# State of Ohio – Office of Risk Management Self-Insured Vehicle Liability Program

Actuarial analysis of loss and allocated loss adjustment expense reserves

As of March 31, 2020

June 2020





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23 June 2020

Ms. Traci Heyer, ARM, AU, AINS Risk Manager, Underwriting & Analytics Ohio Department of Administrative Services General Services Division - Office of Risk Management 4200 Surface Road Columbus, OH 43228

Dear Ms. Heyer:

We have completed our engagement to provide estimates of the unpaid loss and allocated loss adjustment expenses ("ALAE") as of March 31, 2020 for the State of Ohio's self-insurance program (the "Program"), specifically as it relates to its self-insured vehicle liability program, and to provide estimates of the ultimate loss and ALAE for the fiscal year ending June 30, 2021 ("Fiscal/Accident Year 2021") using data evaluated as of March 31, 2020. Our engagement was performed in accordance with our engagement agreement made effective December 8, 2017 and amended March 29, 2018 and September 1, 2019, and our procedures were limited to those described in that agreement.

#### Results of our work/Period covered by our procedures/Recommendations

During the period April 2020 through June 2020, Ernst & Young ("EY") performed an actuarial unpaid claim liability projection for the Program's self-insured vehicle liability exposures on both an undiscounted and discounted basis, using data through March 31, 2020. Our work also included an ultimate loss and ALAE estimate for the fiscal year ending June 30, 2021. The ultimate loss and ALAE estimate for the upcoming fiscal year was estimated on an undiscounted and discounted basis and includes various levels of confidence. Our findings resulting from our work are provided in this report.

#### Background

The State of Ohio Office of Risk Management ("ORM") manages a self-insured vehicle liability program through the Risk Management Reserve Fund ("The Fund") created under Ohio Revised Code Section 9.823. The Program for vehicle exposures covers liability only; losses related to physical damage are not covered by the Program. The exposures in the Program are from vehicles. Vehicle exposures include passenger vehicles, trucks (light, medium, and heavy weight), emergency vehicles, guest vehicles (buses), mobile equipment (light and heavy), and watercraft.

There are currently 92 state agencies that participate in the Program. In consideration of the agency's premium payment, the ORM agrees to pay liability claims and judgments properly made and rendered against the state, state officers and state employees that arise from the officer's or employee's operation of any state-owned vehicle, provided that the operation of the vehicle was in the course of state business as authorized by the state agency.

The ORM has engaged EY to provide an unpaid claims estimate as of March 31, 2020 and estimates of ultimate loss and ALAE for the upcoming fiscal year. In addition, it is our understanding that the estimates are also to be presented on an undiscounted and discounted basis showing anticipated future cash flows with expected payments per period. Finally, the estimate for the upcoming fiscal year was also requested by the ORM to be allocated to the various agencies participating in the Program ("Premium Allocation").

This report provides a range of expected unpaid claim estimates for vehicle liability claims incurred from July 1, 2004 through March 31, 2020 and evaluated as of March 31, 2020.

The report also provides estimates of the ultimate loss and ALAE for the prospective period July 1, 2020 through June 30, 2021 at retention levels of \$2M and \$5M, as requested by the ORM, and includes these estimates at various levels of confidence. The estimates are then allocated to the agencies expected to participate in the Program in fiscal year July 1, 2020 to June 30, 2021. For more background on the Program, please see Section V of this report.

#### Scope of our work

As outlined in our engagement agreement, our estimate of total vehicle liability outstanding loss and ALAE as of March 31, 2020 and estimates of ultimate loss and ALAE for the next fiscal year were based on inquiries of, and discussions with, the ORM. We have not sought to confirm the accuracy of the data or the information and explanations provided by the ORM.

This report contains a reasonable range of estimates of the unpaid loss and ALAE limited to the Program's self-insured retentions for fiscal accident years 2005 through 2020, evaluated as of March 31, 2020. These estimates are presented on both an undiscounted and discounted basis utilizing a discount rate provided by the ORM. Also contained within this report is an estimate of ultimate loss and ALAE for the next fiscal year beginning July 1, 2020 and ending June 30, 2021. The expected ultimate loss and ALAE for this year is also shown on an undiscounted and discounted basis, and is estimated for possible future insurance limits of \$2 million and \$5 million, as requested by the ORM. We also provide

the estimate for fiscal/accident year 2021 at various levels of confidence. EY has also allocated the actuarial indications to the agencies the ORM expects to participate in the Program in fiscal year 2021.

Our work has been limited in scope and time and we stress that more detailed procedures may have revealed issues that this engagement has not. The procedures performed throughout this engagement were advisory in nature and were performed under the American Institute of Certified Public Accountants ("AICPA") consulting standards. The procedures performed did not constitute an audit, a review, examination, or other form of attestation or assurance as those terms are defined by the AICPA. Accordingly, we do not express any form of assurance. Any use of the term "review" within this report should be interpreted in the common use of that term, and not in the definition of "review" promulgated by the AICPA. Also, this report/work product does not constitute a legal opinion or advice.

#### Restrictions on the use of our work product

Our estimate of total vehicle liability outstanding loss and ALAE as of March 31, 2020 and our estimate of ultimate loss and ALAE for the next fiscal year beginning July 1<sup>st</sup> are intended solely for the information and use of the management of the ORM. They are not intended to be and should not be used by anyone other than these specified parties.

#### EY personnel responsible for our work product

Kishen Patel, FCAS, MAAA, and Thomas Conway, ACAS, MAAA are responsible for this report. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to perform this engagement and provide the findings contained herein. Comments or questions regarding this report should be directed to Kishen Patel at 312-879-2988, who is also available to provide supplemental information and/or explanation as requested.

We appreciate the cooperation and assistance provided to us during the course of our work.

Very truly yours,

Ernet + Young ILP

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## I. Introduction and scope

Ernst & Young ("EY") has been retained by The State of Ohio - Office of Risk Management (the "ORM") to provide an unpaid claim estimate for vehicle liability claims incurred from July 1, 2004 through March 31, 2020 evaluated as of March 31, 2020. Additionally, EY was asked to provide estimates of ultimate loss and allocated loss adjustment expense ("ALAE") for the fiscal accident year beginning July 1, 2020 and ending June 30, 2021 at limits of \$2 million and \$5 million. These estimates are presented on both an undiscounted and discounted basis. Furthermore, EY has been asked to allocate the estimates for fiscal/accident year 2021 to the agencies that are expected to participate in the Program for fiscal/accident year 2021. For the expected loss and ALAE for the next fiscal year, beginning July 1, 2020, variation from expected results at various confidence levels are presented.

As outlined in our engagement agreement, our estimate of total vehicle liability outstanding loss and ALAE as of March 31, 2020 and estimate of ultimate loss and ALAE for the next fiscal year beginning July 1<sup>st</sup> were based on inquiries of, and discussions with, the ORM. We have not sought to confirm the accuracy of the data or the information and explanations provided by the ORM.

Our work has been limited in scope and time and we stress that more detailed procedures may have revealed issues that this engagement has not. The procedures performed throughout this engagement were advisory in nature and were performed under the AICPA consulting standards. The procedures performed did not constitute an audit, a review, examination, or other form of attestation or assurance as those terms are defined by the AICPA. Accordingly, we do not express any form of assurance. Any use of the term "review" within this report should be interpreted in the common use of that term, and not in the definition of "review" promulgated by the AICPA. Also, this report/work product does not constitute a legal opinion or advice.

Kishen Patel, FCAS, MAAA and Thomas Conway, ACAS, MAAA are responsible for this report. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to perform this engagement and provide the findings contained herein. Comments or questions regarding this report should be directed to Kishen Patel at 312-879-2988, who is also available to provide supplemental information and/or explanation as requested.

# II. Distribution and use

This report is intended solely for the information and use of the management of the ORM. The report is not intended to be and should not be used by anyone other than these specified parties. This report should not be relied upon for any other purpose. Any other use or distribution of this report without our express written consent is not authorized.

# III. Reliances and limitations

Use of the term "review" in our workproduct

The services we performed throughout this engagement were advisory in nature; therefore, this report/work product does not represent an assurance report or opinion, nor does it constitute an audit, review, examination, or other form of attestation as those terms are defined by the American Institute of Certified Public Accountants. Any use of the term "review" within this report should be interpreted in the common use of that term, and not in the definition of "review" promulgated by the AICPA. Also, this report/work product does not constitute a legal opinion or advice.

### Data and qualitative information

The report presents an analysis of data, conditions, and practices communicated to EY personnel involved in this engagement and described herein.

In preparing our analysis, we relied on data and qualitative information provided to us under the direction of Ms. Traci Heyer, Risk Manager, Underwriting & Analytics of the State of Ohio - Office of Risk Management. We have relied on the oral and/or written statements of Ms. Heyer regarding the quality, accuracy, and completeness of the data and information supplied to us. Any inaccuracies or inconsistencies in the data could have a significant effect on our results.

We relied on industry benchmarks based on industry aggregated insurance company data, public rate filing information, and some proprietary development data in performing our analysis.

Our analysis considers loss and ALAE on a combined basis. Any reference to loss in this report is intended to include loss and ALAE, unless otherwise indicated.

In accordance with ASOP 23, *Data* Quality, we performed "an informal examination of the obvious characteristics of the selected data to determine if such data appear reasonable and consistent for purposes of the assignment." This "informal examination" did not constitute an audit of data. Rather, the procedures that we performed on the data provided to us were as follows: Compared incurred and paid loss and ALAE and vehicle exposure information to that of data/loss runs as of prior year evaluations for reasonability/consistency purposes. We note that the review procedures performed may not always uncover existing defects, as they did not constitute an audit. Should any defects be found in the data, by management, through the ORM's financial audit, or through any other external review, we should be notified so that our analysis can be adjusted accordingly.

### **Evaluation date**

The evaluation date is March 31, 2020. Our review considered information provided to us through the date of this report.

### Uncertainty or risk

In determining the estimates, EY has used a measure known as the Actuarial Central Estimate. The Actuarial Central Estimate represents an expected value over the range of reasonably possible outcomes. Such a range of reasonably possible outcomes may not include all conceivable outcomes, as, for example, it would not include conceivable extreme events where the contribution of such events to an expected value is not reliably estimable.

The actuarial central estimates in the report are based on assumptions and procedures described in the section of the report entitled "Analysis." Considerable uncertainty and variability are inherent in the estimation of unpaid claim liabilities. The uncertainty of the findings contained herein is increased by the need to use external/industry data and benchmarks due to the small volume of claims history. As a result, it is possible that actual experience may be different than the estimates promulgated in this report, and such difference may be material. As such, we cannot provide any determination that future experience will be as expected in this report or recorded by the Program.

The level of uncertainty in our actuarial central estimates, for both the unpaid claim liability estimate as of March 31, 2020 and for the ultimate loss and ALAE estimate for the next fiscal year, was increased due to the potential impacts from COVID-19, a coronavirus first identified in December 2019 in Wuhan China and later declared a pandemic by the World Health Organization ("WHO") on March 11, 2020, and the economic downturn that ensued. Within a week of the WHO declaration, most major economies had announced significant and increasing restrictions on the movement and interaction of people. On March 25, 2020 it was estimated that a quarter of the world's population was under some form of lockdown or stay-at-home order.

At the time of publication of this report there are many issues arising from COVID-19 that could impact claims incurred by the ORM on or before March 31, 2020. These include:

- A number of states, including Ohio, are under directives to stay-at-home, many courts and arbitration systems are closed, potentially limiting the ability to report claims and the ORM's ability to settle claims thus causing increases in duration and severity.
- Many elective surgeries have been cancelled and claimants are not able to attend physical therapy appointments, potentially limiting the ORM's ability to improve outcomes for claimants thus causing increases in duration and severity.

This list of potential effects may not be exhaustive and at this time we are unable to provide any quantification of the impact from COVID-19 on claims incurred as of March 31, 2020.

### Other reliances or limitations

The ORM selected a 2.0% discount rate for purpose of discounting its self-insurance vehicle liability reserve. The assumption provided by the ORM in the prior year was 2.5%. EY relied on this discount rate supplied to us by the ORM. An appropriate discount rate should reflect the expected returns on invested assets of similar size and duration as the claim payments, as well as the uncertainty associated with future returns and the timing and amount of eventual payments. Assessing the reasonableness for the Program's selection of 2.0% is outside the scope of our analysis. The ORM noted that 2.0% was selected based on a longer-term view of the interest rate environment so as not to overreact to the recent volatility and reduction observed in the U.S. treasury yield curve. We note that the comparable duration-matched risk-free rate is 0.20% on the U.S. treasury yield curve rates as of March 31, 2020 based on an estimated duration of payments of 1.5 years, which reflects the lower U.S. treasury yield curve compared to prior years resulting from actions taken by the Federal Reserve to stimulate the economy after the financial downturn from COVID-19.

EY's approach to determine estimates of ultimate loss for the prospective period at different confidence levels was to utilize the Monte Carlo simulation from our March 31, 2018 analysis to estimate the distribution of ultimate claims for this period. This approach estimates the variation of actual results from expected, given a known distribution of aggregate claims (process risk). Though the Program's actual data was used to select the best fit distribution, the actual distribution of ultimate claims is unknown, and selected assumptions such as loss trends and loss development factors were also used; thus, parameter risk still exists.

To allocate the fiscal year 2021 projection period estimates to the participating agencies for purposes of calculating the premium, the fiscal year 2020 query of vehicle counts by agency was used at the guidance of the ORM. This assumes no change in the overall level of exposure for the upcoming fiscal year.

# IV. Findings

The EY Summary of total net loss and ALAE reserves for the ORM's self-insured vehicle liability program as of March 31, 2020 is as follows:

	U	npaid Claims Liability (	\$)
	Low	ACE	High
(1) Undiscounted	4,614,171	5,494,948	6,375,725
(2) Discounted at 2.0%	4,484,232	5,340,206	6,196,180

Based on our review, we find the range of reasonable unpaid claim estimates to be from \$4.6M to \$6.4M on an undiscounted basis, and \$4.5M to \$6.2M on a discounted basis. The high and low estimates were determined after consideration of the variability observed across the various ultimate loss indications as well as consideration of the nature of the underlying exposure, the inherent variability in this type of coverage, the magnitude of the liabilities, the limits being retained, and our experience with similar exposures with other clients. The above table is also displayed on Exhibit Auto-1.

We performed an actual versus expected analysis based on the assumptions underlying EY's prior actuarial analysis as of March 31, 2019. On an incurred basis, loss and ALAE emerged by \$1.8M less than expected on fiscal/accident years 2019 and prior. On a paid basis, loss and ALAE emerged by \$1.5M less than expected on fiscal/accident years 2019 and prior. Our estimates imply a decrease in ultimate loss and ALAE estimates on those same years of \$1.7M. These actual versus expected diagnostics are also displayed on Exhibit Auto-19 and 20.

The EY estimate of expected ultimate loss and ALAE for the ORM's self-insured vehicle liability program for fiscal accident year 7/1/2020-6/30/2021 is as follows:

	Ultimate Los	s & ALAE (\$)
	ACE @ 2M	ACE @ 5M
(1) Undiscounted	2,347,270	2,744,065
(2) Discounted at 2.5%	2,231,922	2,609,218

The above estimates are also found on Exhibits Auto-3 and Auto-5. The estimates presented herein are based on the assumption that exposures in fiscal accident year 7/1/2020-6/30/2020 will be comparable to the current exposures observed in the data as of March 31, 2020. Given the level of uncertainty in exposures created by COVID-19, we have assumed a "normal" year and have not made an adjustment for the impacts of COVID-19.

The EY estimate of ultimate loss and ALAE for the ORM's self-insured vehicle liability program for fiscal accident year 7/1/2020-6/30/2021 at various levels of confidence is as follows:

	Undiscou	inted (\$)		Discoun	ted (\$)
	\$2,000,000	\$5,000,000	\$2	2,000,000	\$5,000,000
Confidence Level	per Occurrence	per Occurrence	per	Occurrence	per Occurrence
ACE	2,347,270	2,744,065		2,231,922	2,609,218
60%	2,326,915	2,548,731		2,212,567	2,423,483
65%	2,495,202	2,727,015		2,372,585	2,593,006
70%	2,700,612	2,947,136		2,567,900	2,802,310
75%	2,966,215	3,221,356		2,820,452	3,063,054
80%	3,262,007	3,553,978		3,101,707	3,379,330
85%	3,569,486	4,032,991		3,394,076	3,834,804
90%	3,971,349	4,860,982		3,776,192	4,622,107
95%	4,642,866	6,508,796		4,414,709	6,188,945

A description of the procedures performed to obtain the various confidence levels shown above can be found within the "Analysis" section of this report.

# V. Company background

The State of Ohio - Office of Risk Management (the "ORM") manages a self-insured vehicle liability program through the Risk Management Reserve Fund ("The Fund") created under Ohio Revised Code Section 9.823. The Program for vehicle exposures covers liability only; losses related to physical damage are not covered by the Program. The exposures covered by the Program include all motorized, self-propelling "vehicles" as defined in Ohio Revised Code 9.83, including passenger vehicles, medium and heavy weight trucks, emergency vehicles, guest vehicles (buses), off-road light and heavy equipment and watercraft.

The Program covers all state agencies, boards and commissions, as well as the Legislative and Judicial branches of state government. Pursuant to Ohio Revised Code 9.82, the "state" does not include political subdivisions or institutions of higher education. There are currently 92 entities covered under the Program. Premiums are allocated to and paid by the agencies that own the state "vehicles." The ORM agrees to pay liability claims and judgments properly made and rendered against the state, state officers, or state employees that arise from the officer's or employee's operation of any state-owned vehicle, provided that the operation of the vehicle was in the course of state business as authorized by the state agency. For fiscal year ending June 30, 2020, over two-thirds of the exposures are associated with three state departments; Department of Natural Resources, Department of Public Safety, and the Department of Transportation.

# VI. Analysis

### General approach

We prepared an independent estimate of net loss and ALAE liabilities for fiscal accident years 2005 through 2020, using data provided by the ORM as of March 31, 2020. Liability estimates were limited to historical self-insured retentions. Additionally, we prepared expected ultimate loss and ALAE projections for the next fiscal accident year beginning July 1, 2020 and ending June 30, 2021 at limits of self-insured liability of \$2 million and \$5 million.

We utilized data provided by the ORM, supplemented with benchmarks derived from industry aggregated data and publicly available Commercial Auto product filings/manuals.

### Responsible party for methods and assumptions

EY is responsible for each material assumption and method used in this analysis, except as noted below:

- As discussed above, the data are the responsibility of the ORM
- The discount rate utilized was provided by the ORM
- We relied on industry aggregated insurance company data for consideration of Commercial Auto Liability loss development
- We utilized public rate filing information for consideration of Commercial Auto Liability Increased Limit Factors and Vehicle Classification relativities
- We relied on the current estimates of vehicle counts by agency as the basis for the fiscal year 2021 projection period and premium allocation, as directed by the ORM

### Detailed description of analysis

#### 1. Organization of Data

The loss data was analyzed on a combined basis, including both loss and ALAE. The loss data was organized by historical fiscal/accident year, as the coverage was provided on an occurrence basis. Our analysis was based upon data beginning July 1, 2004 through March 31, 2020, evaluated as of March 31, 2020. A fiscal/accident year for the ORM runs from July 1<sup>st</sup> to June 30<sup>th</sup>. For example, fiscal accident year 2017 includes all claims that incurred in the period July 1, 2016 to June 30, 2017. Data is presented limited to the historical self-insured retentions, which are \$1 million per occurrence for fiscal/accident years 2005-2008, and \$2 million per claim for all subsequent periods. Our estimates take into account the fact that self-insured retentions are applied to claims after application of deductibles and recognition of salvage and subrogation recoveries. We have not separately estimated the impact of deductibles and recoveries, as such procedures were not outlined in our scope of work.

#### 2. Estimation Methodologies

We computed independent estimates of loss and ALAE liabilities limited to historical retentions by applying the following generally accepted actuarial methods to paid and incurred loss and ALAE data as of March 31, 2020:

- 1. Paid and Incurred Loss Development Method
- 2. Paid and Incurred Bornhuetter-Ferguson Method ("BF")
- 3. IBNR-to-Case Outstanding Method
- 4. Expected Loss Ratio Method

A description of each of the methodologies used is included in Section VII of this report.

3. Procedures performed

#### Loss and ALAE liability/reserve estimates

The paid and incurred loss development patterns used in the first three methods listed above are derived from loss development triangles of the Program's historical data provided by the ORM but reflect our own independent view of the loss emergence patterns. The loss development triangles are stated on an unlimited basis and are not limited to historical self-insured retentions. Based on

these triangles, we have first selected paid and incurred development patterns. We supplemented the Program's data with aggregated Commercial Auto Liability ("CAL") benchmarks in coming up with our final loss development factor selections. Selected loss development factors were applied to corresponding limited loss and ALAE by fiscal/accident year at historical retentions to calculate ultimate loss. Please see Exhibits Auto-7 through Auto-9 for details on these methods.

The key assumption for the BF methods is the "a priori" loss estimate. We have derived a set of loss rates based on comparing the ultimate loss indications from the development methods described above to the exposure base (number of vehicles). These loss rates were then trended to the fiscal accident year 2021 for exposure, severity and frequency. We have applied a net trend of 3% for CAL. The trend rate was selected based on the Program's historical data and our knowledge of recent industry development for this type of risk exposure. Since retention levels have varied by year, we adjusted the historical data to be at the most current retention (\$2M) using Increased Limit Factors ("ILF"). Once an expected loss rate was selected at the \$2M retention, we then adjusted the selected loss rate back to historical retention levels for past years (2005-2008, \$1M) by adjusting with the same ILF. The selected loss rate was also de-trended to the respective accident period to derive the a priori loss estimate by year. Ultimate losses were derived by multiplying the percent unreported (or unpaid) for each accident year, based on our selected loss development patterns, by the a priori loss estimate, and adding reported (or paid) loss and ALAE to date. Thus, this method relies more heavily on the exposure to loss, and our initial expectations, for accident periods where there has not yet been a considerable amount of loss reported (or paid). Please see Exhibits Auto-11 through Auto-13 for detailed calculations for the BF methods.

Ultimate losses were selected for each accident period by giving different weights to the indications produced by the methods described above and detailed further in Section VII. The weights were selected based on actuarial judgement. In general, for immature accident periods, more weight was given to methods that incorporate expectations, such as the BF methods. As accident periods mature, and more claims for that period are reported to date, more weight was given to paid and incurred development methods. Exhibit Auto-5 displays indicated ultimate loss and ALAE from each actuarial method, along with our selected ultimate loss and ALAE.

#### Actual versus expected analysis ("AvE")

As part of our review, we have performed hindsight analyses for fiscal/accident periods 2019 and prior by comparing the actual paid and incurred loss emergence since the prior year review at March 31, 2019 to what was expected based on the paid and incurred loss development patterns selected at the time of the prior review. We used this comparison of actual loss development versus expected loss development as a reasonability check for the changes in our current year selected ultimate losses compared to the prior year's selected ultimate losses for all accident periods 2019 and prior.

For accident periods 2019 and prior, the actual reported loss emergence over the period was \$1.8M less than expected while the actual paid loss emergence over the period was \$1.5M less than expected based on our selected development patterns as of March 31, 2019. Commensurate with the loss emergence observed, we have decreased our overall ultimate loss estimates for accident years 2019 and prior, decreasing them by \$1.7M since March 31, 2019.

#### Prospective period estimates

The ultimate loss estimate for the next fiscal accident year beginning July 1, 2020 through June 30, 2021 was established using the a priori loss rate selected for the BF method. The initial selected expected loss rate at the fiscal accident year 2021 level was multiplied by the expected number of vehicles (exposures) to be covered under the Program for the coming year. As described above, this estimate was based on an expected loss rate at the most recent year's self-insured retention of \$2M. To get an estimate of the ultimate loss at the \$5 million retention, we applied an ILF to the ultimate loss. More details on the ILFs can be found in sub-section "4. Assumptions" below.

The ultimate loss estimate for fiscal year 2021 was then allocated for premium calculation purposes to the 92 agencies anticipated to have in-service of vehicles covered under the Program for the upcoming fiscal year. We estimated the allocation giving consideration to two methods. The first method allocated the ultimate loss and ALAE based on the projected vehicle count distribution, by agency, for fiscal/accident year 2021. The second method allocated based on the historical loss and ALAE experience of each agency. Projected vehicles/exposures are based on fiscal/accident year 2020 exposures by agency and vehicle classification, and are adjusted by proposed classification relativities (see Exhibit Auto Premium Allocation-7). The historical agency loss and ALAE experience was developed to ultimate using the selected loss development factors utilized in this review for the aggregate estimate and were trended to the current cost level utilizing the same trend factor as that used in deriving the a priori expected loss rate described above. The ultimate trended losses were then capped at \$250,000 to avoid over-penalizing an agency for an unusually large loss.

