

# WCIRB Actuarial Committee Meeting

Materials Presented at the WCIRB Actuarial Committee Meeting  
August 3, 2016

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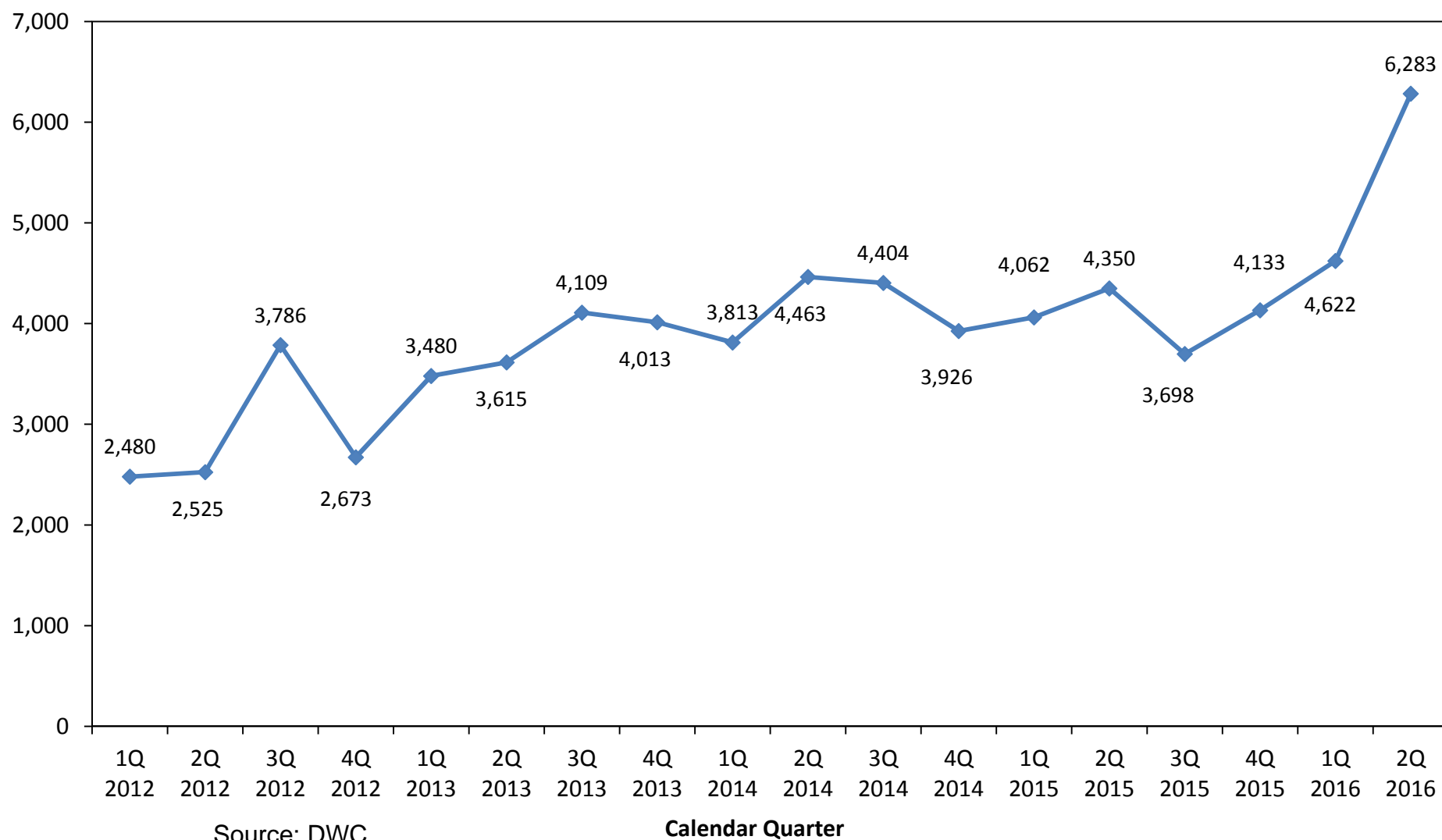
# Third Quarter 2016 Review of Diagnostics

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# Expedited Hearings

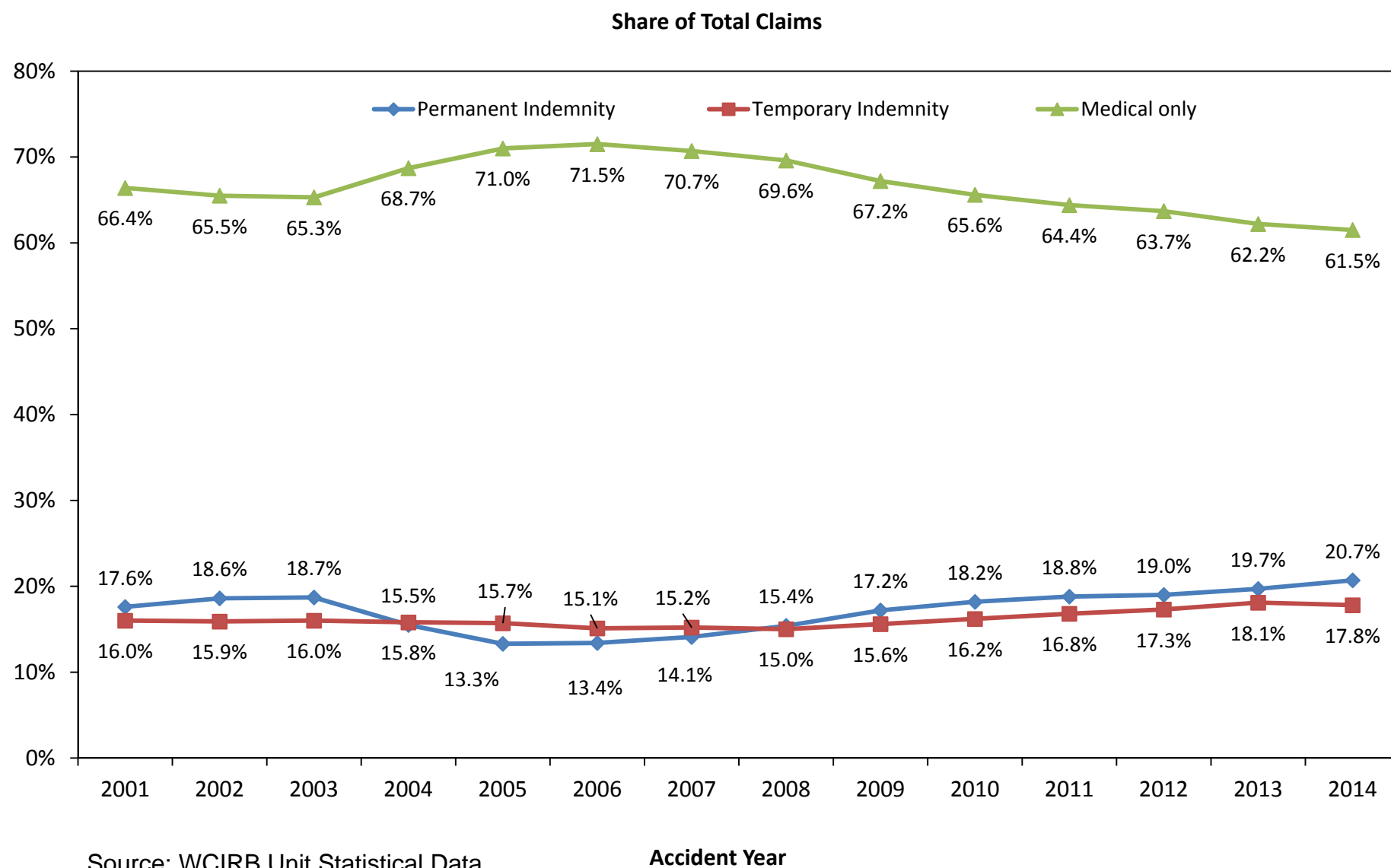
(Exhibit M8.2; pg. IV-A-14)

Statewide Number of DWC Expedited Hearings

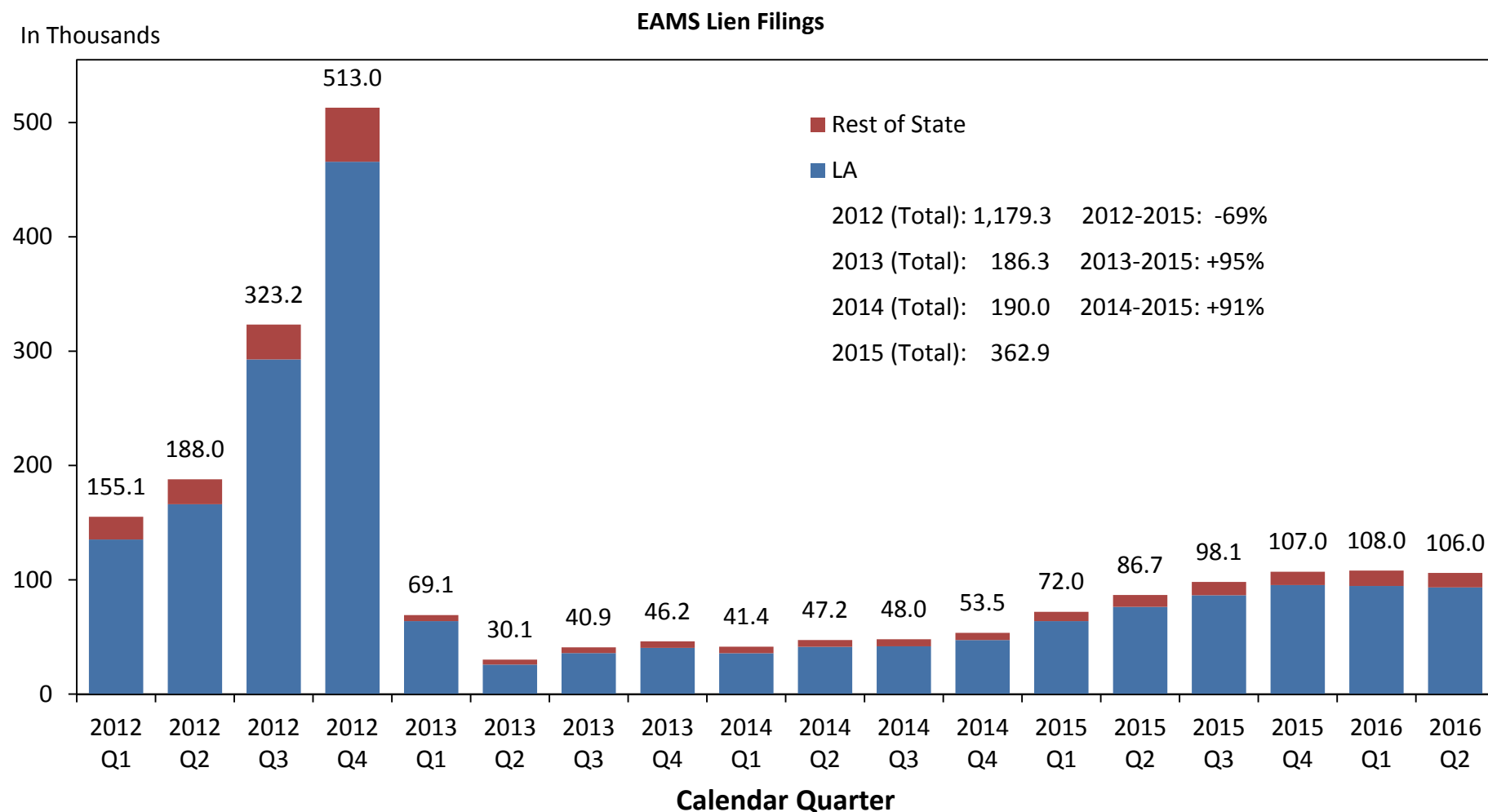


# Permanent Indemnity

(Exhibit M4; pg. IV-A-6)



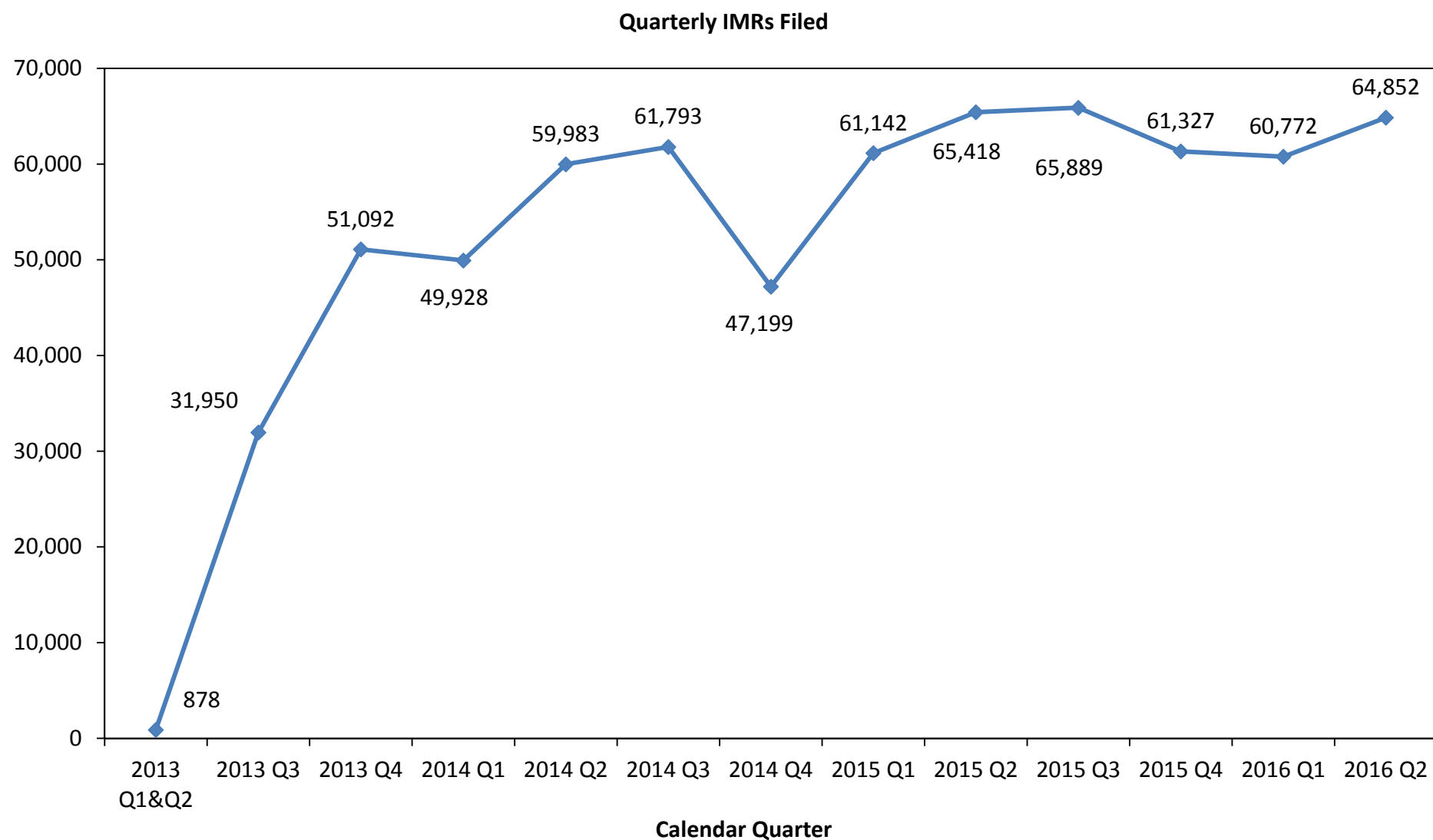
# Liens Filed Counts by Region (Exhibit M9.2; pg. IV-A-16)



Source: EAMS Liens Data

# IMR Filed Count

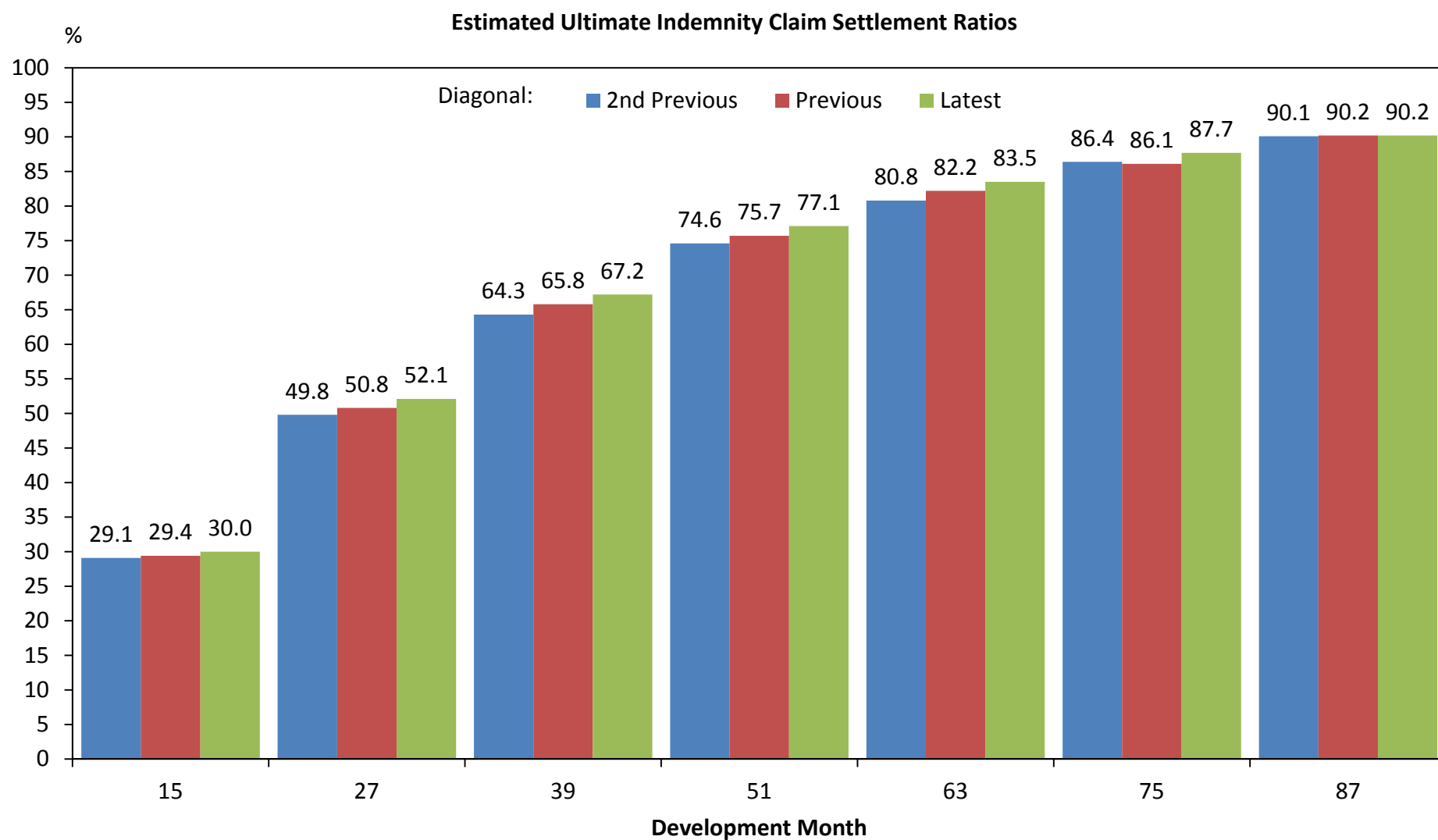
(Exhibit M14; pg. IV-A-22)



Source: DWC Collected from IMR Vendor

# Indemnity Settlement Ratio

(Exhibit C2.1; pg. IV-A-25)

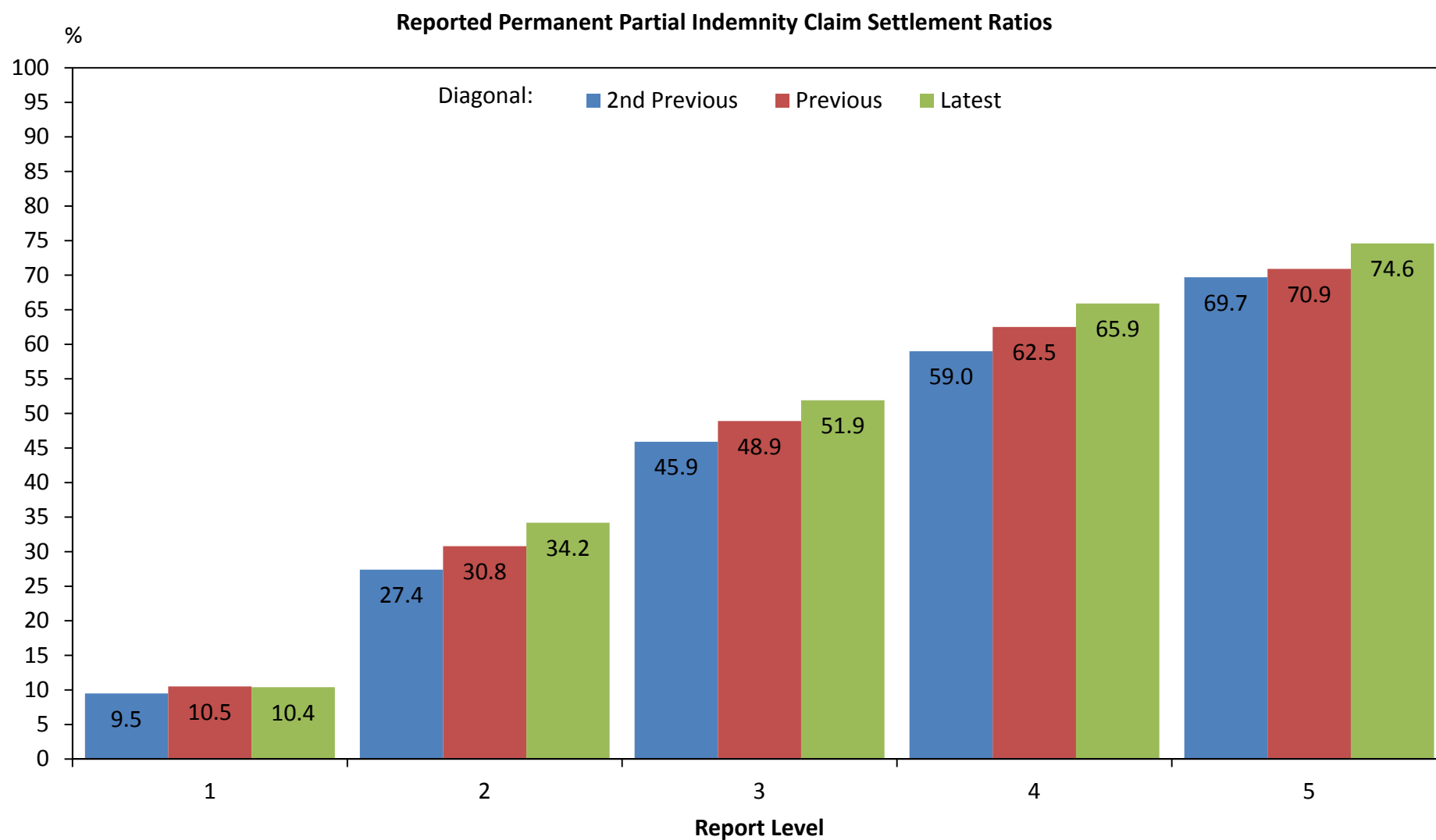


Source: WCIRB Quarterly Calls for Experience



# Permanent Indemnity Settlement Ratio

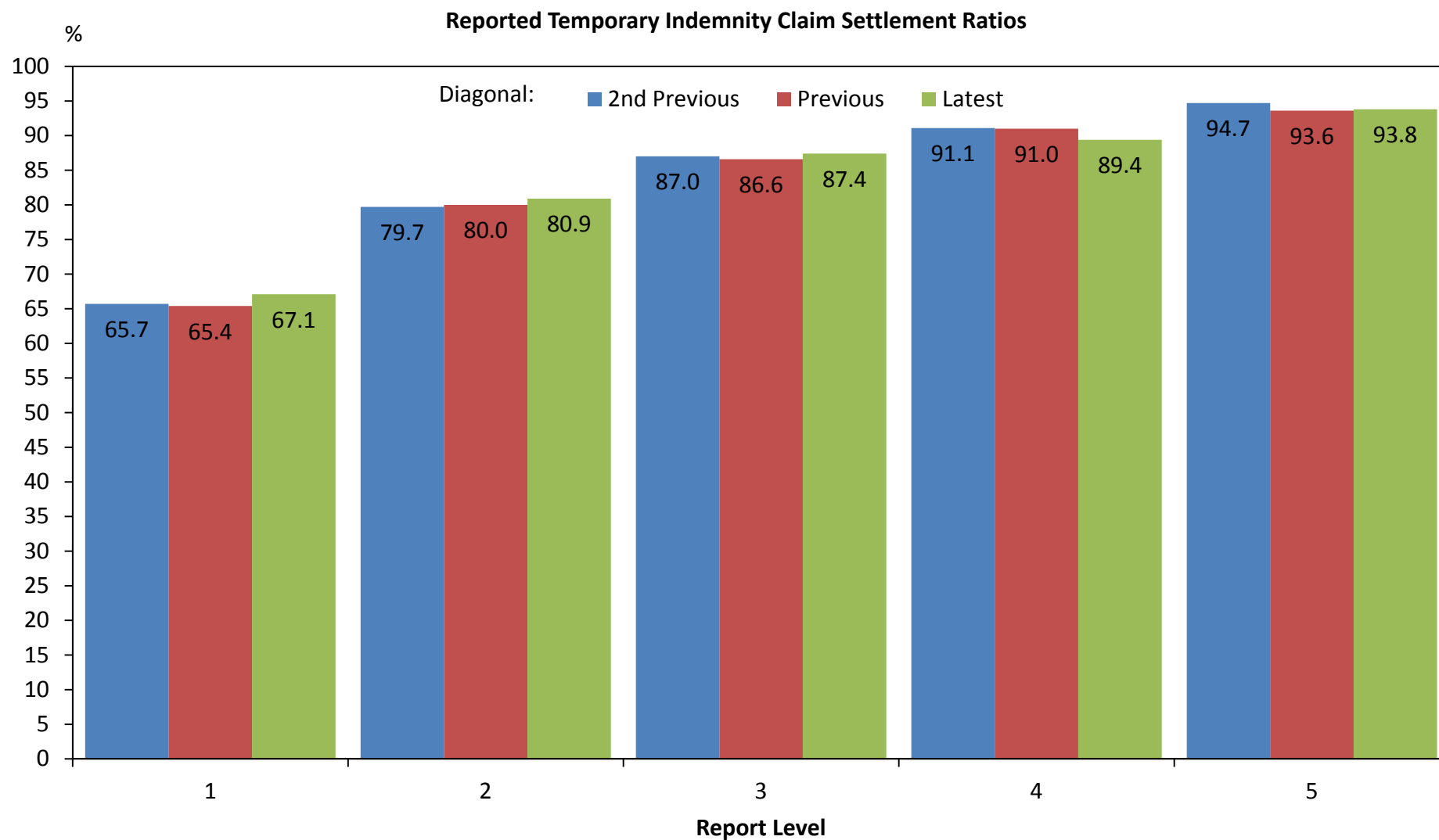
(Exhibit C2.2; pg. IV-A-26)



Source: WCIRB Unit Statistical Data

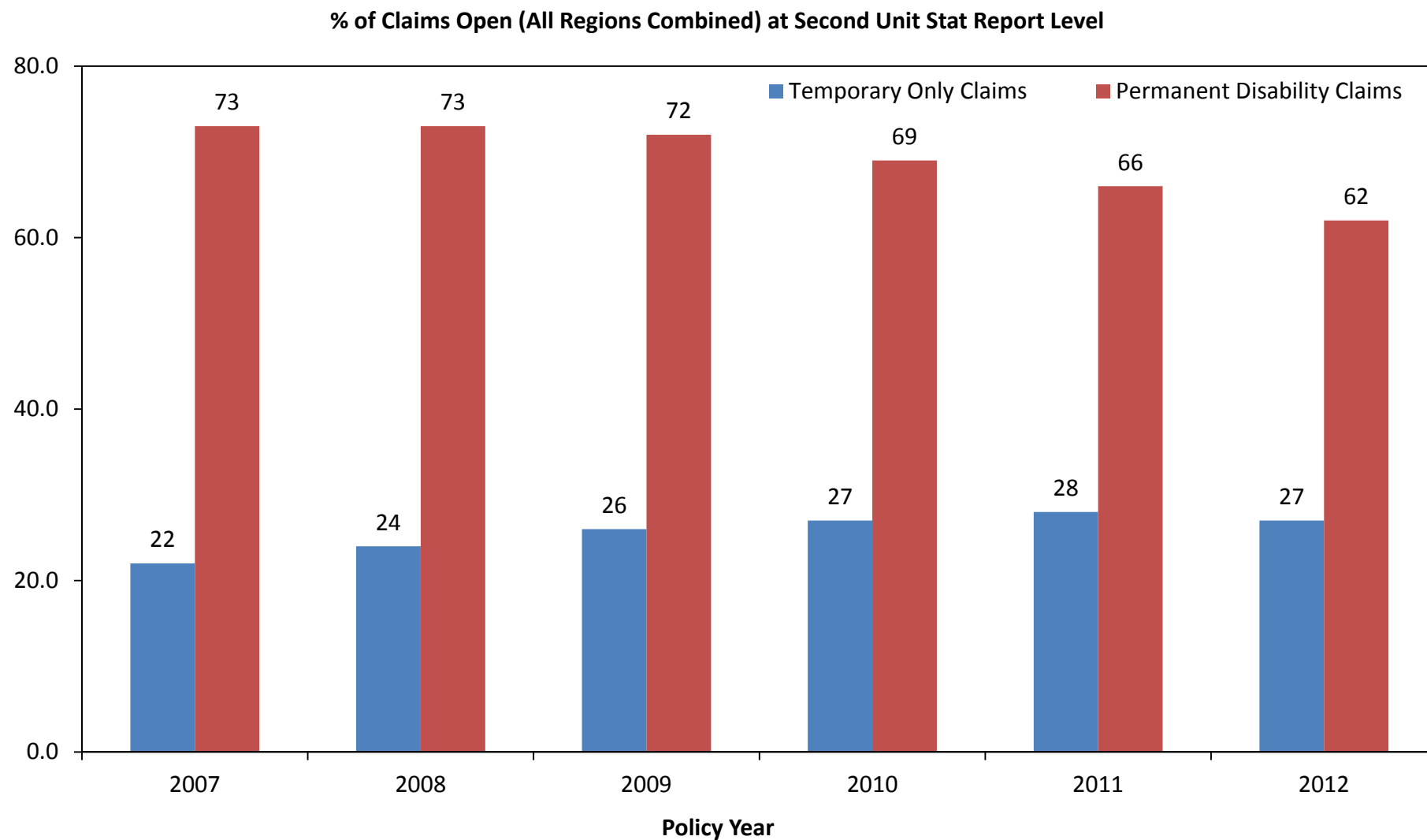
# Temporary Indemnity Settlement Ratio

(Exhibit C2.2; pg. IV-A-26)



