



3109 Cornelius Drive
Bloomington, IL 61704
309.807.2300
pinnacleactuaries.com

Derek W. Freihaut, FCAS, MAAA
Principal and Consulting Actuary
dfreihaut@pinnacleactuaries.com

December 28, 2022

Michelle Brewer
State of Florida, Office of Insurance Regulation
200 East Gaines Street, Larson Building
Tallahassee, FL 32399
[delivered via email to michelle.brewer@flor.com]

Re: December 31, 2021 Actuarial Analysis for Florida Birth-Related Neurological Injury
Compensation Association

Michelle,

Enclosed is our report summarizing Pinnacle Actuarial Resources, Inc.'s (Pinnacle's) annual actuarial analysis of the Florida Birth-Related Neurological Injury Compensation Association (NICA) using data valued as of December 31, 2021. This report analyzes indicated loss and loss adjustment expense reserves as of December 31, 2021, along with a projection of costs for the 2022 birth year for NICA.

Derek W. Freihaut is a member in good standing of the American Academy of Actuaries and meets its qualification standards to prepare this report. We look forward to discussing these findings with you.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Derek W. Freihaut", written over a horizontal line.

Derek W. Freihaut, FCAS, MAAA
Principal and Consulting Actuary

Enclosures

Florida Birth-Related Neurological Injury Compensation Association

**Actuarial Review of Loss Reserves as of December 31, 2021,
Including Additional Costs of the 2022 Birth/Accident Year**

December 28, 2022



3109 Cornelius Drive
Bloomington, IL 61704
309.807.2300
pinnacleactuarial.com

Commitment Beyond Numbers

Table of Contents

SECTION	PAGE
PART 1: GENERAL INFORMATION	1
PART 2: BACKGROUND	6
PART 3: HIGHLIGHTS OF RESERVING APPROACH	8
PART 4. HIGHLIGHTS OF DETERMINATION OF PERCENTILES	10
PART 5. ACTUARIAL OPINION	14
METHODS AND ASSUMPTIONS.....	16
RELIANCES AND LIMITATIONS	18
INHERENT UNCERTAINTY.....	18
DATA RELIANCE	18
EXTRAORDINARY FUTURE EMERGENCE	18
PROJECTIONS BY BIRTH YEAR	19
UNDERLYING ASSETS	19
COVID-19.....	19
DISCOUNTING	19
DISTRIBUTION AND USE.....	20
 EXHIBITS	

Florida Birth-Related Neurological Injury Compensation Association

Actuarial Review of Loss Reserves as of December 31, 2021, Including Additional Costs of the 2022 Birth/Accident Year

PART 1: GENERAL INFORMATION

Overall Funding of Liabilities, Including those of 2022

Pursuant to Florida Statute 766.314(7)(a), the Office of Insurance Regulation (“OIR”) has undertaken an actuarial valuation of the assets and liabilities of the Florida Birth-Related Neurological Injury Compensation Association (“NICA”). Pinnacle Actuarial Resources, Inc. (Pinnacle) has performed a review pertaining to the loss and loss adjustment expenses (LAE) from the 2021 and prior years, as well as those estimated for 2022. The following table summarizes the outstanding loss & LAE as of December 31, 2021.

Florida Birth-Related Neurological Injury Compensation Association

As of 12/31/2021

Summary of Loss & LAE Reserves as of 12/31/2021

Assumes 3.0% Inflation & 5.0% Discount per Annum

Losses in (\$000s)

	Compensable	Deceased when Accepted	Expected to be Dismissed	Total
Case Loss & ALAE	\$772,463	\$2,490	\$581	\$775,535
IBNR Loss & ALAE	181,495	669	1,156	183,320
Pipeline Loss & ALAE	37,681	Incl. in Compensable	508	38,188
ULAE				20,162
Total Outstanding Loss & LAE	\$991,639	\$3,159	\$2,245	\$1,017,205

The total outstanding loss & LAE of \$1,017.2 million is higher than the corresponding outstanding loss & LAE of \$602.2 million calculated as of December 31, 2019. The increase to the reserves is driven by three factors:

- 1) An increase in reported and compensable claims in recent birth years
- 2) An increase in future costs due to the passage of Senate Bill 1786
- 3) An increase in future costs related to NICA no longer being considered the payer of last resort

The projected 2022 loss & allocated loss adjustment expenses (ALAE) of \$66.4 million is also much higher than the collected assessments of \$35.8 million as of fiscal year ending June 30, 2022. The projected 2022 losses are discounted for the time value of money indicating a present value net loss of \$30.6 million for 2022.

These values reflect an actuarial central estimate of NICA's unpaid loss and LAE and projected 2022 costs as of December 31, 2021. The actuarial central estimate is intended to represent an expected value over a range of reasonably foreseeable outcomes. The actuarial central estimate was arrived at through evaluation of NICA's reserve worksheets and claims history. As such, the derivation of this estimate does not reflect extreme events believed to have a remote possibility of occurring.

For the purposes of our report, the "accounting date" of December 31, 2021 is the date used to separate paid and unpaid claim amounts in NICA's financial statements. NICA is only obligated to accrue reserves for births that have triggered NICA coverage prior to the accounting date. Transactions through the "valuation date" of December 31, 2021 are included in the data used in our analysis. No account has been taken in the projections of developments subsequent to the "review date" of December 12, 2022.

We have not included in our estimates any provisions for any expenses other than allocated loss adjustment expenses (ALAE), such as actuarial and audit fees, risk management fees, and in-house legal counsel fees, if applicable. The ALAE amounts included in our estimates include only those categories of LAE (e.g., claims defense, cost containment) that are reflected in the historical ALAE data provided to us. We have made use of the estimate for unallocated loss adjustment expenses (ULAE) prepared by NICA's consulting actuary, George Turner, FCAS, MAAA. We have reviewed his approach and consider these reserves reasonable.

Throughout this report, the use of the term *loss* without modification includes loss and ALAE but does not include ULAE.

Uncertainty

Projections of loss and LAE liabilities are subject to potentially large errors of estimation, since the ultimate disposition of claims incurred prior to the annual report date, whether reported or not, is subject to the outcome of events that have not yet occurred. Examples of these events include jury decisions, court interpretations, legislative changes, changes in the medical condition of claimants, public attitudes, and social/economic conditions such as inflation. Any estimate of future costs is subject to the inherent limitation on one's ability to predict the aggregate course of future events. It should therefore be expected that the actual emergence of losses and LAE will vary, perhaps materially, from any estimate. Thus, no assurance can be given that NICA's actual loss and LAE

liabilities will not ultimately exceed the estimates contained herein. In our judgment, we have employed techniques and assumptions that are appropriate, and the estimates presented herein are reasonable given the information currently available.

Comparison of Reserves Estimated by NICA's Consulting Actuary

Our evaluation of the risk or uncertainty about the actuarial central estimates shows there is a wide range of possible eventual costs for NICA. That uncertainty is magnified by the long duration of benefits and the consequential highly leveraged impact of inflation, interest, medical technology, and life expectancy on future claim costs. Since inflation, interest, and life expectancy must be estimated, that creates a significant uncertainty in the present value of the claim costs. Further, the impact of any changes in medical technology is not estimable at present. Because of that uncertainty, any given specific point or local range has a low probability of representing the actual cost that ultimately occurs. Since NICA's consulting actuary uses a different actuarial approach, it would not be unusual for him to obtain a significantly different best estimate. Mr. Turner produces an outstanding loss & LAE estimate of \$1,235.0 million as of December 31, 2021. Although the reserve indication in Mr. Turner's report is higher than that in this report (\$1,017.2 million), this study does suggest significant uncertainty about the actuarial central estimate whether it be driven by process or parameter risk. This would imply Mr. Turner's findings are reasonable.

Going Forward Adequacy of NICA – 2022 Birth Year

The review of NICA's 2022 loss & ALAE suggests an actuarial central estimate of approximately \$66.4 million of costs on a present value (discounted) basis. Losses are discounted using a 5.0% rate of return per annum on invested assets; future costs are also adjusted by an annual inflation adjustment of 3.0%. Our estimate of the projected 2022 loss & ALAE compares to current assessment levels of approximately \$35.8 million as of fiscal year end 2022. Further, NICA's financials indicate that operating expenses exceed \$5 million. These findings indicate that NICA is encountering an operating loss on a birth year basis. Historical investment returns show that NICA typically generates eight- and sometimes nine-digit investment returns that partially offset this gap. However, these investment returns would not only support the current birth year, but also outstanding claims in previous years. Further, our estimate of \$66.4 million is already discounted for any future investment returns; in other words, we have already given credit for the volume of investment income allocated to support the claims incurred in this year. These findings suggest that corrective action should be considered before the underwriting losses compound to an unmanageable level. Such action may include, but not be limited to, assessment increases, reduction of benefits, reconsideration of NICA's status relative to Medicaid, and potentially, sunseting the program.

Subsequent Events

Subsequent to December 31, 2021, NICA announced the settlement agreement in the false claims act (FCA) lawsuit. In connection with the federal lawsuit captioned *U.S. ex rel. Arven v. The Florida Birth-Related Neurological Injury Compensation Association, et al.*, No. 0:19-cv-61053 (S.D. Fla.) (“Action”) in which it was alleged that NICA caused the submission of false claims to Medicaid in violation of the FCA by acting as the payor of last resort. NICA has entered into a settlement agreement with the United States and Relators Veronica N. Arven and the Estate of Theodore Arven III (collectively, “Relators”). While NICA steadfastly believes it would have prevailed had this dispute gone to trial, it recognizes that litigation is inherently unpredictable. In weighing its options, NICA and its Board ultimately decided that it was in the best interest of the program to not only avoid future legal expenses, but also to avoid the risk of losing the lawsuit, which could have resulted in billions of dollars in exposure and been a financially devastating outcome.

Under the terms and conditions of the settlement, NICA will pay \$51 million plus interest at a rate of 3.375% per annum from September 13, 2022 to no later than thirty days after the effective date of the settlement agreement. NICA has estimated the total cost of the settlement including legal fees and accrued interest at \$53 million, or \$2 million more than established by the settlement agreement. Although this does not fall under the purview of loss & LAE, it does negatively impact NICA’s assets and its ability to generate investment income to pay claims.

NICA has also informed Pinnacle of increased costs related to changes in the Medicaid fee schedule. The increase in Medicaid rates does impact the amount of benefits paid out by NICA and subsequently the loss & LAE reserves. NICA estimates that these changes in 2022 will lead to an increase of approximately \$100 million to future claims costs. While this significant increase will lead to upward pressure on the projected ultimate losses subsequent to December 31, 2021, we note that regular increases to the Medicaid fee schedule are contemplated in our estimation of annual inflation (3.0%), and thus, in our reserve estimates. As a test on the reasonableness of our inflation assumption, Exhibit 21 evaluates changes in the Consumer Price Index (CPI) for all urban consumers since 1999, indicating long-term inflation of less than 2.5%. Although we understand the current rate of inflation is much higher than this benchmark, it is anticipated that inflation will revert to these long-term averages over time.

