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WCIRB Actuarial Committee Meeting

April 15, 2021

Agenda

1. Working Group Meeting Summaries
2. AC21-03-01: First Quarter 2021 Review of Diagnostics
3. AC20-08-04: Impact of Economic Slowdown on Pure Premium Rate Indications
4. AC21-03-02: 12/31/2020 Experience Review & AC21-04-02: Review of Alternative Loss Projection Methodologies
5. AC21-03-04: 9/1/2021 Filing – COVID-19 Claim Cost Projection
6. AC21-04-01: 9/1/2021 Filing – Loss Adjustment Expense Experience Review
7. AC21-04-03: Evaluation of New Medical-Legal Fee Schedule
8. AC21-04-04: Evaluation of Updates to Official Medical Fee Schedule

01

Working Group Meeting Summaries

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02

First Quarter 2021 Review of Diagnostics

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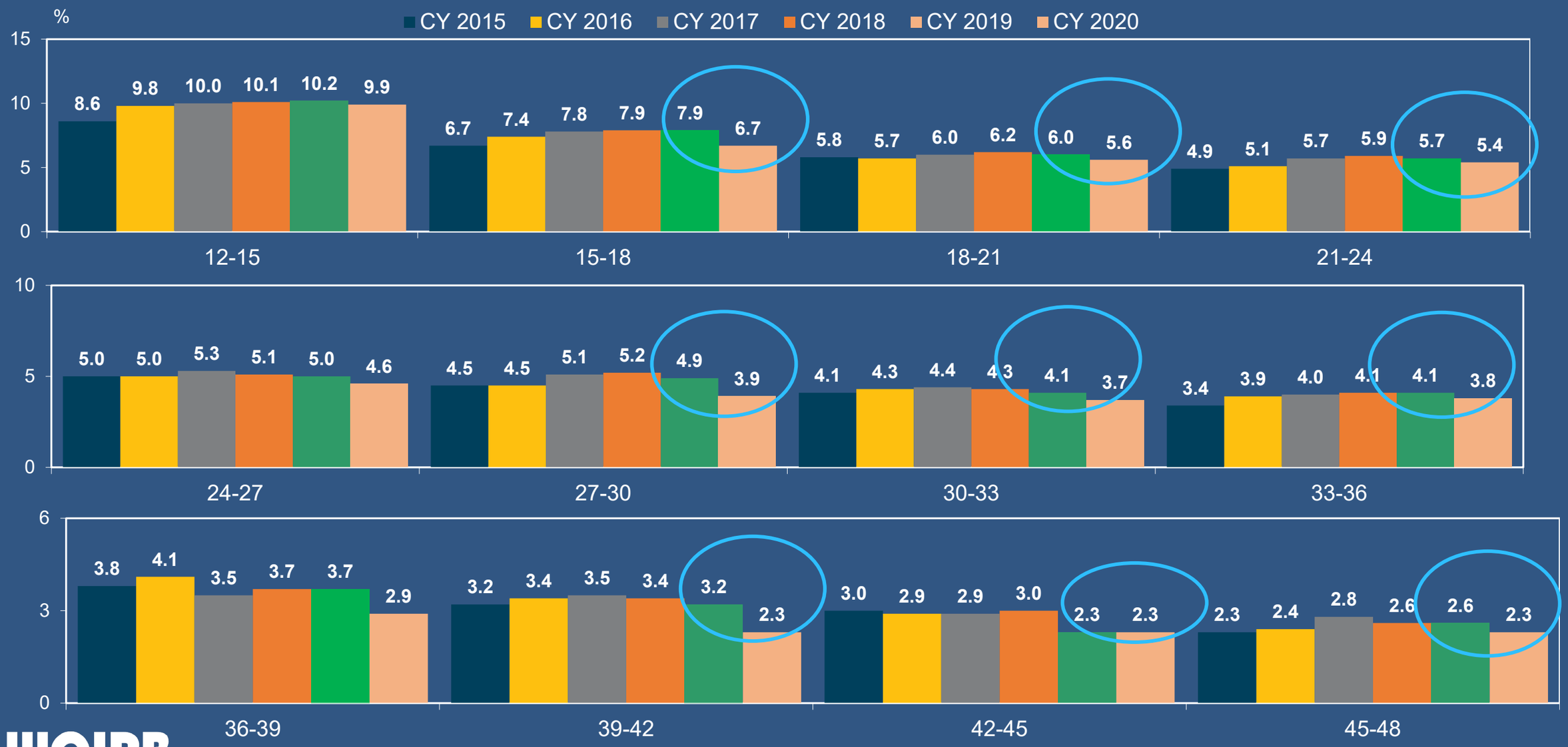
Quarterly Incremental Change in Claim Settlement Ratios

As of December 31, 2020



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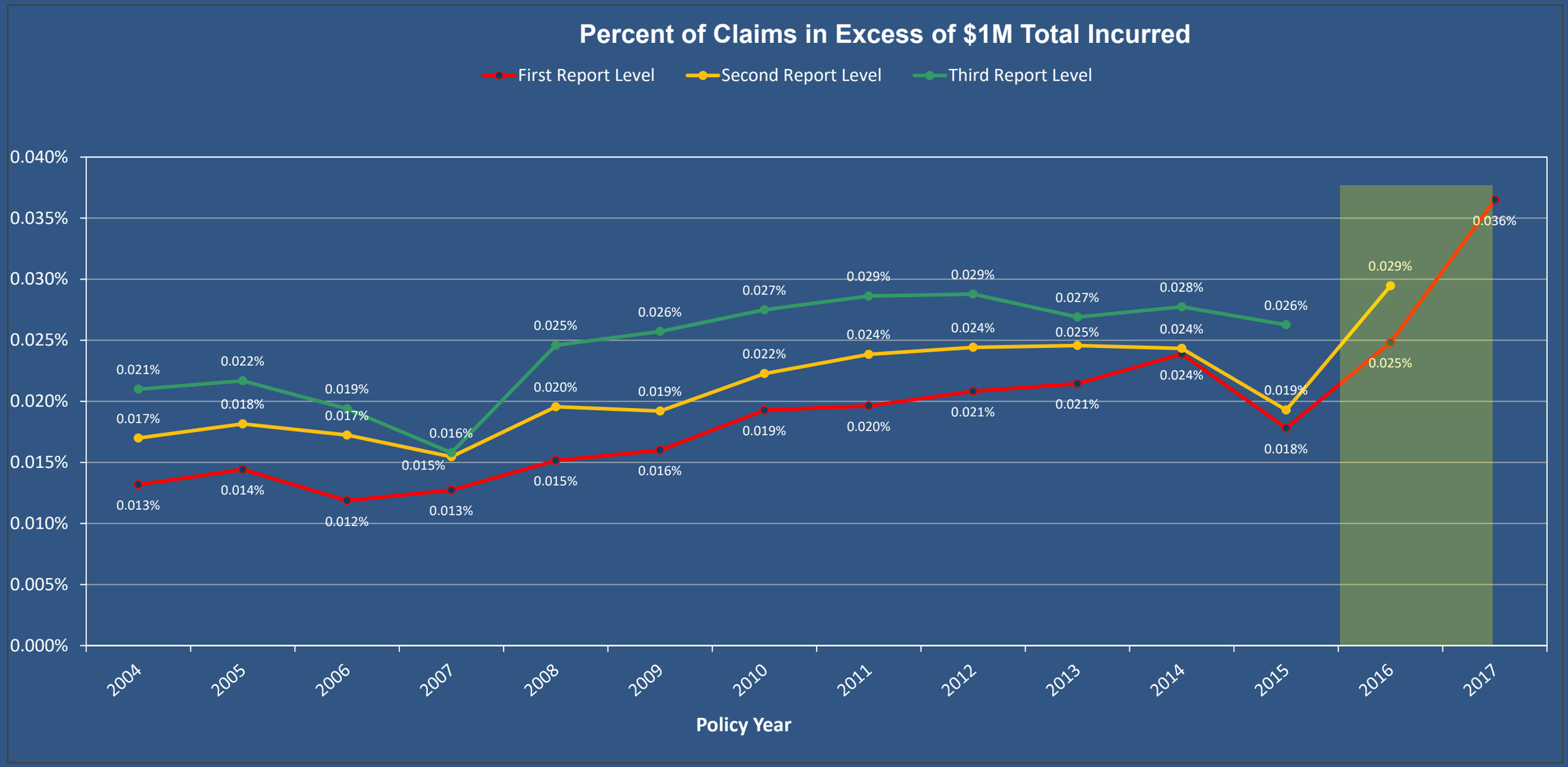
Source: WCIRB aggregate financial data

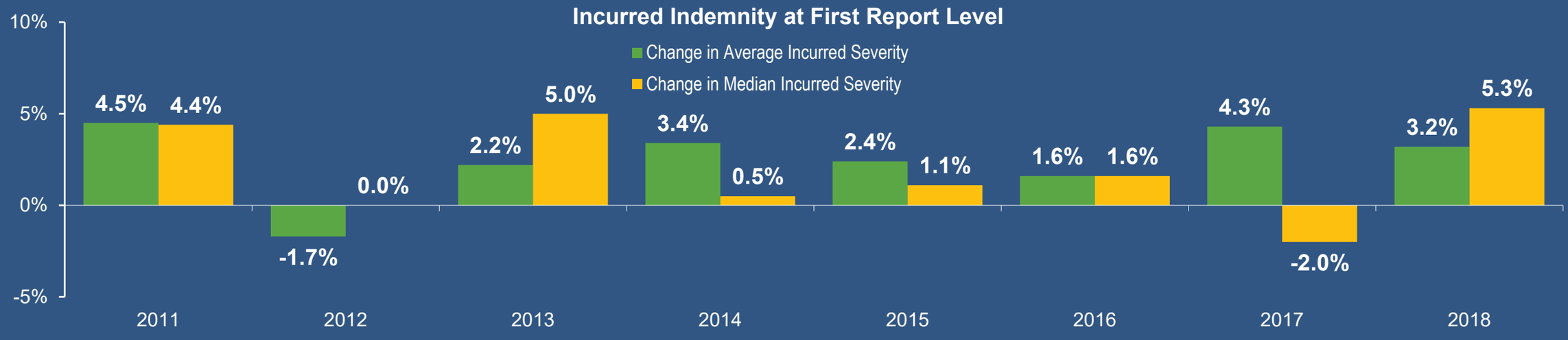
Large Claims

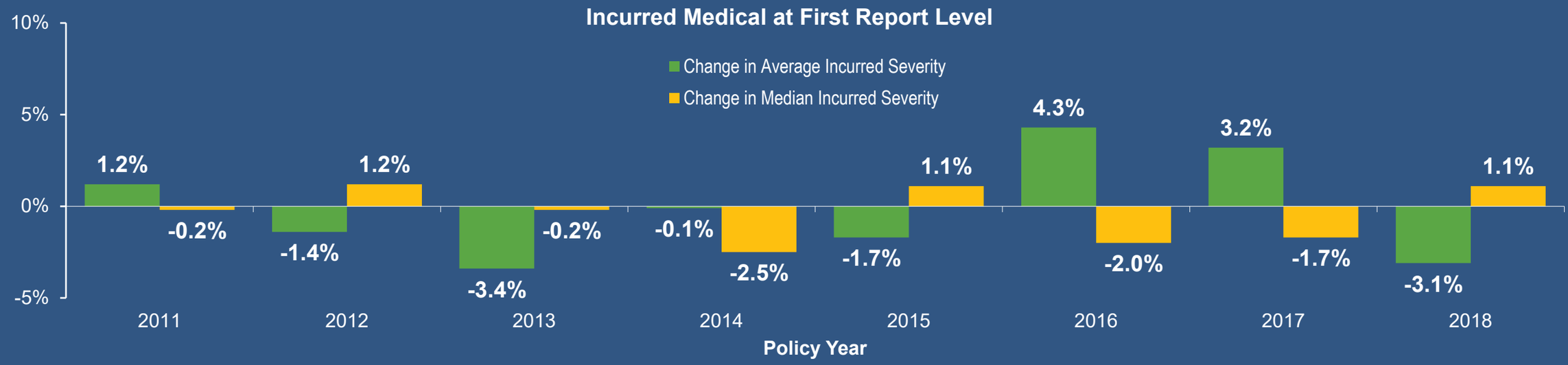


Source: WCIRB unit statistical data

Changes in Average and Median Severities

As of First Report Level





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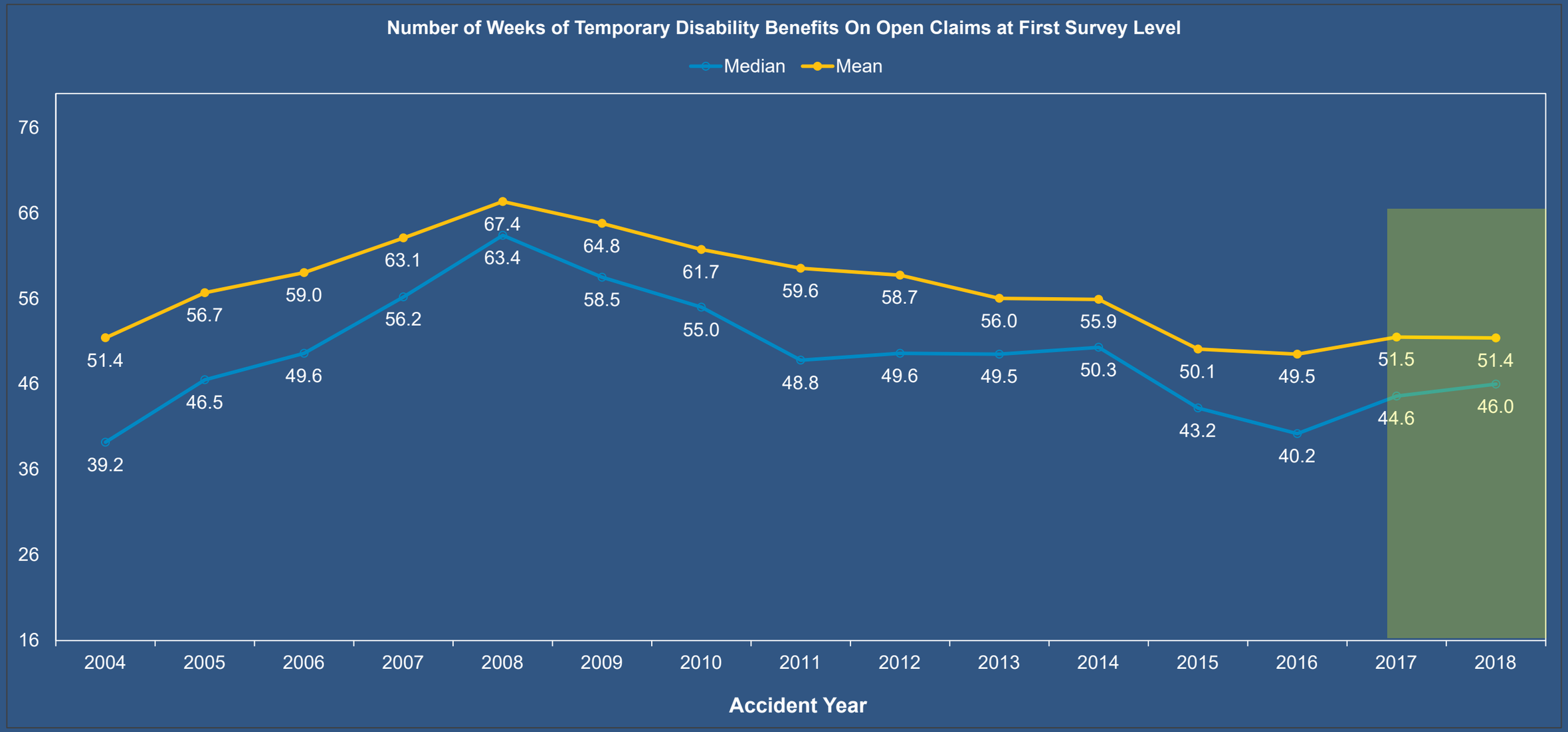
Source: WCIRB unit statistical data at first report level

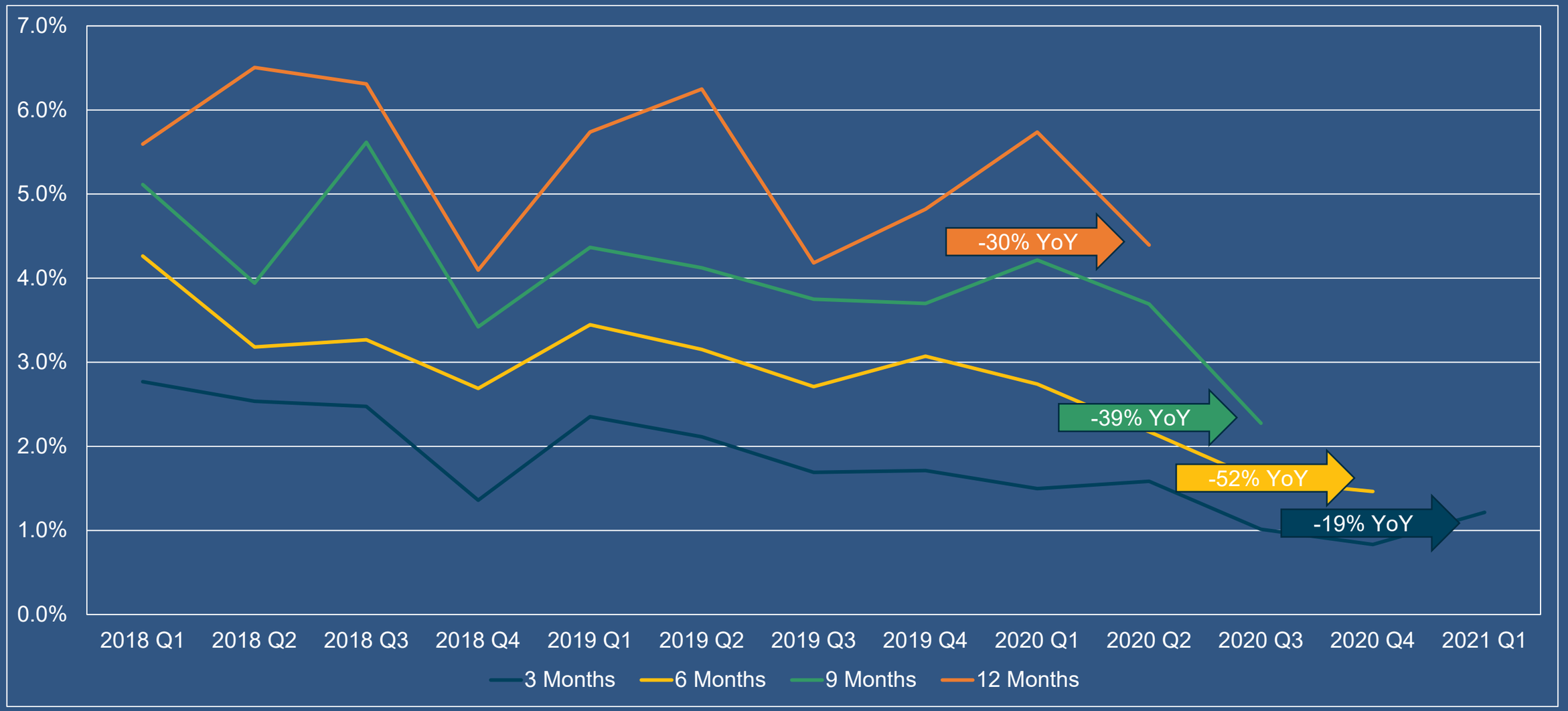
Temporary Disability Duration on Permanent Disability Claims



Source: WCIRB permanent disability survey (first survey level).

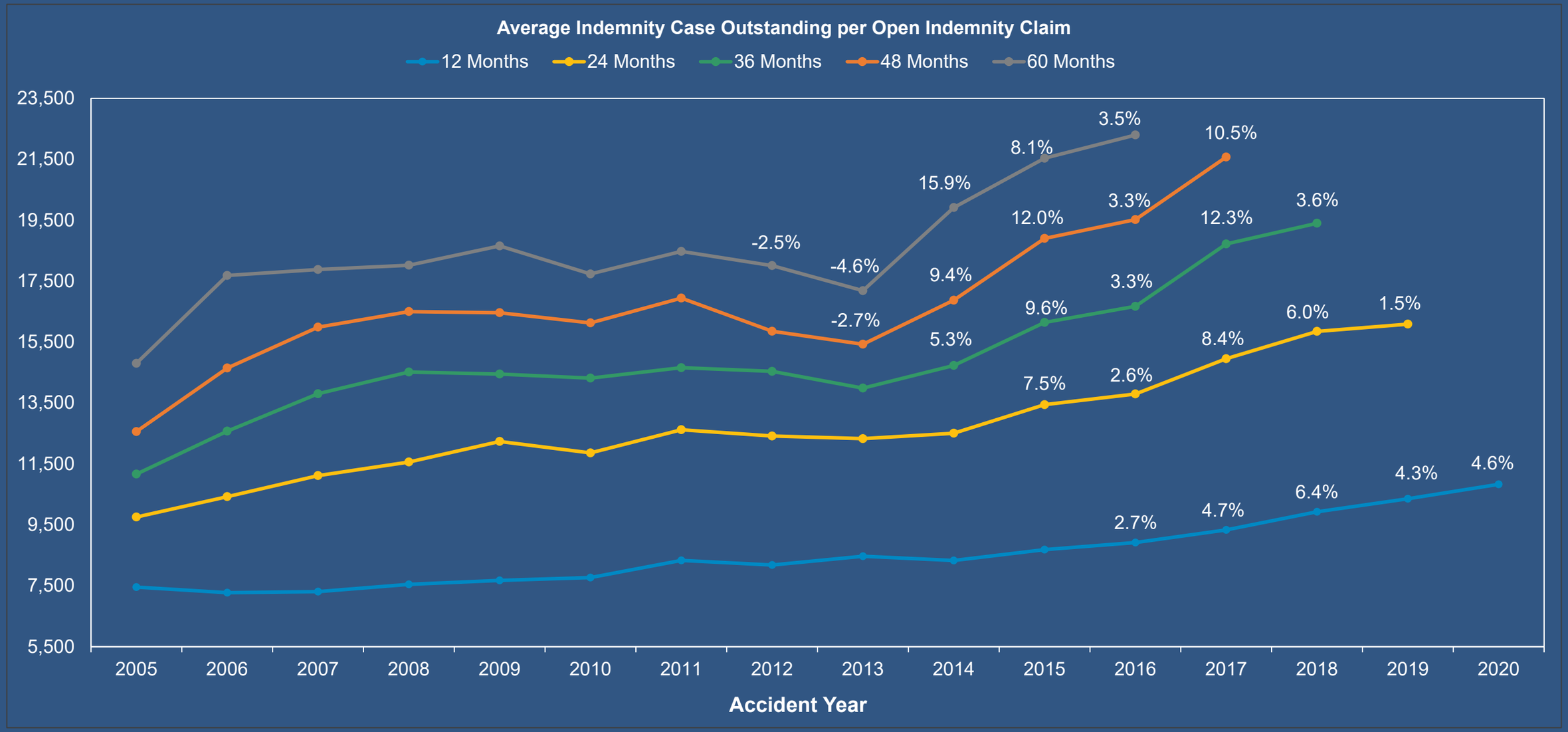
CT Indemnity Claims Reported as a Share of Indemnity Claims Reported by AQ

As of April 8, 2021



Source: FROI and SROI records from WCIRB indemnity transaction data voluntary submitters

Severity − Indemnity Case Outstanding per Open Indemnity Claim



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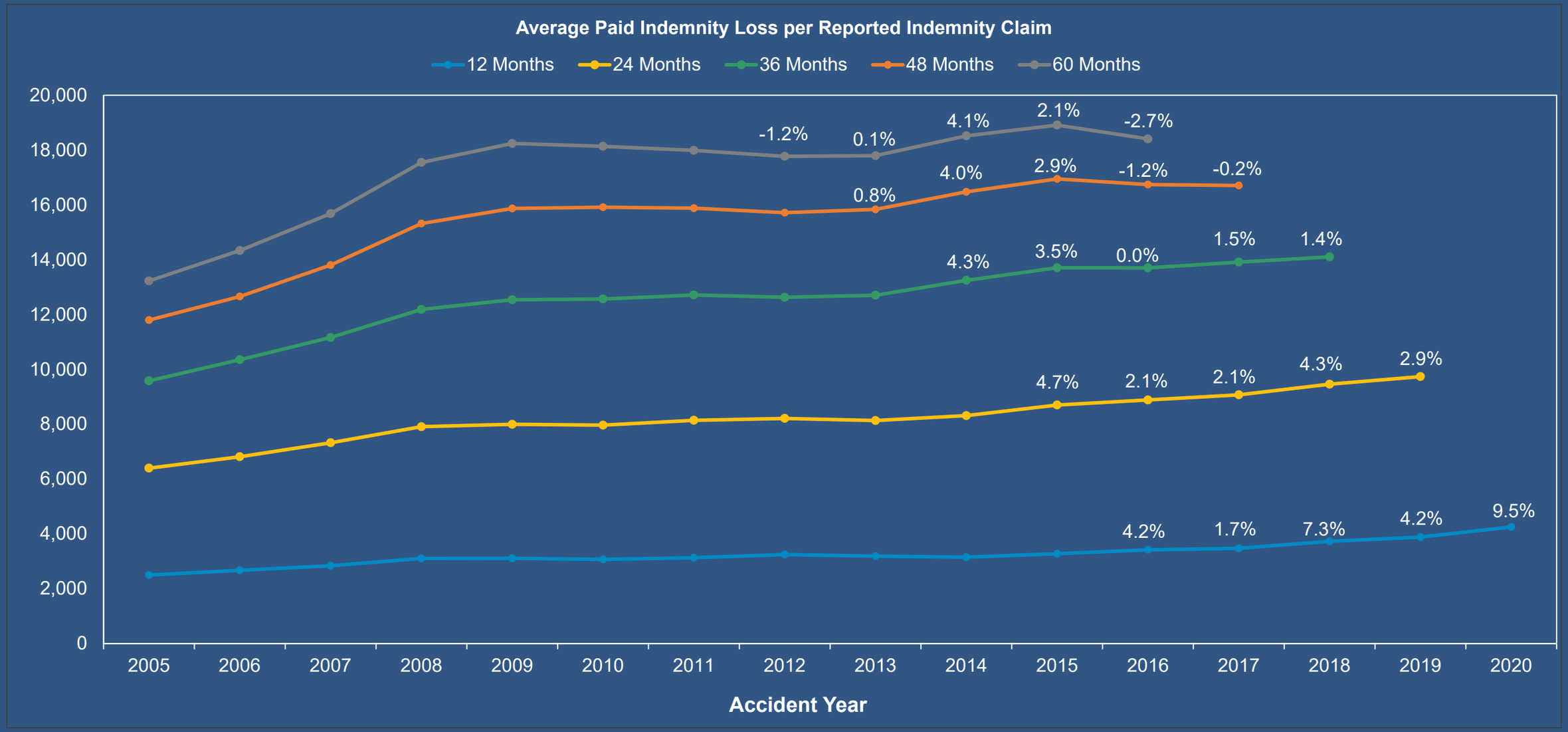
Source: WCIRB aggregate financial data excluding COVID-19 claims

Severity − Paid Indemnity per Indemnity Claim



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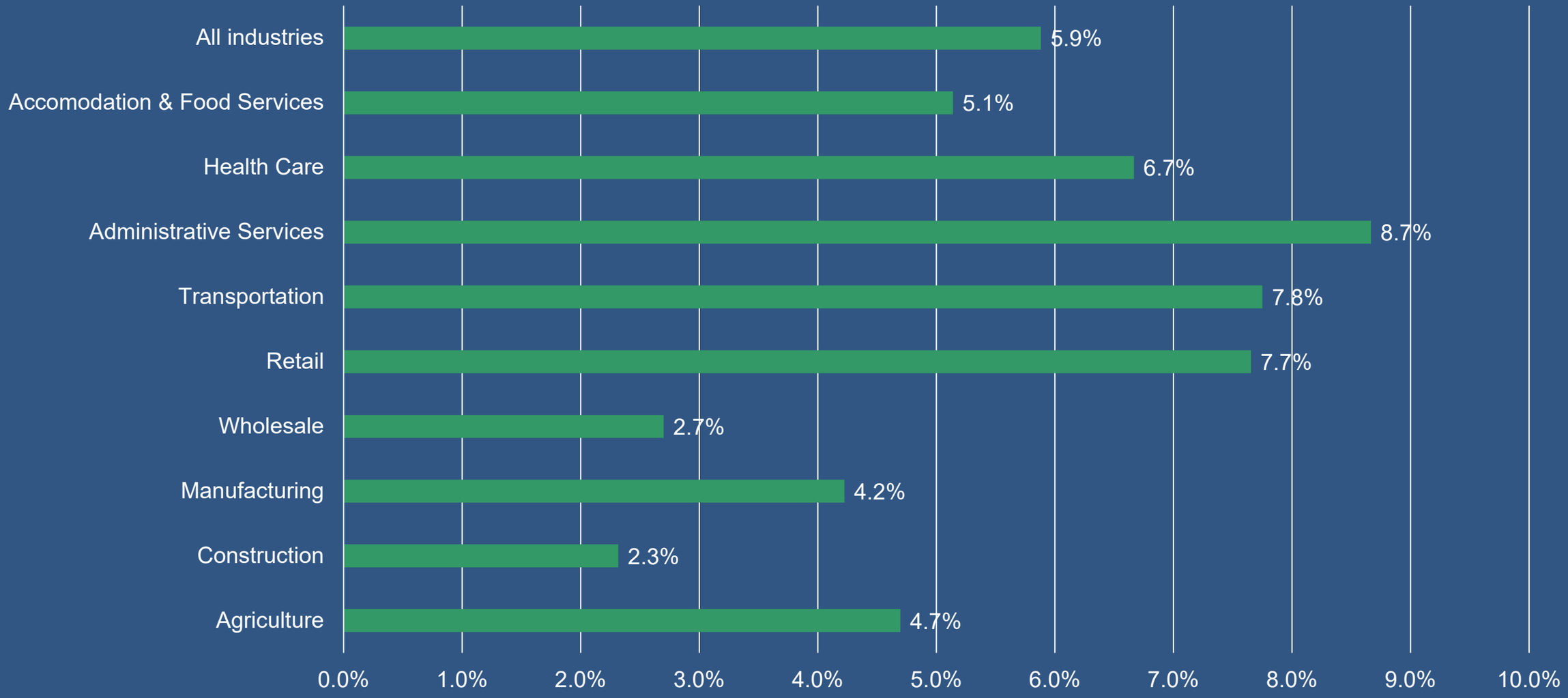
Source: WCIRB aggregate financial data excluding COVID-19 claims

Change in the Median Weekly Wage for Injured Workers AY 2019-20 for Key Industries