Two scenarios were presented for consideration based on the different allocation methods discussed above. The first allocation scenario was based on 50% weight to the vehicle count method and 50% to the historical experience method. These weights were provided by the ORM and are consistent with the weighting used in the prior year analysis. A second scenario was based on using credibility weights that vary the weight given to the historical experience method depending on the size of the fleet for each agency. The following table summarizes the credibility weights statistically calculated and selected by the ORM:

	Statistical	ORM Selected	
# of	Experience	Experience	
Vehicles	Weighting	Weighting	% of
Range	Factor	Factor	Agencies
(0,15]	6%	15%	50%
(15, 100]	16%	15%	18%
(100, 250]	25%	25%	17%
(250, 500]	36%	35%	8%
(500, 1500]	61%	60%	O%
(1500+	87%	75%	7%

The statistical experience weighting factor was calculated as the square root of the # of vehicles divided by the full credibility standard. The full credibility standard was calculated as 3,966 using the standard frequency full credibility sample size of 1,082 converted to an annual number of Class 310 vehicles based on the observed claim frequency of 2.48% and 11 years of historical data used in the experience method. Exhibits Auto Premium Allocation-2 through 7 show the derivation of the final allocation of premium to agency on an undiscounted and discounted basis.

The method EY chose to estimate the variation of the ultimate loss and ALAE of the prospective period was to rely upon the Monte Carlo simulation performed as of March 31, 2018 to estimate the probability distribution for aggregate claims. In this simulation as of March 31, 2018, the bodily injury and property damage portions of claims severity were modeled separately as these coverages have different distributional shapes, specifically at the tail of the distribution. We trended the bodily injury and property damage claim values by 3.0% to the 2021 level and developed all claims to ultimate values. We performed 10,000 simulations for each group, drawing from a Poisson distribution to obtain the number of claims in each simulation, with a mean annual frequency of 0.155% (or 28 claims) for bodily injury and a mean of 2.0% (or 365 claims) for property damage. We ran these simulations simultaneously and developed confidence levels based upon the resulting distribution of simulated results. The results of the March 31, 2018 simulation were then calibrated to our March 31, 2020 ACE.

#### Discounting

Estimates for the outstanding liability and the ultimate loss for the prospective year are presented on a discounted basis to reflect the time value of money. Exhibits Auto-2 and Auto-3 show the calculation for unpaid claims liability (years 2005-2020) and ultimate loss and ALAE (year 2021), respectively. EY utilized a discount rate of 2.0%, supplied to us by the ORM, and the annual payment pattern implied by our paid loss development factor selections to discount future cash flows from reserves to 3/31/2020, and the future payments associated with the ultimate loss and ALAE of the prospective period back to July 1, 2020 (the beginning of that period). When necessary, interpolation was used to develop cumulative loss development factors at interim ages/maturities not explicitly selected in our analyses. We make note that actual future rates of return may be greater than or less than the rate of 2.0% supplied to us by the ORM. Additionally, the actual timing of claim payments emanating from the reserves and ultimate loss at 3/31/2020 may be different than the expected timing that is underlying the discounted estimates. An appropriate discount rate should reflect the expected returns on invested assets of similar size and duration as the claim payments, as well as the uncertainty associated with future returns and the timing and amount of eventual payments. An examination of the assets of the Fund and an evaluation of the reasonableness of the discount rate assumption of 2.0% were beyond the scope of the assignment and we are therefore unable to comment on the reasonableness of this assumption. We note that the comparable durationmatched risk-free rate is 0.20% on the U.S. treasury yield curve rates as of March 31, 2020 based on an estimated duration of payments of 1.5 years, which reflects the lower U.S. treasury yield curve compared to prior years resulting from actions taken by the Federal Reserve to stimulate the economy after the financial downturn from COVID-19.

#### 4. Assumptions

We relied on industry benchmarks to supplement our analysis due to the volatility in the Program's own loss history due to the small volume of claims. These benchmarks included industry incurred and paid loss development patterns, public rate and product filing information, and some proprietary development data in performing our analysis. We also relied on a discount date of 2.0% provided by the ORM.

The industry development patterns were obtained from aggregated CAL data available through an insurance industry data aggregator as of December 31, 2019. Benchmark ILFs for CAL were utilized in our analysis to supplement sparse data at higher value loss points. Benchmarks were based off of top Ohio CAL writers' publicly available rate and product filings, and internal proprietary data from clients with similar exposure.

# VII. Description of methods

#### Loss development methods

The reported (case incurred) loss development method relies on the assumption that, at any given state of maturity, ultimate losses can be predicted by multiplying cumulative reported losses (paid losses plus case OS) by a cumulative development factor. The validity of the results of this method depends on the stability of claim reporting and settlement rates, as well as the consistency of case OS levels. Case OS does not have to be adequately stated for this method to be effective; they only need to have a fairly consistent level of adequacy at all stages of maturity.

Historical "age-to-age" loss development factors ("LDFs") were calculated to measure the relative development of an accident year from one maturity point to the next. We then indicated appropriate age-to-age LDFs based on these historical factors. We used the indicated factors to project the ultimate losses.

The paid loss development method is mechanically identical to the incurred loss development method described above. The paid method does not rely on case OS or claim reporting patterns in making projections.

The validity of the results from using a loss development approach can be affected by many conditions, such as internal claim department processing changes, a shift between single and multiple payments per claim, legal changes, or variations in a company's mix of business from year to year. Also, since the percentage of losses paid for immature years is often low, development factors are volatile. A small variation in the number of claims paid can have a leveraging effect that can lead to significant changes in estimated ultimates. Therefore, ultimate values for immature accident years are often based on alternative estimation techniques.

### IBNR-to-Case OS Method

This method requires the estimation of consistent paid and reported (case) incurred loss development patterns and age-to-ultimate factors. These patterns imply a specific expected relationship between IBNR, including both development on known claims (bulk reserve) and losses on true late reported claims, and reported case incurred losses. This method can be used in a variety of situations. It is appropriate for experience that is mature and possesses a very high ratio of paid losses to reported incurred losses. The strict extrapolation by age-to-ultimate factors may yield unrealistically high estimates of ultimate losses. The method also permits an evaluation of the difference in maturity between the business being reviewed and benchmark development patterns. Depending on the relationship of paid to incurred losses, an estimate of the relative maturity of the business being reviewed can be made and a subsequent estimate driven by the implied IBNR to Case OS ratio at the appropriate maturity can be made. This method is also very useful where experience is incomplete and only the Case OS amounts are determined to be reliable.

#### Bornhuetter-Ferguson expected loss projection methods

The Bornhuetter-Ferguson expected loss projection method based on reported loss data relies on the assumption that remaining unreported losses are a function of the total expected losses rather than a function of currently reported losses. The expected losses used in this analysis are based on the ultimate estimates of older accident years relative to the number of exposures. The expected losses are multiplied by the unreported percentage to produce expected unreported losses. The unreported percentage is calculated as one minus the reciprocal of the indicated cumulative incurred LDFs. Finally, the expected unreported losses are added to the current reported losses to produce ultimate losses.

The calculations underlying the Bornhuetter-Ferguson expected loss projection method based on paid loss data are similar to the incurred Bornhuetter-Ferguson calculations with the exception that paid losses and unpaid percentages replace reported losses and unreported percentages.

The Bornhuetter-Ferguson method is most useful as an alternative to other models for immature accident years. For these immature years, the amounts reported or paid may be small and unstable and therefore not predictive of future development. Therefore, future development is assumed to follow an expected pattern that is supported by more stable historical data or by emerging trends. This method is also useful when changing reporting patterns or payment patterns distort historical development of losses.

Similar to the development methods, the Bornhuetter-Ferguson method may be applied to loss and ALAE on a combined or separate basis.

### Expected Loss Rate/Ratio projection methods

The expected loss rate projections method utilizes only the a-priori expected loss rate and exposure base to determine ultimate loss. The expected losses used in this analysis are based on the ultimate estimates of older accident years, or can be based on plan loss ratios and industry benchmarks. The initial selected expected loss rate is multiplied by the exposures for a given year to arrive at the ultimate loss estimate.

This technique is most often used when there is a lack of appropriate past claims occurrence data due to change in product mix, low volumes of past data, or when there is little to no amount of loss reported to date for immature years on longer-tailed lines.

# VIII. Exhibits

Listing of exhibits:

- Exhibit Summary-1: Estimate of Ultimate Loss & ALAE for Accident Year 7/1/2020-6/30/2021
- Exhibit Auto-1: Estimated Unpaid Claims (Accident Years 2005-2020)
- Exhibit Auto-2: Payout and Discounting of Unpaid Claim Liabilities as of 3/31/2020
- Exhibit Auto-3: Payout and Discounting of Ultimate Loss and ALAE 7/1/20-21 Accident Period
- Exhibit Auto-4: Summary of Loss & ALAE Reserves
- Exhibit Auto-5: Comparison of Ultimate Loss & ALAE Estimates
- Exhibit Auto-6: Paid Loss & ALAE Development Method
- Exhibit Auto-7: Paid Loss & ALAE
- Exhibit Auto-8: Incurred Loss & ALAE Development Method
- Exhibit Auto-9: Incurred Loss & ALAE
- Exhibit Auto-10: Incurred IBNR to Case Development Method for Loss & ALAE
- Exhibit Auto-11: Bornhuetter-Ferguson Method Using Paid Loss & ALAE
- Exhibit Auto-12: Bornhuetter-Ferguson Method Using Incurred Loss & ALAE
- Exhibit Auto-13: Loss & ALAE Rate Helper: Selection for Bornhuetter-Ferguson Method
- Exhibit Auto-14 Increased Limits Factors
- Exhibit Auto-15: Summary of Ultimate Number of Claims and Claims Outstanding
- Exhibit Auto-16: Estimates of Ultimate Number of Claims
- Exhibit Auto-17: Non-Zero Claims Reported
- Exhibit Auto-18: Claims Closed w/ Pay
- Exhibit Auto-19: Actual vs Expected Incurred Loss & ALAE

- Exhibit Auto-20: Actual vs Expected Paid Loss & ALAE
- Exhibit Auto-21: Actual vs Expected Reported Non-Zero Counts
- Exhibit Auto Premium Allocation-1-3: Allocation of 7/1/20-21 Ultimate Loss & ALAE by Agency at ACE \$2M per Occurrence and Undiscounted
- Exhibit Auto Premium Allocation-4-6: Allocation of 7/1/20-21 Ultimate Loss & ALAE by Agency at ACE \$2M per Occurrence and Discounted 2.0%
- Exhibit Auto Premium Allocation-7: Vehicle Type Classification Relativities

## State of Ohio - Office of Risk Management Auto Liability March 31, 2020

## Estimate of Ultimate Loss & ALAE for Accident Year 7/1/2020-6/30/2021

	Undiscou	nted (\$)	Discou	nted (\$)
	\$2,000,000	\$5,000,000	\$2,000,000	\$5,000,000
Confidence Level	per Occurrence	per Occurrence	per Occurrence	per Occurrence
ACE	2,347,270	2,744,065	2,231,922	2,609,218
60%	2,326,915	2,548,731	2,212,567	2,423,483
65%	2,495,202	2,727,015	2,372,585	2,593,006
70%	2,700,612	2,947,136	2,567,900	2,802,310
75%	2,966,215	3,221,356	2,820,452	3,063,054
80%	3,262,007	3,553,978	3,101,707	3,379,330
85%	3,569,486	4,032,991	3,394,076	3,834,804
90%	3,971,349	4,860,982	3,776,192	4,622,107
95%	4,642,866	6,508,796	4,414,709	6,188,945

Notes:

ACE from Exhibit Auto-3

Confidence Level estimates based on Monte Carlo simulation

### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Estimated Unpaid Claims (Accident Years 2005-2020)

	U	npaid Claims Liability (	\$)
	Low	ACE	High
(1) Undiscounted	4,614,171	5,494,948	6,375,725
(2) Discounted at 2.0%	4,484,232	5,340,206	6,196,180

Notes:

(1) Exhibit Auto-4

(2) Exhibit Auto-2

Low and High discounted based on average discount for ACE

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Payout and Discounting of Unpaid Claim Liabilities as of 3/31/2020

A	Reserves				D) D				
Accident	at 3/31/2020			-	2) Payments in				
Period	(1)	3/31/20-21	3/31/21-22	3/31/22-23	3/31/23-24	3/31/24-25	3/31/25-26	3/31/26-27	3/31/27-28
7/1/2011-12	-	-	-	-	-	-	-	-	-
7/1/2012-13	203,715	203,715	-	-	-	-	-	-	-
7/1/2013-14	64,715	37,086	27,629	-	-	-	-	-	-
7/1/2014-15	302,169	195,373	61,202	45,595	-	-	-	-	-
7/1/2015-16	545,349	279,233	172,062	53,900	40,155	-	-	-	-
7/1/2016-17	203,236	118,577	43,347	26,710	8,367	6,234	-	-	-
7/1/2017-18	721,670	393,959	191,202	69,896	43,070	13,492	10,051	-	-
7/1/2018-19	2,102,234	1,047,053	576,022	279,564	102,198	62,974	19,727	14,696	-
7/1/2019-20	1,351,860	252,363	547,623	301,267	146,216	53,451	32,936	10,317	7,686
(2) Calendar Year Payments	5,494,948	2,527,359	1,619,087	776,932	340,005	136,150	62,714	25,014	7,686
(3) Duration of Payment		0.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5
(4) Discount Rate		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
(5) Discounted Payments	5,340,206	2,502,458	1,571,701	739,406	317,238	124,542	56,243	21,993	6,626

#### Notes:

(1) Exhibit Auto-4

(2) Based on payment pattern applied to (1)

(3) Age of payments in years

(4) Provided by Client
(5) = (2) / [1 + (4)]^(3)

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Payout and Discounting of Ultimate Loss and ALAE 7/1/2020-21 Accident Period

Accident	Limit	Ultimate	(3) Payments in Calendar Period								
Period	(1)	(2)	7/1/20-21	7/1/21-22	7/1/22-23	7/1/23-24	7/1/24-25	7/1/25-26	7/1/26-27	7/1/27-28	7/1/28-29
7/1/2020-21	2M	2,347,270	329,368	510,716	761,012	411,019	192,627	75,661	42,716	15,125	9,026
7/1/2020-21	5M	2,744,065	385,046	597,050	889,658	480,500	225,189	88,451	49,937	17,682	10,552
(4) Duration of Pa	ayment (to 7,	/1/2020)	0.50	1.50	2.50	3.50	4.50	5.50	6.50	7.50	8.50
(5) Discount Rate			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
(6) Discounted Pa	ayments										
7/1/2020-21	2M	2,231,922	326,122	495,769	724,255	383,496	176,204	67,853	37,557	13,037	7,628
7/1/2020-21	5M	2,609,218	381,252	579,576	846,687	448,325	205,990	79,323	43,906	15,241	8,917

Notes:

(1) Provided by Client

(2) Exhibit Auto-5

(3) Based on payment pattern applied to (2)

(4) Age of payments in years
(5) Provided by Client
(6) = (2) / [1 + (4)]^(3)

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Summary of Loss & ALAE Reserves

Accident Period Ending 7/1/xxxx	Paid (1)	Incurred (2)	Selected Ultimate (3)	Case Reserve (4)	IBNR Reserve (5)	EY ACE Loss & ALAE Reserve (6)	EY Low Loss & ALAE Reserves (7)	EY High Loss & ALAE Reserves (8)
2005	909,673	909,673	909,673	0	0	0	0	0
2005	727,033	727,033	727,033	0	0	0	0	0
2007	1,578,290	1,578,290	1,578,290	0	0	0	0	0
2008	776,096	776,096	776,096	0	0	0	0	0
2009	1,248,331	1,248,331	1,248,331	0	0	0	0	0
2010	2,632,202	2,632,202	2,632,202	0	0	0	0	0
2011	921,060	921,060	921,060	0	0	0	0	0
2012	1,258,538	1,258,538	1,258,538	0	0	0	0	0
2013	939,799	1,140,283	1,143,514	200,485	3,230	203,715	112,810	294,620
2014	2,209,137	2,257,887	2,273,851	48,750	15,965	64,715	45,328	84,101
2015	2,936,449	3,188,573	3,238,618	252,125	50,045	302,169	220,451	383,887
2016	447,846	957,996	993,195	510,150	35,199	545,349	344,553	746,145
2017	508,609	554,675	711,844	46,067	157,169	203,236	108,771	297,701
2018	1,377,956	1,719,799	2,099,626	341,843	379,827	721,670	675,677	767,662
2019	574,121	1,936,589	2,676,355	1,362,468	739,766	2,102,234	1,905,605	2,298,862
2020 @ 9mo	174,880	504,109	1,526,740	329,230	1,022,630	1,351,860	1,200,974	1,502,746
Total	19,220,018	22,311,135	24,714,966	3,091,117	2,403,831	5,494,948	4,614,171	6,375,725

#### Notes:

(1) Exhibit Auto-6	(5) = (3) - (2)
(2) Exhibit Auto-8	(6) = (4) + (5)
(3) EY Select - latest year is a partial year estimate	(7) EY Select - latest year is a partial year estimate
(4) = (2) - (1)	(8) EY Select - latest year is a partial year estimate

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Comparison of Ultimate Loss & ALAE Estimates

Accident Period Ending 7/1/xxxx	Exposure (Vehicle Count) (1)	Limited Paid Development (2)	Limited Incurred Development (3)	Limited Paid B-F (4)	Limited Incurred B-F (5)	IBNR to Case OS (6)	Average (7)	Prior Selected Ultimate (8)	EY Selected Ultimate (9)	Change in Ultimate (10)	Ultimate Loss Rate (11)	Low Estimate (12)	High Estimate (13)
2005	15,996	909,673	909,673	909,673	909,673	909,673	909,673	909,673	909,673	0	56.87	909,673	909,673
2005	15,990	727,033	727,033	727,033	727,033	727.033	727,033	727,033	727,033	0	45.67	727,033	727,033
2008	15,952	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	0	98.94	1,578,290	1,578,290
2007	16,656	776,096	776,096	776,096	776,096	776,096	776,096	776,096	776,096	0	46.60	776,096	776,096
2008	16,732	1,248,331	1,248,331	1,248,331	1,248,331	1,248,331	1,248,331	1,248,331	1,248,331	0	74.61	1,248,331	1,248,331
										0			
2010	16,381	2,632,202	2,632,202	2,632,202	2,632,202	2,632,202	2,632,202	2,632,202	2,632,202	-	160.69	2,632,202	2,632,202
2011	16,449	921,060	921,060	921,060	921,060	921,060	921,060	921,060	921,060	0	56.00	921,060	921,060
2012	16,516	1,258,538	1,258,538	1,258,538	1,258,538	1,258,538	1,258,538	1,261,977	1,258,538	(3,439)	76.20	1,258,538	1,258,538
2013	16,383	944,642	1,143,514	947,942	1,144,770	1,386,297	1,113,433	1,144,721	1,143,514	(1,207)	69.80	1,052,609	1,234,419
2014	16,396	2,235,990	2,273,851	2,228,799	2,269,382	2,326,497	2,266,904	2,291,995	2,273,851	(18,144)	138.68	2,254,465	2,293,238
2015	16,403	3,039,739	3,238,618	2,993,775	3,214,643	3,398,854	3,177,126	3,321,286	3,238,618	(82,668)	197.44	3,156,900	3,320,336
2016	17,990	481,365	993,195	580,556	1,025,538	1,486,744	913,480	1,105,297	993,195	(112,102)	55.21	792,399	1,193,991
2017	16,939	610,698	606,193	817,586	711,754	602,313	669,709	1,169,382	711,844	(457,538)	42.02	617,380	806,309
2018	18,228	2,180,761	2,104,760	2,132,116	2,094,492	2,057,341	2,113,894	2,964,053	2,099,626	(864,427)	115.19	2,053,633	2,145,618
2019	18,000	2,153,700	2,835,123	2,102,350	2,596,971	2,973,349	2,532,298	2,873,242	2,676,355	(196,887)	148.69	2,479,726	2,872,983
2020	19,113	1,780,230	1,360,367	2,229,916	1,938,522	1,265,040	1,714,815	2,345,669	2,035,653	(310,016)	106.51	1,834,472	2,236,835
Total	270,055	23,478,348	24,606,844	24,084,263	25,047,295	25,547,658	24,552,882	27,270,306	25,223,880	(2,046,427)	93.40	24,292,807	26,154,952
2021 @\$2M	19,113								2,347,270		122.81		
2021 @\$2M 2021 @\$5M	19,113								2,744,065		143.57		
2021 0001	17,115								2,144,005		143.51		
Notes:													

(1)	Provided by Client	(7)	Average (2) through (5)
(2)	Exhibit Auto-6	(8)	Prior EY Analysis
(3)	Exhibit Auto-8	(9)	EY Select
(4)	Exhibit Auto-11	(10)	= (9) - (8)
(5)	Exhibit Auto-12	(11)	= (9)/(1)
(6)	Exhibit Auto-10 (	12)&(13)	EY Select

### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Paid Loss & ALAE Development Method

Accident Period Ending 7/1/xxxx	Historical Retention (1)	Limited at Historical Retention Paid Loss & ALAE (2)	EY Factor to Ultimate (3)	Limited Ultimate @ Retention (4)
2005	1,000,000	909,673	1.000	909,673
2006	1,000,000	727,033	1.000	727,033
2007	1,000,000	1,578,290	1.000	1,578,290
2008	1,000,000	776,096	1.000	776,096
2009	2,000,000	1,248,331	1.000	1,248,331
2010	2,000,000	2,632,202	1.000	2,632,202
2011	2,000,000	921,060	1.000	921,060
2012	2,000,000	1,258,538	1.000	1,258,538
2013	2,000,000	939,799	1.005	944,642
2014	2,000,000	2,209,137	1.012	2,235,990
2015	2,000,000	2,936,449	1.035	3,039,739
2016	2,000,000	447,846	1.075	481,365
2017	2,000,000	508,609	1.201	610,698
2018	2,000,000	1,377,956	1.583	2,180,761
2019	2,000,000	574,121	3.751	2,153,700
2020	2,000,000	174,880	10.180	1,780,230

Total

19,220,018

23,478,348

Notes:

(1) Provided by Client

(2) Exhibit Auto-7

(3) Exhibit Auto-7, adjusted for retention

(4) = (2) x (3)

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Paid Loss & ALAE

Paid Loss & ALAE																
Accident Period Ending 7/1/xxxx	9	21	33	45	57	69	81	Months of Dev 93		117	129	1.41	153	165	177	189
//1/XXXX	9	21	33	45	57	69	81	93	105	117	129	141	153	165	1//	189
2005								909,673	909,673	909,673	909,673	909,673	909,673	909,673	909,673	909,673
2006							727,033	727,033	727,033	727,033	727,033	727,033	727,033	727,033	727,033	
2007						1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290		
2008					774,546	774,546	775,046	775,046	775,046	776,096	776,096	776,096	776,096			
2009				1,194,498	1,212,726	1,246,374	1,246,459	1,246,459	1,248,331	1,248,331	1,248,331	1,248,331				
2010			549,387	2,599,797	2,623,790	2,633,958	2,622,635	2,622,635	2,652,820	2,652,820	2,652,820					
2011		578,180	935,263	935,438	935,438	934,543	921,060	921,060	921,060	921,060						
2012	182,763	321,644	848,350	1,109,465	1,186,890	1,186,890	1,258,538	1,258,538	1,258,538							
2013	168,424	285,618	606,474	924,150	924,226	930,283	933,875	939,799								
2014	197,935	460,548	1,468,696	1,549,043	2,080,316	2,082,673	2,209,137									
2015	248,668	404,940	675,931	2,675,618	2,883,423	2,936,884										
2016	164,746	303,093	370,030	440,598	447,846											
2017	158,601	307,742	447,365	508,609												
2018	190,113	354,636	1,377,956													
2019	185,895	574,121														
2020	174,880															
Period Ending								Developmen	t Factors							
7/1/xxxx	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141	141-153	153-165	165-177	177-189	189-201
2005								1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2006							1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2007						1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2008					1.000	1.001	1.000	1.000	1.001	1.000	1.000	1.000				
2009				1.015	1.028	1.000	1.000	1.002	1.000	1.000	1.000					
2010			4.732	1.009	1.004	0.996	1.000	1.012	1.000	1.000						
2011		1.618	1.000	1.000	0.999	0.986	1.000	1.000	1.000							
2012	1.760	2.638	1.308	1.070	1.000	1.060	1.000	1.000								
2013	1.696	2.123	1.524	1.000	1.007	1.004	1.006									
2014	2.327	3.189	1.055	1.343	1.001	1.061										
2015	1.628	1.669	3.958	1.078	1.019											
2016 2017	1.840 1.940	1.221	1.191 1.137	1.016												
		1.454	1.137													
2018 2019	1.865 3.088	3.886														
2017	0.000															
vg All	2.018	2.225	1.988	1.066	1.007	1.013	1.001	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
vg 5	2.072	2.284	1.773	1.101	1.005	1.021	1.001	1.003	1.000	1.000	1.000					
Yr Avg Ex Hi/Lo	1.882	2.104	1.284	1.055	1.003	1.020	1.000	1.001	1.000	1.000	1.000					
td Avg All	2.012	2.231	1.820	1.076	1.008	1.016	1.001	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
td Avg 5	2.051	2.370	1.709	1.123	1.008	1.023	1.001	1.005	1.000	1.000	1.000					
td Avg 3	2.313	2.274	2.427	1.160	1.011	1.048	1.002	1.006	1.000	1.000	1.000	1.000	1.000			
dustry	3.415	1.592	1.318	1.158	1.068	1.030	1.013	1.007	1.005	1.004	1.003	1.002	1.002	1.007		
ast	2.580	2.025	1.304	1.117	1.037	1.018	1.007	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
I LDF	2.714	2.370	1.318	1.117	1.038	1.023	1.007	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	10.180	2.370	1.318	1.117	1.038	1.023	1.007	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DF	10.180	3.751	1.583	1.201	1.075	1.035	1.012	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Incurred Loss & ALAE Development Method