NICA has experienced investment losses in excess of \$250 million since December 31, 2021. This does not impact our loss and LAE reserve projections but does negatively impact the valuation of NICA’s assets, particularly their bond portfolio on a GAAP basis, as well as its ability to generate investment income to pay claims. Our discounted reserve estimates reflect that as of December 31, 2021 there were sufficient assets to support the reserves. While NICA has experienced significant unrealized

investment losses in 2022, it is worth noting that rising interest rates may also lead to higher returns going forward.

PART 2: BACKGROUND

Structure of NICA's Eligibility or Qualification Process

NICA coverage is elected by obstetric physicians and midwives. Should a child meeting the eligibility requirements as set forth in Sections 766.301-316, Florida Statutes, suffer damage at birth as a result of a "birth-related neurological injury," when the treating obstetrician has elected NICA coverage the child's parents may bring a claim through NICA's protocols (via an administrative law judge system). Under the statutes, certain preconditions, such as the obstetrician having posted his/her NICA election for parents, and the timeliness of the claim presentation, must be met. A maximum parental award of \$250,000, (increased from \$100,000 due to the passage of Senate Bill (1786)), plus necessary medical and maintenance (e.g., modified vans, housing modifications) expenses for the lifetime of the claimant, may be made by a Division of Administrative Hearings ("DOAH") administrative law judge. Parties involved in the hearing may include the petitioner family, hospital and other entities involved in the birth, treating obstetrician, and NICA. The administrative law judge may determine that the claim is compensable or dismiss the claim. Potentially, the claim may be consequently appealed by any of the parties. The data shows evidence of all these scenarios. However, the data suggests that a relatively small percentage of claims are revised on appeal.

Claim Progression

A potential claim event initially occurs at the birth of a child. At that time, the claim has occurred, but has not yet been reported to NICA. So, the claim is referred to as "unreported." At some point, the claim is reported to NICA and a hearing date is requested. After that, the claim is reported, but is considered a "pending" claim until it is adjudicated, and an administrative law judge holds a hearing. During the hearing, the administrative law judge will either determine that benefits should be awarded or dismiss the claim. Subsequently, the claim moves into either awarded (NICA's terminology is "compensable") or dismissed status. Either way, it may be regarded as adjudicated. If the benefits are awarded, the costs are not always evaluated immediately, but are done as soon as practicable. Generally, after the year's end, NICA management has reviewed all the claims and projected the future payments of each one in a worksheet. Therefore, the claim is initially awarded, but is not "awarded and evaluated" or "pipeline" (both the OIR's terminology) until the corresponding worksheet is prepared. Depending on the particulars of the claim and the type of dismissal, claims may be appealed. Claims are closed on either the final payout at the death of the child covered by an awarded claim, or a definite finding of dismissal and final payment of legal defense costs.

Class Action on Prior Nursing Care Provided by Family Members

NICA officials informed the OIR during a previous (2012) review that a class action had been brought against NICA. The class action related to the amount of loss that was paid or could have been paid as

reimbursement to family members for care provided to children covered by NICA benefits. This case was resolved some time ago. This affected payment rates for nursing care rendered in the past and for nursing care provided in the future. In conversations with NICA staff, the OIR was told that on most of the affected claims this had been resolved. Therefore, no special analysis of this issue was performed.

Primary Data Available for Analysis

Pinnacle was provided with a detailed claim listing valued as of December 31, 2021. The data included total paid and incurred loss and expense, birth (accident) year, status at DOAH, and other relevant coding. The report included breakdowns between loss and defense (legal other than payments to claimant attorneys). The coding in those files was used to synthesize other information such as whether adjudicated claims were then classed as awarded or dismissed.

We were also provided with the reserve worksheets on claims classed as awarded. Sufficient detail for an estimate of the stream of future payments (after 2021) by calendar year was present in the worksheets. These worksheets were supplemented with inflation and discounting factors to reflect the time value of money and were also adjusted for mortality based on the 2019 mortality tables compiled by the Social Security Administration. The mortality tables were adjusted to reflect the life expectancies outlined in the reserve worksheets.

Reinsurance Commutation

Previously, the OIR was informed that NICA had once purchased reinsurance on claims from the 2003 and prior years. However, NICA indicated that that all the reinsurance has now been commuted.

The Impact of Investment Income and Inflation

NICA's compensable claims typically have durations that extend more than 20 years. During this time, NICA has an opportunity to earn income on its investment portfolio. However, it is also affected by inflation, which erodes the impact of the investment income. Both these forces can be expected to vary randomly and unpredictably over such a long time period. These factors do not always change in a positively correlated manner with one another. The net impact to NICA is the investment income earned less the increase in costs driven by inflation. For this analysis, NICA has selected a 5.0% rate of return on invested assets. We have conducted a review of historical investment returns concluding that a 5.0% rate of return is reasonable.

PART 3: HIGHLIGHTS OF RESERVING APPROACH

Claim Classes Analyzed Separately

To perform our analysis, we separated our analysis into seven distinct categories

1. Loss and defense dollars on awarded 2021 and prior claims (those with worksheets).
2. Loss and defense dollars on awarded 2021 and prior claims classified as “deceased when accepted” (DA claims)
3. Defense costs on claims expected to be dismissed in the future.
4. Loss and defense dollars on 2021 and prior birth year claims that are projected to be awarded (IBNR and pipeline claims)
5. Defense dollars on 2021 and prior birth year claims that are projected to be dismissed (IBNR and pipeline claims)
6. Cost of claims anticipated during the 2022 birth year.
7. “Unallocated loss expense” or claims handling costs associated with all the claims above.

The worksheets on awarded claims driving much of the analysis reflect streams of future payments made in successive future calendar years (at December 31, 2021 cost levels). The analysis was performed by projecting cash flows in future calendar years, then applying a mortality factor and the amount of inflation/investment discount offset beyond December 31, 2021.

Future Payments for Loss Dollars on 2021 and Prior Claims with Worksheets

Since the payouts are specified in the worksheets, the information in each worksheet was simply converted to the payments by the calendar year it specified. There were no defense costs expected for claimants with worksheets. We assumed that outstanding parental awards would be paid out within the average life expectancy for each claimant and that this payout was guaranteed (i.e. not adjusted for mortality). Likewise, one-time expenses were also expected to be paid out within the claimant’s average life expectancy, however, these costs were adjusted for mortality. Future cash flows are adjusted by an annual rate of inflation of 3.0% and a 5.0% rate of return per annum on the assets supporting the reserves. We relied on the 2019 mortality tables produced by the Social Security Administration to discount the cash flows for mortality. These mortality tables were adjusted to reflect each claimant’s average life expectancy as determined by NICA. This was done by multiplying the probability of death, or $q(x)$ parameter by year, by a constant that varied by claimant.

Future Payments for Loss Dollars on 2021 and Prior Claims – DA Claims

We have performed a separate analysis for those claims denoted as “deceased when accepted.” Since most of the case reserves stem from closed claims, we have assumed that settlement costs for these claims are firm and the case reserves outstanding are reasonable.

Future Payments for Defense Costs on Claims Expected to be Dismissed in the Future:

We have assumed the case reserves outstanding make a reasonable provision for claims already reported. This assumption is not material to the analysis as payments on these claims are small relative to costs on awarded claims. For this study, we have defined materiality as any estimate that makes up more than 5.0% of the overall estimated outstanding loss & LAE.

Future Payments for Loss Dollars Claims Awarded but not Evaluated and Claims Projected to be Awarded:

The provision for IBNR is estimated using a frequency and severity approach. For awarded claims (excluding DA claims), the number of IBNR claims (58) is derived in Exhibit 7; claim severity is estimated to be \$3,140,053 and is derived in Exhibit 6. Likewise, the IBNR for DA claims is also estimated using a frequency & severity approach. We estimate between two and three IBNR claims (see Exhibit 7) with an average claim severity of \$254,678.

Future Payments for Loss and Defense Costs on All Other Claims (Adjudicated, Dismissed, and Closed):

The number of IBNR claims is taken as the difference between total IBNR for reported claims and total IBNR for awarded claims. This results in total IBNR claims for loss and defense costs on all other claims (those expected to be dismissed) of 73. For these claims, we calculate an average claim severity of \$15,724.

Payments for Claims from the 2022 Birth Year (NICA’s 2022 Year of Operation):

Claim costs are derived using a frequency/severity approach. We have estimated costs for compensable claims (excluding DA claims), compensable DA claims, and claims expected to be dismissed. The claim severity for each type of claim is derived in Exhibit 6 and is applied to the expected number of future claims which is derived from the projected claim frequencies in Exhibits 14 and 15 and projected resident live births for 2022 estimated in Exhibit 12.

Reinsurance Recoverable on Claims Paid and to be paid in the Future:

All reinsurance has been commuted, or fully settled for a lump sum, and we have not included a provision for these recoverables in this analysis.

PART 4. HIGHLIGHTS OF DETERMINATION OF PERCENTILES

Why are Percentiles Needed?

The best estimate reserves computed per the previous section represent an actuarial central estimate. However, the actual results will vary, possibly significantly, from that value. There are a variety of factors that could result in actual claim costs exceeding the actuarial central estimate. This could include higher than average rates of inflation, poor investment returns, changes in statutes, and other items. Percentiles can serve as a guide to measure the amount of uncertainty surrounding the actuarial central estimate. Policymakers should consider the degree of uncertainty when evaluating NICA's ability to pay claims. They should also consider the ability (although limited) of NICA to help fund any shortfall through increased assessments.

We have provided estimates at various confidence levels to provide a measure of the uncertainty about the actuarial central estimate. The results of these calculations are summarized in the table below.

Florida Birth-Related Neurological Injury Compensation Association As of 12/31/2021 Summary of Loss & LAE Reserves as of 12/31/2021 At Confidence Levels other than the Actuarial Central Estimate Assumes 3.0% Inflation & 5.0% Discount per Annum Losses in (\$000s)		
Confidence <u>Level</u>	Estimated <u>Future Benefits</u>	Variance from <u>Central Estimate</u>
70%	\$1,054,291	\$37,087
75%	1,065,231	48,026
77%	1,069,835	52,630
78%	1,072,262	55,058
79%	1,075,029	57,824
80%	1,077,843	60,638
85%	1,092,595	75,391
90%	1,111,947	94,743
95%	1,138,974	121,769
Actuarial Central Estimate	\$1,017,205	\$0

We note that the variance reflected in these figures only reflects process variance. That is, variation related to the randomness in the actual number of reported claims or in the actual benefits paid to a claimant. An example of process variance could be a claimant's need of nursing care much sooner than expected based on the reserve worksheets. This development could possibly have an adverse impact on the final settlement value of a claim. The figures presented above do not reflect parameter risk.