As of April 8, 2021



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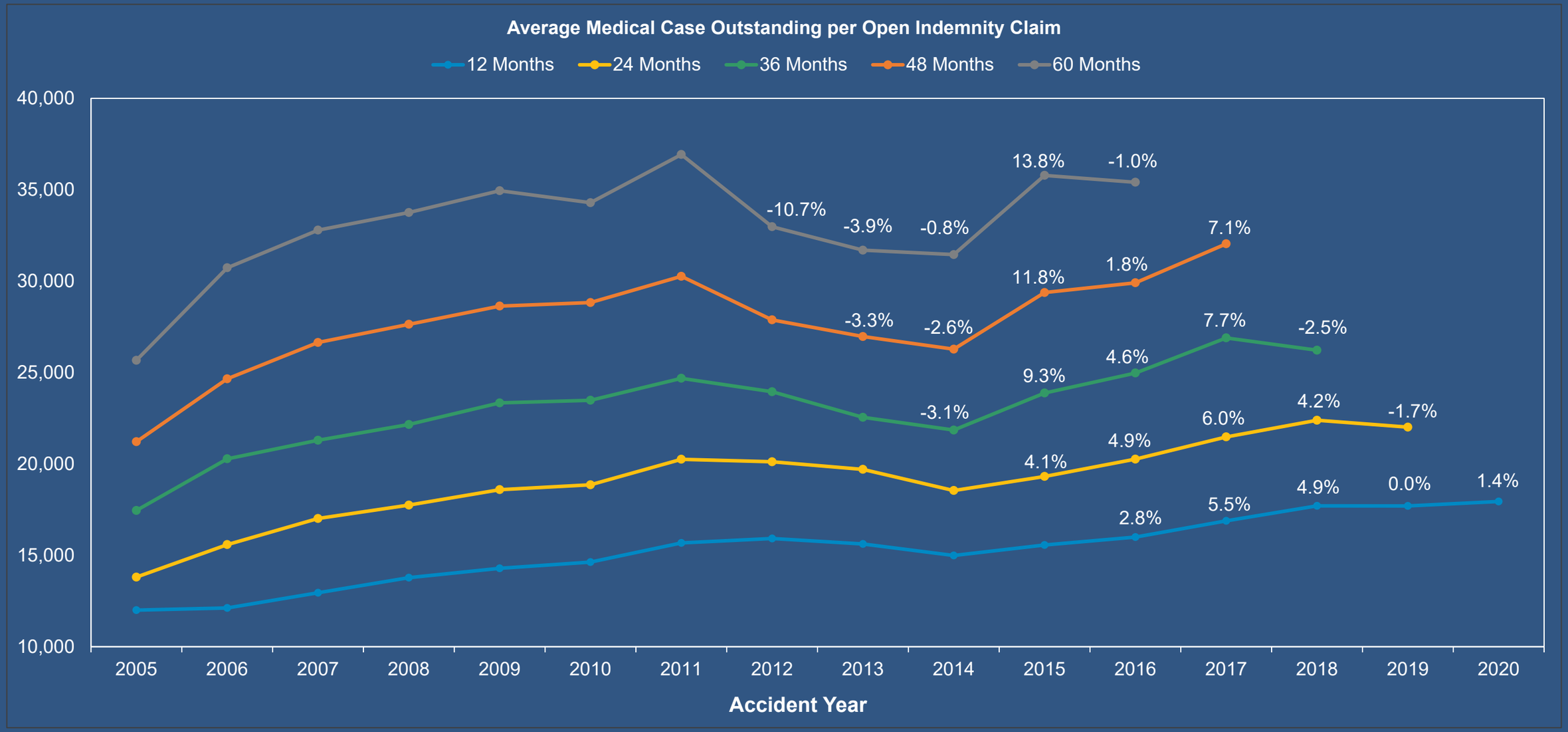
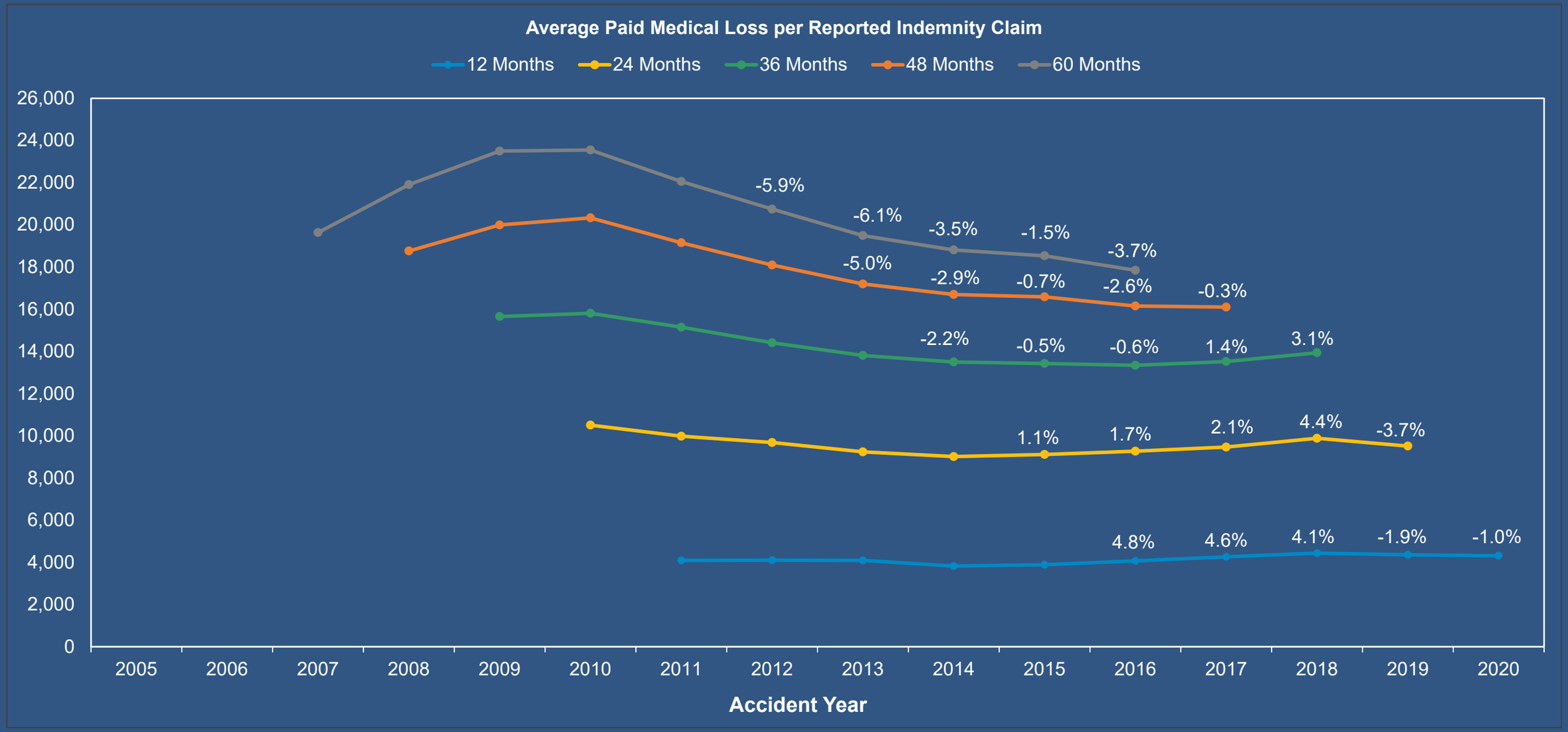
Source: FROI and SROI records from voluntary submitters where the claim is categorized as Indemnity by the Claims Administrator. COVID claims excluded.

Severity − Medical Case Outstanding per Open Indemnity Claim



Source: WCIRB aggregate financial data excluding COVID-19 claims

Severity − Paid Medical per Indemnity Claim



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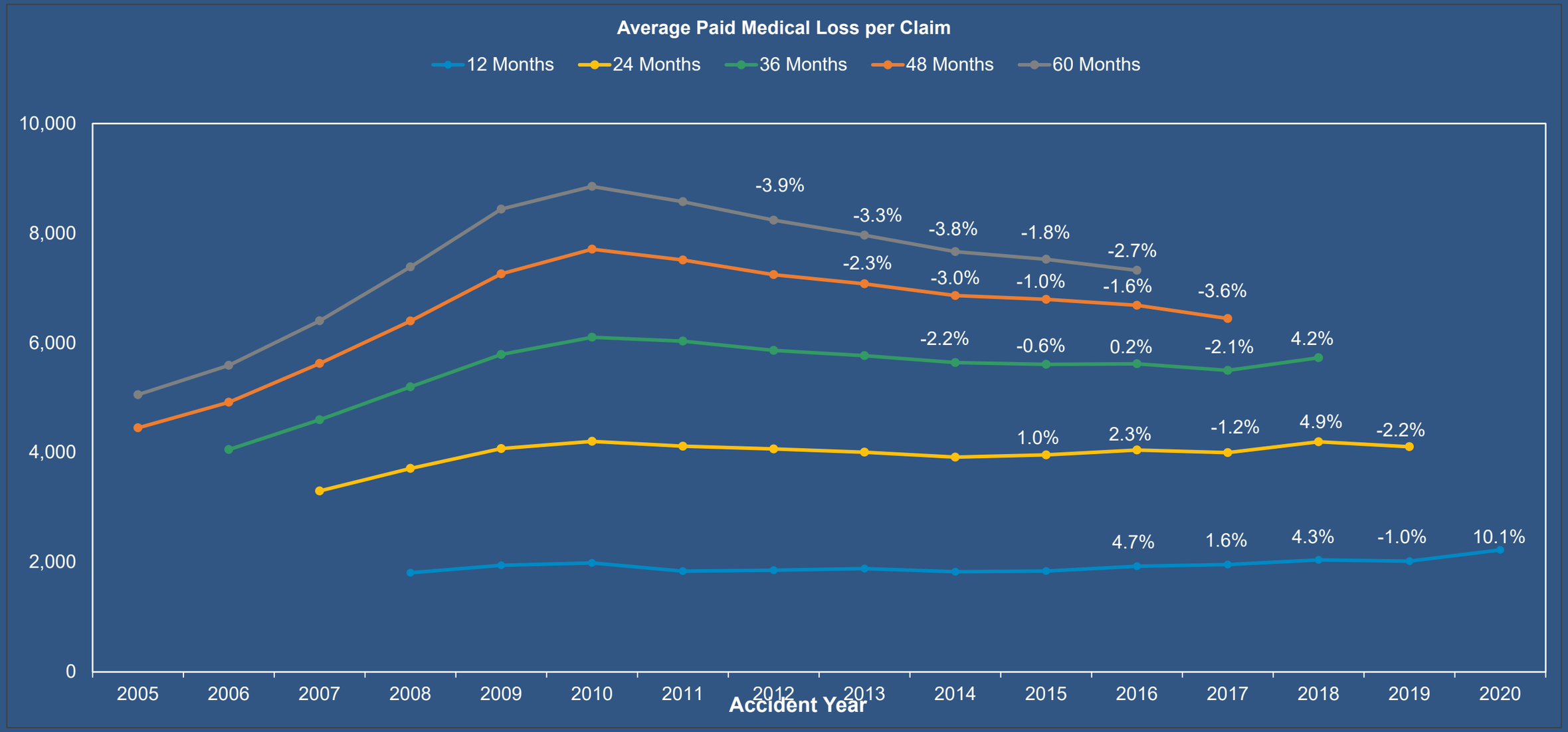
Source: WCIRB aggregate financial data excluding COVID-19 claims

Severity – Paid Medical per Claim



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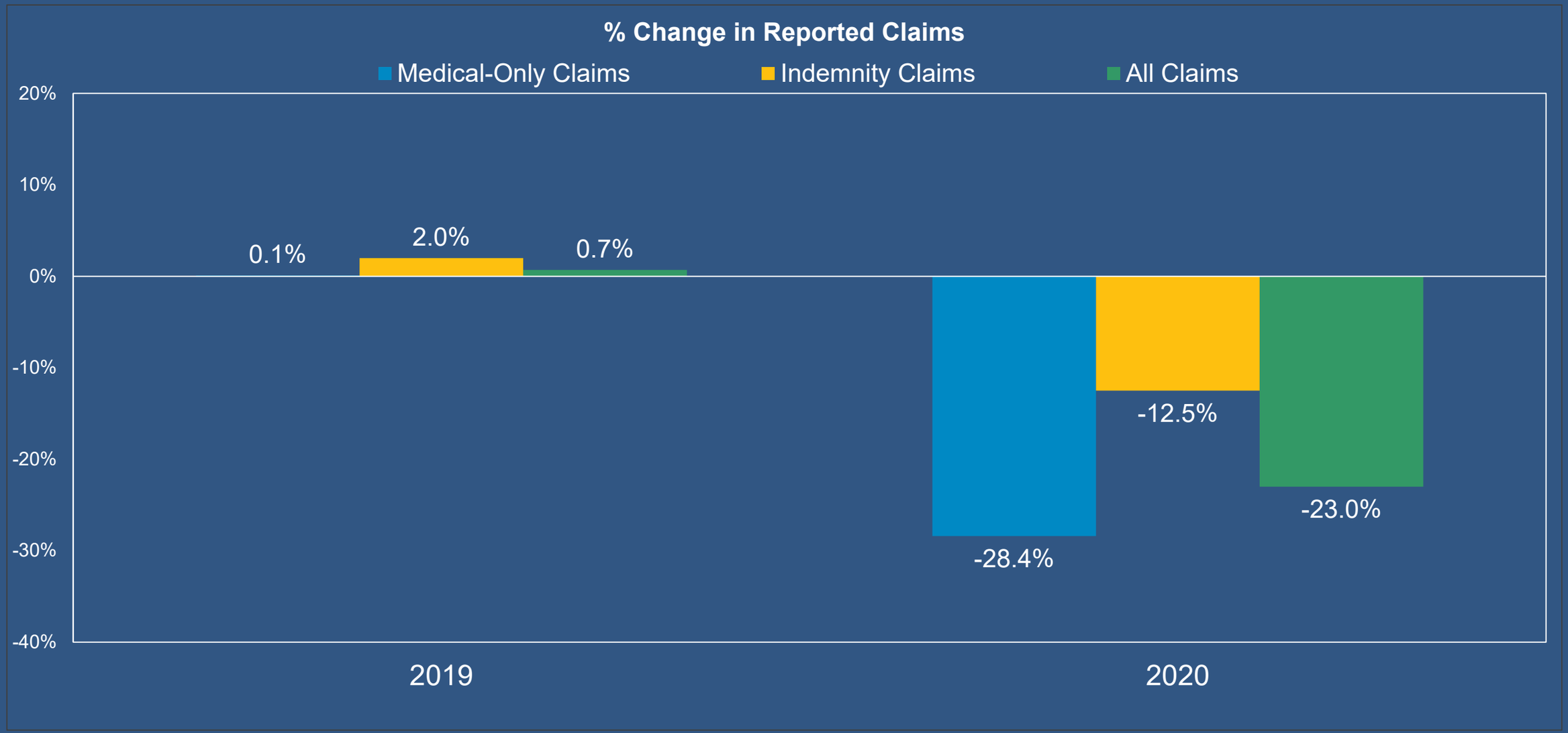
Source: WCIRB aggregate financial data excluding COVID-19 claims

Annual Change in Reported Claim Counts (ex. COVID-19 Claims)
Calendar Years 2019 and 2020



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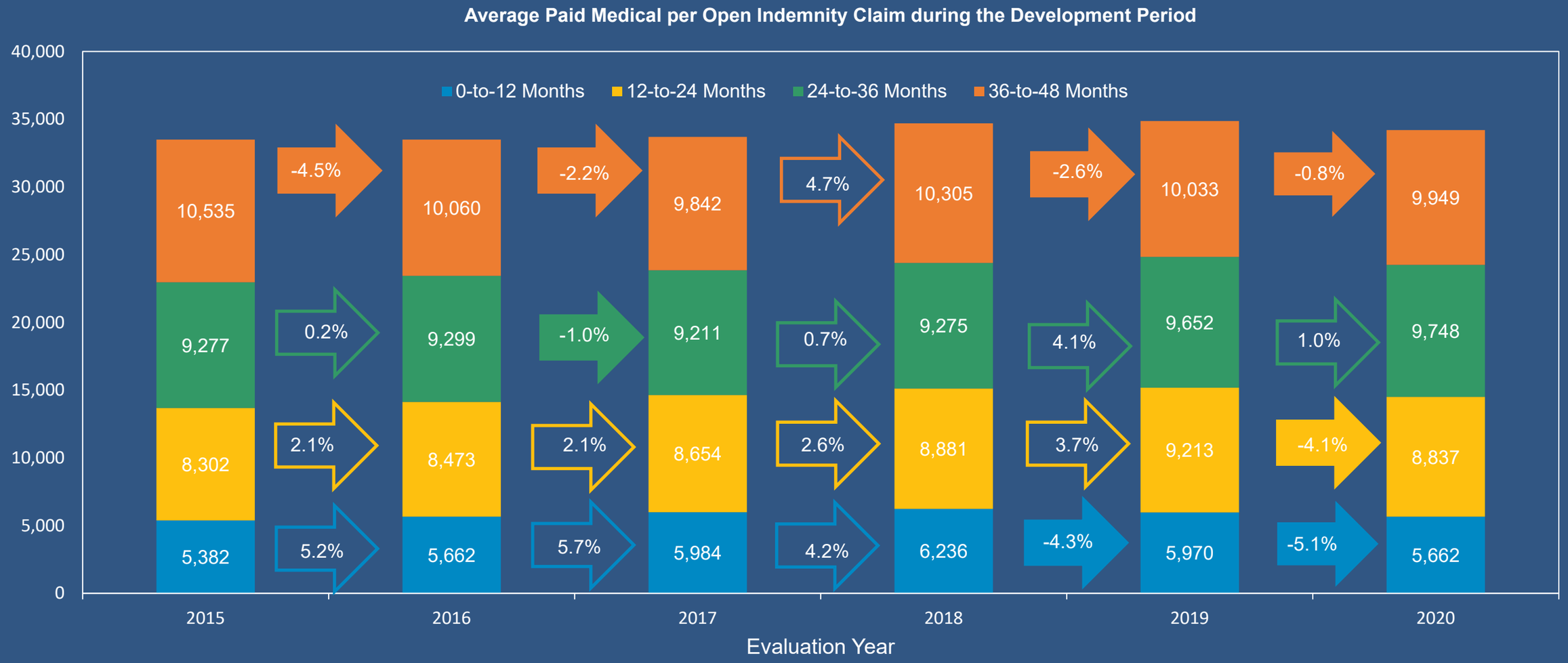
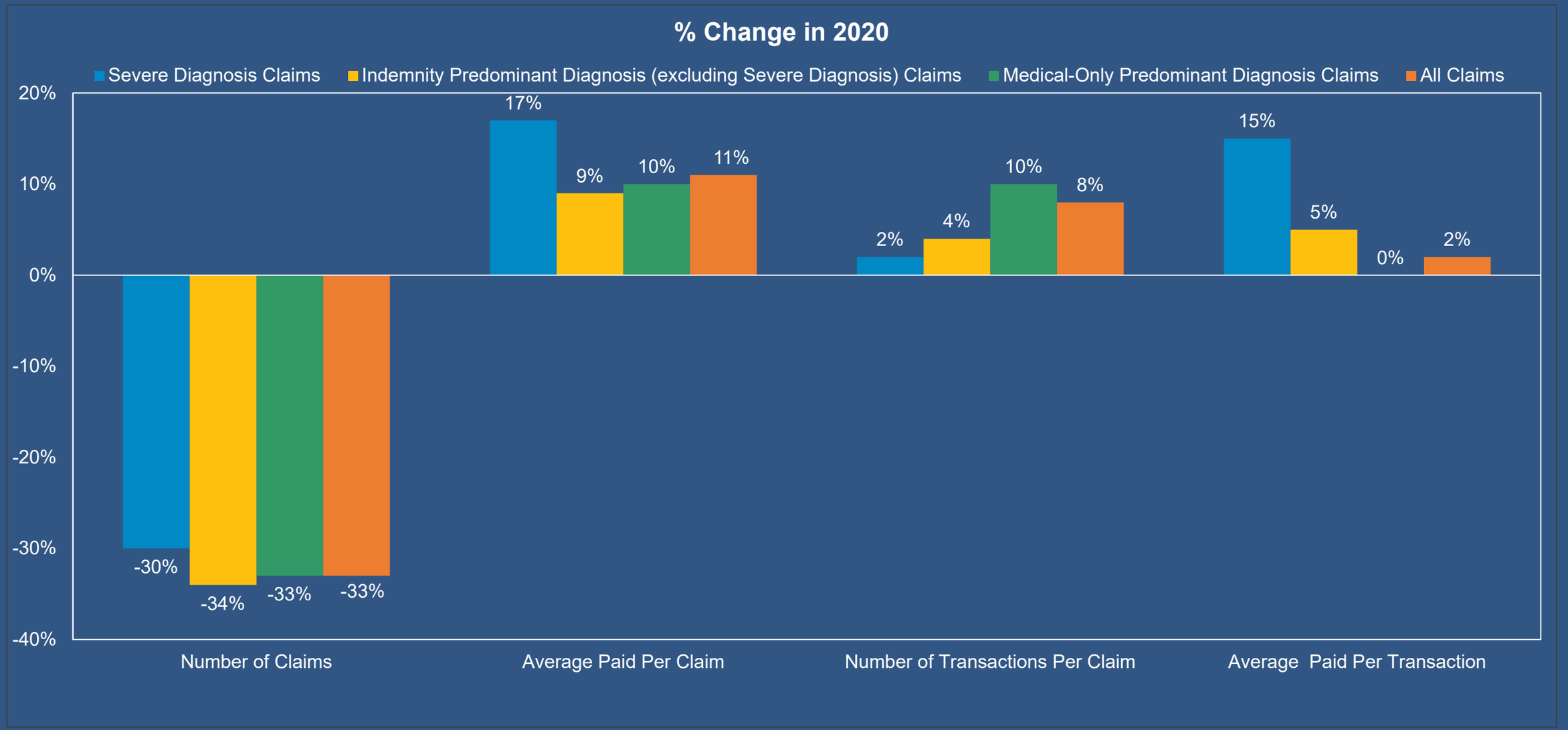
Source: WCIRB aggregate financial data calls. Note that with medical-only claims comprising about two-thirds of all claims and the average ultimate medical per indemnity about 25 times that of a medical-only this shift alone would (all lese being equal) cause about a 12% shift in the average medical severity on all claims.

Incremental Paid Medical per Open Indemnity Claim during the Development Period



Source: WCIRB aggregate financial data, excludes COVID-19 claims

Shifts in Claims by Diagnosis Groupings (ex-COVID-19 Claims)
April – August Injuries 2020 Compared to 2019



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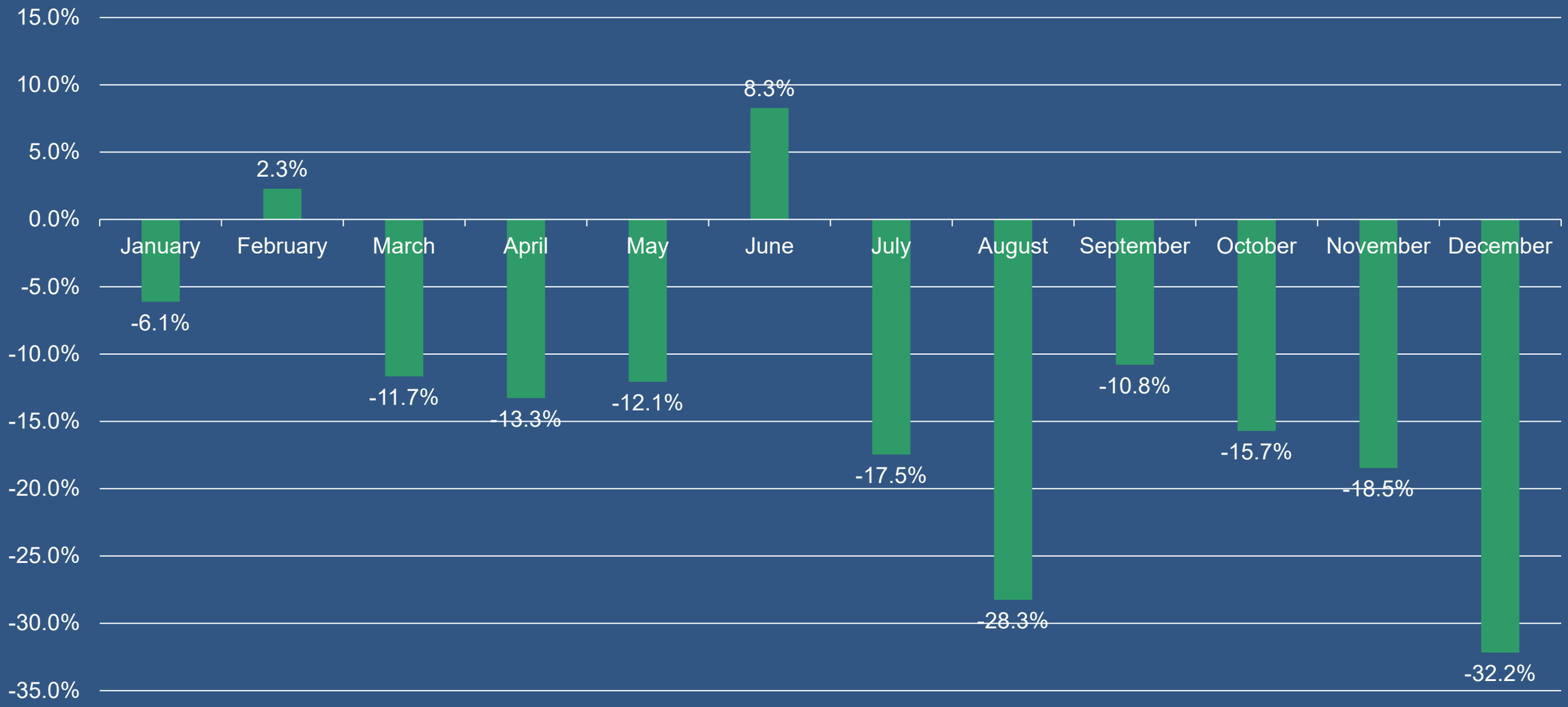
Source: WCIRB medical transaction data that reflects payments through the end of the respective year. The claims have been classified into primary diagnoses assigned by the WCIRB using a standard algorithm and further grouped into the three broad categories of diagnosis groupings based on the average medical losses paid by diagnosis group by the end of the calendar year the injury occurred. Claims with average medical payments more than $7,500 are classified as "Severe Diagnosis Claims", those with average paid medical between $1,500 and $5,000 are classified as "Indemnity Predominant Diagnosis (excluding Severe Diagnosis) Claims" and those with average paid amounts below $1,500 are classified as "Medical-Only Predominant Diagnosis Claims."

Change in the Share of Reported Claims due to Motor Vehicle Accidents

As of April 8, 2021



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Source: FROI data from voluntary submitters

03

Impact of Economic Slowdown on Pure Premium Rate Indications

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Impact of the Economic Slowdown on Pure Premium Rate Indications

- Preliminary Decisions from March 16 Meeting
  - WCIRB frequency model projections for 2020 to 2023 should not assume a recession-related increase in the cumulative injury index.
    - No increase in the index has been observed in available AY 2020 data.
  - Projected 2020 change in the statewide average wage to be based solely on the March 2021 UCLA forecast.
    - Projected 2021 to 2023 changes to be based on the average of UCLA and CA Department of Finance forecasts.
  - Changes in the statewide average wage should be adjusted for observed and UCLA forecast changes in industrial mix.
    - 2020: -1.9% adjustment
    - 2021: +0.4% adjustment (negligible impacts in 2022 and 2023)

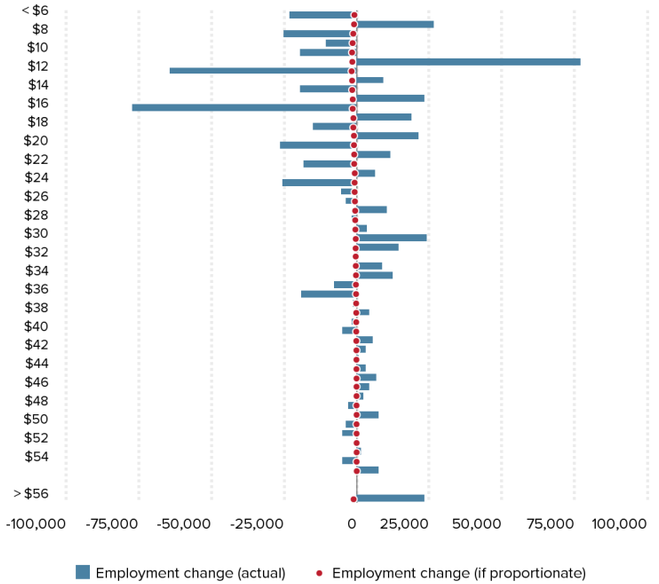
Magnitude of Distortion in 2020 Average Wage Change

- The 9.6% increase in the statewide average wage is the largest observed increase in the data series.
  - Other large observed increases occurred in times of rapid economic growth or high inflation.
- The observed increase is partly explained by the previously discussed changes in industrial mix.
  - Even after this adjustment, the 2020 change would be 7.5%.
- Anecdotal evidence suggested that, within industries, employment losses were heavily skewed toward lower wage workers in 2020.
- A study by the Economic Policy Institute confirmed this and showed how dissimilar employment changes by wage level were in 2020 compared to prior recessions.

Comparison With Prior Recessions

Job losses in the early 2000s recession appear unrelated to wage level

Employment change from 2001 to 2002, by wage level



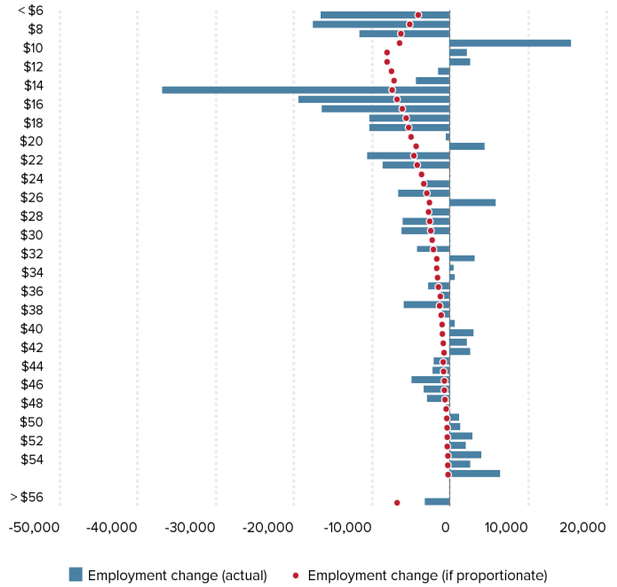
Notes: Wages are adjusted for inflation using the CPI-U-RS. The bars represent how much average employment changed, on a monthly basis, for workers in hourly "wage bands" (i.e., levels) labeled by the midpoint value of the band. For example, the bar at $10 represents the monthly loss in jobs with hourly wages from $7.50 to $12.49 and the bar at $11 represents loss in jobs with hourly wages from $8.50 to $13.49. (The last bar represents jobs with wages $56 an hour or higher). This smoothing of employment into wage bands was used to clarify underlying trends. The dots are provided as benchmarks—they show how many jobs would have been lost at each wage level if jobs had contracted proportionately across the entire wage distribution. If a bar extends to the right of the zero axis, workers at that wage level actually gained jobs. If the bar extends left of the zero axis but does not extend beyond its dot, workers at that wage level lost jobs but fewer than they would have had jobs been shed proportionately to how many jobs were in that bin in 2001. Finally if the bar extends to the left of its dot, workers at that wage level lost jobs at a faster rate than would have occurred if the losses were proportionate.

Source: Authors' analysis of EPI Current Population Survey Extracts, Version 1.0.14 (2021), https://microdata.epi.org.

Economic Policy Institute

Job losses during the Great Recession are weakly related to wage level

Employment change from 2007 to 2010, by wage level



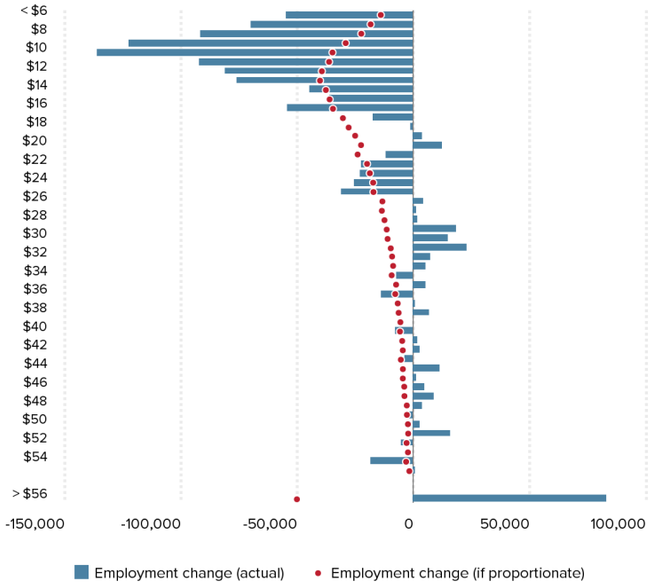
Notes: Wages are adjusted for inflation using the CPI-U-RS. The bars represent how much average employment changed, on a monthly basis, for workers in hourly "wage bands" (i.e., levels) labeled by the midpoint value of the band. For example, the bar at $10 represents the monthly loss in jobs with hourly wages from $7.50 to $12.49 and the bar at $11 represents loss in jobs with hourly wages from $8.50 to $13.49. (The last bar represents jobs with wages $56 an hour or higher.) This smoothing of employment into wage bands was used to clarify underlying trends. The dots are provided as benchmarks—they show how many jobs would have been lost at each wage level if jobs had contracted proportionately across the entire wage distribution. If a bar extends to the right of the zero axis, workers at that wage level actually gained jobs. If the bar extends left of the zero axis but does not extend beyond its dot, workers at that wage level lost jobs but fewer than they would have had jobs been shed proportionately to how many jobs were in that bin in 2007. Finally if the bar extends to the left of its dot, workers at that wage level lost jobs at a faster rate than would have occurred if the losses were proportionate.

Source: Authors' analysis of EPI Current Population Survey Extracts, Version 1.0.14 (2021), https://microdata.epi.org.

Economic Policy Institute

Lower-wage workers experienced job losses in far excess of the proportionate shares

Employment change from 2019 to 2020, by wage level



Notes: Wages are adjusted for inflation using the CPI-U-RS. The bars represent how much average employment changed, on a monthly basis, for workers in hourly "wage bands" (i.e., levels) labeled by the midpoint value of the band. For example, the bar at $10 represents the monthly loss in jobs with hourly wages from $7.50 to $12.49 and the bar at $11 represents the monthly loss in jobs with hourly wages from $8.50 to $13.49. (The last bar represents jobs with wages $56 an hour or higher.) This smoothing of employment into wage bands was used to clarify underlying trends. The dots are provided as benchmarks—they show how many jobs would have been lost at each wage level if jobs had contracted proportionately across the entire wage distribution. If a bar extends to the right of the zero axis, workers at that wage level actually gained jobs. If the bar extends left of the zero axis but does not extend beyond its dot, workers at that wage level lost jobs but fewer than they would have had jobs been shed proportionately to how many jobs were in that bin in 2019. Finally if the bar extends to the left of its dot, workers at that wage level lost jobs at a faster rate than would have occurred if the losses were proportionate.

