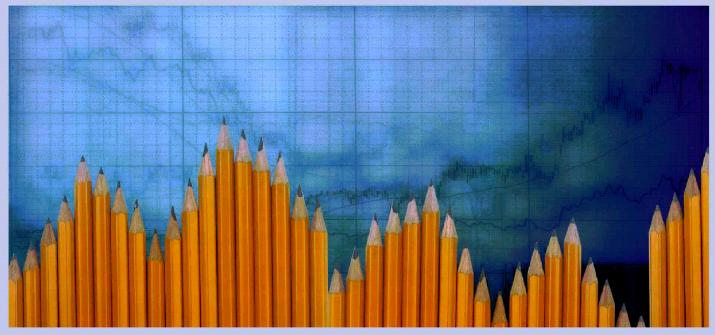
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Willis Towers Watson I.I'I'I.I

Agenda

- Scope and Distribution
- Indicated Loss & ALAE Liabilities as of June 30, 2018
- Potential Rate Implications for Program Year 2019-20
- Questions
- Appendix

Scope and Distribution



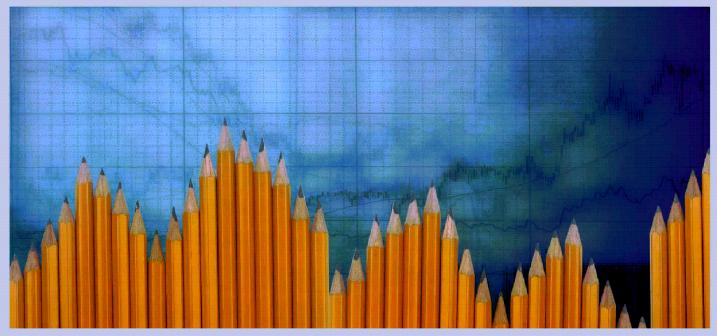
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Scope and Distribution

- NJSIG retained Willis Towers Watson to prepare an actuarial analysis of unpaid loss and ALAE as of June 30, 2018
- Willis Towers Watson presented the results of its review in a draft report dated August 20, 2018
- Estimates are produced on a net of reinsurance and salvage/subrogation basis
- The report provides unpaid loss estimates at an actuarial central estimate and above the central estimate
- The following slides provide a high-level summary of Willis Towers Watson's report
- Any conclusions drawn from these slides may be inappropriate and/or incomplete without a thorough reading of the full report
- The distribution of the slides contained herein is limited to the management of NJSIG and its Board of Trustees
- Ann M. Conway and Stacy L.T. Mina are members of the American Academy of Actuaries and meet its qualification standards to render the actuarial opinion contained herein

Indicated Loss & ALAE Liabilities as of June 30, 2018

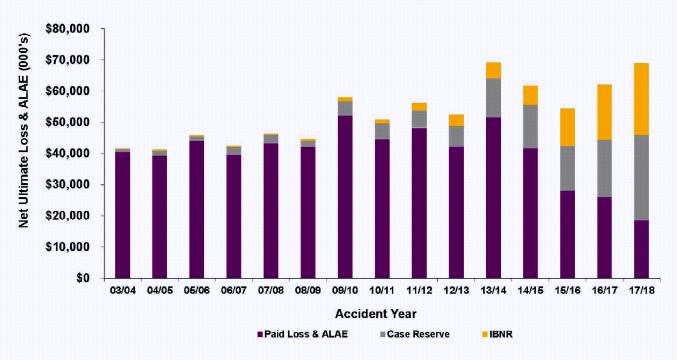


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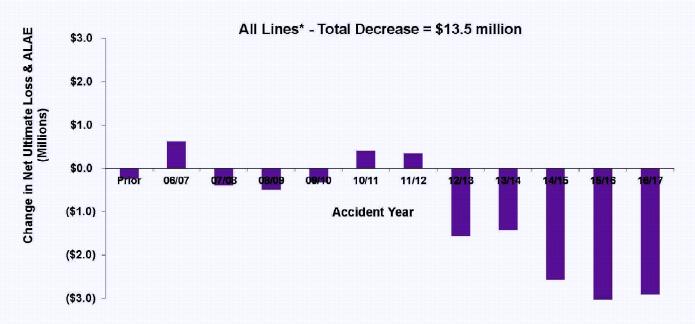
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As an accident year ages, IBNR generally decreases and paid losses increase; more uncertainty in recent years' estimates

Total Net Ultimate Loss & ALAE by Component Central Estimates (\$000s)