That is, the risk that our estimates of long-term inflation and investment returns as well as our assumptions regarding mortality are under or overstated. The sensitivity to parameter risk should also be considered. For example, an average increase of 100 basis to long-term claim inflation is expected to have an adverse impact on the outstanding loss & LAE of approximately \$163.6 million, which exceeds the variance at the 95th percentile as shown in the table above. The impact of parameter risk is discussed later in Part 4 report.

Conceptual Approach:

The general approach used is to estimate a key statistical quantity, specifically the variance of the future number and cost of claims. Using our best estimates as the statistical mean, we fit the expected number of IBNR claims to a Poisson distribution. Likewise, we use our best estimate of claim severity as the statistical mean, fitting this parameter to a lognormal distribution with a coefficient of variation of 2.0. Using these parameters, we run a simulation to generate losses at confidence levels other than expected.

Components of the Variance:

Key items considered in estimating the variance from the actuarial central estimate were:

- Compensable claim frequency. The actual number of compensable claims as of December 31, 2021, will ultimately differ, perhaps substantially, from our estimates.
- Severity distribution. Reflects the natural variability in the actual cost for a given claim.

These two elements comprise that portion of the variance related to process risk. We have not explicitly included the impact of parameter risk in our confidence level analysis which include:

- Mortality risk. Relates to the fact that the future life expectancy for those claimants with worksheets will differ from what has been estimated by NICA.
- Interest rate risk. Considers that NICA's long-term investment returns will not be 5.0% per annum.
- Inflation risk. Considers that long-term inflation will not be 3.0%.

The impact of parameter risk is estimated on a deterministic basis, the results of which are outlined in the sensitivity analysis.

Sensitivity Analysis

In performing this analysis, the sensitivity of key variables was considered. A number of assumptions about model variables are made in our analysis. We consider the key variables to include the selection of claim count development factors as well as inflation and severity trend factors. Additionally, the use of the adjusted Social Security Administration's 2019 mortality tables introduces additional uncertainty into our analysis. We have performed stress tests of our interest rate, inflation rate and mortality assumptions.

The table below shows the results of a series of stress tests examining inflation scenarios of up to 150 basis points above and below our general inflation assumption. At the extreme values, these differences in assumptions have the potential to increase NICA's surplus in an extremely low inflation scenario or place NICA in a deficit at the high inflation scenario.

Florida Birth-Related Neurological Injury Compensation Association As of 12/31/2021 Inflation Rate Sensitivity Testing Losses in (\$000s)		
Annual Inflation (Baseline +/-)	Estimated Future Claim Payments	Difference From Baseline
-1.50%	\$837,162	(\$180,043)
-1.00%	890,165	(127,039)
-0.50%	949,812	(67,393)
Baseline	1,017,205	0
0.50%	1,093,663	76,459
1.00%	1,180,772	163,567
1.50%	1,280,438	263,234

The following table provides a similar stress test examining the impact of long term differences in investment returns from those assumed in our analysis. This is a particularly important test given the differences between our selected interest rate and the investment manager's target return, and also in light of current uncertainty regarding the financial markets. The impact of actual investment returns that are different than our assumptions have a similar magnitude to the inflation tests, although with the signs reversed. This is intuitive as inflation impacts benefits and thus liabilities, while interest rates impact investments and thus assets.

Florida Birth-Related Neurological Injury Compensation Association As of 12/31/2021 Interest Rate Sensitivity Testing Losses in (\$000s)		
Interest Rate (Baseline +/-)	Estimated Future Claim Payments	Difference From Baseline
-5.0% (Undiscounted)	\$2,698,084	\$1,680,879
-2.00%	1,394,965	377,761
-1.50%	1,278,894	261,689
-1.00%	1,178,985	161,781
-0.50%	1,092,495	75,290
Baseline	1,017,205	0
0.50%	951,315	(65,890)
1.00%	893,355	(123,850)
1.50%	842,120	(175,085)
2.00%	796,615	(220,590)

Finally, we have performed a stress test on the mortality assumptions used throughout our analysis. As noted, we have relied on the 2019 mortality tables produced by the Social Security Administration. These mortality tables have been adjusted to reflect the life expectancy for each claimant with a worksheet. The following table outlines the changes to the outstanding loss & LAE as a result of a +/- 10% change in the overall life expectancy of these claimants.

Florida Birth-Related Neurological Injury Compensation Association As of 12/31/2021 Mortality Sensitivity Testing Losses in (\$000s)		
Rate of Mortality (Baseline +/-)	Estimated Future Claim Payments	Difference From Baseline
-10.0%	\$943,426	(\$73,779)
Baseline	1,017,205	0
10.0%	1,087,751	70,546

PART 5. ACTUARIAL OPINION

Statement of Qualifications and Methodology of Preparer Derek Freihaut:

Derek W. Freihaut is a member in good standing of the American Academy of Actuaries and meets its qualification standards to prepare this report.

Statement of Reliance on Others:

In the course of the analysis, explanations, data, and general perspective on the data and claims environment were provided by Tim Daughtry of NICA. We have reviewed the 12/31/2019 report prepared by Joseph Boor, FCAS, PhD, CERA for further perspective and information on the construction of the loss data. From Mr. Boor's report, we are aware a previous reviewer employed by the OIR, Leigh Halliwell, FCAS, expressed that, except for inflation and discounting, the cash flows projected by NICA in their claim worksheets were reasonable predictions of the ultimate losses on each claim. This review implicitly relies on a similar conclusion. We have also reviewed the December 31, 2021 report prepared by NICA's consulting actuary, George Turner, FCAS, MAAA. We have relied on Mr. Turner's report as a source of ULAE reserves. Finally, we relied on the 2019 mortality tables prepared by the Social Security Administration and adjusted these tables by each claimant's life expectancy as determined by NICA.

Limitation on Partial Dissemination from Preparer:

Pinnacle's actuarial report and supporting work papers are prepared solely for the internal business use of the OIR, its administrators and NICA. It is understood that this report may also be distributed to a variety of interested parties. In the event our report is distributed to other parties due to statute or regulations, or by agreement of Pinnacle and the OIR, we require that the report and supporting exhibits be distributed in their entirety, and that any recipient be advised to have their own actuary review the work. Pinnacle does not intend to benefit any third party recipient of its work product or create any legal duty from Pinnacle to a third party even if Pinnacle consents to the release of its work product to such third party.

In addition, the OIR may desire to distribute the Executive Summary separately to summarize key findings. This distribution is also granted. Individual findings may also be referenced in press releases and other public communications along with proper citation of the report.

Third party users of any of the elements of this report should recognize that the furnishing of this report is not a substitute for their own due diligence and should place no reliance on this report or the data, computations, interpretations contained herein that would result in the creation of any duty or liability by Pinnacle to the third party.

Suggested Retention of Records:

The basis for portions of this report is a set of worksheets with projected payments for a number of claims. Such individual claim reserve detail could potentially be used against NICA in court or elsewhere by claimants. Therefore, individual claim detail is not included within this report. It is recommended that the OIR retain that detail in protected format for some length of time.

METHODS AND ASSUMPTIONS

Pinnacle evaluated the estimated outstanding loss & LAE reserves as of December 31, 2021 in two segments for each cohort analyzed (compensable, DA claims, and claims expected to be dismissed). The first segment was to estimate the outstanding losses on awarded claims (those with worksheets).

We relied on the reserve worksheets prepared by NICA to stream cash flows to future calendar years subsequent to 2021. These cash flows were adjusted by an annual rate of inflation of 3.0% and a 5.0% rate of return on the invested assets supporting the reserves. These future cash flows were also discounted for mortality based on the 2019 mortality tables prepared by the Social Security Administration. We were not provided with the gender of each claimant and so we relied on an average of the male and female mortality patterns for each claimant. Since each claimant has a lower life expectancy than the general population, we have adjusted the 2019 mortality tables to reflect the average life expectancy for each claimant. This effectively produces a larger mortality discount on future cash flows. Had this adjustment not been made, our reserves would have been materially overstated.

The second segment was to estimate the outstanding losses for IBNR and pipeline claims. In this case, we used a frequency/severity approach. This method separately develops estimates of ultimate claim counts and average claims severities by year. The advantage of this method is that claim counts are generally estimable, which focuses most of the variability in this method on variances in claim severities. Claim counts are estimated using three methods: incurred claim count development, incurred claim frequency per unit of exposure, and an incurred Bornhuetter-Ferguson (B-F) method (described later in this section).

The incurred claim count development methods takes the number of claims reported (or awarded) and multiplies them by a loss development factor to produce an estimate of ultimate claim counts. These development factors are derived in Exhibits 18 and 19.

The second method used, known as an Expected Claim Count Method, is simply the number of resident live births by year multiplied by an estimate of expected claim frequency. The expected claim frequency used in this method is based on an analysis of historical claims counts relative to resident live births (see Exhibits 13 & 14).

The third method, known as a B-F method, estimates ultimate claims using a combination of expected claims (resident live births x expected claim frequency) and claim count development techniques.

If we define:

A = Reported (or Compensable) Claims

B = Expected Percentage of Ultimate Claims Reported (or Compensable)

C = Resident Live Births

D = Expected Claim Frequency

then the estimated ultimate number of claims using the B-F technique is: $A + [(C \times D) \times (1 - B)]$.

Using these techniques and data provided to us, we estimated IBNR claims for three types of claims:

- 1) Awarded (those with worksheets)
- 2) Deceased when Accepted (DA claims)
- 3) Claims expected to be dismissed.

To estimate claim severity, we compiled NICA's total payment history on a calendar year basis and trended these claims to a December 31, 2021 cost level using the CPI for all urban consumers. Based on NICA data, we estimated that 92.5% of all claim payments relate to awarded claims, 5.0% relate to DA claims, and the balance (2.5%) stems from dismissed claims. Using this information, in conjunction with the results of our claim count analysis, produced our estimate of claim severity for each type of claim noted above.

We relied on just this one method to develop the reserves on open claims and one method to estimate the IBNR claims. Other actuarial techniques did not perform well given the nature of the exposure. For example, total payments on claims incurred in the 1989 birth year are \$16.9 million; our estimate of outstanding loss & ALAE for this year is \$10.3 million, indicating that just over 60% of the estimated total settlement value of all claims has been paid as of December 31, 2021. This implies a large paid tail factor for an accident year that is over thirty years old and reduces the credibility of any techniques relying on paid loss development techniques. Likewise, the case reserves that are set up by NICA do not consider future inflation and investment returns, and do not fully reflect the discount for mortality. Thus, methods using reported losses (paid + case) would not be reliable.