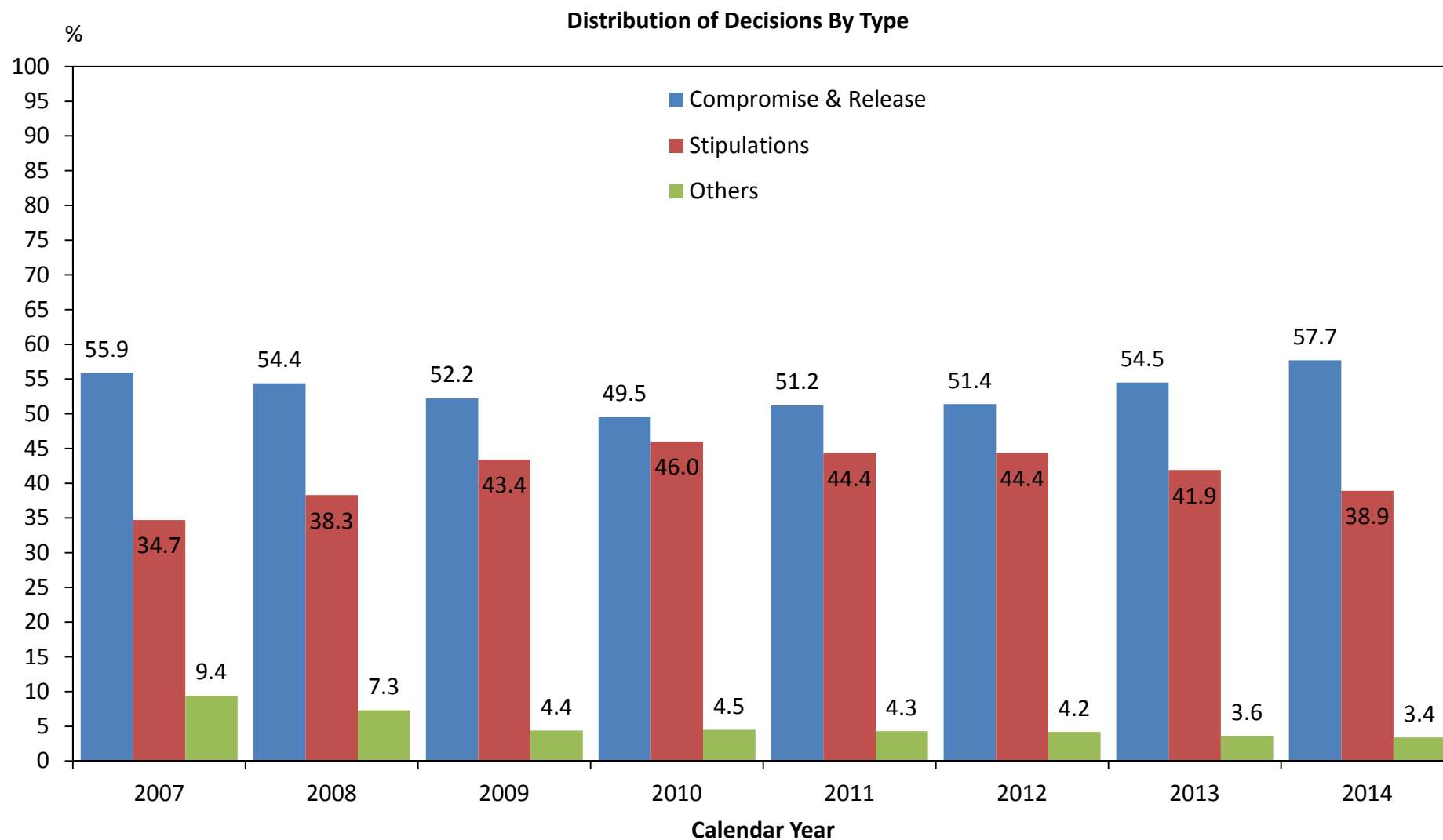
Source: WCIRB Unit Statistical Data

## Open Claim Percentages By Type of Claim (Exhibit M5; pg. IV-A-7)



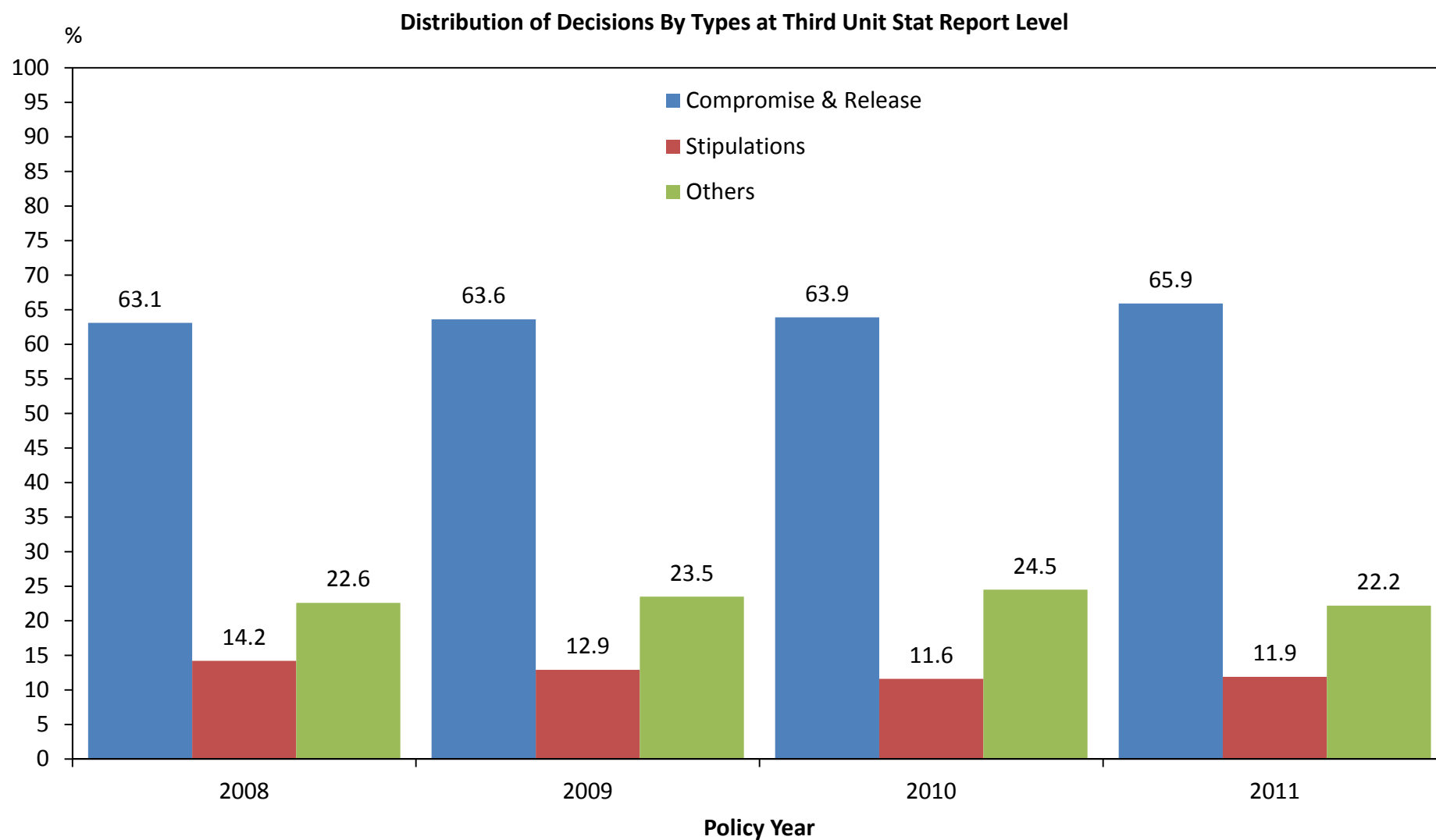
Source: WCIRB Unit Statistical Data

## DWC Decisions By Type Of Decisions (Exhibit M7; pg. IV-A-12)



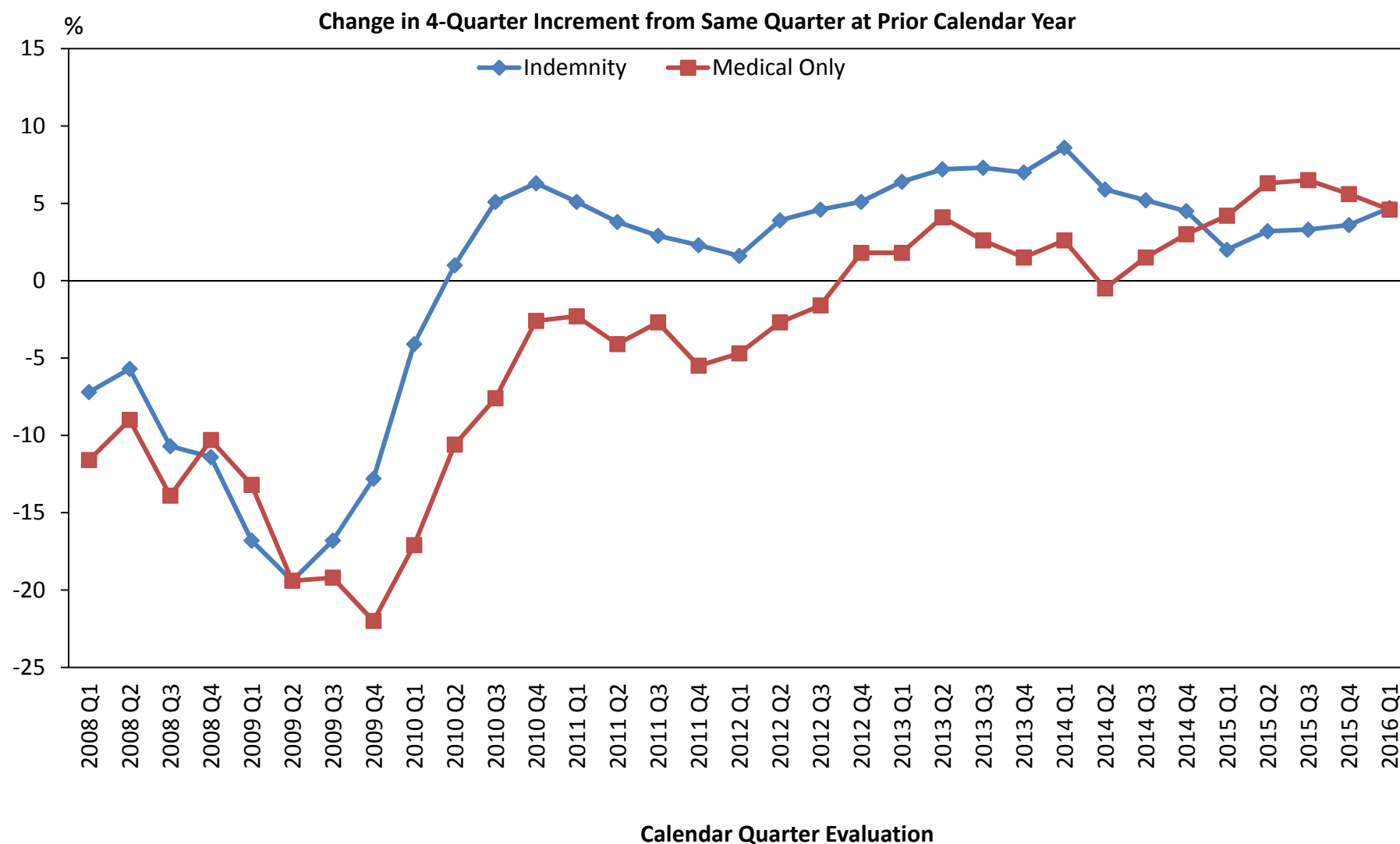
Source: DWC via CHSWC 2015 Annual Report.

## Settlement Type Distribution (Exhibit M6.1; pg. IV-A-8)



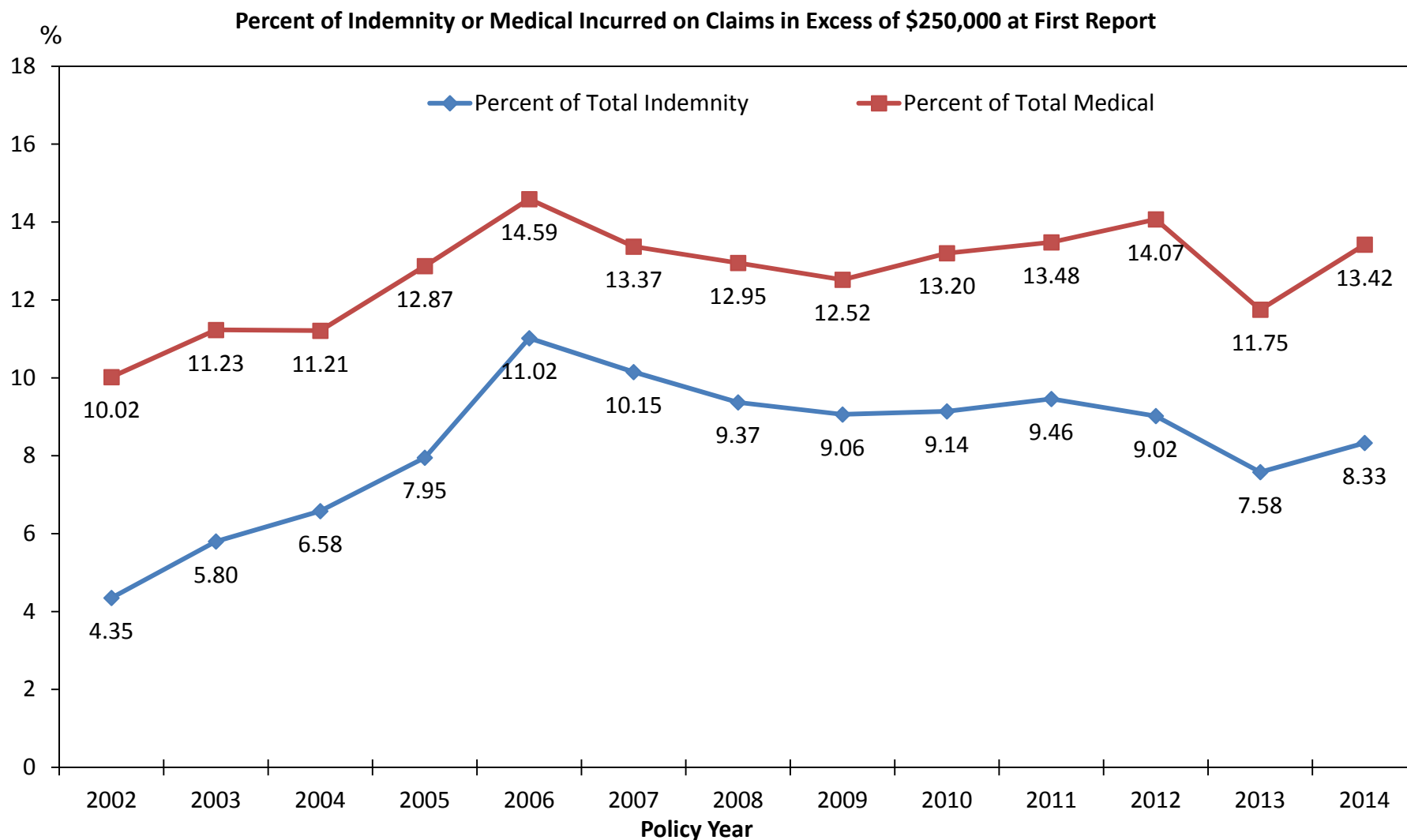
Source: WCIRB Unit Statistical Data at Third Report Level

# Changes in Incremental Claim Counts (Exhibit C11; pg. IV-A-39)



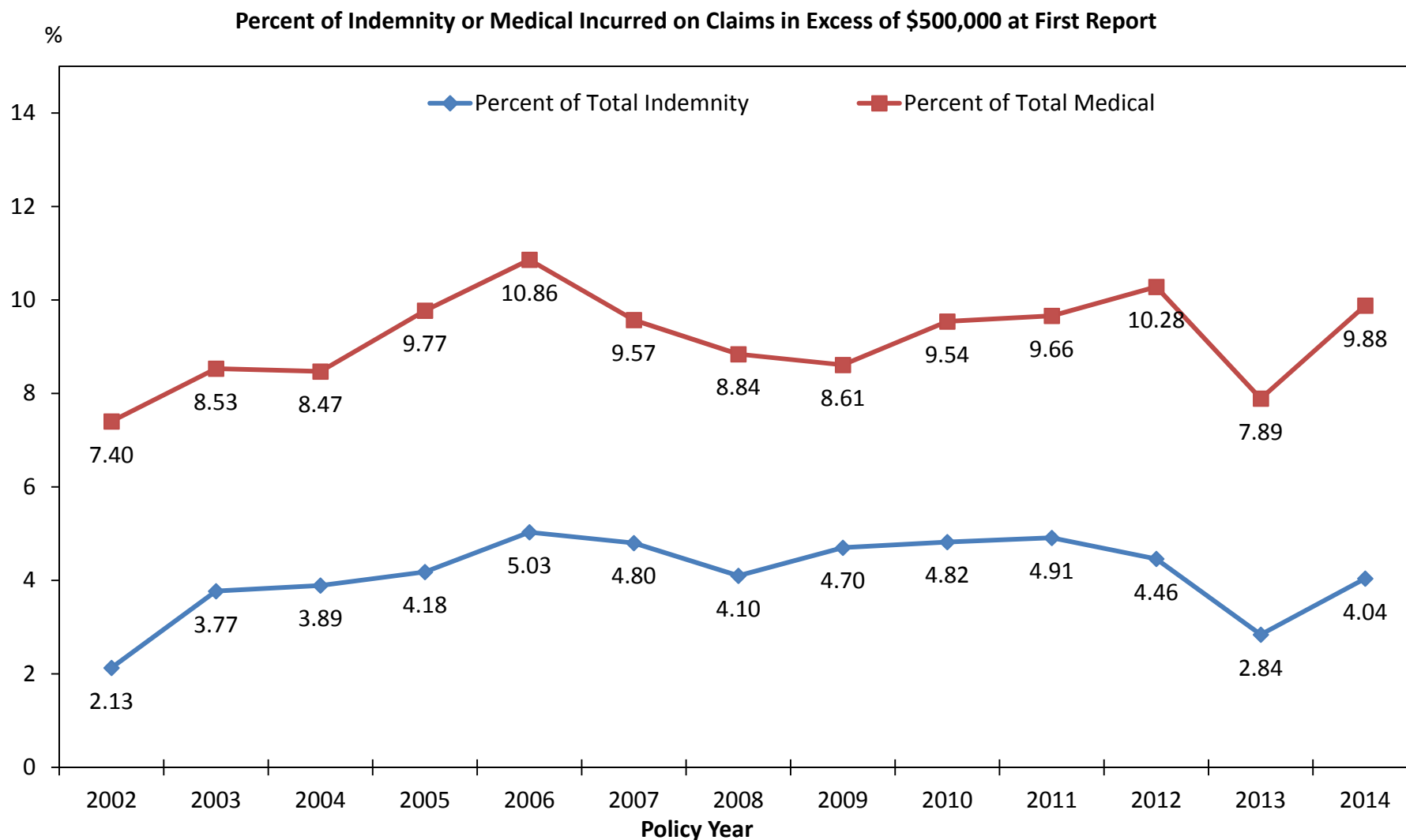
Source: WCIRB Quarterly Calls for Experience

# Loss Share on Claims in Excess of \$250,000 (Exhibit S16.1; pg. IV-A-86)



Source: WCIRB Unit Statistical Data

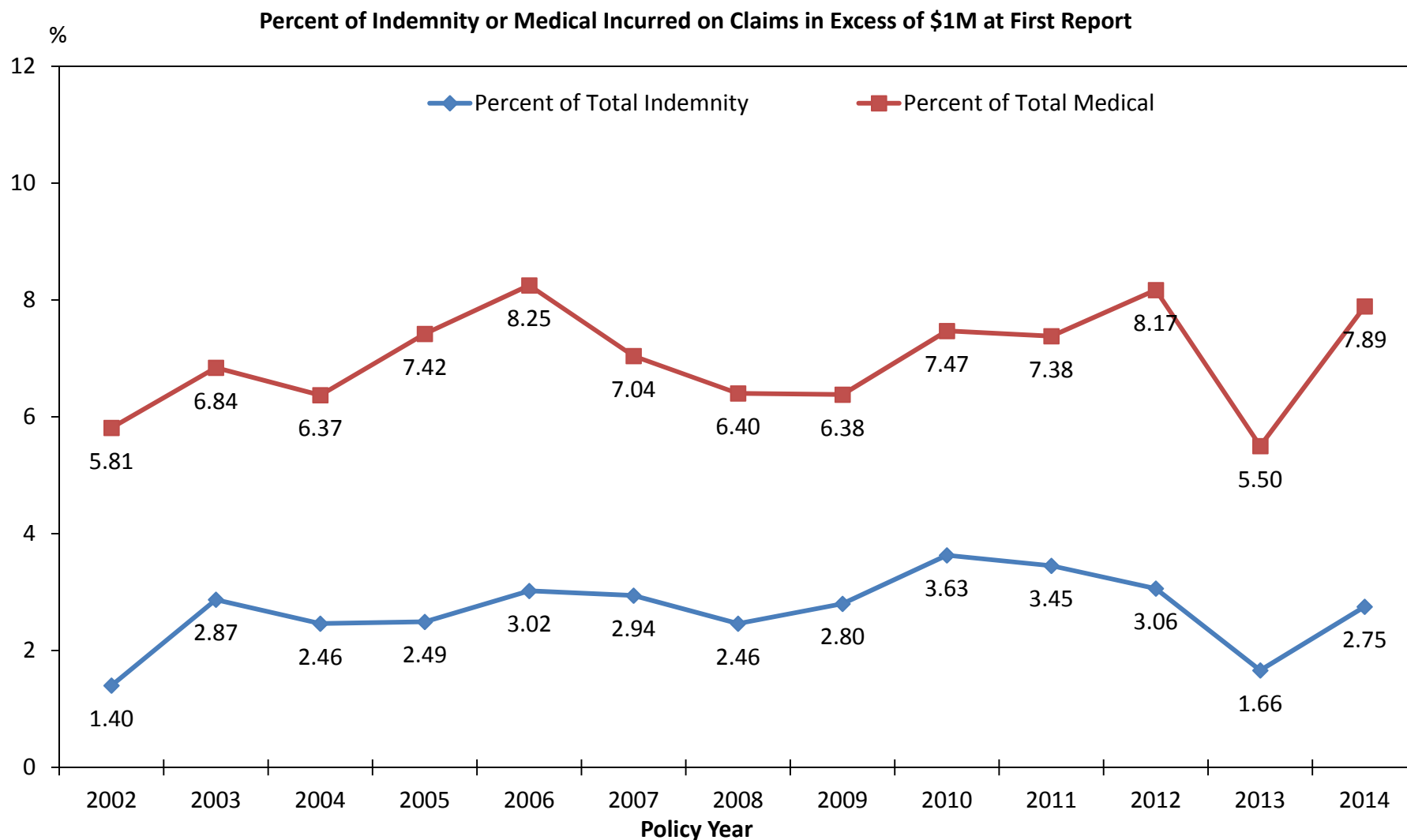
## Loss Share on Claims in Excess of \$500,000 (Exhibit S16.2; pg. IV-A-87)



Source: WCIRB Unit Statistical Data



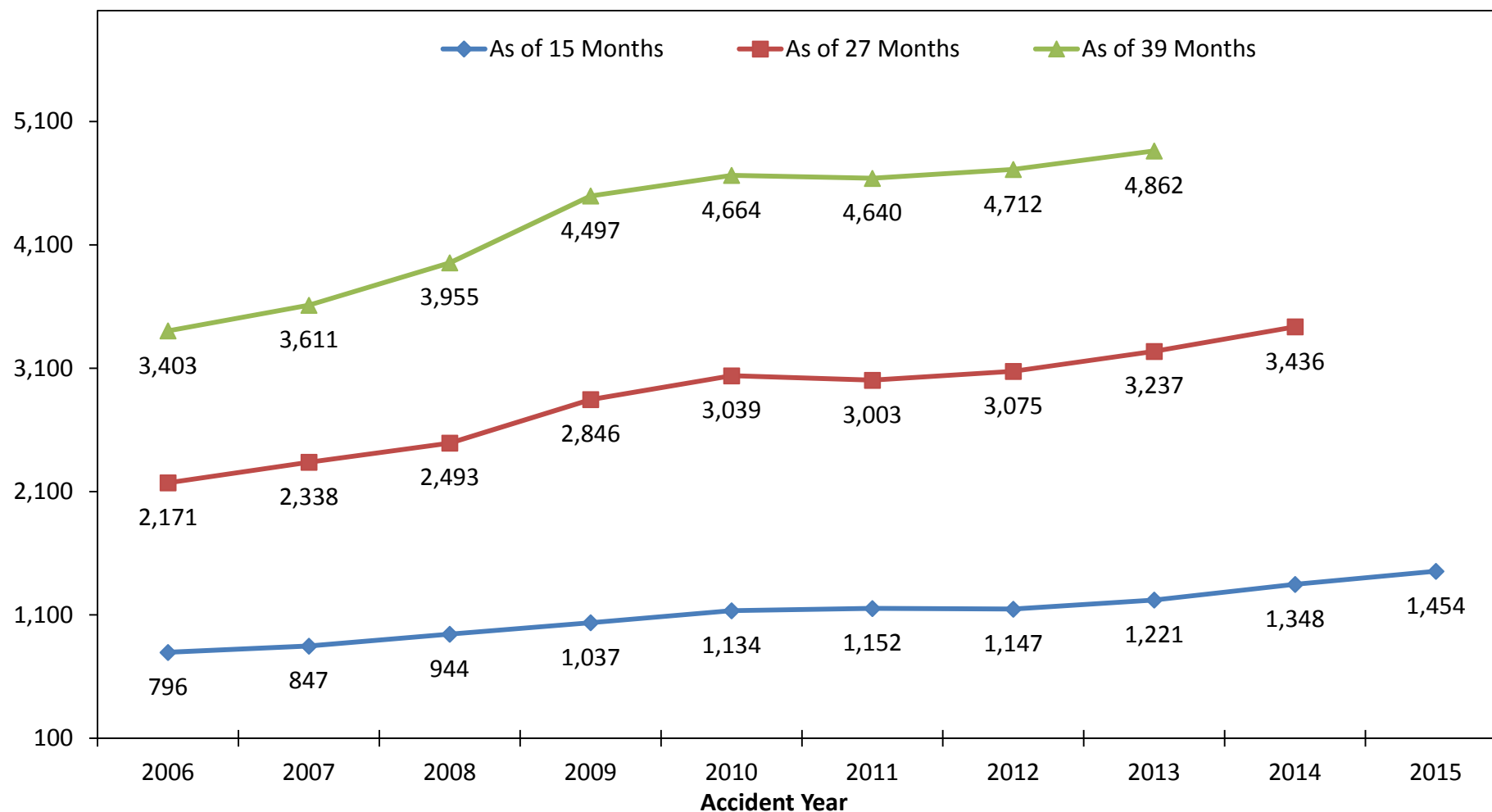
## Loss Share on Claims in Excess of \$1,000,000 (Exhibit S16.3; pg. IV-A-88)



Source: WCIRB Unit Statistical Data

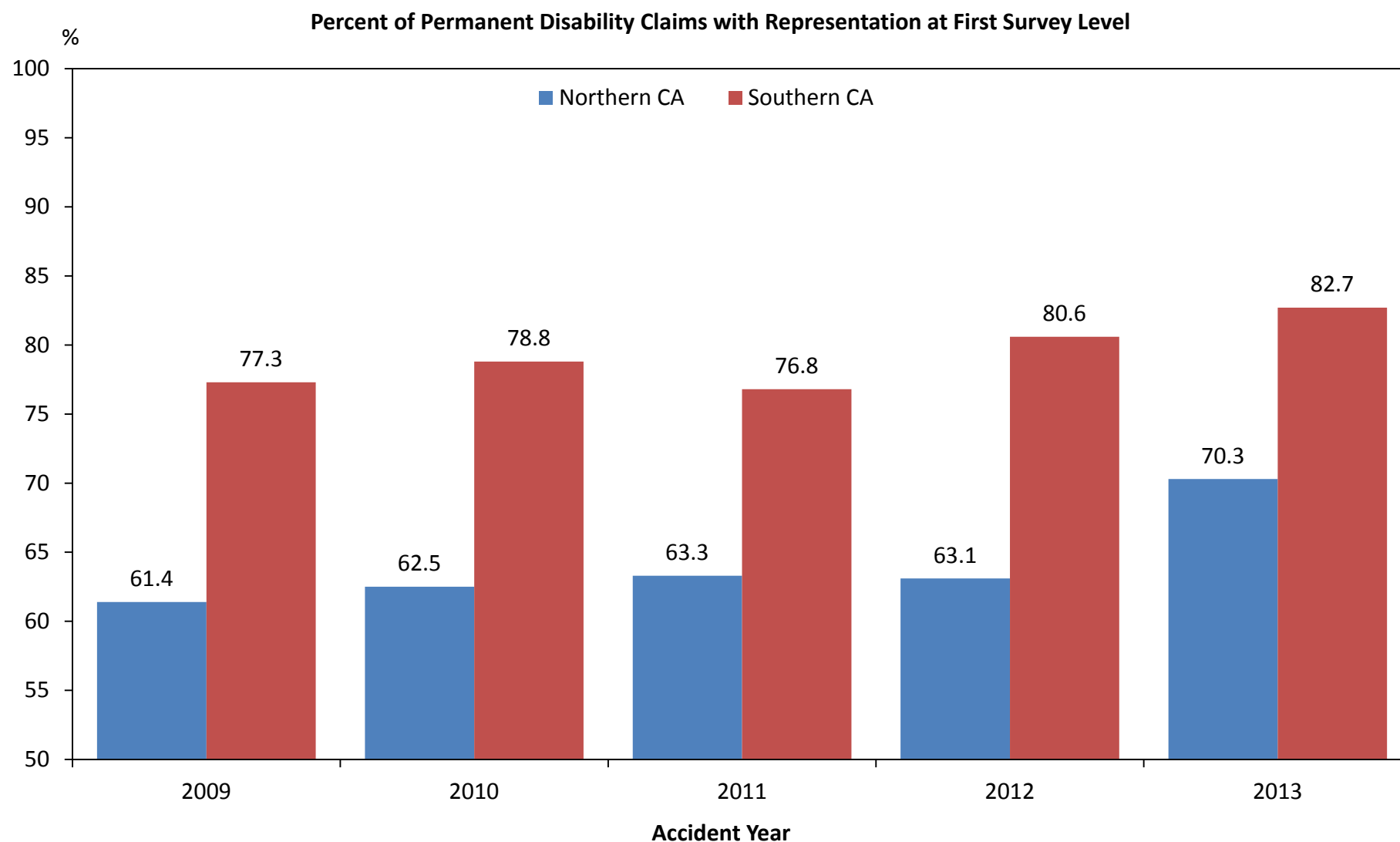
## Paid ALAE per Reported Indemnity Claim (Exhibit E5; pg. IV-A-99)

Average Paid ALAE per Reported Indemnity Claim – Private Insurers



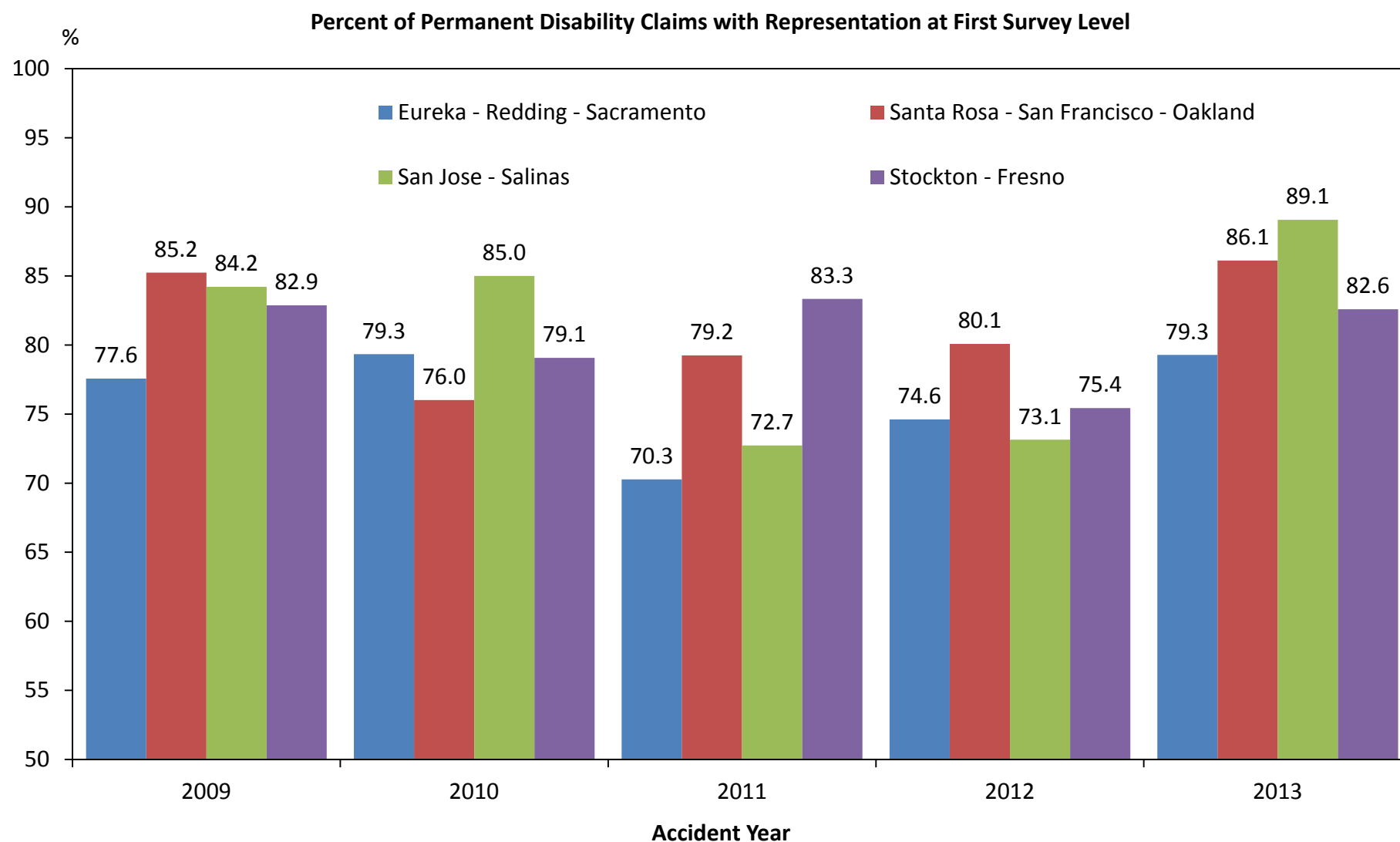
Source: WCIRB Unit Statistical Data

## Percent of PD Claims with Representation (Exhibit E7; pg. IV-A-101)



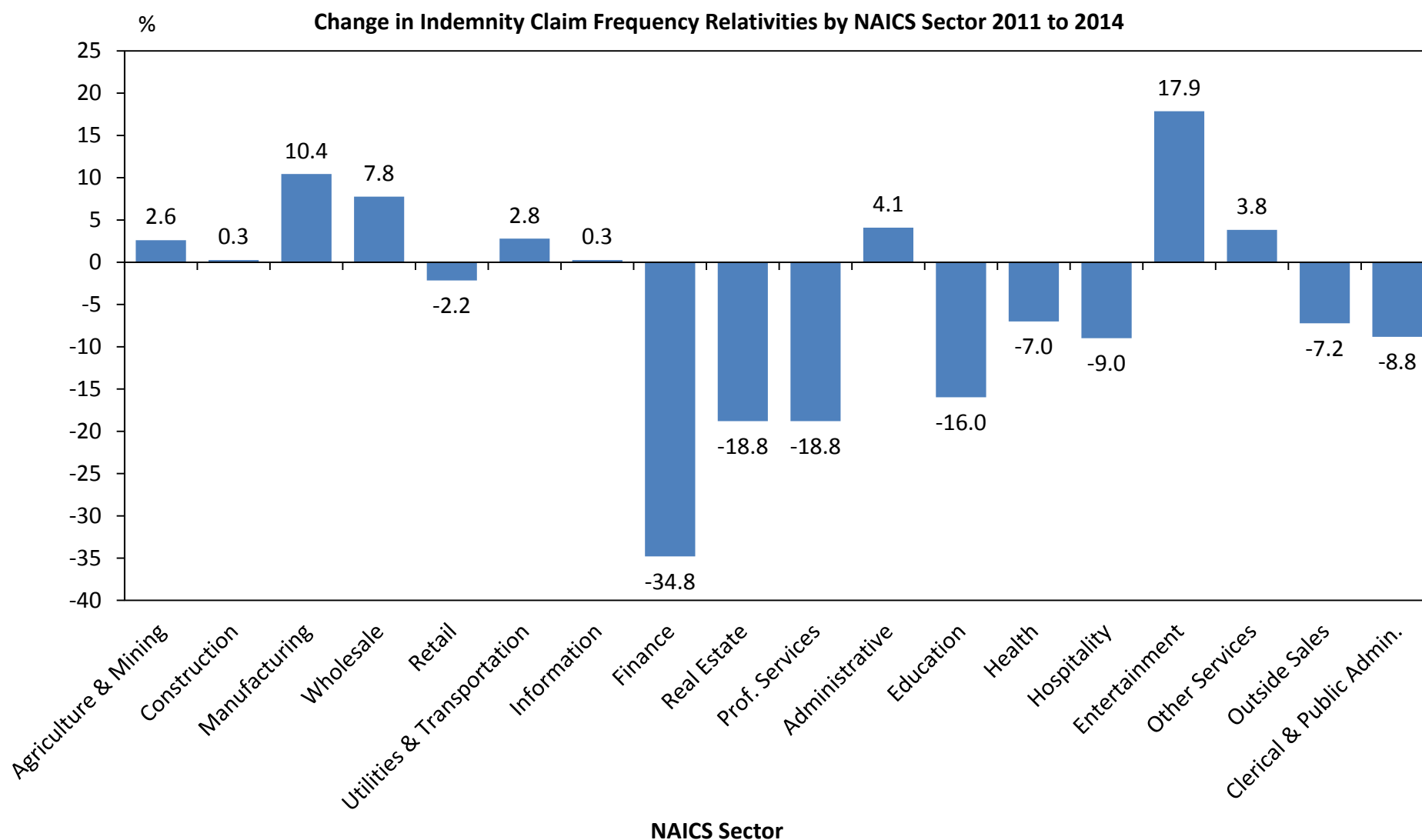
Source: WCIRB Permanent Disability Claim Survey (First Survey Level)