Source: Authors' analysis of EPI Current Population Survey Extracts, Version 1.0.14 (2021), https://microdata.epi.org.

Economic Policy Institute

Data Sources and Methodology

- Data Sources
  - March 2021 UCLA forecast: Distribution of employment by industry and employment change by industry
  - EPI CPS data sets: Distributions of wage level within industries
    - California data
    - Annual values are computed as the average of 12 monthly data points
  - Industrial sectors with sparse data are combined with other sectors

- Two main elements of the adjustment
  - Measurement of wage mix impact in 2020
    - Observed 2019 average wage by industry is compared to a mix-adjusted 2020 average wage
    - Mix-adjusted wage uses:
      - 2019 industrial mix
      - 2019 average wages by industry and wage quartile
      - 2020 distribution of employees by wage quartile within industry
  - Estimates for future years rely on assumptions regarding the return of lower wage employees to the workforce

Observed Industry Level Employment Data

	Employment		A Employment Change	B Distribution	
	2019	2020		2019	2020
Agriculture & Mining	446,467	382,083	-14.4%	2.5%	2.3%
Utilities & Construction	943,920	910,585	-3.5%	5.3%	5.5%
Manufacturing	1,323,017	1,238,533	-6.4%	7.4%	7.5%
Wholesale	694,467	658,958	-5.1%	3.9%	4.0%
Retail	1,656,692	1,530,783	-7.6%	9.3%	9.2%
Transportation & Warehousing	640,505	631,790	-1.4%	3.6%	3.8%
Information	562,517	533,758	-5.1%	3.2%	3.2%
Finance & Insurance	546,986	547,273	0.1%	3.1%	3.3%
Real Estate	294,422	294,577	0.1%	1.6%	1.8%
Prof. Services & Mgmt. of Companies	1,569,370	1,507,947	-3.9%	8.8%	9.1%
Administrative	1,154,505	1,109,319	-3.9%	6.5%	6.7%
Education	386,208	372,035	-3.7%	2.2%	2.2%
Health	2,418,792	2,330,024	-3.7%	13.5%	14.1%
Arts & Entertainment	321,672	243,628	-24.3%	1.8%	1.5%
Hospitality	1,711,012	1,295,888	-24.3%	9.6%	7.8%
Other	576,442	480,450	-16.7%	3.2%	2.9%
Public Administration	2,607,350	2,502,500	-4.0%	14.6%	15.1%
All Industries	17,854,342	16,570,133	-7.2%	100.0%	100.0%

Source: March 2021 UCLA Forecast

Forecast Industry Level Employment Data

	2019 Employment	Relative to 2019 Employment Level			
		2020	2021	2022	2023
Agriculture & Mining	446,467	-14.4%	-9.0%	-3.3%	-1.6%
Utilities & Construction	943,920	-3.5%	0.5%	1.7%	4.0%
Manufacturing	1,323,017	-6.4%	-4.5%	-2.6%	-1.5%
Wholesale	694,467	-5.1%	-3.6%	-2.5%	-1.6%
Retail	1,656,692	-7.6%	-2.3%	-4.6%	-6.7%
Transportation & Warehousing	640,505	-1.4%	4.3%	6.3%	7.8%
Information	562,517	-5.1%	0.6%	4.4%	9.5%
Finance & Insurance	546,986	0.1%	2.1%	3.5%	5.2%
Real Estate	294,422	0.1%	2.1%	3.5%	5.2%
Prof. Services & Mgmt. of Companies	1,569,370	-3.9%	1.4%	5.9%	9.6%
Administrative	1,154,505	-3.9%	1.4%	5.9%	9.6%
Education	386,208	-3.7%	0.0%	3.2%	4.7%
Health	2,418,792	-3.7%	0.0%	3.2%	4.7%
Arts & Entertainment	321,672	-24.3%	-16.7%	-10.5%	-4.3%
Hospitality	1,711,012	-24.3%	-16.7%	-10.5%	-4.3%
Other	576,442	-16.7%	-9.4%	-2.4%	1.0%
Public Administration	2,607,350	-4.0%	-5.0%	-1.6%	0.3%
All Industries	17,854,342	-7.2%	-3.3%	-0.3%	2.0%

Source: March 2021 UCLA Forecast

Forecast Industry Level Employment Data

	Wage Relativity	Employment Distribution				
		2019	2020	2021	2022	2023
Agriculture & Mining	0.570	2.5%	2.3%	2.4%	2.4%	2.4%
Utilities & Construction	1.085	5.3%	5.5%	5.5%	5.4%	5.4%
Manufacturing	1.391	7.4%	7.5%	7.3%	7.2%	7.2%
Wholesale	1.157	3.9%	4.0%	3.9%	3.8%	3.8%
Retail	0.536	9.3%	9.2%	9.4%	8.9%	8.5%
Transportation & Warehousing	0.846	3.6%	3.8%	3.9%	3.8%	3.8%
Information	2.681	3.2%	3.2%	3.3%	3.3%	3.4%
Finance & Insurance	1.880	3.1%	3.3%	3.2%	3.2%	3.2%
Real Estate	1.018	1.6%	1.8%	1.7%	1.7%	1.7%
Prof. Services & Mgmt. of Companies	1.810	8.8%	9.1%	9.2%	9.3%	9.4%
Administrative	0.672	6.5%	6.7%	6.8%	6.9%	6.9%
Education	0.801	2.2%	2.2%	2.2%	2.2%	2.2%
Health	0.757	13.5%	14.1%	14.0%	14.0%	13.9%
Arts & Entertainment	0.872	1.8%	1.5%	1.6%	1.6%	1.7%
Hospitality	0.367	9.6%	7.8%	8.3%	8.6%	9.0%
Other	0.600	3.2%	2.9%	3.0%	3.2%	3.2%
Public Administration	1.023	14.6%	15.1%	14.3%	14.4%	14.4%
All Industries	1.000	100%	100%	100%	100%	100%

2022-2023 increases in the share of employment in hospitality (low wage) are offset by:

- Increased shares in information and professional services (high wage)
- Decreased share in retail (low wage)

Source: March 2021 UCLA Forecast

Derivation of CPS Average Wage at 2019 Levels

	B	C				D				E
	2019 Industry Distribution	2019 CPS Quartile Distribution				2019 CPS Average Wage by Quartile				
		[$0, $15)	[$15, $22)	[$22, $37.5)	[$37.5+)	[$0, $15)	[$15, $22)	[$22, $37.5)	[$37.5+)	Total
Agriculture & Mining	2.5%	56.1%	25.7%	10.4%	7.8%	12.15	17.22	28.19	69.48	19.59
Utilities & Construction	5.3%	14.5%	29.8%	33.7%	22.0%	11.60	17.90	28.31	58.29	29.38
Manufacturing	7.4%	16.7%	24.0%	26.9%	32.3%	12.31	17.86	28.19	72.35	37.34
Wholesale	3.9%	22.4%	30.6%	23.6%	23.4%	11.95	18.00	28.09	66.82	30.44
Retail	9.3%	41.3%	30.5%	17.7%	10.5%	12.07	17.44	27.08	62.65	21.66
Transportation & Warehousing	3.6%	24.5%	35.4%	26.4%	13.7%	11.76	17.70	27.63	60.23	24.70
Information	3.2%	12.9%	13.6%	29.3%	44.2%	10.93	18.39	28.29	72.68	44.33
Finance & Insurance	3.1%	10.9%	19.3%	32.3%	37.5%	11.64	18.25	28.53	68.63	39.77
Real Estate	1.6%	18.6%	29.5%	28.7%	23.2%	11.49	18.52	27.84	65.14	30.69
Prof. Services & Mgmt. of Companies	8.8%	6.1%	12.8%	24.5%	56.5%	11.53	17.95	28.95	72.07	50.85
Administrative	6.5%	33.6%	35.9%	15.4%	15.0%	11.46	17.78	27.05	54.56	22.60
Education	2.2%	14.5%	26.3%	30.3%	28.8%	11.73	17.90	28.71	59.33	32.21
Health	13.5%	19.9%	26.3%	26.6%	27.2%	11.79	17.79	28.54	64.38	32.12
Arts & Entertainment	1.8%	30.8%	33.0%	23.0%	13.1%	11.77	17.32	27.87	76.43	25.80
Hospitality	9.6%	49.8%	29.9%	14.6%	5.7%	11.81	17.20	27.33	57.58	18.30
Other	3.2%	41.6%	26.1%	21.0%	11.3%	11.01	17.57	27.27	61.45	21.85
Public Administration	14.6%	16.5%	17.7%	29.1%	36.7%	11.53	18.49	28.09	59.58	35.22
All Industries	100%	24.8%	25.3%	24.1%	25.8%	11.76	17.78	28.10	65.39	31.06

Sample Column E Calculations

Hospitality: 18.30 = ∑(C x D) = 49.8% x 11.81 + 29.9% x 17.20 + 14.6% x 27.33 + 5.7% x 57.58

All Industries: 31.06 = ∑(B x E)

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Source: March 2021 UCLA Forecast (Column B); 2019 EPI CPS Data Set as of 2021.04.02 (Columns C and D)

Derivation of Employment Change Off-Balance Factor

	A	F				G	H
	2020 UCLA Employment Change	Observed 2020 CPS Employment Change by Quartile				2020 CPS Employment Change	Off Balance
		[$0, $15)	[$15, $22)	[$22, $37.5)	[$37.5+)		
Agriculture & Mining	-14.4%	-27.5%	2.1%	9.0%	27.4%	-11.8%	0.971
Utilities & Construction	-3.5%	-24.3%	-12.2%	3.3%	23.8%	-0.8%	0.972
Manufacturing	-6.4%	-9.7%	-13.8%	-6.1%	0.1%	-6.6%	1.002
Wholesale	-5.1%	-11.1%	-13.5%	3.2%	-1.4%	-6.2%	1.012
Retail	-7.6%	-39.8%	5.7%	0.0%	-7.1%	-15.4%	1.093
Transportation & Warehousing	-1.4%	-26.8%	-3.6%	3.6%	14.2%	-5.0%	1.038
Information	-5.1%	-41.4%	15.7%	-16.8%	10.6%	-3.4%	0.983
Finance & Insurance	0.1%	-38.5%	-27.4%	-5.8%	14.0%	-6.1%	1.065
Real Estate	0.1%	-29.2%	-14.9%	-21.2%	22.4%	-10.7%	1.121
Prof. Services & Mgmt. of Companies	-3.9%	-28.3%	-11.0%	1.1%	-6.3%	-6.4%	1.027
Administrative	-3.9%	-35.0%	-1.8%	47.4%	-39.6%	-11.1%	1.080
Education	-3.7%	-25.7%	-26.1%	0.3%	2.2%	-9.9%	1.069
Health	-3.7%	-22.4%	-10.1%	-13.6%	8.1%	-8.5%	1.053
Arts & Entertainment	-24.3%	-34.8%	-33.7%	-20.7%	10.1%	-25.3%	1.014
Hospitality	-24.3%	-25.4%	-7.4%	-18.0%	-25.0%	-18.9%	0.934
Other	-16.7%	-34.4%	4.0%	-4.1%	19.6%	-11.9%	0.946
Public Administration	-4.0%	-12.7%	21.8%	21.9%	4.9%	9.9%	0.873
All Industries	-7.2%	-25.1%	-3.4%	1.4%	0.0%	-7.0%	0.998

Sample Hospitality Calculations

Column G: -18.9% = ∑(C x F) = 49.8% x -25.4% + 29.9% x -7.4% + 14.6% x -18.0% + 5.7% x -25.0%

Column H: 0.934 = (1 + A) / (1 + G) = (1 - 24.3%) / (1 - 18.9%)

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Source: March 2021 UCLA Forecast (Column A); 2019 and 2020 EPI CPS Data Sets as of 2021.04.02 (Column F)

Derivation of 2020 Hospitality Employment Distribution by Wage Level

	Quartile				
	[$0, $15)	[$15, $22)	[$22, $37.5)	[$37.5+)	Total
2019 Employment Distribution	49.8%	29.9%	14.6%	5.7%	100.0%
Observed CPS Employment Change	-25.4%	-7.4%	-18.0%	-25.0%	-18.9%
Observed UCLA Employment Change					-24.3%
Off-Balance	0.934	0.934	0.934	0.934	0.934
Adjusted Employment Change	-30.3%	-13.5%	-23.4%	-29.9%	-24.3%
Adjusted 2020 Employment Distribution	45.8%	34.2%	14.8%	5.3%	100.0%

45.8% = 49.8% x (1 - 30.3%) / (1 - 24.3%)

2019 distribution is adjusted by adjusted quartile change relative to selected overall change.

Note:

Since the same off-balance factor is applied to all quartiles, the adjusted 2020 employment distribution is equal to the observed 2020 distribution.

Alternate calculation: 45.8% = 49.8% x (1 – 25.4%) / (1 – 18.9%)

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Source: Source: March 2021 UCLA Forecast ; 2019 and 2020 EPI CPS Data Sets as of 2021.04.02

Derivation of Wage-Mix Adjusted Average Wage

	B	I				D				J
	2019 Industry Distribution	Observed 2020 CPS Quartile Distribution				2019 CPS Average Wage by Quartile				
		[$0, $15)	[$15, $22)	[$22, $37.5)	[$37.5+)	[$0, $15)	[$15, $22)	[$22, $37.5)	[$37.5+)	Total
Agriculture & Mining	2.5%	46.2%	29.7%	12.9%	11.2%	12.15	17.22	28.19	69.48	22.17
Utilities & Construction	5.3%	11.1%	26.4%	35.1%	27.5%	11.60	17.90	28.31	58.29	31.95
Manufacturing	7.4%	16.1%	22.2%	27.1%	34.6%	12.31	17.86	28.19	72.35	38.64
Wholesale	3.9%	21.2%	28.2%	26.0%	24.6%	11.95	18.00	28.09	66.82	31.34
Retail	9.3%	29.4%	38.1%	21.0%	11.5%	12.07	17.44	27.08	62.65	23.08
Transportation & Warehousing	3.6%	18.9%	35.9%	28.7%	16.5%	11.76	17.70	27.63	60.23	26.44
Information	3.2%	7.9%	16.3%	25.2%	50.7%	10.93	18.39	28.29	72.68	47.81
Finance & Insurance	3.1%	7.1%	14.9%	32.4%	45.6%	11.64	18.25	28.53	68.63	44.07
Real Estate	1.6%	14.8%	28.1%	25.4%	31.8%	11.49	18.52	27.84	65.14	34.65
Prof. Services & Mgmt. of Companies	8.8%	4.7%	12.2%	26.5%	56.6%	11.53	17.95	28.95	72.07	51.21
Administrative	6.5%	24.6%	39.7%	25.5%	10.2%	11.46	17.78	27.05	54.56	22.34
Education	2.2%	12.0%	21.6%	33.8%	32.7%	11.73	17.90	28.71	59.33	34.34
Health	13.5%	16.9%	25.9%	25.1%	32.1%	11.79	17.79	28.54	64.38	34.44
Arts & Entertainment	1.8%	26.9%	29.3%	24.4%	19.4%	11.77	17.32	27.87	76.43	29.85
Hospitality	9.6%	45.8%	34.2%	14.8%	5.3%	11.81	17.20	27.33	57.58	18.36
Other	3.2%	30.9%	30.9%	22.9%	15.4%	11.01	17.57	27.27	61.45	24.50
Public Administration	14.6%	13.1%	19.6%	32.3%	35.0%	11.53	18.49	28.09	59.58	35.07
All Industries	100%	20.2%	26.4%	25.8%	27.6%	11.76	17.78	28.10	65.39	32.41

Sample Column J Calculations

Hospitality: 18.36 = ∑(I x D) = 45.8% x 11.81 + 34.2% x 17.20 + 14.8% x 27.33 + 5.3% x 57.58

All Industries: 32.41 = ∑(B x J)

Estimated Impact

32.41 / 31.06 – 1 = 4.3%

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Source: March 2021 UCLA Forecast (Column B); 2020 EPI CPS Data Set as of 2021.04.02 (Column I); 2019 EPI CPS Data Set as of 2021.04.02 (Column D)

Wage Level Distribution Impact in 2021 - 2023

- The impact of intra-industry changes in wage distributions in 2020 is measurable using observed California data.
- To the extent that low wage employment increases as the economy recovers, an adjustment in the opposite direction should be made to future years.
  - However, forecasts of future employment by wage level and industry are not available.

- Instead, the WCIRB tested a range of scenarios regarding the unwinding of the 2020 impact.
  - Full Unwinding: Assumes that the measured 4.3% impact in 2020 would fully reverse over the 2021-2023 forecast horizon.
  - No Unwinding: Assumes that changes to the wage distribution within industries are permanent.
  - Proportional to Industry Mix: Assumes that impacts from the change in the wage distribution within industry will reverse in proportion to the reversal due solely to industrial mix.
  - Midpoint: Assumes a reversal halfway between the Full Unwinding and Proportional to Industry Mix scenarios.

Derivation of Adjusted Average Wage Change

	2020	2021	2022	2023	Cumulative	Annualized				
	Average Wage Change									
Average* of UCLA and DoF	9.6%	0.9%	1.8%	2.8%	15.9%	3.7%	Total	Change Factor Due to Mix		
	Industry Mix Adjustment						Unwinding	2020	Culmulative	2021 - 2023
	-1.9%	0.4%	0.0%	0.0%	-1.5%	-0.4%	**0.207**	0.981	0.985	1.004
Scenario	**Wage Mix Adjustments**									
Full Unwinding	-4.3%	2.2%	1.6%	0.7%	0.0%	0.0%	1.000	0.957	1.000	1.045
Midpoint	-4.3%	1.4%	1.0%	0.4%	-1.7%	-0.4%	0.603	0.957	0.983	1.027
Proportional to Industry Mix	-4.3%	0.5%	**0.3%**	0.1%	-3.5%	-0.9%	0.207	0.957	**0.965**	**1.009**
No Unwinding	-4.3%	0.0%	0.0%	0.0%	-4.3%	-1.1%	0.000	0.957	0.957	1.000
	Adjusted Average Wage Change									
Industry Mix Only	7.5%	1.3%	1.8%	2.8%	14.1%	3.4%				
Full Unwinding	2.9%	3.6%	3.4%	3.5%	14.1%	3.4%				
Midpoint	2.9%	2.7%	2.8%	3.3%	12.1%	2.9%				
Proportional to Industry Mix	2.9%	1.8%	2.2%	3.0%	10.2%	2.5%				
No Unwinding	2.9%	1.3%	1.8%	2.8%	9.2%	2.2%				
Assumed Unwinding Share		50%	35%	15%						

*2020 is UCLA only

0.207 = (0.985 - 0.981) / (1 - 0.981)

0.965 = 0.207 x (1 - 0.957) + 0.957

1.009 = 0.965 / 0.957

0.3% = 1.009^35% - 1

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Source:

04

12/31/2020 Experience Review

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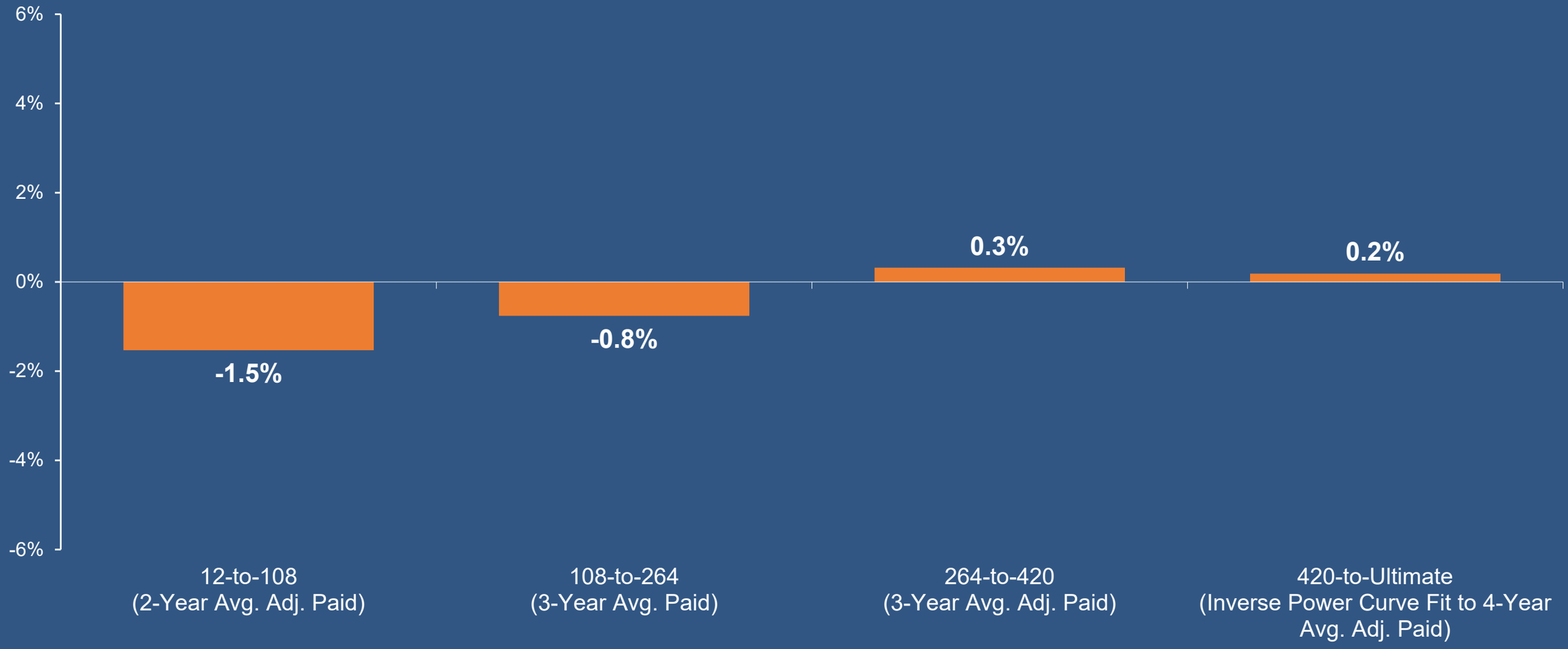
Updated Summary of 12/31/2020 Experience (Excluding COVID-19)

- 100% of market included
- Updates from 3/16/2021 meeting review:
  - Additional insurer data submissions and revisions
  - Loss development primarily based on 2-year average paid adjusted for changes in claim settlement rates
  - Adjustment to medical development for SB 1160 lien reforms updated to a 70% reduction in liens
  - Projected adjustment to weekly TD maximum updated to reflect projected (unadjusted) wage changes
  - Projected changes in average wages adjusted for shifts in class mix
  - Preliminary actual 2020 frequency trend adjusted for shifts in class mix
  - Projected annual medical severity trend updated to 1% (indemnity severity is also 1%)
  - Projected loss ratio is trended from AY 2019 only
- Preliminary projected loss ratio for September 1, 2021 to August 31, 2022 policies is 0.600
  - Revised from 0.592 in 4/15/21 Agenda due to data correction affecting average experience modification for 2019
  - Does not reflect any adjustment to on-level premium or losses for shifts in wage distribution within industry

Approximate Change in Loss Ratio Projection

Factor	Approx. Change in Percentage Points From 1/1/2021 Filing
Unadjusted Loss Development Emergence	-1.5
Loss Development Methodology – 2-Year Average	1.0
Updated SB 1160 Adjustment to Medical Development	0.0
Indemnity On-level Adjustments (TD Maximum)	0.0
Updated Wage Forecast	-2.0
Updated Frequency Trends	2.5
Updated Medical Severity Trend (1% Annual)	-1.0
Trend from 2019 Only (vs. 2018 and 2019)	-1.5
Trend to September 1, 2022 Average Experience Date	0.5
Total (to 4/15/2021 Agenda After Revision)	**-2.0**

Change in Projected Medical Development Factor
3/31/2020 to 12/31/2020 Experience



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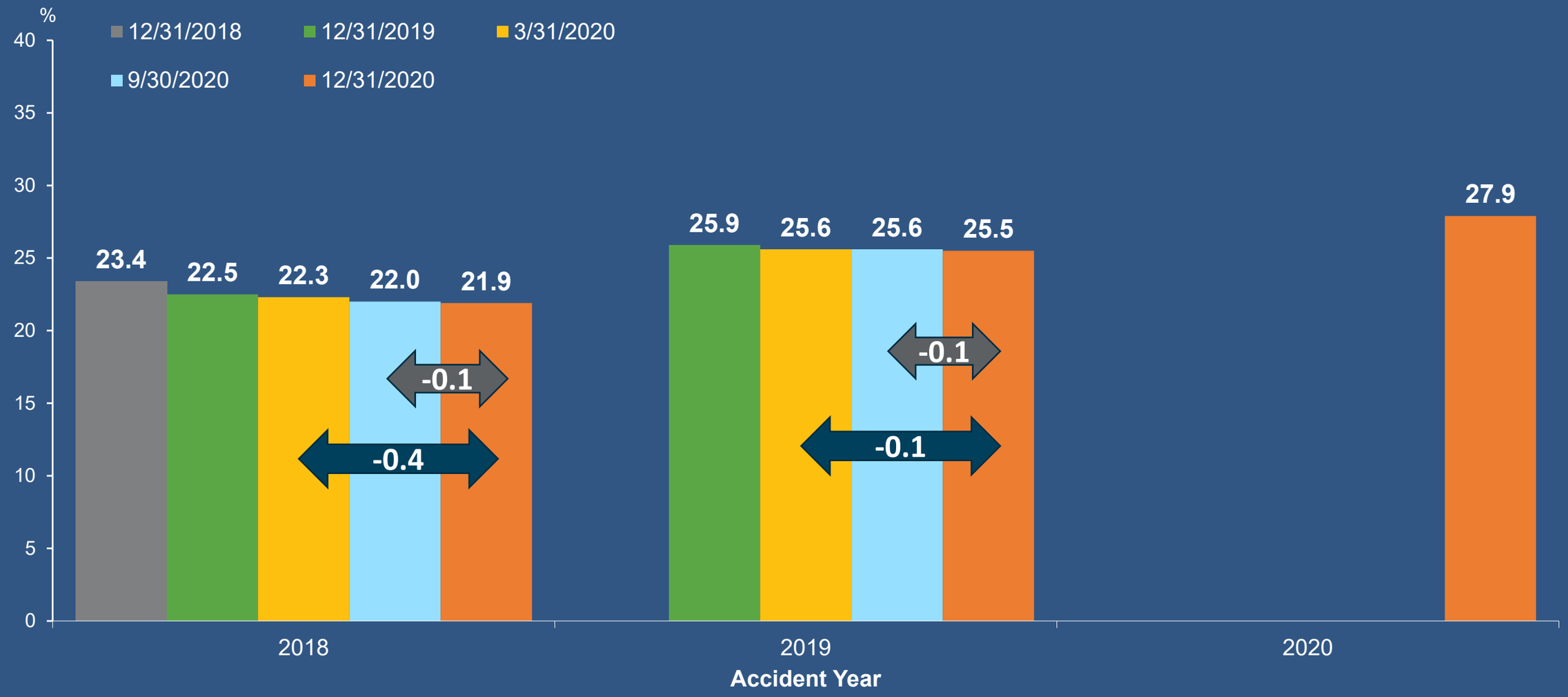
Source: WCIRB aggregate financial data

Developed Indemnity Loss Ratios (Exhibit 3.1)

As of December 31, 2020



Note: All loss ratios are adjusted to the loss development methodology reflected in the April 15, 2021 Actuarial Committee Agenda and may not be comparable to the actual loss ratios projected at that time.
Source: WCIRB aggregate financial data excluding COVID-19 claims

Developed Medical Loss Ratios (Exhibit 3.2)

As of December 31, 2020

Note: All loss ratios are adjusted to the loss development methodology reflected in the April 15, 2021 Actuarial Committee Agenda and may not be comparable to the actual loss ratios projected at that time.
Source: WCIRB aggregate financial data excluding COVID-19 claims

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Alternative Loss Development Methodologies (Item AC21-04-02)
Incurred Methods

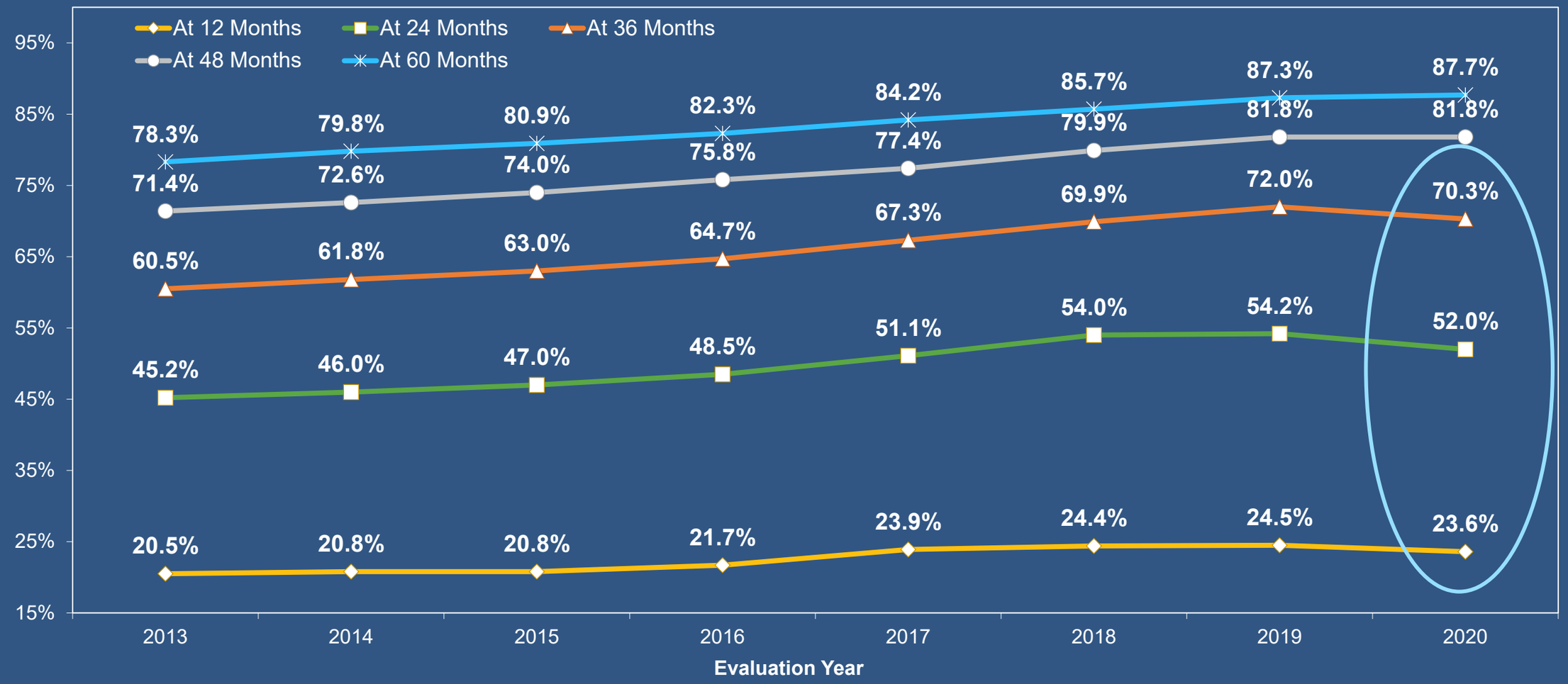
- Unadjusted Incurred Projections
  - Best with stable case reserve levels and incurred patterns
  - Can be distorted by changing reserve levels
  - ★ Incurred development more volatile and cyclical than paid development
  - ★ Performed poorly during transition periods
  - Greater variability across insurers than paid method
  - Difficult to impute reform adjustments
  - Treatment of MCCP in medical reserves unknown
  - ★ Other than flat 2Q, incurred development continued to decline steadily in 2020
- Incurred Adjusted for Changes in Case Reserve Levels
  - Best with clear evidence of changing case reserve levels
  - Unclear how to impute reform impacts
  - Recent updates reduced reliance on assumptions and improved accuracy of adjustment
  - ★ Method can be very volatile with constantly shifting reserve levels (3-year average is used)
  - ★ Pandemic volatility in 2020 claim activity creating additional volatility in this approach

Alternative Loss Development Methodologies (Item AC21-04-02)
Paid Methods

- Unadjusted Paid Projections
  - Best with stable payment patterns
  - Can be distorted by changing settlement rates or reforms
  - ★ Generally outperformed unadjusted incurred during transition periods
  - Less variability in paid patterns across insurers than in incurred patterns
  - ★ Recent changes in paid development likely related to reforms and claim settlement changes
- Reform-Adjusted Paid
  - Best with clear evidence of reform impact on payment patterns
  - SB 1160 adjustments reflect impact of liens on medical development patterns
  - Adjustment for pharmaceutical cost changes restate medical development to 2018 pharmaceutical cost level
  - ★ Continued efficacy of reform adjustments reviewed periodically
- Claim Settlement Rate-Adjusted Paid
  - Best with clear evidence of changes in claim settlement rates affecting loss development
  - ★ Improved projection during periods of significant settlement rate change
  - Primary assumptions of method reasonable based on recent review
  - ★ Claim settlement rates have declined sharply for recent AYs during pandemic slowdown