Accident Period Ending 7/1/xxxx	Historical Retention	Limited at Historical Retention Incurred Loss & ALAE	EY Factor to Ultimate	Limited Ultimate @ Retention
//1/****	(1)	(2)	(3)	(4)
2005	1,000,000	909,673	1.000	909,673
2006	1,000,000	727,033	1.000	727,033
2007	1,000,000	1,578,290	1.000	1,578,290
2008	1,000,000	776,096	1.000	776,096
2009	2,000,000	1,248,331	1.000	1,248,331
2010	2,000,000	2,632,202	1.000	2,632,202
2011	2,000,000	921,060	1.000	921,060
2012	2,000,000	1,258,538	1.000	1,258,538
2013	2,000,000	1,140,283	1.003	1,143,514
2014	2,000,000	2,257,887	1.007	2,273,851
2015	2,000,000	3,188,573	1.016	3,238,618
2016	2,000,000	957,996	1.037	993,195
2017	2,000,000	554,675	1.093	606,193
2018	2,000,000	1,719,799	1.224	2,104,760
2019	2,000,000	1,936,589	1.464	2,835,123
2020	2,000,000	504,109	2.699	1,360,367

Total

22,311,135

24,606,844

Notes:

(1) Provided by Company

(2) Exhibit Auto-9

(3) Exhibit Auto-9, adjusted for retention

(4) = (2) x (3)

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Incurred Loss & ALAE

							Incu	red Loss & ALAI	E							
Accident Period Ending								Months of Dev								
7/1/xxxx	9	21	33	45	57	69	81	93	105	117	129	141	153	165	177	189
2005								909,673	909,673	909,673	909,673	909,673	909,673	909,673	909,673	909,673
2006							727,033	727,033	727,033	727,033	727,033	727,033	727,033	727,033	727,033	
2007						1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290	1,578,290		
2008					794,546	774,546	775,046	775,046	775,046	776,096	776,096	776,096	776,096			
2009				1,542,998	1,506,369	1,423,874	1,246,459	1,246,459	1,248,331	1,248,331	1,248,331	1,248,331				
2010			3,090,754	2,831,842	2,747,356	2,733,958	2,721,504	2,721,504	2,652,820	2,652,820	2,652,820					
2011		1,332,702	985,263	985,438	935,438	934,543	921,060	921,060	921,060	921,060						
2012	951,619	1,084,079	1,388,640	1,410,240	1,436,515	1,436,515	1,258,538	1,258,538	1,258,538							
2013	638,487	1,256,618	1,491,049	1,220,150	1,154,226	1,135,283	1,137,783	1,140,283								
2014	1,156,800	1,298,188	2,350,734	2,437,716	2,285,483	2,260,483	2,257,887									
2015	921,324	1,853,078	2,880,022	3,157,773	3,208,925	3,189,008										
2016	484,761	537,184	531,350	974,283	957,996											
2017	368,249	670,920	651,542	554,675												
2018	1,002,068	2,203,842	1,719,799													
2019	1,792,675	1,936,589	-111. 11													
2020	504,109	1,,00,00,														
Period Ending								Developmen	t Factors							
7/1/xxxx	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141	141-153	153-165	165-177	177-189	189-201
=																
2005								1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2006							1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2007						1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2008					0.975	1.001	1.000	1.000	1.001	1.000	1.000	1.000				
2009				0.976	0.945	0.875	1.000	1.002	1.000	1.000	1.000					
2010			0.916	0.970	0.995	0.995	1.000	0.975	1.000	1.000						
2011		0.739	1.000	0.949	0.999	0.986	1.000	1.000	1.000							
2012	1.139	1.281	1.016	1.019	1.000	0.876	1.000	1.000								
2013	1.968	1.187	0.818	0.946	0.984	1.002	1.002									
2014	1.122	1.811	1.037	0.938	0.989	0.999										
2015	2.011	1.554	1.096	1.016	0.994											
2016	1.108	0.989	1.834	0.983												
2017	1.822	0.971	0.851													
2018	2.199	0.780														
2019	1.080															
Avg All	1.556	1.164	1.071	0.975	0.985	0.967	1.000	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Avg All Avg 5	1.556	1.164	1.127	0.980	0.985	0.967	1.000	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
5 Yr Avg Ex Hi/Lo	1.647	1.171	0.995	0.982	0.994	0.993	1.000	1.000	1.000	1.000	1.000	1 000	1 000	1.000	1.000	
Wtd Avg All	1.482	1.172	1.015	0.977	0.987	0.969	1.000	0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd Avg 5	1.576 1.521	1.239 0.851	1.056	0.983 0.982	0.993 0.990	0.976 0.963	1.000 1.001	0.990 0.986	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000			
Wtd Avg 3			1.154											1.000		
Industry	2.039	1.221	1.120	1.054	1.021	1.009	1.004	1.003	1.002	1.001	1.001	1.001	1.001	1.002	1.000	1 000
Last	1.766	1.243	1.116	1.054	1.021	1.008	1.003	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Sel LDF	1.843	1.196	1.120	1.054	1.021	1.009	1.004	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CDF	2.699	1.464	1.224	1.093	1.021	1.016	1.004	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CDI	2.099	1.404	1.224	1.093	1.037	1.010	1.007	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Incurred IBNR to Case Development Method for Loss & ALAE

Accident Period Ending 7/1/xxxx	Limited Incurred @ Retention	Limited Paid @ Retention	Outstanding @ Retention	Incurred CDF	Paid CDF	IBNR Factor	IBNR	Limited Ultimate @ Retention
// 1/ XXXX	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2005	909,673	909,673	0	1.000	1.000	0.000	0	909,673
2006	727,033	727,033	0	1.000	1.000	0.000	0	727,033
2007	1,578,290	1,578,290	0	1.000	1.000	0.000	0	1,578,290
2008	776,096	776,096	0	1.000	1.000	0.000	0	776,096
2009	1,248,331	1,248,331	0	1.000	1.000	0.000	0	1,248,331
2010	2,632,202	2,632,202	0	1.000	1.000	0.000	0	2,632,202
2011	921,060	921,060	0	1.000	1.000	0.000	0	921,060
2012	1,258,538	1,258,538	0	1.000	1.000	0.000	0	1,258,538
2013	1,140,283	939,799	200,485	1.003	1.005	1.227	246,014	1,386,297
2014	2,257,887	2,209,137	48,750	1.007	1.012	1.407	68,610	2,326,497
2015	3,188,573	2,936,449	252,125	1.016	1.035	0.834	210,281	3,398,854
2016	957,996	447,846	510,150	1.037	1.075	1.036	528,749	1,486,744
2017	554,675	508,609	46,067	1.093	1.201	1.034	47,638	602,313
2018	1,719,799	1,377,956	341,843	1.224	1.583	0.987	337,542	2,057,341
2019	1,936,589	574,121	1,362,468	1.464	3.751	0.761	1,036,759	2,973,349
2020	504,109	174,880	329,230	2.699	10.180	2.311	760,930	1,265,040
Total	22,311,135	19,220,018	3,091,117				3,236,523	25,547,658

### Notes:

(1) Exhibit Auto-8

- (2) Exhibit Auto-6
- (3) = (1) (2)

(4) Exhibit Auto-8

(5) Exhibit Auto-6
(6) = (1 - 1 / (4)) / (1 / (4) - 1 / (5))
(7) = (3) x (6)
(8) = (1) + (7)

### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Bornhuetter-Ferguson Method Using Paid Loss & ALAE

Accident Period Ending 7/1/xxxx	Exposure (Vehicle Count) (1)	Selected A Priori Loss & ALAE Rate (2)	Expected Loss & ALAE (3)	Paid Factor to Ultimate (4)	Unpaid Percent (5)	Expected Unpaid Loss & ALAE (6)	Limited Paid Loss & ALAE (7)	Limited Ultimate Loss & ALAE (8)	Ultimate Loss & ALAE Rate (9)
2005	15,996	67.4	1,077,928	1.000	0.0%	0	909,673	909,673	56.9
2006	15,921	69.4	1,105,061	1.000	0.0%	0	727,033	727,033	45.7
2007	15,952	71.5	1,140,429	1.000	0.0%	0	1,578,290	1,578,290	98.9
2008	16,656	73.6	1,226,481	1.000	0.0%	0	776,096	776,096	46.6
2009	16,732	86.1	1,441,237	1.000	0.0%	0	1,248,331	1,248,331	74.6
2010	16,381	88.7	1,453,333	1.000	0.0%	0	2,632,202	2,632,202	160.7
2011	16,449	91.4	1,503,101	1.000	0.0%	0	921,060	921,060	56.0
2012	16,516	94.1	1,554,547	1.000	0.0%	0	1,258,538	1,258,538	76.2
2013	16,383	96.9	1,588,290	1.005	0.5%	8,144	939,799	947,942	57.9
2014	16,396	99.9	1,637,237	1.012	1.2%	19,663	2,209,137	2,228,799	135.9
2015	16,403	102.9	1,687,074	1.035	3.4%	57,327	2,936,449	2,993,775	182.5
2016	17,990	105.9	1,905,808	1.075	7.0%	132,710	447,846	580,556	32.3
2017	16,939	109.1	1,848,302	1.201	16.7%	308,978	508,609	817,586	48.3
2018	18,228	112.4	2,048,620	1.583	36.8%	754,160	1,377,956	2,132,116	117.0
2019	18,000	115.8	2,083,686	3.751	73.3%	1,528,228	574,121	2,102,350	116.8
2020	19,113	119.2	2,278,903	10.180	90.2%	2,055,036	174,880	2,229,916	116.7
2021	19,113	122.8	2,347,270			2,347,270		2,347,270	122.8
Total	289,168		27,927,305			7,211,514	19,220,018	26,431,533	
Total x2021	270,055		25,580,035			4,864,245	19,220,018	24,084,263	
<u>Notes:</u>									
(1)	Provided by Client		(5) =	= 1 - 1 / (4)	(9)	=(8)/(1)			
(2)	EY Select		(6) =	= (3) x (5)					
(3)	=(1) x (2)		(7) E	Exhibit Auto-6					

(8) = (6) + (7)

(4) Exhibit Auto-6

### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Bornhuetter-Ferguson Method Using Incurred Loss & ALAE

Accident Period Ending	Exposure (Vehicle Count)	Selected A Priori Loss & ALAE Rate	Expected Loss & ALAE	Incurred Factor to Ultimate	Unreported Percent	Expected Unreported Loss & ALAE	Limited Incurred Loss & ALAE	Limited Ultimate Loss & ALAE	Ultimate Loss & ALAE Rate
7/1/xxxx	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2005	15,996	67.4	1,077,928	1.000	0.0%	0	909,673	909,673	56.9
2005	15,921	69.4	1,105,061	1.000	0.0%	0	727,033	727,033	45.7
2000	15,952	71.5	1,140,429	1.000	0.0%	0	1,578,290	1,578,290	98.9
2008	16,656	73.6	1,226,481	1.000	0.0%	0	776,096	776,096	46.6
2009	16,732	86.1	1,441,237	1.000	0.0%	0	1,248,331	1,248,331	74.6
2010	16,381	88.7	1,453,333	1.000	0.0%	0	2,632,202	2,632,202	160.7
2011	16,449	91.4	1,503,101	1.000	0.0%	0	921,060	921,060	56.0
2012	16,516	94.1	1,554,547	1.000	0.0%	0	1,258,538	1,258,538	76.2
2013	16,383	96.9	1,588,290	1.003	0.3%	4,487	1,140,283	1,144,770	69.9
2014	16,396	99.9	1,637,237	1.007	0.7%	11,495	2,257,887	2,269,382	138.4
2015	16,403	102.9	1,687,074	1.016	1.5%	26,069	3,188,573	3,214,643	196.0
2016	17,990	105.9	1,905,808	1.037	3.5%	67,543	957,996	1,025,538	57.0
2017	16,939	109.1	1,848,302	1.093	8.5%	157,079	554,675	711,754	42.0
2018	18,228	112.4	2,048,620	1.224	18.3%	374,693	1,719,799	2,094,492	114.9
2019	18,000	115.8	2,083,686	1.464	31.7%	660,381	1,936,589	2,596,971	144.3
2020	19,113	119.2	2,278,903	2.699	62.9%	1,434,413	504,109	1,938,522	101.4
2021	19,113	122.8	2,347,270			2,347,270		2,347,270	122.8
Total	289,168		27,927,305			5,083,430	22,311,135	27,394,565	
Total x2021	270,055		25,580,035			2,736,160	22,311,135	25,047,295	
Notes:	<u>-</u>								
(1)	Provided by Client		(5) =	= 1 - 1 / (4)	(9)	=(8)/(1)			
(2)	EY Select		(6) =	= (3) x (5)					
(3)	=(1) x (2)		(7) E	Exhibit Auto-8					

(8) = (6) + (7)

(4) Exhibit Auto-8

EY

### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Loss & ALAE Rate Helper: Selection for Bornhuetter-Ferguson Method

2006         1.000,000         15,921         727,033         727,033         1256%         1.136         1.286,390         80.8         69.4         1.105,06           2007         1.000,000         15,952         1.578,290         1.578,290         151%         1.136         1.286,390         80.8         69.4         1.105,06           2008         1.000,000         16,656         776,096         776,096         147%         1.136         1.249,313         77.7         73.6         1.126,06           2009         2,000,000         16,312         1.248,331         1.248,331         1.43%         1.000         3.643,583         222.4         88.7         1.443,333           2011         2,000,000         16,549         921,060         921,060         924,060         1,328,373         1000         1,322,667         80,7         96,9         1,588,28           2013         2,000,000         16,333         94,642	Accident Period Ending 7/1/xxxx	Retention (1)	Exposure (Vehicle Count) (2)	@ Retention     Developed     Paid     (3)	@ Retention Developed Incurred (4)	Initial Selected Developed Ultimate (5)	3.00% Net Trend Rate (6)	ILF to \$2M (7)	@ \$. Selected Developed Loss & ALAE (8)	2M Developed Loss & ALAE Rate (9)	Selected Loss & ALAE Rate @ Hist Ret (10)	Expected Loss & ALAE @ Hist Ret (11)
2006         1.000,000         15,921         727,033         727,033         1256%         1.136         1.286,390         80.8         69.4         1.105,06           2007         1.000,000         15,952         1.578,290         1.578,290         151%         1.136         1.286,390         80.8         69.4         1.105,06           2008         1.000,000         16,656         776,096         776,096         147%         1.136         1.249,313         77.7         73.6         1.126,06           2009         2,000,000         16,312         1.248,331         1.248,331         1.43%         1.000         3.643,583         222.4         88.7         1.443,333           2011         2,000,000         16,549         921,060         921,060         924,060         1,328,373         1000         1,322,667         80,7         96,9         1,588,28           2013         2,000,000         16,333         94,642												
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		1,000,000		909,673	909,673	909,673			1,657,834		67.4	1,077,928
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $									1,286,390			1,105,061
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2007	1,000,000	15,952	1,578,290	1,578,290	1,578,290	151%	1.136	2,711,240	170.0	71.5	1,140,429
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2008	1,000,000	16,656	776,096	776,096	776,096	147%	1.136	1,294,373	77.7	73.6	1,226,481
2011       2,000,000       16,449       921,060       921,060       134%       1.000       1,237,828       75.3       91.4       1,503,102         2012       2,000,000       16,516       1,258,538       1,258,538       1,230,132       1,000       1,642,106       99.4       94.1       1,558,291         2014       2,000,000       16,336       2,235,990       2,273,851       2,254,921       123%       1,000       2,773,268       169.1       99.9       1,637,233         2015       2,000,000       16,403       3,039,739       3,238,618       3,139,178       119%       1,000       3,748,343       228.5       102.9       1,687,07         2016       2,000,000       16,939       610,698       606,193       608,445       113%       1,000       684,811       40.4       109.1       1,848,300         2018       2,000,000       18,228       2,180,761       2,104,760       2,144,720       115.8       2,034,622         2020       2,000,000       18,228       2,180,761       2,104,760       2,142,760       109%       1,000       2,646,321       147.0       115.8       2,034,622         2021       2,000,000       18,020       2,163,367       1,570,299	2009	2,000,000	16,732	1,248,331	1,248,331	1,248,331	143%	1.000	1,779,821	106.4	86.1	1,441,237
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2010	2,000,000	16,381	2,632,202	2,632,202	2,632,202	138%	1.000	3,643,583	222.4	88.7	1,453,333
2013       2,000,000       16,383       944,642       1,143,514       1,044,078       127%       1.000       1,322,607       80.7       96.9       1,588,294         2014       2,000,000       16,396       2,235,990       2,273,851       2,254,921       123%       1.000       2,773,268       169.1       99.9       1,637,07         2016       2,000,000       17,990       481,365       993,195       737,280       116%       1.000       854,710       47.5       105.9       1,905,800         2017       2,000,000       16,939       610,698       606,193       608,445       113%       1.000       684,811       40.4       109.1       1,848,302         2018       2,000,000       18,28       2,180,761       2,104,760       2,142,760       100%       1.000       2,646,321       147.0       115.8       2,083,680         2020       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,278,900         2020       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,278,900	2011	2,000,000	16,449	921,060	921,060	921,060	134%	1.000	1,237,828	75.3	91.4	1,503,101
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2012	2,000,000	16,516	1,258,538	1,258,538	1,258,538	130%	1.000	1,642,106	99.4	94.1	1,554,547
2015       2,000,000       16,403       3,039,739       3,238,618       3,139,178       119%       1.000       3,748,343       228.5       102.9       1,687,07-         2016       2,000,000       17,990       481,365       993,195       737,280       116%       1.000       854,710       47.5       105.9       1,905,800         2017       2,000,000       16,939       610,698       606,193       608,451       113%       1.000       854,710       47.5       105.9       1,905,800         2018       2,000,000       18,228       2,180,761       2,104,760       2,142,760       109%       1.000       2,341,452       128.5       112.4       2,048,620         2019       2,000,000       18,000       2,153,700       2,835,123       2,494,412       106%       1.000       1,617,408       84.6       119.2       2,278,900         2021       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,247,904       115.7       27,927,300         Average Last 3 Years       120.0       Average Last 3 Years x H/L       144.2       144.2       144.2       144.2       144.2       115.7 <td>2013</td> <td>2,000,000</td> <td>16,383</td> <td>944,642</td> <td>1,143,514</td> <td>1,044,078</td> <td>127%</td> <td>1.000</td> <td>1,322,607</td> <td>80.7</td> <td>96.9</td> <td>1,588,290</td>	2013	2,000,000	16,383	944,642	1,143,514	1,044,078	127%	1.000	1,322,607	80.7	96.9	1,588,290
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2014	2,000,000	16,396	2,235,990	2,273,851	2,254,921	123%	1.000	2,773,268	169.1	99.9	1,637,237
2017       2,000,000       16,939       610,698       606,193       608,445       113%       1.000       684,811       40.4       109.1       1,848,302         2018       2,000,000       18,228       2,180,761       2,104,760       2,142,760       109%       1.000       2,341,452       128.5       112.4       2,048,622         2019       2,000,000       18,000       2,153,700       2,835,123       2,494,412       106%       1.000       2,646,321       147.0       115.8       2,083,646         2020       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,278,902         2021       2,000,000       19,113       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,278,902         2021       2,000,000       19,113       1,360,367       1,570,299       100%       1.000       1.617,408       84.6       119.2       2,347,270         Notes:       Average Last 3 Years       122.8       2,347,270         10       Provided by Client       (8) = (5)*(6)*(7)       Average Last 3 Years x H/L       144.2 <td< td=""><td>2015</td><td>2,000,000</td><td>16,403</td><td>3,039,739</td><td>3,238,618</td><td>3,139,178</td><td>119%</td><td>1.000</td><td>3,748,343</td><td>228.5</td><td>102.9</td><td>1,687,074</td></td<>	2015	2,000,000	16,403	3,039,739	3,238,618	3,139,178	119%	1.000	3,748,343	228.5	102.9	1,687,074
2018       2,000,000       18,228       2,180,761       2,104,760       2,142,760       109%       1.000       2,341,452       128.5       112.4       2,048,620         2019       2,000,000       18,000       2,153,700       2,835,123       2,494,412       106%       1.000       2,646,321       147.0       115.8       2,083,680         2020       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,789,03         2021       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,7927,303         Average Last 3 Years       120.0         Average Last 7 Years x H/L       144.2         (2) Provided by Client       (8) = (5)*(6)*(7)       Average Last 7 Years x last 2       72.1         (3) Exhibit Auto-6       (10) = Selected rate (6)/(7)       Average Last 7 Years x last 2       72.1         (4) Exhibit Auto-6       (11) = (10)/(2)       Average Last	2016	2,000,000	17,990	481,365	993,195	737,280	116%	1.000	854,710	47.5	105.9	1,905,808
2019       2,000,000       18,000       2,153,700       2,835,123       2,494,412       106%       1.000       2,646,321       147.0       115.8       2,083,686         2020       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,278,900         2021       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,278,900         2021       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,789,900         2021       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,789,900         2021       2,000,000       19,113       1,760,230       1,617,408       84.6       119.2       2,787,900         2021       2,000,000       19,113       1,760,230       1,617,408       84.6       119.2       2,747,270         1008       1018       6,59*(6)*(7)       Average Last 7 Years X H/L       144.2       2.1	2017	2,000,000	16,939	610,698	606,193	608,445	113%	1.000	684,811	40.4	109.1	1,848,302
2020       2,000,000       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,278,903         2021       2,000,000       19,113       19,113       1,780,230       1,360,367       1,570,299       103%       1.000       1,617,408       84.6       119.2       2,278,903         2021       2,000,000       19,113       289,168       23,478,348       24,606,844       24,042,596       31,242,094       115.7       27,927,305         Average Last 3 Years       122.8       27,927,305         Motes:       (1) Provided by Client       (8) = (5)*(6)*(7)       Average Last 7 Years x H/L       144.2         (2) Provided by Client       (9) = (8)/(2)       Average Last 7 Years x last 2       72.1         (3) Exhibit Auto-6       (10) = Selected rate /(6)/(7)       Average Last 5 Years x last 2       113.5         (4) Exhibit Auto-8       (11) = (10)/(2)       Average Last 5 Years x last 2       122.8         (5) EY Select based on weighted average of (3)&(4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (7) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M       2,347,270 <td>2018</td> <td>2,000,000</td> <td>18,228</td> <td>2,180,761</td> <td>2,104,760</td> <td>2,142,760</td> <td>109%</td> <td>1.000</td> <td>2,341,452</td> <td>128.5</td> <td>112.4</td> <td>2,048,620</td>	2018	2,000,000	18,228	2,180,761	2,104,760	2,142,760	109%	1.000	2,341,452	128.5	112.4	2,048,620
2021       2,000,000       19,113       100%       1.000       122.8       2,347,270         Total       289,168       23,478,348       24,606,844       24,042,596       31,242,094       115.7       27,927,309         Motes:       Average Last 3 Years       120.0         (1) Provided by Client       (8) = (5)*(6)*(7)       Average Last 7 Years x H/L       144.2         (2) Provided by Client       (9) = (8)/(2)       Average Last 7 Years x last 2       72.1         (3) Exhibit Auto-6       (10) = Selected rate /(6)/(7)       Average Last 7 Years x last 2       113.5         (4) Exhibit Auto-8       (11) = (10)/(2)       Average Last 5 Years x last 2       122.8         (5) EY Select based on weighted average of (3) & (4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M       2,347,270         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M       2,347,270         (16) EY Select       (17) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M       2,347,270	2019	2,000,000	18,000	2,153,700	2,835,123	2,494,412	106%	1.000	2,646,321	147.0	115.8	2,083,686
Total         289,168         23,478,348         24,606,844         24,042,596         31,242,094         115.7         27,927,305           Notes:         Average Last 3 Years         120.0           (1) Provided by Client         (8) = (5)*(6)*(7)         Average Last 5 Years         89.6           (1) Provided by Client         (9) = (8)/(2)         Average Last 7 Years x H/L         144.2           (2) Provided by Client         (9) = (8)/(2)         Average Last 7 Years x last 2         72.1           (3) Exhibit Auto-6         (10) = Selected rate /(6)/(7)         Average Last 7 Years x last 2         113.5           (4) Exhibit Auto-8         (11) = (10)/(2)         Average Last 5 Years x last 2         122.8           (5) EY Select based on weighted average of (3) & (4)         (12) EY Select         Prior Selection Trended 1 Year           (6) EY Select         (13) Exhibit Auto-14         (14) EY Select         Selected Average @ \$2M Limit (12)         122.8         Ult @ \$2M         2,347,270           (7) EY Select         (14) EY Select         Selected Average @ \$2M Limit (12)         122.8         Ult @ \$2M         2,347,270           (2) Mot \$5M ILF (13)         1.169         1.169         1.169	2020	2,000,000	19,113	1,780,230	1,360,367	1,570,299	103%	1.000	1,617,408	84.6	119.2	2,278,903
Notes:       Average Last 3 Years       120.0         (1) Provided by Client       (8) = (5)*(6)*(7)       Average Last 5 Years x H/L       144.2         (2) Provided by Client       (9) = (8)/(2)       Average Last 3 Years x last 2       72.1         (3) Exhibit Auto-6       (10) = Selected rate /(6)/(7)       Average Last 7 Years x last 2       113.5         (4) Exhibit Auto-8       (11) = (10)/(2)       Average Last 5 Years x last 2       122.8         (5) EY Select based on weighted average of (3) & (4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M       2,347,270         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       12.28       Ult @ \$2M       2,347,270         (11) F(13)       1.169       1.169       1.169       1.169	2021	2,000,000	19,113				100%	1.000			122.8	2,347,270
Notes:       Average Last 5 Years       89.6         (1) Provided by Client       (8) = (5)*(6)*(7)       Average Last 7 Years x H/L       144.2         (2) Provided by Client       (9) = (8)/(2)       Average Last 3 Years x last 2       72.1         (3) Exhibit Auto-6       (10) = Selected rate /(6)/(7)       Average Last 7 Years x last 2       113.5         (4) Exhibit Auto-8       (11) = (10)/(2)       Average Last 5 Years x last 2       122.8         (5) EY Select based on weighted average of (3) & (4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (5) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (5) EY Select       (15) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (6) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270	Total		289,168	23,478,348	24,606,844	24,042,596			31,242,094	115.7		27,927,305
(1) Provided by Client       (8) = (5)*(6)*(7)       Average Last 7 Years x H/L       144.2         (2) Provided by Client       (9) = (8)/(2)       Average Last 3 Years x last 2       72.1         (3) Exhibit Auto-6       (10) = Selected rate /(6)/(7)       Average Last 7 Years x last 2       113.5         (4) Exhibit Auto-8       (11) = (10)/(2)       Average Last 5 Years x last 2       122.8         (5) EY Select based on weighted average of (3) & (4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (5) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (5) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (5) EY Select       (15) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (6) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (5) EY Select       (14) EY Select       Selected Average @ \$								Aver	age Last 3 Years	120.0		
(2) Provided by Client       (9) = (8)/(2)       Average Last 3 Years x last 2       72.1         (3) Exhibit Auto-6       (10) = Selected rate / (6)/(7)       Average Last 7 Years x last 2       113.5         (4) Exhibit Auto-8       (11) = (10)/(2)       Average Last 5 Years x last 2       122.8         (5) EY Select based on weighted average of (3) & (4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270	Notes:							Aver	age Last 5 Years	89.6		
(3) Exhibit Auto-6       (10) = Selected rate / (6) / (7)       Average Last 7 Years x last 2       113.5         (4) Exhibit Auto-8       (11) = (10) / (2)       Average Last 5 Years x last 2       122.8         (5) EY Select based on weighted average of (3) & (4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (5) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270	(1) P	rovided by Client			(8) =	(5)*(6)*(7)		Average L	ast 7 Years x H/L	144.2		
(4) Exhibit Auto-8       (11) = (10)/(2)       Average Last 5 Years x last 2       122.8         (5) EY Select based on weighted average of (3) & (4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (52M to \$5M ILF (13)       1.169       1.169       1.169	(2) P	rovided by Client			(9) =	(8)/(2)		Average Las	t 3 Years x last 2	72.1		
(5) EY Select based on weighted average of (3) & (4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (13) Exhibit Auto-14       124.2         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         \$2M to \$5M ILF (13)       1.169       1.169       1.169	(3) E	xhibit Auto-6			(10) =	Selected rate / (6)	/(7)	Average Las	t 7 Years x last 2	113.5		
(5) EY Select based on weighted average of (3) & (4)       (12) EY Select       Prior Selection Trended 1 Year       134.2         (6) EY Select       (13) Exhibit Auto-14       (13) Exhibit Auto-14       122.8       Ult @ \$2M 2,347,270         (7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M 2,347,270         (20) Select       (14) EY Select       Selected Average @ \$2M Limit (12)       1.169       1.169	(4) E	xhibit Auto-8			(11) =	(10)/(2)		Average Las	t 5 Years x last 2	122.8		
(6) EY Select       (13) Exhibit Auto-14         (7) EY Select       (14) EY Select         Selected Average @ \$2M Limit (12)       122.8         Ult @ \$2M       2,347,270         \$2M to \$5M ILF (13)       1.169	(5) E	Y Select based on we	eighted average of (3) & (	4)				Prior Selectio	n Trended 1 Year	134.2		
(7) EY Select       (14) EY Select       Selected Average @ \$2M Limit (12)       122.8       Ult @ \$2M       2,347,270         \$2M to \$5M ILF (13)       1.169       1.169       1.169												
\$2M to \$5M ILF (13) 1.169 1.169						Seleo	cted Average	@ \$2M Limit (12)	122.8	Ult @ \$2M	2,347,270	
								-		1.169		1.169
							Seleo	ted Average	@ \$5M Limit (14)	143.6	Ult @ \$5M	2,744,065

### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Increased Limits Factors

	Increased Limits Factors													
Limit	Benchmark 1	Benchmark 2	Empirical Data Ultimate	Empirical Data Incurred	Prior EY Selection with \$250K Base	Prior EY Selection Rebased to \$2M	EY Select with \$250K base	EY Select Rebased to \$2M						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)						
250K	1.000	1.000	1.000	1.000	1.000	0.646	1.000	0.661						
1M	1.398	1.301	1.387	1.342	1.361	0.880	1.331	0.881						
2M	1.603	1.476	1.554	1.500	1.547	1.000	1.512	1.000						
5M	1.888	1.730	1.571	1.502	1.805	1.166	1.767	1.169						

Notes:

(1) Proprietary internal client data

(2) From public rate filings information for top CAL writer in Ohio

(3) Based on data provided by client as of 3/31/2019

(4) Based on data provided by client as of 3/31/2019

(5) Prior EY Analysis
(6) Prior EY Analysis
(7) EY Select
(8) = (7)/(7) at \$2M

## State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Summary of Ultimate Number of Claims and Claims Outstanding

Accident Period	Closed w/Pay Dev Dev Ultimate (1)	Non-Zero Rptd Dev Ultimate (2)	Selected Ultimate (3)	Non-Zero Reported Claims (4)	Closed w/Pay Claims (5)	Outstanding Claims (6)	IBNR Claims (7)	Outstanding + IBNR (8)
2005	536	536	536	536	536	0	0	0
2006	429	429	429	429	429	0	0	0
2007	528	528	528	528	528	0	0	0
2008	543	543	543	543	543	0	0	0
2009	520	520	520	520	520	0	0	0
2010	533	533	533	533	533	0	0	0
2011	542	542	542	542	542	0	0	0
2012	355	355	355	355	355	0	0	0
2013	420	421	421	421	420	1	0	1
2014	593	594	594	594	593	1	0	1
2015	487	488	488	488	486	2	0	2
2016	335	336	336	336	334	2	0	2
2017	300	300	300	300	297	3	0	3
2018	408	407	407	407	396	11	0	11
2019	386	386	386	385	359	26	1	27
2020 @ 9mo	219	235	246	269	153	116	-23	93
Total	7,135	7,154	7,165	7,186	7,024	162	-21	141

### Notes:

(1) Exhibit Auto-16; latest year is a partial year estimate	(5) Exhibit Auto-18
(2) Exhibit Auto-16; latest year is a partial year estimate	(6) = (4) - (5)
(3) Exhibit Auto-16; latest year is a partial year estimate	(7) = (3) - (4)
(4) Exhibit Auto-17	(8) = (6) + (7)

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Estimates of Ultimate Number of Claims

Accident Period Ending 7/1/xxxx	Non-Zero Reported Claims (1)	Factor to Ultimate (2)	Ultimate Reported Count (3)	Closed Claims (4)	Factor to Ultimate (5)	Ultimate Closed Count (6)	Prior Selected Ultimate (7)	EY Selected Ultimate (8)	Change in Ultimate (9)	Exposure (Vehicle Count) (10)	Selected Ultimate Frequency (11)	Adjusted Exposure (Vehicle Count) (12)	Selected Ultimate Frequency (13)
2005	536	1 000	536	536	1 000	536	536	536	0	15.000	0.024	14.020	0.038
2005	536 429	1.000 1.000	536 429	536 429	1.000 1.000	429	536 429	536 429	0	15,996 15,921	0.034 0.027	14,038 14,040	0.038
2008	429 528	1.000	429 528	528	1.000	429 528	429 528	429 528	0	15,921	0.027		0.031
2007	543	1.000	528	543	1.000	543	543	543	0	16,656	0.033		0.038
2008	520	1.000	543	520	1.000	543	520	520	0	16,732	0.033	17,345	0.033
2010	533	1.000	533	533	1.000	533	533	533	0	16,381	0.031		0.033
2010	542	1.000	542	542	1.000	542	542	542	0	16,449	0.033		0.033
2012	355	1.000	355	355	1.000	355	355	355	0	16,516	0.033	16,525	0.021
2012	421	1.000	421	420	1.000	420	421	421	0	16,383	0.021		0.021
2013	594	1.000	594	593	1.000	593	594	594	0	16,396	0.020		0.020
2015	488	1.000	488	486	1.001	487	488	488	0	16,403	0.030		0.030
2015	336	1.000	336	334	1.002	335	336	336	0	17,990	0.030		0.021
2017	300	1.000	300	297	1.011	300	299	300	1	16,939	0.019		0.018
2018	407	1.001	407	396	1.029	408	408	407	(1)	-	0.010	-	0.023
2019	385	1.001	386	359	1.076	386	408	386	(42)		0.022	17,949	0.023
2019	269		313	153			420	328	(42)	19,113	0.021		
2020	269	1.165	313	153	1.906	292		320		19,113	0.017	23,536	0.014
Total	7,186		7,232	7,024		7,208	6,961	7,247	(42)	270,055	0.027	266,875	0.027

Not	tes:

(1) Exhibit Auto-17
 (2) Exhibit Auto-17
 (3) = (1) x (2)
 (4) Exhibit Auto-18
 (5) Exhibit Auto-18

(6) = (4) x (5)
(7) Prior Analysis Selected
(8) EY Select
(9) = (8) - (7)
(10) Provided by Company

(11) = (8)/(10) (12) = (10) x Relativity (13) = (8)/(12)

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Non-Zero Claims Reported

Accident							NUII-Ze	no cialitis Repor	leu							
Period Ending								Months of De	velopment							
7/1/xxxx	9	21	33	45	57	69	81	93	105	117	129	141	153	165	177	189
2005								536	536	536	536	536	536	536	536	536
2006							429	429	429	429	429	429	429	429	429	
2007						528	528	528	528	528	528	528	528	528		
2008					543	543	543	543	543	543	543	543	543			
2009				520	520	520	520	520	520	520	520	520				
2010			533	533	533	533	533	533	533	533	533					
2011		542	543	543	543	543	542	542	542	542						
2012	242	351	355	355	355	355	355	355	355							
2013	302	421	421	421	421	421	421	421								
2014	500	593	596	595	593	594	594									
2015	455	491	491	488	488	488										
2016	290	334	334	336	336											
2017	244	300	299	300												
2018	409	407	407													
2019	353	385														
2020	269															
Period Ending								Developmen	t Factors							
Period	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141	141-153	153-165	165-177	177-189	189-201
2005								1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2006							1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2007						1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2008					1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2009				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2010			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
2011		1.002	1.000	1.000	1.000	0.998	1.000	1.000	1.000							
2012	1.450	1.011	1.000	1.000	1.000	1.000	1.000	1.000								
2013	1.394	1.000	1.000	1.000	1.000	1.000	1.000									
2014	1.186	1.005	0.998	0.997	1.002	1.000										
2015	1.079	1.000	0.994	1.000	1.000											
2016	1.152	1.000	1.006	1.000												
2017	1.230	0.997	1.003													
2018	0.995	1.000														
2019	1.091															
Avg All	1.197	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Avg 5	1.109	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
5 Yr Avg Ex Hi/Lo	1.107	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
Wtd Avg All	1.174	1.002	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd Avg 5	1.095	1.001	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
Wtd Avg 3	1.085	0.999	1.000	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Last	1.208	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Sel LDF	1.162	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CDF	1.165	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Claims Closed w/ Pay

Accident								Months of De	velopment							
Period	9	21	33	45	57	69	81	93	105	117	129	141	153	165	177	189
Period 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2015 2016 2017 2018 2019 2020	9 145 222 206 153	21 309 276 380 359	479 323 290 396	45 586 483 332 297	57 419 591 485 334	354 420 592 486	81 542 355 420 593	532 542 355 420	105 520 533 542 355	117 543 520 533 542	129 528 543 520 533	141 429 528 543 520	153 536 429 528 543	165 536 429 528	177 536 429	<u>189</u> 536
Accident Period	9-21	21-33	33-45	45-57	57-69	69-81	81-93	Developmen 93-105	t Factors 105-117	117-129	129-141	141-153	153-165	165-177	177-189	189-201
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	1.903 1.712 1.743	1.045 1.051 1.042	1.008 1.028 1.024	1.009 1.004 1.006	1.002 1.002 1.002	1.003 1.000 1.002	1.000 1.000 1.000	1.002 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000	1.000	
vg All td Avg All td Avg 3 ist	1.786 1.771 1.771 1.787	1.046 1.046 1.046 1.048	1.020 1.018 1.018 1.016	1.006 1.006 1.006 1.007	1.002 1.002 1.002 1.002	1.002 1.001 1.001 1.001	1.000 1.000 1.000 1.000	1.001 1.001 1.001 1.000	1.000 1.000 1.000 1.000	1.000						
el LDF DF	1.771 1.906	1.046 1.076	1.018 1.029	1.006 1.011	1.002 1.004	1.001 1.002	1.000 1.001	1.000 1.000	1.000 1.000							

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Actual vs Expected - Incurred Loss & ALAE

Accident Period	Exposure (Earned) (1)	Incurred @ 03/31/19 (2)	Incurred @ 03/31/20 (3)	Actual Dev't (4)	CDF @ 03/31/19 (5)	Age-age @ 03/31/19 (6)	Expected Dev't (7)	Variance (8)	Ultimate Loss & ALAE @ 03/31/19 (9)	Ultimate Loss & ALAE @ 03/31/20 (10)	Change from @ 03/31/19 (11)	Paid Loss & ALAE @ 03/31/20 (12)	Total Reserves (13)	Case Reserves (14)	IBNR Reserves (15)
2005	15,996	909,673	909,673	0	1.000	1.000	0	0	909,673	909,673	0	909,673	0	0	0
2006	15,921	727,033	727,033	0	1.000	1.000	0	0	727,033	727,033	0	727,033	0	0	0
2007	15,952	1,578,290	1,578,290	0	1.000	1.000	0	0	1,578,290	1,578,290	0	1,578,290	0	0	0
2008	16,656	776,096	776,096	0	1.000	1.000	0	0	776,096	776,096	0	776,096	0	0	0
2009	16,732	1,248,331	1,248,331	0	1.000	1.000	0	0	1,248,331	1,248,331	0	1,248,331	0	0	0
2010	16,381	2,632,202	2,632,202	0	1.000	1.000	0	0	2,632,202	2,632,202	0	2,632,202	0	0	0
2011	16,449	921,060	921,060	(0)	1.000	1.000	0	(0)	921,060	921,060	(0)	921,060	0	0	0
2012	16,516	1,258,538	1,258,538	0	1.003	1.003	3,439	(3,439)	1,261,977	1,258,538	(3,439)	1,258,538	0	0	0
2013	16,383	1,137,783	1,140,283	2,500	1.006	1.003	3,818	(1,318)	1,144,721	1,143,514	(1,207)	939,799	203,715	200,485	3,230
2014	16,396	2,260,483	2,257,887	(2,597)	1.014	1.008	17,622	(20,219)	2,291,995	2,273,851	(18,144)	2,209,137	64,715	48,750	15,965
2015	16,403	3,208,490	3,188,573	(19,916)	1.035	1.021	67,133	(87,050)	3,321,286	3,238,618	(82,668)	2,936,449	302,169	252,125	50,045
2016	17,990	974,283	957,996	(16,288)	1.091	1.054	77,596	(93,884)	1,105,297	993,195	(112,102)	447,846	545,349	510,150	35,199
2017	16,939	651,542	554,675	(96,866)	1.218	1.116	276,654	(373,520)	1,169,382	711,844	(457,538)	508,609	203,236	46,067	157,169
2018	18,228	2,203,842	1,719,799	(484,043)	1.514	1.243	359,785	(843,828)	2,964,053	2,099,626	(864,427)	1,377,956	721,670	341,843	379,827
2019	18,000	1,792,675	1,936,589	143,914	2.674	1.766	494,484	(350,570)	2,873,242	2,676,355	(196,887)	574,121	2,102,234	1,362,468	739,766
2020	19,113		504,109	504,109			877,302	(373,192)	2,345,669	2,035,653	(310,016)	174,880	1,351,860	329,230	1,022,630
Total	270,055		22,311,135	30,813			2,177,832	(2,147,019)	27,270,306	25,223,880	(2,046,427)	19,220,018	5,494,948	3,091,117	2,403,831
Total ex 2020	250,942	22,280,322	21,807,026	(473,296)			1,300,530	(1,773,827)	24,924,637	23,188,226	(1,736,411)	19,045,139	4,143,088	2,761,887	1,381,201

Notes:

(1) Provided by Client

(2) Prior Analysis

(3) Exhibit Auto-8

(4) = (3) - (2)

(5) Prior Analysis

(6) Prior Analysis

(7) = [(9) - (2)] \* (1/(6) - 1/(5)) / (1 - 1/(5))

(8) = (4) - (7)

(9) Prior Analysis
(10) Exhibit Auto-5
(11) = (10) - (9)
(12) Exhibit Auto-6
(13) = (10) - (12); latest year is a partial year estimate
(14) = (3) - (12)
(15) = (13) - (14)

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Actual vs Expected - Paid Loss & ALAE

Accident Period	Exposure (Earned) (1)	Paid @ 03/31/19 (2)	Paid @ 03/31/20 (3)	Actual Dev't (4)	CDF @ 03/31/19 (5)	Age-age @ 03/31/19 (6)	Expected Dev't (7)	Variance (8)	Ultimate Loss & ALAE @ 03/31/19 (9)	Ultimate Loss & ALAE @ 03/31/20 (10)	Change from @ 03/31/19 (11)	Incurred Loss & ALAE @ 03/31/20 (12)	Total Reserves (13)	Case Reserves (14)	IBNR Reserves (15)
2005	15,996	909,673	909,673	0	1.000	1.000	0	0	909,673	909,673	0	909,673	0	0	0
2006	15,921	727,033	727,033	0	1.000	1.000	0	0	727,033	727,033	0	727,033	0	0	0
2007	15,952	1,578,290	1,578,290	0	1.000	1.000	0	0	1,578,290	1,578,290	0	1,578,290	0	0	0
2008	16,656	776,096	776,096	0	1.000	1.000	0	0	776,096	776,096	0	776,096	0	0	0
2009	16,732	1,248,331	1,248,331	0	1.000	1.000	0	0	1,248,331	1,248,331	0	1,248,331	0	0	0
2010	16,381	2,632,202	2,632,202	0	1.000	1.000	0	0	2,632,202	2,632,202	0	2,632,202	0	0	0
2011	16,449	921,060	921,060	(0)	1.000	1.000	0	(0)	921,060	921,060	(0)	921,060	0	0	0
2012	16,516	1,258,538	1,258,538	0	1.005	1.005	3,439	(3,439)	1,261,977	1,258,538	(3,439)	1,258,538	0	0	0
2013	16,383	933,875	939,799	5,923	1.012	1.007	115,994	(110,071)	1,144,721	1,143,514	(1,207)	1,140,283	203,715	200,485	3,230
2014	16,396	2,082,673	2,209,137	126,464	1.030	1.018	124,164	2,300	2,291,995	2,273,851	(18,144)	2,257,887	64,715	48,750	15,965
2015	16,403	2,882,988	2,936,449	53,461	1.068	1.037	240,020	(186,559)	3,321,286	3,238,618	(82,668)	3,188,573	302,169	252,125	50,045
2016	17,990	440,598	447,846	7,247	1.193	1.117	402,761	(395,514)	1,105,297	993,195	(112,102)	957,996	545,349	510,150	35,199
2017	16,939	447,365	508,609	61,244	1.556	1.304	394,695	(333,451)	1,169,382	711,844	(457,538)	554,675	203,236	46,067	157,169
2018	18,228	354,636	1,377,956	1,023,320	3.152	2.025	1,243,343	(220,023)	2,964,053	2,099,626	(864,427)	1,719,799	721,670	341,843	379,827
2019	18,000	185,895	574,121	388,226	8.131	2.580	595,352	(207,126)	2,873,242	2,676,355	(196,887)	1,936,589	2,102,234	1,362,468	739,766
2020	19,113		174,880	174,880			288,469	(113,589)	2,345,669	2,035,653	(310,016)	504,109	1,351,860	329,230	1,022,630
Total	270,055		19,220,018	1,840,764			3,408,236	(1,567,472)	27,270,306	25,223,880	(2,046,427)	22,311,135	5,494,948	3,091,117	2,403,831
Total ex 2020	250,942	17,379,254	19,045,139	1,665,884			3,119,767	(1,453,883)	24,924,637	23,188,226	(1,736,411)	21,807,026	4,143,088	2,761,887	1,381,201

Notes:

(1) Provided by Client

(2) Prior Analysis

(3) Exhibit Auto-6

 $(4) = (3) \cdot (2)$ 

(5) Prior Analysis(6) Prior Analysis

(7) = [(9) - (2)] \* (1/(6) - 1/(5)) / (1 - 1/(5))

(8) = (4) - (7)

(9) Prior Analysis
(10) Exhibit Auto-5
(11) = (10) - (9)
(12) Exhibit Auto-6
(13) = (10) - (3), latest year is a partial year estimate
(14) = (12) - (3)
(15) = (13) - (14)

#### State of Ohio - Office of Risk Management Auto Liability March 31, 2020 Actual vs Expected - Reported Non-Zero Counts

Accident Period	Exposure (Vehicle Count) (1)	Non-Zero Count @ 03/13/19 (2)	Non-Zero Count @ 03/31/20 (3)	Actual Dev't (4)	CDF @ 03/13/19 (5)	Age-age @ 03/13/19 (6)	Expected Dev't (7)	Variance (8)	Prior Ultimate Non-Zero Count @ 03/13/19 (9)	EY Ultimate Non-Zero Count @ 03/31/20 (10)	Change from @ 03/13/19 (11)	Closed Non-Zero Count @ 03/31/20 (12)	Total Open + IBNR Counts (13)	Open Counts (14)	IBNR Counts (15)
2005	15,996	536	536	0	1.000	1.000	0	0	536	536	0	536	0	0	0
2006	15,921	429	429	0	1.000	1.000	0	0	429	429	0	429	0	0	0
2007	15,952	528	528	0	1.000	1.000	0	0	528	528	0	528	0	0	0
2008	16,656	543	543	0	1.000	1.000	0	0	543	543	0	543	0	0	0
2009	16,732	520	520	0	1.000	1.000	0	0	520	520	0	520	0	0	0
2010	16,381	533	533	0	1.000	1.000	0	0	533	533	0	533	0	0	0
2011	16,449	542	542	0	1.000	1.000	0	0	542	542	0	542	0	0	0
2012	16,516	355	355	0	1.000	1.000	0	0	355	355	0	355	0	0	0
2013	16,383	421	421	0	1.000	1.000	0	0	421	421	0	420	1	1	0
2014	16,396	594	594	0	1.000	1.000	0	0	594	594	0	593	1	1	0
2015	16,403	488	488	0	1.000	1.000	0	0	488	488	0	486	2	2	0
2016	17,990	336	336	0	1.000	1.000	0	0	336	336	0	334	2	2	0
2017	16,939	299	300	1	1.001	1.001	0	1	299	300	1	297	3	3	0
2018	18,228	407	407	0	1.003	1.002	1	(1	) 408	407	(1)	) 396	11	11	0
2019	18,000	353	385	32	1.212	1.208	73	(41	) 428	386	(42)	) 359	27	26	1
2020	19,113		269							328		153	175	116	59
Total	270,055		7,186							7,247		7,024	223	162	61
Total ex 2020	250,942	6,884	6,917	33			75	(42	6,961	6,919	(42)	6,871	48	46	2

Notes:

(1) Provided by Client

(2) Prior Analysis

(3) Exhibit Auto-16

(4) = (3) - (2)
 (5) Prior Analysis

(6) Prior Analysis (7) = [(9)-(2)] \* (1/(6)-1/(5))/(1-1/(5))

(8) = (4) - (7)

(9) Prior Analysis (10) Exhibit Auto-16 (11) = (10) - (9) (12) Exhibit Auto-16 (12) = (10) - (3) $(14) = (3) \cdot (12)$  $(15) = (13) \cdot (14)$ 

## State of Ohio - Offlice of Risk Management Auto Liability As of March 31, 2020 Allocation of 7/1/20-21 Ultimate Loss & ALAE by Agency at ACE- \$2M per Occurrence and Undiscounted