## Percent of PD Claims with Representation (Exhibit E7; pg. IV-A-101)



Source: WCIRB Permanent Disability Claim Survey (First Survey Level)

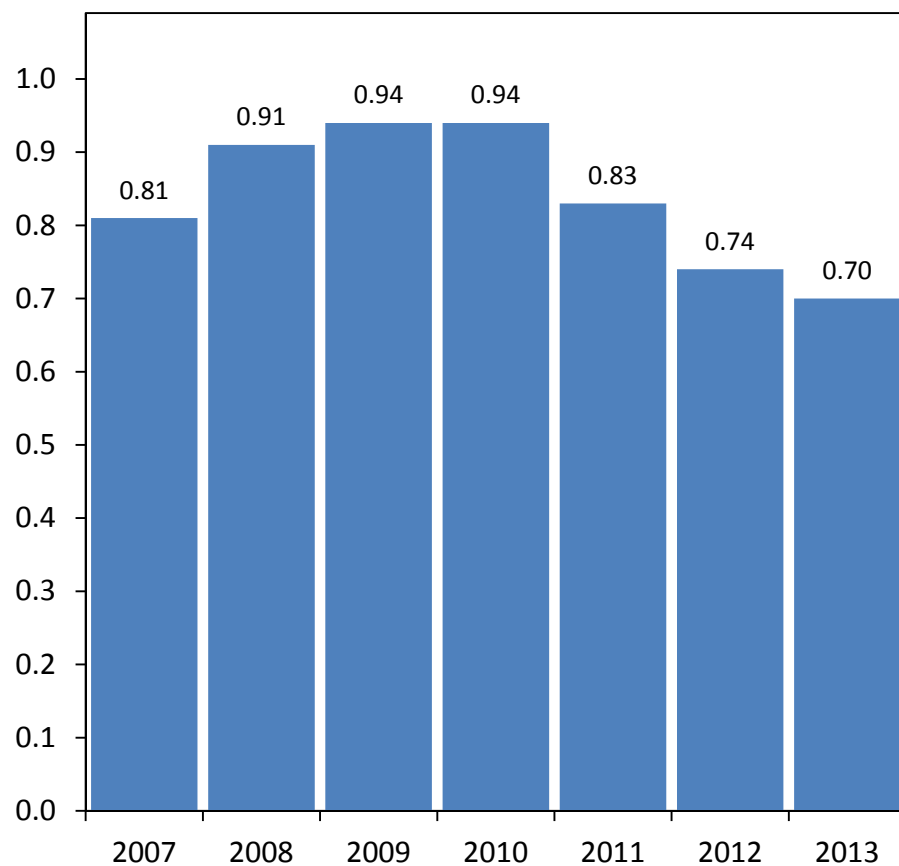
## Indemnity Claim Frequency Relative Change (Exhibit C20; pg. IV-A-47)



Source: WCIRB Unit Statistical Data at First Report Level

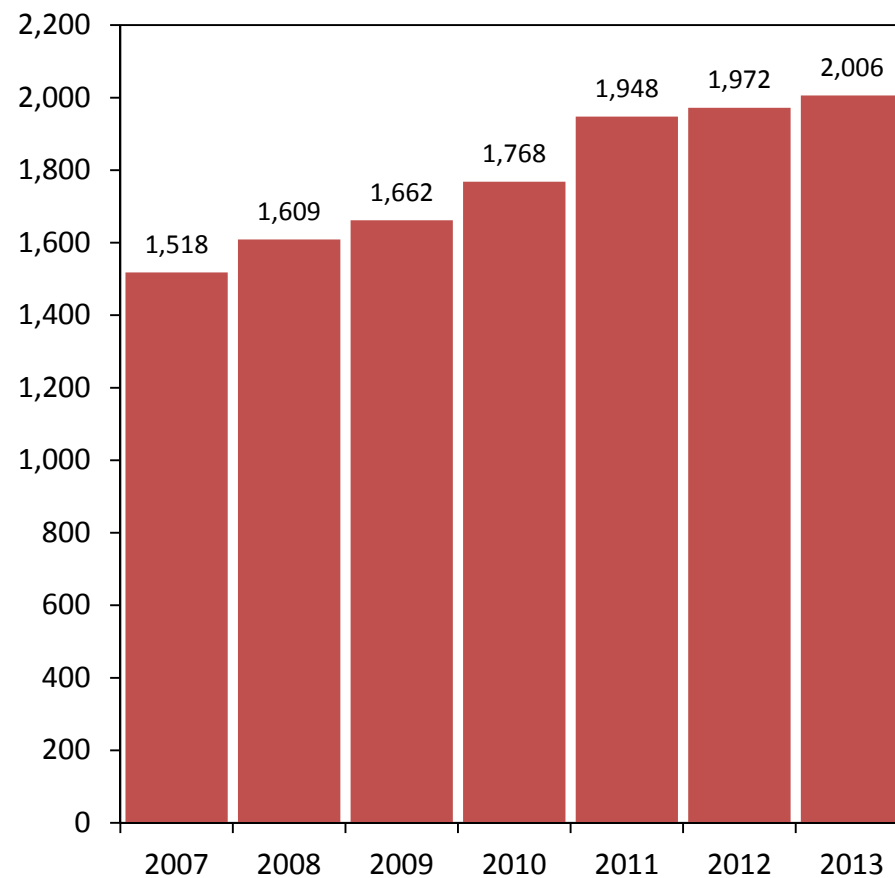
## Medical-Legal Reports (Exhibit E13; pg. IV-A-105)

Medical-Legal Reports per PD Claim



Accident Year

Average Cost per Medical-Legal Report








Accident Year

Source: WCIRB Permanent Disability Claim Survey (First Survey Level)

# SB 863 Cost Monitoring – Adjustments to Pure Premium Ratemaking

WCIRB Actuarial Committee Meeting  
August 3, 2016

# WCIRB 2015 SB 863 Cost Monitoring Report – Indemnity Reforms

SB 863 Provisions	WCIRB Original Cost Estimates (\$'s in billions)	Current Monitoring Results Impact on Net SB 863 Savings	Updated Estimates (\$'s in billions)
Changes to Weekly PD Benefits	+\$0.6		+\$0.6
Changes to PD Rating Formula	+\$0.6		+\$0.6
Elimination of PD Add-ons	(\$0.2)	TBD	(\$0.2)
Three-Tiered Weekly PD Benefits	(\$0.1)	TBD	(\$0.1)
<u>Ogilvie</u> Decision	(\$0.2)		(\$0.1)
Indemnity Claim Frequency	Small Increase		---
Indemnity Severities (Incl. Trend)	Increases		---
<b>Total Indemnity Reforms</b>	<b>+\$0.7</b>	---	<b>+\$0.8</b>



## SB 863 Indemnity Reforms

- 7/1/16 Filing Reflected Indemnity Reforms in On-Level Adjustments and Loss Development
- Emerging Indemnity Costs Generally Consistent with Prospective Estimates
- Staff Recommendation: Use Factors Consistent with those Reflected in 7/1/16 Filing

# WCIRB 2015 SB 863 Cost Monitoring Report – Medical & LAE Reforms

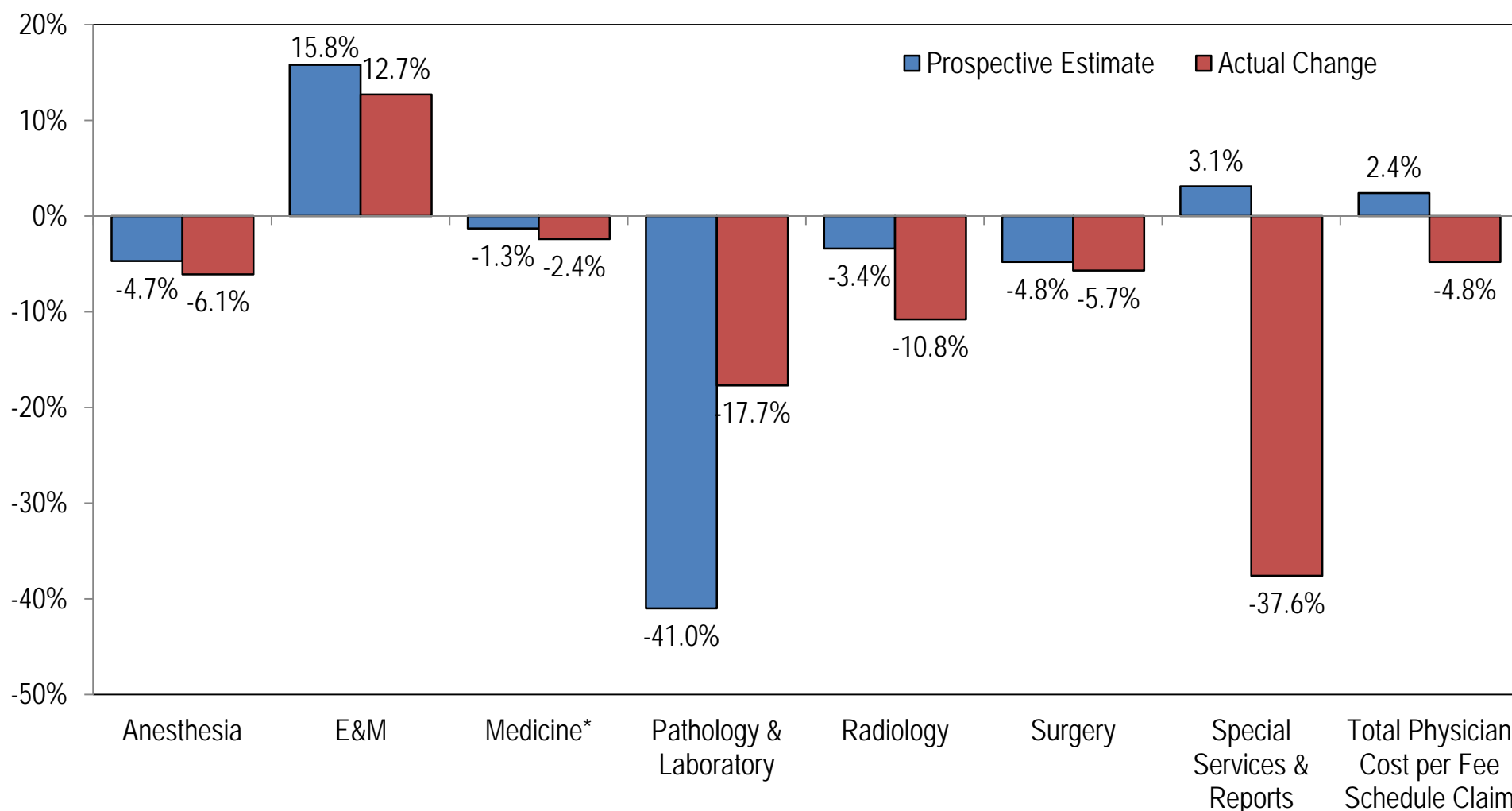
SB 863 Provisions	WCIRB Original Cost Estimates (\$'s in billions)	Current Monitoring Results Impact on Net SB 863 Savings	Updated Estimates (\$'s in billions)
Liens	(\$0.5)	=	(\$0.5)
Surgical Implant Hardware	(\$0.1)	▲	(\$0.1)
ASC Fees	(\$0.1)	=	(\$0.1)
IMR – Impact on Frictional Costs	(\$0.2)	▼	+\$0.1
IMR – Impact on TD Duration	(\$0.2)	▼	(\$0.2)
MPN Strengthening	(\$0.2)	=	(\$0.2)
RBRVS Fee Schedule	+\$0.3	▲	\$0.0
Medical Severities (Incl. Trend)	Increases	▲	(\$0.5)
ALAE and ULAE Severities	Significant Declines	▼	---
<b>Total Medical &amp; LAE Reforms</b>	<b>(\$0.9)</b>	---	<b>(\$1.5)</b>
<b>Total Estimate – All Items</b>	<b>(\$0.2)</b>	---	<b>(\$0.8)</b>

## SB 863 Medical Reforms Effective 1/1/2013

- 7/1/16 Filing Reflected SY 2013 Medical Reforms in Loss Development based on 2015 SB 863 Cost Monitoring Report
- Liens Continuing to Increase in 1Q & 2Q 2016
  - Lien filings may reduce once statute of limitations fully transitions in 3Q 2016
- Staff Recommendation: Use Factors Consistent with those Reflected in 7/1/16 Filing

# Projected vs. Actual Change in Physician Fees – 2013 to 2014

## Exhibit 1

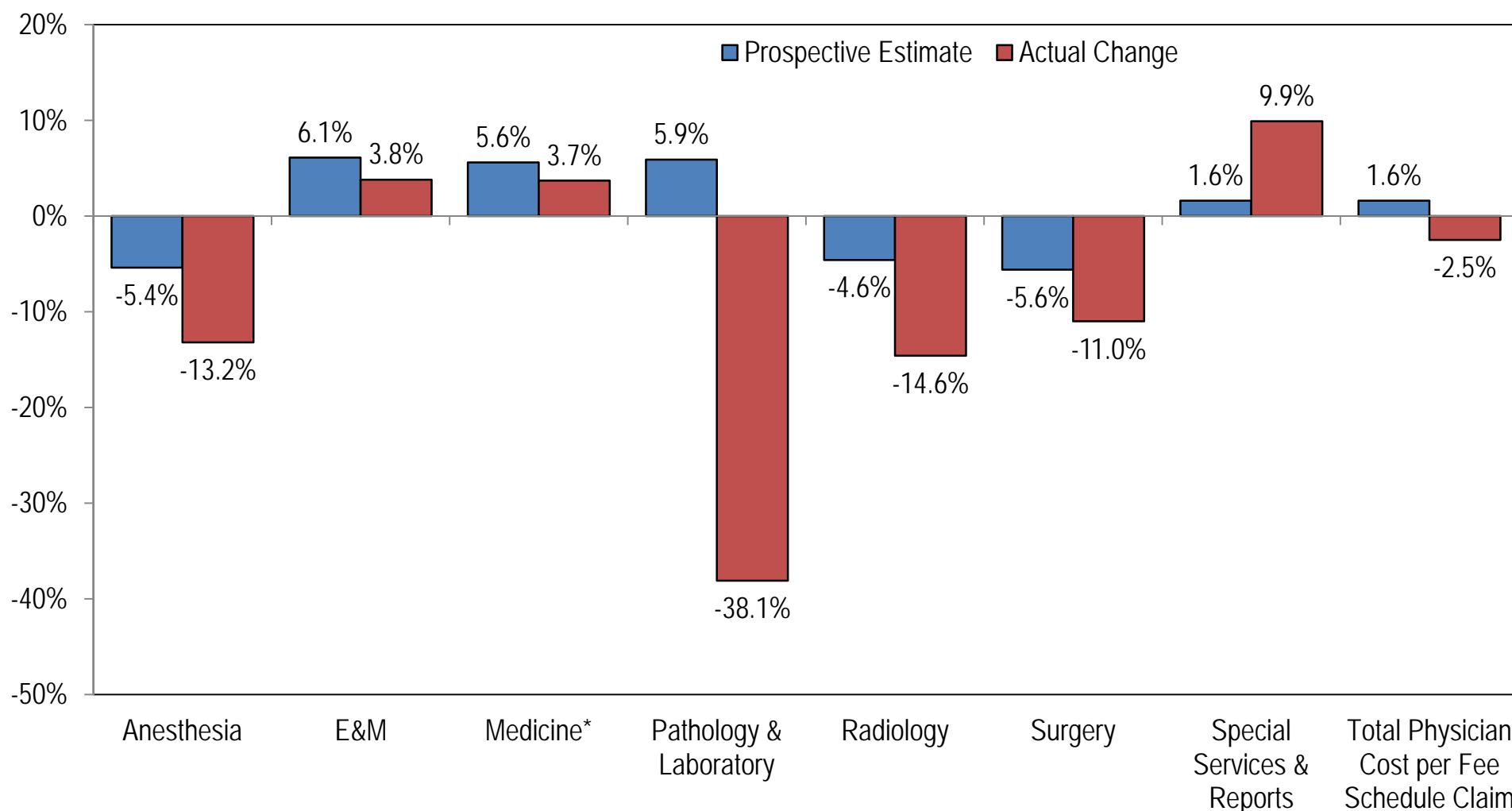


\*Includes Physical Medicine, Chiropractic, and Acupuncture

Source: WCIRB Medical Data Call. Reflects data where the service year equals the transaction year.

# Projected vs. Actual Change in Physician Fees – 2014 to 2015

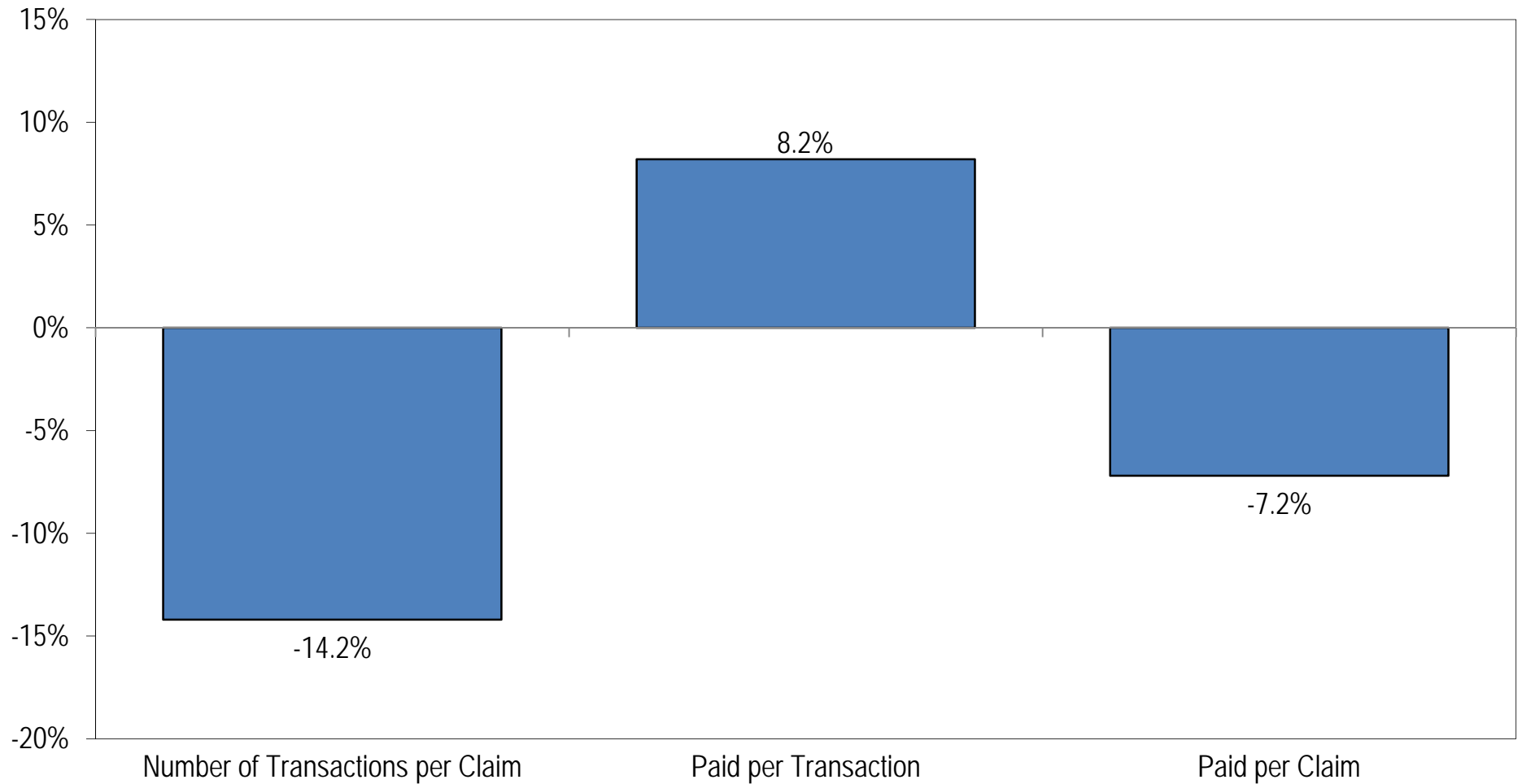
## Exhibit 1 – Updated



\*Includes Physical Medicine, Chiropractic, and Acupuncture

Source: WCIRB Medical Data Call. Reflects data where the service year equals the transaction year.

## Changes in Physician Costs – 2013 to 2015



Source: WCIRB Medical Data Call. Reflects data where the service year equals the transaction year.

## SB 863 Medical Reforms Effective 1/1/2014 & 1/1/2015 (RBRVS)

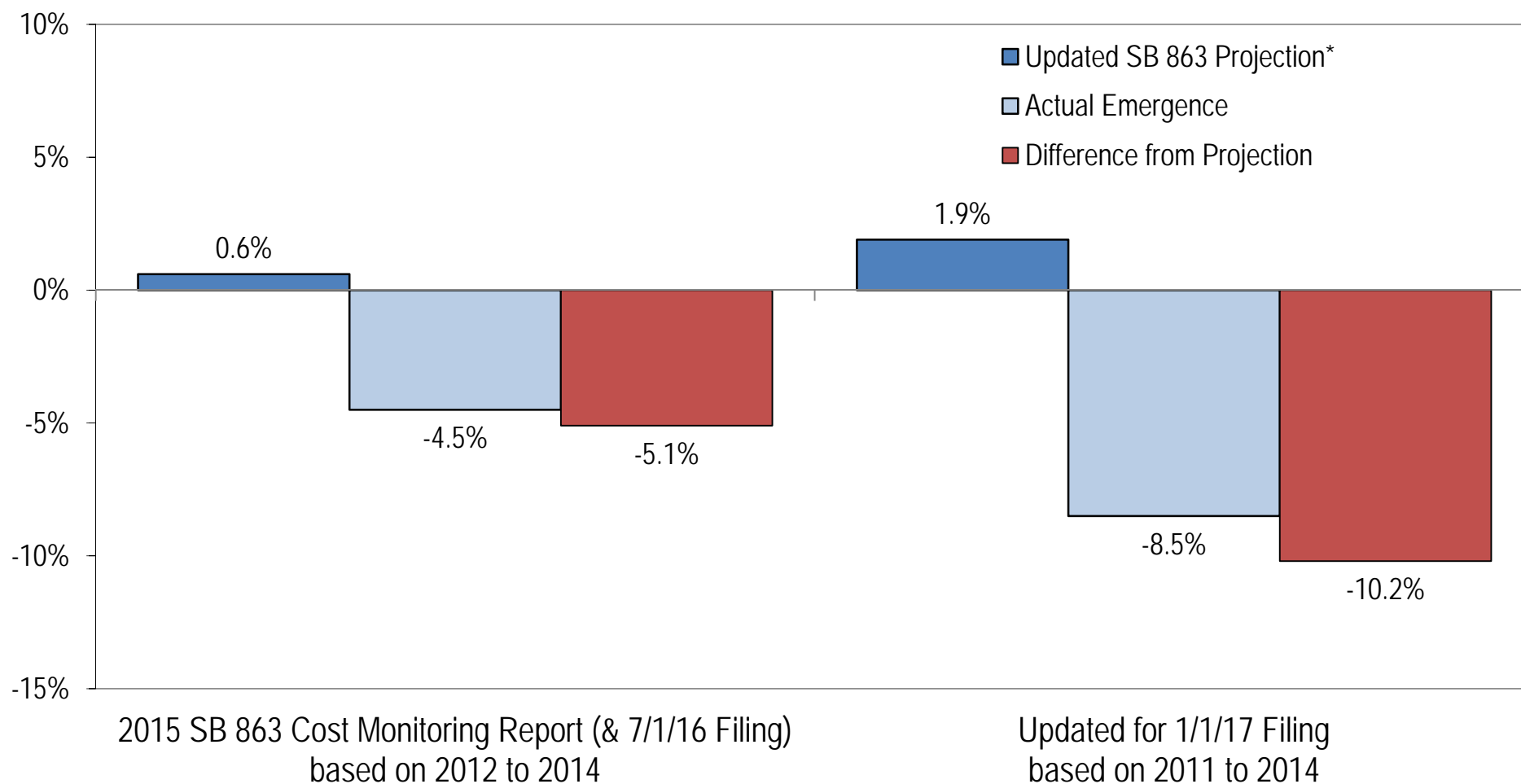
- 7/1/16 Filing Reflected RBRVS Changes in Medical Loss Development & On-level Adjustments based on 2015 Cost Monitoring Report
  - SYs 2014 & 2015 in loss development
  - SYs 2016 & 2017 in on-level adjustments incl. proportion of AYs 2014 & 2015 to develop in 2016 & 2017
- Updated Estimates Since 7/1/16 Filing
  - SY 2015 emerging significantly lower than projected
  - Total SY 2015 impact on medical is -0.9% compared to +0.6%
- Declines Driven by Utilization and May be One-time or Temporary
- Staff Recommendation: Update SY 2015 Medical LDF Adjustment But Continue to Apply 2016 & 2017 based on Prospective Estimates

## SB 863 Impact on Medical Utilization

- 7/1/16 Filing Reflected 5% Decrease in Medical Utilization Resulting from SB 863 based on 2015 Cost Monitoring Report
  - Based on analysis of post-SB 863 medical severities after reflecting updated SB 863 cost impacts & trends
  - Distributed to AYs 2012-2014 based on approximate change in post-SB 863 paid development by AY



# Medical Cumulative Severity Changes – Updated



\*Reflects current SB 863 cost estimates excluding the impact of medical utilization (1/1/17 Filing estimate also reflects updated 2015 RBRVS estimate), medical on-level adjustments not impacted by SB 863, and the current on-level medical severity trend of 2.5%.

## Estimated Impact of SB 863 Medical Utilization Change by Accident Year

Accident Year	Decrease from Pre-reform as a % of AY 2014 Decrease	Cumulative Impact of -5% Medical Util. Change	Cumulative Impact of -10% Medical Util. Change	Incremental Impact of -10% Medical Util. Change
2012	24%	-1%	-2%	-2%
2013	40%	-2%	-4%	-2%
2014	100%	-5%	-10%	-6%

# 3/31/2016 Experience – Review of Methodologies

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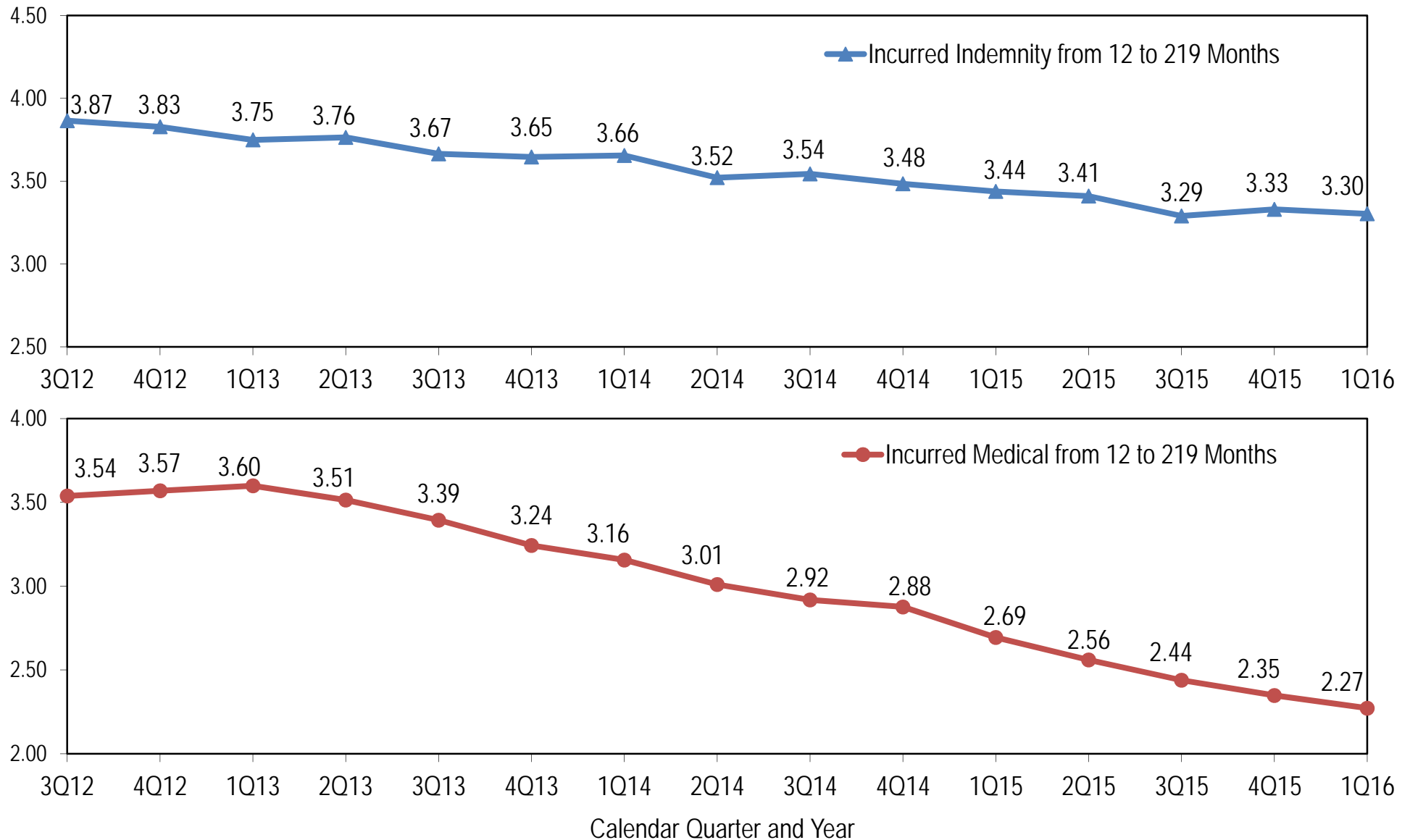
## Updated Summary of March 31, 2016 Experience

- Almost 100% of Market Reflected
- Methodologies Consistent with 7/1/16 Filing with Exception of:
  - Change to loss development tail (adopted at 4/5/16 meeting)
  - Service year 2016 RBRVS adjustment (+0.8%) applied to paid medical development
  - Removal of paid MCCP from medical development through 51 months (adopted at 6/17/16 meeting)
- Projected Policy Year 2017 Loss Ratio in 8/3/16 Agenda: 0.646
  - Projection in 6/17/16 Agenda: 0.638
  - Projection in 7/1/16 Filing: 0.659
- Policy Year 2017 Projection with Updated 2015 RBRVS Estimate: 0.650