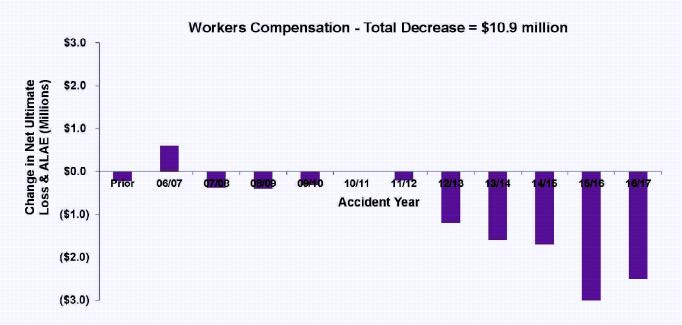


Emergence during fiscal year 2017-2018 was favorable



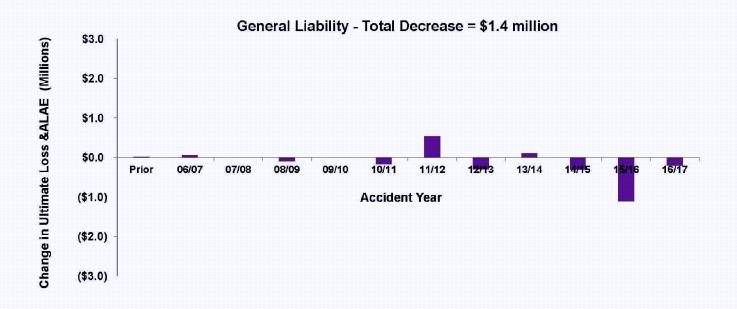
- Workers compensation, general liability and auto liability experienced overall improvement
- Property deteriorated driven by experience in the16/17 year
- E&O has a re-opened claim with case reserves of \$30,000 and \$2,000 in IBNR

Favorable workers compensation experience is severity-driven

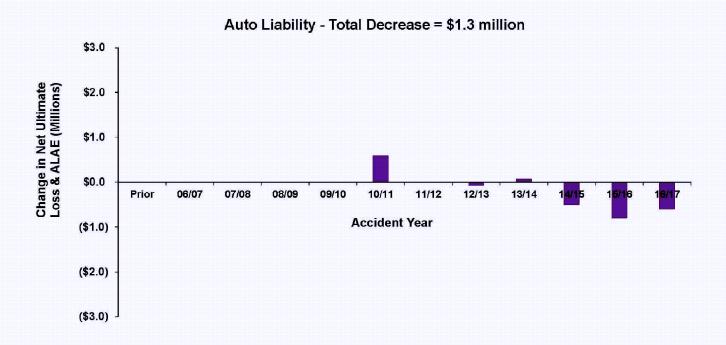


- Improvement in the 12/13 through 16/17 years is driven by stable severity
- Deterioration in the 06/07 year is driven by a single large loss

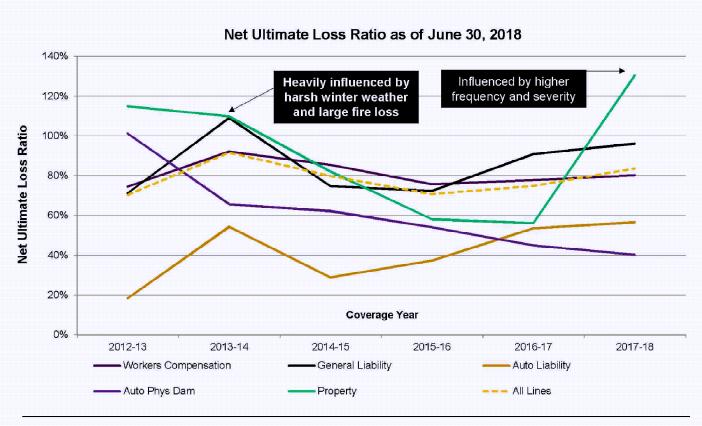
General Liability emergence is slightly favorable, driven by 15/16 results



Auto Liability emergence is favorable for the most recent years



The 2017-18 net loss and ALAE ratio is consistent with the prior analyses for all lines combined



Unallocated Loss Adjustment Expense Liability

- We use a blend of NJSIG and insurance industry data
- Indicated liabilities at central estimate increased from \$8.3 to \$8.4 million; driven by industry benchmark increases and slightly higher expected NJSIG claim inventory
- Booked reserves are \$8.9 million (65% confidence level)

