# ONTARIO RISK SHARING POOL

# MARCH 2016 OPERATIONAL REPORT

# ACTUARIAL HIGHLIGHTS

Related Bulletin: F16-024 Ontario RSP March 2016 Operational Report

Related Quarterly Valuation Highlights:

Actuarial Quarterly Valuation Highlights Risk Sharing Pools as at December 31, 2015

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FACILITY Association

# ACTUARIAL HIGHLIGHTS

# RSP ONTARIO

# OPERATIONAL REPORT

# MARCH 2016

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# 1 Summary

## 1.1 Valuation Schedule (Fiscal Year 2016)

The March 2016 Operational Report incorporates the results of an updated valuation (as at December 31, 2015) – the impact of the implementation of the valuation is discussed in section 1.2. The table immediately below summarizes the implemented valuations and future scheduled valuations for fiscal year 2016.

**ONTARIO RISK SHARING POOL**
**FISCAL YEAR 2016 – SCHEDULE OF VALUATIONS**

| Valuation Date | Discount Rate (per annum) | Operational Report | Description of Changes |
|---|---|---|---|
| Sep. 30, 2015 (completed) | 0.98% mfad: 25 bp | Oct. 2015 | updated valuation (roll forward): accident year 2015 loss ratio decreased 5.7 points to 116.8%; discount rate decreased by 21 basis points; no change to selected margins for adverse deviations |
| Dec. 31, 2015 (completed) | 0.90% mfad: 25 bp | Mar. 2016 | updated valuation: accident year 2015 loss ratio decreased 1.3 points to 115.5%; accident year 2016 loss ratio decreased 3.6 points to 117.0%; discount rate decreased by 8 basis points; no change to selected margins for adverse deviations |
| Mar. 31, 2016 | | May 2016 | update valuation (roll forward): |
| Jun. 30, 2016 | | Aug. 2016 | update valuation: |
| Sep. 30, 2016 | | Oct. 2016 | update valuation (roll forward): |

Under the proposed schedule for fiscal year 2016, the "off-half" valuation quarters ending March 31, 2016 and September 30, 2016 would not reflect a full valuation update of assumptions, but would rather "roll-forward" key assumptions from the previous valuation.

## 1.2 New Valuation

A valuation of the Ontario Risk Sharing Pool ("RSP") as at December 31, 2015 has been completed since last month's Operational Report and the results of that valuation have been incorporated into this month's Report. The valuation was completed by the Facility Association's internal actuarial group in conjunction with, and approved by, the appointed actuary, under the hybrid model for actuarial services. Additional detail will be provided in an "Actuarial Highlights – Quarterly Valuation" report to be posted to the FA website at the same time as this report.

The valuation implementation impact is summarized in the tables at the top of the next page.

*Summary of Impact ($000s) of Implementing Result of Valuation as at December 31, 2015*[1]

| Ontario | unfav / (fav) for the month and ytd | | | | | |
|---|---|---|---|---|---|---|
| | IMPACT in $000s from changes in: | | | | | |
| | ults & payout patterns | | | dsct rate | margins | |
| | Nominal | apv adj. | sub-tot | apv adj. | apv adj. | TOTAL |
| | [1] | [2] | [3] | [4] | [5] | [6] |
| PAYs | (42,724) | (2,018) | (44,742) | 2,103 | - | (42,639) |
| CAY | (2,151) | (279) | (2,430) | 196 | - | (2,234) |
| Prem Def | (4,197) | (515) | (4,712) | 311 | - | (4,401) |
| TOTAL | (49,072) | (2,812) | (51,884) | 2,610 | - | (49,274) |

As indicated in the table above, the incorporation of the new valuation had an estimated ***$49.3 million favourable impact*** on the month's net result from operations, subtracting an estimated 82.8 points (see table immediately below) from the **year-to-date Combined Operating Ratio** to end at **64.4%.**

*Summary of Impact (% YTD EP) of Implementing Result of Valuation as at December 31, 2015*

| Ontario | ytd EP 59,517 (actual) | | | | | |
|---|---|---|---|---|---|---|
| | IMPACT unfav / (fav) as % ytd EP from changes in: | | | | | |
| | ults & payout patterns | | | dsct rate | margins | |
| | Nominal | apv adj. | sub-tot | apv adj. | apv adj. | TOTAL |
| | [1] | [2] | [3] | [4] | [5] | [6] |
| PAYs | (71.8%) | (3.4%) | (75.2%) | 3.5% | - | (71.6%) |
| CAY | (3.6%) | (0.5%) | (4.1%) | 0.3% | - | (3.8%) |
| Prem Def | (7.1%) | (0.9%) | (7.9%) | 0.5% | - | (7.4%) |
| TOTAL | (82.5%) | (4.7%) | (87.2%) | 4.4% | - | (82.8%) |

The impact of the nominal changes is shown in column [1] of the two preceding summary tables. The change in the selected nominal ultimates was favourable by $49.1 million overall. This reflects the impact attributable to the change in the selected ultimate loss ratio (i.e. for each accident year, it is the product of life-to-date earned premium for the accident year and the change in the selected ultimate loss ratio).

The prior accident years overall showed a $42.7 million favourable variance, as recorded claims activity continues to show significantly favourable actual experience relative to recorded activity projected from the previous valuation and with the inclusion of a retroactive reform adjustment related to recent changes to bodily injury tort thresholds and deductibles (on our assumption that the changes apply on a settlement date basis). The total favourable impact is 5.0% of the prior accident years' nominal unpaid balance of $848.5 million determined at the end of last month

[1]In these tables, "PAYs" refers to prior accident years, "CAY" refers to the current accident year, and "Prem Def" refers to the provision for premium deficiency or the deferred policy acquisition asset (as applicable). "Nominal" refers to changes excluding any actuarial present value adjustments, whereas "apv adj." refers to actuarial present value adjustments.

The columns under the heading "ults & payout patterns" reflect the impact of changes in the valuation selected ultimates and claims payment patterns (i.e. based on unchanged selection of discount rates and margins for adverse deviation). The column "dsct rate" reflects the impact of the change in the selected discount rate and the column "margins" reflects the impact of any changes in selected margins for adverse deviations.

(February 2016).

The current accident year and premium deficiency impacts are a result of the changes in the selected loss ratios for accident years **2016** (down 3.6 points from 120.6% to **117.0%**) and **2017** (down 4.7 points from 125.8% to **121.1%**).

The impacts related to actuarial present value adjustments are split into the impact prior to any change in the selected discount rate and margin changes (at the level they were selected, which was at the coverage and accident half-year level), the impact of then updating the discount rate, and finally the impact of any changes to the margins (at the level they are selected). The changes in actuarial present value adjustments are shown in the summary tables in columns [2], [4], and [5].

Column [2] recognizes that changing the nominal selections also changed the unpaid estimates (including changes to the relative mix by government line, which had an impact on the weighted-average margins for adverse deviations or "MfADs"). It also reflects the fact that we updated the projected emergence of claims payments, resulting in a change in the projected cash flows. These changes generated a favourable change of $2.8 million in the actuarial present value adjustments, prior to any changes in the selected discount rate and/or MfADs.

Claims payment emergence patterns were updated and cash flows were reviewed against the selected risk-free yield curve, derived from Government of Canada benchmark bond yields monthly series using values for December 2015. Column [4] accounts for the change in the **discount rate** selected (decreased 8 basis points to **0.90%**), indicating an unfavourable impact of $2.6 million. The impact *related only to claims liabilities* (i.e. PAYs plus CAY) was $2.3 million at March 2016 (projected $2.6 million impact at December 31, 2016) – this compares to the $2.9 million change one would estimate as the impact by interpolation using the interest rate sensitivity table provided in last month's Actuarial Highlights.

Column [5] accounts for any changes to selected MfADs. The selected **investment rate MfAD** was **left unchanged at 25 basis points** and the selected **claims development MfADs** at the coverage and accident year level were **left unchanged** as well.

Consideration was given to recent legal decisions and changes in legislation / regulation as noted above and outlined in section 1.4.

### 1.3 Appointed Actuary and Hybrid Actuarial Services Model

Liam McFarlane of Ernst & Young LLP is Facility Association's Appointed Actuary (effective as of June 1, 2013).

Facility Association operates under a "hybrid" model in relation to the management and provision of actuarial services. Under this model, actuarial services are performed by both Facility Association's internal staff and its external actuarial consulting firm. The hybrid model approach maximizes the efficiency of resource allocation while providing access to additional expertise and capacity as needed.

## 1.4 Consideration of Recent Legal Decisions and Changes in Legislation / Regulation[2]

Consideration and assessment of potential impacts of legal decisions and changes in legislation / regulation constitutes a regular part of the valuation process. Descriptions of some of the more recent changes are provided below.

**Ontario Bill 15** (Fighting Fraud and Reducing Automobile Insurance Rates Act, 2014) was introduced into the Legislature by the Minister of Finance on July 15, 2014 and received Royal Assent on November 20, 2014. Bill 15 includes various amendments and provisions such as, moving the Ontario Automobile Dispute Resolution System (DRS) for statutory accident benefits from the Financial Services Commission of Ontario to the Ministry of the Attorney General (Licence Appeal Tribunal), regulation of the Tow and Storage Industry (amendments to the Consumer Protection Act and Repair and Storage Liens Act), regulations related to licensing of insurance agents and adjusters, changes the applicable interest rate applied to overdue payments in the Statutory Accident Benefits Schedule (SABS), and changes to the prejudgement interest rate on general damages for non-pecuniary loss from the rate as set out in the Courts of Justice Act to rates linked to market conditions. At the September 30, 2015 valuation, reform adjustments specifically related to changes in the non-pecuniary prejudgment interest provision calculation impacting the bodily injury coverage and the applicable interest rate applied to overdue payments in the SABS impacting the accident benefits coverage, were included with the updated industry trend analysis (completed using industry data as at December 31, 2014), impacting the selection of ultimates.