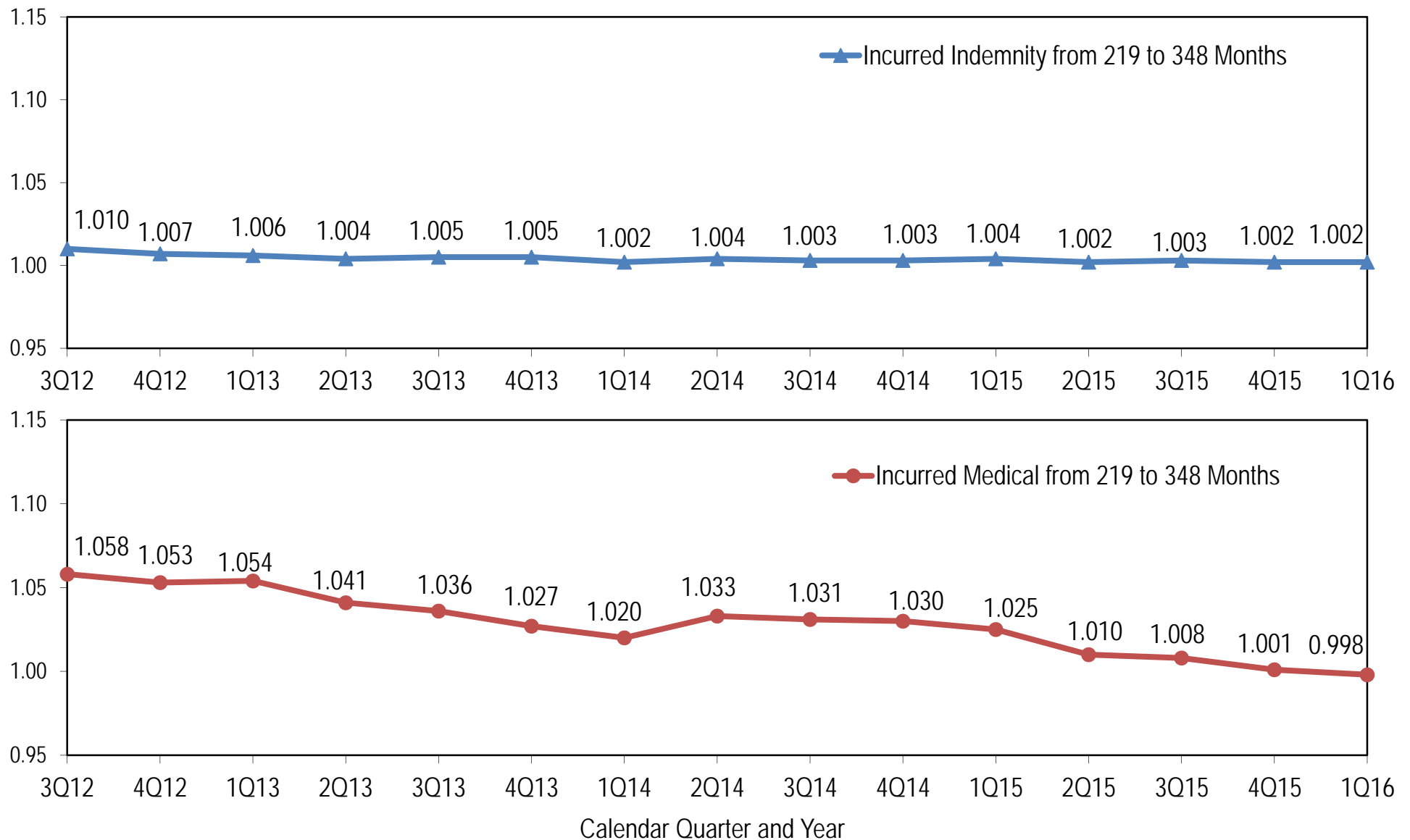
# Approximate Percentage Point Changes in Projected Loss Ratio

Item	Change from 7/1/16 Filing	Change from 6/17/16 Agenda
Loss Development Change	-0.5	N/A
New Tail Development Methodology	0.0	N/A
Removal of MCCP from Medical Development through 51 Months	+0.5	+0.5
Updated UCLA Wage Forecasts	0.0	+0.5
Trend to Policy Year 2017	-1.5	N/A
<b>Total (to 8/3/16 Agenda Projection)</b>	<b>-1.5</b>	<b>+1.0</b>
<i>Updated 2015 RBRVS Adjustments to Paid Medical Development</i>	<i>+0.5</i>	<i>+0.5</i>
<b><i>Total (to Updated Projection)</i></b>	<b><i>-1.0</i></b>	<b><i>+1.5</i></b>

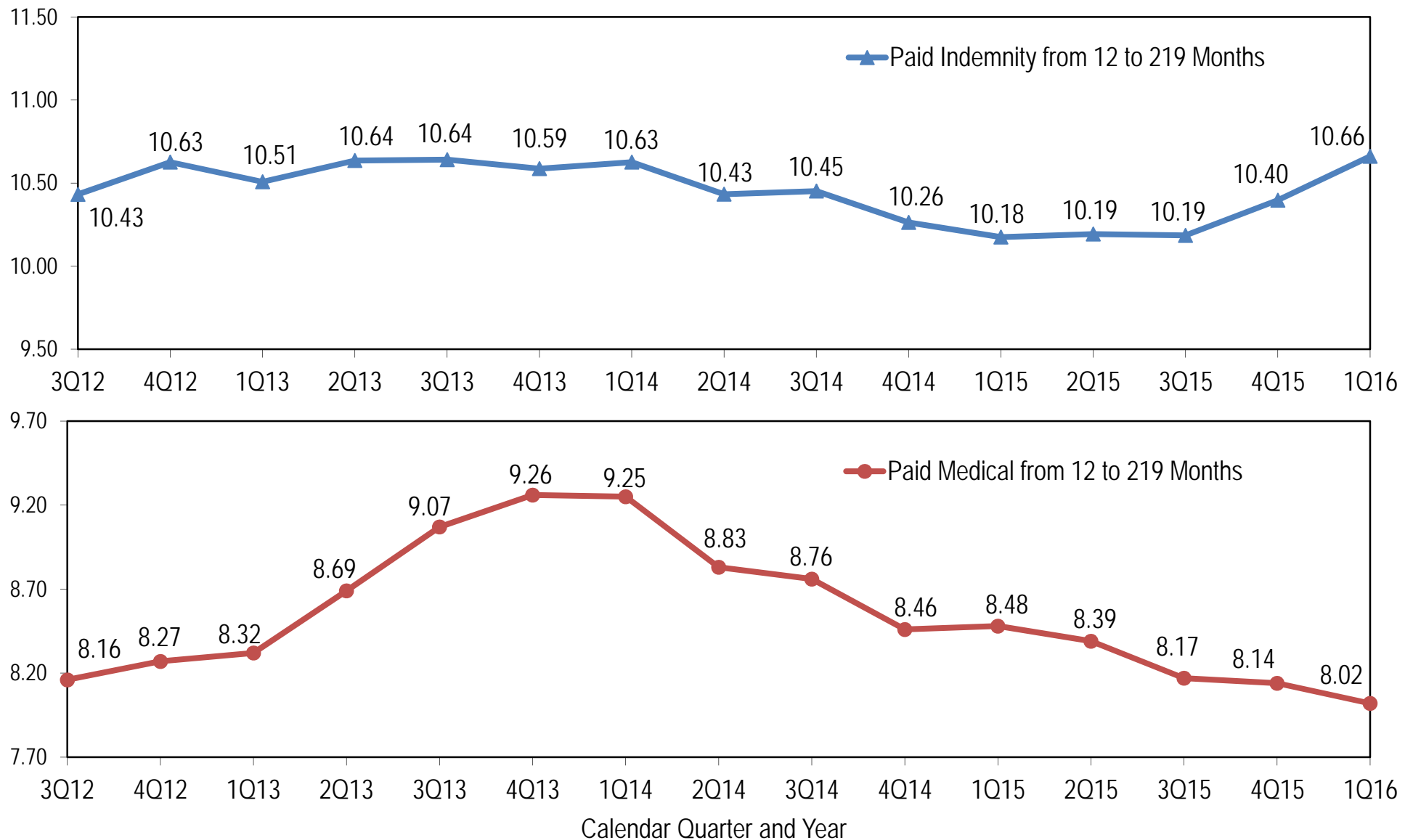
## Cumulative Incurred Development by Quarter



## Cumulative Incurred Development by Quarter

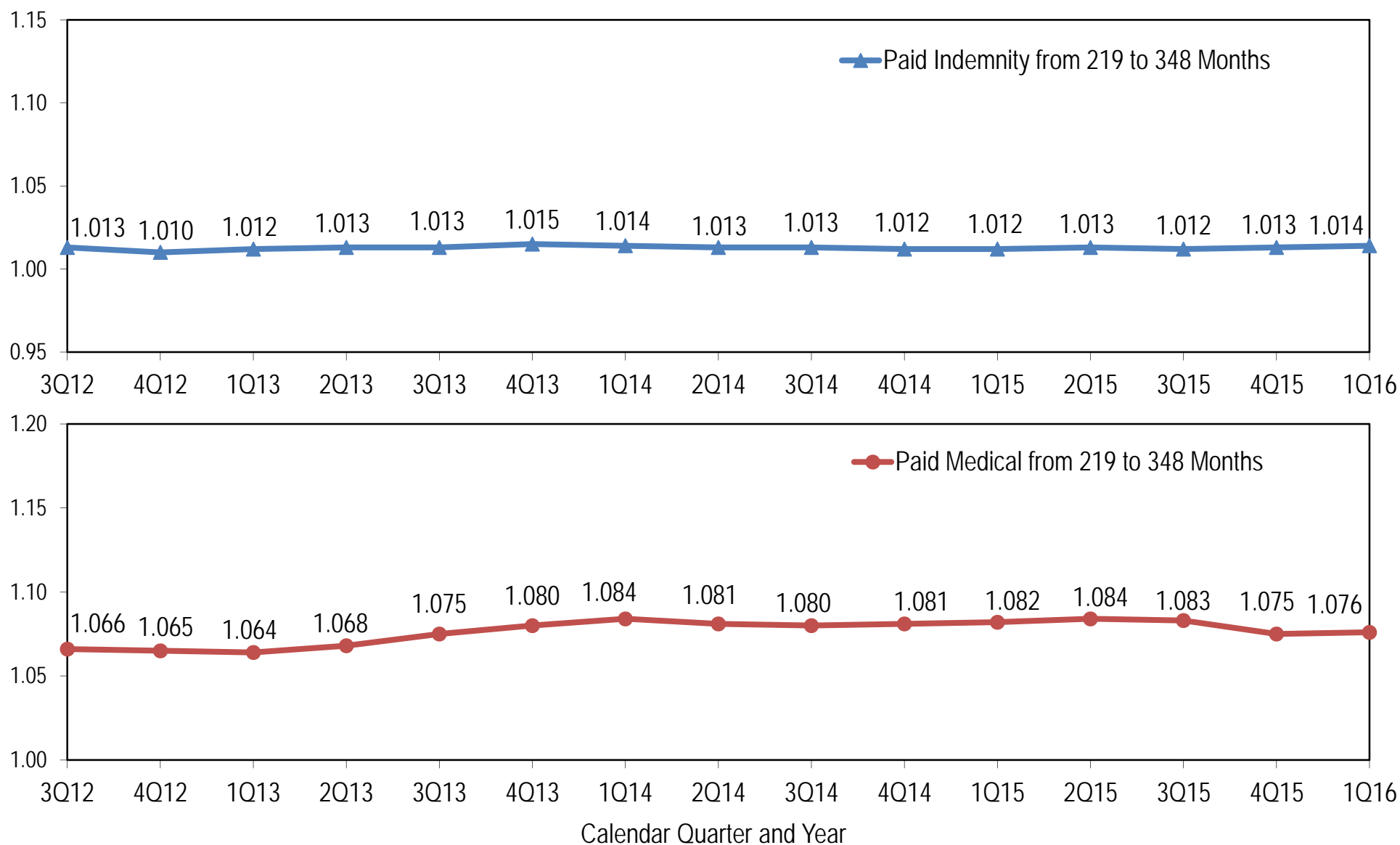


# Cumulative Paid Development by Quarter

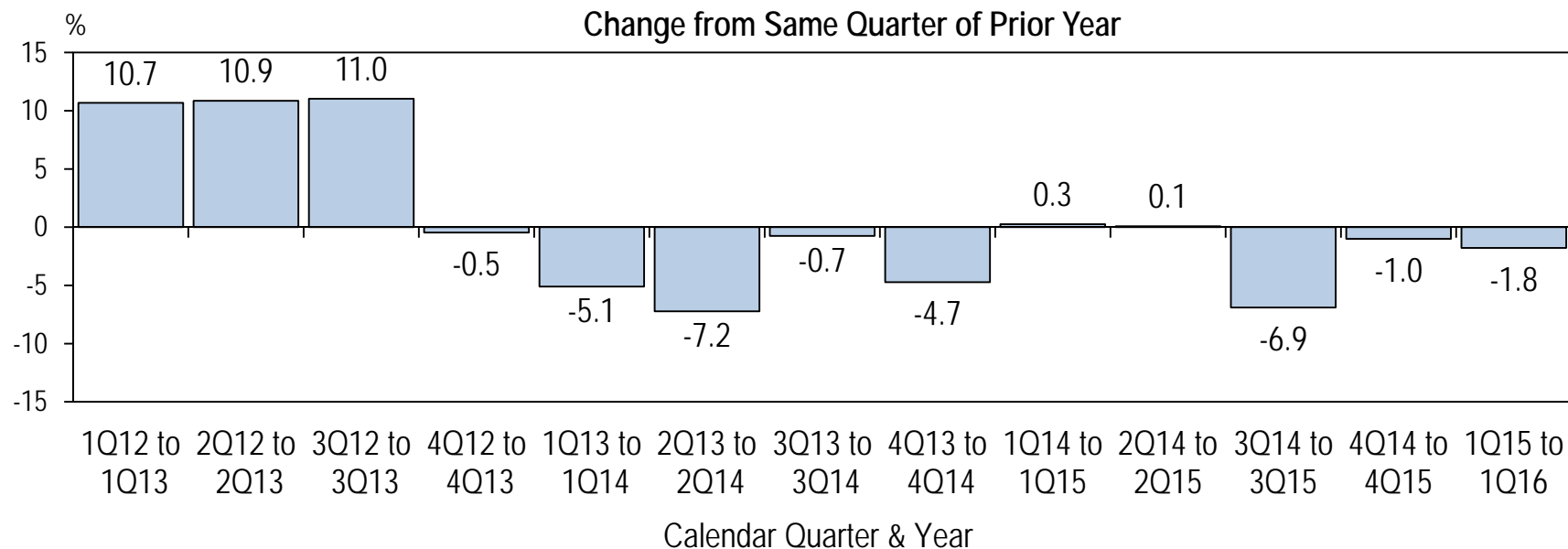
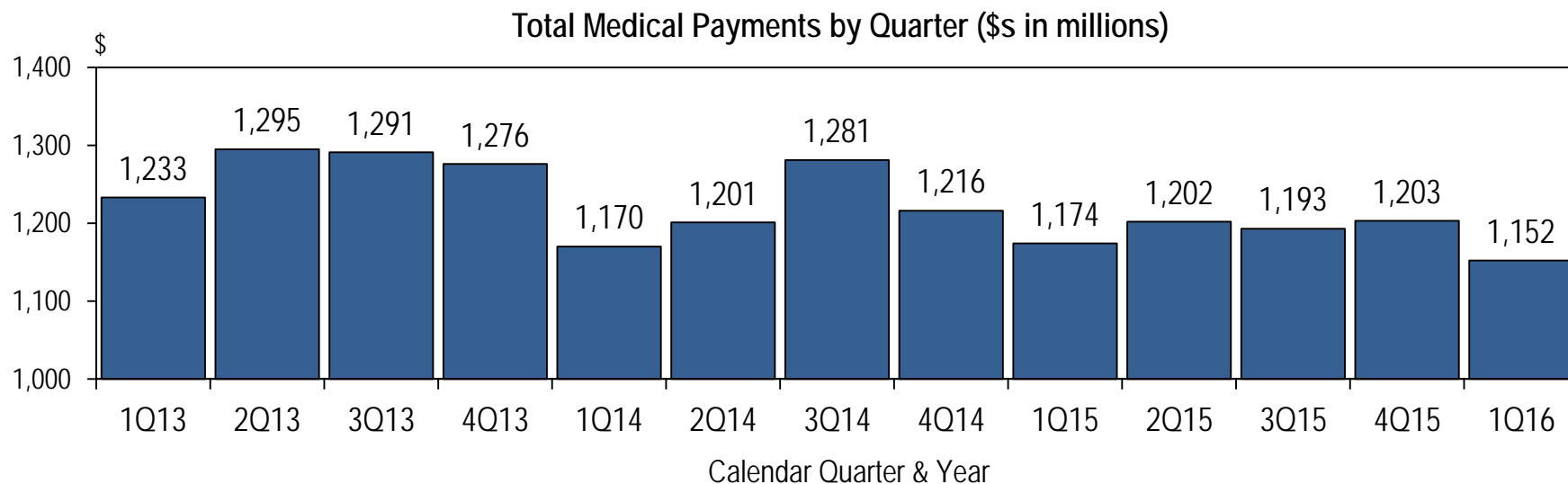




# Cumulative Paid Development by Quarter

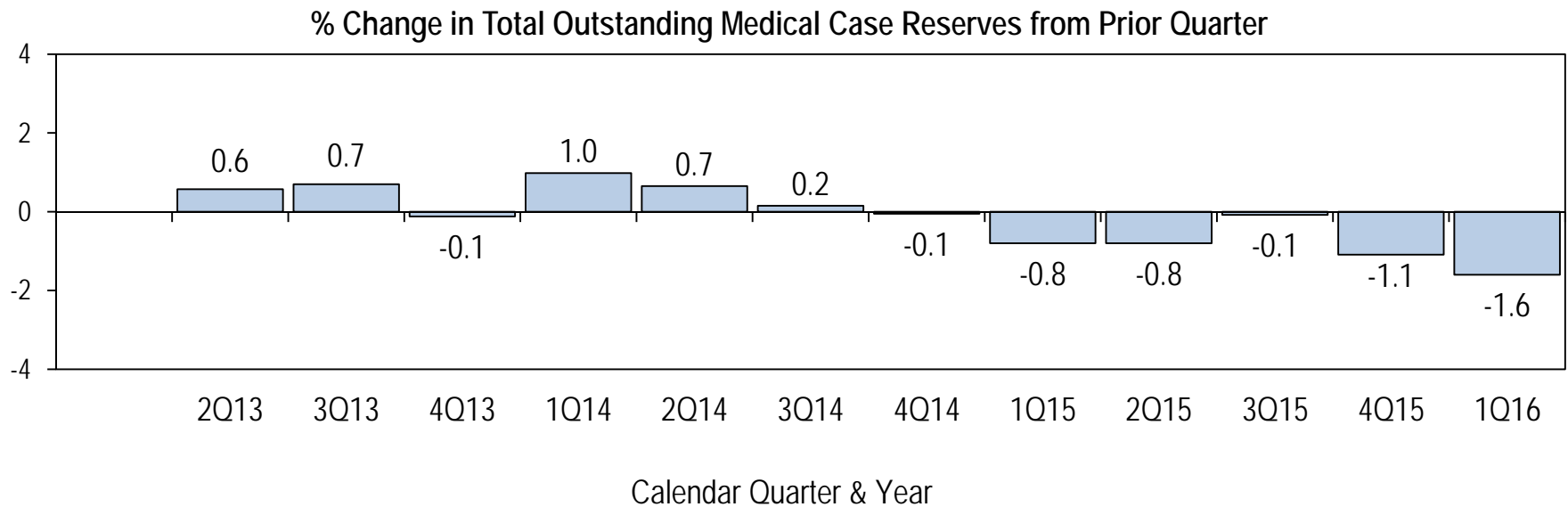
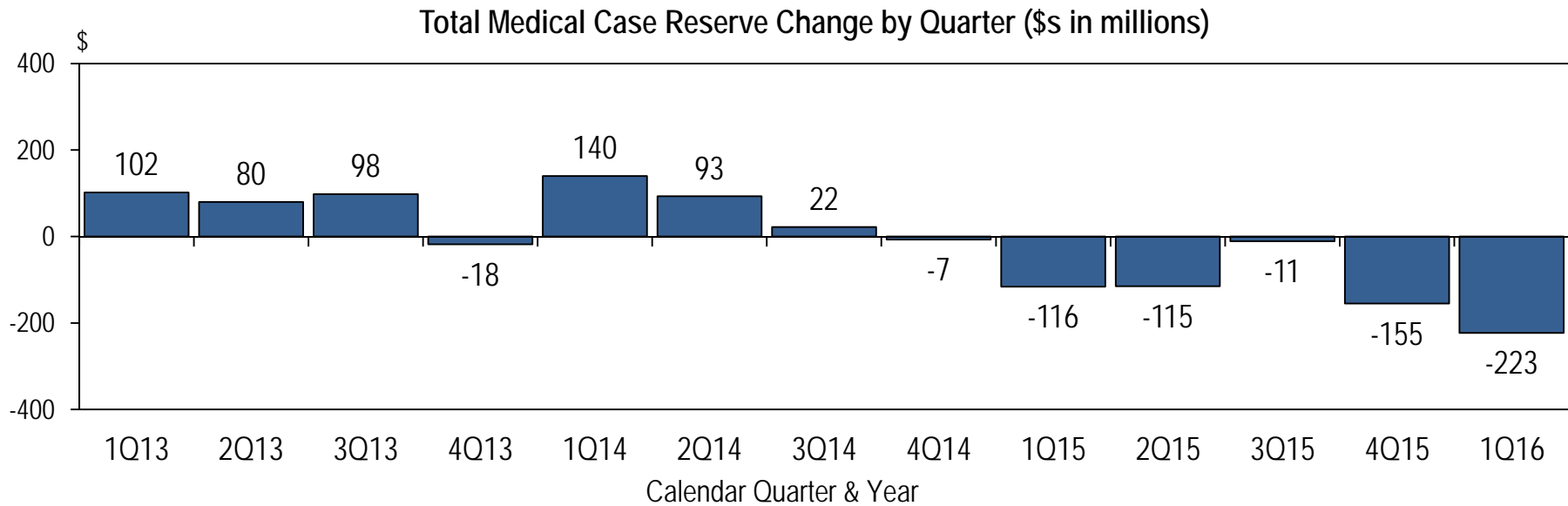


# Total Medical Payments by Calendar Quarter



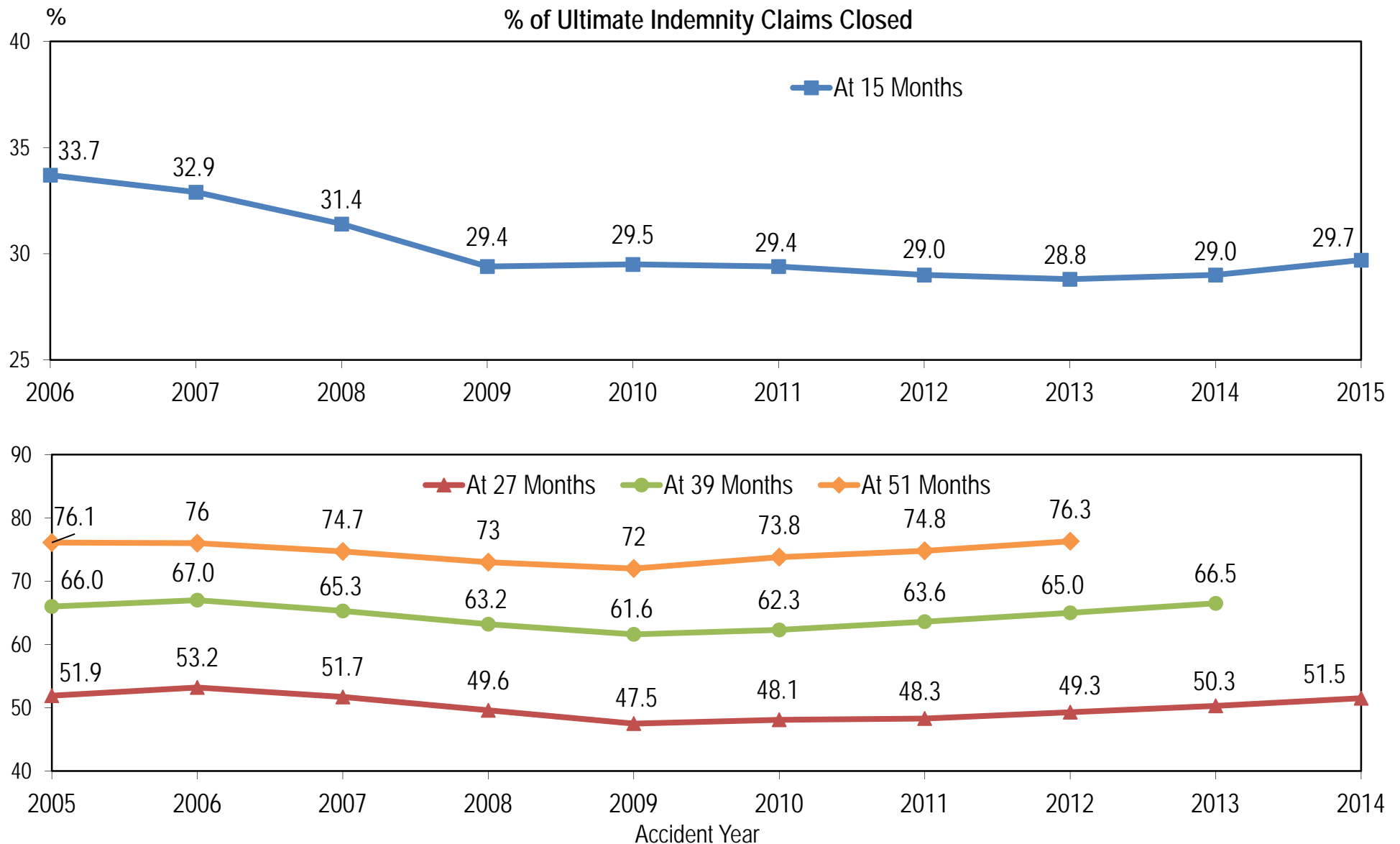
Source: WCIRB Quarterly Calls for Experience

# Total Change in Medical Case Reserves by Calendar Quarter

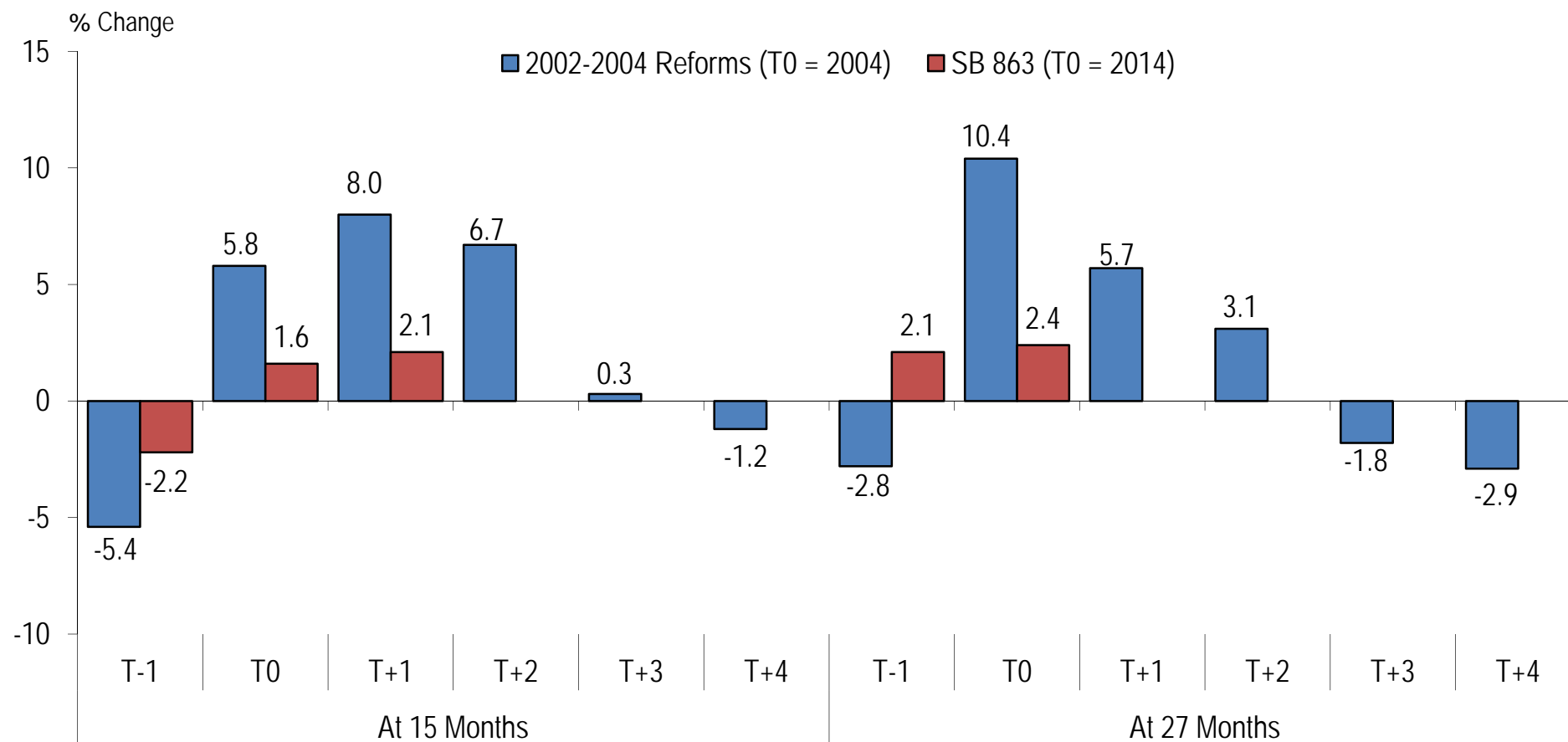


Source: WCIRB Quarterly Calls for Experience

# Indemnity Claim Settlement Ratios (Exhibit 11.2)



# Changes in Reported Claim Settlement Ratios Following Reforms



Source: WCIRB aggregate financial data

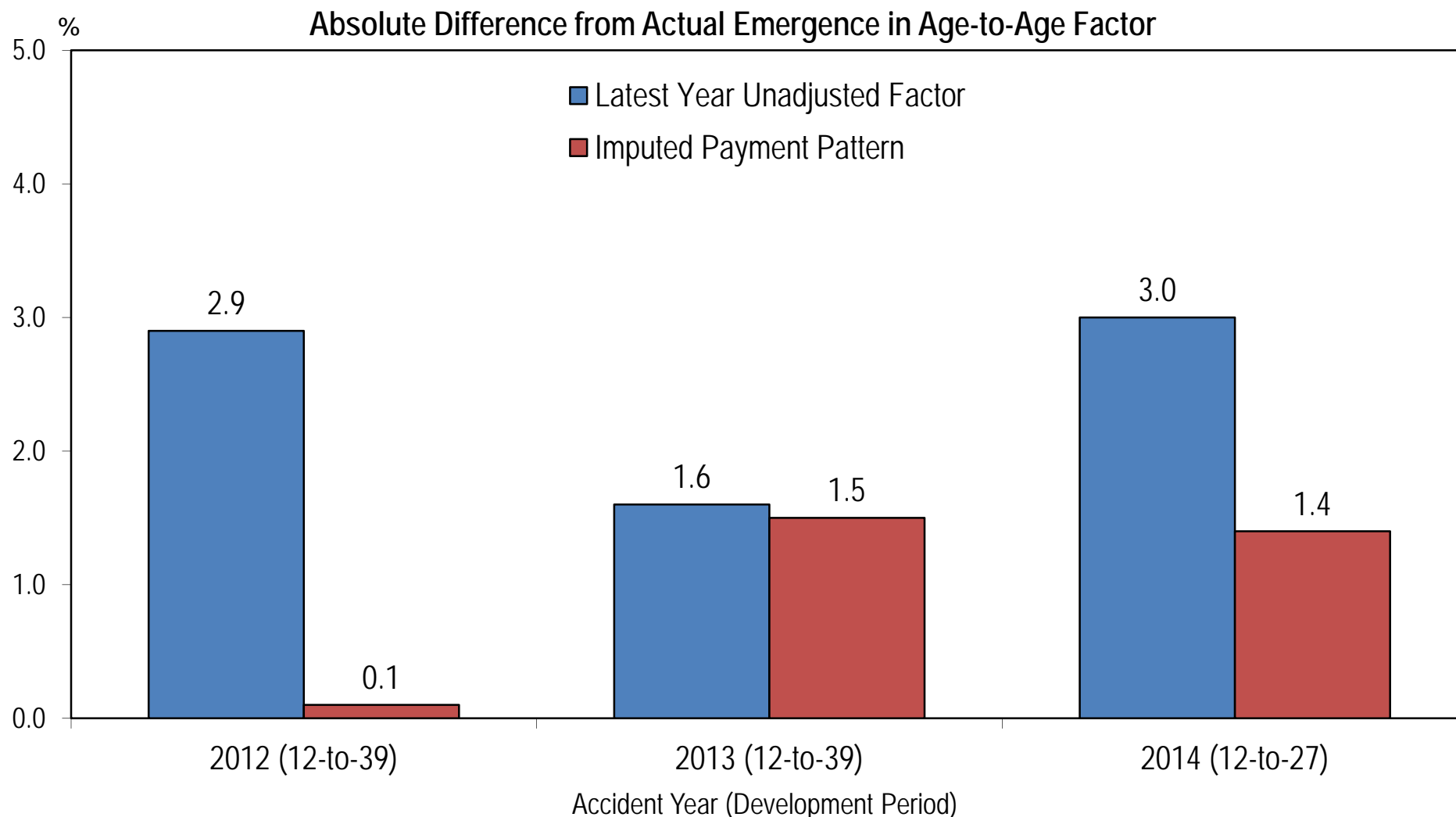
## SB 863 Adjustments to Loss Development (Item AC14-08-06)

- Adjustments Based on August 2013 WCIRB Report
- Prior Annual Committee Reviews Found that they Continued to be Appropriate
- Updated Based on Emerging SB 863 Cost Monitoring Information (Item AC14-08-07)

## SB 863 Adjustments to Loss Development – Indemnity

- 2013 Report: Pre-SB 863 Indemnity Payment Patterns Imputed After Adjusting for SB 863 Changes by Benefit Type
- Difference Between Pre-SB 863 Pattern and Imputed Pattern Applied to Cumulative Indemnity LDFs
- Current Adjustments to Cumulative Indemnity LDFs
  - AYs 2011 & 2012 adjusted by -0.5% (TD duration, MPNs)
  - AY 2013 adjusted by +1.2% (PD min. & max.)
  - AY 2014 adjusted by +6.5% (PD max.)

