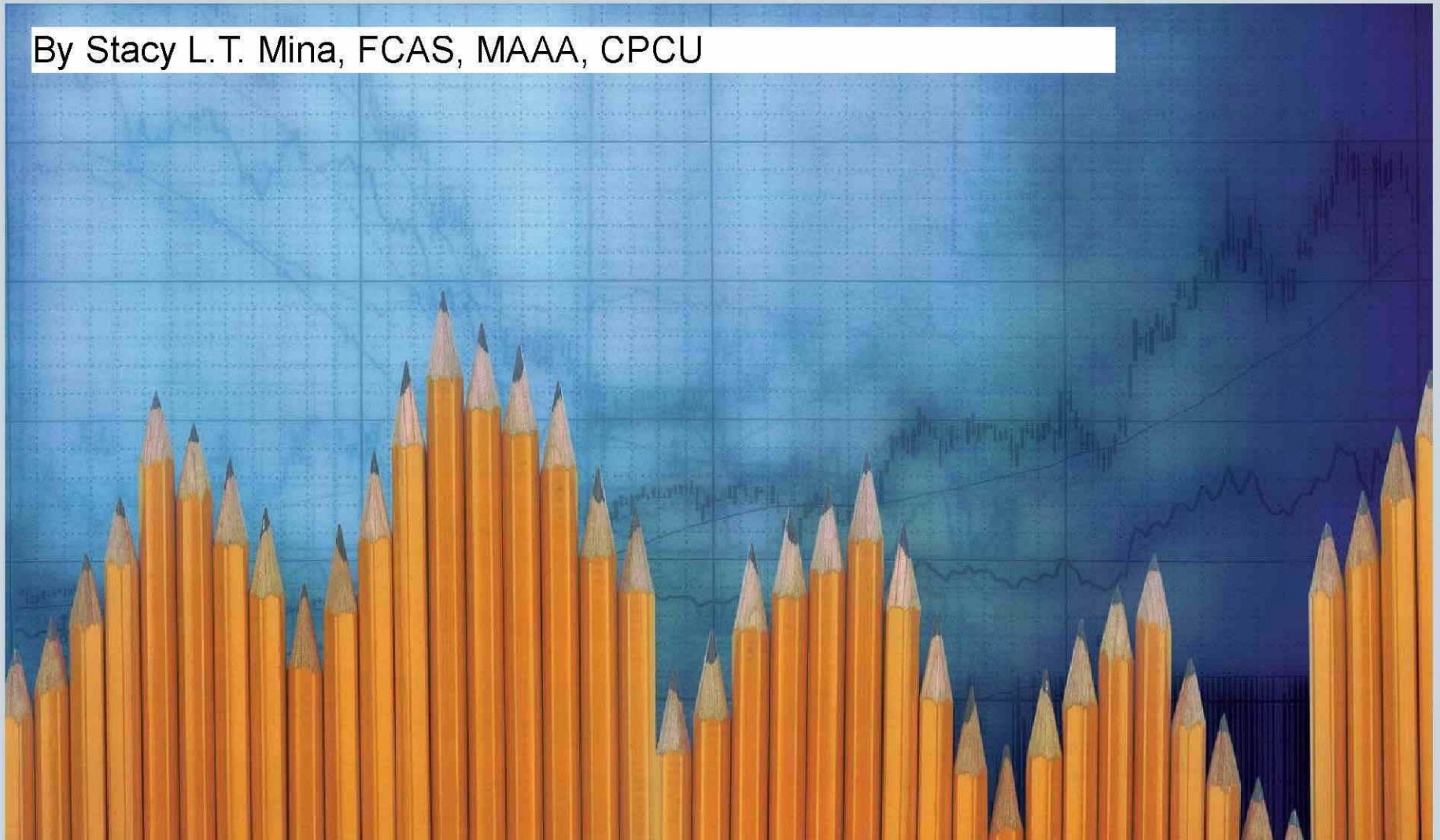


New Jersey Schools Insurance Group Board of Trustee Meeting

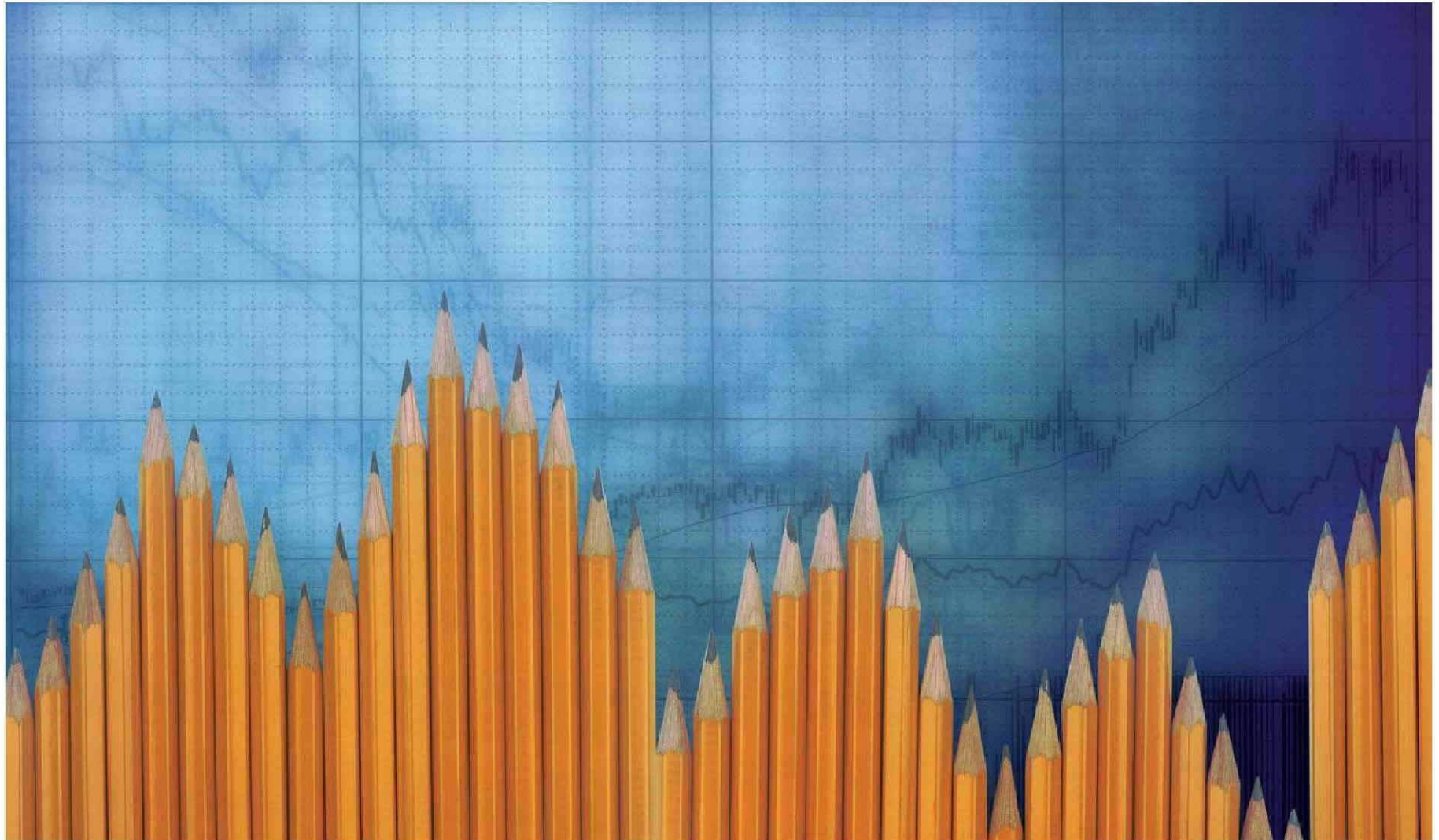
November 28, 2018

By Stacy L.T. Mina, FCAS, MAAA, CPCU



Agenda

- Purpose and Scope / Distribution / Reliances and Limitations
- Estimating Rate Level Changes
- Indicated Rate Changes for July 1, 2019
- Miscellaneous Rate Changes
- Questions and Discussion