RELIANCES AND LIMITATIONS

Inherent Uncertainty

Projections of loss liabilities are subject to potentially large errors of estimation, since the ultimate disposition of claims incurred prior to the financial statement date, whether reported or not, is subject to the outcome of events that have not yet occurred. Examples of these events include jury decisions, court interpretations, legislative changes, changes in the medical condition of claimants, public attitudes, and social/economic conditions such as inflation. Any estimate of future costs is subject to the inherent limitation on one's ability to predict the aggregate course of future events. It should therefore be expected that the actual emergence of losses will vary, perhaps materially, from any estimate. Thus, no assurance can be given that NICA's actual loss liabilities will not ultimately exceed the estimates contained herein. In our judgment, we have employed techniques and assumptions that are appropriate, and the estimates presented herein are reasonable, given the information currently available.

Note that a quantification of this uncertainty would likely reflect a range of reasonable favorable and adverse scenarios, but not necessarily a range of all possible outcomes. Further, the proper application of any range is dependent on the context. NICA's financial reports are governed by accounting standards, and such standards vary among jurisdictions. Under current accounting standards, the ends of a range that is illustrative of uncertainty would likely not be suitable for financial reporting purposes.

Data Reliance

Throughout this analysis, we have relied on historical data and other quantitative and qualitative information supplied by NICA. We have not independently audited or verified this information; however, we have reviewed it for reasonableness and internal consistency. We have assumed that the information is complete and accurate, and that we have been provided with all information relevant to the analysis of NICA's outstanding losses. The accuracy of our results is dependent upon the accuracy and completeness of the underlying data; therefore, any material discrepancies discovered in this data should be reported to us and this report amended accordingly, if warranted.

Extraordinary Future Emergence

We have not anticipated any extraordinary changes to the legal, social, or economic environment that might affect the cost, frequency, or future reporting of claims. In addition, our estimates make no provision for potential future claims arising from loss causes not represented in the historical data (e.g., new types of mass torts or latent injuries, terrorist acts, etc.), except where claims of these types are included but not identified in the reported claims and are implicitly analyzed.

Projections by Birth Year

Consistent with the purpose of our engagement, the focus of our analysis was on NICA's overall reserves for unpaid claims. As such, projections shown in this report for each birth year should be viewed in the context of the entire portfolio of liabilities, not necessarily as best estimates for individual birth years.

Underlying Assets

We have not examined the assets underlying NICA's loss reserves, and we have formed no opinion as to the validity or value of these assets. We have assumed throughout the analysis that NICA's loss reserves are backed by valid assets with suitably scheduled maturities and/or adequate liquidity to meet cash flow requirements.

COVID-19

A substantial source of uncertainty relates to the emergence of the COVID-19 pandemic in 2020. This uncertainty could impact the projection of unpaid claim estimates in several different ways including, but not limited to:

- Claim reporting patterns and the risk of longer claim durations as claims are handled differently
- Changes in exposure to specific coverages
- Material changes in underlying loss benefits as COVID-19 impacts businesses
- Potential legal disputes regarding the applicability of specific coverages to COVID-19-related claims, and
- Changes associated with ongoing medical care of current claimants due to the virus for lines of business with a medical coverage component.

Some of these uncertainties may affect the settlement of claims that had occurred prior to COVID-19 being declared a pandemic. The COVID-19 pandemic may have a material impact on our reserve estimates as its effects emerge over time.

Discounting

Estimates discounted for the time value of money can be more uncertain than those on an undiscounted basis. In addition to the usual uncertainty in projecting unpaid claims obligations and benefits, discounted estimates are also influenced by:

- Variations in the timing of actual benefit payments versus the rate of payment assumed in discounting estimates to present value
- Variation in the actual investment yield on the assets underlying the liabilities versus the assumed interest rate used in discounting.

Distribution and Use

Pinnacle's actuarial report and supporting work papers are prepared solely for the internal business use of the OIR, its administrators and NICA. It is understood that this report may also be distributed to a variety of interested parties. In the event our report is distributed to other parties due to statute or regulations, or by agreement of Pinnacle and the OIR, we require that the report and supporting exhibits be distributed in their entirety, and that any recipient be advised to have their own actuary review the work. Pinnacle does not intend to benefit any third party recipient of its work product or create any legal duty from Pinnacle to a third party even if Pinnacle consents to the release of its work product to such third party.

In addition, the OIR may desire to distribute the Executive Summary separately to summarize key findings. This distribution is also granted. Individual findings may also be referenced in press releases and other public communications along with proper citation of the report.

Third party users of any of the elements of this report should recognize that the furnishing of this report is not a substitute for their own due diligence and should place no reliance on this report or the data, computations, interpretations contained herein that would result in the creation of any duty or liability by Pinnacle to the third party.

It is important to emphasize the nature of our work for the OIR. While the reserve estimates contained in this report represent our best professional judgment, arrived at after careful actuarial analysis of the available data, any study of unpaid claims involves estimates of future contingencies which are subject to the outcome of events yet to occur, e.g., jury decisions and attitudes of claimants with respect to settlements. A high severity, low frequency coverage such as medical malpractice which also has extended reporting and settlement patterns is especially difficult to estimate. This is compounded even further for NICA, given the nature of its coverage - unlimited liability until the claimant has deceased.

Throughout this report, we have used the term IBNR to include all indicated changes to case reserves, including LAE, whether such changes are for "pure" IBNR (i.e., incurred but not reported claims) or for case reserve deficiencies/redundancies.

Judgments as to conclusions, recommendations, methods, and data contained in this report should be made only after studying the report in its entirety. Further reliances and limitations are contained in

the report text and the exhibits accompanying the report. Furthermore, Pinnacle is available to explain any matter presented herein, and it is assumed that the user of this report will seek such explanation as to any matter in question. The exhibits should be considered an integral part of this report.

Index of Exhibits

EXHIBIT	DESCRIPTION
1	Projected 2022 Loss & ALAE
2	Summary of Estimated Outstanding Loss & LAE
3	Estimated Outstanding Loss & ALAE: Claims Expected to be Dismissed
4	Estimated Outstanding Loss & ALAE: DA Claims
5	Estimated Outstanding Loss & ALAE: Compensable Claims
6	Estimated Ultimate Claim Severity
7	Estimated IBNR on Awarded Claims
8	Selected Ultimate Claims: Compensable Claims
9	Selected Ultimate Claims: Reported Claims
10	Ultimate Claims Based on Reported B-F Method: Compensable Claims
11	Ultimate Claims Based on Reported B-F Method: Reported Claims
12	Projected Resident Live Births for 2021 & 2022
13	Resident Live Births per 1,000 Population
14	Selected Initial Expected Frequency: Compensable Claims
15	Selected Initial Expected Frequency: Reported Claims
16	Incurred Claim Development Method: Compensable Claims
17	Incurred Claim Development Method: Reported Claims
18	Compensable Claim Count Development Pattern
19	Reported Claim Count Development Pattern
20	Evaluation of Investment Income Rate of Return
21	Evaluation of Rate of Inflation

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 1

As of 12/31/2021

Projected 2022 Loss & ALAE

Loss & ALAE Discounted to 12/31/2021

Claim Type	Claims per 1,000 Resident Live Births	Projected Live Births	Adjustment Factor	Projected Claims	Projected Severity	Projected Loss & ALAE
	(1)	(2)	(3)	(4)	(5)	(6)
Compensable (excl. "DA Claims")	0.116	220,192	80.3%	21	\$3,140,053	\$64,562,847
Compensable ("DA Claims")	0.116	220,192	19.7%	5	254,678	1,287,933
Expected to be Dismissed	0.272	220,192	100.0%	34	15,724	539,581
Total				60		\$66,390,361

Notes:

- (1) Compensable: Exhibit 14, Col (5) adjusted by 5.7% annual trend
Expected to be dismissed: Exhibit 15, Col (5) adjusted by 1.0% annual trend
- (2) Exhibit 12, Col (3)
- (3) Based on Exhibit 7, Col (3), Selected
- (4) Compensable: Col (1) x (2) x (3) / 1,000
- (5) Exhibit 6
- (6) = Col (4) x Col (5)

Florida Birth-Related Neurological Injury Compensation Association

As of 12/31/2021

Summary of Estimated Outstanding Loss & LAE

Loss & ALAE Discounted to 12/31/2021

Exhibit 2

Birth Year	Known Claims			IBNR Claims			Pipeline Compensable Loss & ALAE	Pipeline Expected to be Dismissed Loss & ALAE	Total Outstanding Loss & ALAE
	Compensable Loss & ALAE	DA	Loss & ALAE on Claims	Compensable Loss & ALAE	DA	Loss & ALAE Expected			
	(Excluding DA Loss & ALAE)	Loss & ALAE	Expected to be Dismissed	(Excluding DA Loss & ALAE)	Loss & ALAE	to be Dismissed			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1989	\$10,252,538	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,252,538
1990	7,617,696	0	0	0	0	0	0	0	7,617,696
1991	12,638,043	0	0	0	0	0	0	0	12,638,043
1992	29,545,482	0	0	0	0	0	0	0	29,545,482
1993	25,104,006	0	0	0	0	0	0	0	25,104,006
1994	12,312,988	137,500	0	0	0	0	0	0	12,450,488
1995	19,444,188	0	0	0	0	0	0	0	19,444,188
1996	16,864,717	50,000	0	0	0	0	0	0	16,914,717
1997	29,509,886	50,000	0	0	0	0	0	0	29,559,886
1998	40,425,186	100,000	0	0	0	0	0	0	40,525,186
1999	9,893,963	50,000	0	0	0	0	0	0	9,943,963
2000	7,982,309	25,000	0	0	0	0	0	0	8,007,309
2001	15,804,210	50,000	0	0	0	0	0	0	15,854,210
2002	41,080,190	0	0	0	0	0	0	0	41,080,190
2003	8,339,293	80,000	0	0	0	0	0	0	8,419,293
2004	20,117,608	0	0	0	0	0	0	0	20,117,608
2005	20,108,123	0	0	0	0	0	0	0	20,108,123
2006	33,959,741	40,000	0	0	0	0	0	0	33,999,741
2007	22,942,669	20,000	0	0	0	0	0	0	22,962,669
2008	37,562,885	0	0	0	0	0	0	0	37,562,885
2009	37,538,697	40,000	11,782	0	0	0	0	0	37,590,479
2010	15,111,767	20,000	27,325	0	0	0	0	0	15,159,092
2011	32,620,310	0	0	0	0	0	0	0	32,620,310
2012	25,608,327	20,000	0	314,005	0	0	0	0	25,942,332
2013	24,215,616	20,000	0	314,005	0	0	0	0	24,549,621
2014	28,735,175	40,000	0	942,016	0	6,083	0	0	29,723,274
2015	52,694,152	40,000	900	2,512,042	0	26,289	0	51,234	55,324,617
2016	19,142,099	40,000	66,325	1,884,032	0	24,743	0	82,869	21,240,068
2017	39,144,092	3,639	110,229	7,222,121	0	78,746	0	81,594	46,640,422
2018	49,581,630	383,781	65,685	18,840,316	0	141,516	6,280,105	29,747	75,322,779
2019	26,565,333	49,303	108,040	31,400,526	0	151,671	9,420,158	112,934	67,807,965
2020	0	900,815	163,349	49,926,837	74,562	280,454	21,980,368	59,918	73,386,304
2021	0	330,360	27,572	68,139,142	594,292	446,199	0	89,312	69,626,877
Total	\$772,462,921	\$2,490,398	\$581,207	\$181,495,042	\$668,854	\$1,155,701	\$37,680,632	\$507,608	\$997,042,363