## Comparison of Indemnity Development with Imputed Patterns (Exhibit 1 of Item AC14-08-06)





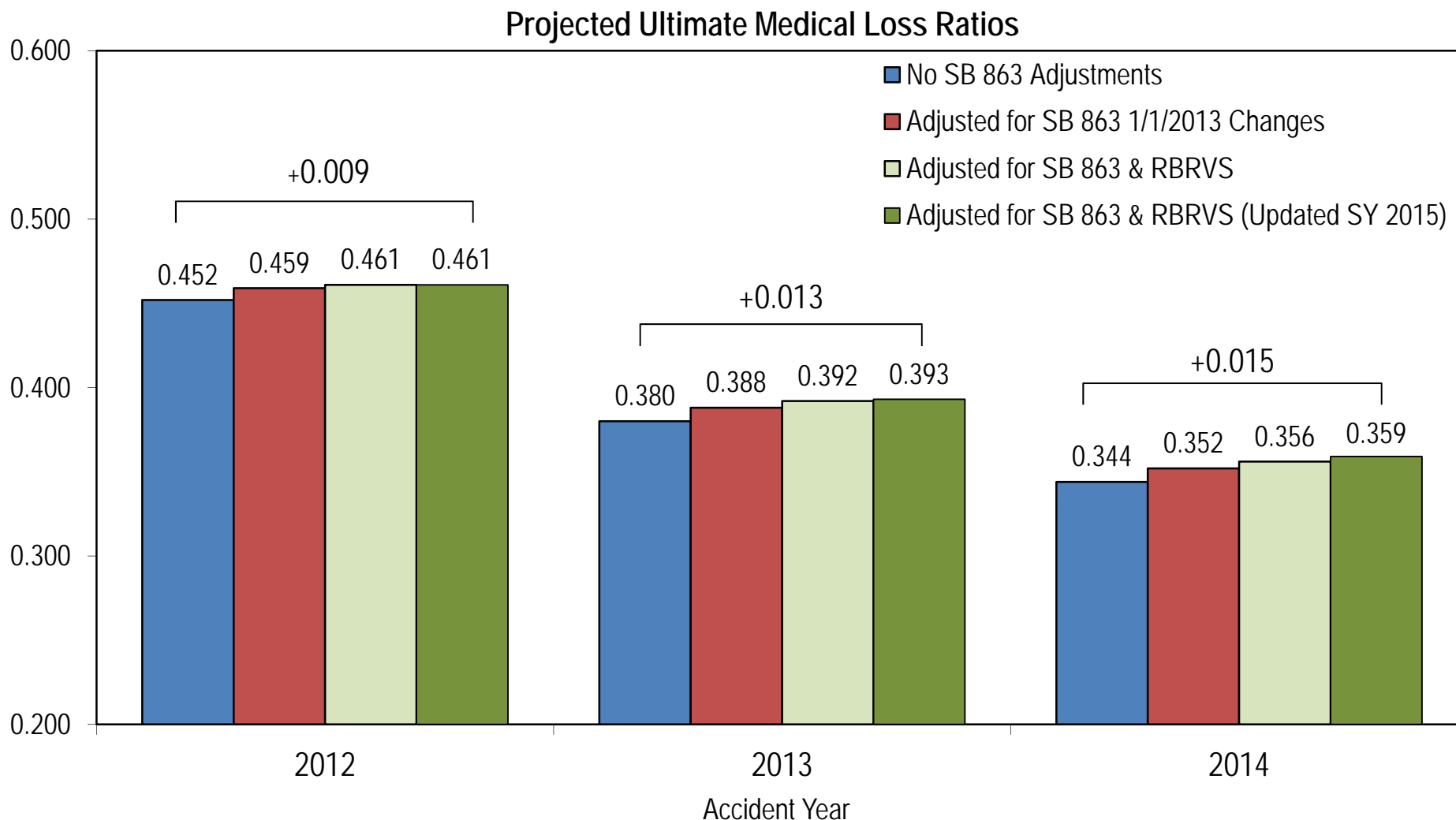
## SB 863 Adjustments to Loss Development – Medical

- 2013 Report: Pre-SB 863 Payments in Age-to-Age Factor Restated at Post-SB 863 Level
  - Effectively “on-levels” payments to be on a consistent basis
  - If no adjustment made, factors would include mix of pre- and post-SB 863 payments and may be distorted
- Adjustments to Medical Payments in 8/3/16 Agenda
  - Pre-1/1/2013: -4.4% (liens, ASCs, surgical hardware, MPNs)
  - Pre-1/1/2014: -1.8% (RBRVS year 1)
  - Pre-1/1/2015: +0.6% (RBRVS year 2)
  - Pre-1/1/2016: +0.8% (RBRVS year 3)

## Adjustments to Medical for RBRVS

- Prospective Evaluations for Service Years 2014 & 2015
  - SY 2014: +2.4% on physician costs; +0.9% on total medical
  - SY 2015: +1.5% on physician costs; +0.6% on total medical
- Reductions in Utilization have Resulted in Overall Savings Significantly Greater than Projected in 2014 and 2015
  - SY 2014: -4.8% on physician costs; -1.8% on total medical
  - SY 2015: -2.5% on physician costs; -0.9% on total medical
- Utilization Changes May be Temporary or One-Time in Nature
- Staff Recommends to Update 2014 & 2015 Adjustments but Continue to Apply 2016 Adjustment based on Prospective Estimate

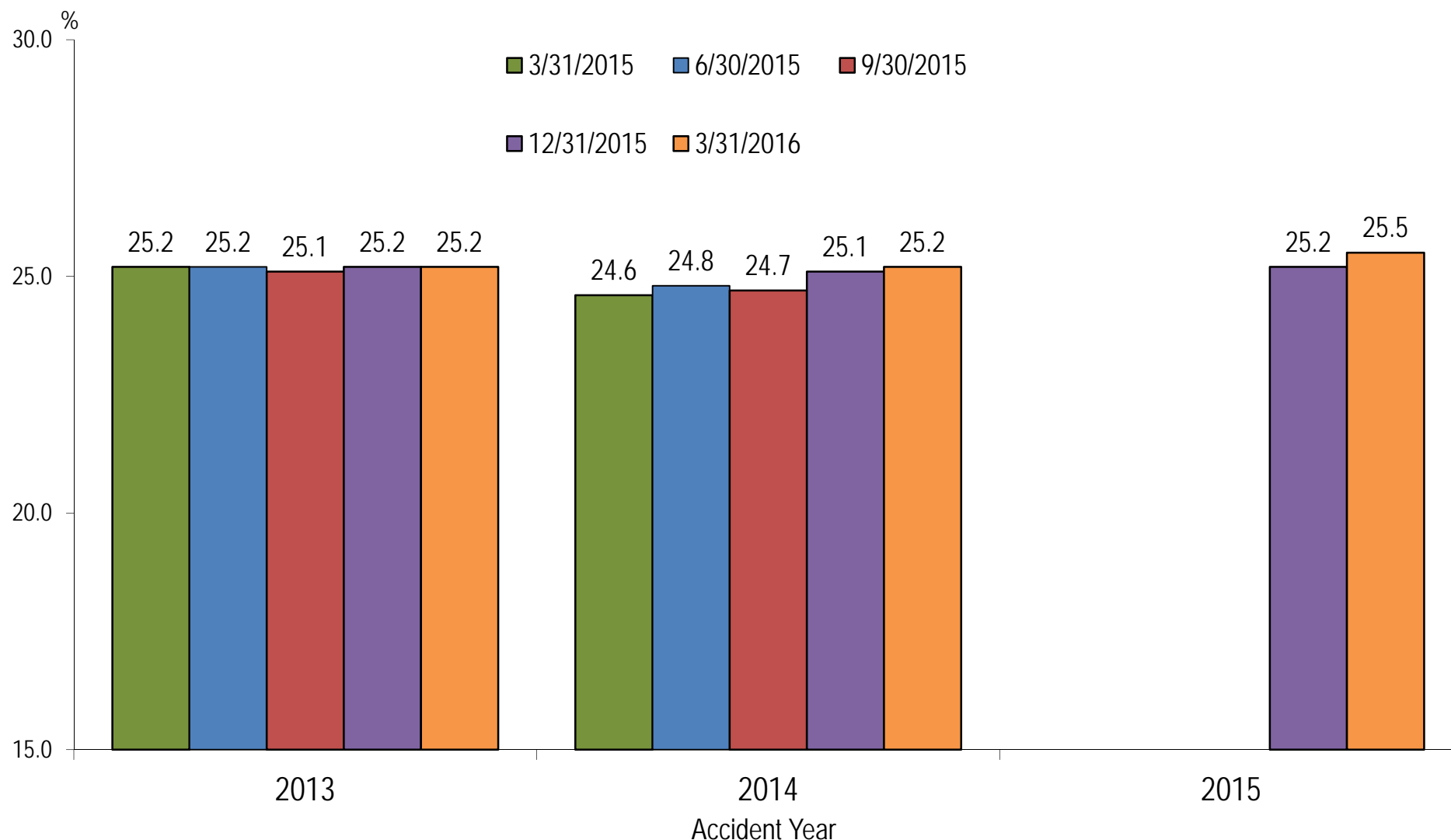
# Impact of Adjustments for SB 863 on Medical Loss Development (Exhibit 3 of Item AC14-08-06 – Updated)



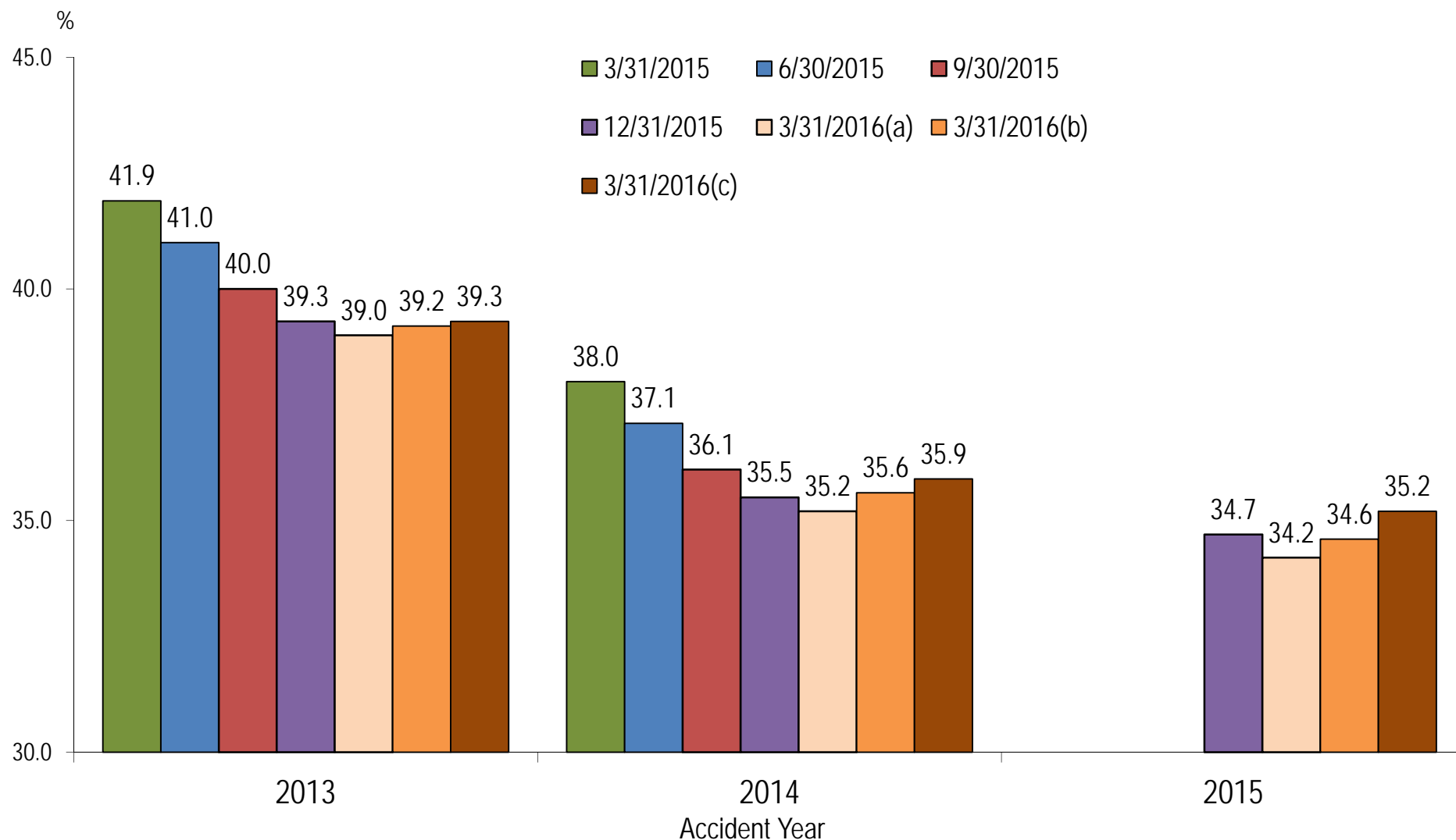
## SB 863 Adjustments to Incurred Loss Development

- Historically, WCIRB has not Reflected Reform Adjustments in Incurred Loss Development
  - Uncertain to what extent reforms impact case reserve levels
- For Indemnity, Difficult to Segregate Case Reserve Development by Benefit Type
  - However, application of paid development adjustments to incurred LDFs can be a reasonable estimate of reform impact
- For Medical, Uncertain to what Extent Reforms Are Reflected in Current Case Reserve Levels
  - However, paid portion of incurred development can be adjusted with same factors applied to paid development
- Alternative Reform-adjusted Incurred Methods Included for Committee's Review (AC16-08-03)

# Projected Ultimate Indemnity Loss Ratios (Exhibit 3.1)



# Projected Ultimate Medical Loss Ratios (Exhibit 3.2)



(a) From 6/17/16 Agenda

(b) From 8/3/16 Agenda (paid MCCP development removed through 51 months)

(c) Adjusted for current estimates of RBRVS for service year 2015

## Alternative Loss Development Methodologies (Item AC16-08-03)

### *Incurred Methods*

- Unadjusted Incurred Projections
  - Best with stable case reserve adequacy and incurred patterns
  - Can be distorted by changing reserve adequacy
  - Performed poorly during transition periods
  - Greater variability across insurers than paid method
  - Difficult to impute reform adjustments
  - Treatment of MCCP in medical reserves unknown
  - Recent incurred development has significantly decreased
- Case Reserve Adequacy-Adjusted Incurred
  - Best with clear evidence of changing case reserve adequacy
  - Very sensitive to severity adjustments to case reserves
  - Unclear how to impute reform impacts
  - Current projection above unadjusted incurred projection

## Alternative Loss Development Methodologies

### *Incurred Methods (Continued)*

- Reform-Adjusted Incurred
  - Best with clear evidence of reform impact on incurred development patterns
  - Uncertain to what extent reforms impact case reserve levels across insurers
  - Methodology based on adjustments to paid development patterns only
  - Current projection slightly higher than the unadjusted incurred projection
- Insurer Mix-Adjusted Incurred
  - Best with clear evidence of shifting market shares impacting incurred patterns
  - Issues with lack of transparency and application of statewide method to individual insurer experience
  - Current projection comparable to unadjusted incurred projection



# Alternative Loss Development Methodologies

## *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 indemnity development has been fairly stable
  - Medical development declining modestly over last several quarters
- Reform-Adjusted Paid
  - Best with clear evidence of reform impact on payment patterns
  - SB 863 adjustments have been performing well and are reviewed and updated regularly
  - Current projection higher than the latest year unadjusted projection

## Alternative Loss Development Methodologies

### *Paid Methods (Continued)*

- Claim Settlement Rate-Adjusted Paid
  - Best with clear evidence of changes in claim settlement rate affecting loss development
  - Improved projection during period of settlement rate decline
  - Adjustment can be volatile
  - Treatment of paid on open amounts uncertain
  - Claim settlement rates have increased in recent quarters which may lead to reduced future paid development
- Insurer Mix-Adjusted Paid
  - Best with clear evidence of shifting market shares impacting paid patterns
  - Issues with lack of transparency and application of statewide method to individual insurer experience
  - Current projection somewhat lower than unadjusted paid projection

## Alternative Loss Development Methodologies

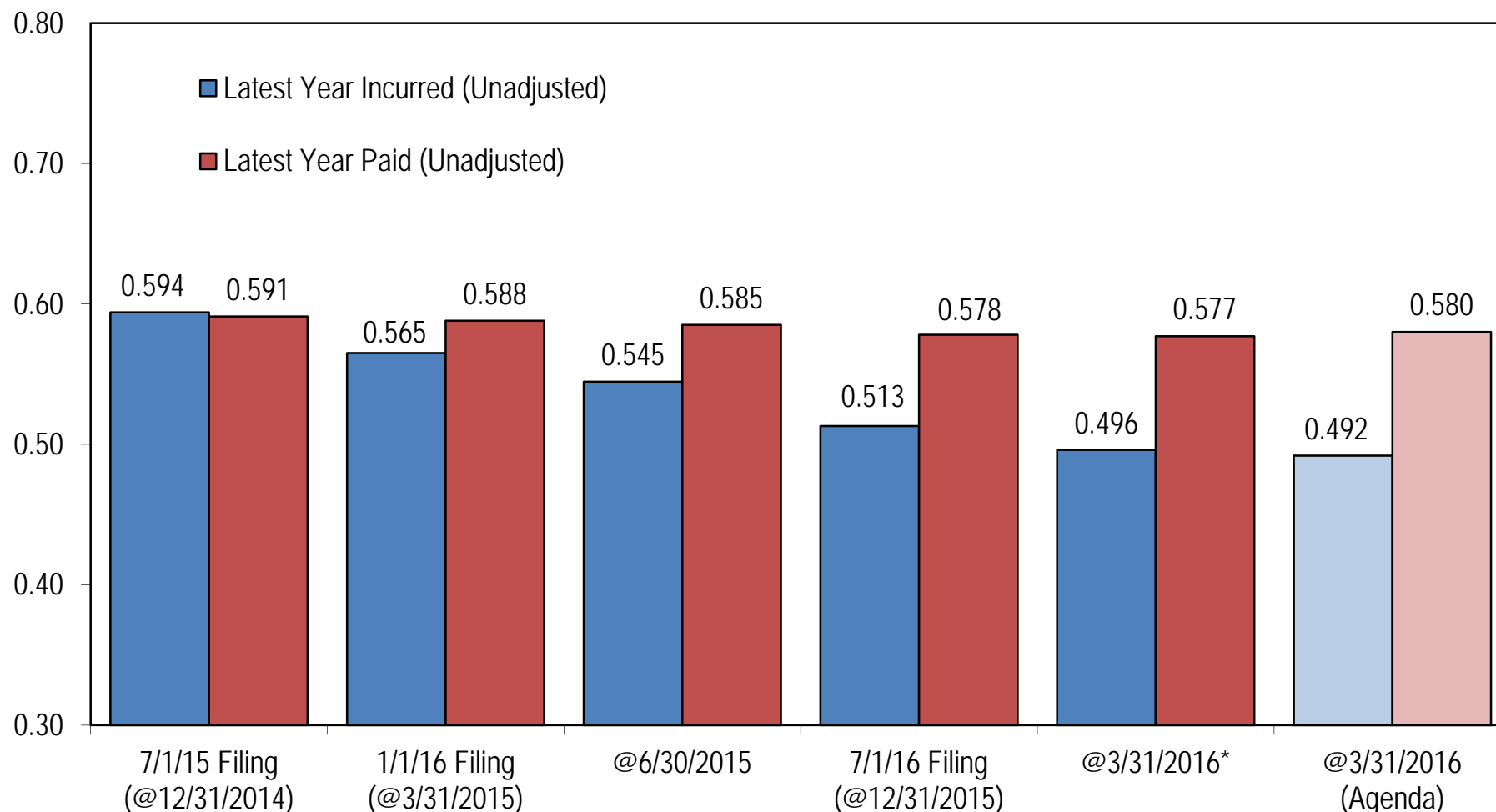
### *Paid Methods (Continued)*

- Bornhuetter-Ferguson (BF) Adjusted Paid
  - Best when early loss development is highly leveraged and volatile
  - Requires assumptions of trend and on-leveling in expected loss ratio projection
  - Reviewed at 4/5/16 meeting and found to be generally less accurate than chain-ladder method historically
  - Current projection consistent with chain-ladder projection

## Basis of Prior Paid Loss Development Recommendation

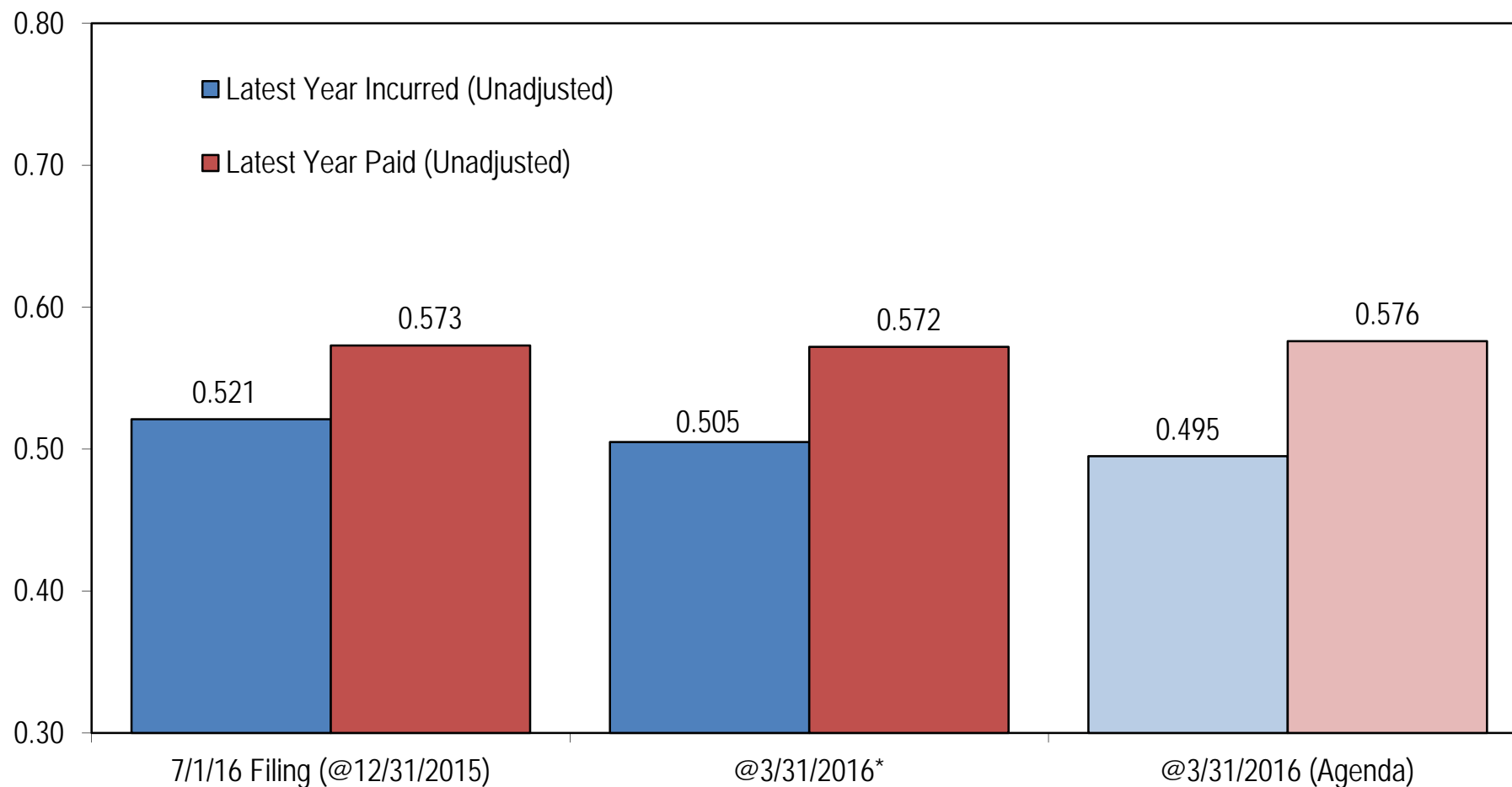
- Paid Methods Generally More Accurate and Stable than Incurred in Retrospective Tests
- Recent Sharp Decrease in Incurred Projections & Divergence from Paid Projections
  - Significant drops in average case reserve levels
  - Unclear if due to case reserve adequacy shift, shift in claims adjustors' expectation of SB 863, or other factors
  - Case reserve adequacy adjustment significantly increases incurred projection
- Unclear as to How to Adjust Incurred Projection for SB 863
  - Impact of fee schedule changes and other reforms on open claims distort immediate post-reform development factors
  - Future payout pattern can be significantly shifted by reforms
  - WCIRB reform-adjusted paid development factors proven effective
  - Reform-adjusted incurred method does increase projection but does not adjust for any changes in case reserve levels

## Accident Year 2014 Projected Total Ultimate Loss Ratios – Latest Year Incurred vs. Latest Year Paid Methodology



\*Includes MCCP development in medical for all accident years (same basis as prior projections).

## Accident Year 2015 Projected Total Ultimate Loss Ratios – Latest Year Incurred vs. Latest Year Paid Methodology



\*Includes MCCP development in medical for all accident years (same basis as prior projections).

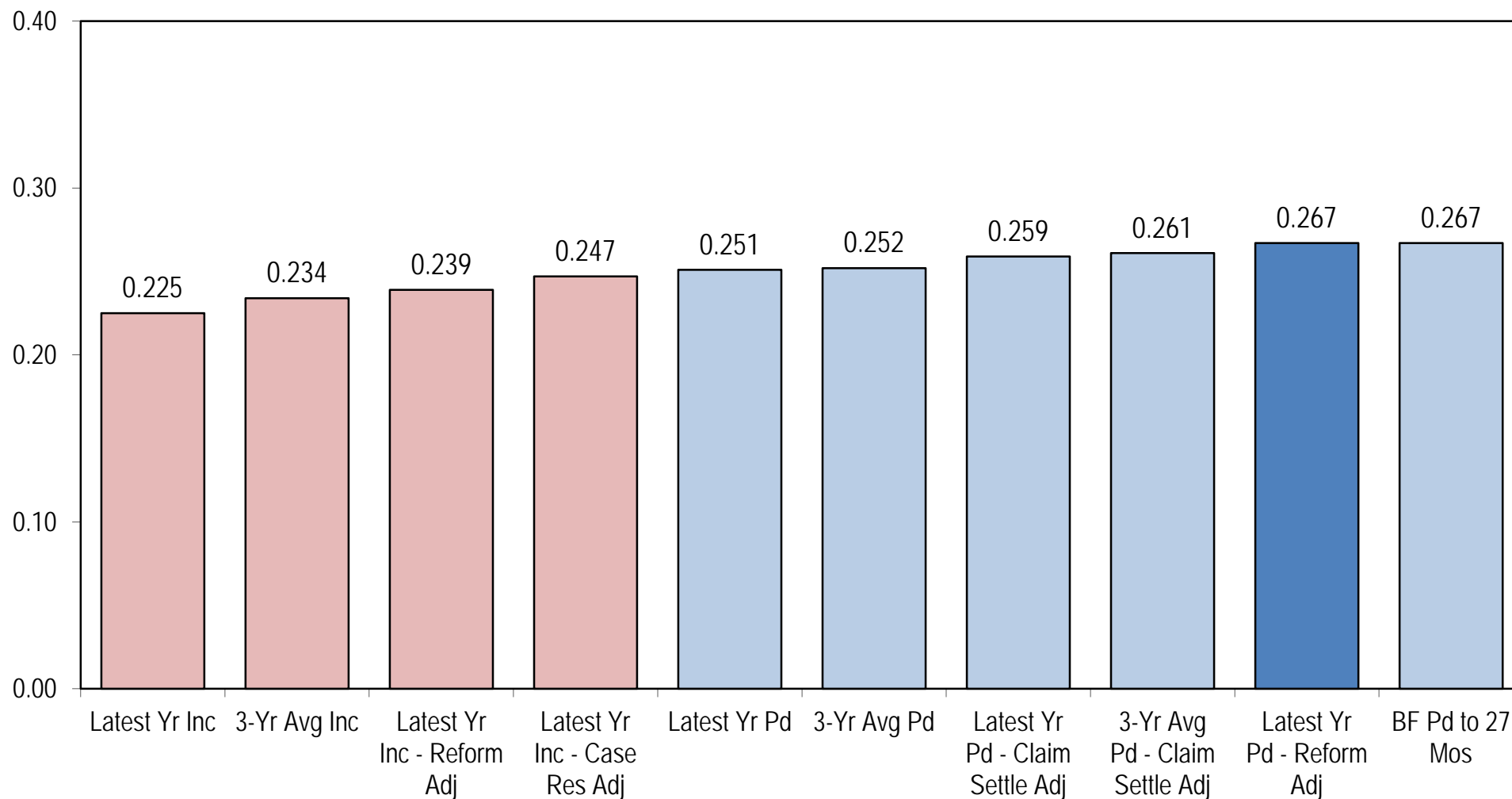
# Indemnity On-Level Loss Ratios for Policy Year 2017 under Alternative Loss Development Methods\*

<b>Paid Latest Year* Adjusted for Reforms (Agenda)</b>	<b>0.267</b>
Incurred 3-Year Average Unadjusted	0.234
Incurred Latest Year Unadjusted	0.225
Incurred Latest Year Adjusted for Reforms	0.239
Incurred Latest Year Adjusted for Case Reserves	0.247
Incurred Latest Year Adjusted for Insurer Mix	0.226
Paid 3-Year Average Unadjusted	0.252
Paid Latest Year Unadjusted	0.251
Paid Latest Year Adjusted for Reforms with CY Tail**	0.266
Paid 3-Year Average Adjusted for Reforms & Claim Settlement Rate	0.261
Paid Latest Year Adjusted for Reforms & Claim Settlement Rate	0.259
Paid Latest Year Adjusted for Insurer Mix	0.250
BF-Adjusted Paid to 27 Months, Reform-Adjusted Paid After 27 Months	0.267

\*All methodologies reflect three-year average factors after 111 months. All paid methodologies reflect three-year average incurred factors after 219 months unless otherwise stated.

\*\*This is the methodology reflected in the July 1, 2016 Pure Premium Rate Filing.