Estimated Ultimate Indemnity Claim Settlement Ratios (Exhibit 11.2)

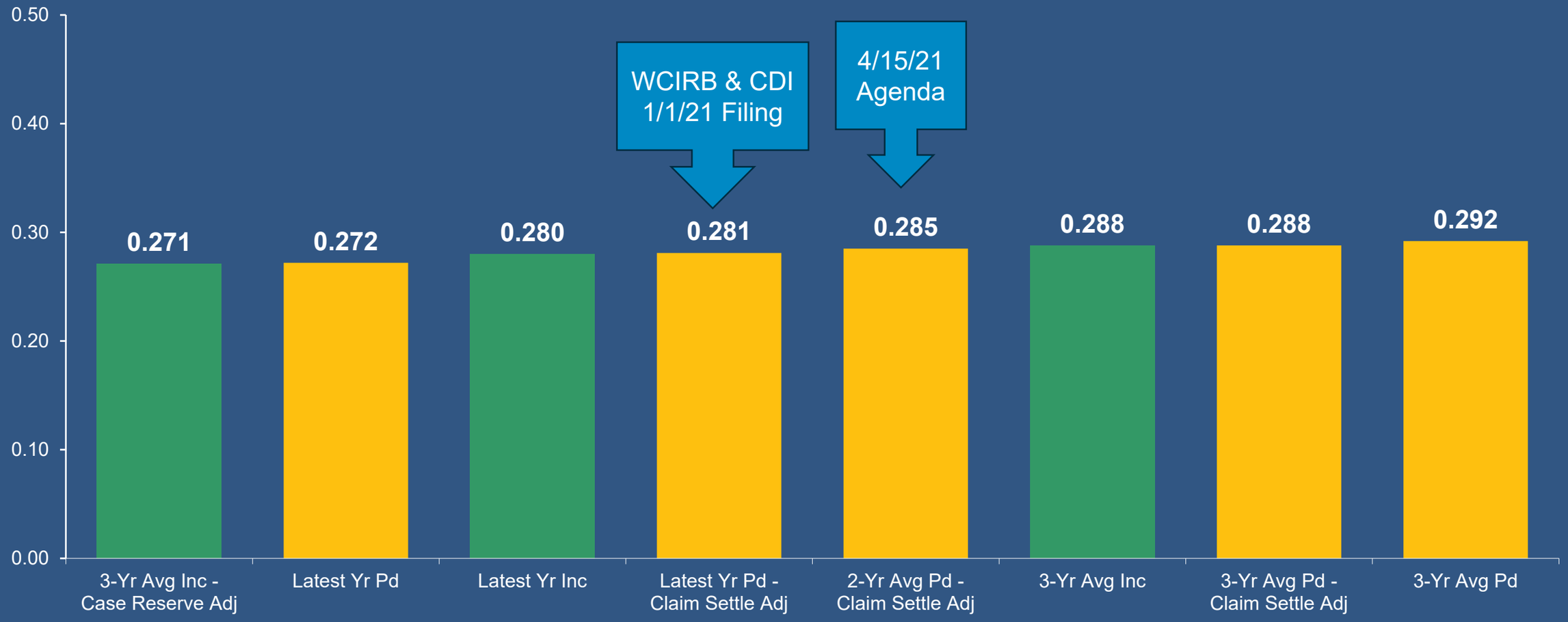
As of December 31, 2020



Source: WCIRB aggregate financial data and projections excluding COVID-19 claims

Projected Indemnity On-Level Loss Ratios under Alternative Development Methods

As of December 31, 2020



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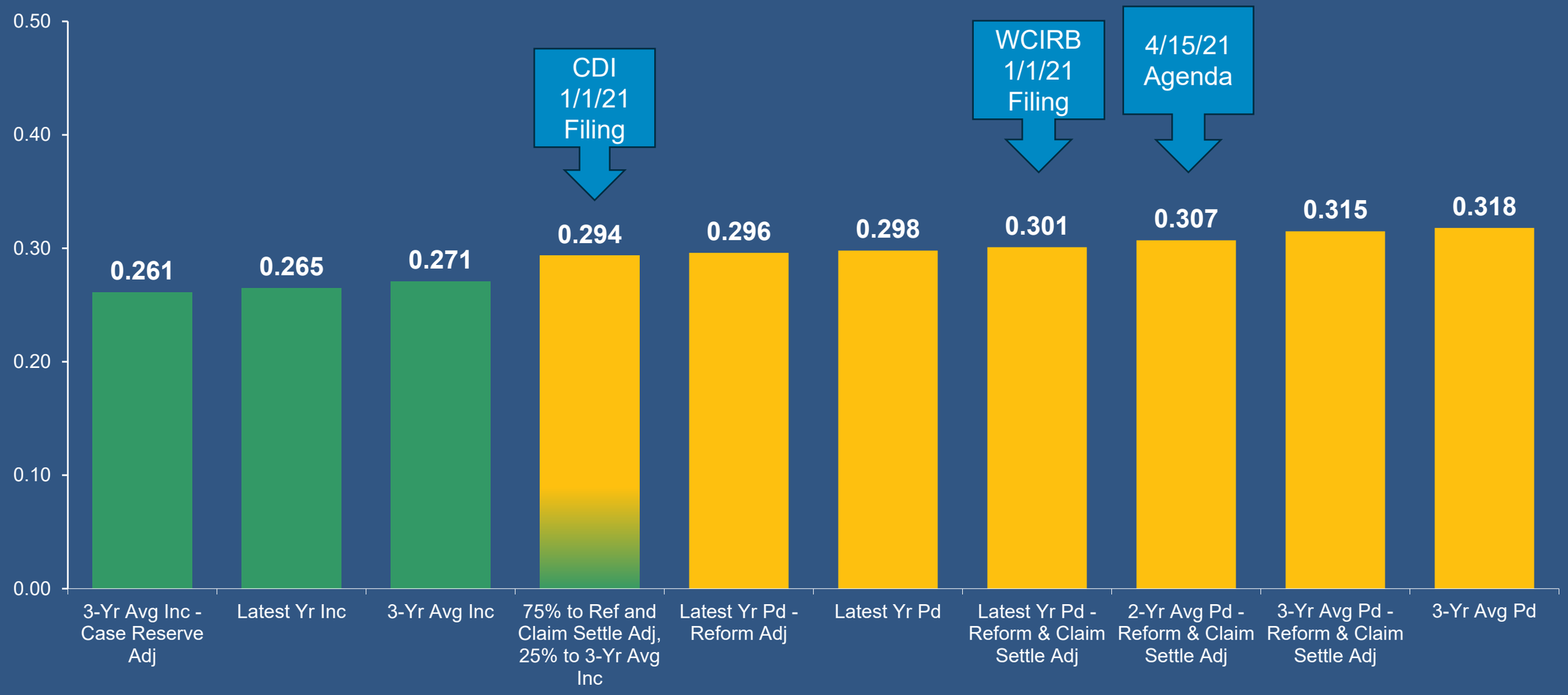
Source: WCIRB aggregate financial data and projections

Projected Medical On-Level Loss Ratios under Alternative Development Methods

As of December 31, 2020



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Source: WCIRB aggregate financial data and projections.

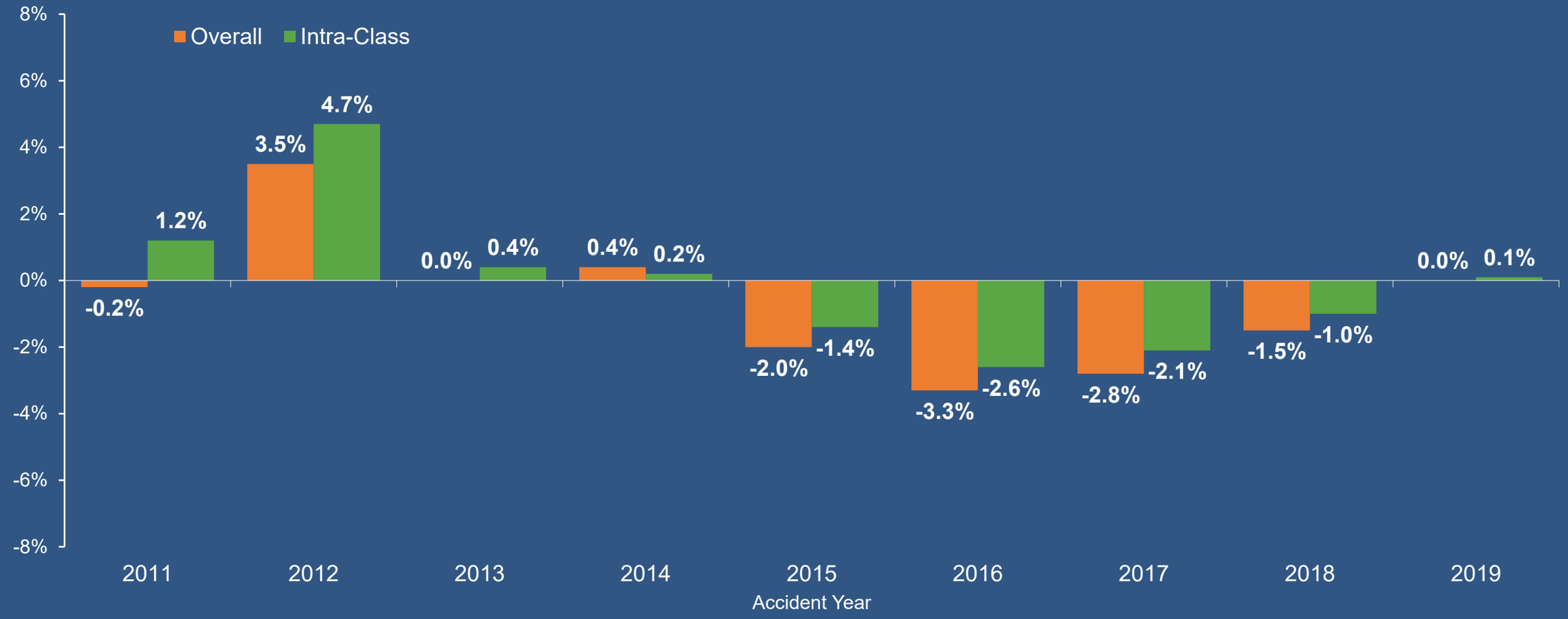
Adjustments to Indemnity Benefits for Increase in TD Maximum

- TD and PT weekly minimum and maximum benefits increased each year by DWC by California statute
- Increases are based on change in SAWW for employees covered by unemployment insurance for the 12 months ending March 31 of the prior year
- Typical increases result in approximately 0.4% increase in indemnity costs
- Benefits effective 1/1/2022 will be based on SAWW for March 31, 2021 compared to March 31, 2020
  - Change in SAWW measure as of September 30, 2020 is 7.9% (it is typically around 4%)
  - Projected wage change for 2021 from UCLA and CA DoF is fairly flat (determines 1/1/2023 benefit maximums)
- Staff updated indemnity on-level adjustments based on these anticipated SAWW changes

Accident Year	Prior Adjustment	Updated Adjustment
2022	0.4%	0.7%
2023	0.4%	0.0%
Total to 9/1/2022	0.5%	0.7%

Historical Changes in Indemnity Claim Frequency (Exhibit 12)

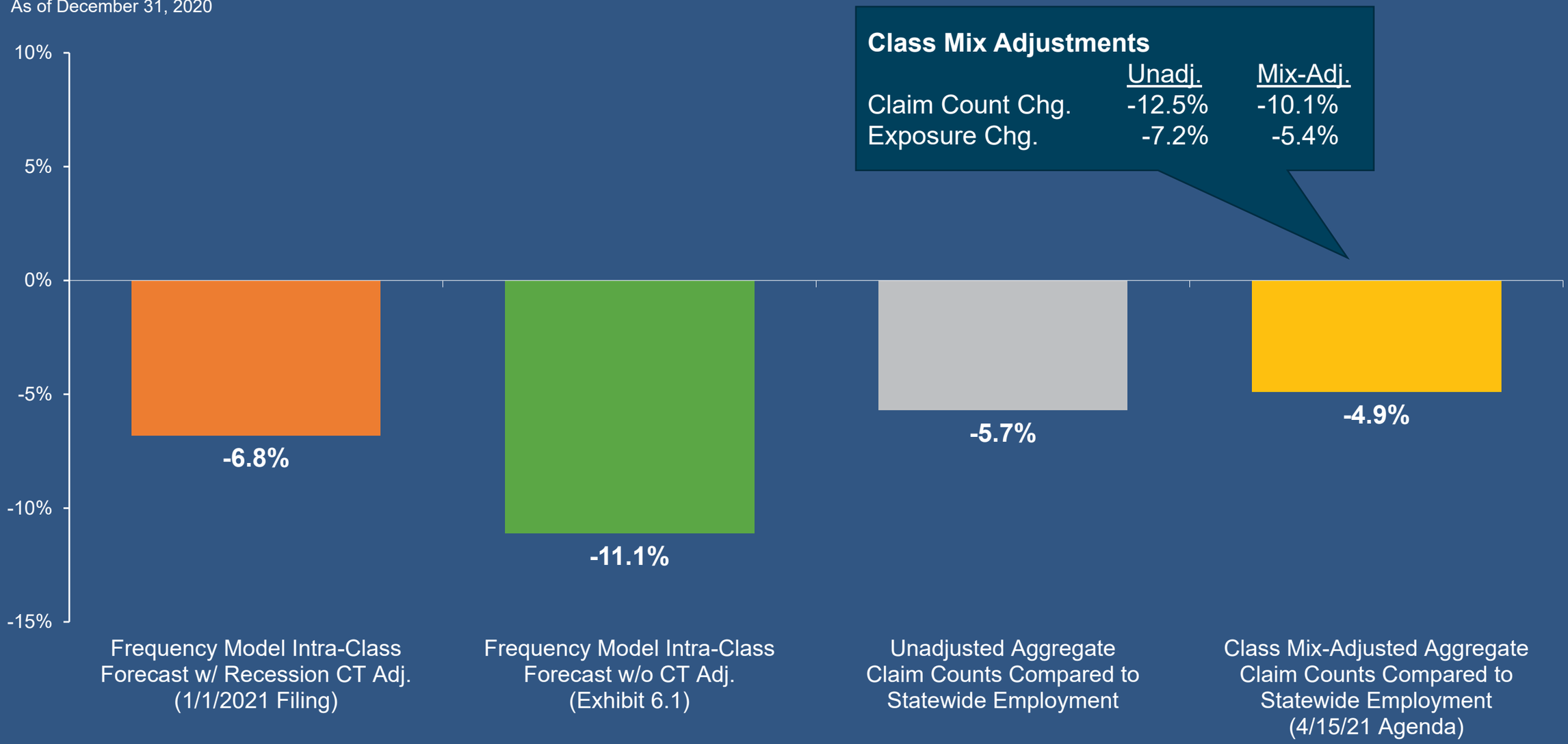
As of December 31, 2020



Source: Unit statistical indemnity claim counts compared to reported insured payroll.

Accident Year 2020 Indemnity Claim Frequency Change (Ex-COVID)

As of December 31, 2020



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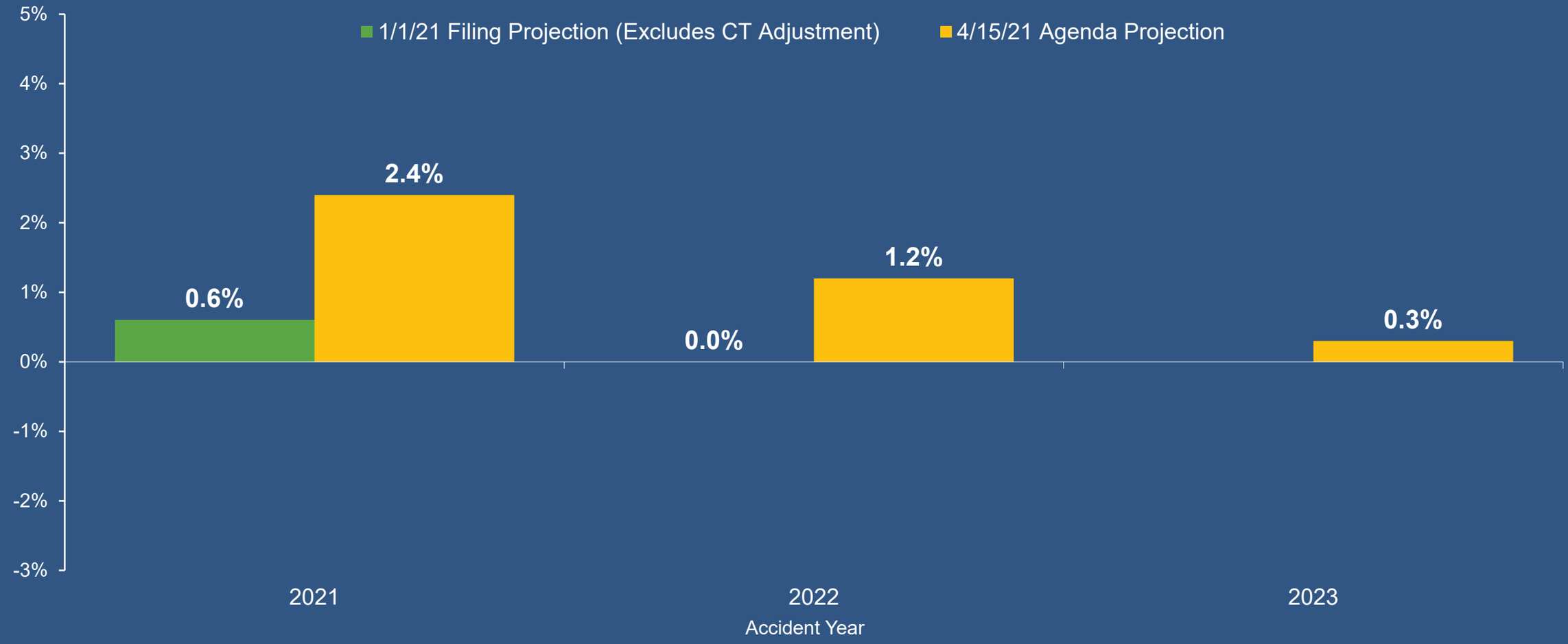
Source: WCIRB aggregate financial data and UCLA Anderson forecast as of December 2020.

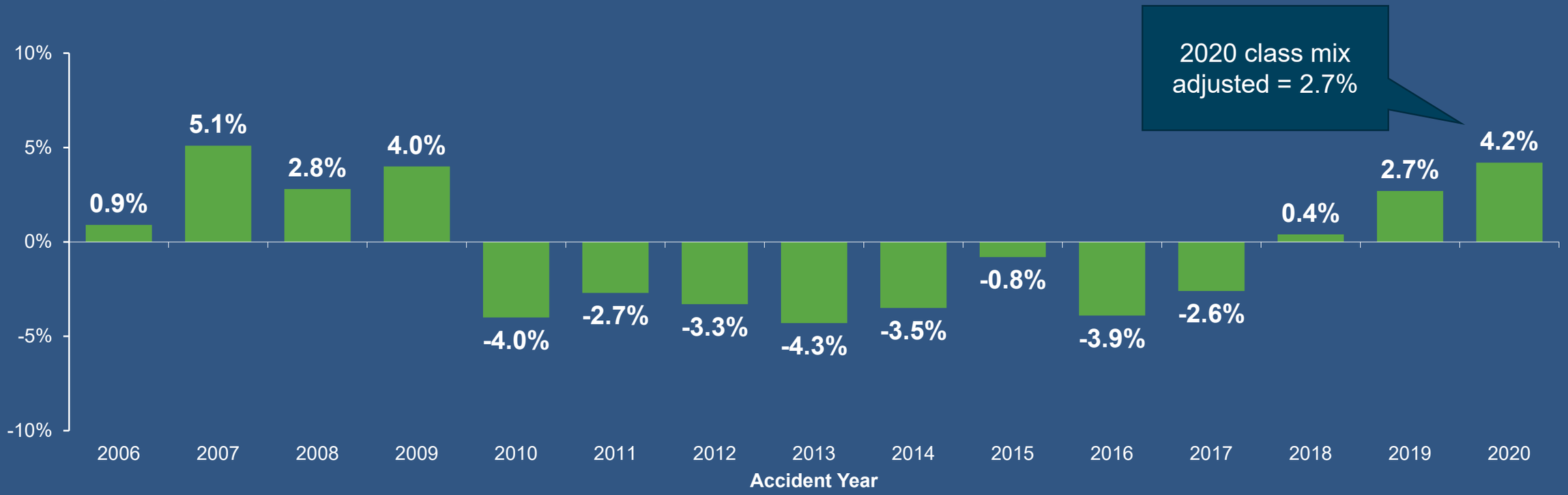
Frequency Model Intra-Class Forecasts for 2021 through 2023



Source: WCIRB indemnity claim frequency model

Projected Changes in On-Level Indemnity Severity (Exhibit 6.2)

As of December 31, 2020



Annual Exponential Trend Based on:

1990 to 2020: 1.0%

2005 to 2019: -1.5%

2015 to 2019: -0.9%

4/15/2021 Agenda Selected: 1.0%

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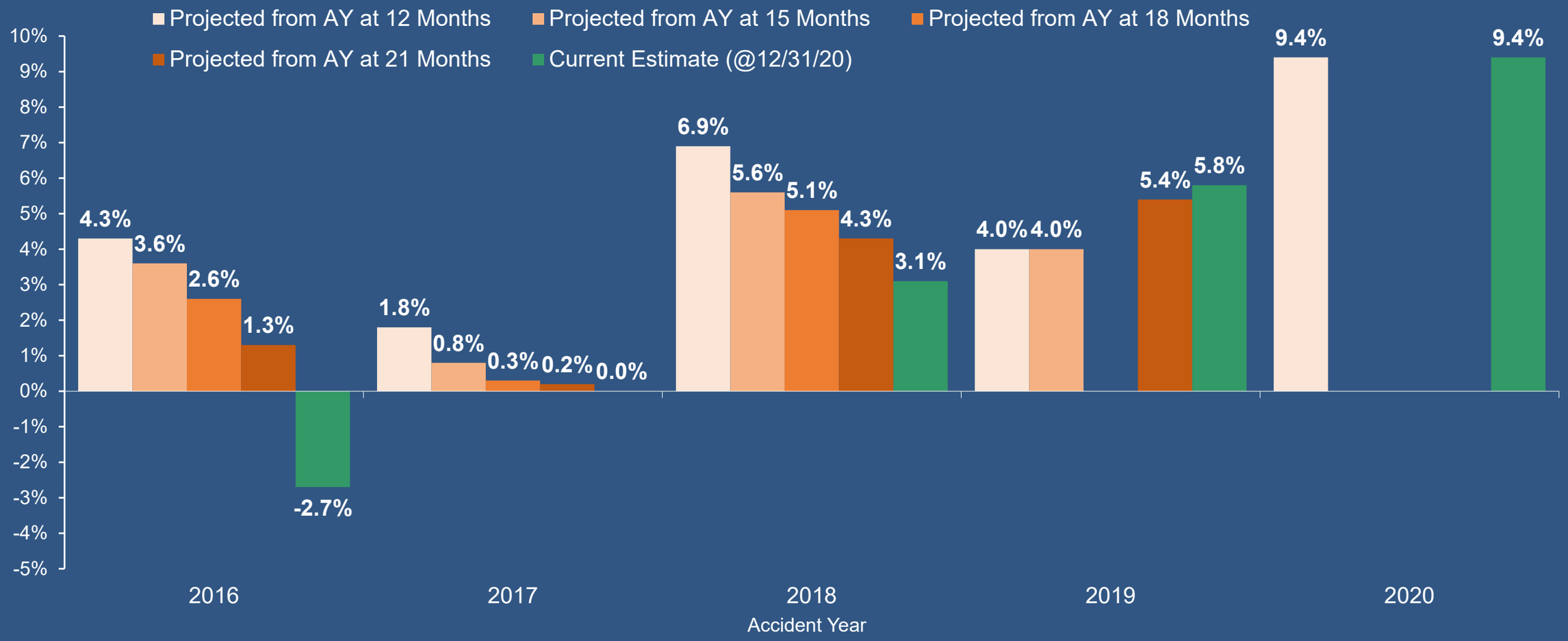
Source: WCIRB aggregate financial data excluding COVID-19 claims and projections

Indemnity Severity Changes Projected from Early Evaluations Compared to Current

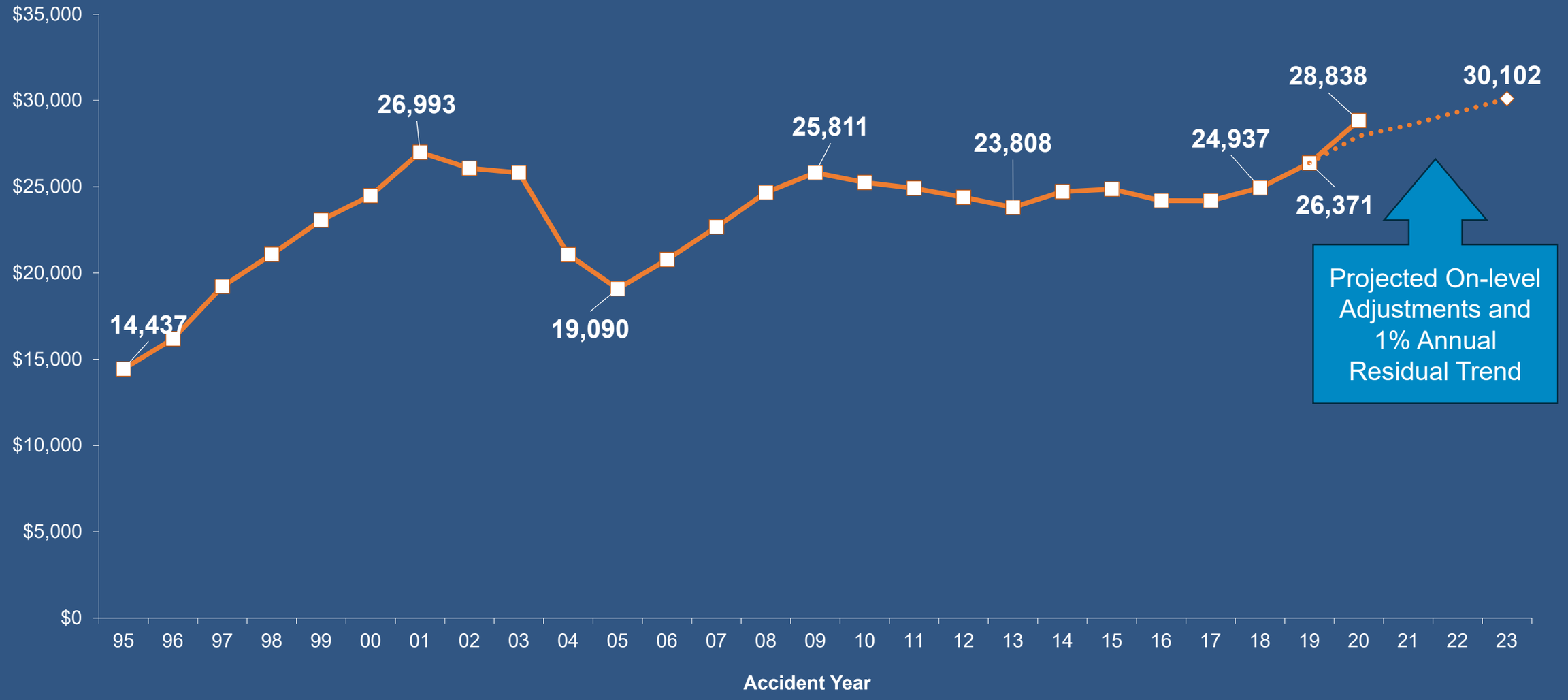
As of December 31, 2020



Source: WCIRB aggregate financial data excluding COVID-19 claims

Ultimate Indemnity per Indemnity Claim

As of December 31, 2020



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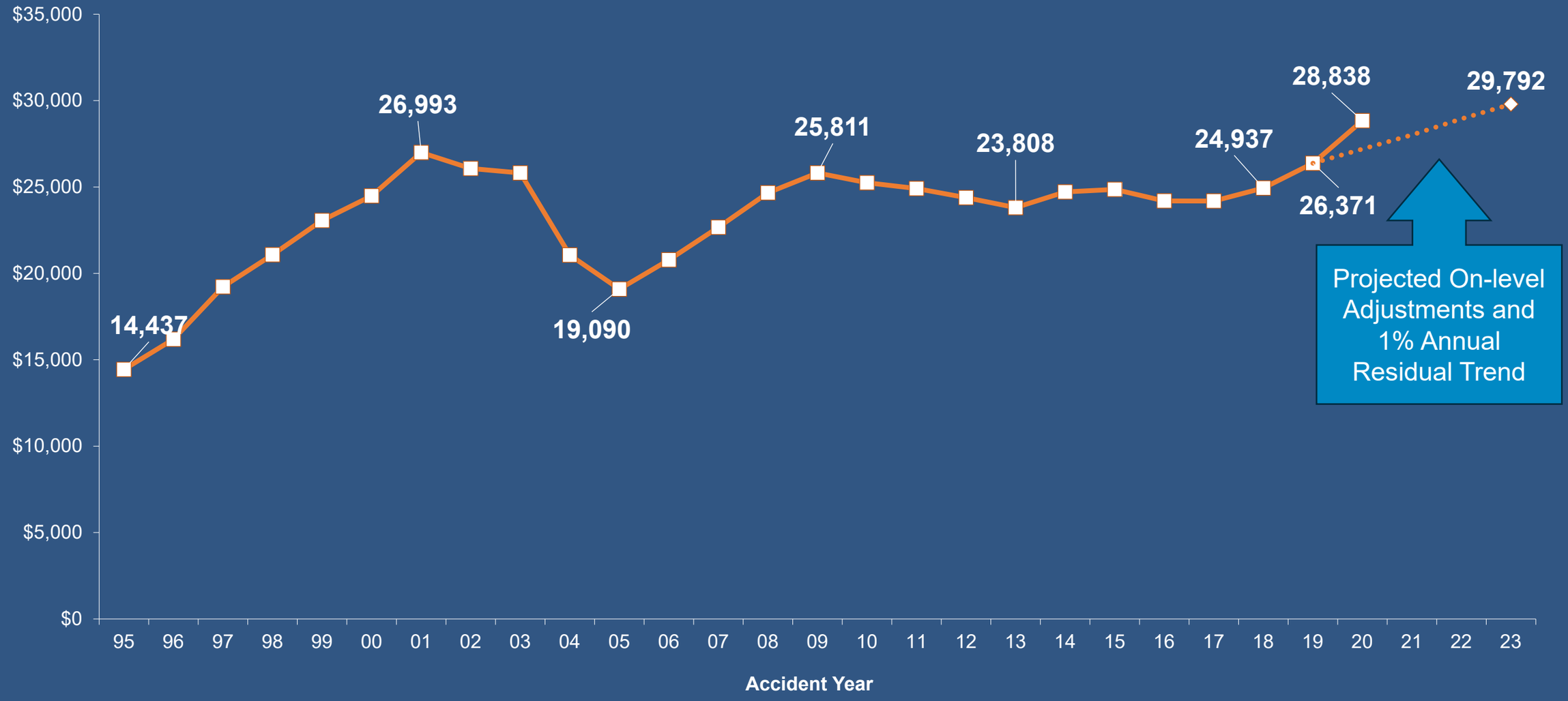
Source: WCIRB aggregate financial data and projections

Ultimate Indemnity per Indemnity Claim – Updated Wage On-level

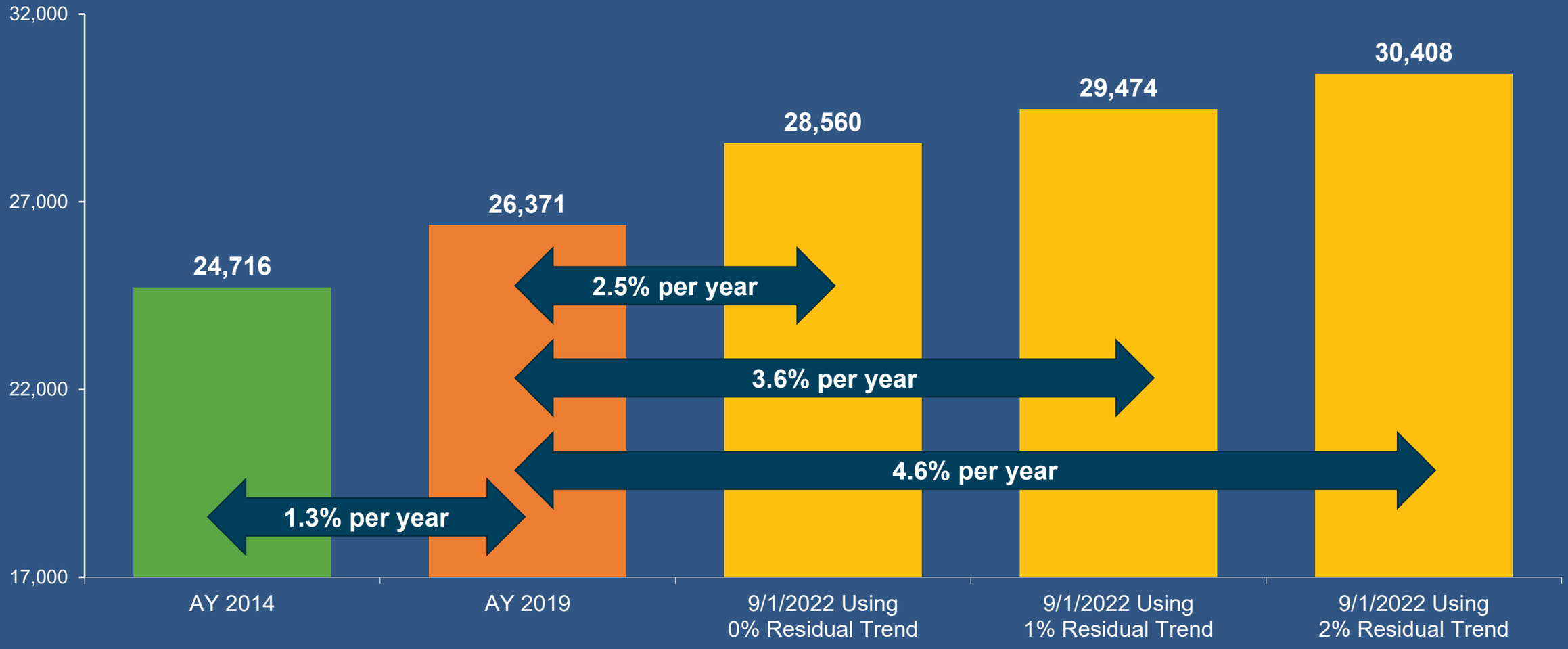
As of December 31, 2020



Source: WCIRB aggregate financial data and projections. Wage on-level adjustment for 2020 is offset by -4.3% with midpoint unwinding through 2023.