Notes:

- (1) Sum of Cols (1) & (2) from Exhibit 5
- (2) Sum of Cols (1) & (2) from Exhibit 4
- (3) Sum of Cols (1) & (2) from Exhibit 3
- (4) Exhibit 5, Col (4)
- (5) Exhibit 4, Col (4)
- (6) Exhibit 3, Col (4)
- (7) Based on discussion with NICA regarding claims expected to be compensable x Exhibit 6, Row (7)
- (8) Sum of defense outstanding pending claims with a NICA status of "Denied"
- (9) Sum of Cols (1) through (8)

ULAE Reserves: 20,162,351
(From Section I, Exhibit I, of Turner Consulting Actuarial Report)

Estimated Outstanding Loss & LAE: \$1,017,204,714

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 3

As of 12/31/2021

Claims Expected to be Dismissed

Estimated Outstanding Loss & ALAE

Birth Year	Estimated Outstanding on Open Claims Discounted to 12/31/2021 Levels (1)	Estimated Outstanding on Closed Claims Discounted to 12/31/2021 Levels (2)	Estimated IBNR Claims (3)	Estimated Outstanding IBNR Discounted to 12/31/2021 Levels (4)	Estimated Outstanding Losses Discounted to 12/31/2021 Levels (5)
1989	\$0	\$0	0	\$0	\$0
1990	0	0	0	0	0
1991	0	0	0	0	0
1992	0	0	0	0	0
1993	0	0	0	0	0
1994	0	0	0	0	0
1995	0	0	0	0	0
1996	0	0	0	0	0
1997	0	0	0	0	0
1998	0	0	0	0	0
1999	0	0	0	0	0
2000	0	0	0	0	0
2001	0	0	0	0	0
2002	0	0	0	0	0
2003	0	0	0	0	0
2004	0	0	0	0	0
2005	0	0	0	0	0
2006	0	0	0	0	0
2007	0	0	0	0	0
2008	0	0	0	0	0
2009	0	11,782	0	0	11,782
2010	27,325	0	0	0	27,325
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	6,083	6,083
2015	0	900	2	26,289	27,189
2016	0	66,325	2	24,743	91,068
2017	73,226	37,003	5	78,746	188,975
2018	38,820	26,865	9	141,516	207,201
2019	28,840	79,200	10	151,671	259,710
2020	29,700	133,649	18	280,454	443,803
2021	0	27,572	28	446,199	473,771
Total	\$197,910	\$383,297	73	\$1,155,701	\$1,736,908

Notes:

- (1), & (2) Provided by NICA
- (3) Exhibit 9, Col (9) - Exhibit 8, Col (9)
- (4) = (3) x Exhibit 6, Row (15)
- (5) = (1) + (2) + (4)

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 4

As of 12/31/2021

Compensable Claims

Deceased when Accepted Claims ("DA" Claims)

Estimated Outstanding Loss & ALAE

Birth Year	Estimated Outstanding on Open Claims Discounted to 12/31/2021 Levels (1)	Estimated Outstanding on Closed Claims Discounted to 12/31/2021 Levels (2)	Estimated IBNR Claims (3)	Estimated Outstanding IBNR Discounted to 12/31/2021 Levels (4)	Estimated Outstanding Losses Discounted to 12/31/2021 Levels (5)
1989	\$0	\$0	0	\$0	\$0
1990	0	0	0	0	0
1991	0	0	0	0	0
1992	0	0	0	0	0
1993	0	0	0	0	0
1994	0	137,500	0	0	137,500
1995	0	0	0	0	0
1996	0	50,000	0	0	50,000
1997	0	50,000	0	0	50,000
1998	0	100,000	0	0	100,000
1999	0	50,000	0	0	50,000
2000	0	25,000	0	0	25,000
2001	0	50,000	0	0	50,000
2002	0	0	0	0	0
2003	0	80,000	0	0	80,000
2004	0	0	0	0	0
2005	0	0	0	0	0
2006	0	40,000	0	0	40,000
2007	0	20,000	0	0	20,000
2008	0	0	0	0	0
2009	0	40,000	0	0	40,000
2010	0	20,000	0	0	20,000
2011	0	0	0	0	0
2012	0	20,000	0	0	20,000
2013	0	20,000	0	0	20,000
2014	0	40,000	0	0	40,000
2015	0	40,000	0	0	40,000
2016	0	40,000	0	0	40,000
2017	0	3,639	0	0	3,639
2018	343,781	40,000	0	0	383,781
2019	29,303	20,000	0	0	49,303
2020	477,315	423,501	0	74,562	975,377
2021	0	330,360	2	594,292	924,652
Total	\$850,399	\$1,639,999	3	\$668,854	\$3,159,253

Notes:

- (1) & (2) Provided by NICA
- (3) Exhibit 7, Col (6)
- (4) = (3) x Exhibit 6, Row (11)
- (5) = (1) + (2) + (4)

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 5

As of 12/31/2021

Compensable Claims

Excludes Deceased when Accepted Claims ("DA" Claims)

Estimated Outstanding Loss & ALAE

Birth Year	Estimated Outstanding on Open Claims Discounted to 12/31/2021 Levels (1)	Estimated Outstanding on Closed Claims Discounted to 12/31/2021 Levels (2)	Estimated IBNR Claims (3)	Estimated Outstanding IBNR Discounted to 12/31/2021 Levels (4)	Estimated Outstanding Losses Discounted to 12/31/2021 Levels (5)
1989	\$10,252,538	\$0	0	\$0	\$10,252,538
1990	7,517,696	100,000	0	0	7,617,696
1991	12,638,043	0	0	0	12,638,043
1992	29,495,482	50,000	0	0	29,545,482
1993	25,100,781	3,225	0	0	25,104,006
1994	12,212,988	100,000	0	0	12,312,988
1995	19,394,188	50,000	0	0	19,444,188
1996	16,814,717	50,000	0	0	16,864,717
1997	29,459,886	50,000	0	0	29,509,886
1998	40,425,186	0	0	0	40,425,186
1999	9,843,963	50,000	0	0	9,893,963
2000	7,932,309	50,000	0	0	7,982,309
2001	15,804,210	0	0	0	15,804,210
2002	41,000,190	80,000	0	0	41,080,190
2003	8,339,293	0	0	0	8,339,293
2004	20,077,608	40,000	0	0	20,117,608
2005	20,108,123	0	0	0	20,108,123
2006	33,959,741	0	0	0	33,959,741
2007	22,942,669	0	0	0	22,942,669
2008	37,562,885	0	0	0	37,562,885
2009	37,498,697	40,000	0	0	37,538,697
2010	15,111,767	0	0	0	15,111,767
2011	32,620,310	0	0	0	32,620,310
2012	25,608,327	0	0	314,005	25,922,332
2013	24,215,616	0	0	314,005	24,529,621
2014	28,682,342	52,833	0	942,016	29,677,191
2015	52,614,152	80,000	1	2,512,042	55,206,194
2016	19,133,556	8,543	1	1,884,032	21,026,130
2017	39,144,092	0	2	7,222,121	46,366,213
2018	49,581,630	0	6	18,840,316	68,421,946
2019	26,565,258	75	10	31,400,526	57,965,860
2020	0	0	16	49,926,837	49,926,837
2021	0	0	22	68,139,142	68,139,142
Total	\$771,658,245	\$804,676	58	\$181,495,042	\$953,957,963

Notes:

- (1) Based on reserve worksheets provided by NICA and 2019 mortality table compiled the Social Security Administration Assumptions include inflation of 3.0% and a discount rate of 5.0% per annum
- (2) Provided by NICA
- (3) Exhibit 7, Col (7)
- (4) = (3) x Exhibit 6, Row (7)
- (5) = (1) + (2) + (4)

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 6

As of 12/31/2021

Estimated Ultimate Claim Severity

Calendar Year	Total Paid Loss & ALAE	CPI	Trended	
		Trend	Total Paid	
		Factor	Loss & ALAE	
		to 12/31/2021	at 12/31/2021 Levels	
	(1)	(2)	(3)	
1989	\$0	2.261	\$0	
1990	4,894,462	2.158	\$10,564,426	
1991	14,209,937	2.065	29,341,745	
1992	10,242,692	2.003	20,516,741	
1993	11,277,875	1.946	21,948,860	
1994	18,890,176	1.897	35,833,255	
1995	20,260,295	1.843	37,336,005	
1996	8,963,289	1.792	16,059,603	
1997	17,423,220	1.753	30,545,470	
1998	15,630,099	1.724	26,947,968	
1999	16,492,917	1.689	27,862,917	
2000	13,011,312	1.630	21,203,610	
2001	18,708,029	1.583	29,611,422	
2002	13,427,352	1.563	20,987,108	
2003	10,713,824	1.532	16,417,124	
2004	6,976,805	1.487	10,374,011	
2005	10,224,185	1.446	14,787,944	
2006	13,614,423	1.389	18,908,102	
2007	11,339,197	1.355	15,363,378	
2008	13,703,223	1.288	17,645,798	
2009	16,687,104	1.309	21,836,526	
2010	11,177,553	1.293	14,448,911	
2011	7,695,958	1.248	9,608,114	
2012	7,809,551	1.230	9,602,481	
2013	4,073,170	1.208	4,919,709	
2014	7,956,165	1.184	9,419,762	
2015	9,692,650	1.182	11,452,479	
2016	6,249,806	1.170	7,313,328	
2017	4,263,203	1.151	4,906,106	
2018	5,614,389	1.119	6,280,574	
2019	7,505,322	1.099	8,251,038	
2020	5,147,695	1.090	5,609,796	
2021	3,128,568	1.035	3,237,550	
Total	\$347,004,448		\$539,141,860	
% of Compensable Claims Excluding DA Claims			92.5%	(4)
Estimated Outstanding on Compensable Claims Excluding DA Claims			772,462,921	(5)
Estimated Ultimate Compensable Claims Excluding DA Claims			405	(6)
Estimated Severity of Compensable Claims Excluding DA Claims			3,140,053	(7)
% of DA Claims			5.0%	(8)
Estimated Outstanding on DA Claims			2,490,398	(9)
Estimated Ultimate DA Claims			116	(10)
Estimated Severity of DA Claims			254,678	(11)
% of Claims Expected to be Dismissed			2.5%	(12)
Estimated Outstanding on Claims Expected to be Dismissed			581,207	(13)
Estimated Ultimate on Claims Expected to be Dismissed			894	(14)
Estimated Severity of Claims Expected to be Dismissed			15,724	(15)