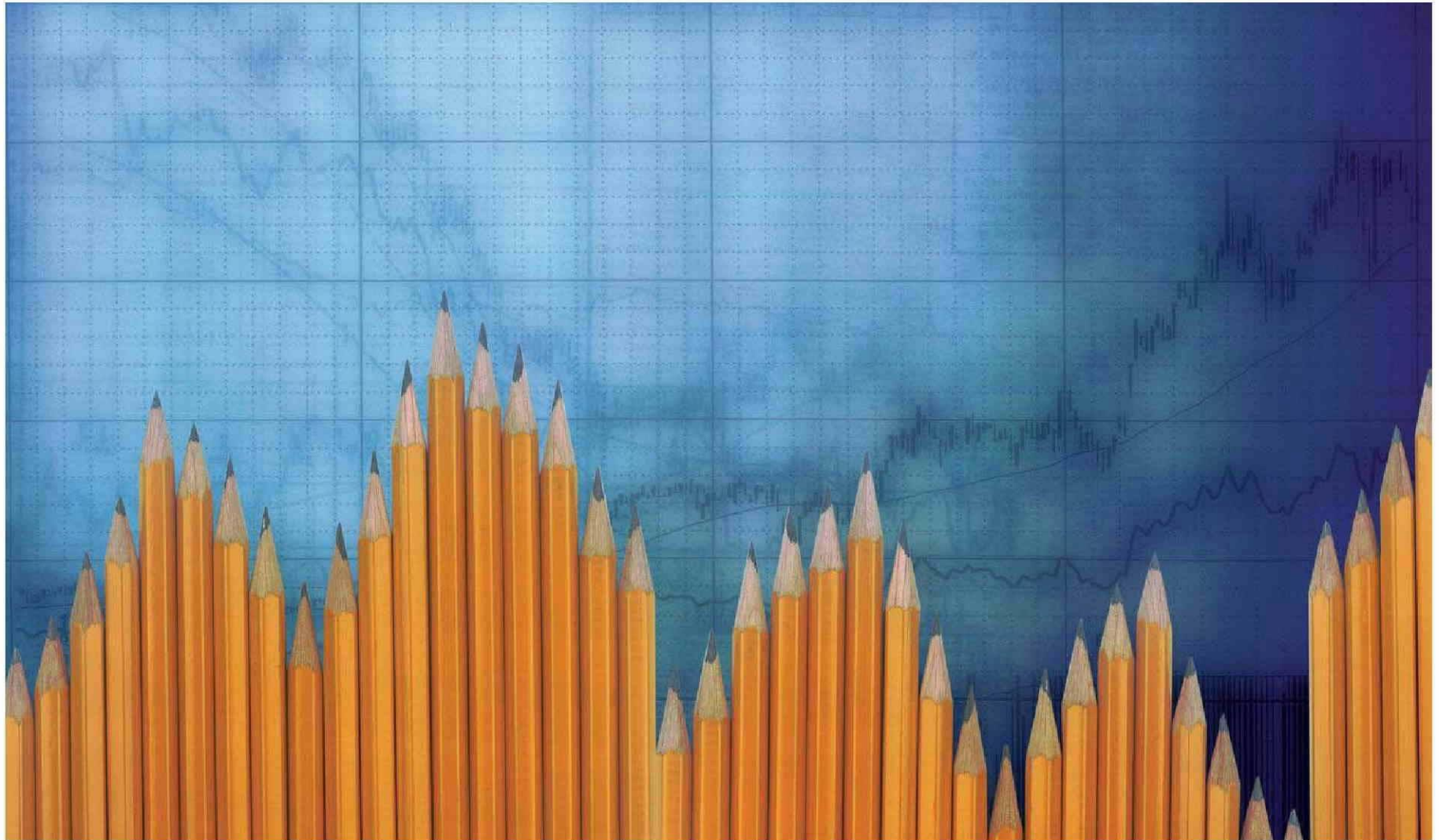
Purpose and Scope / Distribution / Reliances and Limitations