**Ontario Bill 91** (Building Ontario Up Act (Budget Measures), 2015) was introduced into the Legislature by the Minister of Finance on April 23, 2015 and received Royal Assent on June 4, 2015. Bill 91 announced a number of amendments to regulations made under the Insurance Act, including: updating the Catastrophic Impairment Definition and changes to the standard benefit level under the Statutory Accident Benefits Schedule (SABS); restrictions on insurance premium increases and lowering of the maximum interest rate charged on monthly auto insurance premium payments; and adjustments to the monetary threshold beyond which the tort deductible does not apply to reflect inflation (adjustments to reflect inflation in the associated tort deductible were undertaken via an update to regulation 461/96). On August 26, 2015, the Ontario government filed Ontario regulations 250/15 and 251/15 implementing reforms set out in Bill 91. At the September 30, 2015 valuation, reform adjustments specifically related to changes in the tort threshold and deductibles impacting the bodily injury coverage and changes to the SABS impacting the bodily injury and accident benefits coverages, were included with the updated industry trend analysis (completed using industry data as at December 31, 2014) and nominal valuation estimates, impacting the selection of ultimates.

## 1.5 Ontario RSP Bodily Injury Case Reserve summary

As indicated in the previous section, reform adjustments, specifically related to changes in the non-pecuniary prejudgement interest provisions in **Ontario Bill 15** and the changes in the tort threshold and deductibles in **Ontario Bill 91** impacting the third party liability - bodily injury coverage for accident year 2015 and subsequent, was included with the updated Ontario Private Passenger Vehicle industry trend analysis (completed using industry data as at June 30, 2015).

[2]How bills become laws in Ontario is described in detail in the publication: http://www.ontla.on.ca/lao/en/media/laointernet/pdf/bills-and-lawmaking-background-documents/how-bills-become-law-en.pdf.

There have been two conflicting Ontario Superior Court decisions in relation to the application of prejudgement interest provisions: Carillo v. Rizzo (April 15, 2015) and El-Khodr v. Lackie et al (July 28, 2015). In the first, the judge ruled that the change to prejudgement interest for non-pecuniary losses[3] from a set level of 5% to the level that applies to pecuniary losses applies retroactively (i.e. applies to all open claims), whereas in the second, the judge ruled that the change applies only to claims where notification was provided to the insurer on or after January 1, 2015. FA's current view is that the second judgement supersedes the first, and no adjustments have been made to the provisions for accident years 2014 and prior as a result.

In addition to the above, there have also been multiple conflicting Ontario Superior Court decisions in relation to the application of the changes in the tort threshold and deductibles: Cobb v. Long Estates (November 13, 2015), Vickers v. Palacious (December 8, 2015) and ) and Corbett v. Odorico (March 22, 2016). In the first, the judge ruled that the changes to the tort threshold and deductibles were substantive in nature such that the defendant was not entitled to apply the higher deductible, whereas in the second and third, the judges concluded the deductible change is procedural on the grounds that the cap on damages and the statutory deductible were implemented to achieve particular policy objectives and therefore applied retroactively (i.e. applies to all open claims). FA's current view, consistent with the latter two judgments, is that the changes to the applicable tort threshold and deductibles are applied on a settlement date basis. We've included a -2.25%[4] retroactive adjustment to Ontario third party liability - bodily injury unpaid amounts (outstanding case and selected IBNR) using negative IBNR, impacting AY2014/2 and prior. We have applied a 50% tempering factor to the AY2015/1 selected adjustment factor as these are settlements that are negotiated globally and hence there may be erosion of the deductible.

Recognizing that individual members may interpret these results differently, we have included a table at the top of the next page displaying the current levels of Ontario RSP Third Party Liability – Bodily Injury Case Reserves (as at December 31, 2015) by accident year as well as projected average duration, from accident date to projected settlement date, from the December 31, 2015 valuation paid emergence projection model. No attempt has been made to distinguish case reserves held for pecuniary versus non-pecuniary losses, nor in estimating the amount of prejudgment interest, if any, is included in the case reserve estimates.

[3] **Pecuniary** awards are defined on the Ontario Attorney General's website as "Damages that can be measured in money (i.e., special damages)" with special damages further defined as "Damages intended to compensate a plaintiff for a quantifiable monetary loss. Examples of such losses include: lost earnings, medical bills, and repair costs." In contrast, **non-pecuniary** awards defined as "Damages that cannot be measured in money, but nevertheless are compensated for with money (i.e., general damages)" with general damages further defined as "Damages for non-monetary losses suffered by a plaintiff. These damages are not capable of exact quantification. Examples of such losses suffered include pain, suffering, and disfigurement."

[4] The original adjustment with the 2015 Q3 valuation was -3.00%, with the intent to reduce this by 0.75 points with each subsequent valuation, reaching 0.00% with the 2016 Q3 valuation.

**ON RSP** (Amounts in $000s; as at Dec. 31, 2015)

| AY | Curr BI Case | avg yrs to Dec 2015 | projected avg # yrs to settlement | projected avg duration |
|---|---|---|---|---|
| 1993 | - | 22.5 | - | - |
| 1994 | - | 21.5 | - | - |
| 1995 | - | 20.5 | - | - |
| 1996 | 168 | 19.5 | 2.6 | 22.1 |
| 1997 | - | 18.5 | - | - |
| 1998 | - | 17.5 | - | - |
| 1999 | - | 16.5 | - | - |
| 2000 | - | 15.5 | - | - |
| 2001 | - | 14.5 | - | - |
| 2002 | - | 13.5 | - | - |
| 2003 | 38 | 12.5 | 6.4 | 18.9 |
| 2004 | - | 11.5 | 6.9 | 18.4 |
| 2005 | 70 | 10.5 | 7.4 | 17.9 |
| 2006 | 640 | 9.5 | 4.8 | 14.3 |
| 2007 | 2,012 | 8.5 | 3.1 | 11.6 |
| 2008 | 5,983 | 7.5 | 2.6 | 10.1 |
| 2009 | 11,116 | 6.5 | 2.4 | 8.9 |
| 2010 | 24,857 | 5.5 | 2.5 | 8.0 |
| 2011 | 26,424 | 4.5 | 2.3 | 6.8 |
| 2012 | 40,771 | 3.5 | 2.4 | 5.9 |
| 2013 | 54,426 | 2.5 | 2.7 | 5.2 |
| 2014 | 45,063 | 1.5 | 3.3 | 4.8 |
| 2015 | 29,944 | 0.5 | 4.1 | 4.6 |
| **TOTAL** | **241,512** | **3.2** | **2.9** | **6.0** |

In the above table, the column "projected avg duration" is an estimate of the number of years from claim occurrence[5] to claim settlement, via summing the average number of years from claim occurrence to December 31, 2015 (3rd column) and from December 31, 2015 to settlement (4th column).

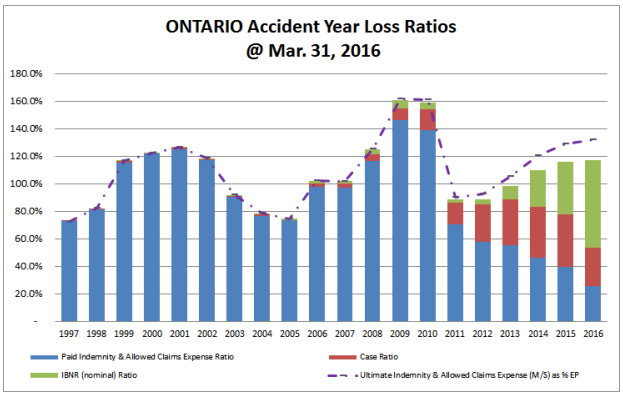
## 1.6 Current Provision Summary

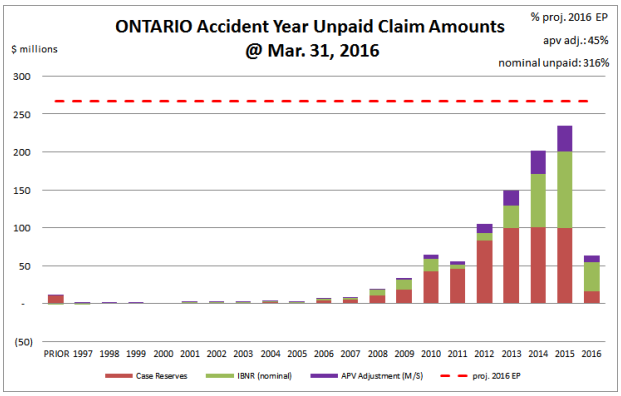
The charts at the top of the next page show the current levels of claim liabilities[6] booked by accident year[7]. The left chart displays life-to-date payments, case reserves, IBNR, and the total including actuarial present value adjustments against accident year earned premium. The right chart shows the associated dollar amounts for the components of the claim liabilities and the current projected amount of 2016 full year earned premium (the red hash-mark line) to provide some perspective.

[5]Pre-judgement interest in Ontario applies to the period from the date the claim is reported, not from the time of occurrence. We have provided the latter to allow actuarial judgement to be applied in estimating the lag between occurrence and reporting.