Notes:

- (1) Provided by NICA
- (2) www.bls.gov; CPI for all urban consumers
- (3) = (1) x (2)
- (4), (8), (12) Based on paid loss data provided by NICA
- (5) Exhibit 5, Cols (1) + (2)
- (6) Exhibit 8, Col (5), Total Row - Sum of Exhibit 7, Col (5)
- (7) = [(3) x (4) + (5)] / (6)
- (9) Exhibit 4, Cols (1) + (2)
- (10) Sum of Exhibit 7, Col (5)
- (11) = [(3) x (8) + (9)] / (10)
- (13) Exhibit 3, Cols (1) + (2)
- (14) Exhibit 9, Col (5) - Exhibit 8, Col (5)
- (15) = [(3) x (12) + (13)] / (14)

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 7

As of 12/31/2021

Estimated IBNR on Awarded Claims

Birth Year	Selected Ultimate Compensable Claims (1)	DA Claims (2)	Ratio of DA Claims to Ult. Compensable Claims (3)	Expected DA Claims (4)	Selected Ultimate DA Claims (5)	IBNR Compensable DA Claims (6)	IBNR Compensable Excl. DA Claims (7)
1989	15	5	33.3%	3	5	0	0
1990	10	0	0.0%	2	0	0	0
1991	8	1	12.5%	2	1	0	0
1992	14	0	0.0%	3	0	0	0
1993	15	2	13.3%	3	2	0	0
1994	16	7	43.7%	3	7	0	0
1995	11	3	27.3%	2	3	0	0
1996	17	6	35.3%	3	6	0	0
1997	17	3	17.6%	3	3	0	0
1998	17	3	17.6%	3	3	0	0
1999	18	7	38.9%	4	7	0	0
2000	13	5	38.5%	3	5	0	0
2001	13	4	30.8%	3	4	0	0
2002	22	3	13.6%	4	3	0	0
2003	9	5	55.5%	2	5	0	0
2004	14	5	35.7%	3	5	0	0
2005	13	0	0.0%	3	0	0	0
2006	13	2	15.4%	3	2	0	0
2007	15	6	40.0%	3	6	0	0
2008	13	1	7.7%	3	1	0	0
2009	17	5	29.4%	3	5	0	0
2010	12	6	49.9%	2	6	0	0
2011	14	0	0.0%	3	0	0	0
2012	16	2	12.4%	3	2	0	0
2013	11	4	36.0%	2	4	0	0
2014	13	1	7.5%	3	1	0	0
2015	22	2	9.2%	4	2	0	1
2016	10	3	31.4%	2	3	0	1
2017	16	3	18.4%	3	3	0	2
2018	29	8	27.6%	6	8	0	6
2019	24	4	16.7%	5	4	0	10
Total	467	106	22.7%				
		15 Yr Vol Wgt	19.7%				
		10 Yr Vol Wgt	19.7%				
		5 Yr Vol Wgt	19.9%				
		4 Yr Vol Wgt	22.8%				
		3 Yr Vol Wgt	21.7%				
		Selected	19.7%				
2020	26	4	15.3%	5	4	0	16
2021	27	3	11.1%	5	5	2	22

Notes:

- (1) Exhibit 8, Col (5)
- (2) Provided by NICA
Excludes DOAH Status: Pending
- (3) = (2) / (1)
- (4) = (1) x (3), Selected
- (5) 2019 & Prior: Col (2)
2020 & subsequent: (4) - (2)
- (6) = (5) - (2)
- (7) Exhibit 8, Col (9) - (6)

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 8

As of 12/31/2021

Compensable Claims

Selected Ultimate Claims

Birth Year	Based on Reported Development Method	Based on B/F Method	Based on Expected Claims Method	Selected Ultimate Claims 12/31/2019	Selected Ultimate Claims 12/31/2021	Resident Live Births	Indicated Ultimate Frequency	Compensable Claims	Indicated IBNR Claims
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1989	15				15			15	0
1990	10				10			10	0
1991	8				8			8	0
1992	14				14			14	0
1993	15				15			15	0
1994	16				16			16	0
1995	11				11			11	0
1996	17				17			17	0
1997	17				17			17	0
1998	17				17			17	0
1999	18				18			18	0
2000	13				13			13	0
2001	13	13	8		13	205,800	0.063	13	0
2002	22	22	9		22	205,580	0.107	22	0
2003	9	9	10		9	212,243	0.042	9	0
2004	14	14	10		14	218,045	0.064	14	0
2005	13	13	11		13	226,219	0.057	13	0
2006	13	13	13		13	237,166	0.055	13	0
2007	15	15	14		15	239,120	0.063	15	0
2008	13	13	14		13	231,417	0.056	13	0
2009	17	17	14		17	221,391	0.077	17	0
2010	12	12	14	12	12	214,519	0.056	12	0
2011	14	14	15	14	14	213,237	0.066	14	0
2012	16	16	16	16	16	212,954	0.076	16	0
2013	11	11	17	11	11	215,194	0.052	11	0
2014	13	13	18	14	13	219,905	0.060	13	0
2015	22	22	20	19	22	224,273	0.097	21	1
2016	10	10	21	7	10	225,018	0.042	9	1
2017	16	17	22	14	16	223,579	0.073	14	2
2018	31	29	23	17	29	221,508	0.131	23	6
2019	24	24	24	15	24	220,010	0.109	14	10
2020	37	28	24		26	209,645	0.125	10	16
2021			27		27	219,690	0.123	3	24
Total	506	325	345		520			460	60

Notes:

- | | |
|---|-------------------------|
| (1) Exhibit 16, Col (3) | (6) Exhibit 10, Col (1) |
| (2) Exhibit 10, Col (8) | (7) = (5) / (6) x 1,000 |
| (3) Exhibit 10, Col (3) | (8) Exhibit 16, Col (1) |
| (4) From 12/31/2019 report prepared by Joseph Boor, FCAS, PHD, CERA | (9) = (5) - (8) |
| (5) Selected based on Cols (1) through (3) | |

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 9

As of 12/31/2021

Reported Claims

Selected Ultimate Claims

Birth Year	Based on Reported Development Method	Based on B/F Method	Based on Expected Claims Method	Selected Ultimate Claims 12/31/2019	Selected Ultimate Claims 12/31/2021	Resident Live Births	Indicated Ultimate Frequency	Reported Claims	Indicated IBNR Claims
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1989	32				32			32	0
1990	39				39			39	0
1991	38				38			38	0
1992	48				48			48	0
1993	40				40			40	0
1994	36				36			36	0
1995	26				26			26	0
1996	40				40			40	0
1997	47				47			47	0
1998	42				42			42	0
1999	40				40			40	0
2000	38				38			38	0
2001	41	41	46		41	205,800	0.199	41	0
2002	50	50	47		50	205,580	0.243	50	0
2003	23	23	49		23	212,243	0.108	23	0
2004	31	31	51		31	218,045	0.142	31	0
2005	41	41	53		41	226,219	0.181	41	0
2006	33	33	56		33	237,166	0.139	33	0
2007	36	36	57		36	239,120	0.151	36	0
2008	42	42	56		42	231,417	0.181	42	0
2009	50	50	54		50	221,391	0.226	50	0
2010	40	40	53	40	40	214,519	0.186	40	0
2011	44	44	53	44	44	213,237	0.206	44	0
2012	50	50	54	51	50	212,954	0.235	50	0
2013	32	32	55	34	32	215,194	0.149	32	0
2014	46	46	56	48	46	219,905	0.208	45	1
2015	52	53	58	53	52	224,273	0.234	50	2
2016	38	39	59	32	38	225,018	0.169	36	2
2017	51	52	59	52	51	223,579	0.229	44	7
2018	70	67	59	55	67	221,508	0.302	52	15
2019	67	64	59	55	62	220,010	0.280	42	20
2020	68	61	57		59	209,645	0.282	25	34
2021	91	63	60		60	219,690	0.275	8	52
Total	1,462	958	1,151		1,415			1,281	134

Notes:

- | | |
|---|-------------------------|
| (1) Exhibit 17, Col (3) | (6) Exhibit 11, Col (1) |
| (2) Exhibit 11, Col (8) | (7) = (5) / (6) x 1,000 |
| (3) Exhibit 11, Col (3) | (8) Exhibit 17, Col (1) |
| (4) From 12/31/2019 report prepared by Joseph Boor, FCAS, PHD, CERA | (9) = (5) - (8) |
| (5) Selected based on Cols (1) through (3) | |

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 10

As of 12/31/2021

Compensable Claims

Ultimate Claims Based on Reported Bornhuetter-Ferguson Method

Birth Year	Resident Live Births	Initial Expected Frequency	Expected Ultimate Claims	Percentage Reported	Expected Unreported Claims	Expected Reported Claims	Actual Reported Claims	Projected Ultimate Claims	Indicated Ultimate Frequency
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2001	205,800	0.041	8	100.0%	0	8	13	13	0.063
2002	205,580	0.043	9	100.0%	0	9	22	22	0.107
2003	212,243	0.045	10	100.0%	0	10	9	9	0.042
2004	218,045	0.048	10	100.0%	0	10	14	14	0.064
2005	226,219	0.051	11	100.0%	0	11	13	13	0.057
2006	237,166	0.053	13	100.0%	0	13	13	13	0.055
2007	239,120	0.057	14	99.9%	0	14	15	15	0.063
2008	231,417	0.060	14	99.9%	0	14	13	13	0.056
2009	221,391	0.063	14	99.9%	0	14	17	17	0.077
2010	214,519	0.067	14	99.8%	0	14	12	12	0.056
2011	213,237	0.071	15	99.7%	0	15	14	14	0.066
2012	212,954	0.075	16	99.5%	0	16	16	16	0.075
2013	215,194	0.079	17	98.9%	0	17	11	11	0.051
2014	219,905	0.083	18	97.7%	0	18	13	13	0.059
2015	224,273	0.088	20	96.5%	1	19	21	22	0.098
2016	225,018	0.093	21	94.2%	1	20	9	10	0.044
2017	223,579	0.099	22	86.0%	3	19	14	17	0.076
2018	221,508	0.104	23	74.6%	6	17	23	29	0.131
2019	220,010	0.110	24	57.7%	10	14	14	24	0.109
2020	209,645	0.116	24	27.3%	18	6	10	28	0.134
2021	219,690	0.123	27				3		
Total	4,616,513		345		39	279	289	325	0.070

Notes:

- | | |
|---|-------------------------|
| (1) 2021: Exhibit 12, Col (3) | (5) = (3) x [1.0 - (4)] |
| 2020 & prior: Exhibit 13, Col (1) | (6) = (3) - (5) |
| (2) 2021: Exhibit 14, Col (5) Selected | (7) Provided by NICA |
| 2020 & prior: detrended at an annual rate of 5.7% per annum | (8) = (5) + (7) |
| (3) = (1) x (2) / 1,000 | (9) = (8) / (1) x 1,000 |
| (4) = 1.0 / Exhibit 16, Col (2) | |