		(1)	(2)	(3)	Premium E (4)	stimate (5)	(6)	(7)	Change	in Premium (E (8)	stimate less P (9)	(10)		(11)	Rate per Adju (12)	(13)	(14)
		(1)		Based on	Based on		Based on	Based (		Based on		Based on		ased on	Based on		Based on
			Estimated Adjusted	Adjusted 2 Vehicle	Capped Trendec Ult. L&LAE	Based on 50/50	Cred. Wtd. Ult. L&LAE	Adjuste Vehicl		oped Trendec Ult. L&LAE	Based on 50/50	Cred. Wtd. Ult. L&LAE		djusted /ehicle	Capped Trendec Ult. L&LAE	Based on 50/50	Cred. Wtd. Ult. L&LAE
		Prior	Vehicle	Count	FY 2010-2020	Claims	FY 2010-2020	Count	FY	2010-2020	Claims	FY 2010-2020		Count	FY 2010-2020	Claims	FY 2010-202
Code ACC	Agency Name Accountancy Board of Ohio	Premium	Count 0.00	Distribution	Distribution	Distribution	Distribution	Distribut	ion E	Distribution	Distribution	Distribution	Dis	tribution	Distribution	Distribution	Distribution
ADJ	Adjutant General	\$ 7,172	132.45	\$ 12,695	\$ 1,673		\$ 9,887	\$ 5,	523 \$	(5,500) \$	5 12	\$ 2,715	\$	95.85	\$ 12.63	\$ 54.24	\$ 74.65
AGE	Department of Aging	\$ 50.984		\$ 96 \$ 40.966	\$ - : \$ 72.361		\$ 81 \$ 51,680	\$	45 \$	(51) 9	5 (3)	\$ 30 \$ 697	\$	95.85 95.85	\$ -	\$ 47.93 \$ 132.58	
AGO AGR	Office of the Attorney General Department of Agriculture	\$ 50,984 \$ 43,939		\$ 30,265			\$ 51,680 \$ 39,862	\$ (10, \$ (13,	)17) \$ 574) \$	21,378 9	5,680 339	\$ (4,076)	\$ \$	95.85 95.85	\$ 169.31 \$ 184.61	\$ 132.58 \$ 140.23	\$ 120.92 \$ 126.25
ARC	Board of Examiners of Architects	s -		ş -			s -										
ART ATH	The Ohio Arts Council Ohio Athletic Commission	\$ - \$ -	0.00	\$ - \$ -	\$ - \$ -		s - s -										
AUD	Auditor of State	\$ 523	9.00			5 543	\$ 763	\$	340 Ş	(300) \$			\$	95.85	\$ 24.73	\$ 60.29	
ETC BOR	Broadcast Educational Media Commission Department of Higher Education	\$ 51 \$ 51		\$ 96 \$ 96	\$ - : \$ -		\$ 81 \$ 81	\$	45 \$ 45 \$	(51) 9			s s	95.85 95.85	s -	\$ 47.93 \$ 47.93	\$ 81.04 \$ 81.04
BUR	Board of Tax Appeals	ş -		s -	\$ - 1	5 -	ŝ -	2							\$ ·	•	
BWC	Bureau of Workers Compensation	\$ 28,173		\$ 30,682			\$ 27,624		08 \$	(5,808)	(1,650)		s	95.85	\$ 69.87		
CAC CDP	Casino Control Commission Chemical Dependency Professionals Board	\$ 833 \$ -	15.00 0.00	\$ 1,438 \$ -	\$ 110 \$ -		\$ 1,232 \$ -	5	605 \$	(722)	5 (58)	\$ 400	\$	95.85	\$ 7.36	\$ 51.60	\$ 82.14
CHR	Board of Chiropractic Examiners	s -		\$ -	\$ - :		s -										
CIV CLA	Civil Rights Commission Ohio Court of Claims	\$ 357 \$ 51		\$ 671 \$ 96	\$ - : \$ -		\$ 567 \$ 81	\$	45 \$	(357) (51)	5 (22) 5 (3)	\$ 210 \$ 30	\$ \$	95.85 95.85	\$ - c .	\$ 47.93 \$ 47.93	\$ 81.04 \$ 81.04
COM	Department of Commerce	\$ 34,572					\$ 33,237	\$ 4,	41 \$				ŝ	95.85	\$ 54.75	\$ 75.30	\$ 81.04
COS	State Cosmetology and Barber Board	\$ 6,047		\$ 1,725 \$ 192	\$ 13,485		\$ 3,471	\$ (4,	322) \$	7,438		\$ (2,576)	\$	95.85	\$ 749.14	\$ 422.50 \$ 47.93	\$ 192.82
CRB CSR	Motor Vehicle Collision Repair Board Capitol Square Review & Advisory Board	\$ 102 \$ 602	2.00 10.80	\$ 192 \$ 1,035	\$ 105		\$ 162 \$ 891	ş.	90 \$ 133 \$	(102) § (497) §	5 (6) 5 (32)		\$ \$	95.85 95.85	\$ 9.71	\$ 52.78	\$ 81.04 \$ 82.49
CSV	Commission on Service & Volunteerism	s -		s -			s -										
CSW DAS	Counselors & Social Workers Board Department of Administrative Services	\$ - \$ 7,205	0.00 100.30	\$ - \$ 9,614	\$ - : \$ 5,368		\$ - \$ 8,507	\$ 2	109 \$	(1,837) \$	\$ 286	\$ 1,303	¢	95.85	\$ 53.52	\$ 74.68	\$ 84.82
DEN	Dental Board	\$ 204	4.00	\$ 383	\$ 443	5 413	\$ 390	\$	.79 \$	239 \$	\$ 209	\$ 186	ŝ	95.85	\$ 110.79	\$ 103.32	\$ 97.57
DEV	Development Services Agency	\$ 780		\$ 1,246			\$ 1,179		166 \$	61 9	5 264	\$ 399	\$	95.85	\$ 64.70 \$ 49.84	\$ 80.28	\$ 90.70
DMH DMR	Department of Mental Health & Addiction Services Department of Developmental Disabilities	\$ 14,527 \$ 26,020	185.35 319.25	\$ 17,766 \$ 30,600	\$ 9,239 \$ 26,086	5 13,502 5 28,343	\$ 15,552 \$ 28,867		39 \$ 80 \$	(5,289) 5	\$ (1,025) \$ 2,323	\$ 1,024 \$ 2,847	s	95.85 95.85	\$ 49.84 \$ 81.71	\$ 72.85 \$ 88.78	\$ 83.90 \$ 90.42
DNR	Department of Natural Resources	\$ 251,357	3,719.20	\$ 356,485	\$ 145,156	250,820	\$ 196,942	\$ 105,	28 \$	(106,202)	\$ (537)	\$ (54,416)	s	95.85	\$ 39.03	\$ 67.44	\$ 52.95
DOH DOT	Department of Health Department of Transportation	\$ 13,257 \$ 1.068,220	191.20 10.053.40	\$ 18,327 \$ 963,618	\$ 15,162 \$ 1.075.111	5 16,744 5 1.019.365	\$ 17,443 \$ 1,041,695		070 \$	1,906 5	5 3,488 5 (48,855)	\$ 4,186 \$ (26,525)	\$ \$	95.85 95.85	\$ 79.30 \$ 106.94	\$ 87.58 \$ 101.40	\$ 91.23 \$ 103.62
DPS	Department of Public Safety	\$ 505,687	5,048.85	\$ 483,932	\$ 531,391	5 507,662	\$ 516,777	\$ (21,		25,704		\$ 11,089	ŝ	95.85	\$ 105.25	\$ 100.55	\$ 102.36
DRC DVM	Department of Rehabilitation & Correction	\$ 174,449	1,102.20	\$ 166,036	\$ 241,877	203,956	\$ 221,736	\$ (8,	12) \$	67,428	\$ 29,508	\$ 47,288	\$	95.85	\$ 139.63	\$ 117.74	\$ 128.00
DVM	Veterinary Medical Board Department of Veterans Services	\$ 5.408	0.00 51.85	\$ 4.970	\$ 5.327	5 5.149	\$ - \$ 4.997	\$ (	(38) Ś	(81)	5 (260)	S (411)	s	95.85	\$ 102.74	\$ 99.30	\$ 96.37
DYS	Department of Youth Services	\$ 16,082	170.50	\$ 16,342	\$ 13,606	14,974	\$ 15,576	\$	60 \$	(2,476)	5 (1,108)	\$ (506)	\$	95.85	\$ 79.80	\$ 87.82	\$ 91.35
EBR EDU	Environmental Board of Review Department of Education	\$ - \$ 1,792	0.00 14.00	\$ - \$ 1,342	\$ 2,301	5 - 5 1,821	\$ - \$ 1,478	\$ 0	(50) Ŝ	509 \$	\$ 30	\$ (314)	s	95.85	\$ 164.34	\$ 130.09	\$ 105.56
ELC	Ohio Elections Commission	\$ -	0.00	\$ 1,5%2	\$ - :	5 1,021	\$ -	<b>\$</b> (	JU) Ş	509 .	<b>y</b> 50	5 (514)	2	<i>y</i> 5.05	5 104.54	\$ 150.05	\$ 105.50
ENG EPA	Engineers & Surveyors Board Environmental Protection Agency	\$ - \$ 18,107	0.00 246.30	\$ - \$ 23,608	\$ - 5,692	5 - 5 14,650	\$ - \$ 19,028	¢ 5	01 \$	(12,415)	\$ (3,457)	\$ 921	s	95.85	\$ 23.11	\$ 59.48	\$ 77.26
ERB	Employee Relations Board	\$ 18,107 \$ 130		\$ 23,608 \$ 192			\$ 19,028 \$ 171	5 5, S	62 \$	(12,415) (73) 9			s	95.85 95.85	\$ 23.11	\$ 59.48	\$ 77.26
ETH	Ethics Commission	\$ 260	3.00	\$ 288	\$ 114	5 201	\$ 260	ŝ	28 \$	(146) \$	\$ (59)	\$ 0	\$	95.85	\$ 38.09	\$ 66.97	\$ 86.73
EXP FUN	Ohio Expositions Commission Board of Embalmers and Funeral Directors	\$ 7,192 \$ 102		\$ 11,416 \$ 192	\$ 895 \$ -		\$ 8,739 \$ 162	\$ 4,	24 \$ 90 \$	(6,297) (102)	6 (1,037) 6 (6)	\$ 1,547 \$ 60	s s	95.85 95.85	\$ 7.51	\$ 51.68 \$ 47.93	\$ 73.38 \$ 81.04
GOV	Office of the Governor	\$ -	0.00	ý 1)L	÷ .	, ,,	J 102	~					Ť	,5.05	*	÷ 41.55	
HF A IGO	Ohio Housing Finance Agency Office of the Inspector General	\$ 868 \$ 5.027			\$ - : \$ 9.915		\$ 1,297 \$ 1,723		666 \$ (40) \$	(868) 9			s s	95.85 95.85	\$	\$ 47.93 \$ 1.700.43	\$ 81.04 \$ 574.17
IGO	Department of Insurance	\$ 5,027 \$ 1,744		\$ 288 \$ 1.246			\$ 1,723 \$ 1,384		40) \$ 198) \$	4,888 3	5 (15)		s	95.85 95.85		\$ 1,700.43	
JCO	Judicial Conference of Ohio	\$ -		s -	\$ -	-	s -										
JCR JEO	Joint Committee on Agency Rule Joint Education Oversight Committee	\$ - \$ -		\$ - \$ -	\$ - : \$ - :		s - s -										
JFS	Department of Job and Family Services	\$ 13,112	158.75	\$ 15,216	\$ 11,603		\$ 14,238	\$2,	.04 \$	(1,508)	\$ 298	\$ 1,126	s	95.85	\$ 73.09	\$ 84.47	\$ 89.69
JLE JMO	Joint Legislative Ethics Commission Joint Medicaid Oversight Committee	ş -	0.00 0.00	\$ - \$ -	\$ - \$ -		s - s -										
JMU JSC	Judiciary/Supreme Court	\$ 378	7.40	\$ - \$ 709	s - :		\$ 600	S	31 \$	(378)	\$ (23)	\$ 222	s	95.85	s -	\$ 47.93	\$ 81.04
LCO	Liquor Control Commission	\$ -	0.00	s -	\$ - :	5 -	s -										
LEC	Lake Erie Commission State Library Board	\$ - \$ 306	0.00	\$ - \$ 575	\$ - \$ -		\$ - \$ 486	\$	269 S	(306)	5 (19)	\$ 180	\$	95.85	ς	\$ 47.93	\$ 81.04
LOT	Ohio Lottery Commission	\$ 15,051	170.30	\$ 16,323		14,322	\$ 15,242		72 \$	(2,731)	5 (730)	\$ 190	s s	95.85	\$ 72.34	\$ 84.10	\$ 89.50
LSC MCD	Legislative Service Commission	\$ 51		\$ 96	\$ - \$ -		\$ 81	\$	45 \$	(51) \$	\$ (3)	\$ 30	\$	95.85	ş -	\$ 47.93	\$ 81.04
MCD MED	Department of Medicaid Medical Board	\$ - \$ 1,021		\$ - \$ 1,917	*	-	\$ - \$ 1,621	\$	896 \$	(1,021)	63)	\$ 600	s	95.85	s -	\$ 47.93	\$ 81.04
ΜΗ	Commission on Minority Health	s -	0.00	\$ -	\$ - :	5 -	s -						1				
NUR OBM	Board of Nursing Office of Budget & Management	\$ - \$ 51	0.00	\$- \$96	\$		\$ - \$ 81	s	45 S	(51)	\$ (3)	\$ 30	s	95.85	s .	\$ 47.93	\$ 81.04
OCC	Office of Consumers' Counsel	\$ 296	4.00	\$ 383		256	\$ 343	s	88 \$	(167) \$	5 (40)	\$ 48	s	95.85	\$ 32.05	\$ 63.95	\$ 85.83
OIC	Industrial Commission	\$ 1,436	5.00	\$ 479	\$ 1,019	749	\$ 557	\$ (	956) \$	(417) \$	\$ (687)	\$ (878)	\$	95.85	\$ 203.73	\$ 149.79	\$ 111.44
ODC OSB	Office of Disciplanary Counsel Ohio State School for the Blind	\$ 102 \$ 1,033	2.00 19.80	\$ 192 \$ 1,898	\$ 422		\$ 162 \$ 1,668	s	90 \$ 865 \$	(102) 9	6 (6) 5 127	\$ 60 \$ 634	s s	95.85 95.85	\$ 21.31	\$ 47.93 \$ 58.58	\$ 81.04 \$ 84.22
OSD	Ohio School for the Deaf	\$ 970	16.40	\$ 1,572	\$ 421	996	\$ 1,392	\$	501 \$	(550) \$	\$ 26	\$ 421	\$	95.85	\$ 25.67	\$ 60.76	\$ 84.87
PRX PSY	Board of Pharmacy Board of Psychology	\$ 2,349	40.00	\$ 4,409 \$ -	\$ - \$ -		\$ 3,728 \$ -	\$ 2,	61 \$	(2,349)	5 (144)	\$ 1,379	\$	95.85	ş -	\$ 47.93	\$ 81.04
PUB	Public Defender Commission	\$ 613		+	\$ -		\$ 973	\$	538 \$	(613)	\$ (38)	\$ 360	s	95.85	s -	\$ 47.93	\$ 81.04
PUC	Public Utilities Commission	\$ 13,514	54.00	\$ 5,176			\$ 7,881	\$ (8,	38) \$	9,975	5 818	\$ (5,633)	\$	95.85	\$ 434.98	\$ 265.41	\$ 145.94
PWC PYT	Public Works Commission Occupational and Physical Therapy Board	\$ - \$ -		\$ - \$ -	\$ - \$ -		s - s -										
RAC	Racing Commission	\$ 153	3.00	\$ 288	\$ -	- 5 144	\$ 243		34 \$	(153)			\$	95.85		\$ 47.93	\$ 81.04
REP RSC	Ohio House of Representatives Opportunities for Ohioans With Disabilities Agency	\$ 346 \$ 13.563	3.00 204.10	\$ 288 \$ 19.563	\$ 393 \$ 10.652		\$ 302 \$ 17.244		(58) \$ 000 \$	47 9	5 (5) 5 1,545	\$ (44) \$ 3,681	\$ \$	95.85 95.85	\$ 131.04 \$ 52.19	\$ 113.44 \$ 74.02	\$ 100.59 \$ 84.49
SCR	Opportunities for Ohioans With Disabilities Agency Board of Career Colleges and Schools	\$ - \$	204.10	\$ - \$ -	\$ - \$	5 -	\$ 17,244 \$ ·	<b>э</b> 6,	Ş	(2,911)	, 1,545	\$ 3,681	5	70.85	\$ 52.19	\$ 14.02	
SEN	The Ohio Senate	\$ 102	2.00	\$ 192	s -	96	\$ 162	\$	90 \$	(102)	6)		s	95.85	\$ -	\$ 47.93	\$ 81.04
SFC SHP	Ohio Facilities Construction Commission Ohio Speech and Hearing Professionals Board	\$ 1,583	28.00 0.00	\$ 2,684 \$ -	\$ - \$ -		\$ 2,269 \$ -	\$ 1,	.01 \$	(1,583)	5 (241)	\$ 687	\$	95.85	ş -	\$ 47.93	\$ 81.04
SOA	Southern Ohio Agricultural & Community Development	\$ 51	1.00	\$ 96	\$ -	5 48	\$ 81	\$	45 \$	(51)	\$ (3)		\$	95.85	s -	\$ 47.93	\$ 81.04
SOS	Ohio Secretary of State	\$ 102	2.00	\$ 192	\$ - :	5 96	\$ 162	\$	90 \$	(102)			\$	95.85	ş -	\$ 47.93	\$ 81.04
SPA TAX	Ohio Commission on Hispanic/Latino Affairs Department of Taxation	\$ 2,536		\$ - \$ 3.748			\$ - \$ 3.909	S 1	12 \$	2.425	5 1.818	\$ 1.373	s	95.85	\$ 126.87	\$ 111.36	\$ 99.97
TOS	Ohio Treasurer of State	\$ 153	3.00		\$ -	144	\$ 243		34 \$	(153)			ŝ	95.85	\$ -	\$ 47.93	
UST	Petroleum UST Release Compensation Board	ş -	0.00	ş -	\$ - :	-	\$ - c .										
VPB	Ohio Vision Professionals Board																

Abtes:
 (1) Provided by Client
 (2) = Vehicle Count Relativity to Vehicle Class 310
 (3) Based on Allocation from Exhibit Auto Premium Allocation:2
 (4) Based on Allocation from Exhibit Auto Premium Allocation:2

(5) Based on Allocation from Exhibit Auto Premium Allocation-2
(6) Based on Allocation from Exhibit Auto Premium Allocation-2
(7) = (3) · (1)
(8) = (4) · (1)

(9) =(5)-(1) (10) =(6)-(1) (11) =(3)/(2) (12) =(4)/(2)

(13) =(5)/(2) (14) =(6)/(2) (15) Prior year analysis (16) Prior year analysis

# State of Ohio - Office of Risk Management Auto Liability As of March 31, 2020 Allocation of 7/1/20-21 Ultimate Loss & ALAE by Agency at ACE- Undiscounted - Scenario 1: 50/50 Weight