[6]Claim liabilities refer to provision for unpaid indemnity and allowed claims expenses. Allowed claims expenses are first party legal and other expenses as listed in the RSP Claims Guide. Claims expenses paid through the member company expense allowance are NOT included in this discussion.

[7]The loss ratio chart has been limited to show the most recent 20 accident years; the unpaid provision chart has been limited to show the most recent 20 accident years, and show all accident years older than 20 years collectively as "PRIOR".




*"M/S" refers to "Member Statement" values – that is, actuarial present value adjustments at the selected discount rate.*

The current actuarial present value adjustments provision for claims liabilities ($120.5 million – see table below) represents 45% of the earned premium projected for the full year 2016 (see the upper right corner of the right chart above). If our current estimates of the nominal unpaid amounts prove to match actual claims payments, the actuarial present value adjustments will be released into the net operating result over future periods.

claim liabilities ($000s)

| | amt | % |
|---|---|---|
| case | 541,622 | 56.2% |
| ibnr | 302,421 | 31.4% |
| M/S apv adjust. | 120,505 | 12.5% |
| M/S total | 964,548 | 100.0% |

The table to the left breaks down the Member Statement (M/S) claim liabilities total into component parts, indicating case reserves represent the largest portion. Approximately 46% of the IBNR balance relates to accident years 2015 and 2016 (see Exhibit B). Approximately 78% of the M/S total claim liabilities are related to accident years 2012-2016 inclusive (i.e. the most recent 5 accident years), and approximately 3% is related to accident years 2006 and prior (i.e. prior to the most recent 10 accident years).

The tables immediately below summarize the premium liabilities and the total policy liabilities.

premium liabilities ($000s)

| | amt | % |
|---|---|---|
| unearned prem | 114,725 | 75.3% |
| prem def/(dpac) | 20,014 | 13.1% |
| M/S apv adjust. | 17,590 | 11.5% |
| M/S total | 152,329 | 100.0% |

policy liabilities ($000s)

| | amt | % |
|---|---|---|
| claim | 844,043 | 75.6% |
| premium | 134,739 | 12.1% |
| M/S apv adjust. | 138,095 | 12.4% |
| M/S total | 1,116,877 | 100.0% |

## 2 Activity During the Month of March 2016

### 2.1 Recorded Premium and Claims Activity

The table at the top of the next page summarizes the extent to which premiums and claims amounts recorded during the month differ from projections reflected in the prior month's Operational Report[8].

[8]There may be rounding differences in values in this document compared with the associated Bulletin and/or Operational Report.

*Ontario RSP Actual vs Projected Summary: Recorded Transaction Amounts ($ thousands)*

| Table 01 | Earned Premium | | Paid Indemnity & Allowed Claims Expense | | Case increase / (decrease) | | Recorded increase / (decrease) | |
|---|---|---|---|---|---|---|---|---|
| Accident Year | Actual | Actual less Projected | Actual | Actual less Projected | Actual | Actual less Projected | Actual | Actual less Projected |
| Prior | (1) | (1) | 10,197 | 1,703 | (8,355) | (2,353) | 1,841 | (651) |
| 2014 | 1 | 1 | 2,640 | 809 | (43) | 129 | 2,597 | 938 |
| 2015 | (75) | (75) | 3,462 | (1,714) | 2,441 | 2,126 | 5,903 | 412 |
| 2016 | 20,383 | (592) | 7,527 | (524) | 4,515 | (982) | 12,042 | (1,505) |
| TOTAL | 20,308 | (667) | 23,826 | 274 | (1,443) | (1,080) | 22,383 | (806) |

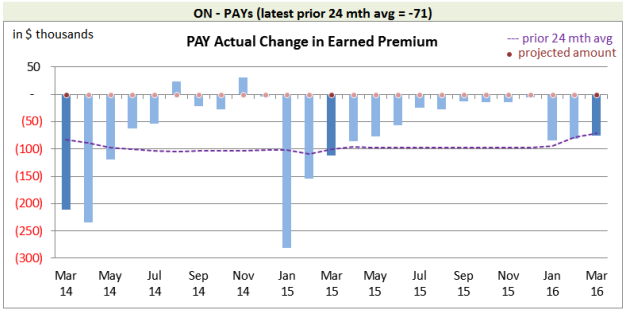
(Recorded transaction amounts exclude IBNR & other actuarial provisions)

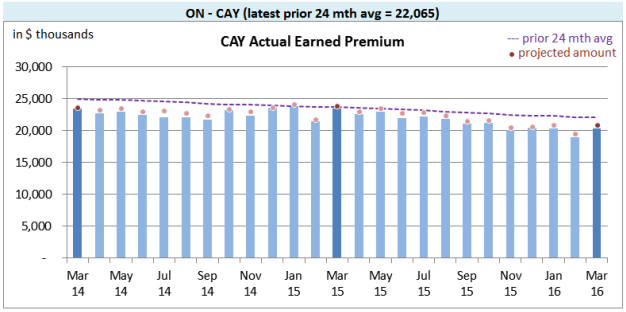
Claims transaction activity is generally volatile and changes from one month to the next are anticipated due to this natural "process variance". Each month, the projection variances are reviewed for signs of projection bias and to identify potential ways to reduce the level of the variance. Commentary from our review is provided in the sub-sections that follow.

### 2.1.a Actual vs. Projected (AvsP): Earned Premium

The charts immediately below show actual **earned premium**[9] activity in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

*Ontario RSP Actual **Earned Premium** by Calendar Month*



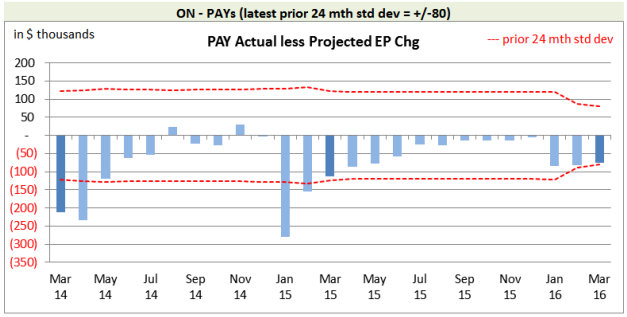



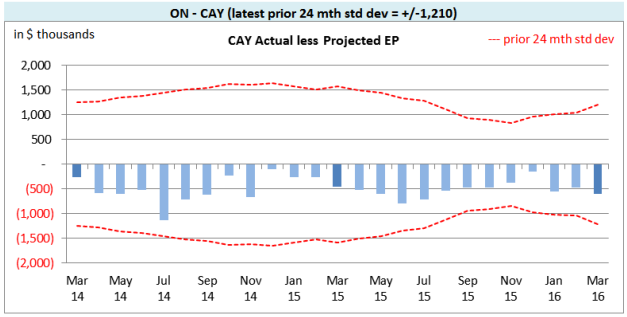

**Earned premium** changes during a given calendar month in relation to prior accident years tend to be at modest levels (note the different scales in the charts above), although relatively high levels generally occur at the beginning of each year.

The associated variance between the actual changes and the projections from the previous month are shown in the charts at the top of the next page. **Earned premium** change projections are all attributed to the current accident year as the projection upload does not accept **earned premium** changes for other accident years. We do not see this limitation as being significant for our purposes, but it does mean that the actual less projection variance will equal the actual **earned premium** change in relation to prior accident years.

[9]Premium is earned on a daily basis based on the transaction term measured in days. As a result, months with 31 days earned relatively more than those with 30 days, and February earns the least.

*Ontario RSP Actual vs. Projected Summary:* ***Earned Premium*** *Variances by Calendar Month*



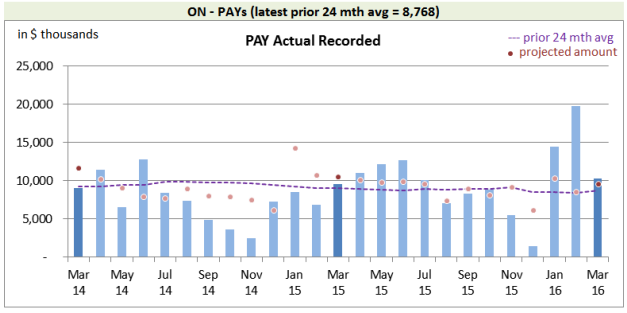

| On Latest $ thousands | | |
|---|---|---|
| **Earned Premium** | PAYs | CAY |
| Mthly Avg EP Chg (prior 24 mths) | (71) | 22,065 |
| std dev | 80 | 1,210 |
| A-P <> std dev | 4 | - |
| % <> std dev | 16.0% | 0.0% |
| norm <> std dev | 31.7% | 31.7% |

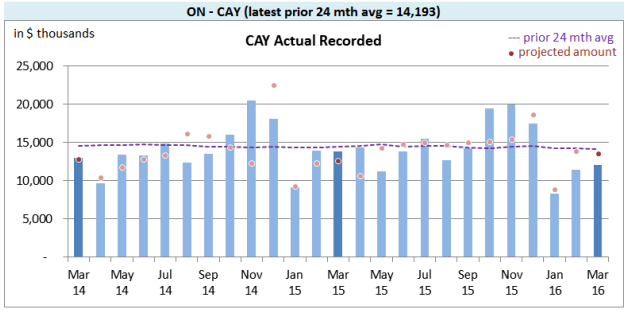
We project **earned premium** changes from known unearned premium and projected written premium levels, but upload the total projections as current accident year (CAY). This process has generated bias[10], with actuals generally lower than projected. However, the magnitude is not high relative to monthly premium, and the variances are within the prior 24-month standard deviation for monthly earned premium more often than indicated by a normal distribution (see table above). Over time, we may consider other projection approaches to narrow monthly variance levels further, but it is not currently deemed a priority.