# Indemnity On-Level Loss Ratios for Policy Year 2017 under Alternative Loss Development Methods





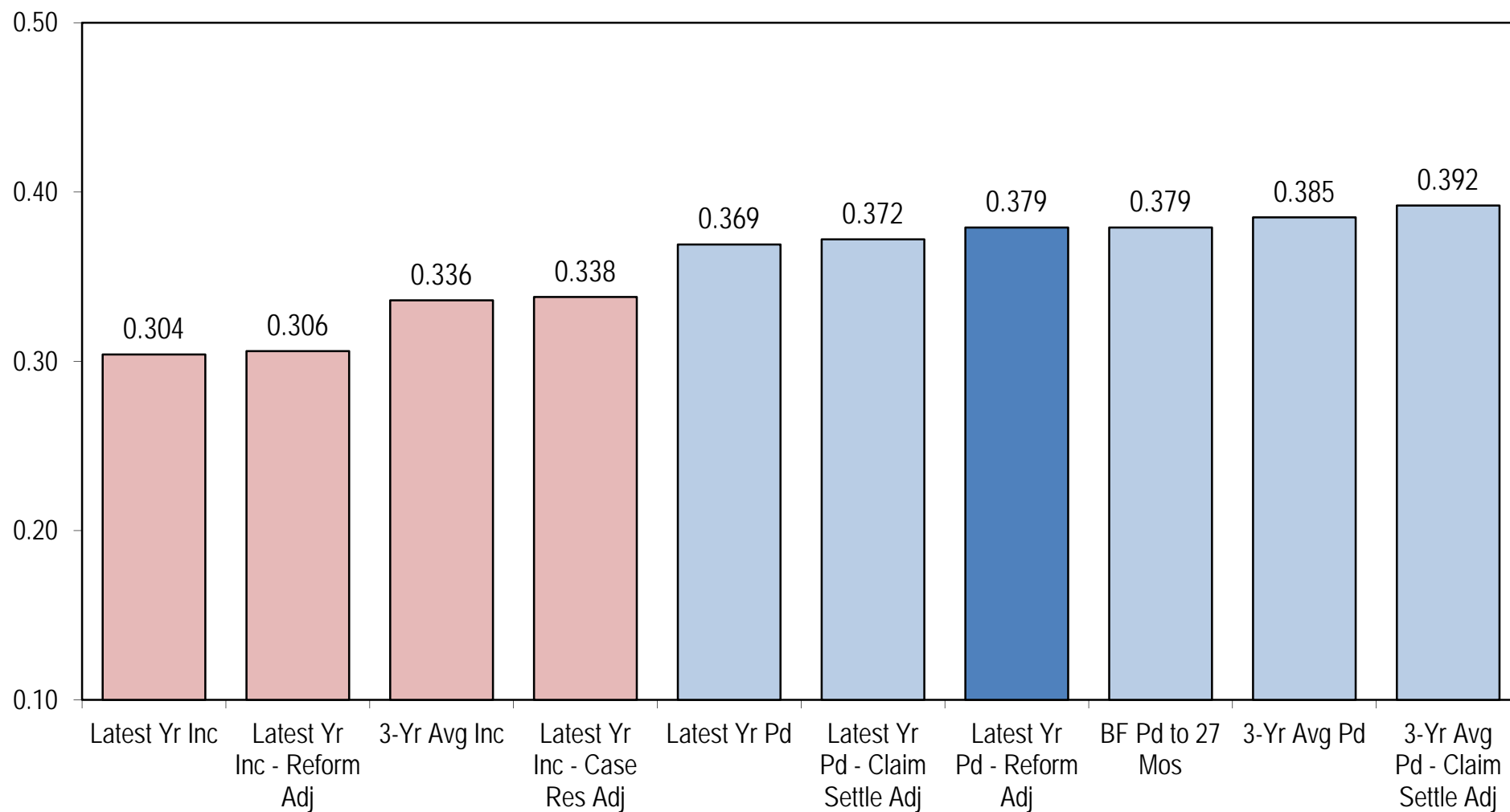
# Medical On-Level Loss Ratios for Policy Year 2017 under Alternative Loss Development Methods\*

<i>Paid Latest Year* Adjusted for Reforms (Updated RBRVS)</i>	<i>0.383</i>
Paid Latest Year* Adjusted for Reforms (Agenda)	0.379
Incurred 3-Year Average Unadjusted	0.336
Incurred Latest Year Unadjusted	0.304
Incurred Latest Year Adjusted for Reforms	0.306
Incurred Latest Year Adjusted for Case Reserves	0.338
Incurred Latest Year Adjusted for Insurer Mix	0.304
Paid 3-Year Average Unadjusted	0.385
Paid Latest Year Unadjusted	0.369
Paid Latest Year Adjusted for Reforms with CY Tail**	0.378
Paid 3-Year Average Adjusted for Reforms & Claim Settlement Rate	0.392
Paid Latest Year Adjusted for Reforms & Claim Settlement Rate	0.372
Paid Latest Year Adjusted for Insurer Mix	0.362
BF-Adjusted Paid to 27 Months, Reform-Adjusted Paid After 27 Months	0.379

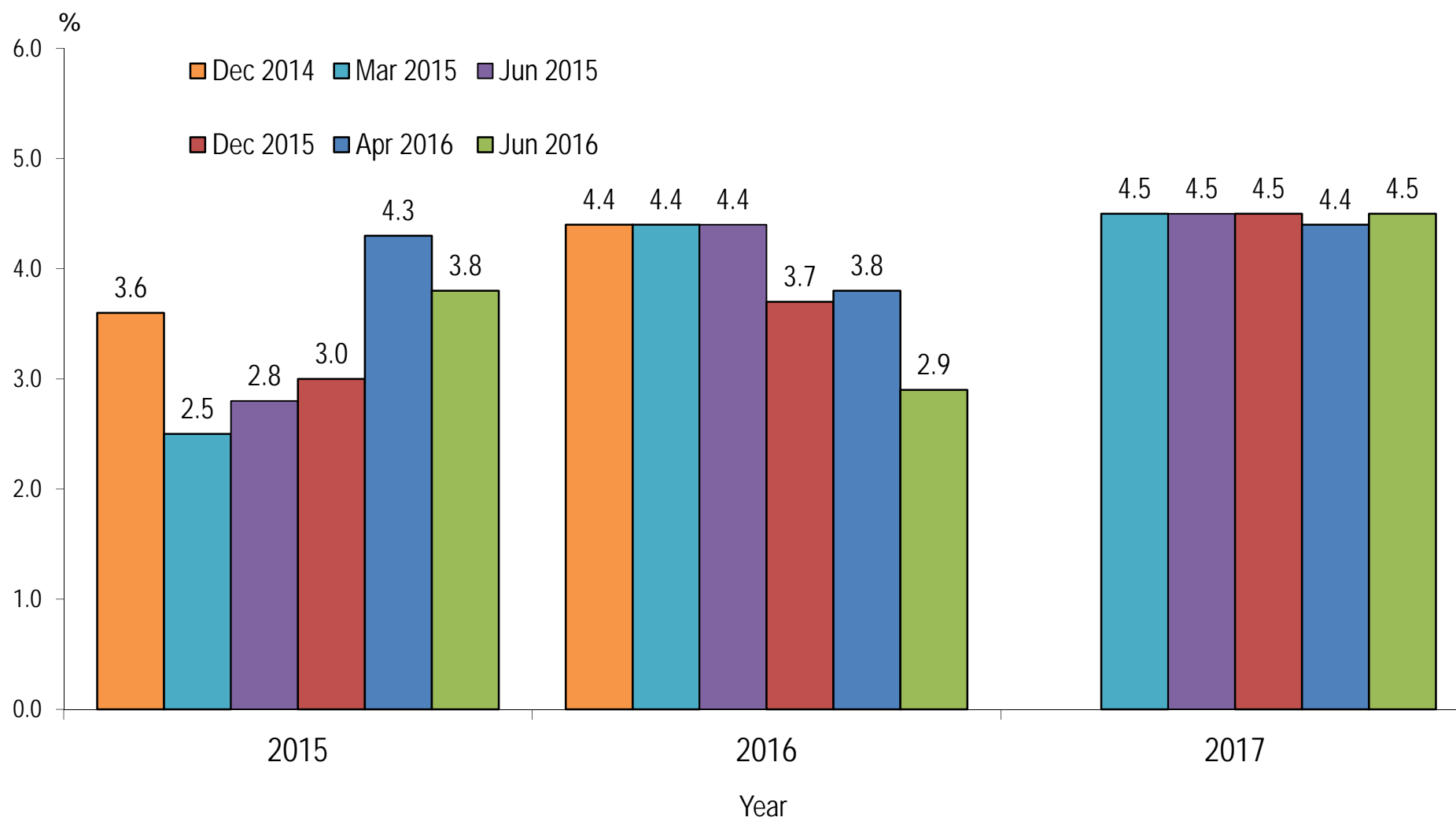
\*All methodologies reflect three-year average factors after 111 months. All paid methodologies reflect three-year average incurred factors after 219 months unless otherwise stated.

\*\*This is the methodology reflected in the July 1, 2016 Pure Premium Rate Filing.

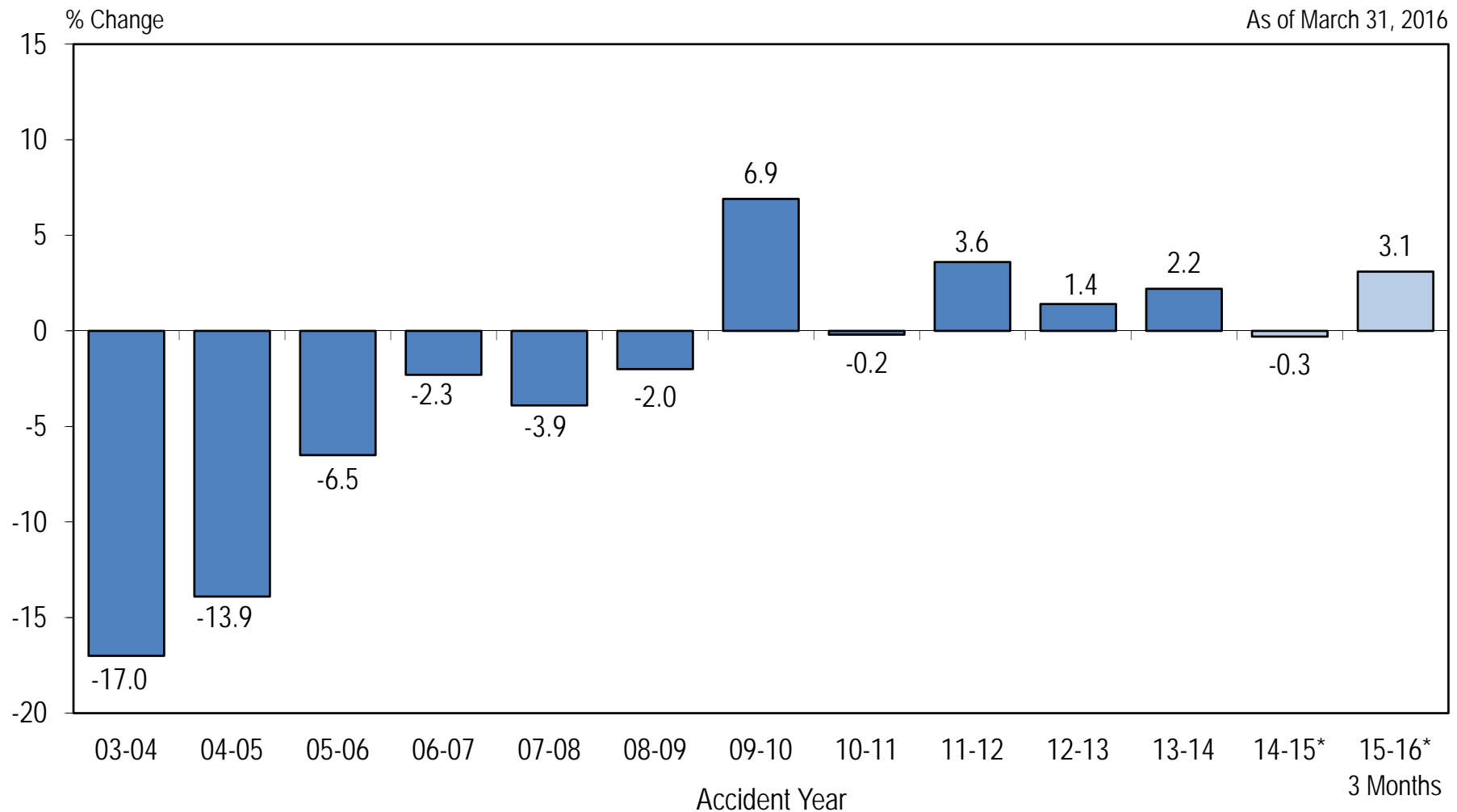
## Medical On-Level Loss Ratios for Policy Year 2017 under Alternative Loss Development Methods



## UCLA Forecasts of Wage Level Changes (Exhibit 5.1)

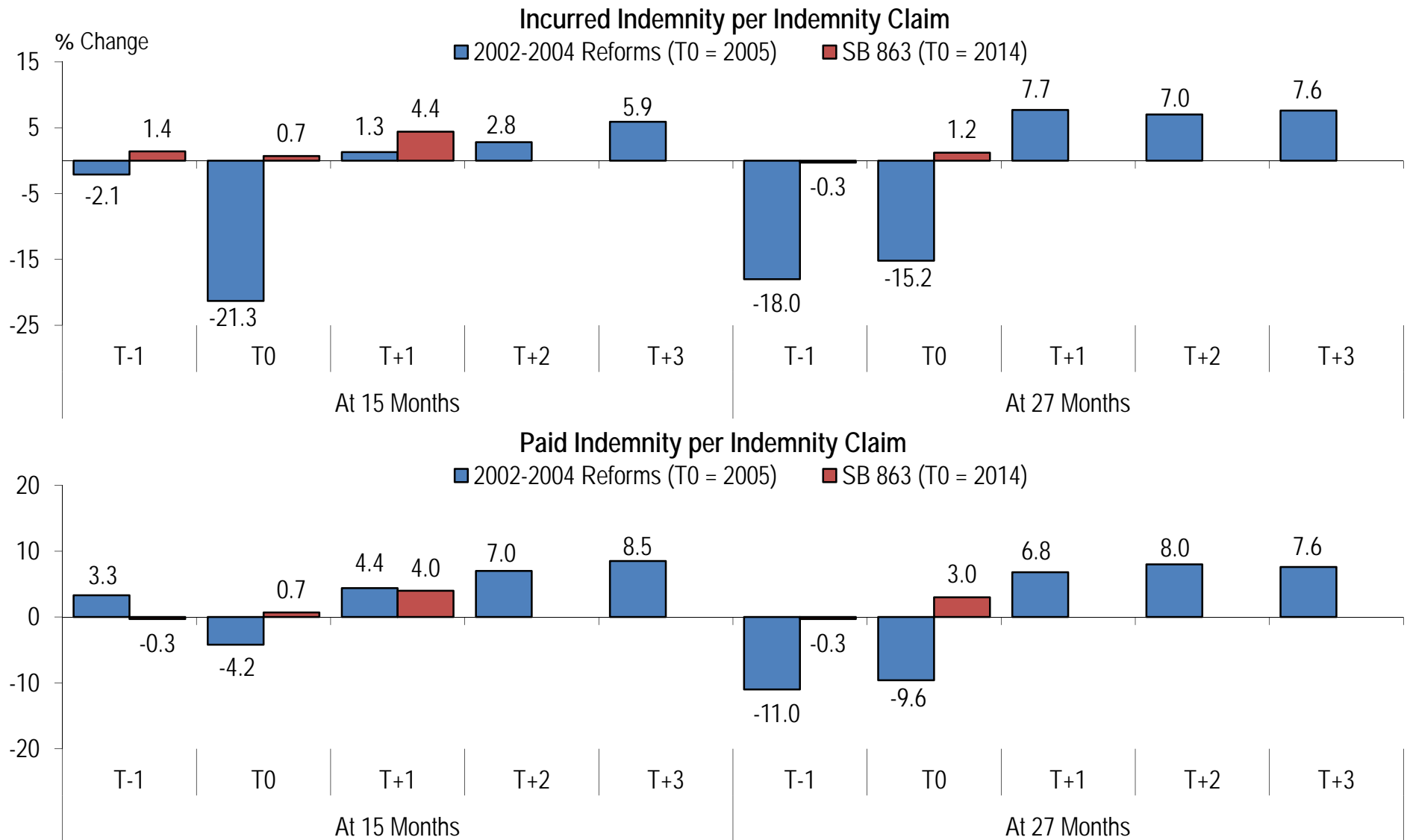


# Estimated Change in Indemnity Claim Frequency (Exhibit 12)



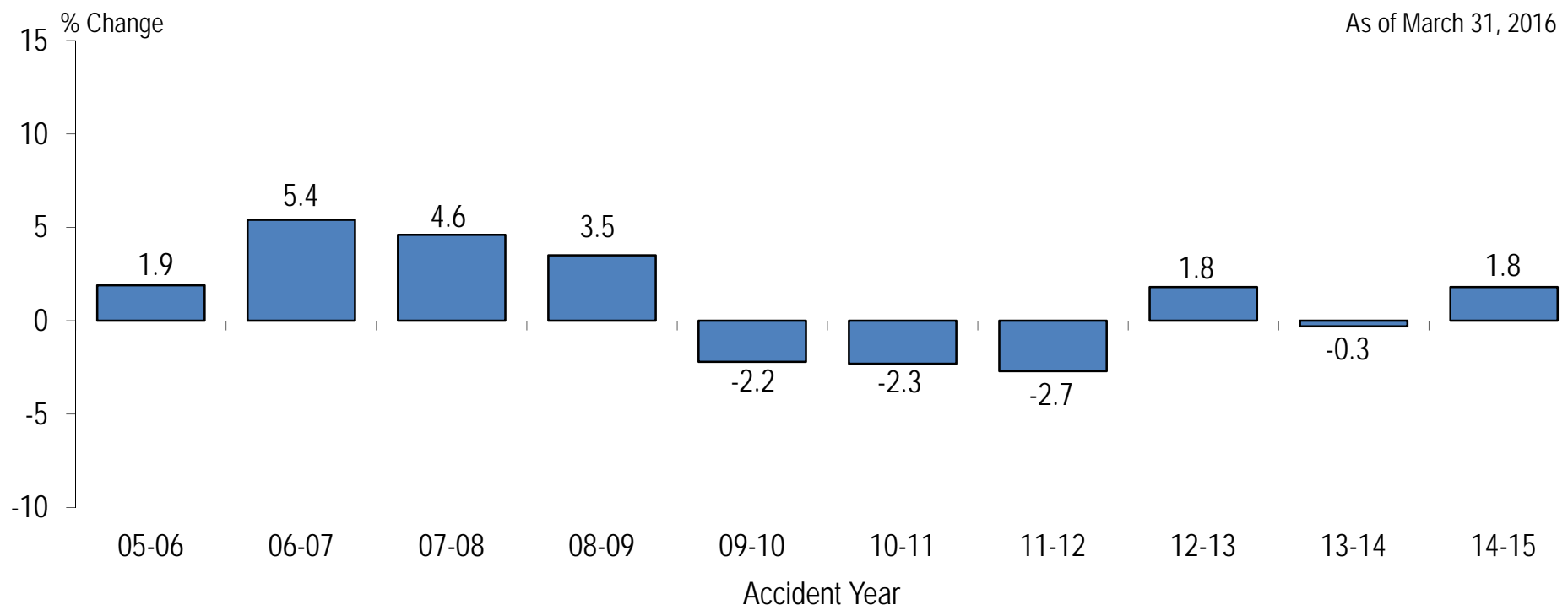
\*Based on changes in reported aggregate indemnity claim counts compared to changes in statewide employment. All other estimates based on unit statistical indemnity claims compared to reported insured payroll.

# Indemnity Severity Changes Following Reforms



Source: WCIRB aggregate financial data

## Change in On-Level Indemnity Severity (Exhibit 6.2)



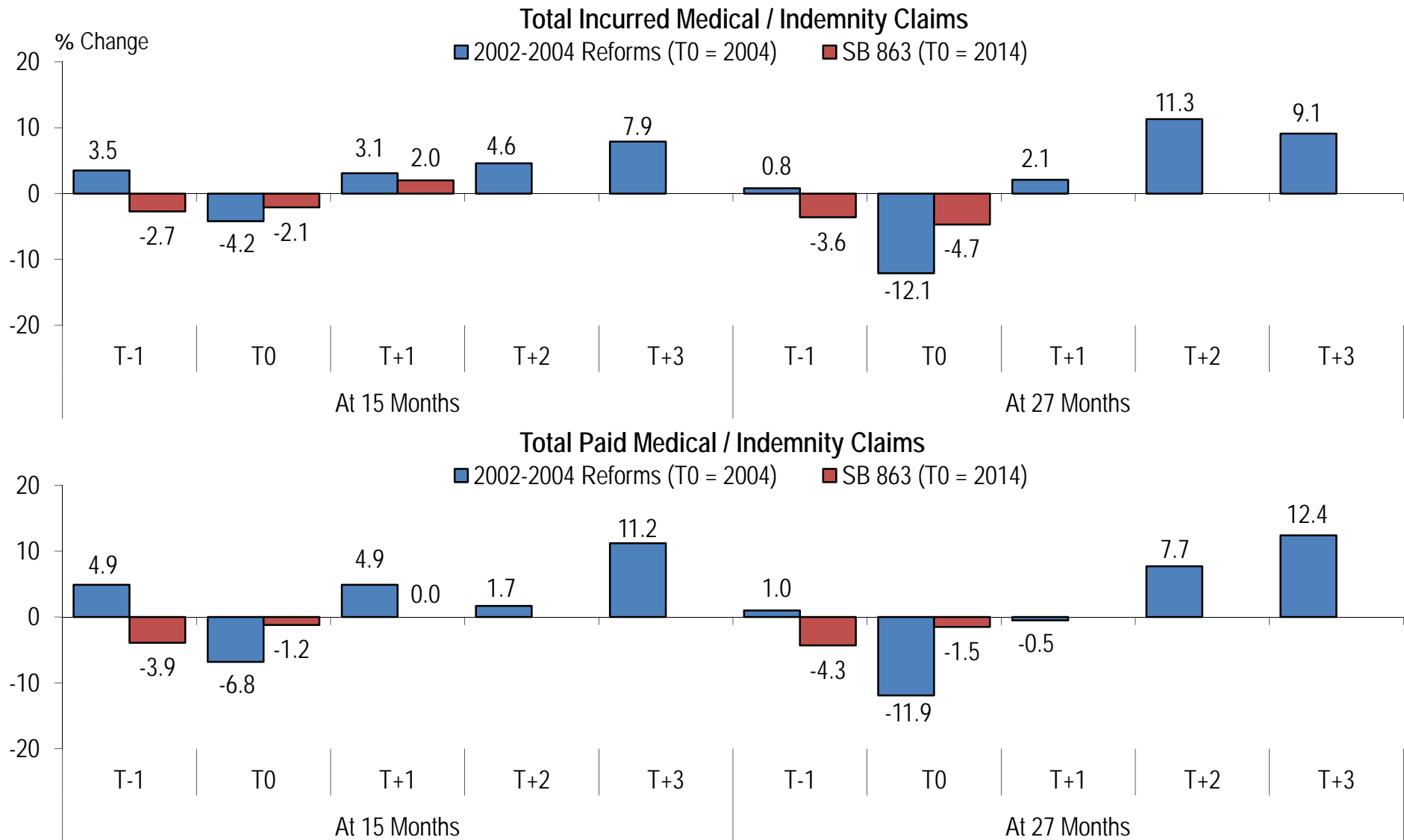
Annual Exponential Trend Based on:

2005 to 2015: +0.7%

2010 to 2015: -0.3%

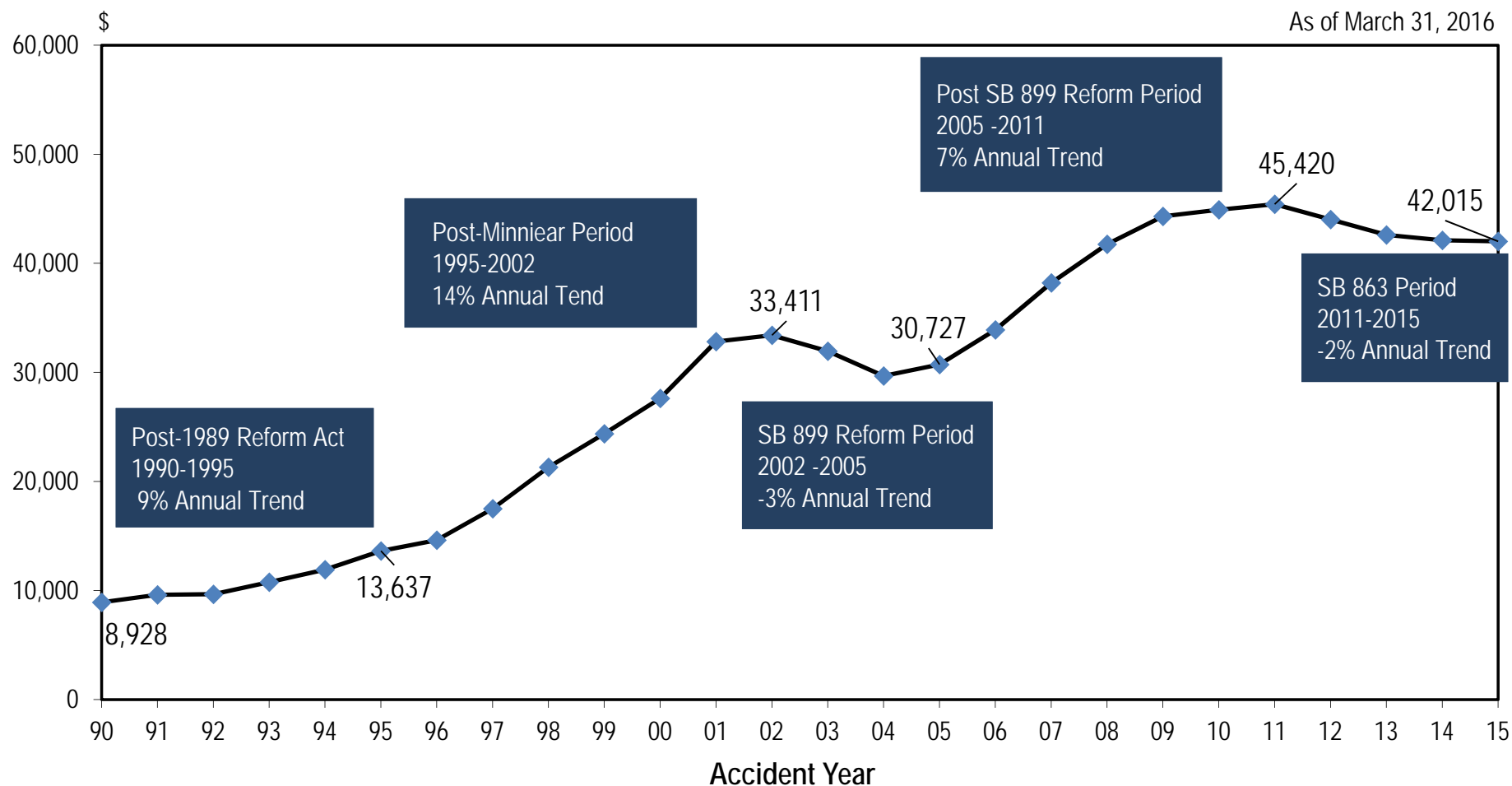
WCIRB Selected: +0.0%

# Medical Severity Changes Following Reforms



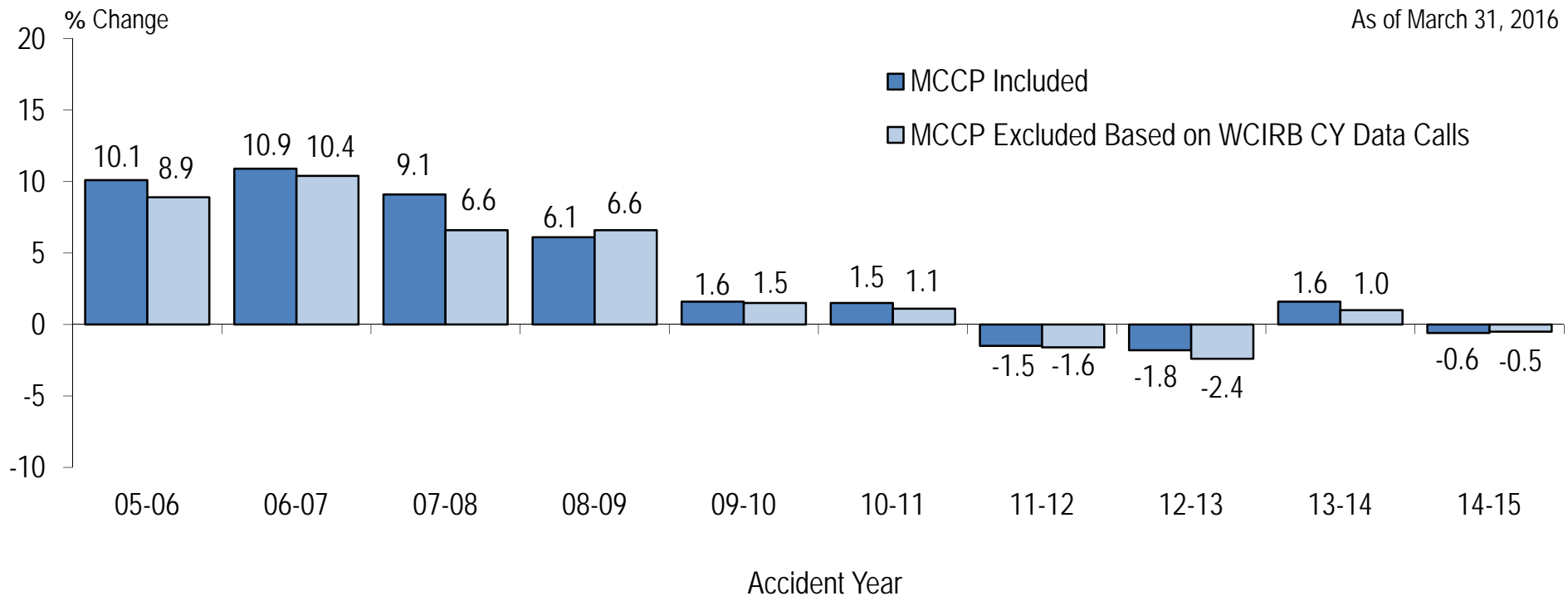
Source: WCIRB aggregate financial data. Figures are based on total paid medical on all claims divided by number of indemnity claims. Includes MCCP.

# Estimated Ultimate Medical (Incl. MCCP) Per Indemnity Claim (Exhibits 6.3 & 6.4)





## Change in On-Level Medical Severity (Exhibit 6.4)



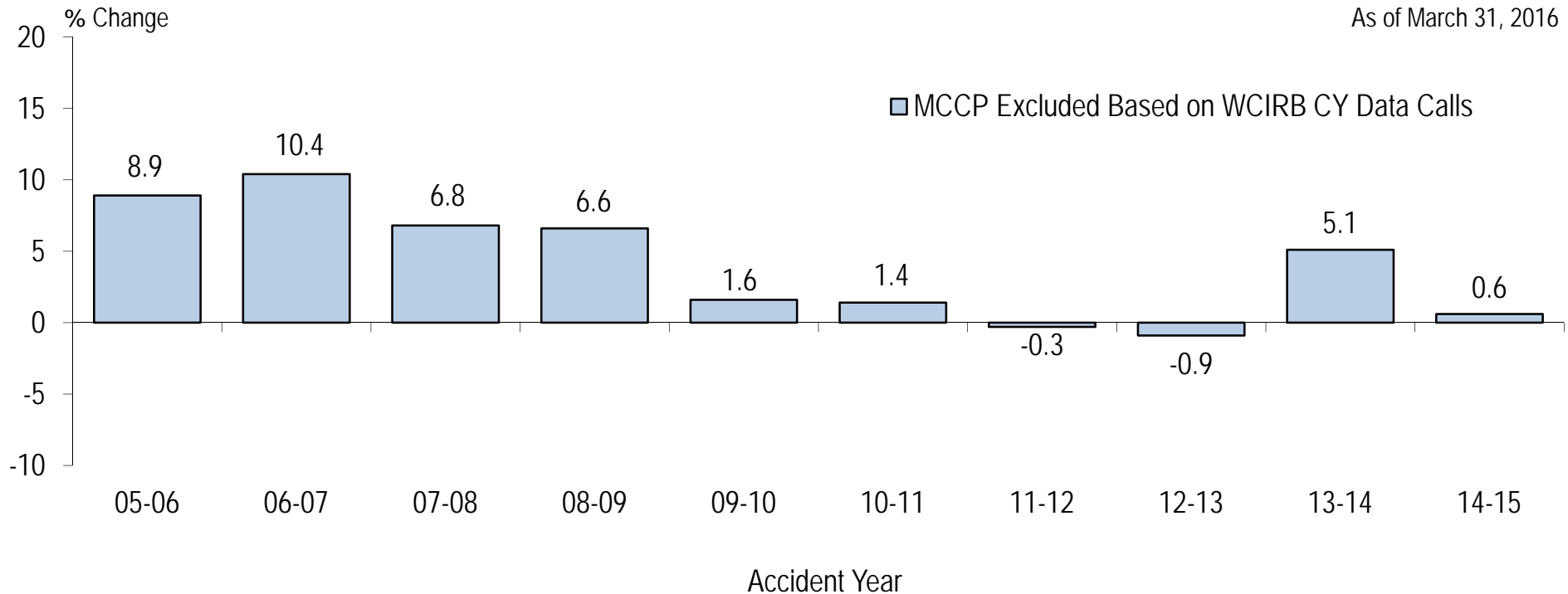
Annual Exponential Trend (Excluding MCCP) Based on:

2005 to 2015: +2.7%

2010 to 2015: -0.7%

WCIRB Selected: +2.5%

## Change in On-Level Medical Severity (Excluding MCCP) – Updated with Current SB 863 Estimates\*



Annual Exponential Trend (Excluding MCCP) Based on:

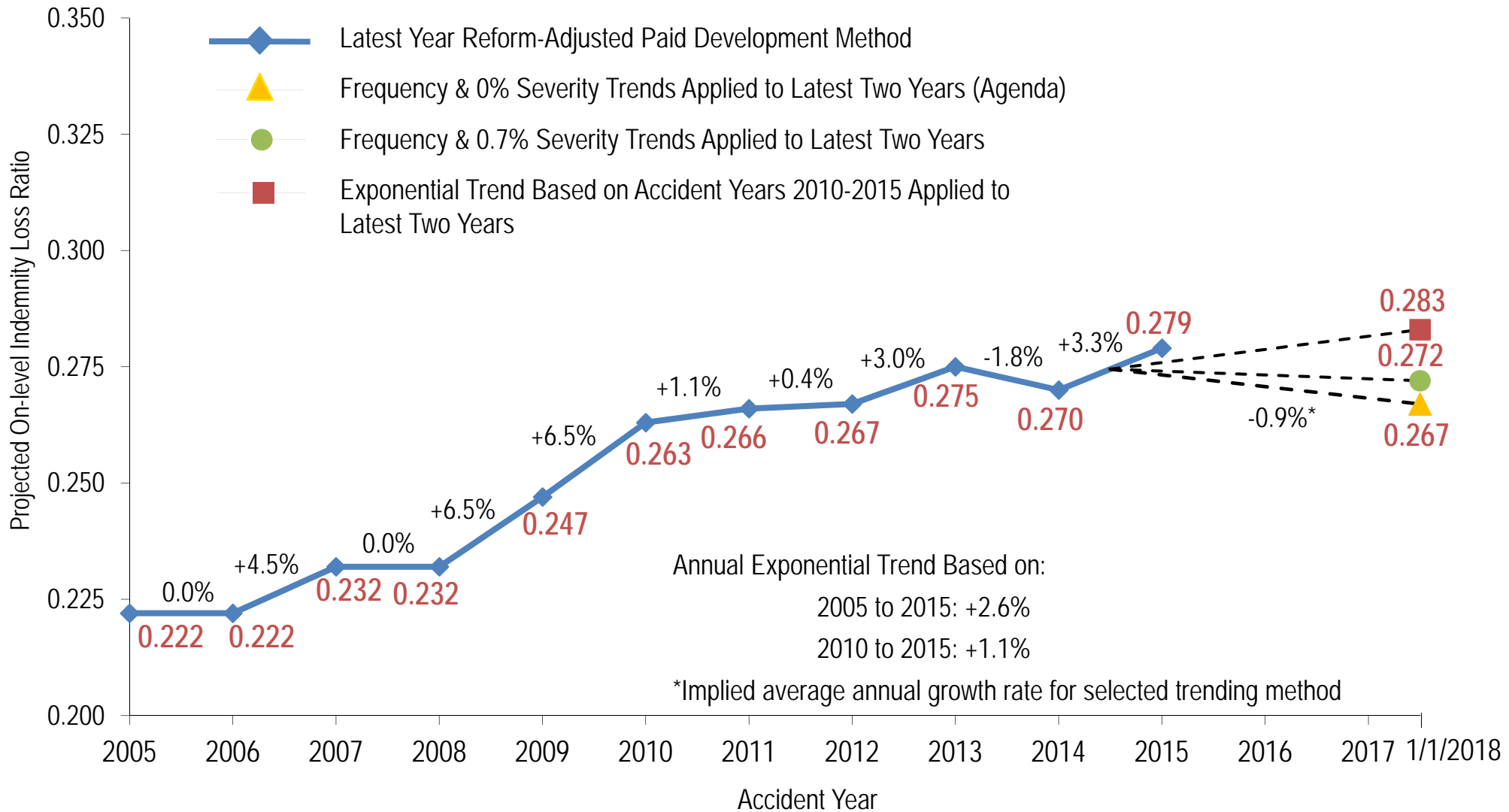
2005 to 2015: +3.5%

2010 to 2015: +1.1%

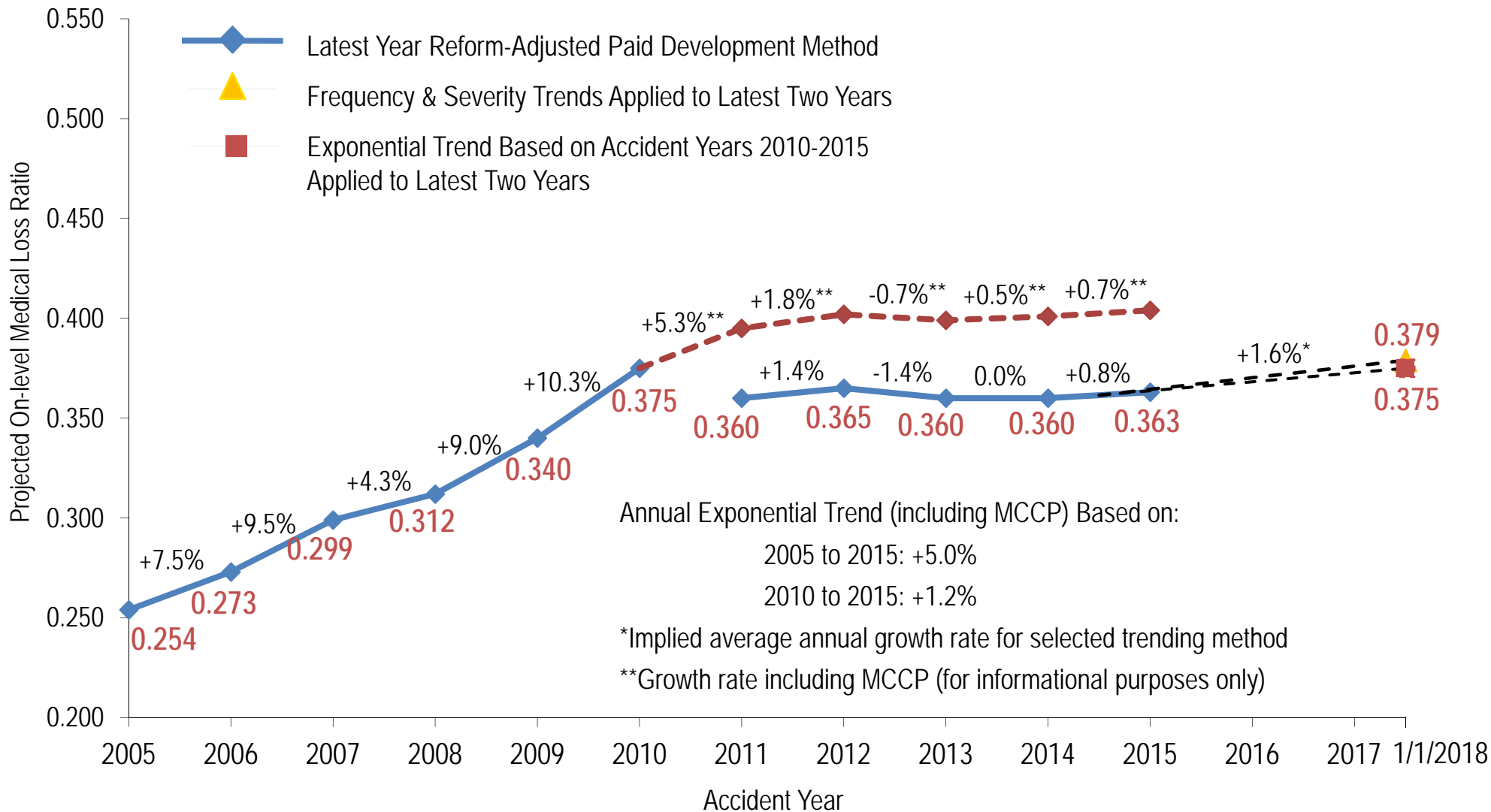
WCIRB Selected: **+2.5%**

\*Reflects a 2015 RBRVS adjustment of -0.9% applied to medical loss development and a -10% impact of SB 863 on medical utilization.

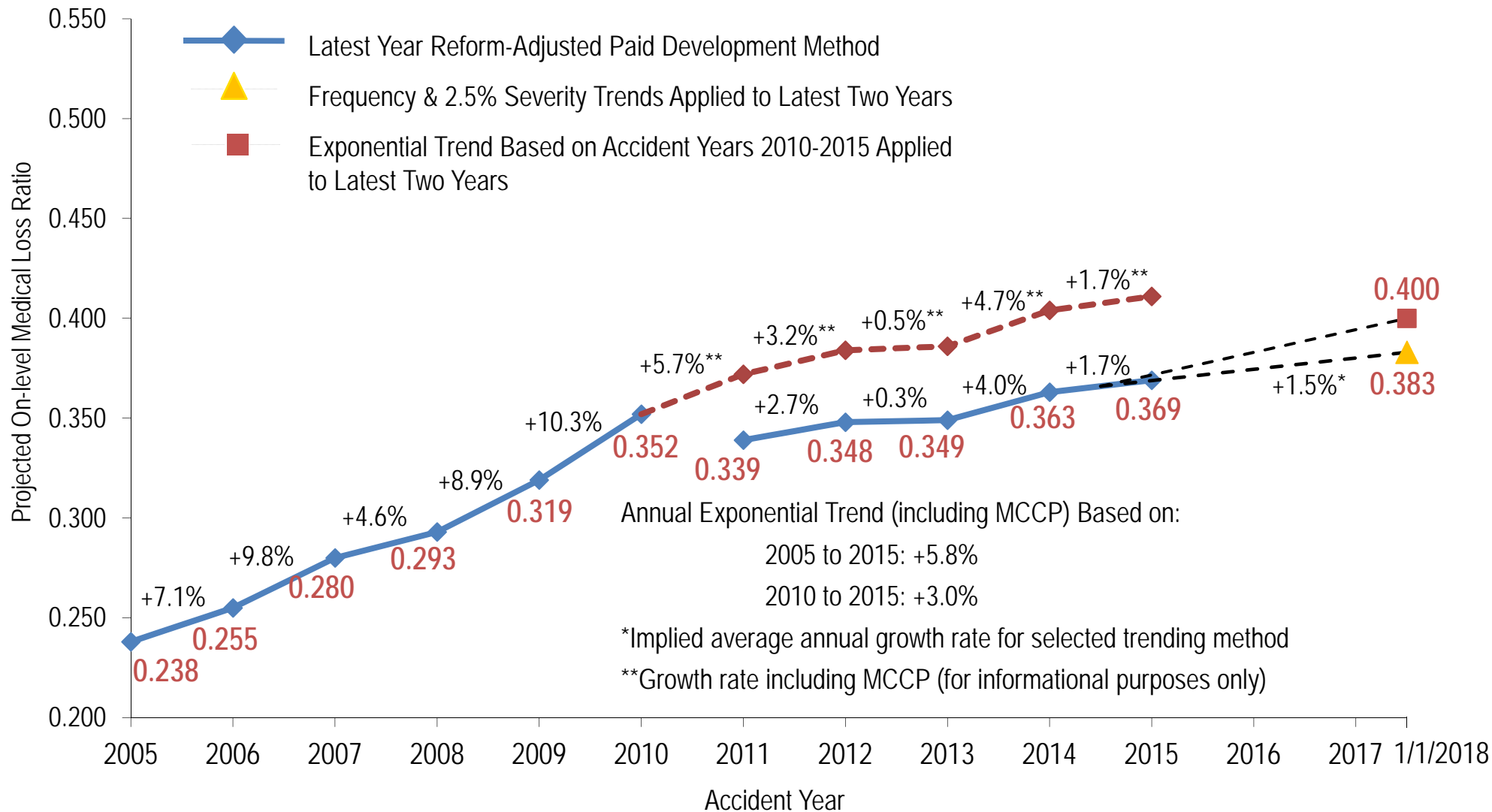
# Indemnity Loss Trend & Projections (Exhibit 7.1)



# Medical Loss Trend & Projections (Exhibit 7.3)



# Medical Loss Trend & Projections – Updated with Current SB 863 Estimates\*



\*Reflects a 2015 RBRVS adjustment of -0.9% applied to medical loss development and a -10% impact of SB 863 on medical utilization.

## Alternative Trending Methodologies (Item AC16-08-03)

- 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 recession period
  - Frequency continuing to increase modestly but not significantly different than model forecasts
  - On-level indemnity severity generally flat over last several years
  - On-level medical severity recently declining but significant inflation has historically followed periods of reform

## Alternative Trending Methodologies (Continued)

- 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 recent recession period
  - Did not perform well during 2002 to 2004 reform and SB 863 transition periods when trends moderate
  - Recent trends have moderated with SB 863 reforms
  - Current projections somewhat above separate frequency & severity projections

## Projected On-Level Loss Ratios for Policy Year 2017 under Alternative Trending Methods

<i>Separate Frequency &amp; Severity Projections (0% Indemnity &amp; 2.5% Medical) Applied to Latest Two Years (Updated SB 863)</i>	<i>0.650</i>
Separate Frequency & Severity Projections (0% Indemnity & 2.5% Medical) Applied to Latest Two Years (Agenda)	0.646
Separate Freq. & Severity (0% Ind. & 2.5% Med.) Applied to Latest Year	0.648
Separate Freq. & Long-Term Severity (0.7% Ind. & 2.5% Med.) Applied to Latest Two Years	0.652
Separate Freq. & Avg. of Long- and Short-Term Severity (0% Ind. & 1% Med.) Applied to Latest Two Years	0.629
Post-2005 Avg. On-Level Loss Ratio Exp. Trend (2.6% Ind. & 5.0% Med.) Applied to Latest Two Years	0.715
5-Year Avg. On-Level Loss Ratio Exp. Trend (1.1% Ind. & 1.2% Med.) Applied to Latest Two Years	0.658



# 1/1/2017 Filing – Loss Adjustment Expense Experience Review

WCIRB Actuarial Committee Meeting  
August 3, 2016

## 2015 Expense Call Changes Related to ULAE

- ULAE Reporting Studied in 2015
  - Focus on differences between insurers writing primarily in CA and those writing in other states
- Changes to Expense Call Adopted at 8/6/15 Meeting to Collect:
  - Negative “service fee”-type adjustments to CW ULAE
  - Losses on deductible policies or handled by TPA in which associated ULAE not in reported CW amounts
  - Various CW amounts consistent with IEE
- CY 2015 Data Received and Reviewed by Staff
  - Consistent with partial adjustments received for 5 large insurers last year
  - Some instances where insurer had significant deductible business but all claims-handling costs in reported ULAE

## Computation of CY 2015 ULAE for 1/1/17 Filing – Formula

$$1. \quad \text{CW ULAE Adjusted For Negatives} = [\text{CW Paid ULAE}] + [\text{Amount of Negative ULAE Adjustment}]$$


---

$$2. \quad \text{Adjusted CW Losses} = \begin{aligned} &[\text{CW Paid Losses}] - \\ &[\text{Loss for Claims not in ULAE from Deduct. Policies}] - \\ &[\text{Loss for Claims not in ULAE from Non-Deduct. Policies}] \end{aligned}$$


---

$$3. \quad \text{Adjusted CW ULAE Ratio} = \frac{[\text{CW ULAE Adjusted for Negatives}]}{[\text{Adjusted CW Losses}]}$$


---

$$4. \quad \text{Adjusted CW Paid ULAE} = [\text{Adjusted CW ULAE Ratio}] \times [\text{CW Paid Losses}]$$


---

$$5. \quad \text{Adjusted CA Paid ULAE} = \frac{[\text{Adjusted CW Paid ULAE}] \times [\text{CA Paid Losses}]}{[\text{CW Paid Losses}]}$$


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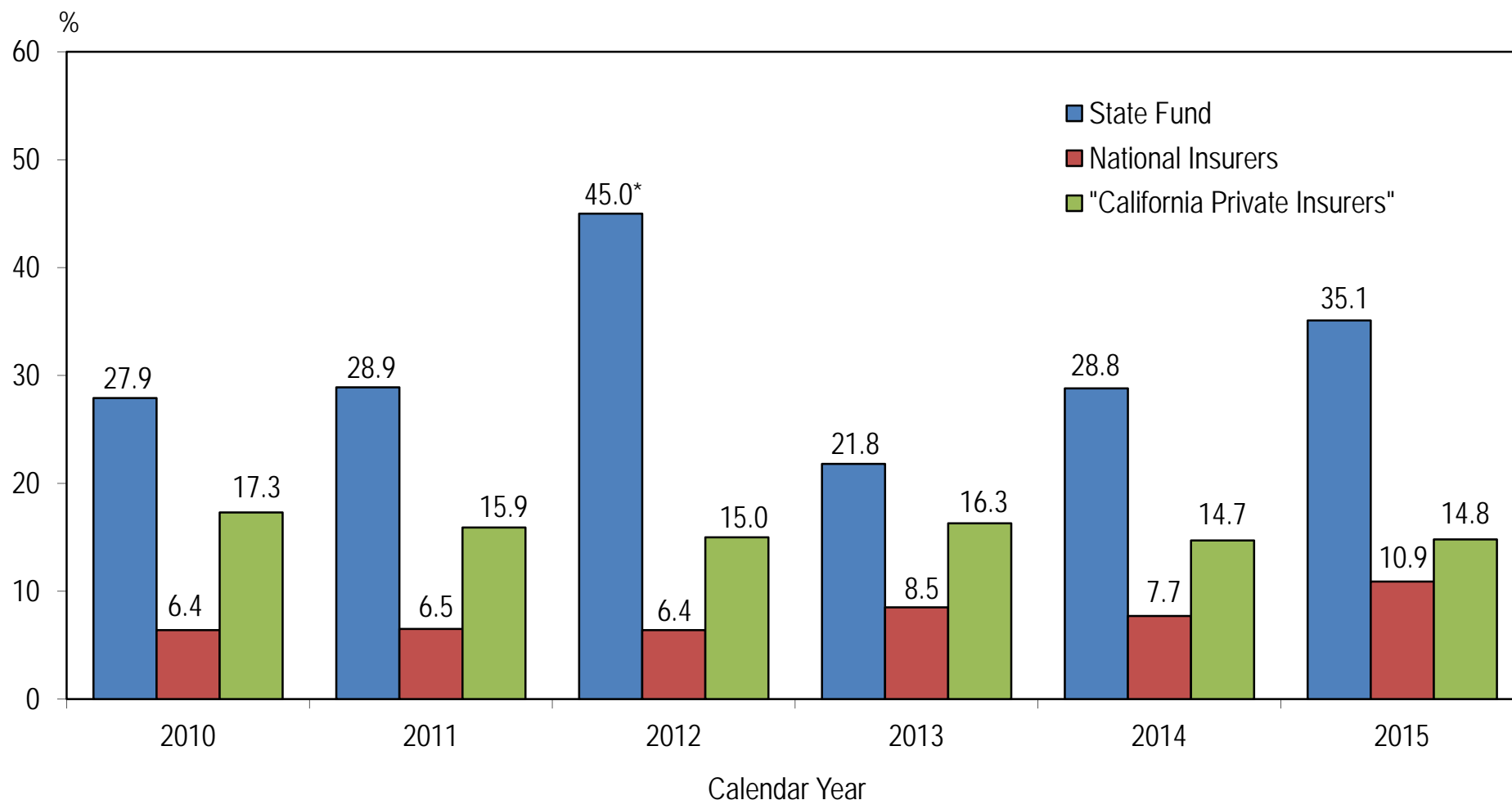
## Computation of CY 2015 ULAE for 1/1/17 Filing – Approach

- Case 1: Insurer with no negative “service fee” adjustments or issues with reporting claims-handling costs for large deductibles or TPAs
  - Formula simplifies to apportioning CW ULAE to CA based on paid losses
  - Paid loss may not always be the best apportioning method
  - Use CA reported ULAE instead (as discussed at 6/17/16 meeting)
- Case 2: Insurer reports claims-handling costs on deductible policies in CW ULAE on a first-dollar basis but has some other adjustments
  - Use formula but with *gross* losses in denominator
- Case 3: Insurer does exclude claims-handling costs below deductible amounts (i.e., through TPA) from reported CW ULAE
  - Use formula but with *net* losses in denominator

## CY 2015 ULAE Computation

Approach	% of Total Private Insurer Adjusted CA ULAE	% of Private Insurers
Using Reported CA ULAE	45%	82%
Using Formula-Adjusted CW ULAE Ratio Based on Gross Losses	2%	7%
Using Formula-Adjusted CW ULAE Ratio Based on Net Losses	53%	11%

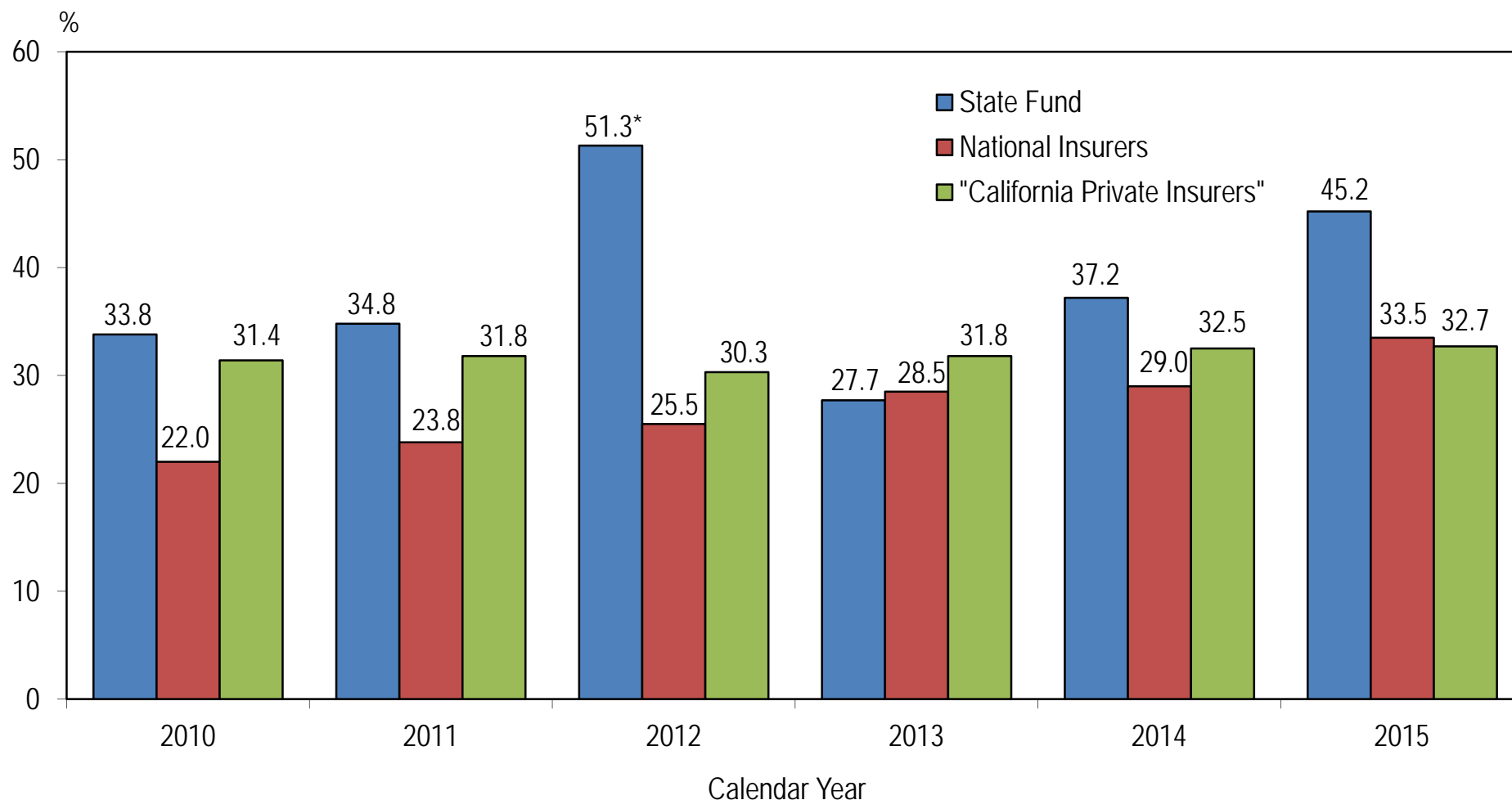
## Ratios of Paid ULAE to Paid Loss (Exhibit 1)



"California Private Insurers" are insurers with at least 80% of their workers' compensation writings in California.

\*2012 figure includes a one-time adjustment made by the State Compensation Insurance Fund to reallocate liabilities related to pension benefits.

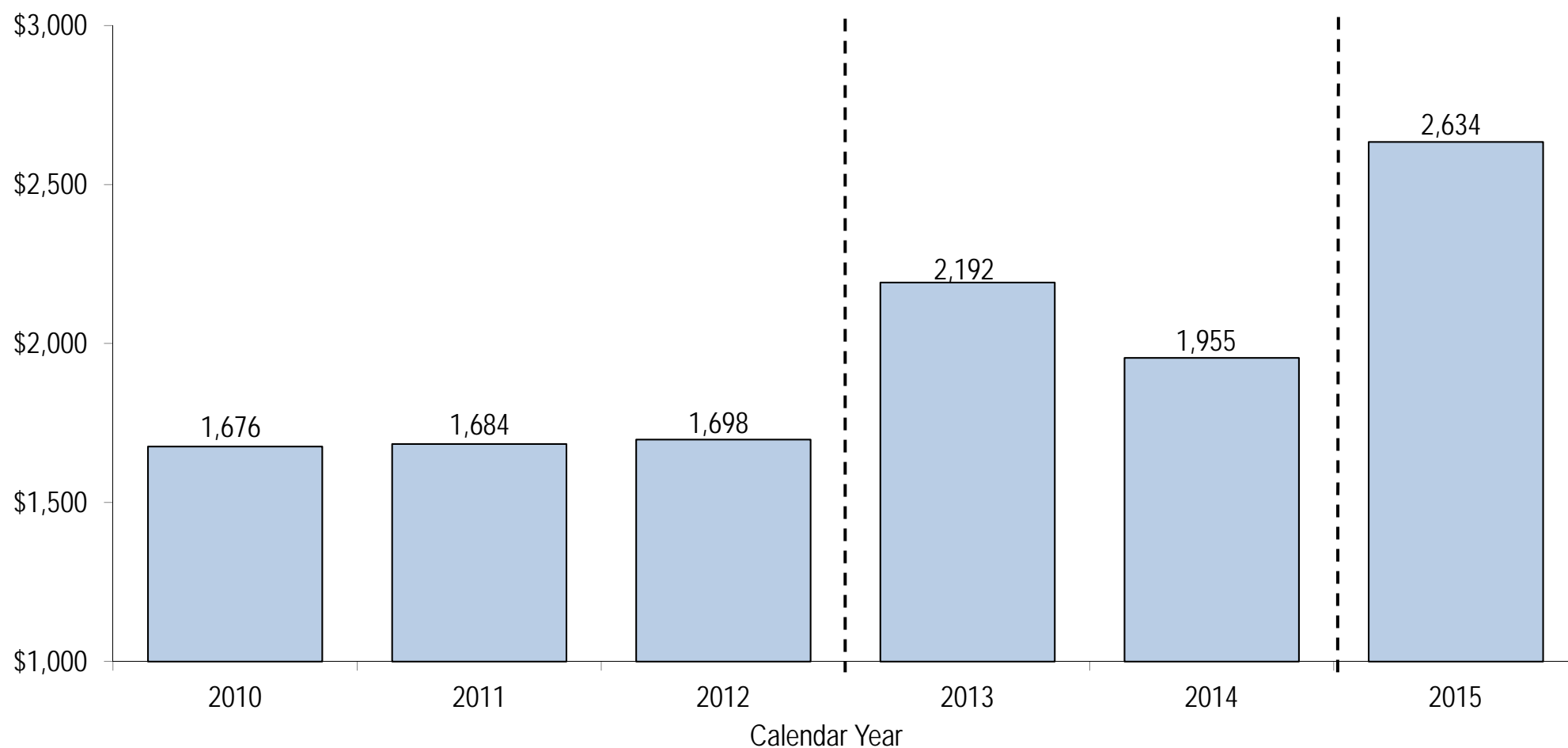
## Ratios of Total Paid LAE to Paid Loss (Exhibit 1)



"California Private Insurers" are insurers with at least 80% of their workers' compensation writings in California.

\*2012 figure includes a one-time adjustment made by the State Compensation Insurance Fund to reallocate liabilities related to pension benefits.

## Paid ULAE per Open Indemnity Claim – Private Insurers (Exhibit 2.2)





## ULAE Projection Methodology

### *Open Indemnity Claim-Based Projection*

- Open Indemnity Claims at Beginning of Calendar Year
  - Projected using WCIRB frequency forecasts and recent reporting and closure patterns
- Calendar Year Paid ULAE per Open Indemnity Claim
  - Projected using UCLA average wage level changes
  - Changes in historical ULAE severities cannot be used until sufficient data based on the new approach is available
- Projected Policy Year 2017 ULAE
  - Trend to future CYs based on CY 2015 only
  - (# of open indemnity claims) X (paid ULAE per open indemnity claim)
  - Projected 3.8 years to approx. average ULAE payment date on 2017 policies

## ULAE Projection Methodology

### *Paid Loss-Based Projection*

- Reported Paid ULAE Ratio to Premium
- Paid Loss Ratio to Premium
  - Projected using paid loss development projections
- Paid ULAE Ratio to Paid Losses
  - $(\text{Paid ULAE to premium ratio}) / (\text{paid loss to premium ratio})$
  - Projected using CY 2015 only
- Projected Policy Year 2017 ULAE to Loss Ratio
  - $\text{Projected ULAE ratio to premium} = (\text{projected paid ULAE to paid loss ratio}) \times (\text{projected paid loss to premium ratio})$
  - Average of calendar years 2017 and 2018
  - Divide by projected policy year 2017 loss ratio

## Selected Ratio of ULAE to Losses

- In Last Several Filings, Projected ULAE Ratio Based on Private Insurers Only
  - Concerns with reflecting State Fund ULAE experience discussed at prior meetings, filings and CDI decisions
- Current WCIRB Methodology Develops ULAE as a Ratio to Counts or Premium and Applies to Projected Counts and Loss Ratios
  - Concerns with applying statewide loss projection methodology to subgroups of insurers
  - Trending from multiple years assumes market shares between State Fund & private insurers consistent over that time
- Staff Recommended Methodology Enhancement
  - Continue to project average ULAE amounts based on private insurers
  - Projected counts and loss ratios projected on a statewide basis
  - Overall impact is modest

# Projections of ULAE to Loss

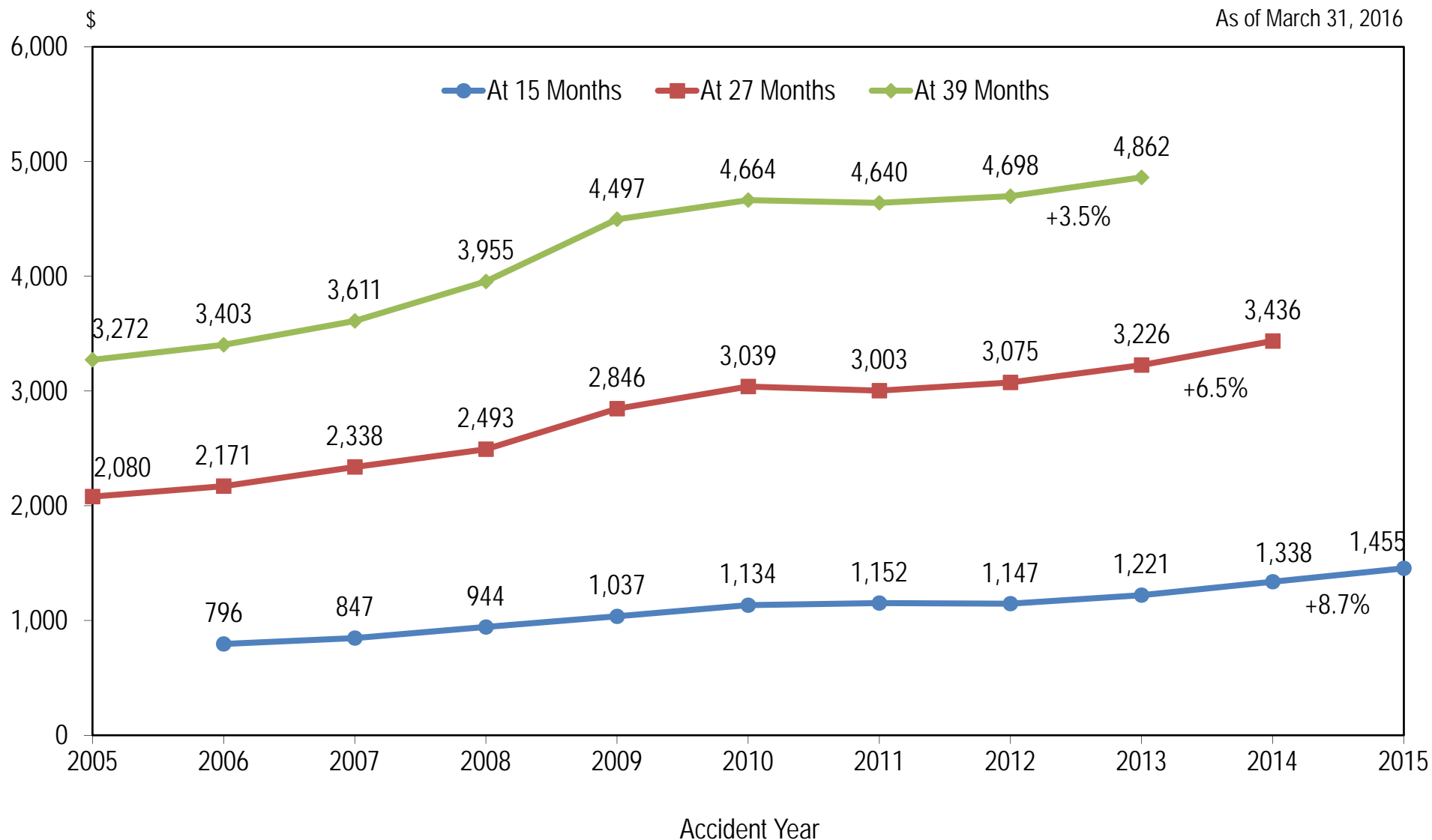
## July 1, 2016 Pure Premium Rate Filing Projection

ULAE Projection Method	Statewide ULAE Ratio	Private Insurer ULAE Ratio	Statewide Using Private Insurer Average ULAE
Paid ULAE per Open Indemnity Claim	12.3%	9.3%	N/A
Paid ULAE to Paid Losses	9.8%	7.3%	N/A
<b>Average of Open Indemnity Claim and Paid Loss-Based Projections</b>	11.1%	<b>8.3%</b>	N/A