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 11

As of 12/31/2021

Reported Claims

Ultimate Claims Based on Reported Bornhuetter-Ferguson Method

Birth Year	Resident Live Births	Initial Expected Frequency	Expected Ultimate Claims	Percentage Reported	Expected Unreported Claims	Expected Reported Claims	Actual Reported Claims	Projected Ultimate Claims	Indicated Ultimate Frequency
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2001	205,800	0.225	46	100.0%	0	46	41	41	0.199
2002	205,580	0.228	47	100.0%	0	47	50	50	0.243
2003	212,243	0.230	49	100.0%	0	49	23	23	0.108
2004	218,045	0.232	51	100.0%	0	51	31	31	0.142
2005	226,219	0.234	53	100.0%	0	53	41	41	0.181
2006	237,166	0.237	56	100.0%	0	56	33	33	0.139
2007	239,120	0.239	57	100.0%	0	57	36	36	0.151
2008	231,417	0.242	56	100.0%	0	56	42	42	0.181
2009	221,391	0.244	54	100.0%	0	54	50	50	0.226
2010	214,519	0.246	53	100.0%	0	53	40	40	0.186
2011	213,237	0.249	53	100.0%	0	53	44	44	0.206
2012	212,954	0.251	54	100.0%	0	54	50	50	0.235
2013	215,194	0.254	55	100.0%	0	55	32	32	0.149
2014	219,905	0.256	56	98.5%	1	55	45	46	0.209
2015	224,273	0.259	58	95.4%	3	55	50	53	0.236
2016	225,018	0.262	59	94.4%	3	56	36	39	0.173
2017	223,579	0.264	59	85.8%	8	51	44	52	0.233
2018	221,508	0.267	59	74.2%	15	44	52	67	0.302
2019	220,010	0.269	59	62.7%	22	37	42	64	0.291
2020	209,645	0.272	57	36.9%	36	21	25	61	0.291
2021	219,690	0.275	60	8.8%	55	5	8	63	0.287
Total	4,616,513		1,151		143	1,008	815	958	0.208

Notes:

- | | |
|---|-------------------------|
| (1) 2021: Exhibit 12, Col (3) | (5) = (3) x [1.0 - (4)] |
| 2020 & prior: Exhibit 13, Col (1) | (6) = (3) - (5) |
| (2) 2021: Exhibit 15, Col (5) Selected | (7) Provided by NICA |
| 2020 & prior: detrended at an annual rate of 1.0% per annum | (8) = (5) + (7) |
| (3) = (1) x (2) / 1,000 | (9) = (8) / (1) x 1,000 |
| (4) = 1.0 / Exhibit 17, Col (2) | |

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 12

As of 12/31/2021

Projected Resident Live Births for 2021 & 2022

Birth Year	Florida Population	Resident Births per 1,000 Population	Projected Resident Live Births
	(1)	(2)	(3)
2021	21,781,128	10.09	219,690
2022	22,129,626	9.95	220,192

Notes:

- (1) 2021 taken from www.census.gov
2022 based on 2021 adjusted by 1.6% growth in population
- (2) Exhibit 13, Col (5)
2022 = 2021, Col (2) x [1 + Exhibit 13, Col (2), Selected Trend Row]
- (3) = (1) x (2) / 1,000

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 13

As of 12/31/2021

Resident Live Births per 1,000 Population

Birth Year	Resident Live Births	Florida Population	Frequency	Frequency Trend	Frequency Adjusted to 2021 Level
	(1)	(2)	(3)	(4)	(5)
2001	205,800	16,384,860	12.56	0.762	9.57
2002	205,580	16,718,033	12.30	0.772	9.50
2003	212,243	17,074,368	12.43	0.783	9.73
2004	218,045	17,476,489	12.48	0.794	9.90
2005	226,219	17,876,663	12.65	0.805	10.18
2006	237,166	18,237,596	13.00	0.816	10.61
2007	239,120	18,500,958	12.92	0.827	10.69
2008	231,417	18,636,837	12.42	0.838	10.41
2009	221,391	18,711,844	11.83	0.850	10.05
2010	214,519	18,820,280	11.40	0.861	9.82
2011	213,237	18,941,742	11.26	0.873	9.83
2012	212,954	19,118,938	11.14	0.885	9.86
2013	215,194	19,314,396	11.14	0.897	9.99
2014	219,905	19,579,871	11.23	0.909	10.21
2015	224,273	19,897,762	11.27	0.922	10.39
2016	225,018	20,231,092	11.12	0.934	10.39
2017	223,579	20,555,733	10.88	0.947	10.30
2018	221,508	20,957,705	10.57	0.960	10.15
2019	220,010	21,268,553	10.34	0.973	10.07
2020	209,645	21,640,766	9.69	0.987	9.56
Total	4,396,823	379,944,486	11.57		10.07
	15 Yr Trend	-1.6%		15 Yr Vol Wgt	10.15
	10 Yr Trend	-1.3%		10 Yr Vol Wgt	10.07
	7 Yr Trend	-2.4%		10 Yr Vol Wgt x-H/L	10.10
	5 Yr Trend	-3.2%		5 Yr Vol Wgt	10.09
	4 Yr Trend	-3.6%		4 Yr Vol Wgt	10.01
	3 Yr Trend	-4.3%		3 Yr Vol Wgt	9.92
	Selected Trend	-1.3%		Selected	10.09

Notes:

(1), (2) Based on data compiled by the Florida Department of Health

(3) = (1) / (2) x 1,000

(4) Based on selected annual trend of -1.3%

(5) = (3) x (4)

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 14

As of 12/31/2021

Compensable Claims

Selected Initial Expected Frequency

Birth Year	Initial Ultimate Claims	Resident Live Births	Indicated Ultimate Frequency	Frequency Trend	Frequency Adjusted to 2021 Level
	(1)	(2)	(3)	(4)	(5)
2001	13	205,800	0.063	3.034	0.192
2002	22	205,580	0.107	2.870	0.307
2003	9	212,243	0.042	2.715	0.115
2004	14	218,045	0.064	2.569	0.165
2005	13	226,219	0.057	2.430	0.140
2006	13	237,166	0.055	2.299	0.126
2007	15	239,120	0.063	2.175	0.137
2008	13	231,417	0.056	2.057	0.116
2009	17	221,391	0.077	1.946	0.150
2010	12	214,519	0.056	1.841	0.103
2011	14	213,237	0.066	1.742	0.115
2012	16	212,954	0.076	1.648	0.124
2013	11	215,194	0.052	1.559	0.081
2014	13	219,905	0.060	1.475	0.089
2015	22	224,273	0.097	1.395	0.135
2016	10	225,018	0.042	1.320	0.056
2017	16	223,579	0.073	1.249	0.091
2018	31	221,508	0.139	1.181	0.164
2019	24	220,010	0.110	1.117	0.123
2020	37	209,645	0.175	1.057	0.185
Total	335	4,396,823	0.076		0.135
	15 Yr Trend	5.7%		15 Yr Vol Wgt	0.120
	10 Yr Trend	10.3%		10 Yr Vol Wgt	0.116
	7 Yr Trend	18.0%		10 Yr Vol Wgt x-H/L	0.115
	5 Yr Trend	38.4%		5 Yr Vol Wgt	0.123
	4 Yr Trend	27.1%		4 Yr Vol Wgt	0.140
	3 Yr Trend	12.1%		3 Yr Vol Wgt	0.157
	Selected Trend	5.7%		Selected	0.123

Notes:

- (1) Exhibit 16, Col (3)
- (2) Based on data compiled by the Florida Department of Health
- (3) = (1) / (2) x 1,000
- (4) Based on selected annual trend of 5.7%
- (5) = (3) x (4)

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 15

As of 12/31/2021

Reported Claims

Selected Initial Expected Frequency

Birth Year	Initial Ultimate Claims	Resident Live Births	Indicated Ultimate Frequency	Frequency Trend	Frequency Adjusted to 2021 Level
	(1)	(2)	(3)	(4)	(5)
2001	41	205,800	0.199	1.220	0.243
2002	50	205,580	0.243	1.208	0.294
2003	23	212,243	0.108	1.196	0.130
2004	31	218,045	0.142	1.184	0.168
2005	41	226,219	0.181	1.173	0.213
2006	33	237,166	0.139	1.161	0.162
2007	36	239,120	0.151	1.149	0.173
2008	42	231,417	0.181	1.138	0.207
2009	50	221,391	0.226	1.127	0.254
2010	40	214,519	0.186	1.116	0.208
2011	44	213,237	0.206	1.105	0.228
2012	50	212,954	0.235	1.094	0.257
2013	32	215,194	0.149	1.083	0.161
2014	46	219,905	0.208	1.072	0.223
2015	52	224,273	0.234	1.062	0.248
2016	38	225,018	0.169	1.051	0.178
2017	51	223,579	0.229	1.041	0.239
2018	70	221,508	0.316	1.030	0.326
2019	67	220,010	0.305	1.020	0.311
2020	68	209,645	0.323	1.010	0.326
Total	905	4,396,823	0.206		0.227
	15 Yr Trend	4.7%		15 Yr Vol Wgt	0.232
	10 Yr Trend	6.0%		10 Yr Vol Wgt	0.249
	7 Yr Trend	9.2%		10 Yr Vol Wgt x-H/L	0.251
	5 Yr Trend	17.0%		5 Yr Vol Wgt	0.275
	4 Yr Trend	10.4%		4 Yr Vol Wgt	0.300
	3 Yr Trend	1.0%		3 Yr Vol Wgt	0.321
	Selected Trend	1.0%		Selected	0.275

Notes:

- (1) Exhibit 17, Col (3)
- (2) Based on data compiled by the Florida Department of Health
- (3) = (1) / (2) x 1,000
- (4) Based on selected annual trend of 1.0%
- (5) = (3) x (4)

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 16

As of 12/31/2021

Compensable Claims

Incurred Claim Development Method

Birth Year	Cumulative Compensable Claims	Cumulative Development Factors	Projected Ultimate Compensable Claims
	(1)	(2)	(3)
1989	15	1.000	15
1990	10	1.000	10
1991	8	1.000	8
1992	14	1.000	14
1993	15	1.000	15
1994	16	1.000	16
1995	11	1.000	11
1996	17	1.000	17
1997	17	1.000	17
1998	17	1.000	17
1999	18	1.000	18
2000	13	1.000	13
2001	13	1.000	13
2002	22	1.000	22
2003	9	1.000	9
2004	14	1.000	14
2005	13	1.000	13
2006	13	1.000	13
2007	15	1.001	15
2008	13	1.001	13
2009	17	1.001	17
2010	12	1.002	12
2011	14	1.003	14
2012	16	1.005	16
2013	11	1.011	11
2014	13	1.023	13
2015	21	1.036	22
2016	9	1.062	10
2017	14	1.163	16
2018	23	1.340	31
2019	14	1.735	24
2020	10	3.667	37
2021	3	NA	
Total	460		506