### 2.1.b AvsP: Recorded Indemnity & Allowed Claims Expense

Actual **recorded** activity (**paid** and case reserve changes) over the last 25-month period is shown in the charts immediately below, including the "prior 24-month average" level.

*Ontario RSP Actual* ***Recorded*** *by Calendar Month*

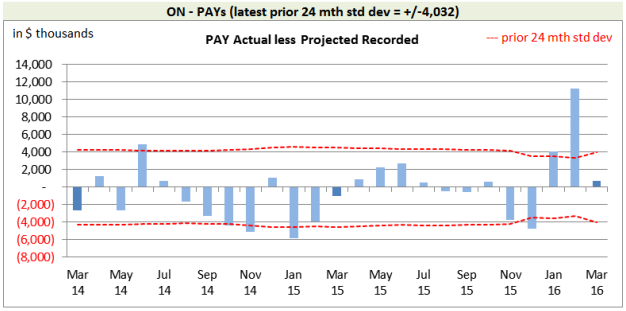


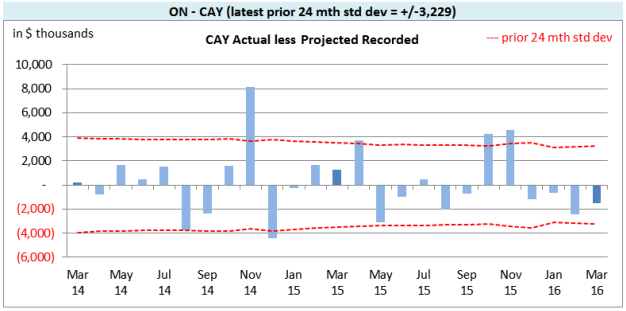




**Recorded** activity variances from the previous month's projections are shown in the charts at the top of the next page, including the "prior 24-month standard deviation" levels.

[10]The prior accident years (PAYs) variances will show bias as the projection upload forces all earned premium projections to be attributed to the current accident year.

*Ontario RSP Actual vs Projected Summary:* ***Recorded*** *Variances by Calendar Month*




| On Latest $ thousands | | |
|---|---|---|
| **Recorded** | PAYs | CAY |
| Mthly Avg Recorded (prior 24 mths) | 8,768 | 14,193 |
| std dev | 4,032 | 3,229 |
| A-P <> std dev | 7 | 5 |
| % <> std dev | 28.0% | 20.0% |
| norm <> std dev | 31.7% | 31.7% |

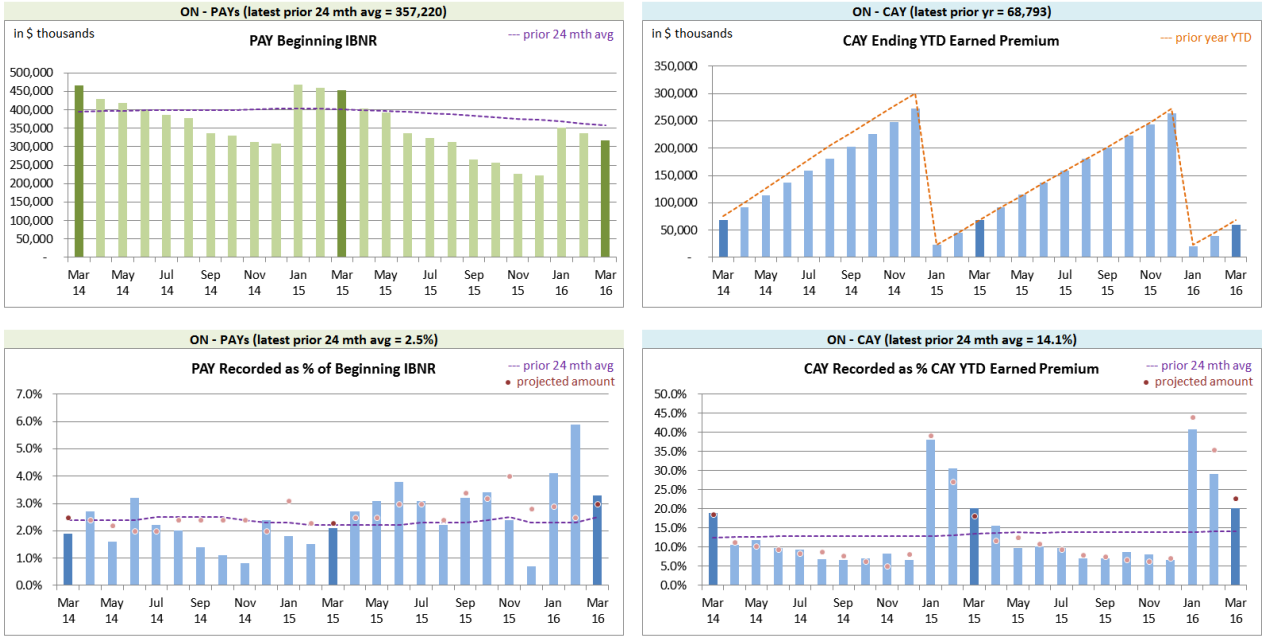
With respect to **recorded** indemnity & allowed claims expense, 28% of the prior accident years' (PAYs) variances (left chart above) were outside of one standard deviation over the period, suggesting the projection process has performed little better than simply projecting the prior 24-month average amount. In addition, there was evidence that bias may have been creeping in at the end of 2014 and into the start of 2015 (where actuals tended to be lower than our projections), although adjustments made to our projections seem to have been successful in reducing this bias. We also note that the ratio of PAYs' **recorded** activity relative to beginning IBNR has been below the average of the preceding 24-months for those months where our projections have been too high (see bottom left chart at top of the next page). We continue to investigate to understand the implications to our projections and make adjustments accordingly.

The current accident year (CAY) **recorded** variances (right chart above) fell outside of one standard deviation 20% of the time over the entire period, suggesting that the projection process performs somewhat better than simply projecting the prior 24-month average amount. We see no evidence of systemic bias in the variances.

The method for establishing IBNR adjusts automatically for changes in **earned premium** and **recorded** claims activity level (see sections 2.2 and 3).

We have included, for reference, additional charts at the top of the next page related to levels influencing **recorded** activity.

*Ontario RSP Levels that influence*[11] ***Recorded*** *activity by Calendar Month*




We track beginning prior accident years' IBNR as **recorded** activity "comes out of" IBNR. Changes in the prior accident years' beginning IBNR (see upper left chart above) occur for several possible reasons:

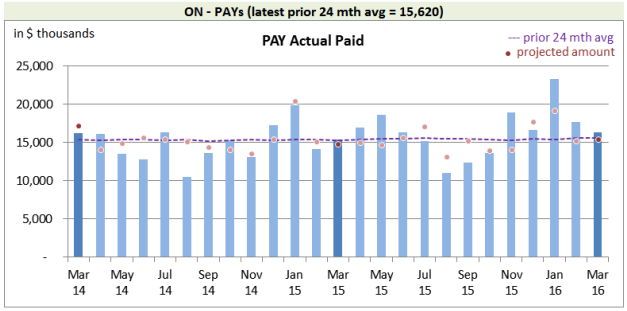
- to offset actual **recorded** activity (through loss ratio matching);
- the annual switchover as a current accident year becomes a prior accident year (occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of prior accident years' ultimate (will show up as a beginning IBNR change one month after the valuation is implemented, i.e. the change will generally show in April, June, September, and November).

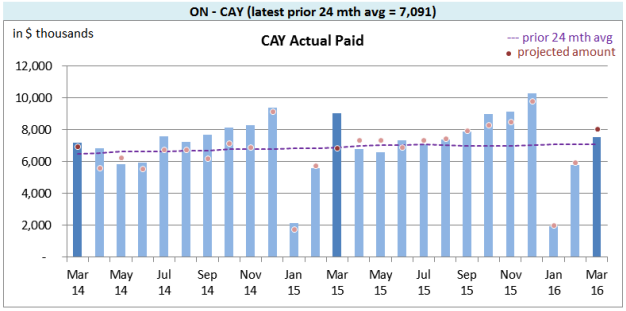
### 2.1.c AvsP: Paid Indemnity & Allowed Claims Expense

The charts at the top of the next page show actual **paid** activity in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

[11]Our recorded activity projections for the prior accident years are based on selected ratios of recorded activity to beginning unpaid balances, whereas the current accident year projections are based on selected ratios of year-to-date IBNR to year-to-date selected ultimate (i.e. selected LR x earned premium), deriving year-to-date recorded as selected ultimate less IBNR. In both cases, the ratio selection is based on our review of the more recent recorded activity and recent AvsP analyses.