Basic Details

- Data is evaluated as of September 30, 2018
 - Update to September 30, 2017 analysis
 - Overall pricing based on current members' experience
 - Miscellaneous rates incorporate data for all members where available
- Willis Towers Watson presented the overall results of its review in a draft report dated November 16, 2018 and the miscellaneous coverage results in a draft report dated November 21, 2018
- 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 report and presentation were prepared for the internal use of NJSIG management to present our findings with respect to our analysis, and it is our understanding that our findings will be considered for the purpose of establishing 2019/20 rate levels
- Distribution is limited to the management of NJSIG and its excess insurers and regulators (the Recipients)
 - It may not be further distributed, disclosed, copied or otherwise provided to any other party
 - Each Recipient is responsible for its own due diligence and will place no reliance on this report that would result in the creation of any duty or liability by Willis Towers Watson to the Recipient
- Stacy Mina is a member of the American Academy of Actuaries and meets its qualification standards to render this actuarial opinion

Reliances and Limitations

- There is inherent uncertainty in the estimation of prospective loss and ALAE
 - Claims are subject to outcomes that have not yet occurred; actual emergence will vary
 - NJSIG has relatively high per occurrence retentions, particularly for E&O
 - E&O is a high severity/low frequency exposure, where a single claim can have a significant impact
 - Small volumes of data tend to be volatile as seen for E&O, some of the WC sub funds and the Miscellaneous Rate coverages
 - There is no guarantee the 2019/20 rate indications will prove to be adequate or not excessive
- The range implied by these estimates is not all inclusive
 - Estimates are based on NJSIG historical experience and do not reflect extreme events that have a remote possibility of occurring
- We have relied on historical and other quantitative and qualitative information provided by NJSIG
 - We have not audited this information but did review for reasonableness and consistency