Notes:

- (1) Provided by NICA
- (2) Based on Exhibit 18
- (3) = (1) x (2)

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 17

As of 12/31/2021

Reported Claims

Incurred Claim Development Method

Birth Year	Cumulative Reported Claims (1)	Cumulative Development Factors (2)	Projected Ultimate Reported Claims (3)
1989	32	1.000	32
1990	39	1.000	39
1991	38	1.000	38
1992	48	1.000	48
1993	40	1.000	40
1994	36	1.000	36
1995	26	1.000	26
1996	40	1.000	40
1997	47	1.000	47
1998	42	1.000	42
1999	40	1.000	40
2000	38	1.000	38
2001	41	1.000	41
2002	50	1.000	50
2003	23	1.000	23
2004	31	1.000	31
2005	41	1.000	41
2006	33	1.000	33
2007	36	1.000	36
2008	42	1.000	42
2009	50	1.000	50
2010	40	1.000	40
2011	44	1.000	44
2012	50	1.000	50
2013	32	1.000	32
2014	45	1.015	46
2015	50	1.049	52
2016	36	1.059	38
2017	44	1.166	51
2018	52	1.347	70
2019	42	1.596	67
2020	25	2.707	68
2021	8	11.368	91
Total	1,281		1,462

Notes:

- (1) Provided by NICA
- (2) Based on Exhibit 19
- (3) = (1) x (2)

Florida Birth-Related Neurological Injury Compensation Association
As of 12/31/2021
Compensable Claim Count Development Pattern

Exhibit 18

Birth Year	As of (Months of Development)									
	12	24	36	48	60	72	84	96	108	120
2000										13
2001									13	13
2002								22	22	22
2003							9	9	9	9
2004						11	12	13	13	14
2005					10	13	13	13	13	13
2006				8	11	13	13	13	13	13
2007			7	12	13	14	14	14	15	15
2008		2	7	10	11	11	13	13	13	13
2009	2	5	11	14	15	15	15	16	17	17
2010	1	6	8	12	12	12	12	12	12	12
2011	0	1	8	9	11	13	14	14	14	14
2012	0	2	8	13	15	16	16	16	16	16
2013	1	5	9	10	11	11	11	11	11	
2014	1	5	8	10	13	13	13	13		
2015	0	3	9	15	17	21	21			
2016	0	3	4	5	8	9				
2017	0	4	8	13	14					
2018	0	5	22	23						
2019	0	10	14							
2020	0	10								
2021	3									

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 18

As of 12/31/2021

Compensable Claim Count Development Pattern

Birth Year	Development Factors									
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-Ult
2000										
2001									1.000	
2002								1.000	1.000	
2003							1.000	1.000	1.000	
2004						1.091	1.083	1.000	1.077	
2005					1.300	1.000	1.000	1.000	1.000	
2006				1.375	1.182	1.000	1.000	1.000	1.000	
2007			1.714	1.083	1.077	1.000	1.000	1.071	1.000	
2008		3.500	1.429	1.100	1.000	1.182	1.000	1.000	1.000	
2009	2.500	2.200	1.273	1.071	1.000	1.000	1.067	1.063	1.000	
2010	6.000	1.333	1.500	1.000	1.000	1.000	1.000	1.000	1.000	
2011		8.000	1.125	1.222	1.182	1.077	1.000	1.000	1.000	
2012		4.000	1.625	1.154	1.067	1.000	1.000	1.000	1.000	
2013	5.000	1.800	1.111	1.100	1.000	1.000	1.000	1.000		
2014	5.000	1.600	1.250	1.300	1.000	1.000	1.000			
2015		3.000	1.667	1.133	1.235	1.000				
2016		1.333	1.250	1.600	1.125					
2017		2.000	1.625	1.077						
2018		4.400	1.045							
2019		1.400								
2020										
Avg	4.625	2.881	1.384	1.185	1.097	1.029	1.013	1.011	1.006	
W Avg	11.800	2.275	1.339	1.153	1.095	1.025	1.013	1.012	1.006	
5 yr W Avg		2.280	1.294	1.189	1.094	1.014	1.000	1.014	1.000	
7 yr W Avg		2.114	1.309	1.187	1.092	1.010	1.011	1.021	1.000	
10 yr W Avg		2.227	1.305	1.144	1.071	1.022	1.007	1.015	1.007	
5 yr Avg x Hi/Lo		2.133	1.375	1.178	1.064	1.000	1.000	1.000	1.000	
10 yr Avg x Hi/Lo		2.442	1.345	1.145	1.056	1.010	1.000	1.008	1.000	
Prior at 12/31/2019	7.800	2.222	1.392	1.142	1.074	1.031	1.015	1.014	1.007	1.007
Prior LDF to Ult	31.840	4.082	1.837	1.320	1.156	1.076	1.044	1.028	1.014	1.007
Selected	10.000	2.114	1.294	1.153	1.095	1.025	1.013	1.012	1.006	1.005
LDF to Ultimate	36.674	3.667	1.735	1.340	1.163	1.062	1.036	1.023	1.011	1.005

Florida Birth-Related Neurological Injury Compensation Association
As of 12/31/2021
Reported Claim Count Development Pattern

Exhibit 19

Birth Year	As of (Months of Development)																																	
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	396	
1990	1	7	18	27	30	37	38	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	
1991	0	6	17	24	29	34	34	37	37	37	37	37	37	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	
1992	5	11	31	39	42	47	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	
1993	3	9	32	34	35	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
1994	3	16	29	32	32	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
1995	2	6	14	20	23	25	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	
1996	2	11	19	23	31	39	39	39	39	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
1997	2	11	23	32	42	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	
1998	2	12	29	33	34	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	
1999	5	14	22	29	32	39	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
2000	4	16	26	31	33	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	
2001	3	10	23	30	35	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	
2002	3	18	33	38	42	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
2003	3	8	11	15	18	21	21	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	
2004	0	9	14	20	23	29	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	
2005	0	9	21	30	35	39	40	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	
2006	2	9	17	24	28	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	
2007	4	12	22	26	31	32	33	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	
2008	1	9	18	24	29	37	37	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	
2009	5	15	26	34	39	47	48	48	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
2010	4	13	25	32	36	39	39	39	39	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
2011	6	14	24	37	38	40	40	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	
2012	5	17	36	44	46	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
2013	5	12	23	27	31	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	
2014	2	14	32	38	44	44	44	44	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	
2015	0	13	34	41	44	48	50																											
2016	7	13	19	25	30	36																												
2017	3	21	32	36	44																													
2018	7	29	46	52																														
2019	8	26	42																															
2020	2	25																																
2021	8																																	

Exhibit 19

NICA Reserves @ 12.31.2021

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 20

As of 12/31/2021

Evaluation of Investment Income Rate of Return

Calendar Year	Beginning Assets	Ending Assets	Investment Income	Investment Fees	Net Invest. Revenue	Net Return
Ending 30-Jun	(1)	(2)	(3)	(4)	(5)	(6)
1999	-	259,753,054	14,729,889	634,437	14,095,452	
2000	259,753,054	290,594,274	13,484,516	757,077	12,727,439	4.6%
2001	290,594,274	322,448,433	26,492,391	898,720	25,593,671	8.3%
2002	322,448,433	346,096,030	(2,364,423)	1,069,770	(3,434,193)	-1.0%
2003	346,096,030	382,229,582	12,021,744	1,092,207	10,929,537	3.0%
2004	382,229,582	440,726,160	43,973,889	1,440,245	42,533,644	10.3%
2005	440,726,160	500,202,393	43,454,989	1,903,011	41,551,978	8.8%
2006	500,202,393	606,754,030	61,655,301	2,715,730	58,939,571	10.6%
2007	606,754,030	716,319,722	90,147,957	3,219,148	86,928,809	13.1%
2008	716,319,722	705,135,858	(16,082,004)	3,421,872	(19,503,876)	-2.7%
2009	705,135,858	563,808,849	(109,232,024)	2,418,989	(111,651,013)	-17.6%
2010	563,808,849	652,202,115	86,478,251	2,558,749	83,919,502	13.8%
2011	652,202,115	762,134,527	111,039,225	3,167,414	107,871,811	15.3%
2012	762,134,527	800,516,517	17,678,775	2,863,323	14,815,452	1.9%
2013	800,516,517	890,786,400	73,775,304	3,263,491	70,511,813	8.3%
2014	890,786,400	1,024,478,268	144,560,808	3,865,431	140,695,377	14.7%
2015	1,024,478,268	1,030,522,152	8,795,827	3,644,655	5,151,172	0.5%
2016	1,030,522,152	1,072,391,046	35,864,078	3,618,760	32,245,318	3.1%
2017	1,072,391,046	1,158,494,820	95,128,890	3,070,049	92,058,841	8.3%
2018	1,158,494,820	1,210,964,330	50,669,779	3,417,424	47,252,355	4.0%
2019	1,210,964,330	1,315,790,163	106,706,461	3,236,594	103,469,867	8.2%
2020	1,315,790,163	1,475,845,426	124,591,136	3,308,839	121,282,297	8.7%
2021	1,475,845,426	1,699,486,369	254,082,247	3,706,519	250,375,728	15.8%

Average: 2000 - 2021 5.6%

Average: 2005 - 2021 6.2%

Average: 2010 - 2021 7.9%

Average: 2015 - 2021 6.8%

Notes:

(1), (2) From NICA financial statements; Balance Sheet

(3), (4) From NICA financial statements; Income Statement

(5) = (3) - (4)

NICA Selected 5.0%

(6) = [(5) / Average (1), (2)]

Florida Birth-Related Neurological Injury Compensation Association

Exhibit 21

As of 12/31/2021

Evaluation of Rate of Inflation

Year	Consumer Price Index	% Change
	(1)	(2)
1999	166.4	
2000	172.5	3.7%
2001	177.6	3.0%
2002	179.8	1.3%
2003	183.4	2.0%
2004	189.0	3.1%
2005	194.3	2.8%
2006	202.4	4.1%
2007	207.4	2.5%
2008	218.2	5.2%
2009	214.8	-1.6%
2010	217.4	1.2%
2011	225.1	3.5%
2012	228.6	1.5%
2013	232.7	1.8%
2014	237.4	2.0%
2015	237.8	0.2%
2016	240.2	1.0%
2017	244.2	1.7%
2018	251.2	2.9%
2019	255.6	1.8%
2020	257.9	0.9%
2021	271.6	5.3%
Average: 2000 - 2021		2.2%
Average: 2005 - 2021		2.1%
Average: 2010 - 2021		2.0%
Average: 2015 - 2021		2.2%
Selected		3.0%

Notes:

(1) www.bls.gov; CPI for all urban consumers

(2) $= (1) / [(1), \text{Prior}]$