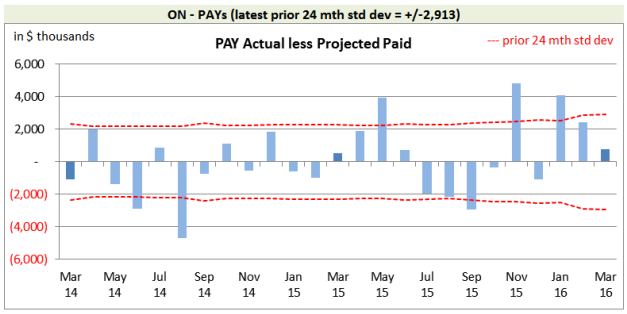
*Ontario RSP Actual **Paid** activity by Calendar Month*

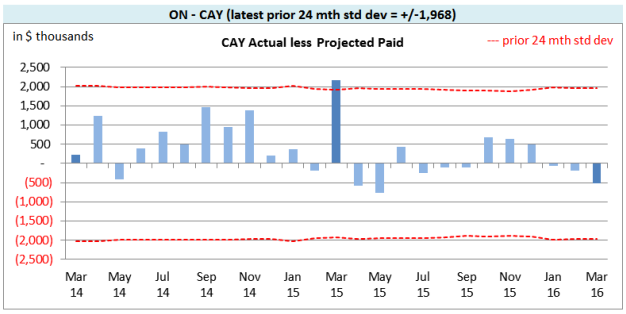



The charts immediately below show the actual less projected **paid** variances for the last 25 calendar months, along with bands for the "prior 24-month standard deviations" to show how the variances from projection compare with historical standard deviations.

*Ontario RSP Actual vs Projected Summary: **Paid** Variances by Calendar Month*



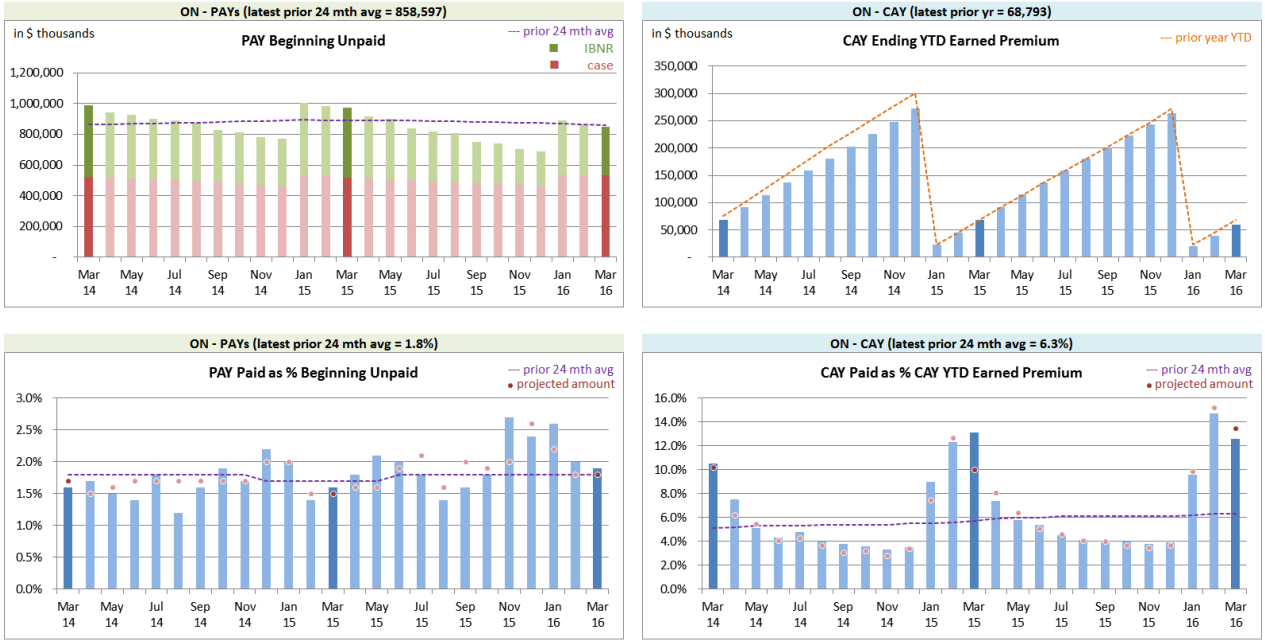

| On Latest $ thousands | | |
|---|---|---|
| **Paid** | PAYs | CAY |
| Mthly Avg Paid (prior 24 mths) | 15,620 | 7,091 |
| std dev | 2,913 | 1,968 |
| A-P <> std dev | 6 | 1 |
| % <> std dev | 24.0% | 4.0% |
| norm <> std dev | 31.7% | 31.7% |

With respect to **paid** indemnity & allowed claims expense, 24% of the prior accident years' (PAYs) variances (left chart above) over the last 25 calendar months have fallen outside of one standard deviation, suggesting the projection process has performed somewhat better than projecting simply based on the preceding 24-month average. There does not appear to be evidence of bias.

The current accident year (CAY) **paid** variances (right chart above) do not raise concerns over our projection process with respect to magnitudes projected, although there is evidence of bias (actuals tended to be higher than our projections). We have implemented adjustments to address this and they seem to be working.

We have included, for reference, additional charts at the top of the next page related to levels influencing **paid** activity.

*Ontario RSP Levels that influence[12] Paid activity by Calendar Month*




We track beginning prior accident years' unpaid balance (case and IBNR) as **paid** activity "comes out of" the unpaid balance. Changes in the prior accident years' beginning unpaid balance (see upper left chart above) occur for several possible reasons:

- to offset actual **paid** activity (may reduce case or IBNR or both);
- the annual switchover as a current accident year becomes a prior accident year (occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of prior accident years' ultimate (will show up as a beginning unpaid balance change one month after the valuation is implemented, i.e. the change will generally show in April, June, September, and November).

## 2.2 Actuarial Provisions

An "ultimate loss ratio matching method" (described in section 3) is used to determine the month's IBNR[13], and factors are applied to the nominal unpaid claims liability (case plus IBNR) to determine the discount amount (shown as a negative value to indicate its impact of reducing the liability) and the Provisions for Adverse Deviations. The loss ratios and the factors used to determine the projections and actuals were based on the applicable valuation. The table at the top of the next page summarizes variances in provisions included in the March 2016 Operational Report and the associated one-month projections from last month's Report.

[12]Our paid projections for the prior accident years are based on selected ratios of paid to beginning unpaid balances, whereas the current accident year projections are based on selected ratios of year-to-date paid to year-to-date selected ultimate indemnity (i.e. selected LR x earned premium). In both cases, the ratio selection is based on our review of the more recent recorded activity and recent AvsP analyses.

[13]For ease of discussion, "IBNR" is used in place of "provisions for incurred but not recorded (IBNR) and development".

*Ontario RSP Actual vs Projected Summary: IBNR and APV Amounts ($ thousands)*

Table 02

| | actuarial present value adjustments | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | IBNR | | Discount Amount | | Provisions for Adverse Deviations | | IBNR + actuarial present value adjustments | |
| Accident Year | Actual | Actual less Projected | Actual | Actual less Projected | Actual | Actual less Projected | Actual | Actual less Projected |
| Prior | 92,787 | (29,392) | (13,405) | 3,829 | 60,549 | (4,578) | 139,931 | (30,141) |
| 2014 | 71,131 | (10,152) | (4,453) | 805 | 34,397 | (1,904) | 101,075 | (11,251) |
| 2015 | 100,414 | (3,921) | (5,802) | 657 | 40,256 | 1,126 | 134,868 | (2,138) |
| 2016 | 38,089 | (1,360) | (1,694) | 301 | 10,657 | (415) | 47,052 | (1,474) |
| TOTAL | 302,421 | (44,825) | (25,354) | 5,592 | 145,859 | (5,771) | 422,926 | (45,004) |

The IBNR provision is $44.8 million lower than projected, counterbalancing the recorded claims activity and adjusting for the earned premium variance impacts indicated in section 2.1, and due to the valuation implementation.

Exhibit G shows the accident year IBNR amount change from last month to this month broken down into:

(i) the change projected last month;

(ii) the additional change due to variances in earned premium (because we apply a loss ratio to earned premium in determining ultimate level) and/or recorded claims (as IBNR is calculated as ultimate less recorded) differences; and

(iii) the additional change due to valuation implementation impacts (as applicable)

The variances associated with (ii) above are discussed in sections 2.1.a and 2.1.b.

The table immediately below summarizes the variances in the provisions for the premium deficiency amounts (this RSP remains in a premium deficiency liability position) included in the March 2016 Operational Report and the one-month projections from last month's Report. Variances are mainly driven by the unearned premium variance and due to the valuation implementation.

*Ontario RSP Actual vs Projected Summary: Premium Deficiency / (DPAC) Amounts ($ thousands)*

Table 03

| | Premium Deficiency / (Deferred Policy Acquisition Costs) | | actuarial present value adjustments | | Premium Deficiency / (DPAC) including actuarial present value adjustments | |
|---|---|---|---|---|---|---|
| | Actual | Actual less Projected | Actual | Actual less Projected | Actual | Actual less Projected |
| balance: | 20,014 | (4,794) | 17,590 | (629) | 37,604 | (5,423) |
| balance as % unearned premium: | 17.4% | (3.7%) | 15.3% | (0.1%) | 32.8% | (3.8%) |
| actual unearned premium: | 114,725 | | | | | |
| less projected: | (2,718) | | | | | |

## 3 Ultimate Loss Ratio Matching Method

An "ultimate loss ratio matching method" continues to be applied to the current month and two projected months shown in the Operational Reports, with IBNR determined by accident year as follows:

(a) Earned premium to-date
(b) Ultimate loss[14] ratio per latest valuation
(c) Estimated ultimate incurred = (a) x (b)
(d) Recorded indemnity & allowed claims expense to-date
(e) IBNR = (c) – (d)

## 4 Calendar Year-to-Date Results

The table below summarizes the calendar year-to-date results for indemnity & allowed claims expenses[15], including IBNR.