Projected Average Ultimate Indemnity Severities

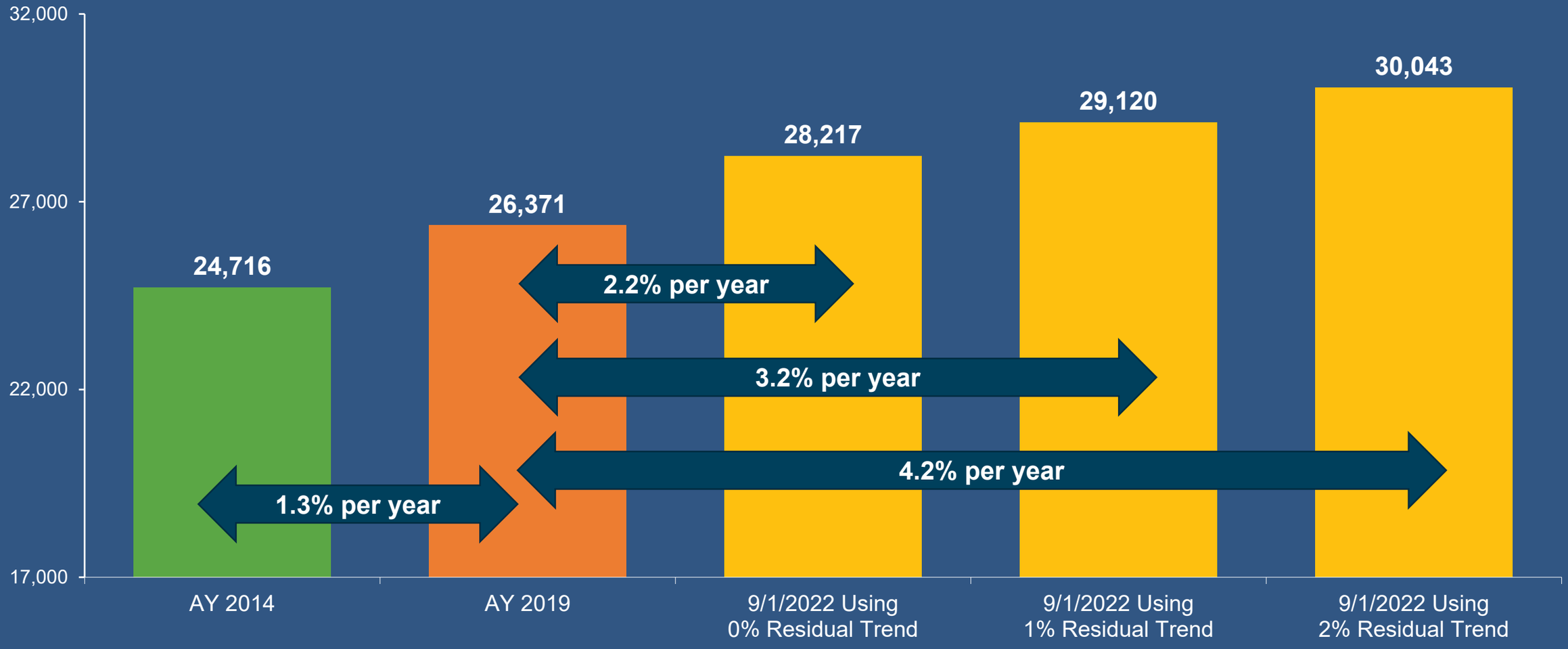
As of December 31, 2020



Source: WCIRB aggregate financial data and projections.

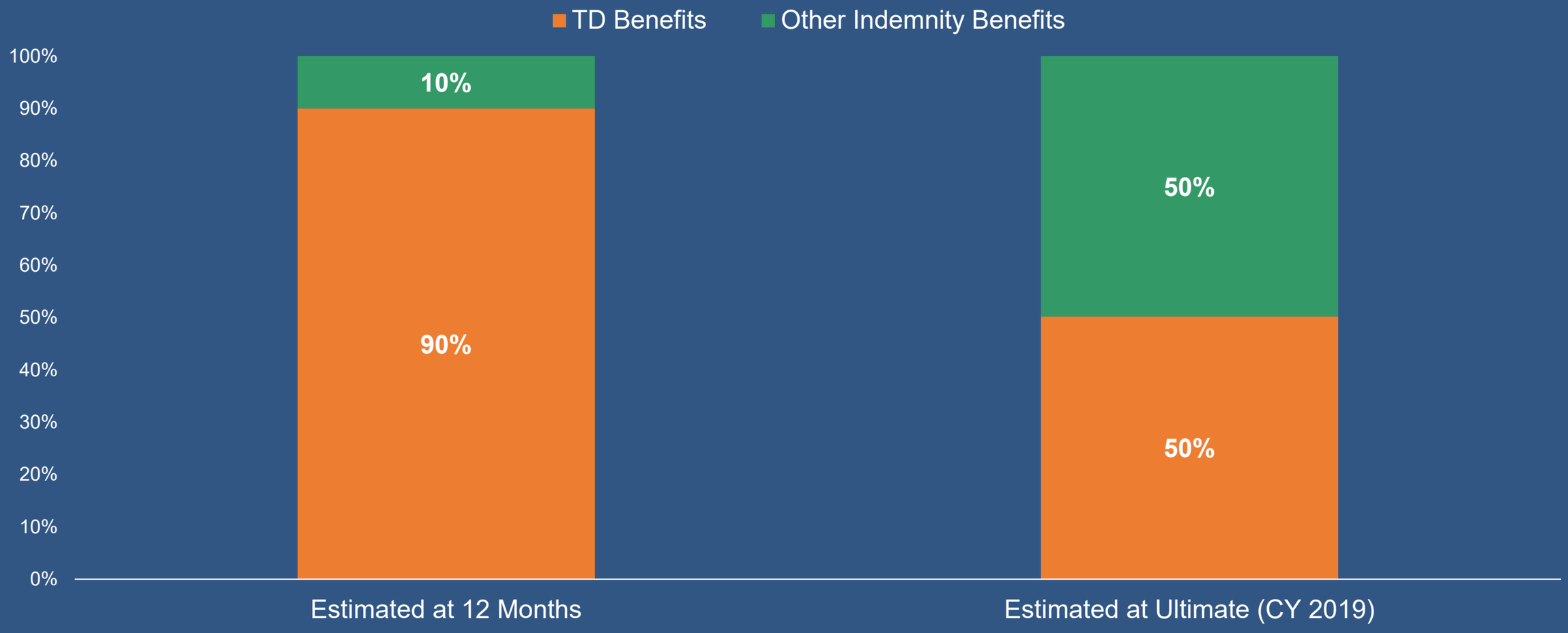
Projected Average Ultimate Indemnity Severities – Updated Wage On-level

As of December 31, 2020



Source: WCIRB aggregate financial data and projections. Wage on-level adjustment for 2020 is offset by -4.3% with midpoint unwinding through 2023.

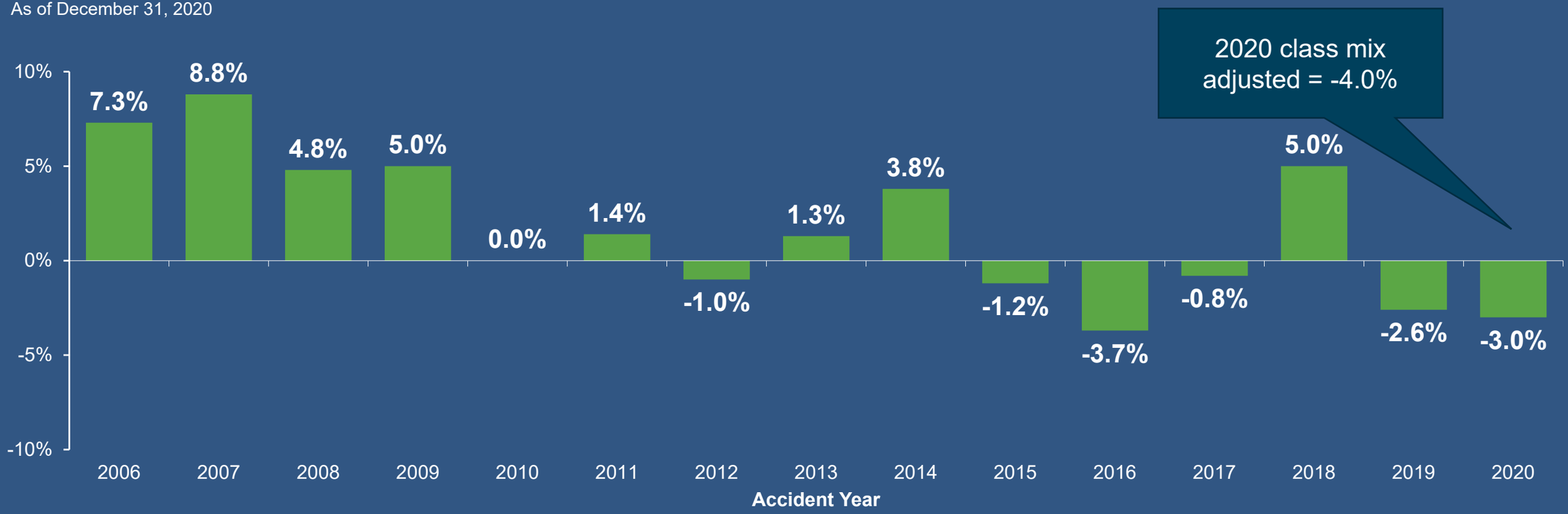
Approximate Proportion of TD vs Other Indemnity Benefits in Paid Indemnity



Source: WCIRB transactional indemnity data and annual report on losses and expenses

Projected Changes in On-Level Medical Severity (Exhibit 6.4)

As of December 31, 2020



Annual Exponential Trend Based on:

1990 to 2020 (including MCCP): 5.1%

2005 to 2019: 1.5%

2015 to 2019: 0.0%

4/15/2021 Agenda Selected: 1.0%

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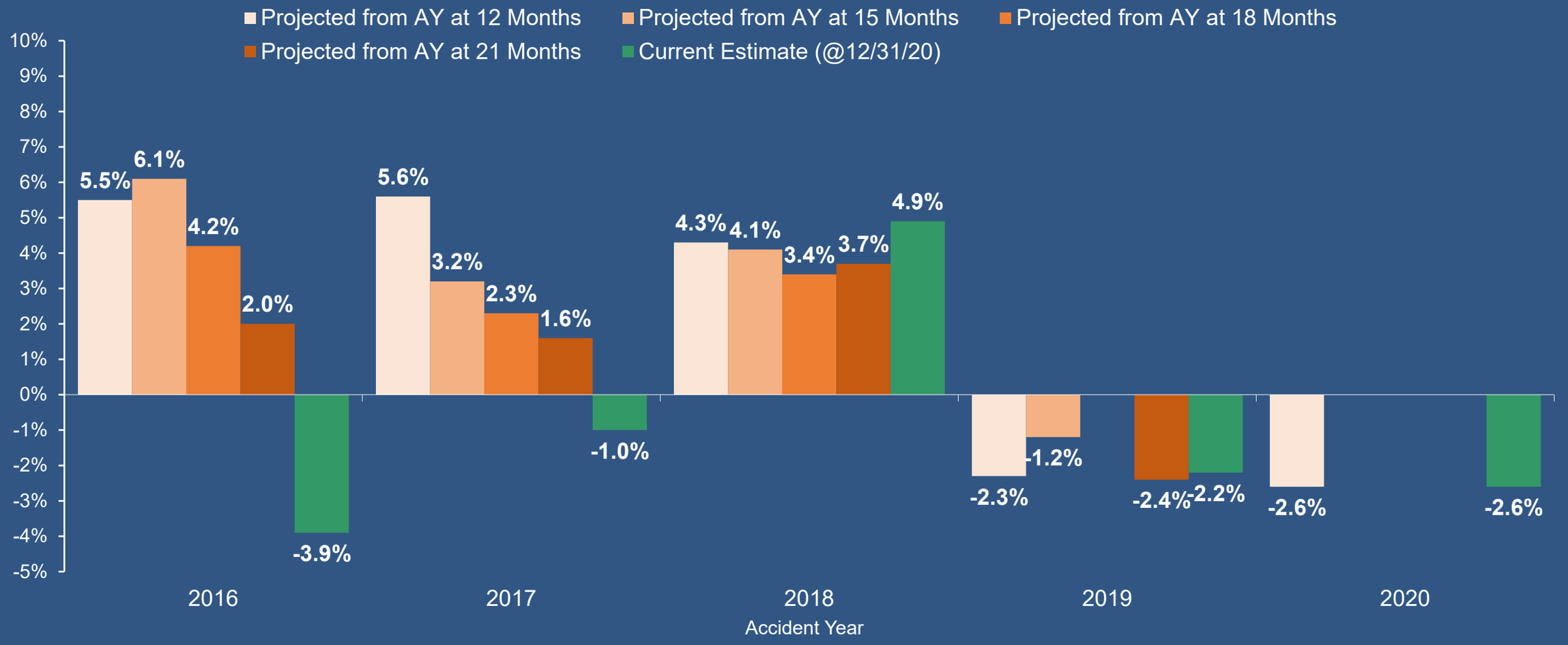
Source: WCIRB aggregate financial data excluding COVID-19 claims and projections. MCCP costs are excluded from accident years 2011 and prior.

Medical Severity Changes Projected from Early Evaluations Compared to Current

As of December 31, 2020



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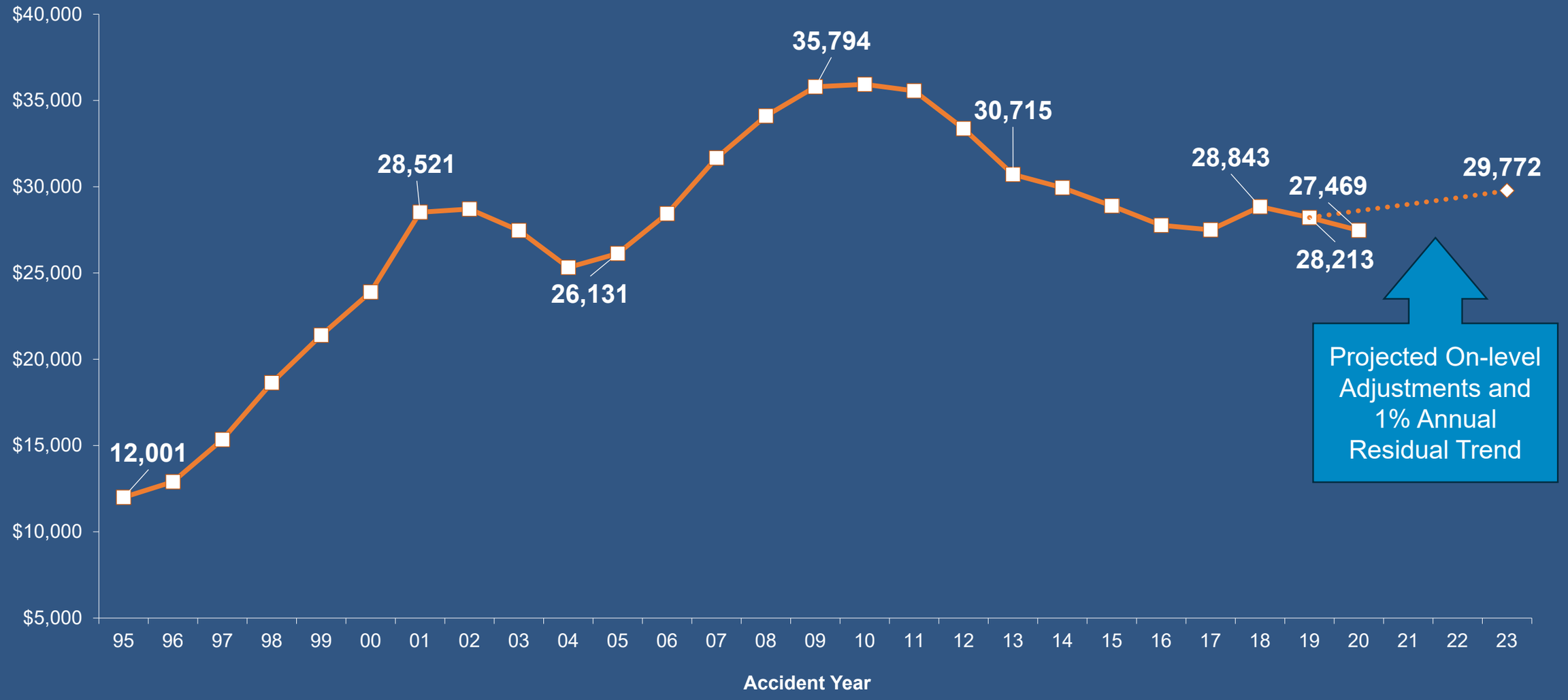
Source: WCIRB aggregate financial data excluding COVID-19 claims

Ultimate Medical per Indemnity Claim

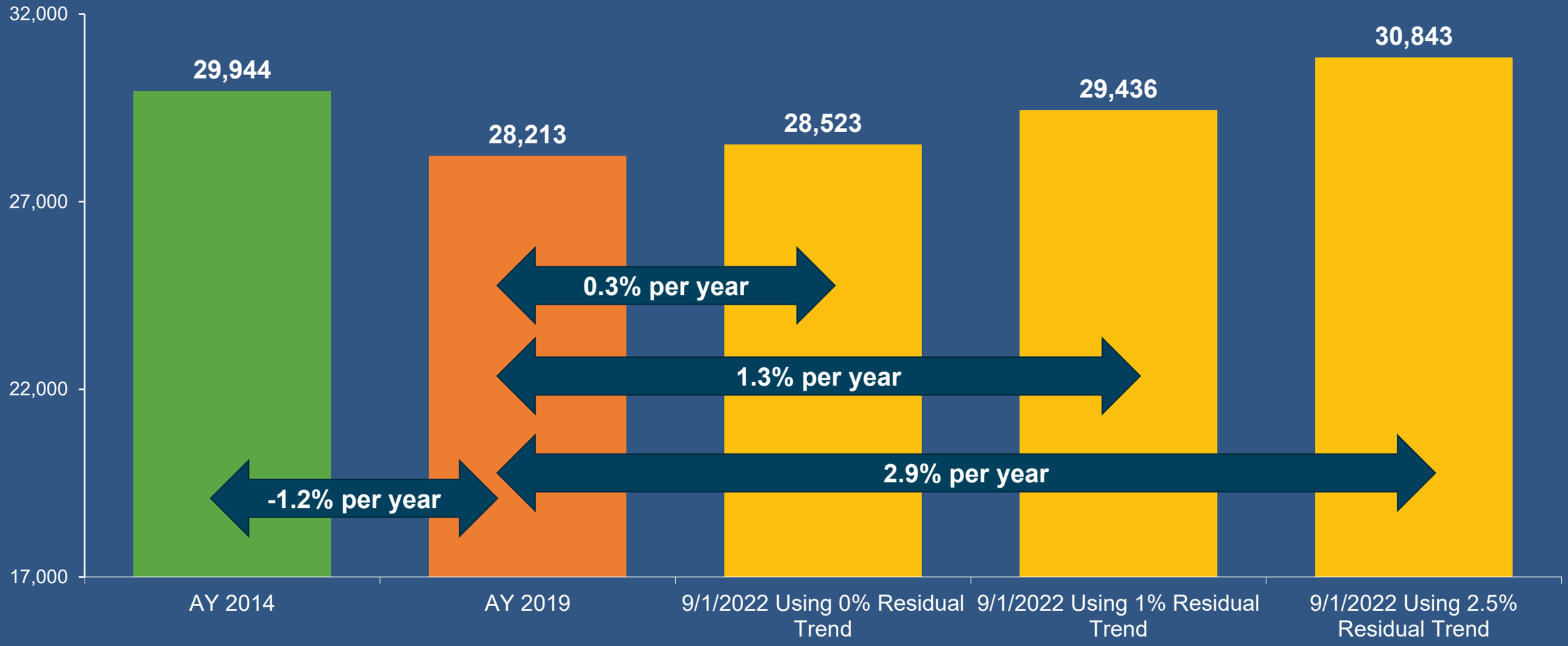
As of December 31, 2020



Source: WCIRB aggregate financial data and projections

Projected Average Ultimate Medical Severities

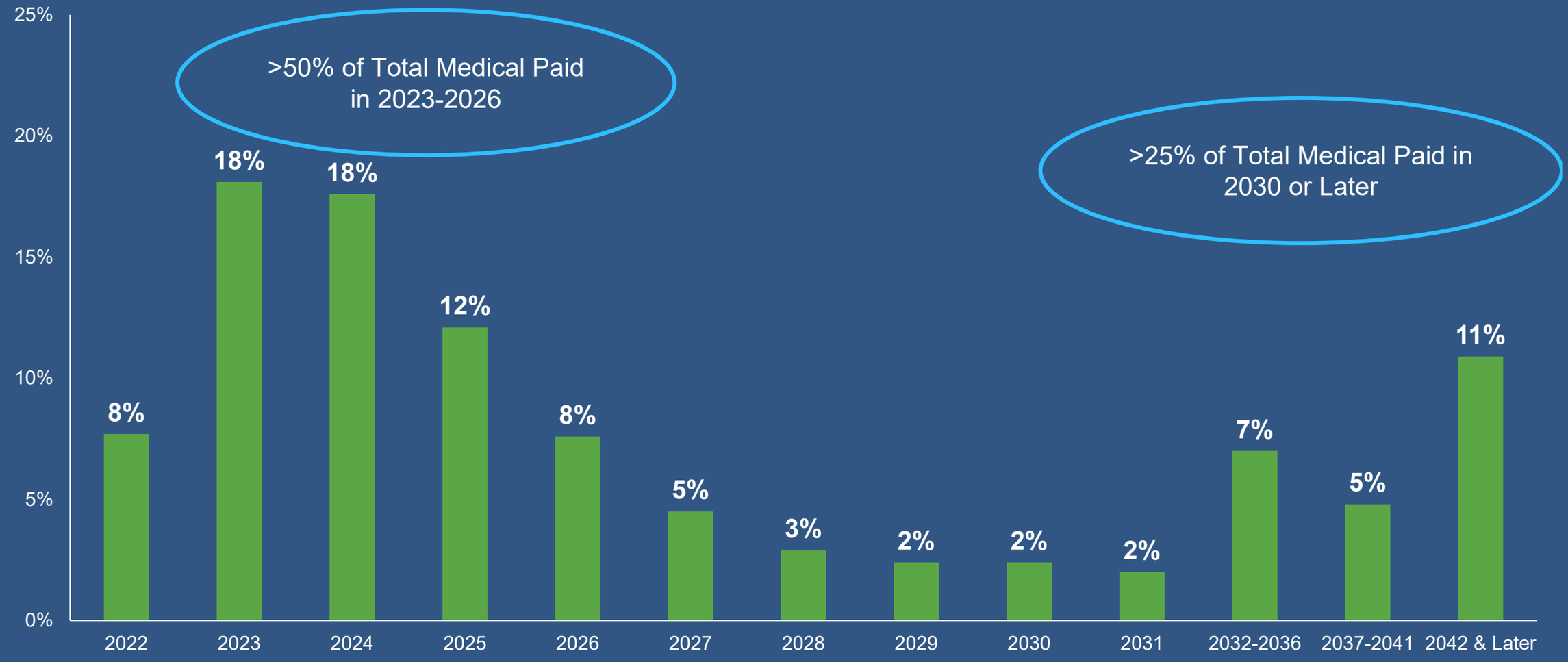
As of December 31, 2020



Source: WCIRB aggregate financial data and projections.

Policy Year 2022 – Estimated Medical Paid by Year

As of December 31, 2020



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Source: WCIRB aggregate financial data and projections of paid medical

Alternative Trending Methodologies (Item AC21-04-02)

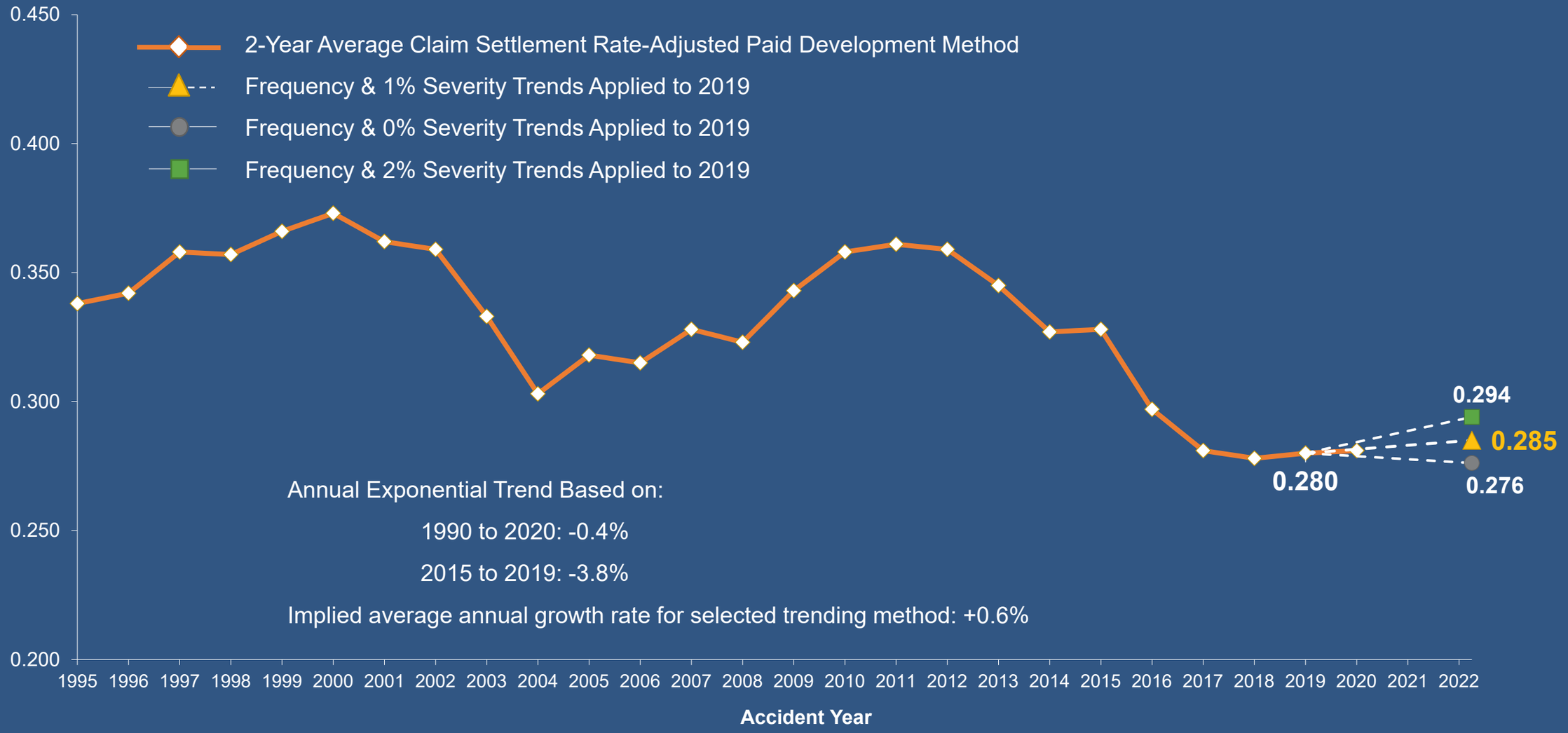
- Separate Frequency & Severity Trends Projections
  - Best during periods when loss ratios are volatile
  - ★ Frequency and severity are affected by differing underlying forces
  - ★ Allows for separate assumptions and judgment about future trends
  - ★ Assumes frequency & severity not highly correlated
  - Performed well during 2002-2004 reform and SB 863 transition periods but not post-reform periods
  - Performed well in most recent study of trending methods
  - On-level indemnity and medical severities relatively flat over last several years

Alternative Trending Methodologies (Item AC21-04-02)

- Loss Ratio Trend Projections
  - Best during periods with stable loss ratio trends
  - Historical loss ratios fit reasonably well to exponential curve
  - Rely on accurate on-leveling adjustments
  - Performed well during post-2002 to 2004 reform period
  - ★ Did not perform well during 2002 to 2004 reform and SB 863 transition periods when trends change
  - Generally not as accurate as frequency & severity method in most recent trending study
  - Recent trends have moderated with SB 863 & SB 1160 reforms
  - ★ Current loss ratio projections consistent with separate frequency & severity projections when similar periods to select trends are used
  - ★ Unclear whether current loss ratio trends will continue into post-COVID-19 environment

Projected On-Level Indemnity Loss Ratios (Exhibit 7.1)

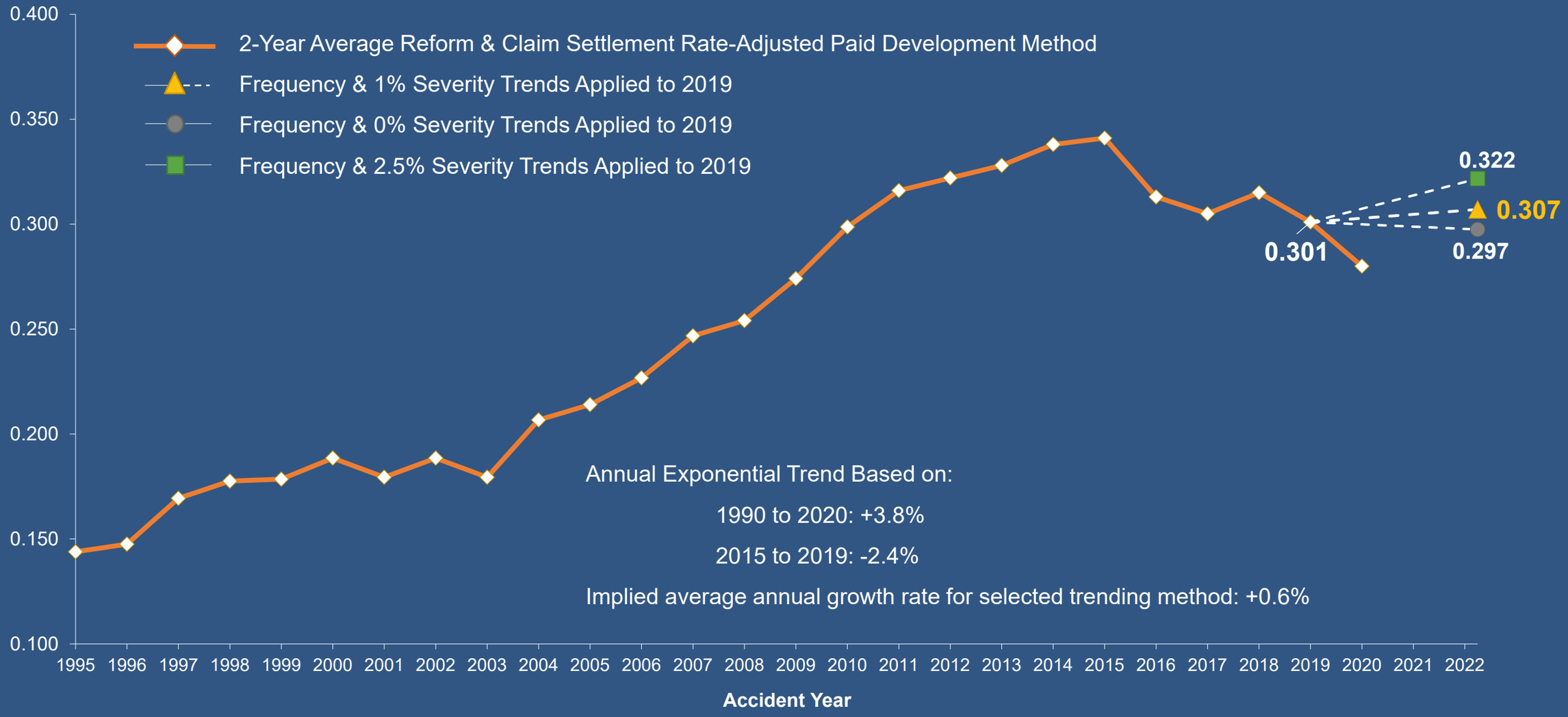
As of December 31, 2020



Source: WCIRB aggregate financial data and projections

Projected On-Level Medical Loss Ratios (Exhibit 7.3)

As of December 31, 2020



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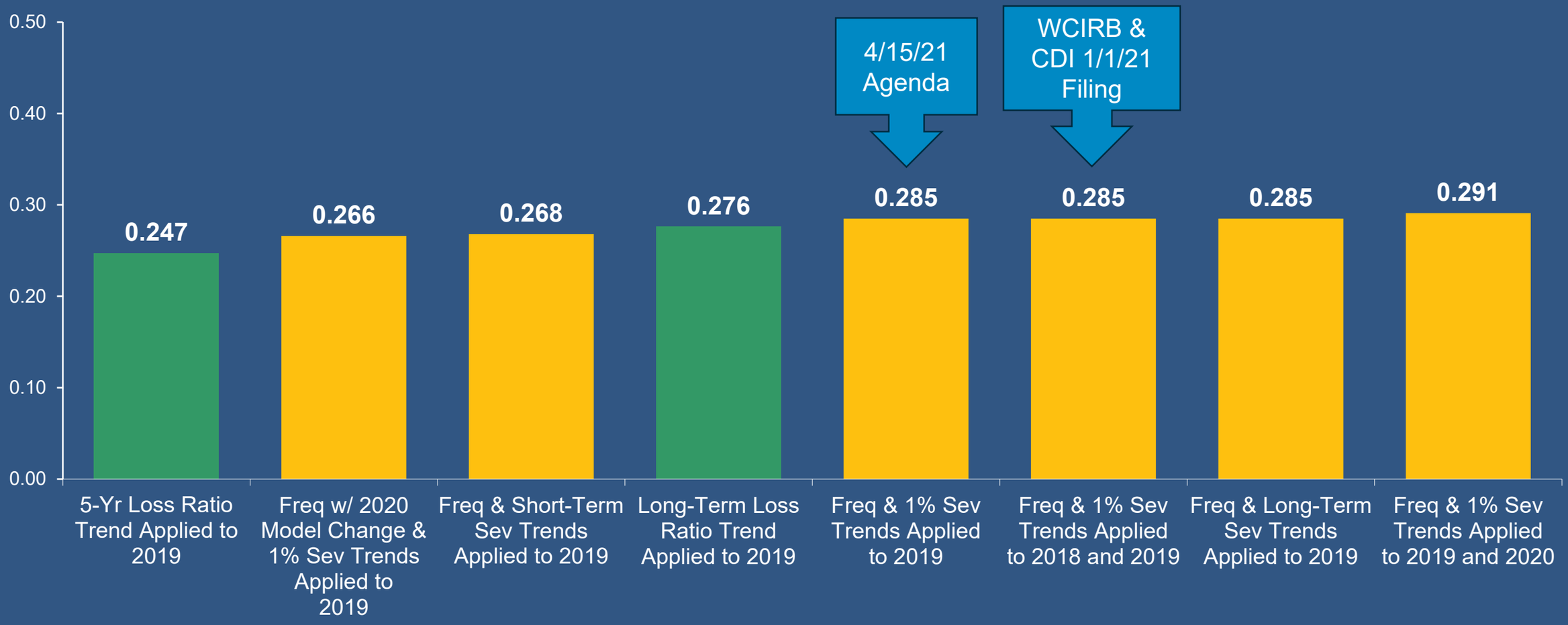
Source: WCIRB aggregate financial data and projections. 2010 and prior years adjusted to a level that excludes MCCP costs.