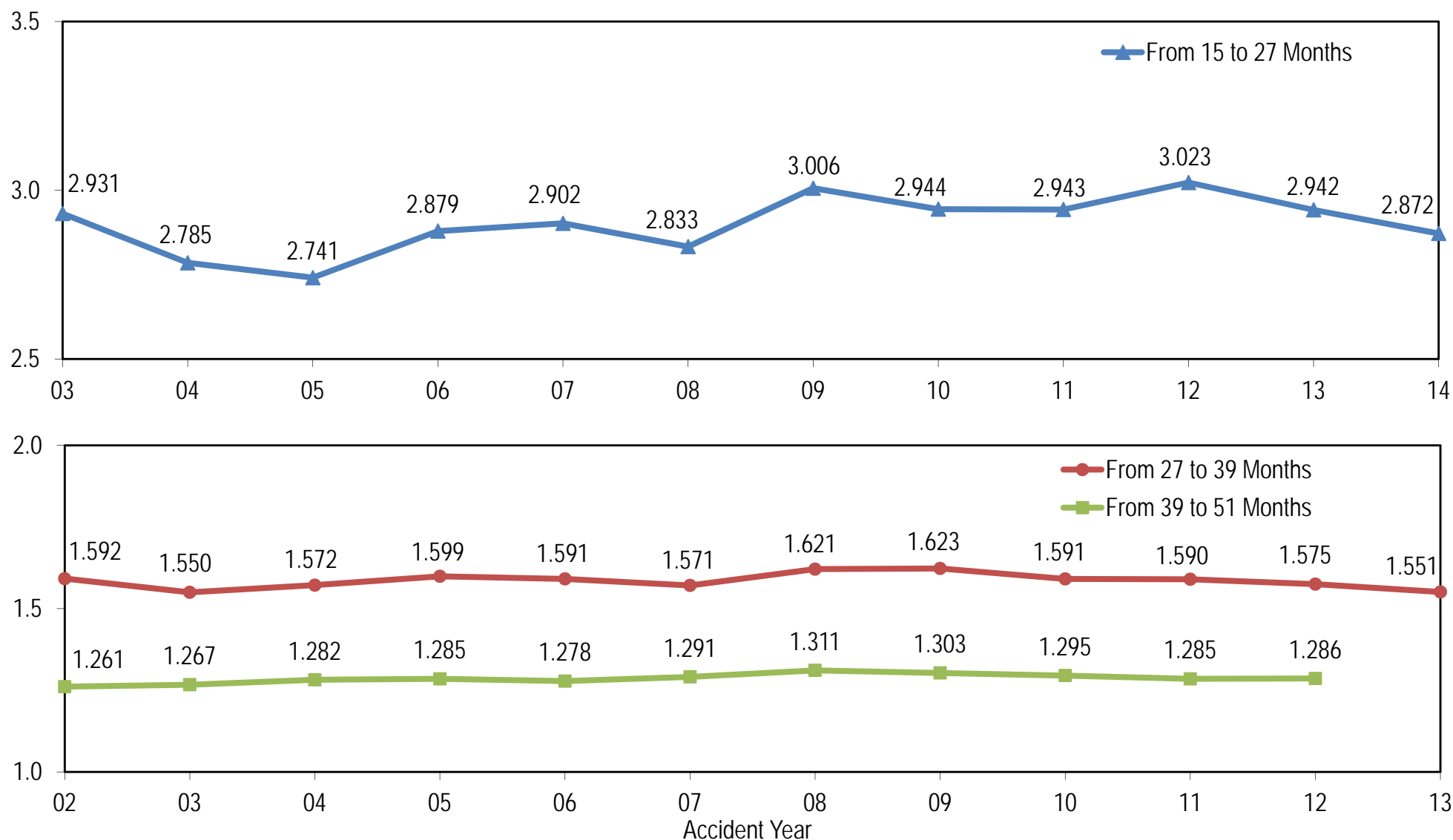
## Projection for Policy Year 2017

ULAE Projection Method	Statewide ULAE Ratio	Private Insurer ULAE Ratio	Statewide Using Private Insurer Average ULAE
Paid ULAE per Open Indemnity Claim	14.1%	11.1%	11.7%
Paid ULAE to Paid Losses	11.7%	9.0%	9.3%
<b>Average of Open Indemnity Claim and Paid Loss-Based Projections</b>	12.9%	10.1%	<b>10.5%</b>

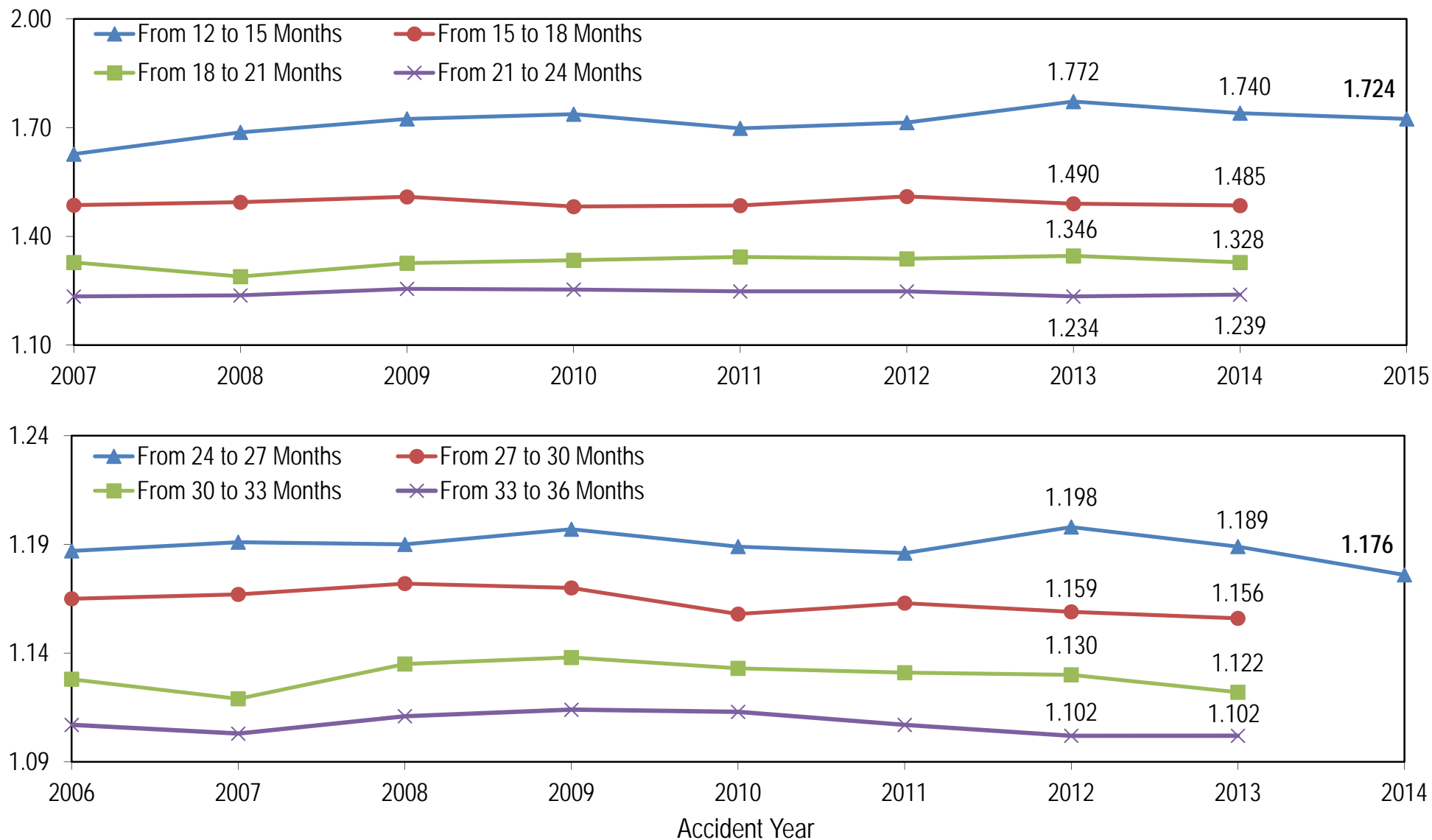
# Paid ALAE per Reported Indemnity Claim – Private Insurers Excluding MCCP (Exhibit 11)



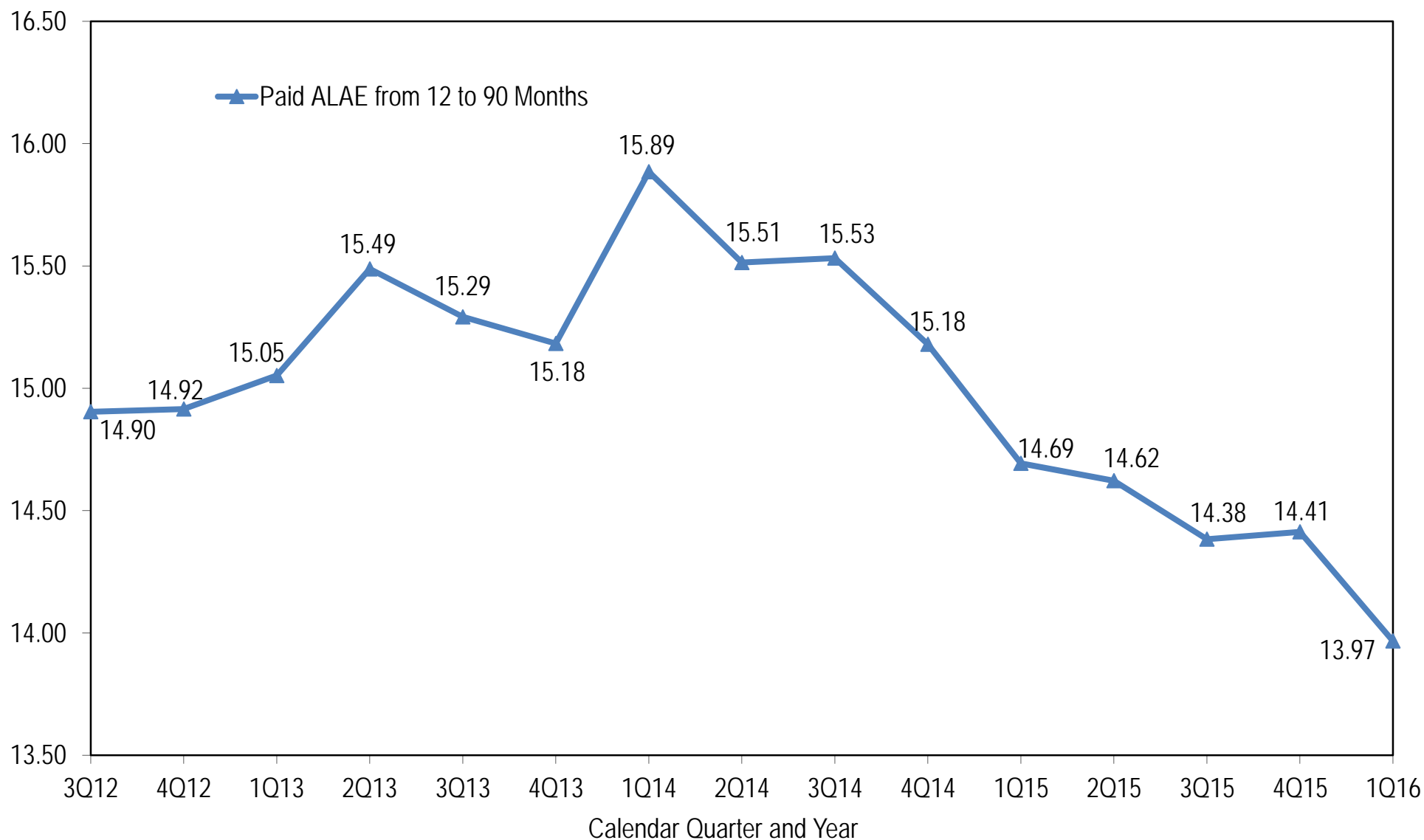
# Paid ALAE Development Factors – Private Insurers Excluding MCCP (Exhibit 15.1)



# ALAE Quarterly Paid Development Factors – Private Insurers (Exhibit 15.2)

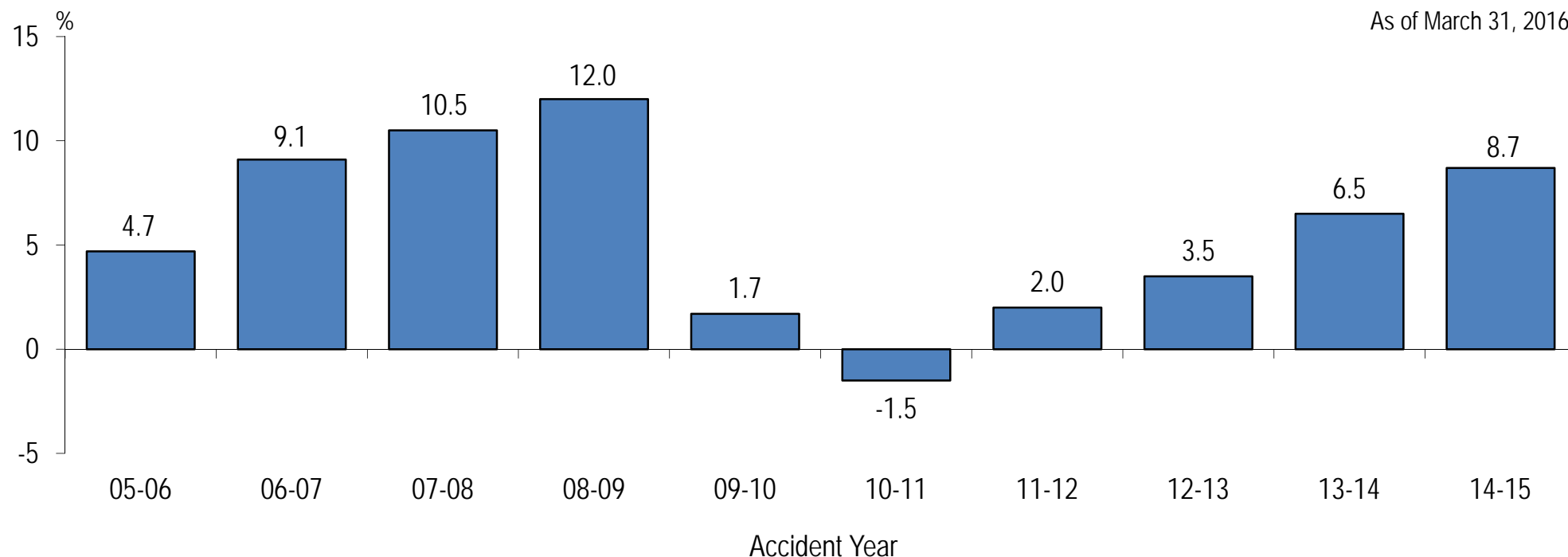


## Cumulative Quarterly Paid ALAE Development – Private Insurers





## Change in Estimated Ultimate ALAE per Indemnity Claim – Private Insurers Excluding MCCP (Exhibit 12.2)

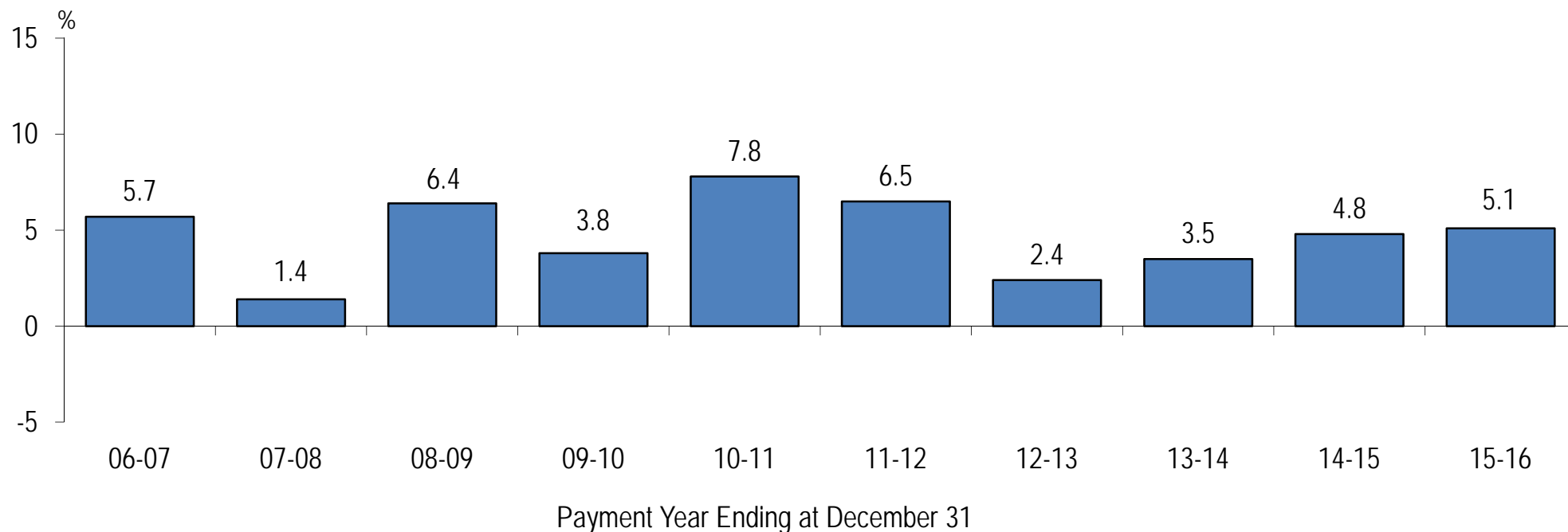


Annual Exponential Trend Based on:

2005 to 2015: +5.1%

2010 to 2015: +3.8%

## Change in Incremental Paid ALAE per Open Indemnity Claim – Private Insurers Excluding MCCP (Exhibit 13)



Annual Exponential Trend Based on:

2006 to 2016: +4.8%

2010 to 2016: +4.7%

WCIRB Selected ALAE Severity Trend: +4.5%

## ALAE Projection Methodology

- Accident Year Ultimate Indemnity Claim Counts
  - Latest year development
  - Projected using WCIRB frequency forecasts
- Accident Year Ultimate ALAE per Indemnity Claim
  - Latest year development with inverse power tail
  - Projected using average of ultimate ALAE per indemnity claim and incremental paid ALAE per open indemnity claim
- Projected Policy Year 2017 ALAE
  - (Projected # of ultimate indemnity claims) X (projected ultimate ALAE per indemnity claim)
  - Projection from latest two accident years

## Selected Ratio of ALAE (Excluding MCCP) to Losses

- As with ULAE, Projected ALAE Ratio Based on Private Insurers Only in Last Several Filings
- Current WCIRB Methodology Develops ALAE Ultimate Severity and Applies to Projected Counts and Loss Ratios
  - Concerns with applying statewide loss projection methodology to subgroups of insurers & market share changes
- Staff Recommends Similar Methodology Enhancement as to ULAE
  - Continue to project average ultimate ALAE severity based on private insurers
  - Projected counts and loss ratios projected on a statewide basis
  - Overall impact is modest

# Projections of ALAE to Loss – Excluding MCCP

## July 1, 2016 Pure Premium Rate Filing Projection

ALAE Projection Method	Statewide ALAE Ratio	Private Insurer ALAE Ratio	Statewide Using Private Insurer Average ALAE
Trended Ultimate ALAE per Indemnity Claim	19.1%	20.5%	N/A

## Projection for Policy Year 2017

ALAE Projection Method	Statewide ALAE Ratio	Private Insurer ALAE Ratio	Statewide Using Private Insurer Average ALAE
Trended Ultimate ALAE per Indemnity Claim	19.1%	20.6%	19.9%

## Preliminary Projected ALAE to Loss Ratios for Policy Year 2017 under Alternative Methods – Excluding MCCP

ALAE Projection Method	Statewide ALAE Ratio	Private Insurer ALAE Ratio
Trended Ultimate ALAE Per Indemnity Claim – Trend from Latest Two Years	19.1%	20.6%
Trended Ultimate ALAE per Indemnity Claim – Trend from Latest Year	19.8%	21.4%
Latest Year Paid ALAE Ratio Development Compared to Losses – Projection Based on Latest Two Years	17.7%	19.1%
Latest Year Paid ALAE to Paid Indemnity Development Compared to Losses – Projection Based on Latest Two Years	18.0%	19.3%

## Review of MCCP Projection Methodology (Item AC16-06-03)

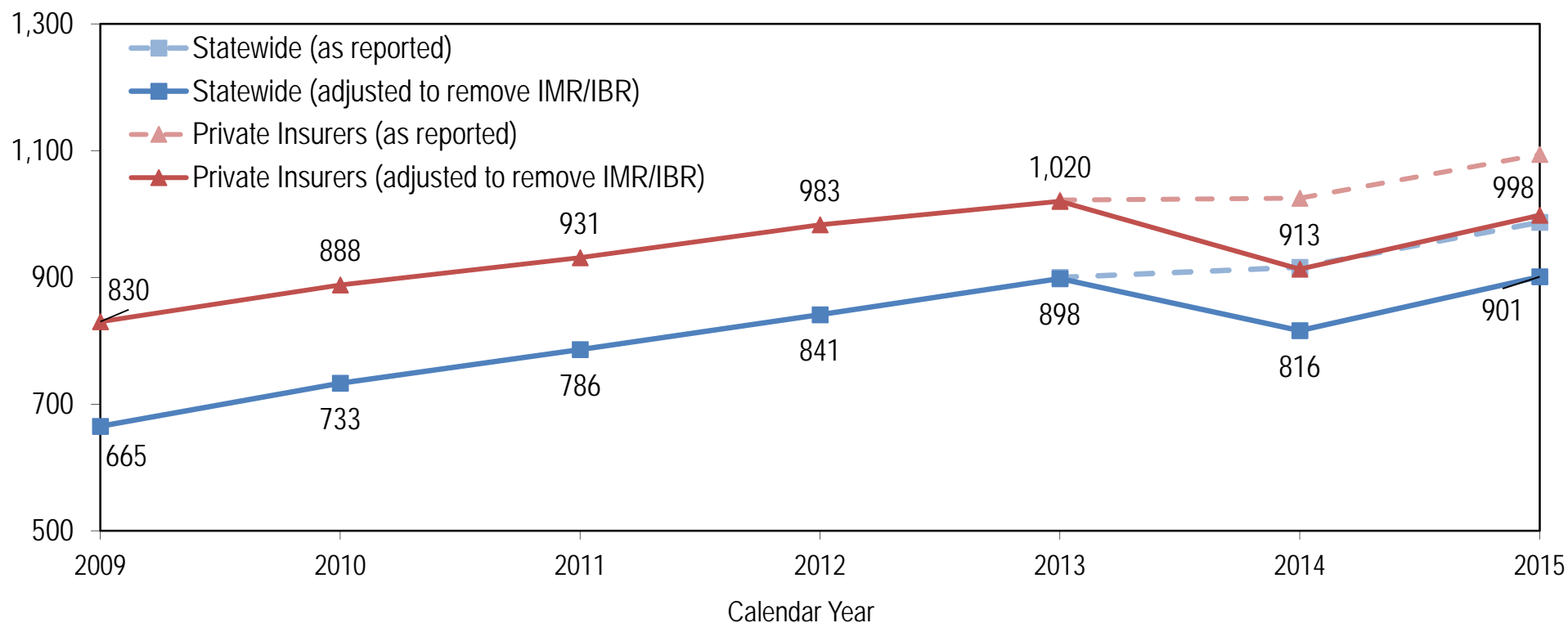
- MCCP Methodology Based on that for ALAE in Last Several Filings
  - Development based on paid medical LDFs
  - Trend based on change in CY MCCP per open claim
- 6/17/16 Actuarial Committee Meeting Summary
  - Use actual paid MCCP development when available (51 months)
  - Review possible adjustment of medical/MCCP tail when applied to MCCP or “pure” medical loss
  - Review averaging CY MCCP trend with AY ultimate trend after considering change to IMR/IBR fees

## Analysis of Medical/MCCP Tail Development

- Ratio to Medical/MCCP Tail Development from 24-48 Months:
  - MCCP = 80% of medical/MCCP
  - Pure medical = 102% of medical/MCCP
- Unclear if Relationship between Medical & MCCP is Consistent in Older AYs
  - MCCP trends generally higher than medical over long term
- Staff Recommends No Adjustment at this Time
  - Review other sources of MCCP by AY to assess proportions in older periods



## Calendar Year Paid MCCP per Indemnity Claims Inventory (Exhibit 23)

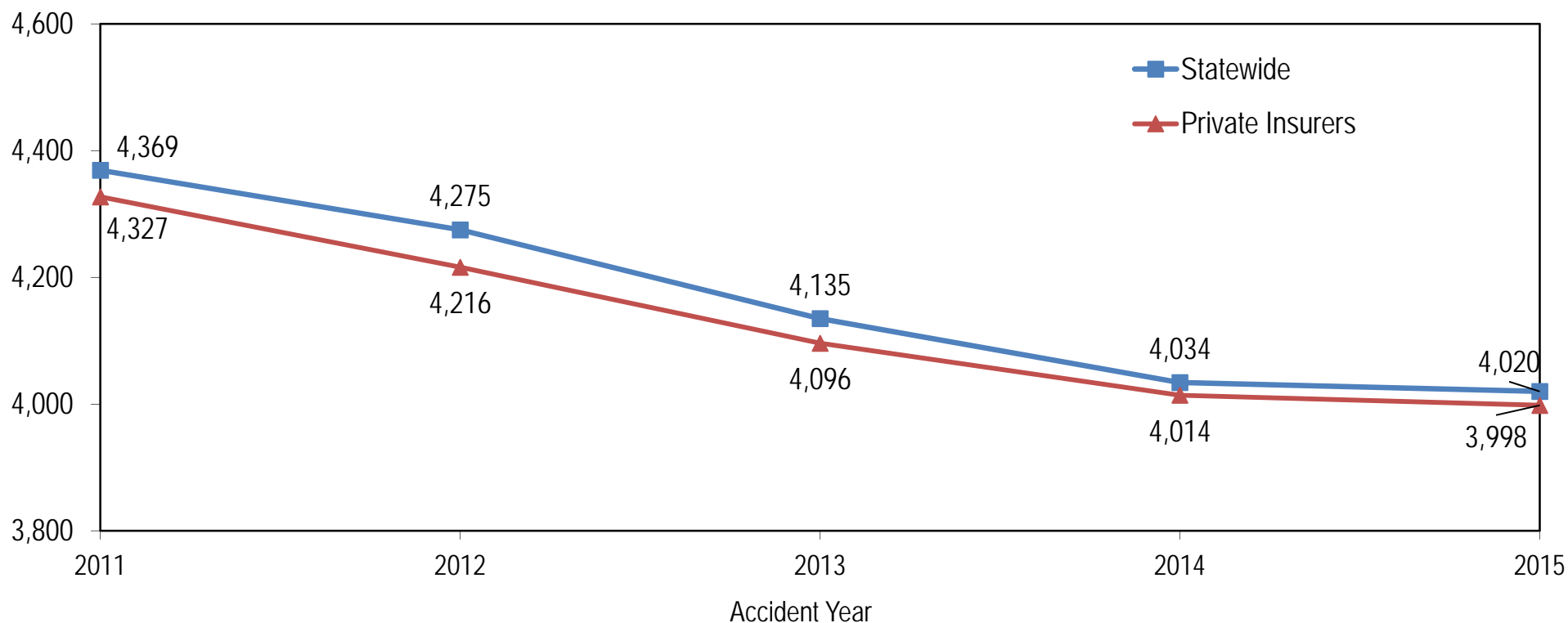


Annual Exponential Trend Excluding IMR/IBR Based on 2009-2015:

Statewide: +4.6%

Private Insurers: +2.5%

## Accident Year Ultimate MCCP per Indemnity Claim (Exhibit 24)



Annual Exponential Trend Based on 2011-2015:

Statewide: -2.2%

Private Insurers: -2.0%

## Selected Ratio of MCCP to Losses

- As with Other LAE, Projected MCCP Ratio Based on Private Insurers Only in Last Several Filings
- Concerns with State Fund's Experience for ULAE & Other ALAE Do Not Apply to MCCP
- Staff Recommends MCCP Projection Based on Statewide Data
  - Projection using private insurer MCCP severities and other statewide information included for Committee's review
  - Also consider using average of accident year and calendar year MCCP severity trends as for ALAE excl. MCCP

# Projections of MCCP to Loss

## July 1, 2016 Pure Premium Rate Filing Projection

MCCP Projection Method	Statewide MCCP Ratio	Private Insurer MCCP Ratio	Statewide Using Private Insurer Average MCCP
Trended Ultimate MCCP per Indemnity Claim based on Paid Medical Development & CY MCCP Severity Trend	6.8%	7.2%	N/A

## Projection for Policy Year 2017

MCCP Projection Method	Statewide MCCP Ratio	Private Insurer MCCP Ratio	Statewide Using Private Insurer Average MCCP
Trended Ultimate MCCP per Indemnity Claim based on MCCP Dev. Through 51 Months & CY MCCP Severity Trend	5.8%	6.0%	5.8%
Trended Ultimate MCCP per Indemnity Claim based on MCCP Dev. Through 51 Months & Avg. of CY & AY MCCP Severity Trends	5.6%	5.5%	5.3%

# Industry Average Filed Rates – 7/1/16

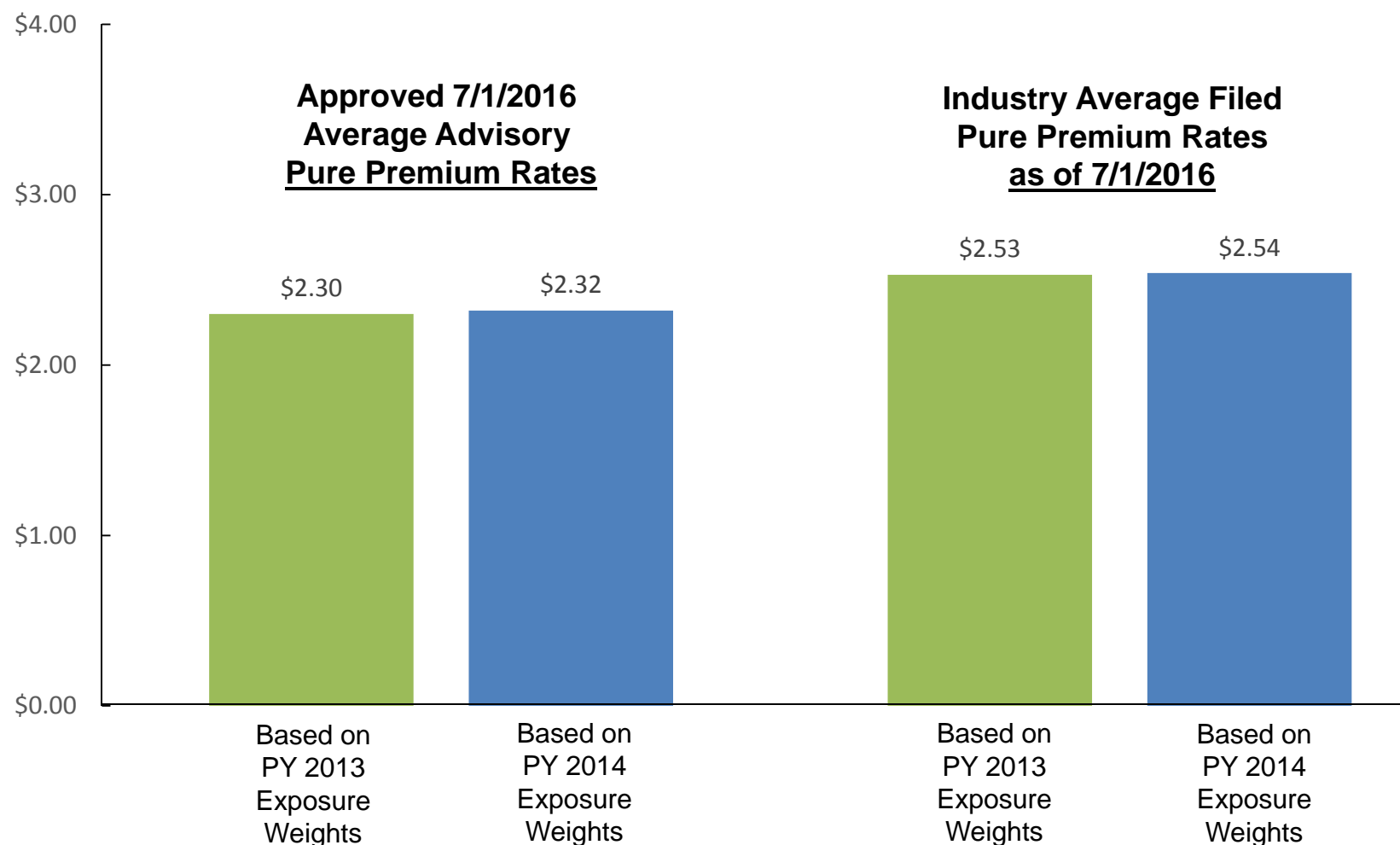
WCIRB Actuarial Committee Meeting  
August 3, 2016

## Calculation of Industry Average Filed Rates – 7/1/16

### Standard Method – Used for Annual Filings

- Insurance Commissioner Directive – Compare Pure Premium Rate Projection to Average Industry Filed Pure Premium Rate
- More Reflective of Current Market Conditions than Prior Approved Pure Premium Rates
- Same Process as Prior Annual Rate Filings – Developed in Consultation with CDI
- Rate Filings of the Largest 120 Insurers Downloaded (98% of Market)
- Insurer Manual Rate Tables Loaded
- Distribution Weights for Insurer Filed Sub-classifications, Territories, etc. Obtained from Insurer
- Exposure Weights by Class and Insurer from Latest 12 Months Unit Stat. Data Used

# Updates to Average Pure Premium Rate Benchmarks Based on Updated Exposure Weights



For purposes of this summary, policy year 2013 consists of policies incepting between November 2012 and October 2013, and policy year 2014 consists of policies incepting between November 2013 and October 2014.

## Industry Average Filed Rates Per \$100 of Payroll Based on Updated Exposure Weights