In calculating the amounts as percentages of earned premium, the calendar year-to-date earned premium has been used, which includes earned premium associated with the current accident year but also earned premium adjustments related to prior accident years. Specifically, the current accident year (CAY) ratio in the table is 117.5% rather than 117.0% (the valuation ultimate ratio for accident year 2016), as the calendar year-to-date earned premium includes prior accident year earned premium adjustments. (Note that the ratios in this table may differ slightly from those shown in the Ontario RSP Summary of Operations due to rounding.)

*Ontario RSP Calendar Year-to-Date Indemnity & Allowed Claims Expense Summary ($ thousands)*

| Table 04 | YTD Nominal Values | | YTD actuarial present value adjustment | | YTD Total | | Change from Prior Month YTD | |
|---|---|---|---|---|---|---|---|---|
| | Amount | % EP | Amount | % EP | Amount | % EP | Amount | LR pts |
| PAYs | (42,960) | (72.2%) | (7,458) | (12.5%) | (50,418) | (84.7%) | (44,858) | (70.5%) |
| CAY | 69,919 | 117.5% | 8,963 | 15.1% | 78,882 | 132.5% | 25,063 | (4.8%) |
| TOTAL | 26,959 | 45.3% | 1,505 | 2.5% | 28,464 | 47.8% | (19,795) | (75.3%) |

("% EP" based on 2016 calendar year-to-date earned premium; ratios may not total due to rounding)

The prior accident years (PAYs) changes from last month are due to the release of the actuarial present value adjustments with claims payments and due to the valuation implementation. The loss ratio change year-to-date reflects not only changes in the prior accident year levels, but also the increase in the calendar year-to-date earned premium with an additional month's earned premium and due to the valuation implementation.

For the current accident year, changes in the year-to-date total reflects the additional month's exposure and regular changes to actuarial present value adjustments as the year ages and due to the valuation implementation.

## 5 Current Operational Report – Additional Exhibits

Section 6 provides exhibits pertaining to the actuarial provisions reflected in the current month's Operational Report.

IBNR (including actuarial present value adjustments) presented in section 6, Exhibit A, were derived on a discounted basis, and therefore reflect the time value of money and include an explicit provision

[14] "Loss" here refers to indemnity and allowed claims expenses, but does not include the claims expense allowance included in member company overall expense allowances ("Expense Allowance" in the Operational Report).

[15] Allowed claims expenses are first party legal and other expenses as listed in the RSP Claims Guide. Claims expenses paid through the member company expense allowance are NOT included in this analysis.

for adverse deviations in accordance with accepted actuarial practice in Canada.

IBNR presented in section 6, Exhibit B, does NOT include any actuarial present value adjustments. The "Total IBNR" from this exhibit is shown in the Operational Report as "Undiscounted IBNR".

The ultimate loss ratios presented in section 6, Exhibit B, refer to the estimates derived on the basis of various actuarial methodologies applied to the experience of the Ontario Risk Sharing Pool for the purposes of the most recent quarterly valuation. As discussed in section 3, IBNR in the current month's Operational Report was derived as the difference between the estimated ultimate for the claims amount (i.e. earned premium x ultimate loss ratio) and the associated current recorded amounts (life-to-date payments plus current case reserves).

## 6 EXHIBITS

The exhibits listed below are provided on the pages that follow:

| | |
|---|---|
| EXHIBIT A | IBNR for Member Sharing – includes Actuarial Present Value Adjustments |
| EXHIBIT B | IBNR |
| EXHIBIT C | Premium Liabilities |
| EXHIBIT D | Projected Year-end Policy Liabilities |
| EXHIBIT E | Discount Rate & Margins for Adverse Deviations |
| EXHIBIT F | Interest Rate Sensitivity |
| EXHIBIT G | Components of IBNR Change During Month |

# EXHIBIT A

## IBNR for Member Sharing – includes Actuarial Present Value Adjustments

TABLE EXHIBIT A

IBNR + M/S actuarial present value adjustments

discount rate
0.90%

interest rate margin
25 basis pts

| Accident Year | Actual Feb. 2016 | Actual Mar. 2016 | Projected Apr. 2016 | Projected May. 2016 | Projected Dec. 2016 |
|---|---|---|---|---|---|
| | Amounts in $000s | | | | |
| prior | 352 | 872 | 853 | 837 | 731 |
| 1997 | (30) | (28) | (27) | (26) | (20) |
| 1998 | 78 | 79 | 78 | 77 | 69 |
| 1999 | 304 | 158 | 154 | 151 | 131 |
| 2000 | 295 | 146 | 143 | 140 | 123 |
| 2001 | 719 | 469 | 459 | 448 | 389 |
| 2002 | 1,064 | 706 | 692 | 678 | 589 |
| 2003 | 1,226 | 933 | 914 | 896 | 777 |
| 2004 | 1,512 | 1,348 | 1,321 | 1,295 | 1,124 |
| 2005 | 1,575 | 1,681 | 1,648 | 1,614 | 1,402 |
| 2006 | 3,823 | 3,171 | 3,108 | 3,046 | 2,645 |
| 2007 | 4,082 | 3,642 | 3,570 | 3,498 | 3,037 |
| 2008 | 8,882 | 8,657 | 8,484 | 8,314 | 7,218 |
| 2009 | 19,005 | 15,478 | 15,168 | 14,864 | 12,905 |
| 2010 | 23,780 | 20,918 | 20,499 | 20,090 | 17,441 |
| 2011 | 16,154 | 10,392 | 10,184 | 9,980 | 8,683 |
| 2012 | 31,540 | 22,312 | 21,865 | 21,425 | 18,642 |
| 2013 | 59,079 | 48,997 | 48,116 | 47,250 | 41,100 |
| 2014 | 114,299 | 101,075 | 99,352 | 97,660 | 85,044 |
| 2015 | 143,334 | 134,868 | 125,630 | 117,537 | 102,901 |
| 2016 | 34,031 | 47,052 | 60,990 | 77,141 | 166,566 |
| TOTAL | 465,104 | 422,926 | 423,201 | 426,915 | 471,497 |
| Change | | (42,178) | 275 | 3,714 | |

*Please see Exhibit G, page 1 for Components of Change during Current Month*

# EXHIBIT B

## IBNR

TABLE EXHIBIT B

Amounts in $000s

IBNR

| Ultimate Loss Ratio | Accident Year | Actual Feb. 2016 | Actual Mar. 2016 | Projected Apr. 2016 | Projected May. 2016 | Projected Dec. 2016 |
|---|---|---|---|---|---|---|
| - | prior | (395) | (41) | (40) | (39) | (32) |
| 72.7% | 1997 | (40) | (38) | (37) | (36) | (29) |
| 82.1% | 1998 | 20 | 20 | 20 | 20 | 20 |
| 116.5% | 1999 | 221 | 83 | 81 | 79 | 69 |
| 122.2% | 2000 | 275 | 136 | 133 | 130 | 114 |
| 126.5% | 2001 | 624 | 384 | 376 | 368 | 319 |
| 118.5% | 2002 | 951 | 609 | 597 | 585 | 508 |
| 91.6% | 2003 | 1,113 | 828 | 811 | 795 | 690 |
| 78.4% | 2004 | 1,360 | 1,194 | 1,170 | 1,147 | 996 |
| 74.4% | 2005 | 1,485 | 1,583 | 1,551 | 1,520 | 1,320 |
| 101.7% | 2006 | 3,468 | 2,825 | 2,768 | 2,713 | 2,356 |
| 101.6% | 2007 | 3,630 | 3,193 | 3,129 | 3,066 | 2,662 |
| 124.8% | 2008 | 7,716 | 7,455 | 7,306 | 7,160 | 6,216 |
| 160.4% | 2009 | 16,719 | 13,246 | 12,981 | 12,721 | 11,045 |
| 159.1% | 2010 | 18,389 | 15,466 | 15,157 | 14,854 | 12,895 |
| 88.3% | 2011 | 11,055 | 5,576 | 5,464 | 5,355 | 4,648 |
| 88.6% | 2012 | 19,428 | 10,876 | 10,658 | 10,445 | 9,066 |
| 98.5% | 2013 | 38,652 | 29,392 | 28,804 | 28,228 | 24,506 |
| 109.6% | 2014 | 82,942 | 71,131 | 69,708 | 68,314 | 59,306 |
| 115.5% | 2015 | 109,826 | 100,414 | 92,381 | 85,452 | 74,183 |
| 117.0% | 2016 | 27,700 | 38,089 | 49,305 | 62,294 | 130,873 |
| | TOTAL | 345,139 | 302,421 | 302,323 | 305,171 | 341,731 |
| | Change | | (42,718) | (98) | 2,848 | |

*Please see Exhibit G, page 2 for Components of Change during Current Month*

# EXHIBIT C

## Premium Liabilities

TABLE EXHIBIT C

| Premium Liabilities | Actual Feb. 2016 | Actual Mar. 2016 | Projected Apr. 2016 | Projected May. 2016 | Projected Dec. 2016 |
|---|---|---|---|---|---|
| | Amounts in $000s | | | | |
| (1) unearned premium (UP) | 114,987 | 114,725 | 118,423 | 124,219 | 167,333 |
| FOR MEMBER SHARING | | | | | |
| (2) expected future costs ratio {% of (1)} | 136.4% | 132.8% | 133.0% | 133.4% | 137.2% |
| (3) expected future costs {(1) x (2)} | 156,866 | 152,329 | 157,534 | 165,680 | 229,534 |
| (4) premium deficiency / (deferred policy acquisition cost) | 41,879 | 37,604 | 39,111 | 41,461 | 62,201 |
| Excluding Actuarial Present Value Adjustments | | | | | |
| (5) expected future costs ratio {% of (1)} | 120.9% | 117.4% | 117.7% | 118.0% | 121.3% |
| (6) expected future costs {(1) x (5)} | 139,057 | 134,739 | 139,342 | 146,547 | 203,026 |
| (7) premium deficiency / (deferred policy acquisition cost) | 24,070 | 20,014 | 20,919 | 22,328 | 35,693 |