Projected On-Level Indemnity Loss Ratios under Alternative Trending Methods

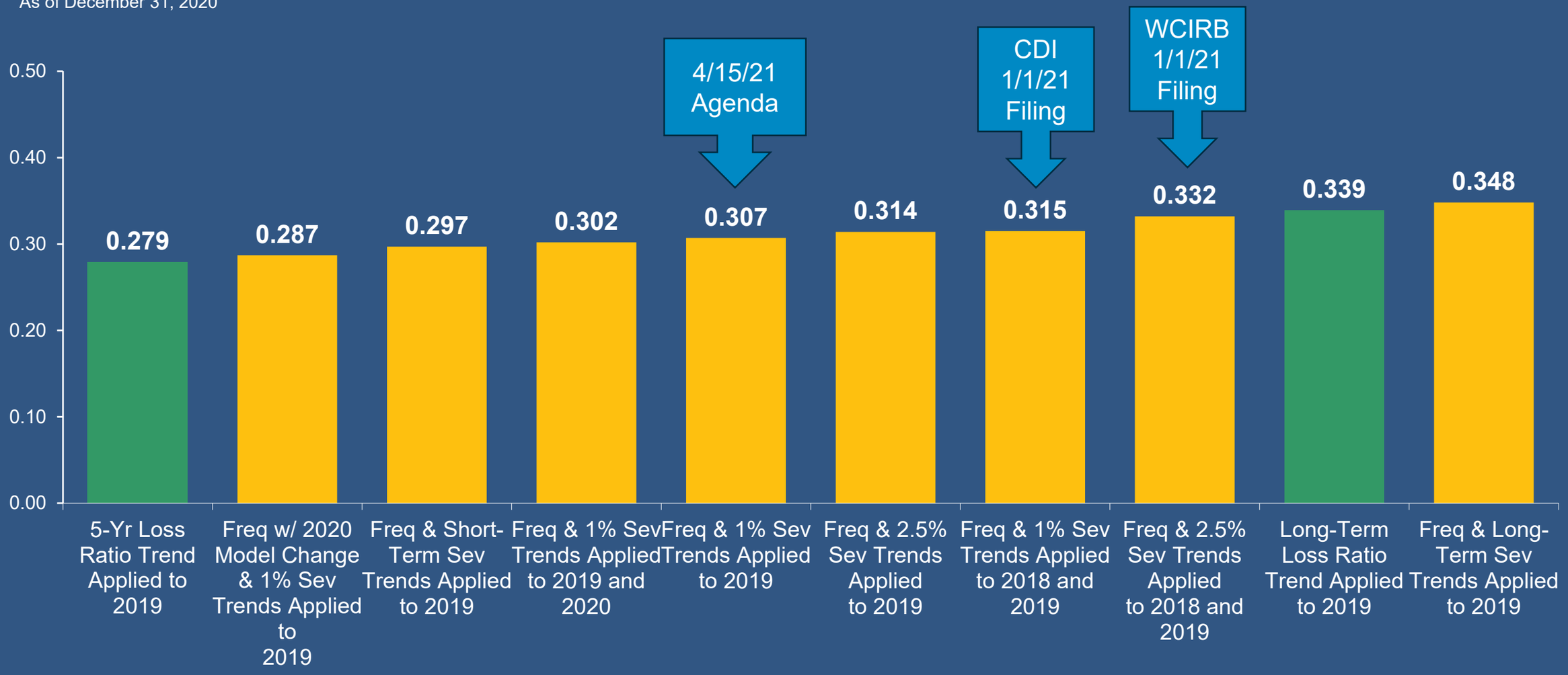
As of December 31, 2020



Source: WCIRB aggregate financial data and projections.

Projected On-Level Medical Loss Ratios under Alternative Trending Methods

As of December 31, 2020



Source: WCIRB aggregate financial data and projections.

05

9/1/2021 Filing – COVID-19 Claim Cost Projection

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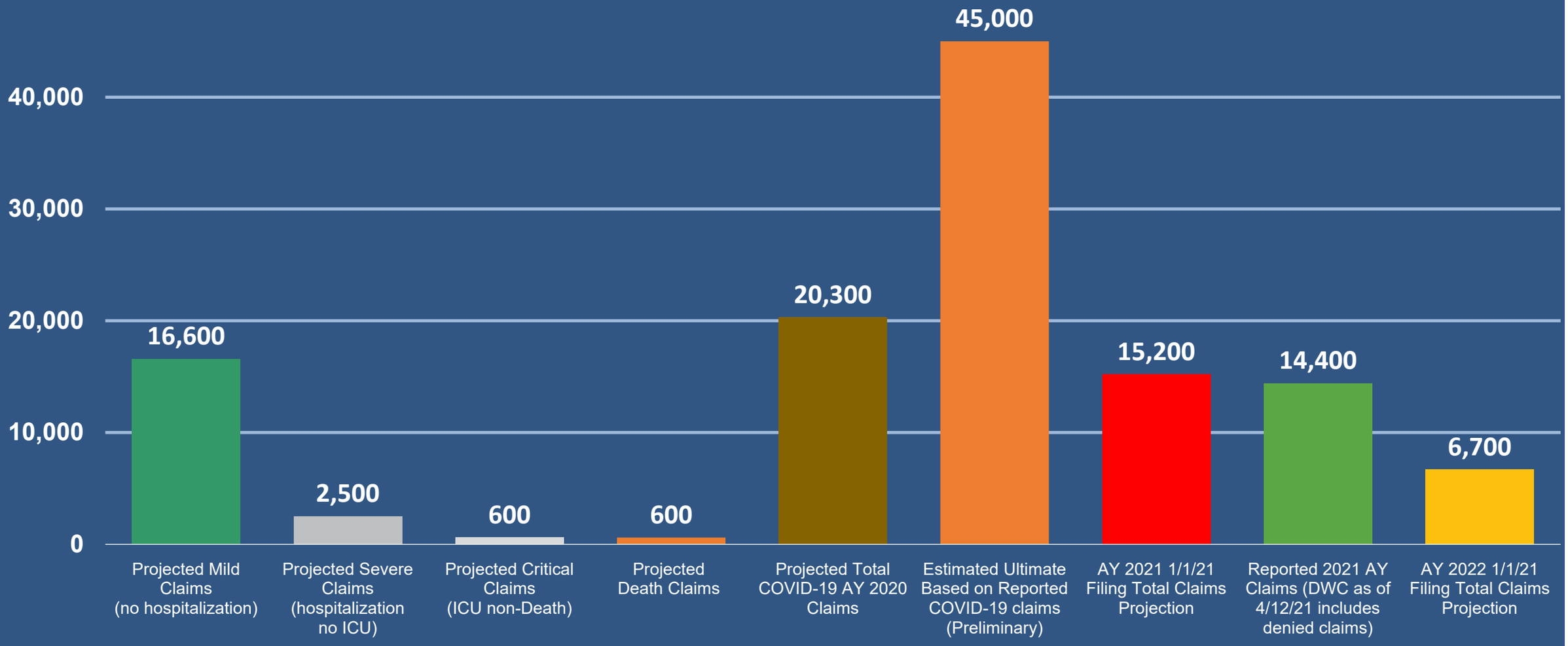
Projected Accident Year 2020 California Workers' Compensation COVID-19 Claim Counts — Insured Employers Only



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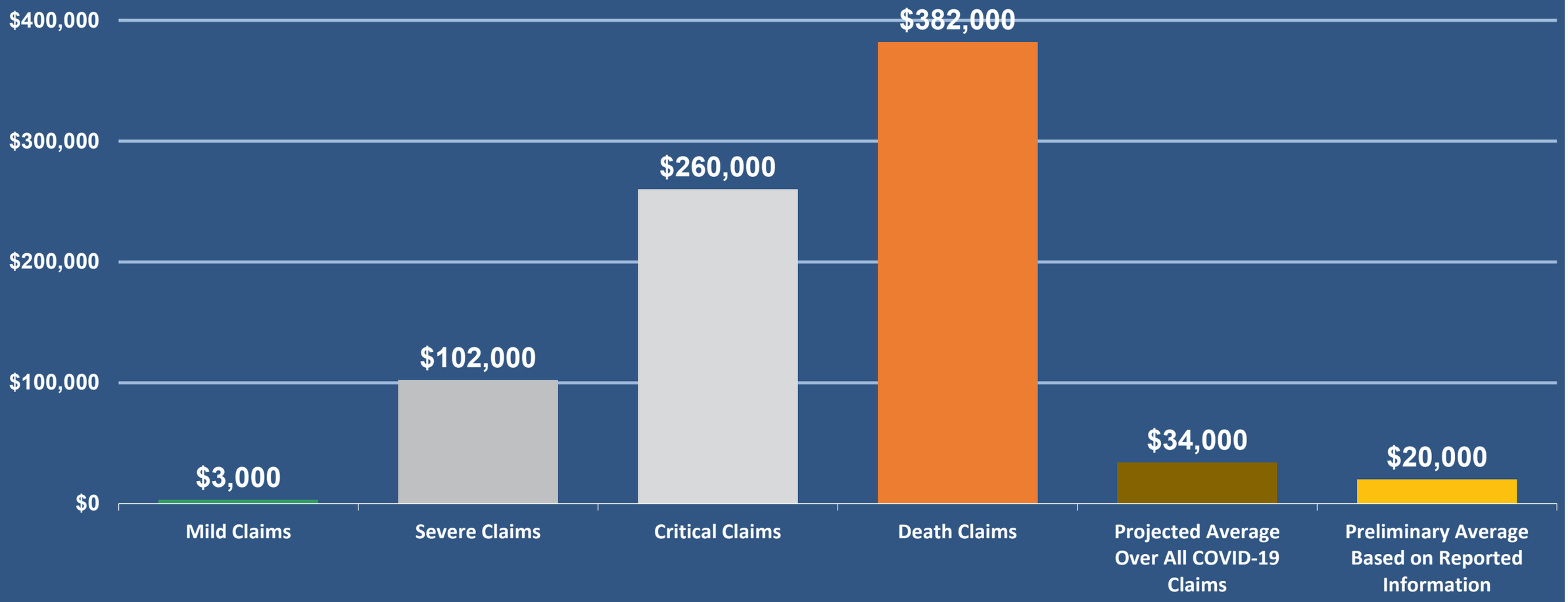
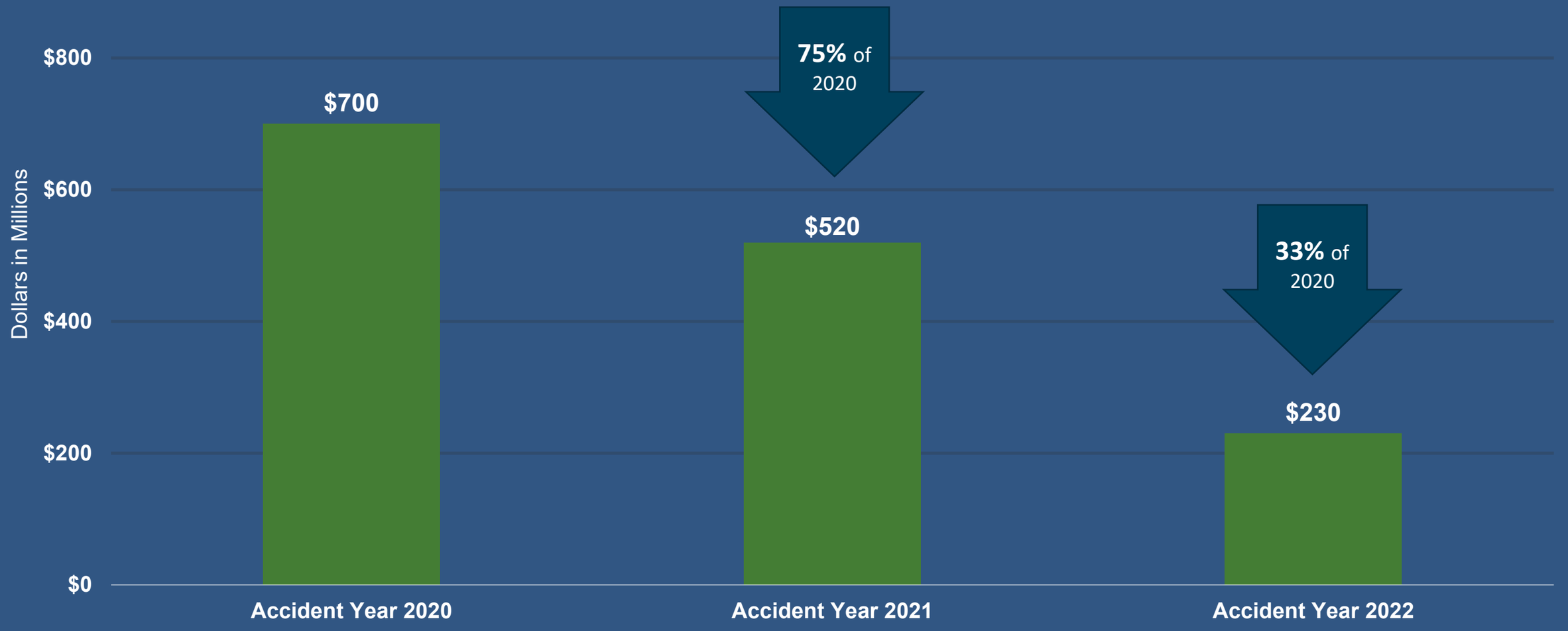
Sources: WCIRB January 1, 2021 Pure Premium Rate Filing, WCIRB indemnity transaction data reported through February 2021 (excluding denied claims), WCIRB aggregate financial calls and DWC.

Projected Accident Year 2020 California Workers' Compensation COVID-19 Claim Severity — Insured Employers Only



Sources: January 1, 2021 Pure Premium Rate Filing and WCIRB aggregate financial calls. Severity amounts include indemnity, medical and loss adjustment expenses.

Projected Cost of COVID-19 Claims — Insured Employers Only



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Source: January 1, 2021 Pure Premium Rate Filing..

Forecasts for COVID-19 in 2021

- Limited forecasts for COVID-19 cases available beyond four weeks into the future
- Three published forecasts for COVID-19 in 2021 indicated a small number of COVID deaths would occur after summer 2021
  - Potentially near herd immunity (60-80% of the population immune) via vaccination and infections by end of summer (July-August)
  - Immunity would last at least through 2021
  - COVID-19 deaths and hospitalizations may drop to low levels even before summer (May-July 2021)
    - High-risk individuals prioritized for vaccinations
    - Vaccinations accelerated
    - New vaccines getting approved
    - Emerging evidence on the effectiveness of vaccines in reducing infections, hospitalizations and deaths
  - Key forecasts for CA and the U.S.
    - IHME: 67k deaths in California by August 1, 2021 (plateau starting in June)
    - YYG-MIT: 600k deaths in the U.S. through end of 2021 (deaths negligible after July)
    - Herd immunity modeling: 100k in the U.S. between mid-Feb and July, when herd immunity is achieved
- Variants
  - Emerging evidence on COVID-19 vaccines' continued protection against the variants and severe COVID-19 infections
- Limited evidence of a significant COVID-19 exposure on policies incepting on or after September 1, 2021

Source: IHME COVID-19 Projection. COVID-19 projections at: https://covid19-projections.com/path-to-herd-immunity/; When Could the United States Reach Herd Immunity? It's Complicated. NYT, Feb 20, 2021. https://www.nytimes.com/interactive/2021/02/20/us/us-herd-immunity-covid.html?action=click&module=Top%20Stories&pgtype=Homepage https://jamanetwork.com/journals/jama/fullarticle/2777785

06

9/1/2021 Filing – Loss Adjustment Expense Experience Review

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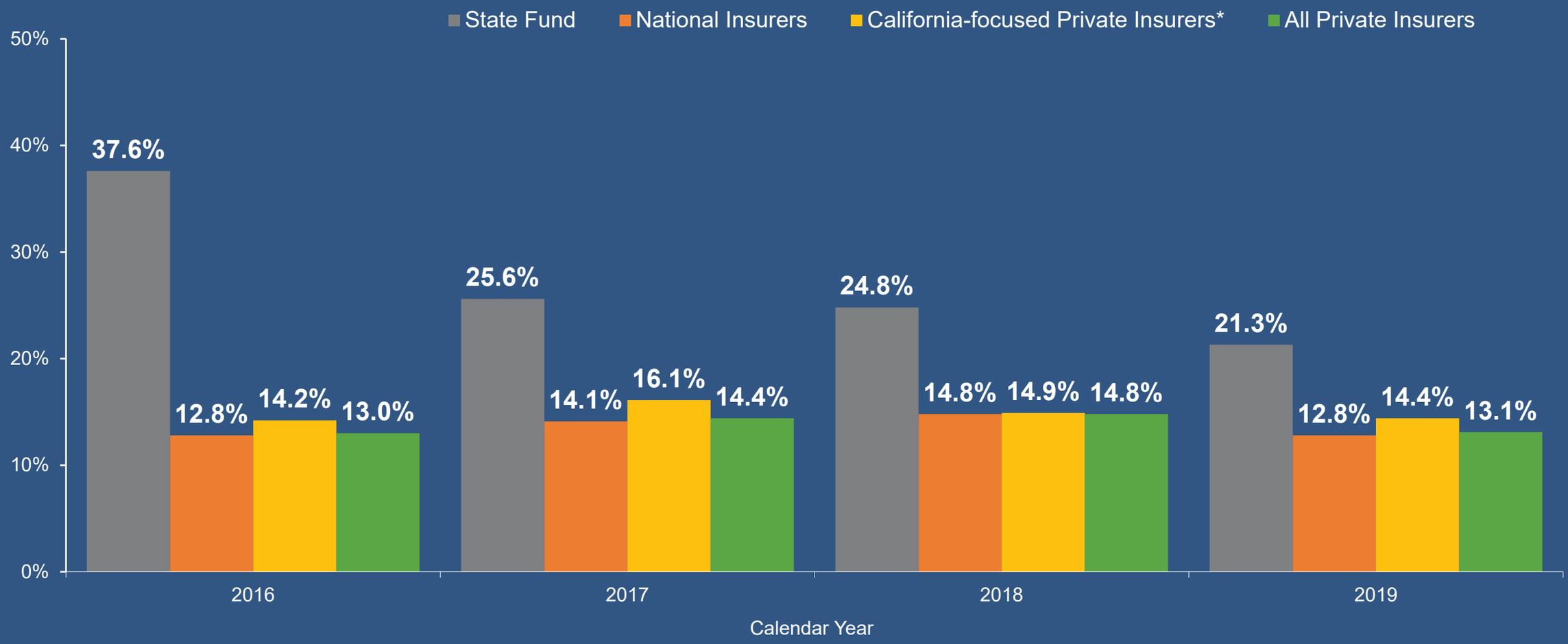
Summary of Preliminary ULAE Projection

- Paid ULAE data through CY 2019 is used
  - CY 2020 not yet available
  - CYs 2013 to 2019 reflect adjustments to ULAE for large deductibles and TPAs consistent with 1/1/21 Filing
- ULAE projection reflects enhancements adopted at 12/11/20 meeting
  - Open Count Method uses incremental claim settlement rates rather than estimated ultimate
  - Latest two CY paid ULAE to paid loss ratios used in lieu of more complex and less stable Paid Loss Method from 1/1/21 Filing
- All information excludes COVID claims

Ratios of Paid ULAE to Paid Losses (Exhibit 1)

As of December 31, 2019



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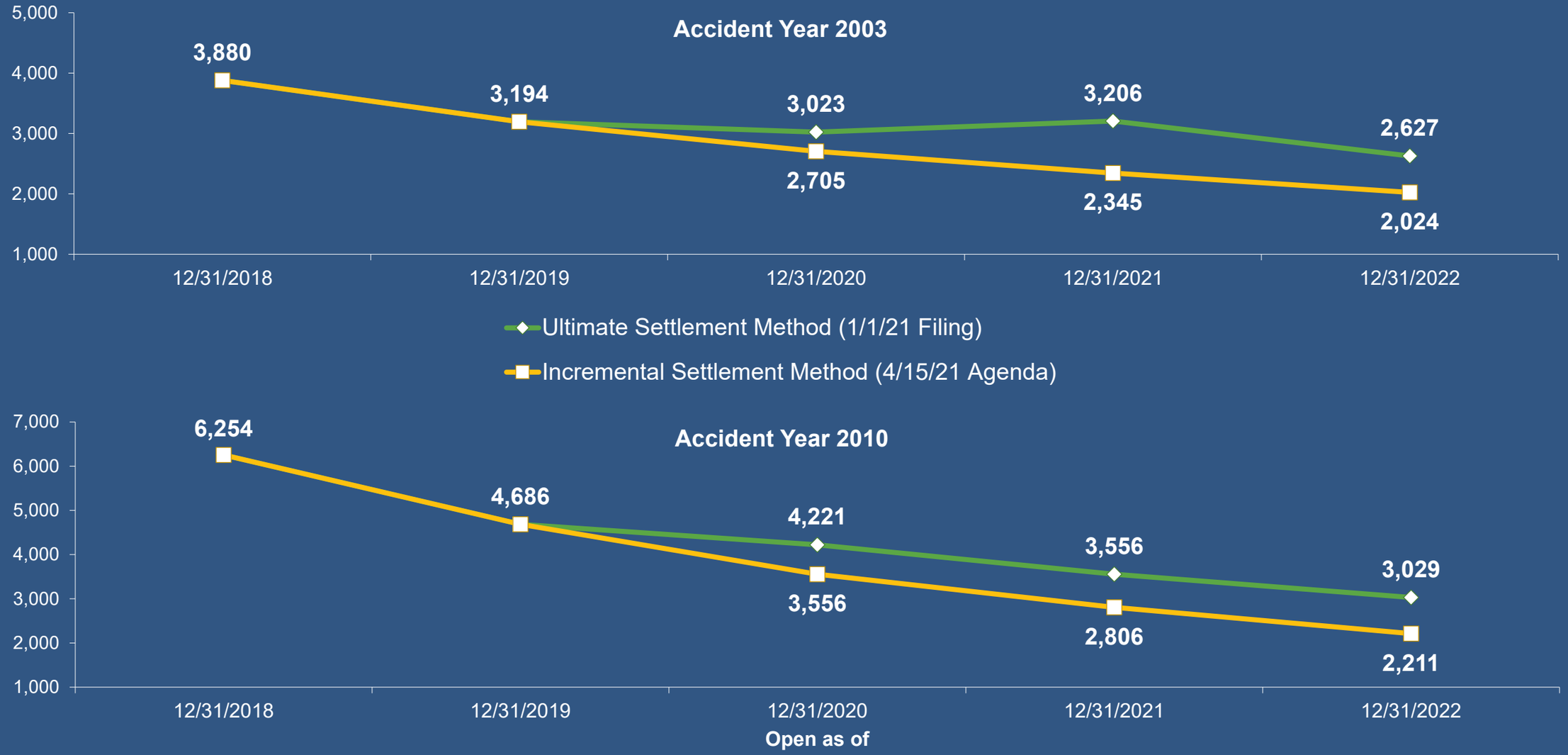
Source: WCIRB aggregate financial data
*California-focused Private Insurers are insurers with at least 80% of their workers' compensation writings in California.

ULAE Projection Methodology
Open Indemnity Claim Count-based Projection

- Open Indemnity Claims at Beginning of Calendar Year
  - Projected using WCIRB frequency forecasts and recent reporting and closure patterns
  - Open claims by AY projected using latest incremental claim settlement pattern
  - Frequency forecasts consistent with those used for loss projection
- Calendar Year Paid ULAE per Open Indemnity Claim
  - Data based on private insurers only
  - Future values projected using selected wage level changes (Item AC21-03-02, Exhibit 5.1)
  - Does not reflect adjustment for shifting wage levels within an industry
- Projected 9/1/2021 to 8/31/2022 Policy Inception Period ULAE
  - Trend to future CY based on average of CYs 2018 & 2019
  - (# of open indemnity claims) X (paid ULAE per open indemnity claim)
  - Use weighted average of CY in policy period (6%/72%/22% to 2021/2022/2023)
  - Paid ULAE per open claim projected out 3 years to approx. average ULAE payment date on claims

Projected Open Indemnity Counts for ULAE Methodology

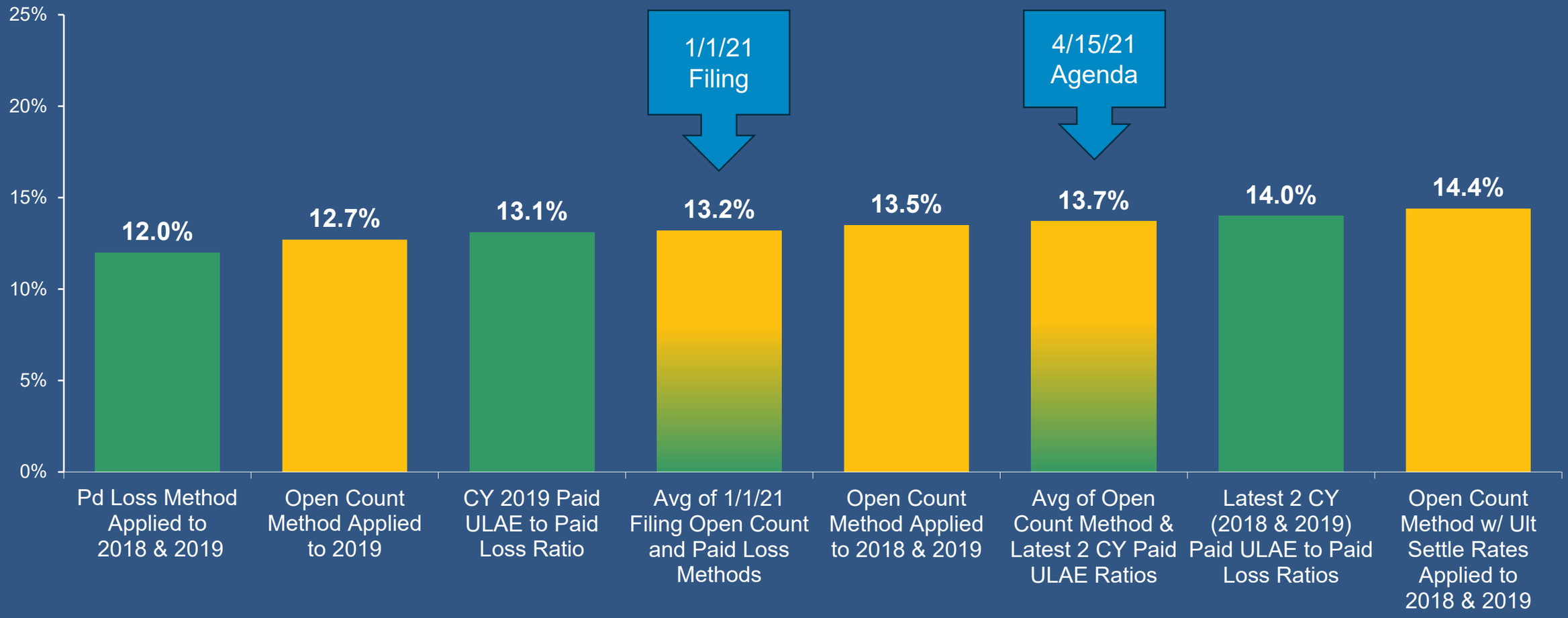
As of December 31, 2019



Source: WCIRB aggregate financial data.