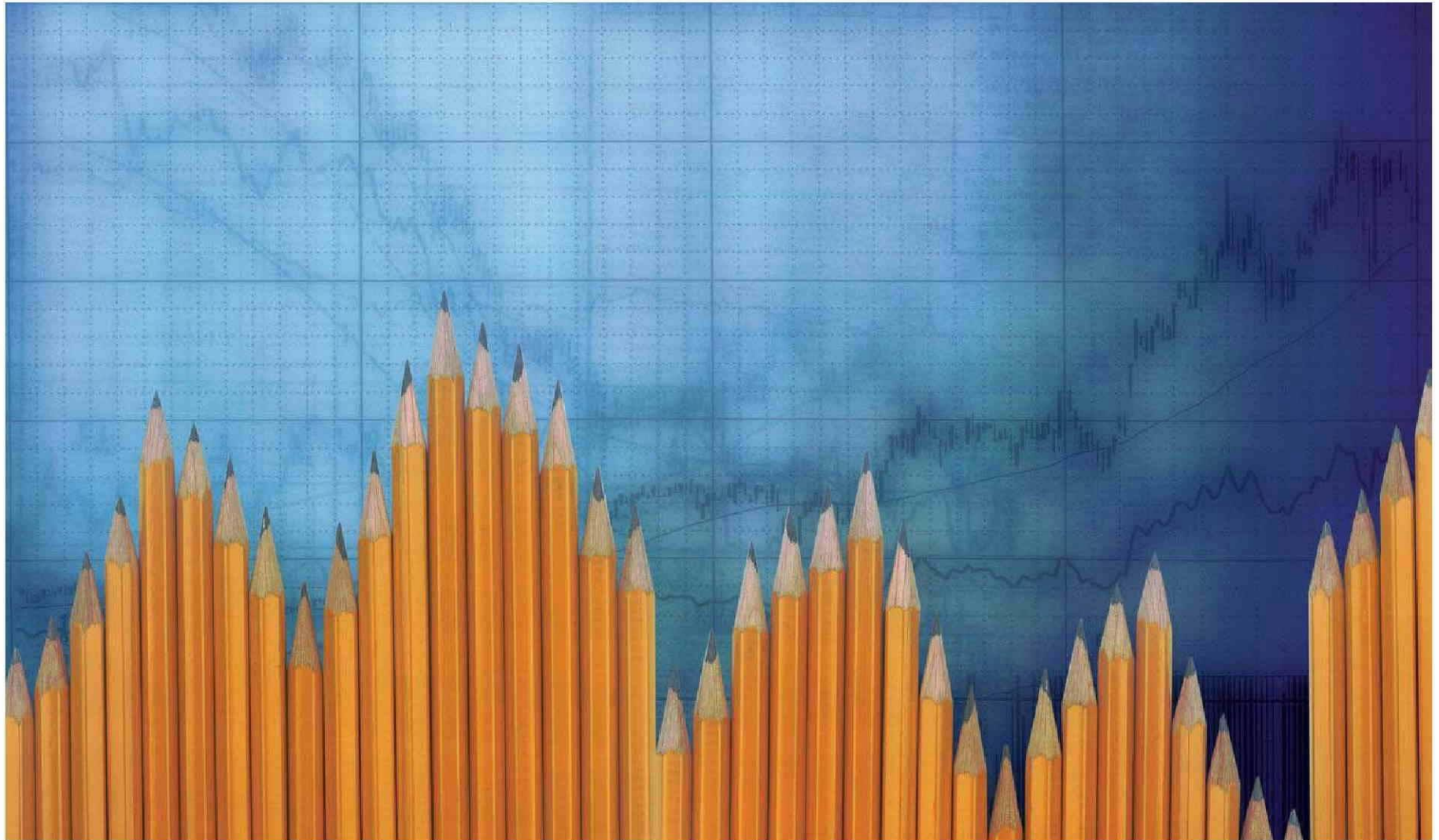


Estimating Rate Level Changes

General Ratemaking Approach

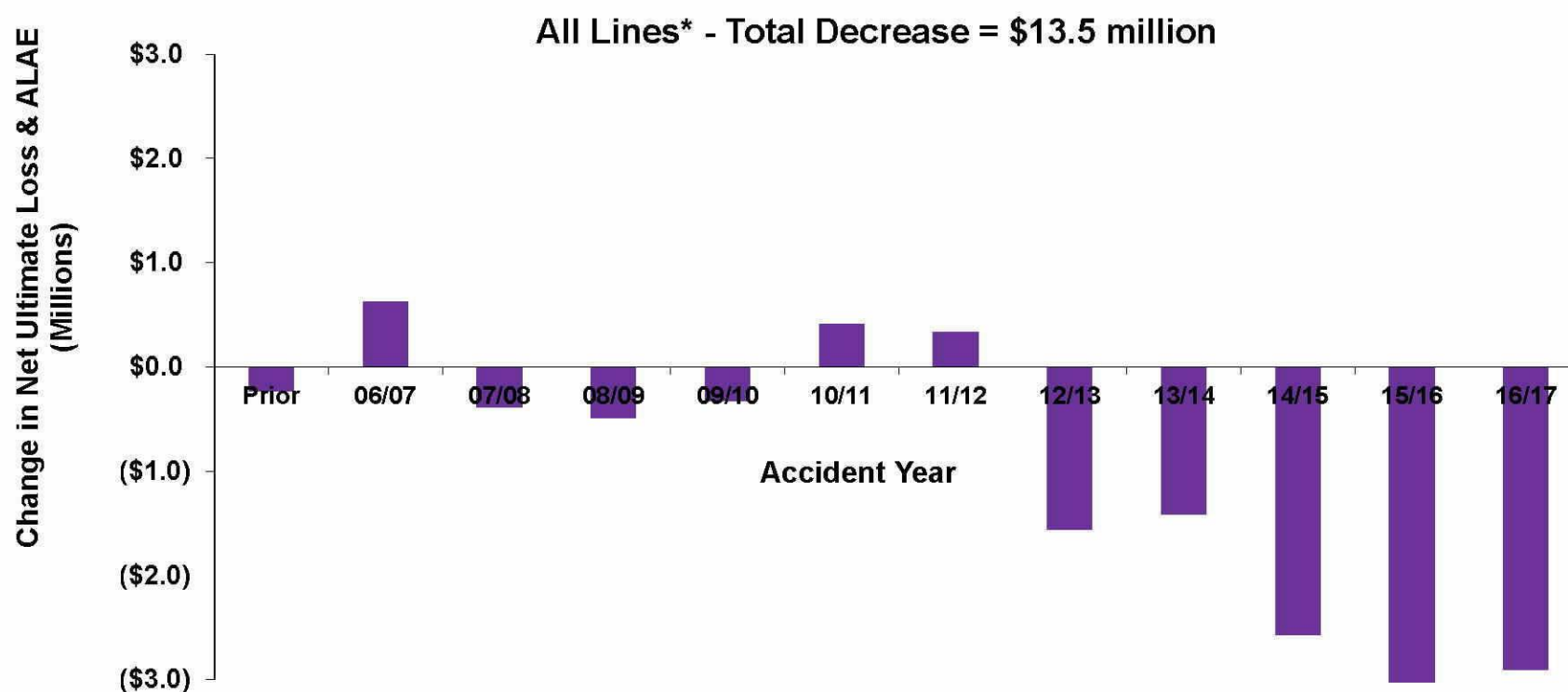


- We have relied on historical and other quantitative and qualitative information provided by NJSIG
- For miscellaneous rates, we have used a combination of NJSIG historical data and industry data; approaches vary by coverage



Indicated Rate Changes for July 1, 2019

Liability Analysis as of June 30, 2018 produced favorable experience in most years which drives rate indications



- There was overall improvement with variation by coverage
- Property deteriorated driven by 16/17 experience
- Favorable experience in the more recent years has a larger impact on rate indications