EXHIBIT D

Projected Year-end Policy Liabilities

The table below presents the projected policy liabilities as at December 31, 2016, broken down by component.

| Ontario | Projected Balances as at Dec. 31, 2016 ($000s) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ending 2016 | nominal values | | | actuarial present value adjustments (apvs) | | | | |
| Acc Yr | Case | IBNR | Total Unpaid | discount | investment PfAD | development PfAD | Total apvs | TOTAL |
| prior | 8,694 | (32) | 8,662 | (132) | 40 | 855 | 763 | 9,425 |
| 1997 | 133 | (29) | 104 | (2) | 1 | 10 | 9 | 113 |
| 1998 | 619 | 20 | 639 | (17) | 4 | 62 | 49 | 688 |
| 1999 | 774 | 69 | 843 | (26) | 7 | 81 | 62 | 905 |
| 2000 | 10 | 114 | 124 | (4) | 1 | 12 | 9 | 133 |
| 2001 | 743 | 319 | 1,062 | (44) | 12 | 102 | 70 | 1,132 |
| 2002 | 786 | 508 | 1,294 | (58) | 16 | 123 | 81 | 1,375 |
| 2003 | 792 | 690 | 1,482 | (73) | 19 | 141 | 87 | 1,569 |
| 2004 | 1,304 | 996 | 2,300 | (122) | 32 | 218 | 128 | 2,428 |
| 2005 | 260 | 1,320 | 1,580 | (92) | 25 | 149 | 82 | 1,662 |
| 2006 | 3,179 | 2,356 | 5,535 | (321) | 89 | 521 | 289 | 5,824 |
| 2007 | 3,811 | 2,662 | 6,473 | (330) | 91 | 614 | 375 | 6,848 |
| 2008 | 8,965 | 6,216 | 15,181 | (607) | 152 | 1,457 | 1,002 | 16,183 |
| 2009 | 15,389 | 11,045 | 26,434 | (952) | 264 | 2,548 | 1,860 | 28,294 |
| 2010 | 35,786 | 12,895 | 48,681 | (1,801) | 487 | 5,860 | 4,546 | 53,227 |
| 2011 | 38,004 | 4,648 | 42,652 | (1,493) | 384 | 5,144 | 4,035 | 46,687 |
| 2012 | 69,198 | 9,066 | 78,264 | (2,426) | 626 | 11,376 | 9,576 | 87,840 |
| 2013 | 84,932 | 24,506 | 109,438 | (2,736) | 657 | 18,673 | 16,594 | 126,032 |
| 2014 | 87,915 | 59,306 | 147,221 | (3,828) | 1,031 | 28,535 | 25,738 | 172,959 |
| 2015 | 92,560 | 74,183 | 166,743 | (4,836) | 1,334 | 32,220 | 28,718 | 195,461 |
| PAYs (sub-total): | 453,854 | 210,858 | 664,712 | (19,900) | 5,272 | 108,701 | 94,073 | 758,785 |
| CAY (2016) | 86,742 | 130,873 | 217,615 | (6,746) | 1,741 | 40,698 | 35,693 | 253,308 |
| **claims liabilities:** | 540,596 | 341,731 | 882,327 | (26,646) | 7,013 | 149,399 | 129,766 | 1,012,093 |
| | Unearned Premium | Premium Defiency / (DPAC) | Total Provision | discount | investment PfAD | development PfAD | Total apvs | TOTAL* |
| **premium liabilities:** | 167,333 | 35,693 | 203,026 | (5,471) | 1,418 | 30,561 | 26,508 | 229,534 |
| | | | | | | | | *Total may not be sum of parts, as apvs apply to future costs within UPR |
| **policy liabilities:** | | | **1,085,353** | **(32,117)** | **8,431** | **179,960** | **156,274** | **1,241,627** |

EXHIBIT E

Discount Rate & Margins for Adverse Deviations

The tables below present selected margins for adverse development by coverage (the total is a weighted average, based on the unpaid claims projection for December 31, 2016 from the valuation), followed by the selected discount rate and the associated margin for investment income.

Selected Claims Development MfADs (Dec. 31, 2015)

| Accident Year | Third Party Liability | Accident Benefits | Other Coverages | Total |
|---|---|---|---|---|
| 1994 | 10.0% | 10.0% | 10.0% | 10.0% |
| 1995 | 10.0% | 10.0% | 10.0% | 10.0% |
| 1996 | 10.0% | 10.0% | 10.0% | 10.0% |
| 1997 | 10.0% | 10.0% | 10.0% | 10.0% |
| 1998 | 10.0% | 10.0% | 10.0% | 10.0% |
| 1999 | 10.0% | 10.0% | 10.0% | 10.0% |
| 2000 | 10.0% | 10.0% | 10.0% | 10.0% |
| 2001 | 10.0% | 10.0% | 10.0% | 10.0% |
| 2002 | 9.3% | 10.0% | 10.0% | 10.0% |
| 2003 | 10.0% | 10.0% | 10.0% | 10.0% |
| 2004 | 10.0% | 10.0% | 10.0% | 10.0% |
| 2005 | 10.0% | 10.0% | 10.0% | 10.0% |
| 2006 | 10.0% | 10.0% | 10.0% | 10.0% |
| 2007 | 10.0% | 10.0% | 10.0% | 10.0% |
| 2008 | 10.0% | 10.0% | 9.5% | 10.0% |
| 2009 | 10.0% | 10.0% | 7.1% | 10.0% |
| 2010 | 12.5% | 12.5% | 11.3% | 12.5% |
| 2011 | 12.5% | 12.5% | 12.2% | 12.5% |
| 2012 | 15.0% | 15.0% | 12.6% | 15.0% |
| 2013 | 17.5% | 17.5% | 15.7% | 17.5% |
| 2014 | 19.9% | 20.0% | 17.3% | 19.9% |
| 2015 | 19.9% | 20.0% | 17.2% | 19.9% |
| 2016 | 19.3% | 20.0% | 7.9% | 19.3% |
| prem liab | 15.5% | 20.0% | 5.3% | 15.5% |

| | |
|---|---|
| discount rate: | 0.90% |
| margin (basis points): | 25 |

# EXHIBIT F

## Interest Rate Sensitivity

The tables below present sensitivity to the member statement claims liability as projected to Dec. 31, 2016 from the latest valuation date (projections in exhibits A to D are to Dec. 31, 2016 and based on more up-to-date information). We have included both the current valuation selection (0.90%), the prior valuation assumption (0.98%) and the prior fiscal year end valuation assumption (0.98%) for comparative purposes. A 25 basis point margin for investment return adverse deviation is used in all scenarios presented.

$ Format: $000s

| | Actuarial Present Value of Provisions at Various Discount Rates - Dec. 31, 2016 projected Unpaid | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AY** | 0.40% | 0.90% | 1.40% | 1.90% | 2.40% | 2.90% | 0.98% | 0.98% |
| 2001 & prior | 12,107 | 11,970 | 11,836 | 11,706 | 11,578 | 11,453 | 11,948 | 11,948 |
| 2002 | 1,593 | 1,552 | 1,513 | 1,475 | 1,439 | 1,404 | 1,546 | 1,546 |
| 2003 | 1,801 | 1,751 | 1,704 | 1,658 | 1,614 | 1,572 | 1,743 | 1,743 |
| 2004 | 2,749 | 2,667 | 2,588 | 2,513 | 2,441 | 2,372 | 2,654 | 2,654 |
| 2005 | 1,840 | 1,780 | 1,723 | 1,668 | 1,616 | 1,567 | 1,771 | 1,771 |
| 2006 | 5,592 | 5,410 | 5,238 | 5,074 | 4,918 | 4,770 | 5,381 | 5,381 |
| 2007 | 6,523 | 6,336 | 6,160 | 5,993 | 5,835 | 5,685 | 6,307 | 6,307 |
| 2008 | 15,769 | 15,411 | 15,072 | 14,749 | 14,444 | 14,156 | 15,354 | 15,354 |
| 2009 | 29,049 | 28,459 | 27,902 | 27,374 | 26,873 | 26,395 | 28,368 | 28,368 |
| 2010 | 56,702 | 55,533 | 54,428 | 53,374 | 52,375 | 51,423 | 55,352 | 55,352 |
| 2011 | 45,055 | 44,170 | 43,331 | 42,530 | 41,766 | 41,035 | 44,031 | 44,031 |
| 2012 | 71,433 | 70,193 | 69,017 | 67,893 | 66,817 | 65,788 | 70,006 | 70,006 |
| 2013 | 116,196 | 114,557 | 112,964 | 111,438 | 109,986 | 108,578 | 114,283 | 114,283 |
| 2014 | 170,329 | 167,867 | 165,522 | 163,216 | 161,045 | 158,934 | 167,486 | 167,486 |
| 2015 | 211,508 | 208,109 | 204,864 | 201,744 | 198,729 | 195,793 | 207,595 | 207,595 |
| 2016 | 262,419 | 257,821 | 253,384 | 249,112 | 245,028 | 241,052 | 257,085 | 257,085 |
| Total | 1,010,665 | 993,586 | 977,246 | 961,517 | 946,504 | 931,977 | 990,910 | 990,910 |
| | curr - 50 bp | curr val assumption | curr + 50bp | curr + 100bp | curr + 150bp | curr + 200bp | prior val assumption | prior fyr end assumption |