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
			Estimate Using Adjusted	Capped	Estimate Using Capped Trended			7/1/20-21 Ultimate	7/1/20-21 Ultimate				
		Adjusted	Vehicle	Trended	Ult. L&LAE	Experience	Selected	Losses & LAE	Losses & LAE			Percentage	
Code	A	Vehicle	Count	Ult. L&LAE	FY 2010-2020	Weighting	Claims Distribution	\$2,000,000	\$5,000,000	Prior	Change in Premium	Change in Premium	Cost per
Code ACC	Agency Name Accountancy Board of Ohio	Count 0.00	Distribution \$ -	FY 2010-2020 \$-	Distribution \$ -	Factor 50%	0.00%		per Occurrence \$ -	Premium \$ -	S -	O%	Vehicle \$ -
ADJ	Adjutant General	132.45	\$ 12,695		\$ 1,673	50%	0.31%		\$ 8,399	\$ 7,172	\$ 12		\$ 54.24
AGE AGO	Department of Aging Office of the Attorney General		\$ 96 \$ 40,966	\$ - \$ 425,552	\$ - \$ 72,361	50% 50%	0.00%		\$ 56 \$ 66,243	\$ 51 \$ 50,984	\$ (3) \$ 5,680		\$ 47.93 \$ 132.58
AGR	Department of Agriculture			\$ 342,810	\$ 58,292	50%	1.89%			\$ 43,939	\$ 339		\$ 140.23
ARC	Board of Examiners of Architects			s -	s -	50%	0.00%		s -	s -	s -		s -
ART ATH	The Ohio Arts Council Ohio Athletic Commission		s - s -		\$ - \$ -	50% 50%	0.00%		\$ - \$ -	\$ - \$ -	\$ - \$ -		s - s -
AUD	Auditor of State		\$ 863		\$ 223	50%	0.02%		\$ 634	\$ 523	\$ 20		\$ 60.29
ETC	Broadcast Educational Media Commission		\$ 96	s -	s -	50%	0.00%		\$ 56	\$ 51	\$ (3)	-6%	\$ 47.93
BOR BTA	Department of Higher Education Board of Tax Appeals		\$ 96 \$ -		\$ - \$ -	50% 50%	0.00%		\$ 56 \$ -	\$ 51 \$ -	\$ (3) \$ -		\$ 47.93 \$ -
BWC	Bureau of Workers Compensation			\$ 131,527	\$ 22,365	50%	1.13%		\$ 31,007	\$ 28,173	\$ (1,650)		\$ 82.86
CAC	Casino Control Commission	15.00	\$ 1,438		\$ 110	50%	0.03%			\$ 833	\$ (58)	-7%	\$ 51.60
CDP CHR	Chemical Dependency Professionals Board Board of Chiropractic Examiners			s - s -	\$ - \$ -	50% 50%	0.00%		s - s -	\$ - \$ -	s - s -		\$ - \$ -
CIV	Civil Rights Commission			s -	s ·	50%	0.00%		\$ 392	\$ 357	\$ (22)		\$ - \$ 47.93
CLA	Ohio Court of Claims		\$ 96		s -	50%	0.00%	\$ 48	\$ 56	\$ 51	\$ (3)	-6%	\$ 47.93
COM	Department of Commerce		\$ 39,313		\$ 22,457	50%	1.32%	+	\$ 36,106	\$ 34,572	\$ (3,687)		\$ 75.30
COS CRB	State Cosmetology and Barber Board Motor Vehicle Collision Repair Board		\$ 1,725 \$ 192	\$ 79,302 \$ -	\$ 13,485 \$ -	50% 50%	0.32%			\$ 6,047 \$ 102	\$ 1,558 \$ (6)		\$ 422.50 \$ 47.93
CSR	Capitol Square Review & Advisory Board			\$ 617	\$ 105	50%	0.02%		\$ 666	\$ 602	\$ (32)		\$ 52.78
CSV	Commission on Service & Volunteerism			s -	s -	50%	0.00%		s -	s -	s -		s -
CSW DAS	Counselors & Social Workers Board Department of Administrative Services			\$- \$31.569	\$ - \$ 5.368	50% 50%	0.00%		\$- \$8,757	\$ - \$ 7,205	\$ - \$ 286		\$ - \$ 74.68
DEN	Dental Board			\$ 2,606	\$ 5,368	50%	0.02%		\$ 483	\$ 204	\$ 209		\$ 103.32
DEV	Development Services Agency	13.00	\$ 1,246	\$ 4,947	\$ 841	50%	0.04%	\$ 1,044	\$ 1,220	\$ 780	\$ 264	34%	\$ 80.28
DMH DMR	Department of Mental Health & Addiction Services Department of Developmental Disabilities		\$ 17,766 \$ 30,600		\$ 9,239 \$ 26,086	50% 50%	0.58%		\$ 15,785 \$ 33,134	\$ 14,527 \$ 26,020	\$ (1,025) \$ 2,323		\$ 72.85 \$ 88.78
DNR	Department of Natural Resources				\$ 145,156	50%	1.21%			\$ 251,357	\$ (537)		\$ 67.44
DOH	Department of Health	191.20	\$ 18,327	\$ 89,170	\$ 15,162	50%	0.71%	\$ 16,744	\$ 19,575	\$ 13,257	\$ 3,488	26%	\$ 87.58
DOT	Department of Transportation Department of Public Safety				\$ 1,075,111	50%	43.43% 21.63%		\$ 1,191,684	\$ 1,068,220	\$ (48,855)		\$ 101.40
DPS DRC	Department of Public Safety Department of Rehabilitation & Correction			\$ 3,125,078 \$ 1,422,461	\$ 531,391 \$ 241,877	50% 50%	21.63%		\$ 593,480 \$ 238,434	\$ 505,687 \$ 174,449	\$ 1,974 \$ 29,508		\$ 100.55 \$ 117.74
DVM	Veterinary Medical Board		\$ -	\$ -	\$ -	50%	0.00%		\$ -	\$ -	\$ -		s -
DVS	Department of Veterans Services		\$ 4,970		\$ 5,327	50%	0.22%		\$ 6,019	\$ 5,408	\$ (260)		\$ 99.30
DYS EBR	Department of Youth Services Environmental Board of Review		\$ 16,342 \$ -	\$ 80,014 \$ -	\$ 13,606 \$ -	50% 50%	0.64%		\$ 17,505 \$ -	\$ 16,082 \$ -	\$ (1,108) \$		\$ 87.82 \$ -
EDU	Department of Education		\$ 1,342		\$ 2,301	50%	0.00%		\$ 2,129	\$ 1,792	\$ 30		\$ 130.09
ELC	Ohio Elections Commission	0.00	s -	s -	s -	50%	0.00%	s -	\$-	\$-	s -	0%	s -
ENG EPA	Engineers & Surveyors Board		\$ -	\$- \$33.472	\$ - \$ 5.692	50% 50%	0.00%		\$ .	\$ - \$ 18.107	\$ - \$ (3,457)		\$ - \$ 59.48
ERB	Environmental Protection Agency Employee Relations Board		\$ 23,608 \$ 192		\$ 5,692 \$ 57	50%	0.62%		\$ 17,126 \$ 145	\$ 18,107 \$ 130	\$ (3,457) \$ (6)		\$ 59.48 \$ 62.21
ETH	Ethics Commission		\$ 288		\$ 114	50%	0.01%	\$ 201	\$ 235	\$ 260	\$ (59)		\$ 66.97
EXP	Ohio Expositions Commission		\$ 11,416		\$ 895	50%	0.26%		\$ 7,196	\$ 7,192	\$ (1,037)		\$ 51.68
FUN GOV	Board of Embalmers and Funeral Directors Office of the Governor		\$ 192 \$ -		\$ - \$ -	50% 50%	0.00%		\$ 112 \$ -	\$ 102 \$ -	\$ (6) \$ -		\$ 47.93 \$ -
HFA	Ohio Housing Finance Agency		\$ 1,534		š -	50%	0.03%		\$ 896	\$ 868	\$ (101)		\$ 47.93
IGO	Office of the Inspector General		\$ 288		\$ 9,915	50%	0.22%		\$ 5,964	\$ 5,027	\$ 74		\$ 1,700.43
INS JCO	Department of Insurance Judicial Conference of Ohio		\$ 1,246 \$ -	\$ 13,008	\$ 2,212 \$ -	50% 50%	0.07%		\$ 2,021 \$ -	\$ 1,744 \$ -	\$ (15) \$ -		\$ 133.00 \$ -
JCR	Joint Committee on Agency Rule		ş -		ş -	50%	0.00%		\$ -	\$ -	s -		ş -
JEO	Joint Education Oversight Committee		ş -		s -	50%	0.00%		\$-	\$-	s -		s -
JFS JLE	Department of Job and Family Services Joint Legislative Ethics Commission		\$ 15,216 \$ -		\$ 11,603 \$ -	50% 50%	0.57%		\$ 15,677 \$ -	\$ 13,112 \$ -	\$ 298 \$ -		\$ 84.47 \$ -
JMO	Joint Medicaid Oversight Committee		s -		s -	50%	0.00%		s -	ş -	s -		ş -
JSC	Judiciary/Supreme Court		\$ 709	s -	s -	50%	0.02%		\$ 415	\$ 378	\$ (23)	-6%	\$ 47.93
LCO	Liquor Control Commission			s -	s -	50%	0.00%		\$ ·	s -	s -		s -
LEC LIB	Lake Erie Commission State Library Board		\$ - \$ 575	s - c -	\$ .	50% 50%	0.00%		\$ - \$ 336	\$ 306	\$ · (19)		\$ - \$ 47.93
LOT	Ohio Lottery Commission		\$ 16,323		\$ 12,320	50%	0.61%		\$ 16,743	\$ 15,051	\$ (730)		\$ 84.10
LSC	Legislative Service Commission		\$ 96		s -	50%	0.00%		\$ 56	\$ 51	\$ (3)		\$ 47.93
MCD MED	Department of Medicaid Medical Board		\$ - \$ 1,917	s -	s -	50% 50%	0.00%		\$ - \$ 1,121	\$ - \$ 1,021	\$ - \$ (63)		\$ - \$ 47.93
MIH	Commission on Minority Health		\$ 1,917		s -	50%	0.04%		\$ 1,121 \$ ·	\$ 1,021	\$ -		\$ 41.93 \$ -
NUR	Board of Nursing		s -	*	s -	50%	0.00%		\$ -	s -	\$ -		s -
OBM	Office of Budget & Management Office of Consumers' Counsel		\$ 96 \$ 383		\$ - \$ 128	50%		\$ 48 \$ 256	\$ 56 \$ 200	\$ 51 \$ 296	\$ (3) \$ (40)		\$ 47.93 \$ 63.95
OCC OIC	Industrial Commission		\$ 383 \$ 479		\$ 128 \$ 1,019	50% 50%	0.01%		\$ 299 \$ 876	\$ 296 \$ 1,436	\$ (40) \$ (687)		\$ 63.95 \$ 149.79
ODC	Office of Disciplanary Counsel	2.00	\$ 192	s -	s -	50%	0.00%	\$ 96	\$ 112	\$ 102	\$ (6)	-6%	\$ 47.93
OSB	Ohio State School for the Blind		\$ 1,898		\$ 422	50%	0.05%		\$ 1,356	\$ 1,033	\$ 127		\$ 58.58
OSD PRX	Ohio School for the Deaf Board of Pharmacy			\$2,475 \$-	\$ 421 \$ -	50% 50%	0.04%			\$ 970 \$ 2,349	\$ 26 \$ (144)		\$ 60.76 \$ 47.93
PSY	Board of Psychology	0.00	\$ 4,409 \$ -		s -	50%	0.00%	\$-	\$ -	ş -	s -	0%	s -
PUB	Public Defender Commission		\$ 1,150		\$ -	50%	0.02%		\$ 672	\$ 613	\$ (38)	-6%	\$ 47.93
PUC	Public Utilities Commission Public Works Commission		\$ 5,176 \$ -		\$ 23,489 \$ -	50% 50%	0.61%		\$ 16,755 \$ -	\$ 13,514 \$ -	\$ 818 \$ -		\$ 265.41 \$ -
PWC	Occupational and Physical Therapy Board		s - s -		s -	50%	0.00%		s -	s -	s -		s -
RAC	Racing Commission	3.00	\$ 288		s -	50%	0.01%	\$ 144	\$ 168	\$ 153	\$ (9)	-6%	\$ 47.93
REP	Ohio House of Representatives Opportunities for Ohioans With Disabilities Agency		\$ 288 \$ 19,563	\$ 2,312 \$ 62,646	\$ 393 \$ 10,652	50% 50%	0.01% 0.64%			\$ 346 \$ 13,563	\$ (5) \$ 1,545		\$ 113.44 \$ 74.02
SCR	Board of Career Colleges and Schools		\$ 19,563 \$ -		\$ 10,652 \$ -	50%	0.64%		\$ 17,662 \$ -	\$ 13,563 \$ -	\$ 1,545 \$ -		\$ 74.02 \$ -
SEN	The Ohio Senate	2.00	\$ 192	ş -	s -	50%	0.00%	\$ 96	\$ 112	\$ 102	\$ (6)	-6%	\$ 47.93
SFC	Ohio Facilities Construction Commission			s -	ş -	50%	0.06%		\$ 1,569	\$ 1,583	\$ (241)		\$ 47.93
SHP SOA	Ohio Speech and Hearing Professionals Board Southern Ohio Agricultural & Community Development		\$ - \$ 96		\$ - \$ -	50% 50%	0.00%		\$ - \$ 56	\$. \$51	\$ . \$ (3)	0% -6%	\$ - \$ 47.93
SOS	Ohio Secretary of State		\$ 192		s -	50%	0.00%			\$ 102	\$ (6)		\$ 47.93 \$ 47.93
SPA	Ohio Commission on Hispanic/Latino Affairs	0.00	s -	s -	s -	50%	0.00%	ş -	s -	s -	s -	O%	ş -
TAX	Department of Taxation Obio Treasurer of State	39.10 3.00			\$ 4,961 \$ -	50% 50%	0.19%			\$ 2,536 \$ 153	\$ 1,818		\$ 111.36 \$ 47.02
UST	Petroleum UST Release Compensation Board			s - s -	s - s -	50%	0.01%		\$ 168 \$ -	\$ 153 \$ -	\$ (9) \$ -		\$ 47.93 \$ -
1051			š -	s -	s -	50%	0.00%		\$ -	ş -	s -	0%	s -
VPB	Ohio Vision Professionals Board Total	24,488	\$ 2,347,180				100.00%	\$ 2.347.270	\$ 2,744,065	\$ 2,360,797	\$ (13,572)		\$ 95.85

AVerage per Auguster versione Council Notes: (1) = Vehicle Count x Relativity to Vehicle Class 310 (2) = (1)/(1 Total)\* (7 Total) from Exhibit Auto-3 (3) Incurred Loss developed, trended to 7/1/2020, and capped at \$250,000 (4) = (3)/(3 Total)\* (7 Total) from Exhibit Auto-3

(5) Weights provided by the ORM
(6) Based on weighted average of (2) and (4); weights provided by the ORM (7) = (6) x (7 total); (7 total) tom Exhibit Auto-3
(8) = (6) x (8 total); (8 total) from Exhibit Auto-3

(9) Provided by ORM (10) =(7) - (9) (11) =(7)/(9) - 1 (12) =(7)/(1)

## State of Ohio - Office of Risk Management Auto Liability A sof March 31, 2020 Allocation of 7/1/20-21 Ultimate Loss & ALAE by Agency at ACE- Undiscounted - Scenario 2: Credibility Weight

		(1)	(2) Estimate Using Adiusted		(4) Estimate Using Capped Trended	(5)	(6)	(7)	(8) 7/1/20-21 Ultimate	(9) 7/1/20-21 Ultimate	(10)	(11)	(12)	(13)
C. A.		Adjusted Vehicle	Vehicle Count	Trended Ult. L&LAE	Ult. L&LAE FY 2010-2020	Experience Weighting	Weighted Cost	Selected Claims Distribution	Losses & LAE \$2,000,000	Losses & LAE \$5,000,000	Prior	Change in	Percentage Change in	Cost per
Code ACC	Agency Name Accountancy Board of Ohio	Count 0.00	Distribution \$ -	FY 2010-2020 \$ -	Distribution \$ -	Factor 15% S			per Occurrence p S -	s -	Premium \$ -	Premium S -	Premium 0%	Vehicle \$ -
ADJ AGE	Adjutant General Department of Aging		\$ 12,696 \$ 96	\$ 9,839 \$ -	\$ 1,673	25% 5		0.42%		\$ 11,559 \$ 95	\$ 7,172 \$ 51	\$ 2,715 \$ 30	38% 59%	\$ 74.65 \$ 81.04
AGE	Office of the Attorney General	427.40	\$ 40,968	\$ 425,552	\$ 72,361	35%	51,956	2.20%	\$ 51,680	\$ 60,416	\$ 50,984	\$ 697	1%	\$ 120.92
AGR	Department of Agriculture		\$ 30,266	\$ 342,810	\$ 58,292	35%	40,075	1.70%	\$ 39,862	\$ 46,601	\$ 43,939	\$ (4,076)	-9%	\$ 126.25
ARC ART	Board of Examiners of Architects The Ohio Arts Council	0.00	s - s -	s - s -	s - s -	15% S			s - s -	ş - s -	s - s -	s - s -	0% 0%	ş - s -
ATH	Ohio Athletic Commission	0.00	\$ -	\$ -	\$ -	15%		0.00%	s -	\$-	ş -	s -	0%	š -
AUD ETC	Auditor of State Broadcast Educational Media Commission		\$ 863 \$ 96	\$ 1,309 \$ -	\$ 223 \$ -	15% S 15% S	767	0.03%	\$ 763 \$ 81	\$ 892 \$ 95	\$ 523 \$ 51	\$ 240 \$ 30	46% 59%	\$ 84.73 \$ 81.04
BOR	Department of Higher Education		\$ 96 \$ 96	ş -	\$ - \$ -	15%	81	0.00%	\$ 81		\$ 51	\$ 30	59%	\$ 81.04
BTA	Board of Tax Appeals	0.00		s -	s -	15%		0.00%			ş -	\$ - \$ (549)	0%	s -
BWC	Bureau of Workers Compensation Casino Control Commission	320.10 15.00		\$ 131,527 \$ 649	\$ 22,365 \$ 110	35% 9		1.18%			\$ 28,173 \$ 833	\$ (549) \$ 400	-2% 48%	\$ 86.30 \$ 82.14
CDP	Chemical Dependency Professionals Board		ş -	s -	\$ -	15%		0.00%		s -	ş -	ş -	0%	s -
CHR	Board of Chiropractic Examiners Civil Rights Commission		\$- \$671	\$ - \$ -	\$ - \$ -	15% S		0.00%		+	\$ - \$ 357	\$ - \$ 210	0% 59%	\$ - \$ 81.04
CLA	Ohio Court of Claims		\$ 96	s -	ş -	15%	81	0.00%	\$ 81	\$ 95	\$ 51	\$ 30	59%	\$ 81.04
COM	Department of Commerce	410.15 18.00		\$ 132,065 \$ 79,302	\$ 22,457 \$ 13.485	35% 9		1.42%			\$ 34,572	\$ (1,335)	-4%	\$ 81.04
CRB	State Cosmetology and Barber Board Motor Vehicle Collision Repair Board	2.00	\$ 1,725 \$ 192	\$ 79,302 \$ -	\$ 13,485 \$ -	15% S	3,489 163	0.15% 0.01%	\$ 3,471 \$ 162	\$ 4,057 \$ 189	\$ 6,047 \$ 102	\$ (2,576) \$ 60	-43% 59%	\$ 192.82 \$ 81.04
CSR	Capitol Square Review & Advisory Board	10.80	\$ 1,035	\$ 617	\$ 105	15%	896	0.04%	\$ 891	\$ 1,042	\$ 602	\$ 289	48%	\$ 82.49
CSV CSW	Commission on Service & Volunteerism Counselors & Social Workers Board	0.00	\$- ¢.	s - s -	\$ - c .	15% S 15% S		0.00%	s - s -	\$- ¢.	\$ - c .	\$ - c .	0% 0%	\$ - \$ -
DAS	Department of Administrative Services	100.30	\$	\$ 31,569	\$ 5,368	25%	8,553	0.36%		\$	\$ 7,205	\$ 1,303	18%	\$ 84.82
DEN	Dental Board	4.00	\$ 383	\$ 2,606 \$ 4,947	\$ 443 \$ 841	15%	392		\$ 390	\$ 456	\$ 204	\$ 186	91%	\$ 97.57
DEV	Development Services Agency Department of Mental Health & Addiction Services	13.00 185.35	\$ 1,246 \$ 17,766	\$ 4,947 \$ 54,332	\$ 841 \$ 9,239	15% 25%		0.05%		\$ 1,378 \$ 18,181	\$ 780 \$ 14,527	\$ 399 \$ 1.024	51% 7%	\$ 90.70 \$ 83.90
DMR	Department of Developmental Disabilities	319.25	\$ 30,601	\$ 153,408	\$ 26,086	35%	29,021	1.23%	\$ 28,867	\$ 33,747	\$ 26,020	\$ 2,847	11%	\$ 90.42
DNR DOH	Department of Natural Resources Department of Health	3,719.20 191.20	\$ 356,499 \$ 18,327	\$ 853,651 \$ 89,170	\$ 145,156 \$ 15,162	75% S 25% S		8.39% 0.74%		\$ 230,234 \$ 20,392	\$ 251,357 \$ 13,257	\$ (54,416) \$ 4,186	-22% 32%	\$ 52.95 \$ 91.23
DOT	Department of Transportation	10,053.40	\$ 963,655	\$ 6,322,659	\$ 1,075,111	75%		44.38%		\$ 1,217,789	\$ 1,068,220	\$ (26,525)	-2%	\$ 103.62
DPS	Department of Public Safety	5,048.85	\$ 483,951	\$ 3,125,078	\$ 531,391	75%		22.02%		\$ 604,135	\$ 505,687	\$ 11,089	2%	\$ 102.36
DRC DVM	Department of Rehabilitation & Correction Veterinary Medical Board	1,732.25 0.00	\$ 166,043 \$ -	\$ 1,422,461 \$ -	\$ 241,877 \$ -	75% 5		9.45% 0.00%		\$ 259,220 \$ -	\$ 174,449 \$ -	\$ 47,288	27% 0%	\$ 128.00 \$ -
DVS	Department of Veterans Services	51.85	\$ 4,970	\$ 31,330	\$ 5,327	15% \$	5,024	0.21%	\$ 4,997	\$ 5,842	\$ 5,408	\$ (411)	-8%	\$ 96.37
DYS EBR	Department of Youth Services Environmental Board of Review	170.50 0.00	\$ 16,343	\$ 80,014	\$ 13,606	25% 15%	15,659	0.66%	\$ 15,576 \$ -	\$ 18,209	\$ 16,082	\$ (506)	-3% 0%	\$ 91.35
EDU	Department of Education		\$ 1,342	\$ 13,530	\$ 2,301	15%		0.06%	\$ 1,478	\$ 1,728	\$ 1,792	\$ (314)	-18%	\$ 105.56
ELC	Ohio Elections Commission	0.00		\$ - c .	s -	15%		0.00%	ş -	ş -	ş -	s -	0%	\$ - c
ENG EPA	Engineers & Surveyors Board Environmental Protection Agency	0.00 246.30	Ş	\$ - \$ 33,472	\$ - \$ 5,692	15% S 25% S		0.00% 0.81%		~	\$ 18,107	\$ - \$ 921	0% 5%	\$ - \$ 77.26
ERB	Employee Relations Board	2.00	\$ 192	\$ 336	\$ 57	15%	172	0.01%	\$ 171	\$ 199	\$ 130	\$ 41	31%	\$ 85.31
ETH	Ethics Commission Ohio Expositions Commission	3.00		\$ 672 \$ 5.262	\$ 114 \$ 895	15% 25%		0.01%			\$ 260 \$ 7,192	\$ 0 \$ 1.547	0% 22%	\$ 86.73 \$ 73.38
FUN	Board of Embalmers and Funeral Directors	2.00		\$ 5,262	\$ -	15%		0.01%		\$ 10,217	\$ 102	\$ 1,547	59%	\$ 81.04
GOV	Office of the Governor	0.00	s -	ş -	s -	15%		0.00%			ş -	s -	0%	s -
HFA IGO	Ohio Housing Finance Agency Office of the Inspector General	16.00 3.00	\$ 1,534 \$ 288	\$ - \$ 58.310	\$ - \$ 9.915	15% S		0.06%		\$ 1,516 \$ 2,014	\$ 868 \$ 5.027	\$ 429 \$ (3.305)	49%	\$ 81.04 \$ 574.17
INS	Department of Insurance	13.00	\$ 1,246	\$ 13,008	\$ 2,212	15%	1,391	0.06%	\$ 1,384	\$ 1,617	\$ 1,744	\$ (360)	-21%	\$ 106.43
JCO JCR	Judicial Conference of Ohio Joint Committee on Agency Rule	0.00	\$ -	\$ - \$ -	\$ - \$ -	15% 5		0.00%		\$ -	\$ - \$ -	\$ - c	0% 0%	\$ - \$ -
JEO	Joint Education Oversight Committee		s -	s -	s -	15%		0.00%		s -	ş -	s -	0%	ş -
JFS	Department of Job and Family Services	158.75	\$ 15,217	\$ 68,239	\$ 11,603	25%			\$ 14,238	\$ 16,644	\$ 13,112	\$ 1,126	9%	\$ 89.69
JLE JMO	Joint Legislative Ethics Commission Joint Medicaid Oversight Committee		s - s -	s - s -	s - s -	15% S		0.00%	s - s -	ş - s -	\$ - \$ -	\$ - \$ -	0% 0%	\$ - \$ -
JSC	Judiciary/Supreme Court	7.40	\$ 709	ş -	\$ -	15%	603	0.03%	\$ 600		\$ 378	\$ 222	59%	\$ 81.04
LCO	Liquor Control Commission Lake Erie Commission	0.00	\$ -	s - s -	\$ - \$ -	15% 5		0.00%		\$- \$-	\$ - \$ -	\$ - c	0%	\$ - \$ -
LIB	State Library Board	6.00	+	s -	s -	15%		0.02%		\$ 568	\$ 306	\$ 180	59%	\$ 81.04
LOT	Ohio Lottery Commission	170.30		\$ 72,453	\$ 12,320	25%		0.65%			\$ 15,051	\$ 190	1%	\$ 89.50
LSC MCD	Legislative Service Commission Department of Medicaid	1.00	\$ 96 \$ -	s - s -	\$ - \$ -	15% S		0.00%		\$ 95 \$ -	\$ 51 \$ .	\$ 30 \$ -	59% 0%	\$ 81.04 \$ -
MED	Medical Board	20.00	-	ş -	š -	15%	1,630	0.07%	\$ 1,621	\$ 1,895	\$ 1,021	\$ 600	59%	\$ 81.04
MIH NUR	Commission on Minority Health Board of Nursing	0.00	\$ -	\$ - \$ -	\$ - \$ -	15% S		0.00%		\$ -	\$ - \$ -	\$ - c	0% 0%	\$ - \$ -
OBM	Office of Budget & Management	1.00	\$- \$96	s -	s -	15%		0.00%			\$ 51	\$ 30	59%	\$ 81.04
occ	Office of Consumers' Counsel	4.00	\$ 383	\$ 754	\$ 128	15% \$		0.01%		\$ 401	\$ 296	\$ 48	16%	\$ 85.83
OIC ODC	Industrial Commission Office of Disciplanary Counsel	5.00 2.00		\$ 5,991 \$ -	\$ 1,019	15% 15%	560 163	0.02%	\$ 557 \$ 162	\$651 \$189	\$ 1,436 \$ 102	\$ (878) \$ 60	-61% 59%	\$ 111.44 \$ 81.04
OSB	Ohio State School for the Blind	19.80	\$ 1,898	\$ 2,482	\$ 422	15%	1,677	0.07%	\$ 1,668	\$ 1,950	\$ 1,033	\$ 634	61%	\$ 84.22
OSD PRX	Ohio School for the Deaf Board of Pharmacy	16.40 46.00		\$ 2,475 \$ -	\$ 421 \$ -	15% 9		0.06%			\$ 970 \$ 2,349	\$ 421 \$ 1,379	43% 59%	\$ 84.87 \$ 81.04
PSY	Board of Pharmacy Board of Psychology	46.00		s -	s -	15%		0.16%		\$ 4,358 \$ -	\$ 2,349 \$ -	\$ 1,3/9 \$ -	0%	\$ 81.04 \$ -
PUB	Public Defender Commission	12.00	\$ 1,150	\$ -	\$ -	15%	978	0.04%	\$ 973		\$ 613	\$ 360	59%	\$ 81.04
PUC	Public Utilities Commission Public Works Commission	54.00 0.00		\$ 138,136 \$ -	\$ 23,489	15% S		0.34%			\$ 13,514	\$ (5,633)	-42% 0%	\$ 145.94 \$ -
PYT	Occupational and Physical Therapy Board	0.00	ş -	ş -	ş -	15%		0.00%	s - :		ş -	ş -	0%	š -
RAC	Racing Commission			s -	s -	15%		0.01%			\$ 153	\$ 90	59%	\$ 81.04
REP	Ohio House of Representatives Opportunities for Ohioans With Disabilities Agency	3.00 204.10	\$ 288 \$ 19.564	\$ 2,312 \$ 62.646	\$ 393 \$ 10.652	15% 25%		0.01%		\$ 353 \$ 20.159	\$ 346 \$ 13.563	\$ (44) \$ 3.681	-13% 27%	\$ 100.59 \$ 84.49
SCR	Board of Career Colleges and Schools	0.00	ş -	\$ -	\$ -	15%	-	0.00%	s -	ş -	\$ -	s -	0%	s -
SEN SFC	The Ohio Senate Ohio Facilities Construction Commission	2.00 28.00	\$ 192 \$ 2.684	\$ - c .	\$ - c .	15% 5		0.01%		\$ 189 \$ 2,653	\$ 102 \$ 1,583	\$ 60 \$ 687	59% 43%	\$ 81.04 \$ 81.04
SHP	Ohio Speech and Hearing Professionals Board	28.00	ş -	s - s -	ş -	15%		0.10%		ş -	\$ 1,083 \$ -	\$ -	0%	\$ -
SOA	Southern Ohio Agricultural & Community Development	1.00	\$ 96	\$ -	s -	15%			\$ 81	\$ 95	\$ 51	\$ 30	59%	\$ 81.04
SOS SPA	Ohio Secretary of State Ohio Commission on Hispanic/Latino Affairs	2.00	\$ 192 \$ -	s - s -	\$ - \$ -	15% S		0.01%	\$ 162 \$ -	\$ 189 \$ -	\$ 102 \$ -	\$ 60 \$ -	59% 0%	\$ 81.04 \$ -
TAX	Department of Taxation	39.10			\$ 4,961	15%	3,930	0.17%	\$ 3,909		\$ 2,536	\$ 1,373	54%	\$ 99.97
TOS	Ohio Treasurer of State Petroleum UST Release Compensation Board	3.00	\$ 288	\$ - \$ -	\$ - \$ -	15% 5		0.01%		\$ 284 \$ -	\$ 153 \$ -	\$ 90 \$ -	59% 0%	\$ 81.04 \$ -
VPB	Ohio Vision Professionals Board	0.00	ş -	š -	š -	15%		0.00%		š -	ŝ -	s -	0%	š -
	Total	24,488	\$ 2,347,270	\$ 13,804,146	\$ 2,347,270	ç	2,359,780	100.00%		\$ 2,744,065 \$ 112.06	\$ 2,360,797	\$ (13,527)		\$ 95.85
Notes	Average per Adjusted Vehicle Count								\$ 95.85	\$ 112.06				