Projections of ULAE to Loss

As of December 31, 2019



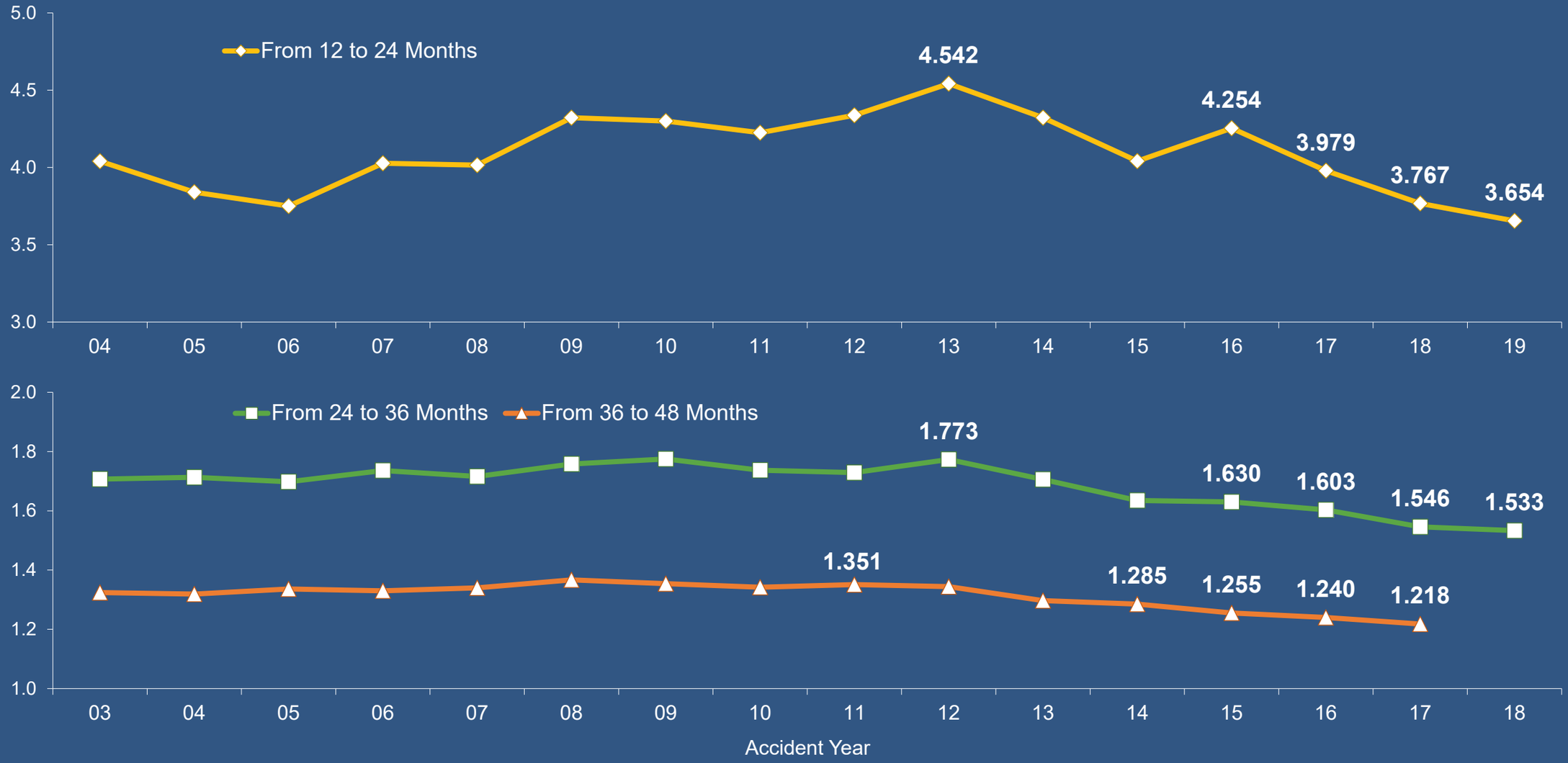
Source: WCIRB aggregate financial data and projections. The ULAE to loss projection included in the 1/1/21 Filing was 13.7%.

Summary of Preliminary ALAE and MCCP Projections

- Data is through December 31, 2020 with COVID-19 claims excluded
- Methodology is consistent with 1/1/2021 Filing with some adjustments (below)
- Development is projected based on the average of the latest two years (consistent with the loss projection)
  - ALAE development includes adjustment for changes to claim settlement rates for both diagonals
- Projection based on trends applied to accident year 2019 only (consistent with the loss projection)
- Adjustment to ALAE for the impact of SB 1160 updated to reflect a 70% reduction in lien filings

Paid ALAE Development – Private Insurers (Exhibit 10.1)

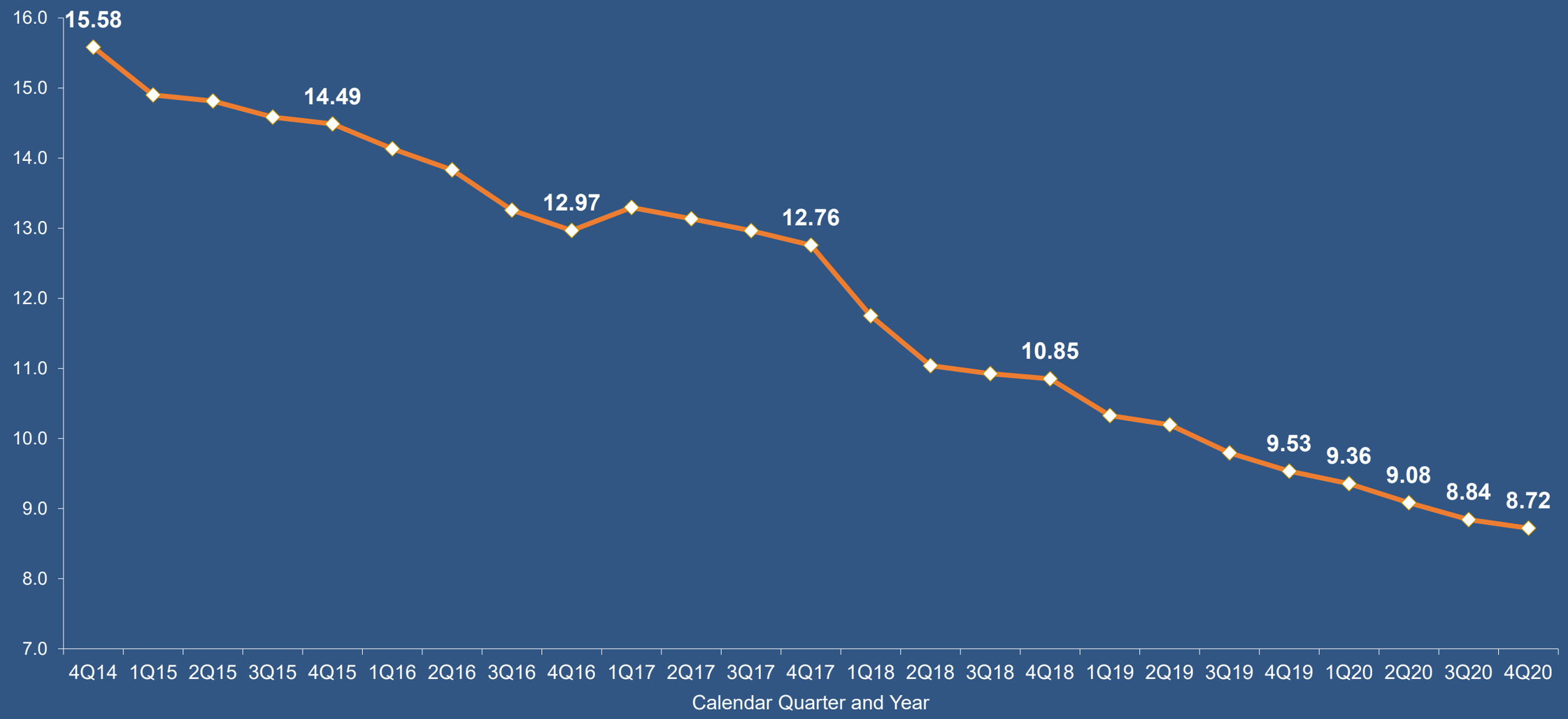
As of December 31, 2020



Source: WCIRB aggregate financial data. Excludes medical cost containment program costs and includes costs for independent medical review and independent bill review for all years.

Cumulative Paid ALAE Development from 12 to 90 Months

As of December 31, 2020



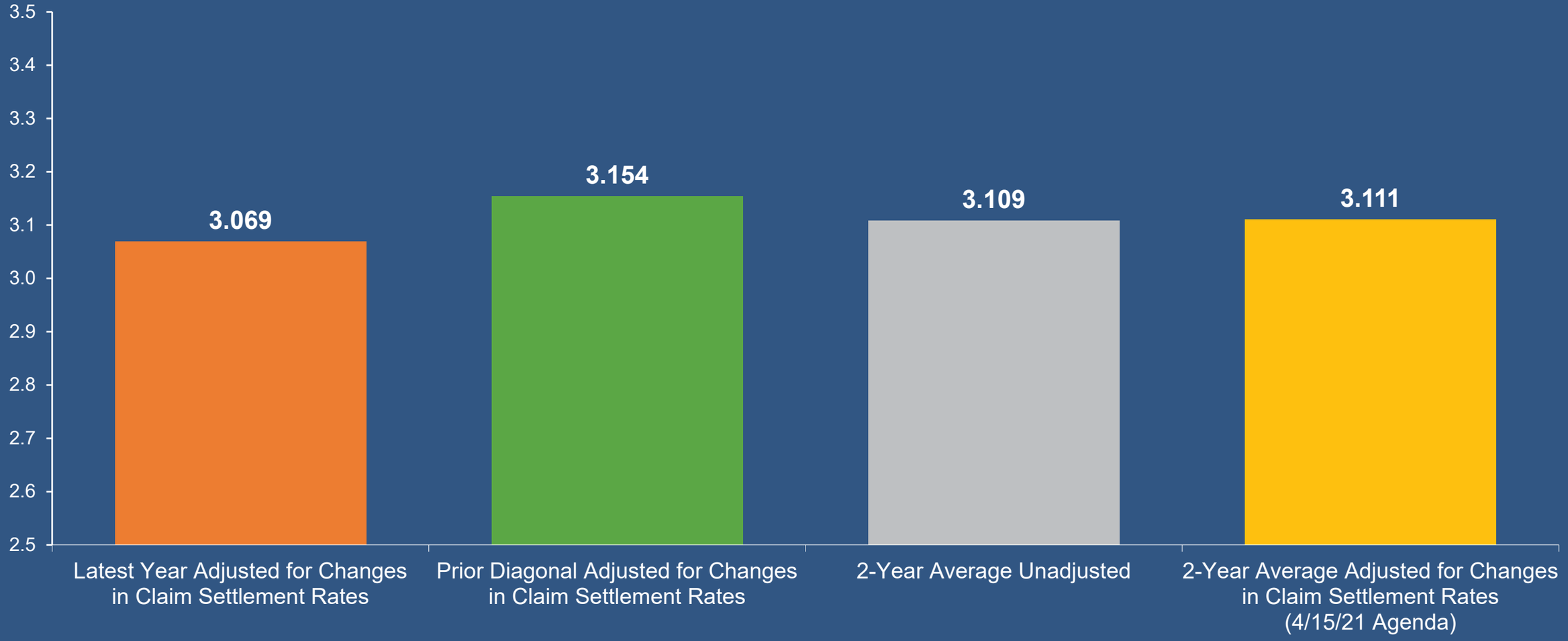
Source: WCIRB aggregate financial data. MCCP is excluded.

ALAE Projection Methodology

- Accident Year Ultimate Indemnity Claim Counts
  - Latest year development
  - Projected using actual 2020 frequency and WCIRB frequency model forecasts (same as loss projection)
- Accident Year Ultimate ALAE per Indemnity Claim
  - Data based on private insurers only
  - 2-year average development with adjustment for changes in claim settlement rates and inverse power curve tail
  - Projected using average of ultimate ALAE per indemnity claim and incremental paid ALAE per open indemnity claim for both long-term and short-term periods
- Projected 9/1/2021 to 8/31/2022 Policy Inception Period ALAE
  - (Projected # of ultimate indemnity claims) X (projected ultimate ALAE per indemnity claim)
  - Projection from AY 2019 only
  - Initial projected ratio reduced for lien savings from SB 1160 & AB 1244 not yet significantly reflected in emerging ALAE costs
    - Full impact is -11.2% based on 70% reduction in lien filings
    - Tempered by 60% based on impact already emerging

Projected 24-to-Ultimate Paid ALAE Development Factor (Exhibit 10.1)

As of December 31, 2020



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Source: WCIRB aggregate financial data

Adjustment to ALAE Development for Claim Settlement Rate Changes

- 2019 study showed correlation between settlement rate change and change in later period paid ALAE development
- Adjustment reflected in 1/1/2021 Filing
  - Only applied during periods of significant claim settlement rate change (>1.5 points in absolute value)
  - Applied to age-to-age paid ALAE development based on settlement rate change for that period
  - Adjustment factors are based on historical linear relationship between claim settlement rate change and difference in emerging paid ALAE development from latest CY projection
- Current adjustment having opposite impact to 12/31/2020 experience (settlement rate decrease) compared to 12/31/2019 experience (settlement rate increase)

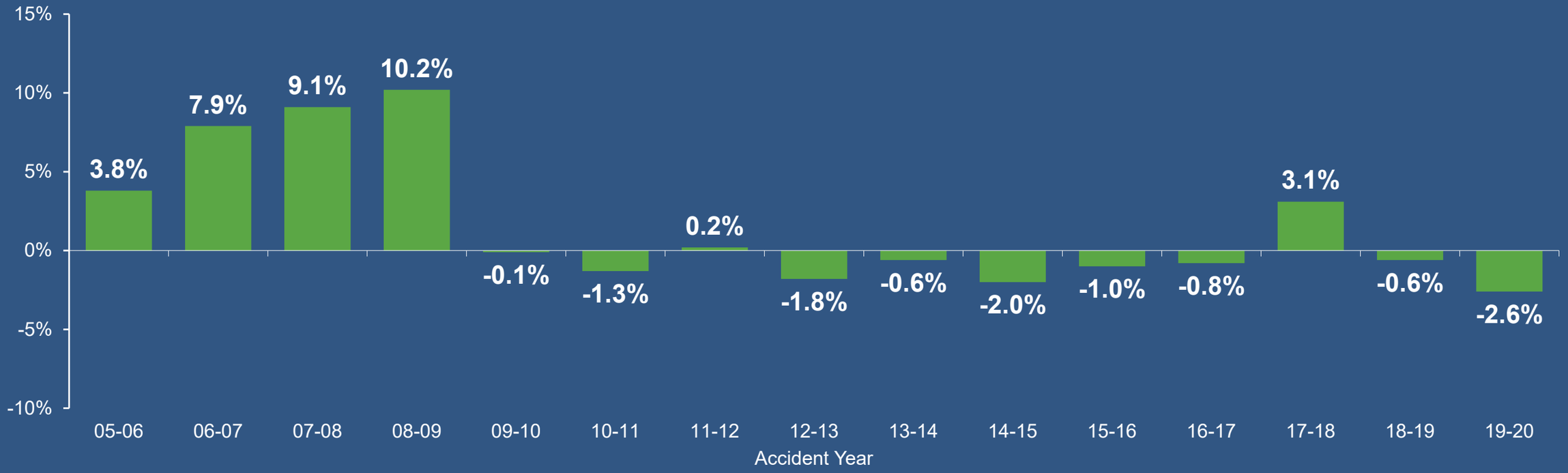
Adjustment to ALAE Development for Claim Settlement Rate Changes

Age (AY @12/31/20)	(1) Age-to-Age Adjustment	As of 12/31/2019			As of 12/31/2020		
		(2) Settlement Rate Point Change	(3) Unadjusted Age-to-Age Factor	(4) Adjusted Age-to-Age Factor	(5) Settlement Rate Point Change	(6) Unadjusted Age-to-Age Factor	(7) Adjusted Age-to-Age Factor
72 (2015)	-1.1%	1.1	1.056	N/A	0.6	1.048	N/A
60 (2016)	-0.5%	1.6	1.081	**1.072**	0.4	1.071	N/A
48 (2017)	-0.4%	1.9	1.128	**1.119**	0.0	1.117	N/A
36 (2018)	-0.6%	2.1	1.240	**1.224**	-1.7	1.218	**1.231**
24 (2019)	-0.9%	0.2	1.546	N/A	-2.1	1.533	**1.564**
12 (2020)	-3.4%	0.1	3.767	N/A	-0.9	3.654	N/A

(1) Adjustment per 1 point of claim settlement rate change, from 2019 and 2020 studies, adjusted to 12/31 evaluations
(2), (3) from Exhibit 11.2 of Item AC21-03-02
(4) = [(1) x (2) + 1.0] x (3) if (2) is greater than 1.5 in absolute value

Projected Changes in Ultimate ALAE Severity – Private Insurers (Exhibit 8)

As of December 31, 2020



Annual Exponential Trend Based on:

1993 to 2020: 5.3%

2008 to 2019: -0.3%

2015 to 2019: 0.3%

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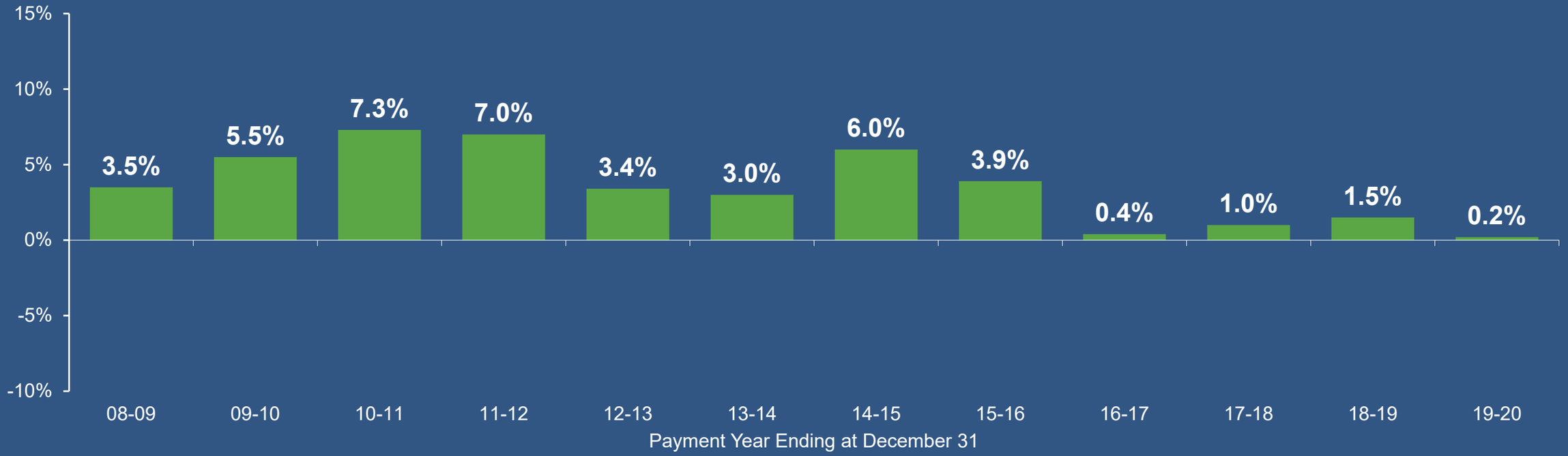
Source: WCIRB aggregate financial data and projections. Excludes MCCP costs.

Change in Incremental Paid ALAE per Open Indemnity Claim – Private Insurers (Exhibit 9)

As of December 31, 2020



Annual Exponential Trend Based on:

2008 to 2019: +3.6%

2015 to 2019: +0.9%

4/15/21 Agenda Selected ALAE Severity Trend: 1.0%

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Source: WCIRB aggregate financial data and projections. Excludes MCCP costs.

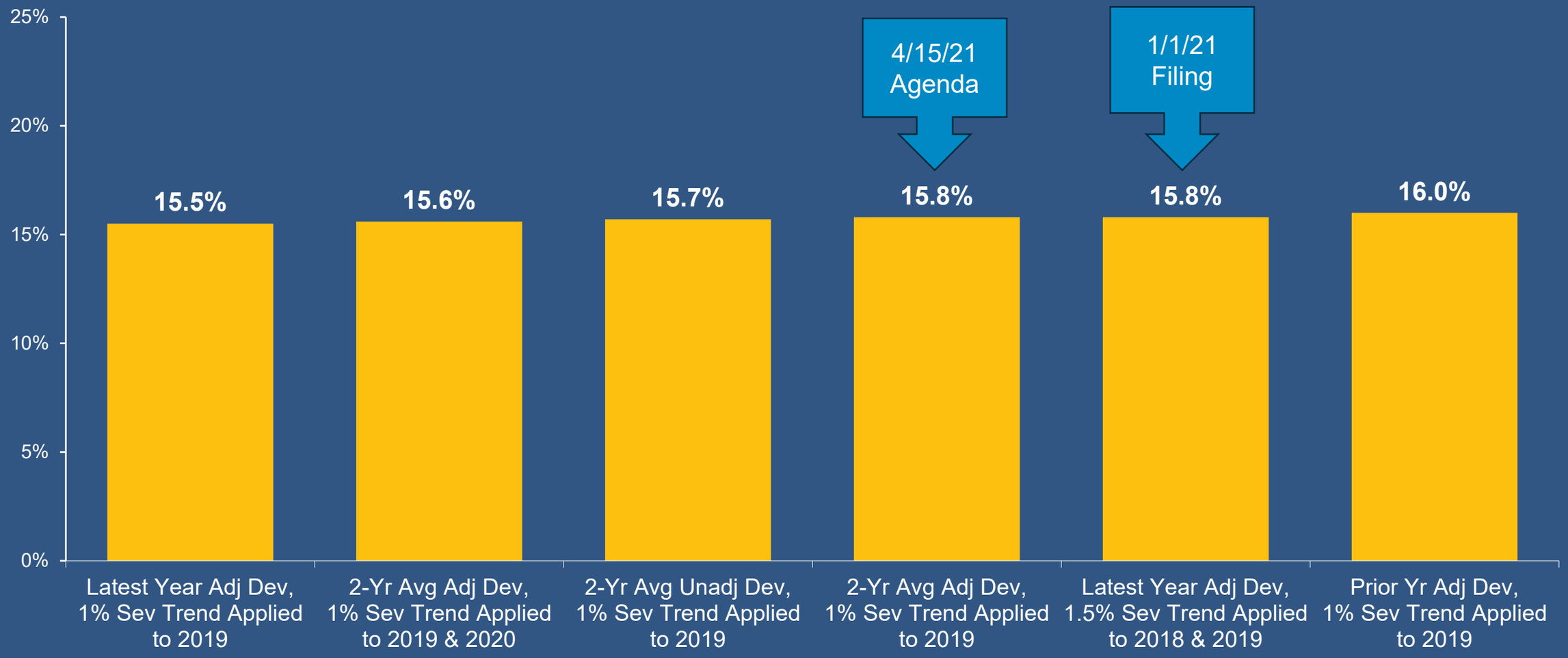
Adjustment for SB 1160 & AB 1244 Lien Reforms in ALAE

As of December 31, 2020

AY & Age	Estimated % of 168 Mos. ALAE Paid	Estimate Reflected in 1/1/2021 Filing (60% Reduction)
2018 (36 Months)	56%	---
2017 (48 Months)	69%	---
Average	62%	---
Selected Tempering	60%	50%
Tempered Adjustment to ALAE (-11.2% Full)	**-4.5%**	**-4.8% (-5.6% w/ 70% reduction)**

Projections of ALAE (Excluding MCCP) to Loss

As of December 31, 2020



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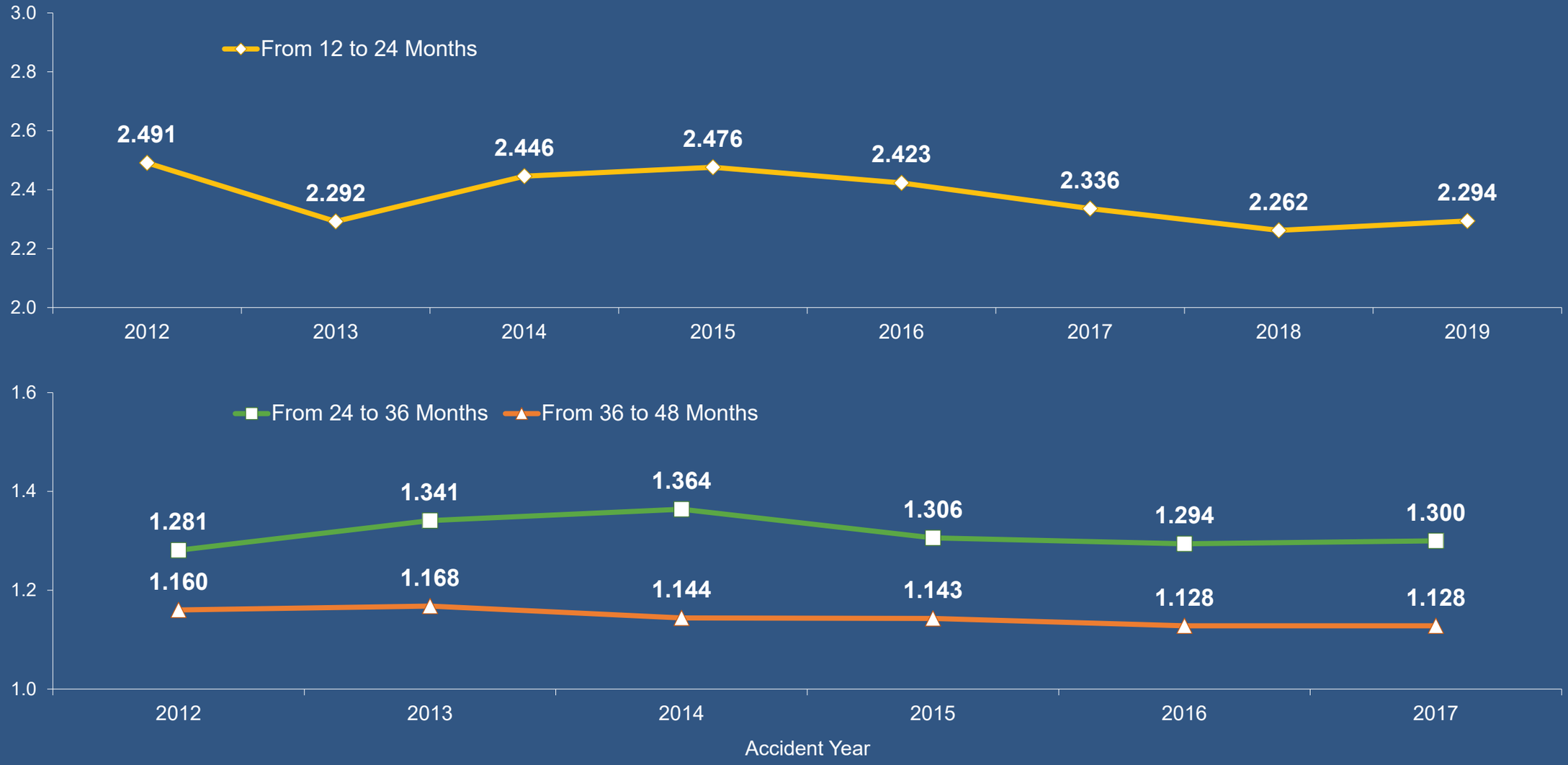
Source: WCIRB aggregate financial data and projections. All projections include adjustment for SB 1160 reforms to liens. The ALAE to loss projection included in the 1/1/21 Filing was 16.1%.

Paid MCCP Development (Exhibit 18.1)

As of December 31, 2020



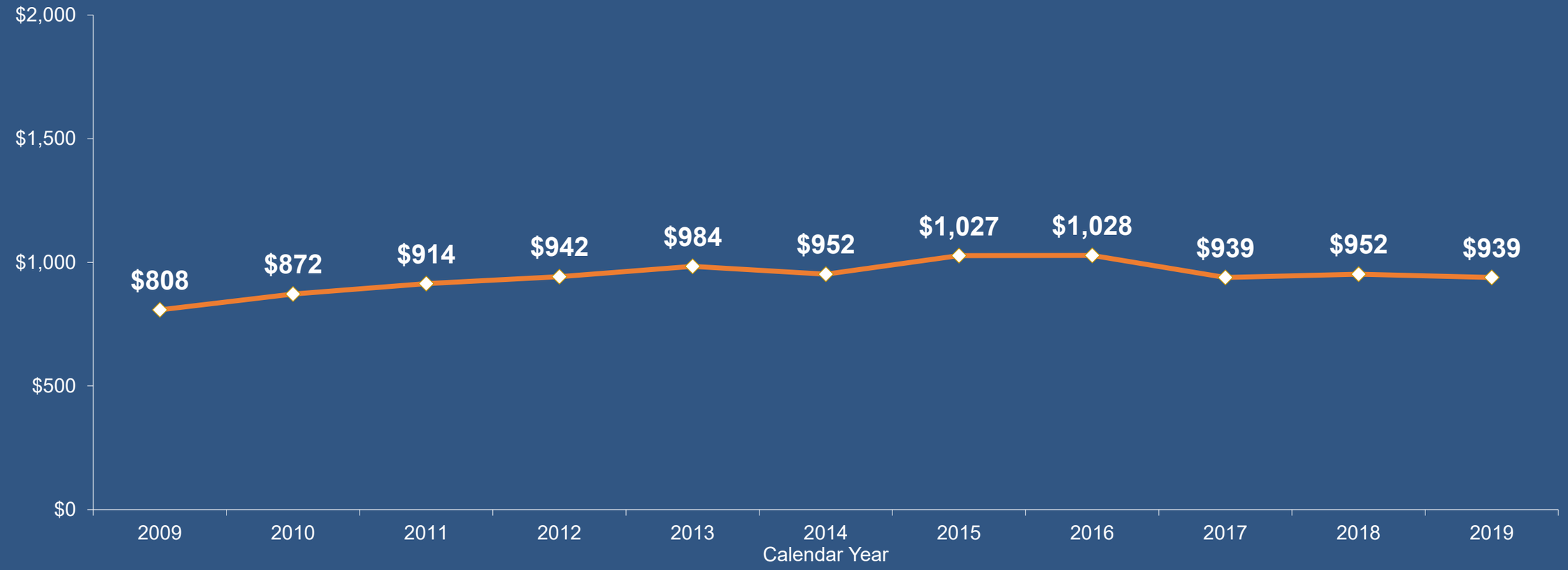
Source: WCIRB aggregate financial data. Excludes the cost of IMR and IBR from all years.

MCCP Projection Methodology

- MCCP methodology based on that for ALAE
  - Statewide data used
  - Development based on 2-year average paid MCCP through 108 months and paid medical after 108 months
  - Trend based on average changes in CY MCCP per open claim and ultimate AY MCCP per indemnity claim
  - Trend applied to 2019 only

Calendar Year Paid MCCP per Indemnity Claims Inventory (Exhibit 17)

As of December 31, 2019



Annual Exponential Trend Based on:

2009 to 2019: 1.3%

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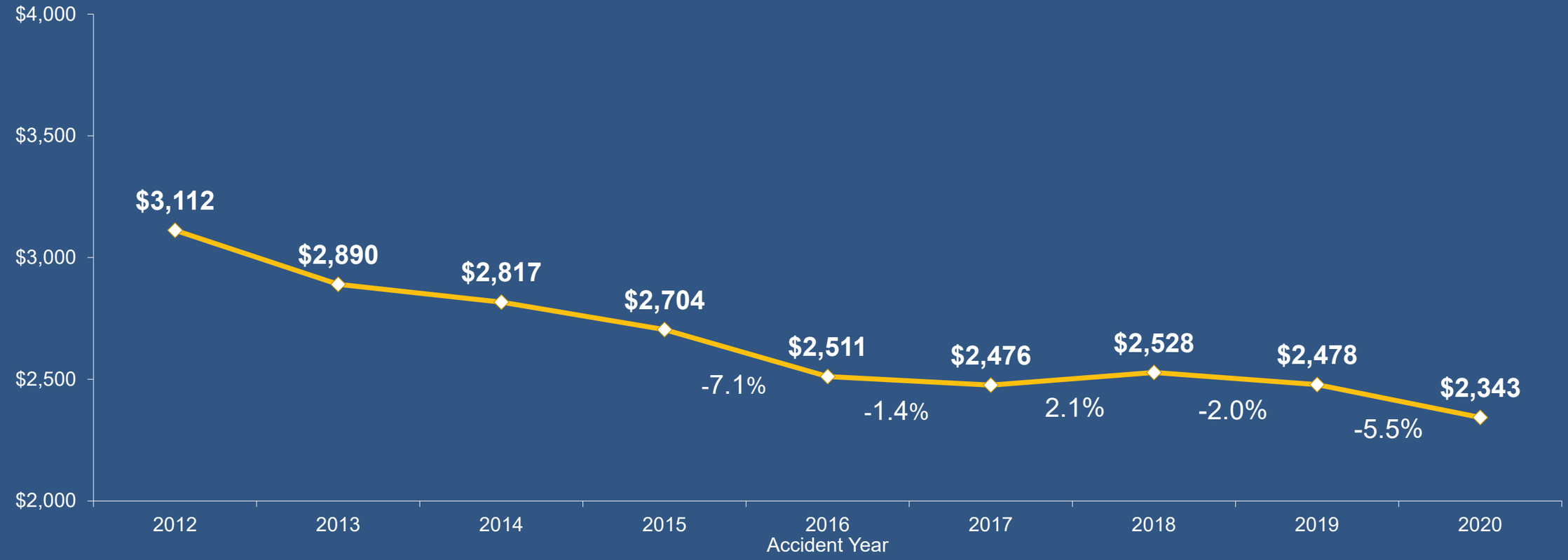
Source: WCIRB aggregate financial data. Excludes the cost of IMR and IBR from all years.