The analysis produces a range of rate level indications

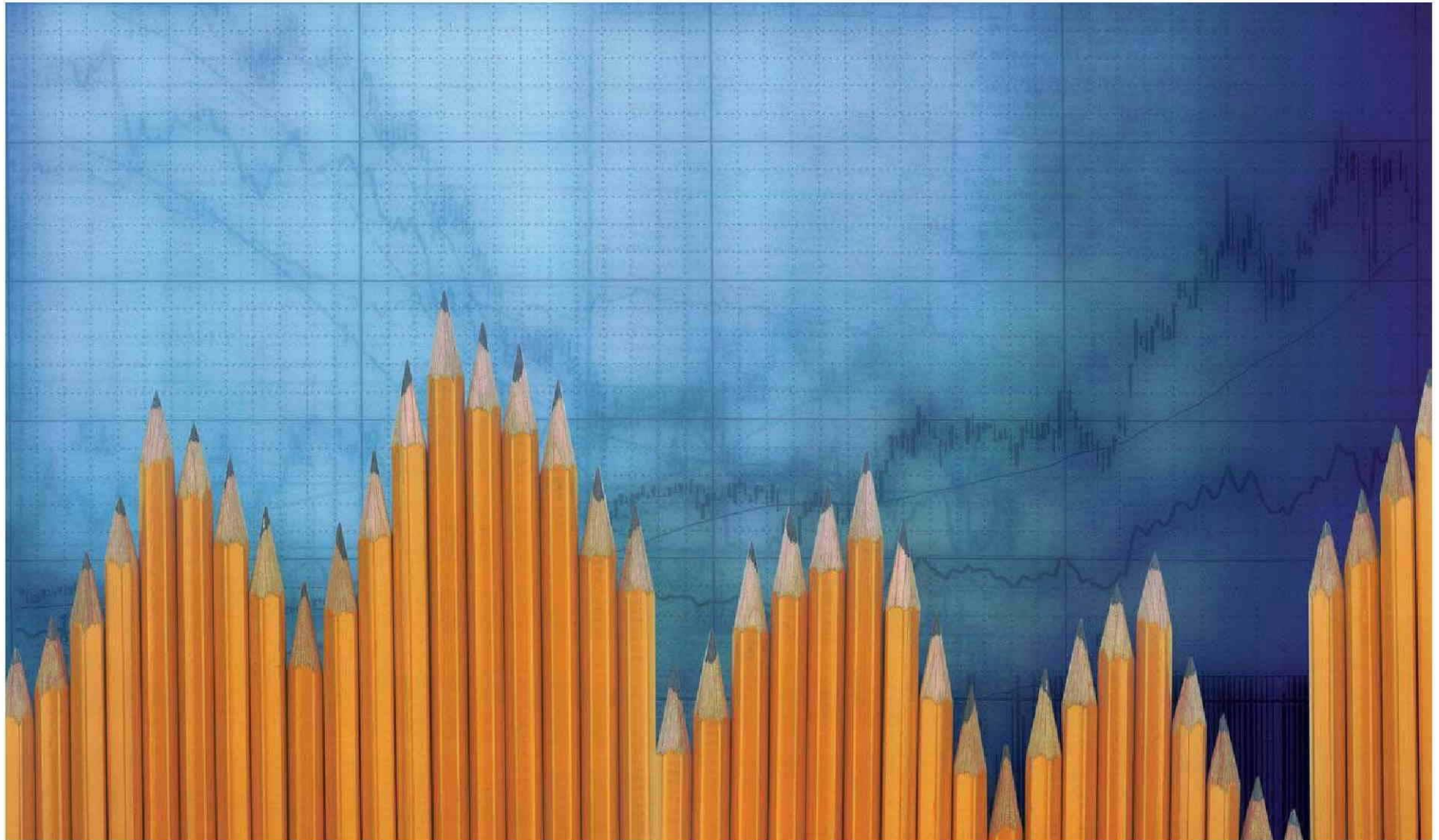
Coverage	Estimated 2019-20 Premium (\$000s)	Estimated 2019 – 2020 Retained Rate Change			
		Low Reasonable	Central Estimate	High Reasonable	Proposed Change
Workers Compensation	\$71,567	-1.9%	+0.1%	+2.1%	+3.0%
General Liability	5,862	+55.5%	+64.2%	+73.7%	+3.0%
Auto Liability	3,856	-30.5%	-22.7%	-13.6%	+3.0%
Auto Physical Damage	786	-16.8%	-14.0%	-10.5%	+3.0%
Errors and Omissions	14,397	-12.6%	-7.8%	-1.4%	TBD
Property	5,577	+5.5%	+13.4%	+21.3%	+3.0%
Total	102,045	-0.9%	+2.4%	+6.0%	TBD
Total Excluding E&O	87,648	+1.0%	+4.1%	+7.3%	+3.0%

- The overall proposed rate level change for retained limits is slightly below the central estimate, excluding errors and omissions

There were a number of changes between the 2019/20 preliminary and final rate indications

Coverage	Preliminary	Final
Workers Compensation	+1.9%	+0.1%
General Liability	+16.2%	+64.2%
Auto Liability	-12.4%	-22.7%
Auto Physical Damage	+34.1%	-14.0%
Errors and Omissions	+0.6%	-7.8%
Property	-17.5%	+13.4%
Total	+0.3%	+2.4%
Total Excl E&O	+0.3%	+4.1%

- Loss experience was favorable for all coverages except general liability and property
- Changes in the impact of individual rating significant for all coverages except workers compensation
- General liability was impacted by deteriorating claim frequency in the most recent two years and changes in individual rating
- Property was impacted by individual rating and loss experience
- Auto physical damage loss indications impacted by more detail on bus rating