Average per Adjusted Venice Louin. Notes: (1) = Venicle Count & Relativity to Venicie Class 310 (2) = (1)/1 (7 table) '(6 Tadle 1 Chail from Enbild Auto-3 (3) incurred Loss developed, trended to 7/1/2020, and caped at \$250,000 (4) = (3)/(3 Tota) '(8 Tota); (8 Tota); trom Exhibit Auto-3

(5) Weights based on the size of the agency
(6) = (4) \* (5) + (2) \* (1 - (5))
(7) = (6) / (6 Total)
(8) = (7) x (8 Total); (8 Total) from Exhibit Auto-3

(9) = (7) x (9 Total); (9 Total) from Exhibit Auto-3 (10) Provided by ORM (11) =(8) - (10) (12) =(8) / (10) - 1 (13) =(8) / (1)

## State of Ohio - Office of Risk Management Auto Liability As of March 31, 2020 Allocation of 7/1/20-21 Ultimate Loss & ALAE by Agency at ACE- S2M per Occurrence and Discounted (2.0%)

					Premium E						timate less Pr				Rate per A				
<u> </u>		(1)	(2)	(3) Based on	(4) Based on	(5)	(6) Based on	(7) Based or	n Ba	(8) ised on	(9)	(10) Based on	В	(11) ased on	(12) Based on		(13)	(14) Based o	
			Estimated Adjusted	Adjusted C Vehicle	Capped Trendec Ult. L&LAE	Based on 50/50	Cred. Wtd. Ult. I & AF	Adjusted Vehicle	i Cappe	d Trendec	Based on 50/50	Cred. Wtd. Ult 1 & AF		djusted Vehicle	Capped Trend		ased on 50/50	Cred. Wt	
		Prior	Vehicle		FY 2010-2020		Y 2010-2020	Count		. L&LAE 010-2020		Y 2010-2020			FY 2010-202			FY 2010-2	
Code	Agency Name Accountancy Board of Obio	Premium	Count 0.00	Distribution	Distribution	Distribution	Distribution	Distributio	on Dist	tribution [	Distribution	Distribution	Dis	stribution	Distribution	n Dis	tribution	Distributi	on
ACC ADJ		\$ - \$ 7,172	0.00 132.45	\$ - \$ 12,071	\$ - 5 \$ 1,591 5	5 - \$ 6,831	\$ - \$ 9,402	\$ 4,8	99 \$	(5,582) \$	(341)	\$ 2,229	s	91.14	\$ 12.0	1\$	51.58	\$ 70	.98
AGE		\$ 51	1.00		\$ - 5		\$ 77		40 \$	(51) \$	(5)	\$ 26	s	91.14		\$	45.57	\$ 77	
AGO AGR		\$ 50,984 \$ 43,939	427.40 315.75	+	\$ 68,805 5 \$ 55,427 5		\$ 49,140 \$ 37,904		30) \$ 61) \$	17,822 \$ 11,488 \$	-,	\$ (1,843) \$ (6,035)	\$ S	91.14 91.14	\$ 160.99 \$ 175.54		126.06 133.34	\$ 114 \$ 120	
ARC	Board of Examiners of Architects	\$ -	0.00	\$ -	\$ - 5	\$ -	\$ -	\$ (13,1	51) V	11,400 \$	(1,000)	\$ (0,033)	~	21.14	\$ 115.5	• •	155.54	÷ 120	0.4
ART ATH	The Ohio Arts Council Ohio Athletic Commission	\$ - c	0.00	\$ - c	\$ - 5	ş -	ş -												
AUD	Auditor of State	\$ 523	9.00	\$ 820	\$ 212 5	\$ 516	\$ 725	\$ 2	97 \$	(311) \$	(7)	\$ 202	s	91.14	\$ 23.52	2 \$	57.33	\$ 80	.57
ETC	Broadcast Educational Media Commission	\$ 51	1.00		\$ - 5		\$ 77	\$	40 \$	(51) \$	(5)	\$ 26	s	91.14	\$ -	ş	45.57	\$ 77	.06
BOR BTA	Department of Higher Education Board of Tax Appeals	\$ 51 \$ -	1.00	\$ 91 \$ -	\$ - 5 5 - 5	\$46 \$-	\$ 77 \$ -	\$	40 \$	(51) \$	(5)	\$ 26	\$	91.14	ş -	\$	45.57	\$ 77.	06
BWC	Bureau of Workers Compensation	\$ 28,173	320.10		\$ 21,266		\$ 26,267	\$ 1,0		(6,907) \$	(2,953)		\$	91.14	\$ 66.4		78.79	\$ 82	
CAC CDP		\$ 833 \$ -	15.00 0.00	,	\$ 105 5		\$ 1,172 \$ -	\$ 5	35 \$	(728) \$	(96)	\$ 339	\$	91.14	\$ 7.00	5	49.07	\$ 78	11
CHR		ş -	0.00	T	\$ - 5	, \$-	ş -												
CIV		\$ 357	7.00		\$ - 5		\$ 539		B1 \$	(357) \$	(38)		\$	91.14 91.14	s -	\$	45.57	\$ 77	
CLA COM		\$ 51 \$ 34,572	1.00 410.15		\$ - 5 \$ 21.353 5		\$ 77 \$ 31,604	\$ 2.8	40 \$ 09 \$	(51) \$ (13,219) \$		\$ 26 \$ (2,968)	\$ S	91.14 91.14	\$ 52.0	5 5	45.57 71.60	\$ 77. \$ 77.	
COS	State Cosmetology and Barber Board	\$ 6,047	18.00		\$ 12,822		\$ 3,300		06)\$	6,775 \$	1,184	\$ (2,747)	ŝ	91.14	\$ 712.3		401.73	\$ 183	
CRB CSR	Motor Vehicle Collision Repair Board Capitol Square Review & Advisory Board	\$ 102 \$ 602	2.00 10.80	\$ 182 \$ 984	\$ - 5 \$ 100 5	\$ 91 \$ 542	\$ 154 \$ 847		BO \$ B2 \$	(102) \$ (502) \$	(11) (60)	\$ 52 \$ 245	Ş	91.14 91.14	\$ - \$ 9.2	\$ 2 \$	45.57 50.19	\$ 77. \$ 78.	
CSV	Commission on Service & Volunteerism	s -	0.00	\$ -	\$ - 5	ş .	s -		•	(502/ 5	(00)	2.45	Ť	21.14	÷ 9.2.		50.25	+ 10	
CSW DAS		\$ - \$ 7.205	0.00	\$ - \$ 9.141	\$ - 5 \$ 5,104	Ŷ	\$ - \$ 8.089	\$ 1.9	37 Č	(2.100)	(82)	\$ 885	~	01.14	\$ 50.8		71.01	\$ 80	65
DAS DEN		\$ 7,205 \$ 204	100.30 4.00		\$ 5,104 S \$ 421 S		\$ 8,089 \$ 371		37 Ş 60 Ş	(2,100) \$ 217 \$	(82) 189	\$ 885 \$ 167	\$	91.14 91.14	\$ 50.89 \$ 105.39		71.01 98.24	\$ 80 \$ 92	
DEV		\$ 780	13.00		\$ 800		\$ 1,121		05 \$	20 \$	212	\$ 341	s	91.14	\$ 61.52	2\$	76.33	\$ 86	
DMH DMR	bepartment of mental meaning Addiction ber need	\$ 14,527 \$ 26,020	185.35 319.25	\$ 10,075	\$ 8,785 5 \$ 24,804 5		\$ 14,787 \$ 27,448	\$ 2,3 \$ 3.0		(5,743) \$	(1,689) 930	\$ 260 \$ 1.428	\$ ¢	91.14 91.14	\$ 47.39		69.27 84.42	\$ 79 \$ 85	
DNR		\$ 251,357	3,719.20	\$ 338,968	\$ 138,023 5	\$ 238,495	\$ 187,264		10 \$ (1		(12,862)	\$ (64,094)	ŝ	91.14	\$ 37.1		64.13	\$ 50	
DOH DOT	Department of Health Department of Transportation	\$ 13,257 \$ 1.068,220	191.20 10.053.40	\$ 17,426 \$ 916.267	\$ 14,417 5 \$ 1.022.278	\$ 15,922 \$ 969,273	\$ 16,586 \$ 990,504	\$ 4,1 \$ (151.9		1,161 \$ (45,941) \$	2,665	\$ 3,329 \$ (77,715)	Ş	91.14 91.14	\$ 75.40 \$ 101.60		83.27 96.41	\$ 86 \$ 98	
DPS		\$ 1,068,220 \$ 505,687	5,048.85	\$ 460,152	\$ 505,278	\$ 969,273 \$ 482,715	\$ 990,504 \$ 491,382	\$ (45,5		(45,941) \$	(98,947) (22,972)		ş	91.14 91.14	\$ 100.00		96.41 95.61	\$ 98	
DRC	Department of Rehabilitation & Correction	\$ 174,449	1,732.25	\$ 157,877	\$ 229,990	\$ 193,934	\$ 210,840	\$ (16,5		55,542 \$	19,485	\$ 36,391	ŝ	91.14	\$ 132.7		111.95	\$ 121	71
DVM DVS	Veterinary Medical Board Department of Veterans Services	\$ - \$ 5.408	0.00 51.85	\$ - \$ 4.726	\$ - 5 \$ 5.066	5 - 5 4.896	s - s 4.751	\$ (6	B3) \$	(343) \$	(513)	\$ (657)	¢	91.14	\$ 97.70	5	94.42	\$ 91	64
DYS	Department of Youth Services	\$ 16,082	170.50	\$ 15,539	\$ 12,937 5	\$ 14,238	\$ 14,810		43) \$	(3,145) \$	(1,844)		ŝ	91.14			83.51	\$ 86	
EBR FDU	Environmental Board of Review Department of Education	\$ - \$ 1,792	0.00	\$ - \$ 1,276	\$ - 5 \$ 2,188 5	\$- \$1,732	\$ - \$ 1,405	\$ (5	16) \$	396 \$	(60)	\$ (386)	s	91.14	\$ 156.20		123.70	\$ 100	20
ELC	Ohio Elections Commission	\$ 1,792 \$ -	0.00	\$ 1,276 \$ -	\$ 2,188 3	\$ 1,732 \$ -	\$ 1,405 \$ -	\$ (5	16) \$	396 \$	(60)	\$ (386)	\$	91.14	\$ 156.20	s Ş	123.70	\$ 100	38
ENG		ş -	0.00	ş -	\$ - 5	ş -	s -												
EPA FRB		\$ 18,107 \$ 130	246.30 2.00		\$ 5,412 S		\$ 18,093 \$ 162	\$ 4,3 \$	41 \$ 52 \$	(12,695) \$ (76) \$	(4,177)		s	91.14 91.14			56.56 59.15	\$ 73 \$ 81	
ETH	Ethics Commission	\$ 260	3.00		\$ 109 5		\$ 247		13 \$	(151) \$	(69)		ŝ	91.14		2\$	63.68	\$ 82	
EXP FUN	Ohio Expositions Commission Board of Embalmers and Funeral Directors	\$ 7,192 \$ 102	119.10 2.00		\$ 851 S		\$ 8,310 \$ 154	\$ 3,6	63 \$ BO \$	(6,341) \$ (102) \$	(1,339)	\$ 1,118 \$ 52	Ş	91.14 91.14	\$ 7.14	4 \$	49.14 45.57	\$ 69 \$ 77	
GOV	Office of the Governor	\$ -	0.00	\$ 102	· · ·	\$ 91	\$ 134	э .	50 \$	(102) \$	(11)	\$ 52	ç	91.14	\$ ·	÷	40.07	ə 11.	00
HFA	Ohio Housing Finance Agency	\$ 868	16.00		\$ - 5		\$ 1,233		90 \$	(868) \$	(139)	\$ 365	s	91.14	ş -	\$	45.57	\$ 77	
IGO INS	Office of the Inspector General Department of Insurance	\$ 5,027 \$ 1,744	3.00 13.00	\$ 273 \$ 1,185	\$ 9,428 5 \$ 2,103 5		\$ 1,638 \$ 1,316		54)\$ 59)\$	4,401 \$ 360 \$	(177) (100)	\$ (3,389) \$ (428)	\$ s	91.14 91.14	\$ 3,142.60 \$ 161.79		1,616.87 126.46	\$ 545 \$ 101	
JCO	Judicial Conference of Ohio	\$ -	0.00	\$ -	\$ - 5	\$ -	\$ -	*			(200)	• • • • • •							
JCR JEO	Joint Committee on Agency Rule Joint Education Oversight Committee	\$ - \$ -	0.00	\$ - c .	\$ - 5 5 - 5	\$ - c _	\$ - c .												
JFS		\$ 13,112	158.75	\$ 14,468	\$ 11,033 5	\$ 12,751	\$ 13,538	\$ 1,3	57 \$	(2,079) \$	(361)	\$ 426	\$	91.14	\$ 69.50	5 (	80.32	\$ 85	.28
JLE	Joint Legislative Ethics Commission	s -	0.00	ş -	\$ - 5	Ŷ	s -												
JMO JSC		\$ - \$ 378	0.00 7.40	\$ - \$ 674	s - s		\$ - \$ 570	\$ Z	97 Ŝ	(378) \$	(41)	\$ 192	s	91.14	s -	s	45.57	\$ 77	06
LCO	Liquor Control Commission	\$ -	0.00	\$ -	\$ - 9	\$ -	\$ -	-			(,				•				
LEC LIB	Lake Erie Commission State Library Board	\$ - \$ 306	0.00 6.00	\$ - \$ 547	\$ - 5 \$ - 5		\$ - \$ 462	\$ 2	41 S	(306) \$	(33)	\$ 156	s	91.14	s .	\$	45 57	\$ 77	06
LOT	Ohio Lottery Commission	\$ 15,051	170.30	\$ 15,521	\$ 11,715 5	\$ 13,618	\$ 14,493	\$ 4	70 \$	(3,337) \$	(1,433)	\$ (559)	ş	91.14	\$ 68.7	ə Ş	45.57	\$ 85	.10
LSC	Legislative Service Commission	\$ 51	1.00	\$ 91	\$ - <u>\$</u>	\$ 46	\$ 77	\$	40 \$	(51) \$	(5)	\$ 26	\$	91.14	\$ -	\$	45.57	\$ 77	06
MCD MED	Department of Medicaid Medical Board	\$ - \$ 1,021	0.00 20.00	\$ - \$ 1,823	s - 5	5 - 5 911	\$ 1,541	\$ 8	02 \$	(1,021) \$	(110)	\$ 520	s	91.14	s -	S	45.57	\$ 77.	.06
MIH	Commission on Minority Health	\$ -	0.00	ş -	s	s -	s -				()		ľ						
NUR OBM	Board of Nursing Office of Budget & Management	\$ - \$ 51	0.00	\$- \$91	\$ - 5 5 - 5		\$ - \$ 77	\$	40 S	(51) \$	(5)	\$ 26	s	91.14	s .	\$	45.57	\$ 77	06
OCC		\$ 296	4.00	+	\$ 122 5		\$ 326		40 \$ 69 \$	(174) \$		\$ 26 \$ 31	ş	91.14 91.14	\$ 30.4	\$ 3\$	45.57	\$ 81	
OIC	Industrial Commission	\$ 1,436	5.00	÷ +50	\$ 969 5		\$ 530		BO) \$	(467) \$		\$ (906)	s	91.14	\$ 193.72		142.43	\$ 105	
ODC OSB		\$ 102 \$ 1.033	2.00 19.80		\$ - 5 \$ 401 5		\$ 154 \$ 1.586		BO\$ 71\$	(102) \$ (632) \$		\$ 52 \$ 552	ş	91.14 91.14	\$ 20.2	\$ 7 \$	45.57 55.70	\$ 77. \$ 80.	
OSD	Ohio School for the Deaf	\$ 970	16.40	\$ 1,495	\$ 400 5	\$ 947	\$ 1,324	\$ 5	24 \$	(570) \$	(23)	\$ 353	ŝ	91.14	\$ 24.40		57.77	\$ 80	.70
PRX PSY	Board of Pharmacy Board of Psychology	\$ 2,349	46.00 0.00	\$ 4,192	\$ - 5 c	\$ 2,096	\$ 3,545	\$ 1,8	44 \$	(2,349) \$	(252)	\$ 1,196	\$	91.14	\$ -	\$	45.57	\$ 77	06
PUB		\$ 613	12.00	\$ 1,094	\$ - 5	\$- \$547	\$ 925	\$ 4	B1 \$	(613) \$	(66)	\$ 312	s	91.14	s -	\$	45.57	\$ 77	.06
PUC	Public Utilities Commission	\$ 13,514	54.00	\$ 4,922	\$ 22,334		\$ 7,494	\$ (8,5		8,821 \$	114	\$ (6,020)	\$	91.14	\$ 413.60	o ŝ	252.37	\$ 138	
PWC PYT	Public Works Commission Occupational and Physical Therapy Board	ş - s -	0.00	s - s -	\$ - 5 \$ - 6	5 - 5 -	ş - ş -												
RAC	Racing Commission	\$ 153	3.00		\$ - 5		\$ 231		20 \$	(153) \$	(16)		\$	91.14	s -	\$	45.57	\$ 77	
REP	Ohio House of Representatives Opportunities for Ohioans With Disabilities Agency	\$ 346 \$ 13.563	3.00 204.10		\$ 374 5 \$ 10.129 5		\$ 287 \$ 16.397	\$ (	72) \$ 39 \$	28 \$	(22) 802	\$ (59) \$ 2.834	Ş	91.14 91.14	\$ 124.60 \$ 49.6		107.87 70.38	\$ 95 \$ 80	
RSC SCR	Opportunities for Ohioans With Disabilities Agency Board of Career Colleges and Schools	\$ 13,563 \$ -	204.10 0.00	\$ 18,602 \$ -	\$ 10,129 5	ə 14,365 Ş -	ş тв,397 Ş	\$ 5,0	24 2	(3,434) \$	802	\$ 2,834	\$	91.14	ə 49.6.	5	70.38	ə 80	34
SEN	The Ohio Senate	\$ 102	2.00	+	\$ - S		\$ 154		BO \$	(102) \$	(11)		s	91.14	s -	\$	45.57		.06
SFC SHP	Ohio Facilities Construction Commission Ohio Speech and Hearing Professionals Board	\$ 1,583	28.00 0.00	\$ 2,552	\$ - 5 5 - 5		\$ 2,158 \$ -	\$ 9	69 \$	(1,583) \$	(307)	\$ 575	\$	91.14	\$ -	\$	45.57	\$ 77	06
SOA		\$ - \$ 51	1.00	\$ - \$ 91	\$ - 5	• \$ 46	\$ - \$ 77		40 \$	(51) \$	(5)	\$ 26	s	91.14	s -	\$	45.57	\$ 77	.06
SOS	Ohio Secretary of State	\$ 102	2.00	\$ 182	\$ - 5		\$ 154		BO \$	(102) \$	(11)	\$ 52	\$	91.14	s -	\$	45.57	\$ 77	
SPA TAX	Ohio Commission on Hispanic/Latino Affairs Department of Taxation	\$ - \$ 2.536	0.00 39.10	\$ - \$ 3.564	\$ - 9 \$ 4,717	\$- \$4.140	\$ - \$ 3.717	\$ 1.0	28 Ś	2.181 \$	1.604	\$ 1.181	s	91.14	\$ 120.64	4 5	105.89	\$ 95	06
TOS	Ohio Treasurer of State	\$ 153	3.00		\$ - 9	\$ 137	\$ 231		20 \$	(153) \$	(16)	\$ 78	ŝ	91.14	\$ -	\$	45.57	\$ 77.	
UST		\$ - c	0.00	\$ - c	\$ - 5 c . c	ş -	s -												
4PB		\$ 2,360,797	24,488.05	\$ 2,347,270	\$ 2,347,270	\$ 2,347,270	\$ 2,347,270	\$ (128,9	56)\$(1	128,875) \$	(128,915)	\$ (128,875)	\$	95.85	\$ 95.8	5\$	95.85	\$ 95	.85
VPB	Ohio Vision Professionals Board Total	\$ 2,360,797		\$ 2,347,270	\$ 2,347,270	\$ 2,347,270	\$ 2,347,270	\$ (128,9	56)\$(1	128,875) \$	(128,915)	\$ (128,875)	s	95.85	\$ 95.8	5\$	95.85	\$	<b>9</b> 5.

Abtes:
 (1) Provided by Client
 (2) = Vehicle Count Relativity to Vehicle Class 310
 (3) Based on Allocation from Exhibit Auto Premium Allocation:2
 (4) Based on Allocation from Exhibit Auto Premium Allocation:2

(5) Based on Allocation from Exhibit Auto Premium Allocation-2
(6) Based on Allocation from Exhibit Auto Premium Allocation-2
(7) = (3) · (1)
(8) = (4) · (1)

(9) =(5)-(1) (10) =(6)-(1) (11) =(3)/(2) (12) =(4)/(2)

(13) =(5)/(2) (14) =(6)/(2) (15) Prior year analysis (16) Prior year analysis

# State of Ohio - Office of Risk Management Auto Liability As of March 31, 2020 Allocation of 7/1/20-21 Ultimate Loss & ALAE by Agency at ACE- Discounted (2.0%) - Scenario 1: 50/50 Weight