Projected Ultimate MCCP per Indemnity Claim (Exhibit 16)

As of December 31, 2020



Annual Exponential Trend Based on:

2012 to 2019: -3.2%

2015 to 2019: -1.7%

4/15/21 Agenda Selected MCCP Severity Trend: -1.0%

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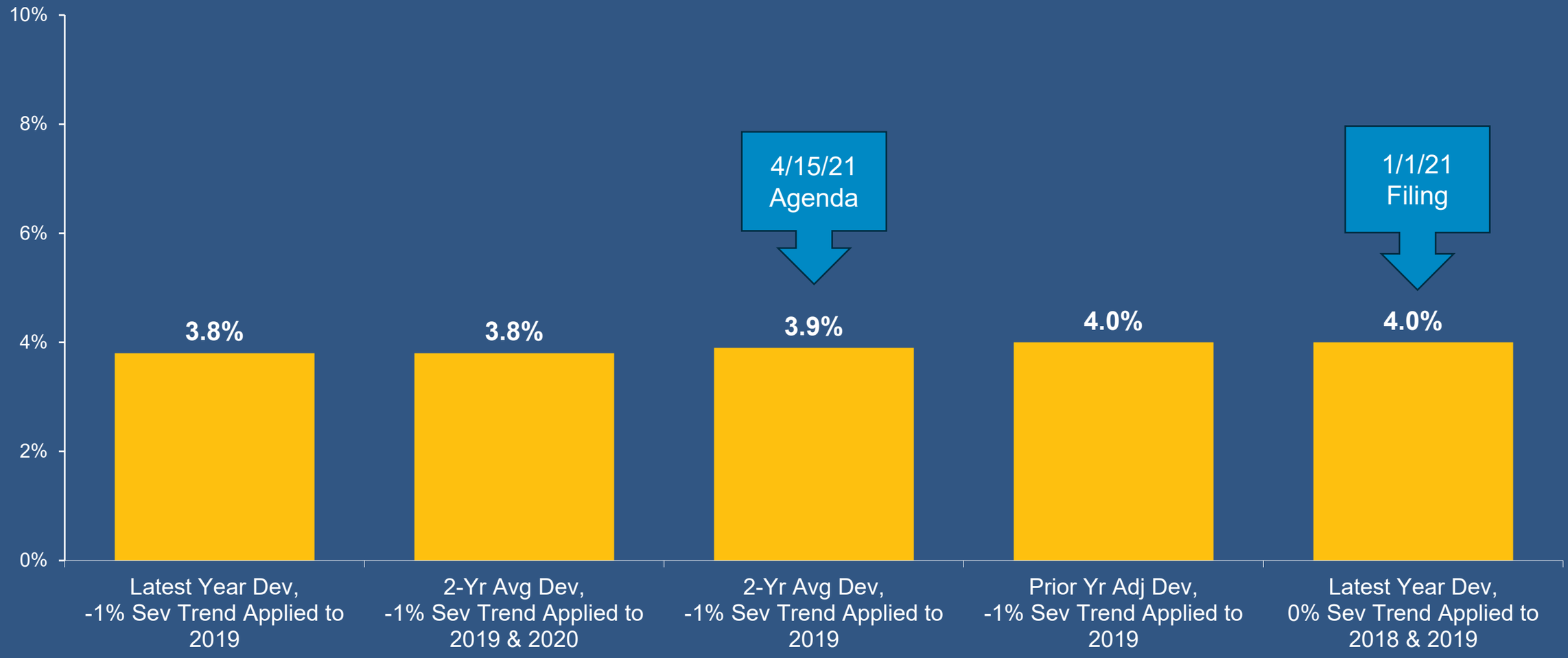
Source: WCIRB aggregate financial data and projections. Excludes the cost of IMR and IBR from all years.

Projections of MCCP to Loss

As of December 31, 2020



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Source: WCIRB aggregate financial data and projections. All projections include adjustment for SB 1160 reforms to liens. The ALAE to loss projection included in the 1/1/21 Filing was 16.1%.

07

Evaluation of New Medical-Legal Fee Schedule

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Background on New Medical-Legal Fee Schedule

- The Division of Workers' Compensation (DWC) adopted significant changes to the Medical-Legal Fee Schedule effective April 1, 2021.

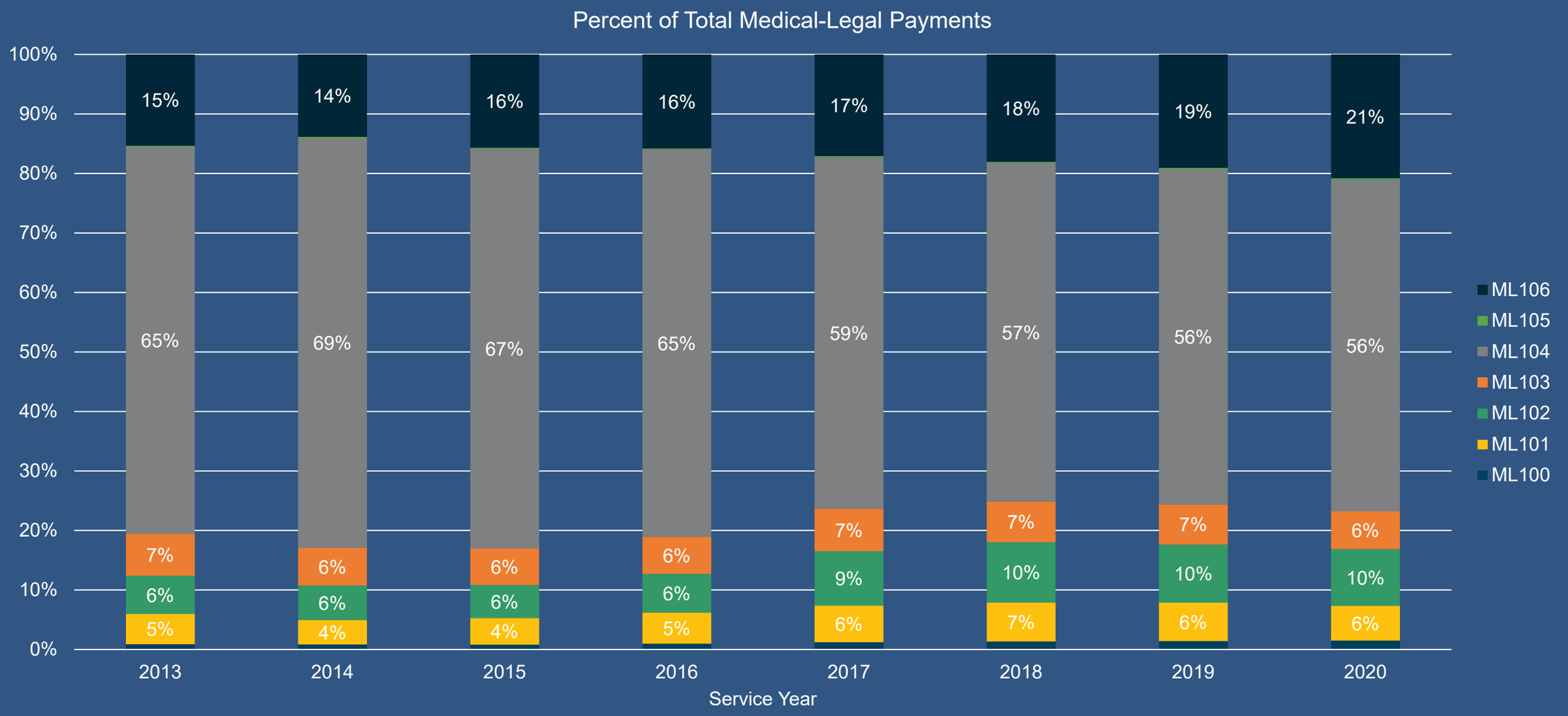
- The new Medical-Legal Fee Schedule is intended to increase the reimbursement rate for medical-legal reports while eliminating the increased hourly billing provisions.
  - The current reimbursement procedures or parameters for reimbursement for medical-legal reports were last changed in June 2006.
  - Empirical studies have shown that in recent years there has been a substantial increase in the incidence of hourly billing under the old fee schedule.

- The WCIRB has conducted a preliminary evaluation of the cost impact of the new Medical-Legal Fee Schedule based on historical medical transaction data for consideration for inclusion in the September 1, 2021 Pure Premium Rate Filing.

Source: DWC Initial Statement of Reasons. Medical Legal Fee Schedule, October 2020.

Distribution of Payments for Medical-Legal Services
(6.5% of all medical payments)

As of April 7, 2021



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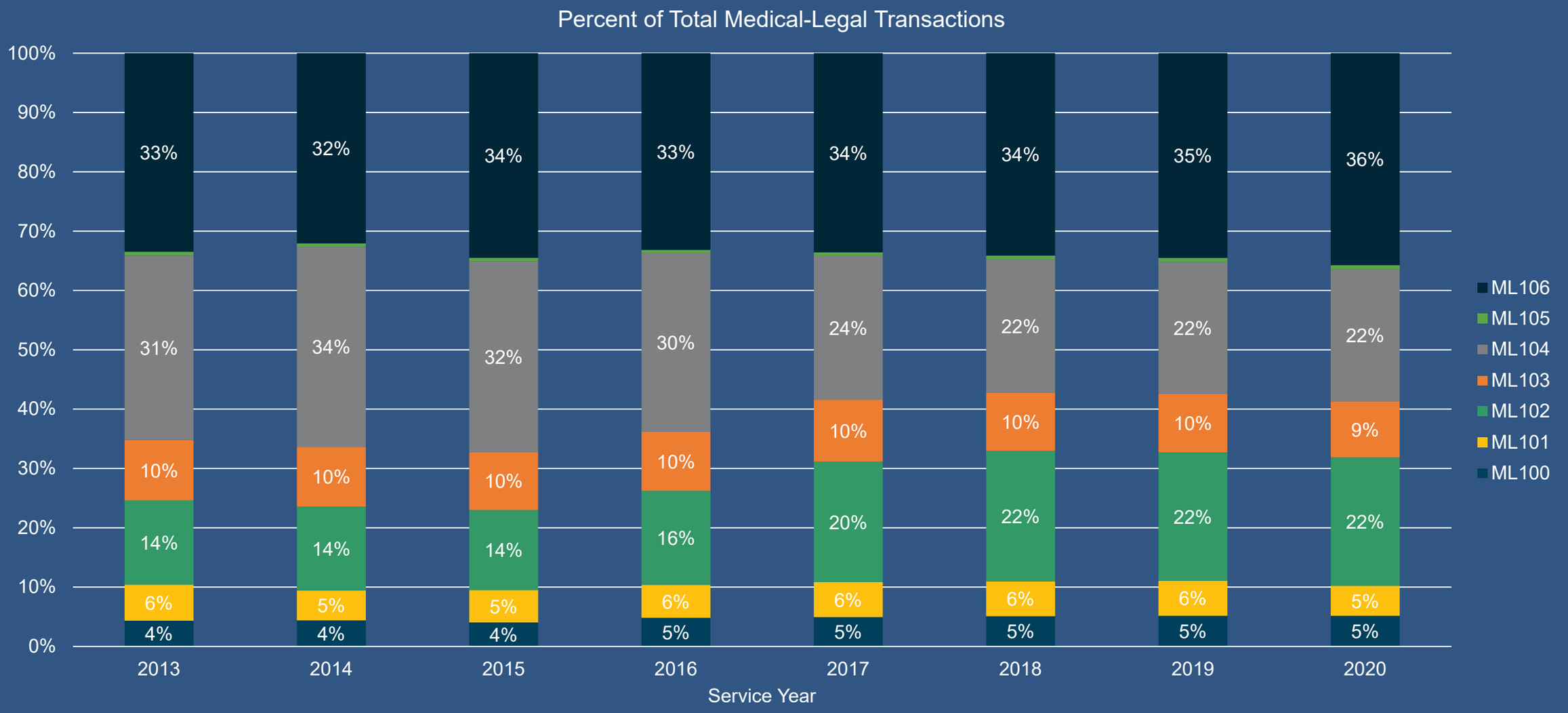
Source: *2019 California Workers' Compensation Losses and Expenses,* WCIRB, June 2020. WCIRB Medical Transaction Data.

Distribution of Medical-Legal Service Utilization

As of April 7, 2021



Source: WCIRB Medical Transaction Data.

Summary of the Key Changes in the New Medical-Legal Fee Schedule

- Effective on medical-legal (ML) services on or after April 1, 2021
- Key changes in the new ML fee schedule
  - Increased fees for relative value (RV) from $12.5 to $16.25
  - RV changed for some ML codes
  - Changes to modifiers
    - Increased multipliers for current modifier (94 – Agreed Medical Evaluator (AME) but limited use of AME modifier to ML evaluations)
    - Expanded use of interpreter modifier
    - Added modifiers for psychologist/psychiatrist, toxicologist and oncologist services
  - Eliminated the time component in the ML evaluation codes
  - Added ML codes for record review and sub rosa recordings review

New ML Code	Old ML Code	Procedure Description
ML200	ML100	Missed Appointment for a Comprehensive or Follow-Up Medical-Legal Evaluation.
ML201	ML102	Basic Comprehensive Medical-Legal Evaluation.
	ML103	Complex Comprehensive Medical-Legal Evaluation involving three complexity factors.
	ML104	Complex Comprehensive Medical-Legal Evaluation involving four or more complexity factors.
ML202	ML101	Follow-up Medical-Legal Evaluation.
ML203	ML106	Fees for supplemental medical-legal evaluations.
ML204	ML105	Fees for medical-legal testimony.
ML205		Fees for Review of Sub Rosa Recordings
MLPRR		Record Review

Comparison of Reimbursement Rates for Medical-Legal Services

New ML Code	Old ML Code	Old Fee Schedule	New Fee Schedule	Potential Cost Impact
ML200	ML100	No reimbursement rate Ave. paid: $320	Flat fee: $503.75	+
ML202	ML101	Time-based: $62.5 per 15 mins Ave. paid: $1,628	Flat fee: $1,316.3	-
ML201	ML102	Flat fee: $625 Ave. paid: $672	Flat fee: $2,015	+
	ML103	Flat fee: $937.5 Ave. paid: $1,017	Flat fee: $2,015	+
	ML104	Time-based: $62.5 per 15 mins Ave. paid: $3,736	Flat fee: $2,015	-
ML204	ML105	Time-based: $62.5 per 15 mins, $250 per deposition Ave. paid: $542	Time-based: $455 per hour, $910 per deposition	+
ML203	ML106	Time-based: $62.5 per 15 mins Ave. paid: $797	Flat fee: $650	-
ML205			Time-based: $325 per hour	+
MLPRR			$3 per additional page	+

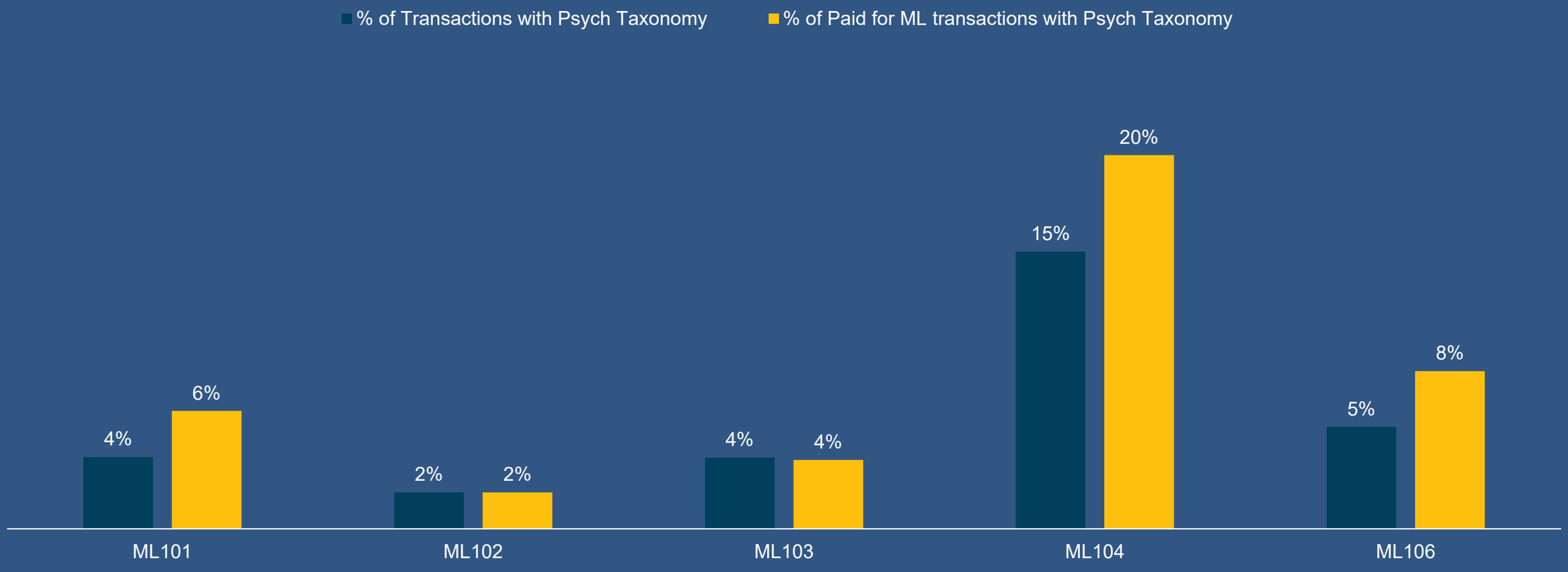
Source: WCIRB Medical Transaction Data.

WCIRB's Approach for the Prospective Cost Impact Evaluation

- Compare the expected payments for ML services under the new fee schedule to historical payments in WCIRB medical transaction data to estimate the cost impact – 2018 and 2019 ML transactions
  - Apply changes to RV, fees for RV and modifiers
- Key assumptions - validated with Claims Working Group and Medical Analytics Working Group:
  1. Mix of ML services remains the same
  2. Modifiers:
     a. Mix of existing modifiers remains the same – interpreter and AME
     b. Expanded use of interpreter modifier:
        - Same share of ML101 and ML104 transactions under old fee schedule would have an interpreter as ML102 and ML103
     c. New psych and toxicologist modifiers:
        - Distribution of psych and toxicological evaluations remains the same
        - ML evaluations provided by psychologist/psychiatrists and toxicologists (taxonomy code) would be using the new modifiers
  3. Supplemental ML evaluations (new ML203) – Assumed a 15% reduction in frequency based on published research*
  4. ML testimonies (new ML204) - Assumed all are depositions
  5. ML205 sub rosa recordings review - Assumed to be rare
  6. ML record review (MLPRR)
     - Assumed 100 pages / hour for record review based on feedback from claims experts
     - Assumed about one-third of time spent on ML101, ML104 and ML106 evaluations under old fee schedule is for record review

* California Workers' Compensation Medical-Legal Fee Schedule – Analysis and Recommendations, RAND, October 2018. DWC Initial Statement of Reasons. Medical Legal Fee Schedule, October 2020.

Historical Distribution of Medical-Legal Psychological/Psychiatric Evaluations
- Based on SY2018- SY2019 Medical Transaction Information



- The new psych modifier is applicable to ML201 - ML203 (old ML101-ML104 and ML106)
- Our evaluation assumes ML evaluations provided by a psychologist/psychiatrist would be using the new modifier

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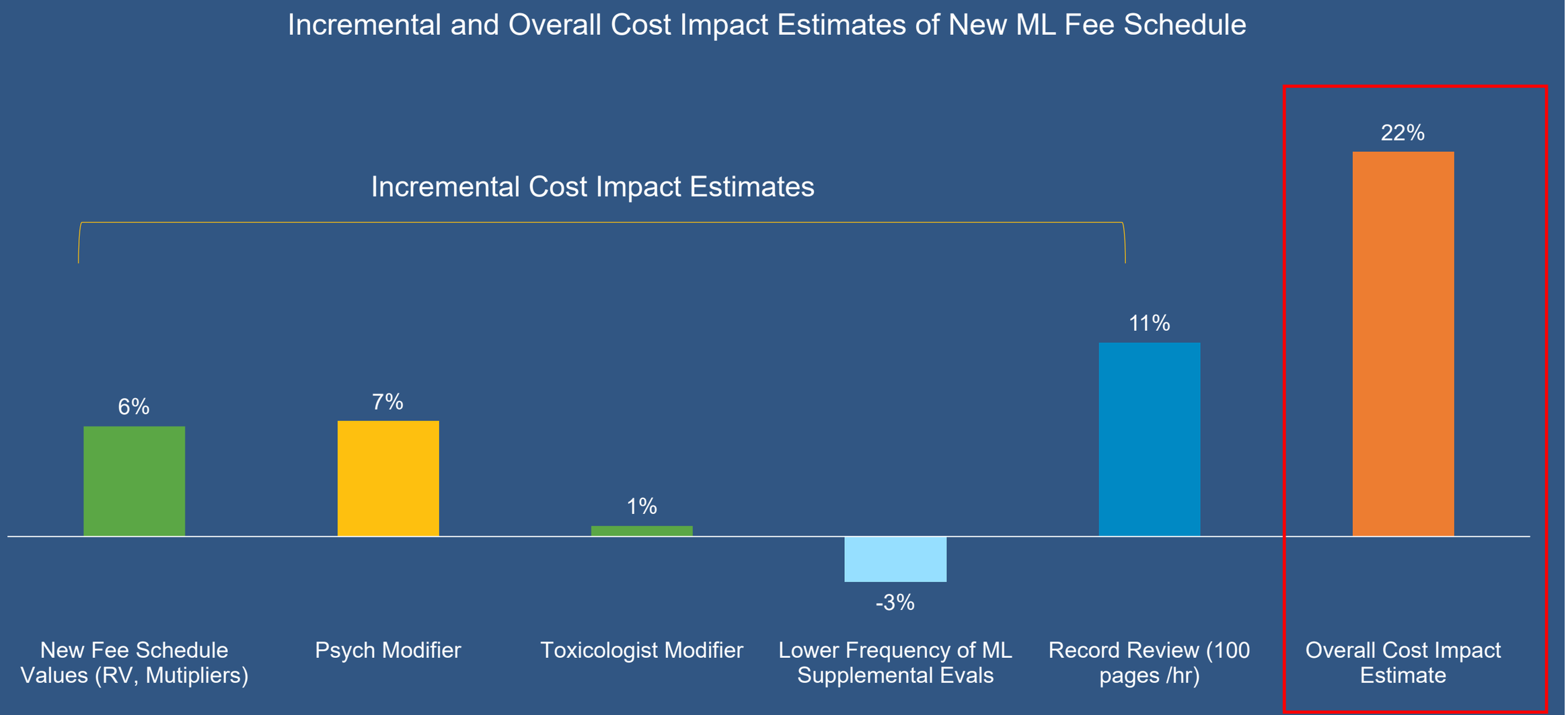
Source: WCIRB Medical Transaction Data.

Cost Estimates of New Medical-Legal Fee Schedule Impact
- Based on SY2018- SY2019 Medical Transaction Information



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Source: WCIRB Medical Transaction Data.

Estimates of New Medical-Legal Fee Schedule Impact
- Based on SY2018- SY2019 Medical Transaction Information

New ML Procedure	Brief Description	Historical Transaction Share	Historical Payments	Historical Payment Share	Expected Payments	Expected Payment Share	Percentage Difference in Payments
ML200	Missed Appointment	6.2%	$5,331,455	1.4%	$8,285,680	1.8%	+55%
ML201	ML Evaluation	53.4%	$281,770,222	73.3%	$336,849,372	71.8%	+20%
ML202	Follow-up ML Evaluation	5.8%	$24,976,257	6.5%	$23,550,609	5.0%	-6%
ML203	Supplemental ML Evaluation	33.9%	$71,296,466	18.6%	$55,980,543	11.9%	-22%
ML204	ML Testimony	0.7%	$934,101	0.2%	$1,567,930	0.3%	+68%
MLPRR	Record Review (100 pages / hour)				$42,758,630	9.1%	
Total		**100%**	$384,308,502	**100%**	$468,992,763	**100%**	**+22%**

Source: WCIRB Medical Transaction Data.

Sensitivity Analysis Based on Alternative Hours to Pages Conversion

- MLPRR – Record Review
  - Assumed different page review speed and all else stays the same
  - The cost impact estimate ranges from +11% to +35% (column A+B)

Assumption on Record Review Speed (Holding Time Constant)	(A) Cost Impact Estimate Without Record Review	(B) Incremental Cost Impact Estimate From Record Review	(A+B) Cost Impact Estimate Including Record Review
50 pages / hour	+11%	0%	+11%
100 pages / hour	+11%	11%	+22%
150 pages / hour	+11%	24%	+35%

Source: WCIRB Medical Transaction Data.

08

Evaluation of Updates to Official Medical Fee Schedule

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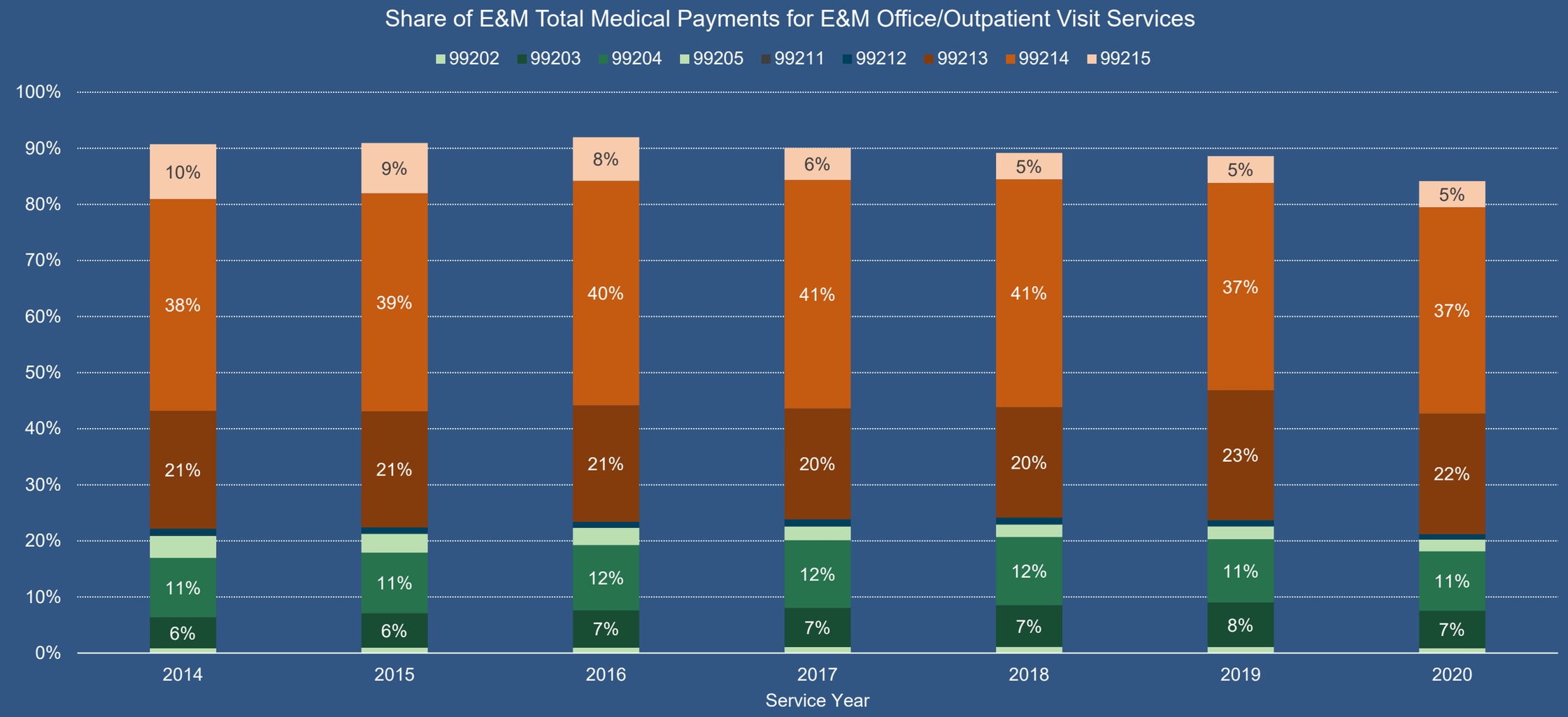
Background on 2021 Official Medical Fee Schedule (OMFS) Adjustments to Evaluation and Management Services

- The Centers for Medicare & Medicaid Services (CMS) made changes to reimbursement rules and rates in the Medicare payment system in 2021, including increased reimbursement rates for E&M office/outpatient visit services.
- The Division of Workers' Compensation (DWC) made major changes to E&M billing for 2021 and posted new reimbursement rates for E&M services to conform to relevant 2021 changes in the Medicare payment system, effective March 1, 2021.
- Some of the significant changes to the E&M Section of the OMFS include the following:
  - Updated relative value units (RVU)
  - Updated conversion factors
  - Updated telehealth list
  - Altered the way providers bill for E&M service
    - 1995 and 1997 E&M Documentation Guidelines are no longer used
    - Code change: eliminated 99201 and adopted G2212
    - Determination of the level of E&M service (via time or medical decision making)
- The WCIRB is evaluating the cost impact of the increased reimbursement rates for E&M office/outpatient visit services to be reflected in September 1, 2021 Advisory Pure Premium Rate Filing.
- The WCIRB plans to retrospectively evaluate the cost impact of the changes to E&M service billing process based on changes in actual billing and payment patterns.

Distribution of Payments for E&M Office/Outpatient Visit Services
(15.5% of payments for all medical services)

As of April 7, 2021



Source: *2019 California Workers' Compensation Losses and Expenses,* WCIRB, June 2020. WCIRB Medical Transaction Data.

Calculation of the Payment Rates for E&M Services

RVU work x GPCI work
+
RVU practice expense x GPCI practice expense
+
RVU malpractice x GPCI malpractice

X

Conversion Factor

=

Base Maximum Fee

Actual payments adjusted for medical network discounting

RVU

X

Conversion Factor

=

Base Maximum Fee

Actual payments adjusted for medical network discounting

Effective 3/1/2021:

Significant increase in RVU

X

Slight Decrease in Conversion Factor (-2%)

=

Potential increase in Base Maximum Fee

Actual payments adjusted for network discounting

WCIRB's Approach for Estimating the Cost Impact of Increased Reimbursement Rates for E&M Office/Outpatient Visit Services

- Compare the expected payment for E&M services under the updated fee schedule to historical payments in WCIRB medical transaction data to estimate the cost impact - 2019 E&M transactions
  - Apply the updated RVU, GPCI, conversion factor and estimated network discount
- Key assumptions:
  1. Mix of E&M office/outpatient visit services remains the same
  2. Region mix remains the same for GPCI factors
  3. The magnitude of network discount remains the same (about 12%)
  4. Year-over-year inflationary change of 2-3% remains the same

E&M Office/Outpatient Visit CPT Code	Description	Estimated Average Network Discount in SY2019	Estimated Average Network Discount in SY2020
99202	New sf 15-29 min	0.90	0.88
99203	New low 30-44 min	0.90	0.89
99204	New mod 45-59 min	0.88	0.88
99205	New hi 60-74 min	0.84	0.84
99211	Established minimal prob	1.02	0.90
99212	Established sf 10-19 min	0.90	0.88
99213	Established low 20-29 min	0.89	0.87
99214	Established mod 30-39 min	0.87	0.86
99215	Established hi 40-54 min	0.83	0.83

Source: WCIRB Medical Transaction Data.

Estimates for Cost Impact of Increased Reimbursement Rates to E&M Office/Outpatient Visit Services Based on 2019 Services

- Based on the WCIRB medical transaction data in service year 2019
- The expected average payments for the nine office/outpatient visits are estimated to be 15% higher

E&M Office/Outpatient Visit CPT Code	Description	Percentage Change in Non-Facility BMF from 2019 to 2020	Percentage Change in Non-Facility BMF from 2020 to 2021	Transaction Share in SY2019	Historical Average Payments in SY2019	Expected Average Payments Adjusted for Discounting in SY2021
99202	New sf 15-29 min	1%	-3%	2%	$97	$95
99203	New low 30-44 min	2%	5%	8%	$135	$145
99204	New mod 45-59 min	2%	3%	8%	$199	$210
99205	New hi 60-74 min	3%	8%	1%	$239	$266
99211	Established minimal prob	4%	0%	0%	$33	$34
99212	Established sf 10-19 min	2%	25%	3%	$58	$74
99213	Established low 20-29 min	3%	23%	35%	$92	$117
99214	Established mod 30-39 min	2%	20%	39%	$132	$163
99215	Established hi 40-54 min	2%	25%	4%	$168	$215
Overall Avg Payment*					$124	$149 (+20%)
Removing the typical annual inflation from 2019 to 2021 (2.5% per year)						**+15%**

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Note. * Included both facility and non-facility E/M services. Source: WCIRB Medical Transaction Data.

Comparison of the Cost Impact Estimates Based on E&M Office/Outpatient Visit Services in 2019 and 2020

Nine E&M Office/Outpatient Visit Procedures	Based on E&M Office/Outpatient Visit Services in 2019	Based on E&M Office/Outpatient Visit Services in 2020
Historical Average Payment	$124	$125
Expected Payments Under 2021 Fee Schedule Adjusting for Network Discount	$149	$147
Percentage Change	20%	18%
Removing typical annual inflationary change	2.5% * 2 years	2.5%
Cost Impact Estimate	15%	15.5%

Source: WCIRB Medical Transaction Data.

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