Miscellaneous Rate Changes

Miscellaneous Rates

- We were asked to review a number of miscellaneous rates
 - Property Coastal and Inland Rate Relativity for First \$1 Million
 - Crime and Bond Rates
 - Electronic Data Processing (EDP) Rates
 - Auto Hired and Non-Owned Rates
 - Auto Physical Damage - Actual Cash Value (ACV) versus Replacement Cost Value (RCV)
- Rate levels for these coverages do not materially impact overall rate adequacy
- The rates/rating factors can impact the relative member rate equity
- Individual member impact of proposed changes may vary considerably from the estimated average change

Property Coastal and Inland Relativity for First \$1 Million

- Currently coastal members have a higher rate than inland members for the first \$1 million and excess of \$1 million
- Review of losses below \$1 million indicates that coastal rate should be lower than inland rate
 - Coastal rate would decrease 15.5% while inland rate would increase 2.1%
 - Estimates are based on NJSIG historical experience for all members
- Alternative option is to make the \$1 million rate equal for both territories
 - Coastal rate decreases 13.9% while inland rate increases 1.9%
- Both options are revenue neutral (no overall premium level impact)
- Any overall rate change would be in addition to these changes

Crime and Bond Rates

- Net written premium is approximately \$599,000 or 12% of property premium
- Loss experience for 2008 through 2018 implies an approximate loss ratio of 10%
 - No large losses in historical data but given the policy limits provided, one or two catastrophic claims could exceed total annual premium
- Insurance industry rate information is limited
- Current crime rating structure is not consistently in line with industry
- Proposing to re-align all rates to appropriately reflect the exposure underlying the various limit and deductible options
 - Approximate 1% decrease in total premium
 - Members that purchase higher limits for Money/Securities and Money Order Counterfeit coverages without other crime coverages would be most affected

Electronic Data Processing (EDP) Rates

- Net written premium is approximately \$683,000 or 13% of property premium
- Insurance industry rate information is limited
- Loss experience for 2007 through 2018 implies a central estimate decrease of 88%
 - Range of -84% to -91%
 - No large losses in historical data but given the policy limits provided, one or two catastrophic claims could exceed total annual premium
- Similar to Crime, the annual premium is low as compared to coverage limits provided
- Indicated property rate increase of 13.4% and all coverages excluding E&O increase of 2.4%
 - Decrease for this coverage would exacerbate the premium need
 - Doesn't appear to be a competitive need to reduce premium

Auto Hired and Non-owned (HNOA) Rates

- Net written premium is approximately \$44,000 or 1% of combined auto liability and physical damage premium
 - 100 members purchase HNOA
 - Most prevalent manual premium is \$631
- Current rate covers both liability and physical damage
- Insurance industry rate information is limited
- Loss experience for 2010 through 2018 implies a 1% loss ratio
 - No large losses in historical data but given the policy limits provided, one large claim could exceed total annual premium
- Indicated rate increase of 2.4% for all coverages excluding E&O
 - Individual member premium is not significant to annual premium for most members
 - Doesn't appear to be a competitive need to reduce premium

Auto Physical Damage – ACV Differential to RCV Rate

- NJSIG experiences competitive issues for this coverage
 - Competitors offer RCV coverage at ACV rate
 - NJSIG's differential is between \$331 and \$635 per bus
- Estimated frequency of claims where RCV would be required is between 1% and 4%
 - 1% is based on NJSIG data
 - 4% was selected to provide a range of possible results
- Estimated differential in ACV and RCV cost by rate category selected judgmentally; variation does not have significant impact on overall result
- Total differential in ACV and RCV rates
 - Low frequency ranges from \$5 to \$23
 - High frequency ranges from \$22 to \$94
- Estimated reduction in premium
 - Low - \$285,624 for members that currently purchase RCV
 - High - \$251,174 for members that currently purchase RCV
 - Overall APD rate indication is for approximate \$110,000 reduction which would absorb about 40% of the RCV change
- Potential increase in premium if all ACV members purchased RCV which would further offset reductions above
 - Low - \$40,276 for members that currently purchase RCV
 - High - \$161,104 for members that currently purchase RCV

Questions