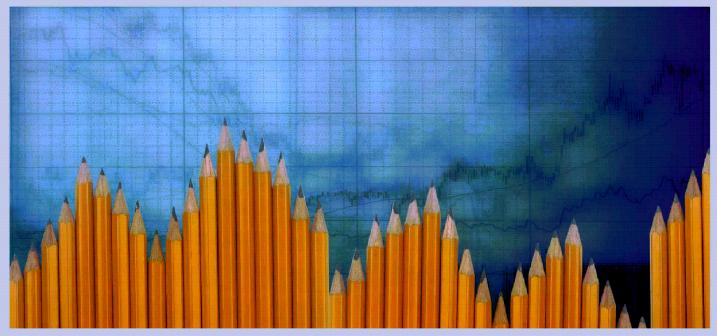
Loss and LAE reserve variability can significantly impact surplus

Impact of Variability on Booked Loss and LAE Reserves and Surplus (\$ Millions)

	Liabilities @6/30/2018	Difference versus Booked	Surplus
Booked*	\$216.5	\$	\$94.1
Central Estimate	204.6	(12.0)	106.0
65% Percentile	216.5	0.0	94.1
75% Percentile	227.3	10.8	83.3
90% Percentile	250.6	34.1	60.0

^{*}Booked numbers are preliminary and prior to any safety grant declaration.

Potential Rate Implications for Program Year 2019-20



Preliminary Rate Indications

- The results that follow are based on our June 30, 2018 liability analysis; actual rate indications will be based on data evaluated as of September 30, 2018
- Willis Towers Watson has not performed an in-depth analysis of rates at this point

The July 1, 2019 rate level indication implies a slight increase

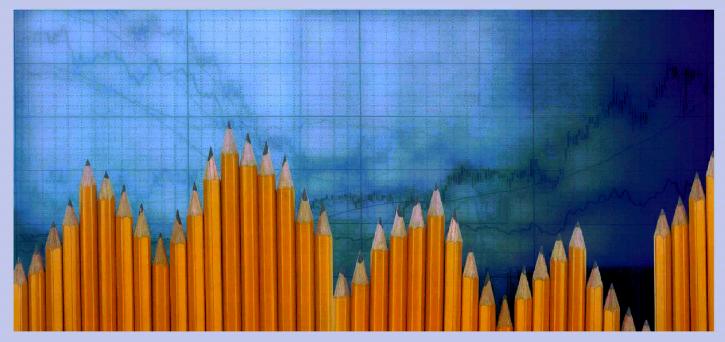
Coverage	Initial Expected 2019-20 Rate Change	Direction of 2019-20 Rate Indication from Initial Expected
Workers Compensation	0.9%	Lower
General Liability	16.7%	Lower
Auto Liability	(9.1)%	Lower
Auto Physical Damage	33.6%	Flat
Property	(16.7)%	Flat
Total	0.6%	Lower

The most uncertainty relates to Property reinsurance markets

Questions and Discussion



Appendix



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There is uncertainty inherent in the estimates of unpaid loss and ALAE

- Our estimates are based on historical claim and loss information
- There is no guarantee that estimates will prove to be accurate, and will change with future updates as new data emerges
- Multiple projection techniques (methods and models) are used, which provide various indications of the ultimate loss and LAE
- The confidence levels provided here are not all inclusive
- These estimates are based on NJSIG's historical experience and do not reflect extreme events that have a remote possibility of occurring

There is uncertainty inherent in the estimates of unpaid loss and ALAE (cont)

The inherent uncertainty associated with ultimate loss and LAE estimates is magnified in this case due to the following:

- NJSIG's mix of business is weighted toward coverages such as workers compensation and general liability for which the estimation of unpaid loss is more uncertain than for shorter-tailed property and casualty lines.
- NJSIG has relatively high per occurrence retentions, which increases the uncertainty associated with our liability estimates.
- The geographic (New Jersey) and industry (schools) concentration of NJSIG could cause adverse results due to legislative or judicial changes or catastrophic events (e.g., hurricanes).

Glossary

AL – Automobile liability

ALAE – Allocated loss adjustment expense

APD - Automobile physical damage

Case Reserves – claim value estimate set by adjuster (reported loss – paid loss)

E&O - Errors and omissions

Frequency – Claims per unit of exposure

GL - General Liability

IBNR - Incurred But Not Reported (ultimate loss - reported loss)

LAE - Loss adjustment expense (ALAE + ULAE)

Severity - Average loss per claim

ULAE - Unallocated loss adjustment expense

WC - Workers compensation