| | Dollar Impact Relative to Valuation Assumption | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AY** | 0.40% | 0.90% | 1.40% | 1.90% | 2.40% | 2.90% | 0.98% | 0.98% |
| Total | 17,079 | - | (16,340) | (32,069) | (47,082) | (61,609) | (2,676) | (2,676) |
| | curr - 50 bp | curr val assumption | curr + 50bp | curr + 100bp | curr + 150bp | curr + 200bp | prior val assumption | prior fyr end assumption |

| | Percentage Impact Relative to Valuation Assumption | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AY** | 0.40% | 0.90% | 1.40% | 1.90% | 2.40% | 2.90% | 0.98% | 0.98% |
| 2001 & prior | 1.1% | - | (1.1%) | (2.2%) | (3.3%) | (4.3%) | (0.2%) | (0.2%) |
| 2002 | 2.6% | - | (2.5%) | (5.0%) | (7.3%) | (9.5%) | (0.4%) | (0.4%) |
| 2003 | 2.9% | - | (2.7%) | (5.3%) | (7.8%) | (10.2%) | (0.5%) | (0.5%) |
| 2004 | 3.1% | - | (3.0%) | (5.8%) | (8.5%) | (11.1%) | (0.5%) | (0.5%) |
| 2005 | 3.4% | - | (3.2%) | (6.3%) | (9.2%) | (12.0%) | (0.5%) | (0.5%) |
| 2006 | 3.4% | - | (3.2%) | (6.2%) | (9.1%) | (11.8%) | (0.5%) | (0.5%) |
| 2007 | 3.0% | - | (2.8%) | (5.4%) | (7.9%) | (10.3%) | (0.5%) | (0.5%) |
| 2008 | 2.3% | - | (2.2%) | (4.3%) | (6.3%) | (8.1%) | (0.4%) | (0.4%) |
| 2009 | 2.1% | - | (2.0%) | (3.8%) | (5.6%) | (7.3%) | (0.3%) | (0.3%) |
| 2010 | 2.1% | - | (2.0%) | (3.9%) | (5.7%) | (7.4%) | (0.3%) | (0.3%) |
| 2011 | 2.0% | - | (1.9%) | (3.7%) | (5.4%) | (7.1%) | (0.3%) | (0.3%) |
| 2012 | 1.8% | - | (1.7%) | (3.3%) | (4.8%) | (6.3%) | (0.3%) | (0.3%) |
| 2013 | 1.4% | - | (1.4%) | (2.7%) | (4.0%) | (5.2%) | (0.2%) | (0.2%) |
| 2014 | 1.5% | - | (1.4%) | (2.8%) | (4.1%) | (5.3%) | (0.2%) | (0.2%) |
| 2015 | 1.6% | - | (1.6%) | (3.1%) | (4.5%) | (5.9%) | (0.2%) | (0.2%) |
| 2016 | 1.8% | - | (1.7%) | (3.4%) | (5.0%) | (6.5%) | (0.3%) | (0.3%) |
| Total | 1.7% | - | (1.6%) | (3.2%) | (4.7%) | (6.2%) | (0.3%) | (0.3%) |
| | curr - 50 bp | curr val assumption | curr + 50bp | curr + 100bp | curr + 150bp | curr + 200bp | prior val assumption | prior fyr end assumption |

EXHIBIT G



Components of Member Statement IBNR (i.e. "Discounted") Change During Month

| RSP | Ontario |
|---|---|
| AccountCode Desc | IBNR - Discount |

**M/S IBNR - in $000s**

| | Values | | | | | | |
|---|---|---|---|---|---|---|---|
| AccYear | Sum of Prior Month Actual Amount | Sum of Projected Change | Sum of Change Due to AvsP Variances | Sum of Change Due to Valuation Implementation | Sum of Total Change | Sum of % Total Change | Sum of Current Month Final Amount |
| prior | 352 | (7) | 27 | 500 | 520 | 147.7% | 872 |
| 1997 | (30) | 1 | 1 | - | 2 | (6.7%) | (28) |
| 1998 | 78 | (1) | 1 | 1 | 1 | 1.3% | 79 |
| 1999 | 304 | (5) | 4 | (145) | (146) | (48.0%) | 158 |
| 2000 | 295 | (7) | 7 | (149) | (149) | (50.5%) | 146 |
| 2001 | 719 | (13) | 13 | (250) | (250) | (34.8%) | 469 |
| 2002 | 1,064 | (22) | 21 | (357) | (358) | (33.6%) | 706 |
| 2003 | 1,226 | (25) | 25 | (293) | (293) | (23.9%) | 933 |
| 2004 | 1,512 | (31) | 30 | (163) | (164) | (10.8%) | 1,348 |
| 2005 | 1,575 | (30) | 127 | 9 | 106 | 6.7% | 1,681 |
| 2006 | 3,823 | (77) | 83 | (658) | (652) | (17.1%) | 3,171 |
| 2007 | 4,082 | (83) | 182 | (539) | (440) | (10.8%) | 3,642 |
| 2008 | 8,882 | (177) | 1,193 | (1,241) | (225) | (2.5%) | 8,657 |
| 2009 | 19,005 | (379) | 692 | (3,840) | (3,527) | (18.6%) | 15,478 |
| 2010 | 23,780 | (475) | (2) | (2,385) | (2,862) | (12.0%) | 20,918 |
| 2011 | 16,154 | (323) | 1,386 | (6,825) | (5,762) | (35.7%) | 10,392 |
| 2012 | 31,540 | (635) | (600) | (7,993) | (9,228) | (29.3%) | 22,312 |
| 2013 | 59,079 | (1,079) | (2,771) | (6,232) | (10,082) | (17.1%) | 48,997 |
| 2014 | 114,299 | (1,973) | (1,075) | (10,176) | (13,224) | (11.6%) | 101,075 |
| 2015 | 143,334 | (6,328) | (235) | (1,903) | (8,466) | (5.9%) | 134,868 |
| 2016 | 34,031 | 14,495 | 760 | (2,234) | 13,021 | 38.3% | 47,052 |
| **Grand Total** | **465,104** | **2,826** | **(131)** | **(44,873)** | **(42,178)** | **(9.1%)** | **422,926** |

EXHIBIT G



Components of IBNR (i.e. "Undiscounted") Change During Month

| | |
|---|---|
| RSP | **Ontario** |
| AccountCode Desc | **IBNR - Undiscounted** |

**IBNR - in $000s**

| AccYear | Values<br>Sum of Prior Month Actual Amount | Sum of Projected Change | Sum of Change Due to AvsP Variances | Sum of Change Due to Valuation Implementation | Sum of Total Change | Sum of % Total Change | Sum of Current Month Final Amount |
|---|---|---|---|---|---|---|---|
| prior | (395) | 8 | 14 | 332 | 354 | (89.6%) | (41) |
| 1997 | (40) | 1 | 1 | - | 2 | (5.0%) | (38) |
| 1998 | 20 | - | - | - | - | - | 20 |
| 1999 | 221 | (4) | 4 | (138) | (138) | (62.4%) | 83 |
| 2000 | 275 | (6) | 6 | (139) | (139) | (50.5%) | 136 |
| 2001 | 624 | (12) | 12 | (240) | (240) | (38.5%) | 384 |
| 2002 | 951 | (19) | 19 | (342) | (342) | (36.0%) | 609 |
| 2003 | 1,113 | (22) | 22 | (285) | (285) | (25.6%) | 828 |
| 2004 | 1,360 | (27) | 27 | (166) | (166) | (12.2%) | 1,194 |
| 2005 | 1,485 | (30) | 128 | - | 98 | 6.6% | 1,583 |
| 2006 | 3,468 | (69) | 81 | (655) | (643) | (18.5%) | 2,825 |
| 2007 | 3,630 | (73) | 179 | (543) | (437) | (12.0%) | 3,193 |
| 2008 | 7,716 | (154) | 1,180 | (1,287) | (261) | (3.4%) | 7,455 |
| 2009 | 16,719 | (334) | 671 | (3,810) | (3,473) | (20.8%) | 13,246 |
| 2010 | 18,389 | (368) | 4 | (2,559) | (2,923) | (15.9%) | 15,466 |
| 2011 | 11,055 | (221) | 1,464 | (6,722) | (5,479) | (49.6%) | 5,576 |
| 2012 | 19,428 | (389) | (614) | (7,549) | (8,552) | (44.0%) | 10,876 |
| 2013 | 38,652 | (773) | (2,503) | (5,984) | (9,260) | (24.0%) | 29,392 |
| 2014 | 82,942 | (1,659) | (937) | (9,215) | (11,811) | (14.2%) | 71,131 |
| 2015 | 109,826 | (5,491) | (499) | (3,422) | (9,412) | (8.6%) | 100,414 |
| 2016 | 27,700 | 11,749 | 791 | (2,151) | 10,389 | 37.5% | 38,089 |
| **Grand Total** | **345,139** | **2,107** | **50** | **(44,875)** | **(42,718)** | **(12.4%)** | **302,421** |