		(1)	(2) Estimate Using	(3)	(4) Estimate Using	(5)	(6)	(7)	(8) 7/1/20-21	(9)	(10)	(11)	(12)
c	A 11	Adjusted Vehicle	Adjusted Vehicle Count	Trended Ult. L&LAE	Capped Trended Ult. L&LAE FY 2010-2020	Experience Weighting	Selected Claims	Ultimate Losses & LAE \$2,000,000	Ultimate Losses & LAE \$5,000,000	Prior	Change in	Percentage Change in	Cost per
Code ACC	Agency Name Accountancy Board of Ohio	Count 0.00		FY 2010-2020 \$-	Distribution \$ -	Factor 50%	Distribution 0.00%	per Occurrence \$ -	\$ -	Premium \$ -	Premium \$ -	Premium 0%	Vehicle \$ -
DJ	Adjutant General				\$ 1,591	50%	0.31%		\$ 7,986	\$ 7,172	\$ (341)		\$ 51.58
AGE AGO	Department of Aging Office of the Attorney General				\$ - \$ 68,805	50% 50%	0.00%	\$ 46 \$ 53,879	\$ 53 \$ 62,987	\$ 51 \$ 50.984	\$ (5) \$ 2,896	-11% 6%	\$ 45.57 \$ 126.06
GR	Department of Agriculture				\$ 55,427	50%			\$ 49,220	\$ 43,939	\$ (1,836)	-4%	\$ 133.34
RC	Board of Examiners of Architects				s -	50%		ş -	\$ -	s -	s -		ş -
ART ATH	The Ohio Arts Council Ohio Athletic Commission				\$- \$-	50% 50%	0.00%		\$ - \$ -	\$ - \$ -	\$ - \$ -		s - s -
UD	Auditor of State				\$ 212	50%	0.02%		\$ 603	\$ 523	\$ (7)	-1%	\$ 57.33
TC	Broadcast Educational Media Commission			s -	s -	50%	0.00%		\$ 53	\$ 51	\$ (5)		\$ 45.57
BOR	Department of Higher Education Board of Tax Appeals			*	\$ - \$ -	50% 50%	0.00%		\$ 53 \$ -	\$ 51 \$ -	\$ (5) \$ -		\$ 45.57 \$ -
BWC	Bureau of Workers Compensation			\$ 131,527	\$ 21,266	50%			\$ 29,483	\$ 28,173	\$ (2,953)		\$ 78.79
CAC	Casino Control Commission				\$ 105	50%		\$ 736	\$ 860	\$ 833	\$ (96)	-12%	\$ 49.07
DP HR	Chemical Dependency Professionals Board Board of Chiropractic Examiners			*	\$ - \$ -	50% 50%	0.00%		s - s -	\$ - \$ -	\$ - \$ -	0% 0%	s - s -
CIV	Civil Rights Commission			s -	s -	50%	0.01%		\$ 373	\$ 357	\$ (38)	-11%	\$ 45.5
CLA	Ohio Court of Claims	1.00	\$ 91	s -	s -	50%	0.00%		\$ 53	\$ 51	\$ (5)	-11%	\$ 45.57
:OM	Department of Commerce				\$ 21,353	50%	1.32%		\$ 34,331	\$ 34,572	\$ (5,205)		\$ 71.6
COS CRB	State Cosmetology and Barber Board Motor Vehicle Collision Repair Board			\$ 79,302 \$ -	\$ 12,822	50% 50%	0.32%	\$ 7,231 \$ 91	\$ 8,454 \$ 107	\$ 6,047 \$ 102	\$ 1,184 \$ (11)		\$ 401.73 \$ 45.57
SR	Capitol Square Review & Advisory Board				\$ 100	50%			\$ 634	\$ 602	\$ (60)	-10%	\$ 50.19
SV	Commission on Service & Volunteerism				s -	50%	0.00%	\$ -	s -	s -	s -	0%	ş -
SW	Counselors & Social Workers Board				\$ - C E 104	50%	0.00%		\$ -	\$ - C 7.005	\$ -		\$ -
DAS DEN	Department of Administrative Services Dental Board				\$ 5,104 \$ 421	50% 50%	0.32%		\$ 8,327 \$ 459	\$ 7,205 \$ 204	\$ (82) \$ 189	-1% 92%	\$ 71.0 \$ 98.2
DEV	Development Services Agency				\$ 800	50%	0.02%		\$ 1,160	\$ 204 \$ 780	\$ 212		\$ 76.3
мн	Department of Mental Health & Addiction Services	185.35	\$ 16,893	\$ 54,332	\$ 8,785	50%	0.58%	\$ 12,839	\$ 15,009	\$ 14,527	\$ (1,689)	-12%	\$ 69.2
MR	Department of Developmental Disabilities			\$ 153,408	\$ 24,804	50%			\$ 31,506	\$ 26,020	\$ 930	4%	\$ 84.42
ONR OOH	Department of Natural Resources Department of Health	.,			\$ 138,023 \$ 14,417	50% 50%	10.69% 0.71%		\$ 278,812 \$ 18,613	\$ 251,357 \$ 13,257	\$ (12,862) \$ 2,665	-5% 20%	\$ 64.11 \$ 83.2
DOH	Department of Transportation				\$ 1,022,278	50%	43.43%		\$ 18,613 \$ 1,133,124	\$ 1,068,220	\$ (98,947)		\$ 96.43
PS	Department of Public Safety	5,048.85			\$ 505,278	50%	21.63%		\$ 564,316	\$ 505,687	\$ (22,972)		\$ 95.63
RC	Department of Rehabilitation & Correction				\$ 229,990	50%	8.69%		\$ 226,717	\$ 174,449	\$ 19,485		\$ 111.95
OVM OVS	Veterinary Medical Board Department of Veterans Services			\$ - \$ 31,330	\$ - \$ 5.066	50% 50%	0.00%		\$ - \$ 5,723	\$ - \$ 5.408	\$ - \$ (513)	0% -9%	\$ - \$ 94.42
DYS DYS	Department of Youth Services				\$ 12,937	50%	0.22%		\$ 5,723 \$ 16,645	\$ 5,408 \$ 16,082	\$ (1,844)		\$ 94.42
BR	Environmental Board of Review	0.00		s -	s -	50%	0.00%	s -	s -	s -	s -	O%	ş -
DU	Department of Education				\$ 2,188	50%		\$ 1,732	\$ 2,025	\$ 1,792	\$ (60)	-3%	\$ 123.70
LC	Ohio Elections Commission				s -	50% 50%	0.00%		s - s -	\$ - \$ -	s -	0% 0%	ş -
PA	Engineers & Surveyors Board Environmental Protection Agency				\$ - \$ 5,412	50%			\$ 16,285	\$ 18,107	\$ . \$ (4,177)		\$ - \$ 56.56
RB	Employee Relations Board				\$ 54	50%	0.01%		\$ 138	\$ 130	\$ (12)	-9%	\$ 59.15
TH	Ethics Commission				\$ 109	50%	0.01%		\$ 223	\$ 260	\$ (69)		\$ 63.68
XP UN	Ohio Expositions Commission			\$ 5,262 \$ -	\$ 851 \$ -	50% 50%	0.26%	\$ 5,853 \$ 91	\$ 6,842	\$ 7,192 \$ 102	\$ (1,339)		\$ 49.14
SOV	Board of Embalmers and Funeral Directors Office of the Governor			s -	s ·	50%		\$ - \$ -	\$ 107 \$ -	\$ 102 \$ -	\$ (11) \$ ·	-11% 0%	\$ 45.57 \$ -
IFA	Ohio Housing Finance Agency			ş -	š -	50%			\$ 852	\$ 868	\$ (139)		\$ 45.57
GO	Office of the Inspector General				\$ 9,428	50%			\$ 5,671	\$ 5,027	\$ (177)	-4%	\$ 1,616.8
NS	Department of Insurance				\$ 2,103	50%	0.07%		\$ 1,922	\$ 1,744	\$ (100)		\$ 126.46
ICO ICR	Judicial Conference of Ohio Joint Committee on Agency Rule				\$ - \$ -	50% 50%	0.00%		s - s -	\$ - \$ -	s -		s - s -
IEO	Joint Education Oversight Committee	0.00	s -	s -	s -	50%	0.00%	s -	s -	s -	s -	0%	s -
IFS	Department of Job and Family Services				\$ 11,033	50%		\$ 12,751	\$ 14,906	\$ 13,112	\$ (361)		\$ 80.32
ILE IMO	Joint Legislative Ethics Commission			s - s -	\$ - \$ -	50% 50%		\$ - \$ -	s - s -	\$ - \$ -	s - s -	0% 0%	\$ - \$ -
ISC	Joint Medicaid Oversight Committee Judiciary/Supreme Court				s -	50%	0.02%		\$ 394	\$ 378	\$ (41)		\$ 45.57
.co	Liquor Control Commission	0.00		\$ -	s -	50%	0.00%		\$ -	\$ -	ş -		\$ -
EC.	Lake Erie Commission			s -	s -	50%	0.00%		s -	s -	s -	O%	ş -
.IB .OT	State Library Board		\$ 547 \$ 15.521	\$ -	\$ - \$ 11.715	50% 50%	0.01%		\$ 320 \$ 15.920	\$ 306	\$ (33)		\$ 45.5 \$ 79.9
.01 .SC	Ohio Lottery Commission Legislative Service Commission			\$ 72,453 \$ -	\$ 11,715 \$ -	50%	0.61%		\$ 15,920 \$ 53	\$ 15,051 \$ 51	\$ (1,433) \$ (5)		\$ 79.90 \$ 45.5
ACD	Department of Medicaid	0.00	s -	\$ -	\$ -	50%	0.00%	ş -	s -	s -	s -	O%	s -
/ED	Medical Board			s -	s -	50%		\$ 911	\$ 1,065	\$ 1,021	\$ (110)	-11%	\$ 45.5
/IH IUR	Commission on Minority Health Board of Nursing		*	*	\$ - \$ -	50% 50%		\$ - \$ -	s - s -	\$ - \$ -	\$ - \$ -	0% 0%	s - s -
DBM	Office of Budget & Management			s - s -	s -	50%		+	\$ 53	\$ 51	\$ (5)	-11%	\$ 45.5
DCC	Office of Consumers' Counsel	4.00	\$ 365	\$ 754	\$ 122	50%	0.01%	\$ 243	\$ 284	\$ 296	\$ (52)	-18%	\$ 60.8
DIC	Industrial Commission			* *****	\$ 969	50%	0.03%		\$ 833	\$ 1,436	\$ (723)	-50%	\$ 142.4
DDC DSB	Office of Disciplanary Counsel Ohio State School for the Blind			\$ - \$ 2.482	\$ - \$ 401	50% 50%	0.00%	\$ 91 \$ 1.103	\$ 107 \$ 1,289	\$ 102 \$ 1,033	\$ (11) \$ 70	-11% 7%	\$ 45.5 \$ 55.70
)SD	Ohio School for the Deaf				\$ 401	50%			\$ 1,289	\$ 1,033 \$ 970	\$ (23)	-2%	\$ 57.7
RX	Board of Pharmacy	46.00	\$ 4,192	ş -	s -	50%	0.09%	\$ 2,096	\$ 2,451	\$ 2,349	\$ (252)	-11%	\$ 45.5
SY	Board of Psychology	0.00	s -		s -	50%	0.00%	\$ -	s -	s -	s -	0%	s -
PUB PUC	Public Defender Commission Public Utilities Commission		\$ 1,094 \$ 4,922		\$ - \$ 22,334	50% 50%	0.02% 0.61%		\$ 639 \$ 15,932	\$ 613 \$ 13,514	\$ (66) \$ 114		\$ 45.5 \$ 252.3
PWC	Public Vorks Commission				\$ 22,334 \$ -	50%	0.00%		\$ 15,932 \$ -	\$ 13,514 \$ -	\$ 114 \$ -		\$ 252.3
PYT	Occupational and Physical Therapy Board	0.00	s -		s -	50%	0.00%	s -	s -	s -	s -	0%	s -
AC	Racing Commission			\$ -	s -	50%	0.01%		\$ 160	\$ 153	\$ (16)		\$ 45.5
REP	Ohio House of Representatives Opportunities for Ohioans With Disabilities Agency				\$ 374 \$ 10,129	50% 50%	0.01%		\$ 378 \$ 16,794	\$ 346 \$ 13,563	\$ (22) \$ 802		\$ 107.8 \$ 70.3
GCR	Board of Career Colleges and Schools				\$ 10,129	50%	0.64%		\$ 16,794 \$ -	\$ 13,563 \$ -	\$ -		\$ 70.3
EN	The Ohio Senate	2.00	\$ 182	ş -	ş -	50%	0.00%	\$ 91	\$ 107	\$ 102	\$ (11)	-11%	\$ 45.5
FC	Ohio Facilities Construction Commission			s -	ş -	50%	0.06%		\$ 1,492	\$ 1,583	\$ (307)	-19%	\$ 45.5
HP	Ohio Speech and Hearing Professionals Board	0.00		\$ - c .	\$ - c .	50% 50%	0.00%		\$ .	\$ - \$ 51	\$ ·		\$ - ¢ 455
SOA SOS	Southern Ohio Agricultural & Community Development Ohio Secretary of State		* **	*	\$ - \$ -	50% 50%	0.00%			\$ 51 \$ 102	\$ (5) \$ (11)		\$ 45.5 \$ 45.5
PA	Ohio Commission on Hispanic/Latino Affairs			ş -	ş -	50%	0.00%		\$ -	\$ -	\$ -		\$ -
ΆX	Department of Taxation	39.10	\$ 3,564	\$ 29,173	\$ 4,717	50%	0.19%	\$ 4,140	\$ 4,840	\$ 2,536	\$ 1,604	63%	\$ 105.8
OS	Ohio Treasurer of State				s -	50%	0.01%			\$ 153	\$ (16)		\$ 45.5
JST	Petroleum UST Release Compensation Board	0.00	\$ - \$ -	s - s -	\$ - \$ -	50% 50%	0.00%		s - s -	\$ - \$ -	\$ - \$ -	0% 0%	\$ - \$ -
PB	Ohio Vision Professionals Board									-	\$ (128,915)	0.0	-

AVerage per Auguster versione Council Notes: (1) = Vehicle Count x Relativity to Vehicle Class 310 (2) = (1)/(1 Total)\* (7 Total) from Exhibit Auto-3 (3) Incurred Loss developed, trended to 7/1/2020, and capped at \$250,000 (4) = (3)/(3 Total)\* (7 Total) from Exhibit Auto-3

(5) Weights provided by the ORM
(6) Based on weighted average of (2) and (4); weights provided by the ORM (7) = (6) x (7 total); (7 total) tom Exhibit Auto-3
(8) = (6) x (8 total); (8 total) from Exhibit Auto-3

(9) Provided by ORM (10) =(7) - (9) (11) =(7)/(9) - 1 (12) =(7)/(1)

## State of Ohio - Office of Risk Management Auto Liability A sof March 31, 2020 Allocation of 7/1/20-21 Ultimate Loss & ALAE by Agency at ACE- Discounted (2.0%) - Scenario 2: Credibility Weight

		(1)	(2) Estimate Using	(3)	(4) Estimate Using	(5)	(6)	(7)	(8)	(9) 7/1/20-21	(10)	(11)	(12)	(13)
		Adjusted	Adjusted Vehicle	Capped Trended	Capped Trended	Experience	Weighted	Selected	Ultimate Losses & LAE	Ultimate Losses & LAE			Percentage	
Code	Agency Name	Vehicle	Count	Ult. L&LAE	FY 2010-2020 Distribution	Weighting	Cost Base	Claims	\$2,000,000	\$5,000,000 per Occurrence	Prior	Change in Premium	Change in Premium	Cost per Vehicle
ACC	Accountancy Board of Ohio	0.00	\$ -	\$ -	\$ -	15%		0.00%	ş -	\$ -	\$ -	s -	0%	\$ -
ADJ AGE	Adjutant General Department of Aging	132.45		\$ 9,839 \$ -	\$ 1,591 \$ -	25% 15%		0.42%		\$ 10,991 \$ 90	\$ 7,172 \$ 51	\$ 2,229 \$ 26		\$ 70.98 \$ 77.06
AGO	Office of the Attorney General	427.40		\$ 425,552	\$ 68,805	35%		2.20%	\$ 49,140	\$ 57,447	\$ 50,984	\$ (1,843)		\$ 114.98
AGR	Department of Agriculture	315.75		\$ 342,810	\$ 55,427	35%		1.70%		\$ 44,311	\$ 43,939	\$ (6,035)		\$ 120.04
ARC ART	Board of Examiners of Architects The Ohio Arts Council	0.00		\$ - \$ -	s - c -	15% 15%		0.00%		s - s -	s - s -	s -	0% 0%	s -
ATH	Ohio Athletic Commission	0.00	\$-	\$ -	s -	15%		0.00%	s -	s -	s -	ş -	0%	s -
AUD	Auditor of State	9.00		\$ 1,309	\$ 212	15%				\$ 848	\$ 523	\$ 202	39%	\$ 80.57
ETC BOR	Broadcast Educational Media Commission Department of Higher Education	1.00 1.00		\$ - \$ -	s - s -	15% 15%		0.00%		\$ 90 \$ 90	\$ 51 \$ 51	\$ 26 \$ 26	51% 51%	\$ 77.06 \$ 77.06
BTA	Board of Tax Appeals	0.00	ş -	s -	ş -	15%		0.00%	ş -	ş -	ş -	s -	0%	s -
BWC	Bureau of Workers Compensation	320.10		\$ 131,527	\$ 21,266	35%		1.18%			\$ 28,173	\$ (1,906)	-7%	\$ 82.06
CAC	Casino Control Commission Chemical Dependency Professionals Board	15.00		\$ 649 \$ -	\$ 105 \$ -	15% 15%		0.05%		\$ 1,370 \$ -	\$ 833	\$ 339		\$ 78.11 \$ -
CHR	Board of Chiropractic Examiners	0.00		Ŧ	š -	15%		0.00%		š -	š -	š -	0%	š -
CIV	Civil Rights Commission	7.00		s -	s -	15%		0.02%			\$ 357	\$ 182		\$ 77.06
CLA COM	Ohio Court of Claims Department of Commerce	1.00 410.15		\$ - \$ 132.065	\$ - \$ 21.353	15% 35%		0.00%		\$ 90 \$ 36,946	\$ 51 \$ 34,572	\$ 26 \$ (2.968)		\$ 77.06 \$ 77.05
COS	State Cosmetology and Barber Board	18.00		\$ 79,302	\$ 12,822	15%		0.15%			\$ 6,047	\$ (2,747)		\$ 183.34
CRB	Motor Vehicle Collision Repair Board	2.00		s -	s -	15%		0.01%			\$ 102	\$ 52		\$ 77.06
CSR CSV	Capitol Square Review & Advisory Board Commission on Service & Volunteerism	10.80 0.00		\$ 617 \$ -	\$ 100 \$ .	15% 15%	852	0.04%	\$ 847	\$ 990 \$ -	\$ 602	\$ 245 \$ .	41% 0%	\$ 78.44 \$ -
CSW	Counselors & Social Workers Board	0.00		ŝ -	š -	15%			š -	š -	ş -	ŝ -		s -
DAS	Department of Administrative Services	100.30			\$ 5,104	25%					\$ 7,205	\$ 885	12%	\$ 80.65
DEN DEV	Dental Board Development Services Agency	4.00 13.00		\$ 2,606 \$ 4,947	\$ 421 \$ 800	15% 15%		0.02%	\$ 371 \$ 1,121	\$ 434 \$ 1,311	\$ 204 \$ 780	\$ 167 \$ 341		\$ 92.78 \$ 86.24
DMH	Department of Mental Health & Addiction Services	185.35		\$ 54,332	\$ 8,785	25%	1,127		\$ 14,787	\$ 17,287	\$ 14,527	\$ 260	2%	\$ 79.78
DMR	Department of Developmental Disabilities	319.25	\$ 29,097	\$ 153,408	\$ 24,804	35%	27,595	1.23%	\$ 27,448	\$ 32,088	\$ 26,020	\$ 1,428	5%	\$ 85.98
DNR DOH	Department of Natural Resources Department of Health	3,719.20		\$ 853,651 \$ 89,170	\$ 138,023 \$ 14,417	75%		8.39%	\$ 187,264 \$ 16,586	\$ 218,920 \$ 19,390	\$ 251,357 \$ 13,257	\$ (64,094) \$ 3,329	-25%	\$ 50.35 \$ 86.75
DOT	Department of Transportation	10.053.40			\$ 1.022.278	75%		44.38%			\$ 1.068.220	\$ (77,715)		\$ 98.52
DPS	Department of Public Safety	5,048.85			\$ 505,278	75%		22.02%		\$ 574,447	\$ 505,687	\$ (14,306)	-3%	\$ 97.33
DRC	Department of Rehabilitation & Correction	1,732.25		+ -,	\$ 229,990	75%		9.45%		\$ 246,481	\$ 174,449	\$ 36,391		\$ 121.71
DVM DVS	Veterinary Medical Board Department of Veterans Services	0.00 51.85		\$ - \$ 31,330	\$ 5,066	15% 15%		0.00%		\$ - \$ 5,555	\$ 5,408	\$ (657)		\$ - \$ 91.64
DYS	Department of Youth Services	170.50		\$ 80,014	\$ 12,937	25%	14,889	0.66%			\$ 16,082	\$ (1,272)	-8%	\$ 86.86
EBR	Environmental Board of Review	0.00	s -	s -	s -	15%			ş -	s -	s -	s -	0%	s -
EDU ELC	Department of Education Ohio Elections Commission	14.00 0.00		\$ 13,530 \$ -	\$ 2,188	15% 15%		0.06%	\$ 1,405	\$ 1,643 \$ -	\$ 1,792	\$ (386)	-22% 0%	\$ 100.38 \$ -
ENG	Engineers & Surveyors Board	0.00		s -	s -	15%		0.00%		s -	s -	s -	0%	s -
EPA	Environmental Protection Agency	246.30			\$ 5,412	25%	18,189	0.81%			\$ 18,107	\$ (14)	0%	\$ 73.46
ERB ETH	Employee Relations Board Ethics Commission	2.00 3.00			\$ 54 \$ 109	15%		0.01%			\$ 130 \$ 260	\$ 32 \$ (13)		\$ 81.11 \$ 82.46
ETH	Ohio Expositions Commission	119.10		\$ 672 \$ 5,262	\$ 109 \$ 851	25%		0.01%			\$ 260 \$ 7,192	\$ 1.118		\$ 82.46 \$ 69.77
FUN	Board of Embalmers and Funeral Directors	2.00		\$ -	\$ -	15%	155	0.01%	\$ 154		\$ 102	\$ 52	51%	\$ 77.06
GOV	Office of the Governor	0.00		s -	s -	15%		0.00%		s -	\$ -	s -		\$ - \$ 77.06
HF A IGO	Ohio Housing Finance Agency Office of the Inspector General	16.00 3.00		\$ - \$ 58.310	\$ - \$ 9.428	15% 15%		0.06%			\$ 868 \$ 5.027	\$ 365 \$ (3.389)		\$ 77.06 \$ 545.95
INS	Department of Insurance	13.00			\$ 2,103	15%		0.06%			\$ 1,744	\$ (428)		\$ 101.20
JCO	Judicial Conference of Ohio	0.00		s -	s -	15%		0.00%		s -	s -	s -		s -
JCR JEO	Joint Committee on Agency Rule Joint Education Oversight Committee	0.00		\$ - \$ -	ş -	15% 15%		0.00%		\$ - ¢ .	\$ - c .	\$ - c .		\$ - \$ -
JFS	Department of Job and Family Services	158.75		\$ 68,239	\$ 11,033	25%	13,610	0.61%		\$ 15,826	\$ 13,112	\$ 426		\$ 85.28
JLE	Joint Legislative Ethics Commission	0.00	ş -	s -	s -	15%	-	0.00%	ş -	s -	\$-	s -	0%	s -
JMO JSC	Joint Medicaid Oversight Committee Judiciary/Supreme Court	0.00 7.40	\$- \$674	\$ - \$ -	\$ - \$ -	15% 15%		0.00%	\$ - \$ 570	\$ - \$ 667	\$ - \$ 378	\$ - \$ 192	0% 51%	\$ - \$ 77.06
LCO	Liquor Control Commission	0.00		s -	s -	15%		0.00%		\$ -	\$ 5/0 \$ -	s -	0%	\$ -
LEC	Lake Erie Commission	0.00		s -	\$ -	15%		0.00%		\$ -	\$ -	\$ -	0%	\$ -
LIB	State Library Board	6.00 170.30		\$ - \$ 72,453	\$ - \$ 11.715	15% 25%		0.02%			\$ 306 \$ 15.051	\$ 156 \$ (559)		\$ 77.06 \$ 85.10
LOT	Ohio Lottery Commission Legislative Service Commission	1 00.30		\$ 72,453 \$ -	\$ 11,715	25%		0.65%			\$ 15,051 \$ 51	\$ (559)		\$ 77.06
MCD	Department of Medicaid	0.00	ş -	š -	š -	15%		0.00%	s -	ş -	ş -	s -	0%	s -
MED	Medical Board	20.00	/	ş -	ş -	15%		0.07%			\$ 1,021	\$ 520		\$ 77.06
MIH NUR	Commission on Minority Health Board of Nursing	0.00		\$ - \$ -	\$ - \$ -	15% 15%		0.00%		\$ - \$ -	\$ - \$ -	s -		\$ - \$ -
OBM	Office of Budget & Management	1.00	\$91	\$ -	s -	15%	77	0.00%	\$ 77	\$ 90	\$ 51	\$ 26	51%	\$ 77.06
occ	Office of Consumers' Counsel	4.00	\$ 365	\$ 754	\$ 122	15%	328	0.01%	\$ 326	\$ 382	\$ 296	\$ 31	10%	\$ 81.61
OIC ODC	Industrial Commission Office of Disciplanary Counsel	5.00 2.00		\$ 5,991 \$ -	\$ 969 \$ -	15% 15%	533 155	0.02%	\$ 530 \$ 154	\$ 619 \$ 180	\$ 1,436 \$ 102	\$ (906) \$ 52	-63% 51%	\$ 105.96 \$ 77.06
OSB	Ohio State School for the Blind	19.80		\$ 2,482	\$ 401	15%		0.01%			\$ 1,033	\$ 552		\$ 80.08
OSD	Ohio School for the Deaf	16.40	\$ 1,495	\$ 2,475	\$ 400	15%	1,331	0.06%	\$ 1,324	\$ 1,547	\$ 970	\$ 353	36%	\$ 80.70
PRX	Board of Pharmacy Board of Psychology	46.00 0.00		\$ - \$ -	\$ - ¢ .	15% 15%		0.16%		\$ 4,144	\$ 2,349	\$ 1,196		\$ 77.06
PSY PUB	Public Defender Commission	12.00		s - s -	ş -	15%		0.00%		\$ 1,081	\$ 613	\$ 312	0% 51%	\$ 77.06
PUC	Public Utilities Commission	54.00	\$ 4,922	\$ 138,136	\$ 22,334	15%	7,534	0.34%	\$ 7,494	\$ 8,760	\$ 13,514	\$ (6,020)	-45%	\$ 138.77
PWC PYT	Public Works Commission	0.00	\$-	ş -	ş -	15%	; -	0.00%		\$ -	ş -	s -	0%	\$ -
PYT RAC	Occupational and Physical Therapy Board Racing Commission	0.00 3.00		\$ - \$ -	\$ - \$ -	15%		0.00%		\$ - \$ 270	\$ - \$ 153	\$ - \$ 78		\$ - \$ 77.06
REP	Ohio House of Representatives	3.00	\$ 273		\$ 374	15%	288	0.01%	\$ 287	\$ 335	\$ 346	\$ (59)	-17%	\$ 95.65
RSC	Opportunities for Ohioans With Disabilities Agency	204.10		\$ 62,646	\$ 10,129	25%		0.73%		\$ 19,168	\$ 13,563	\$ 2,834	21%	\$ 80.34
SCR SEN	Board of Career Colleges and Schools The Ohio Senate	0.00 2.00		\$ - \$ -	s - c .	15% 15%	155	0.00%		\$ - \$ 180	\$ - \$ 102	\$ - \$ 52		\$ - \$ 77.06
SEN	Ohio Facilities Construction Commission	2.00		\$ - \$ -	ş -	15%	2,169	0.01%		\$ 2,522	\$ 1,583	\$ 575		\$ 77.06
SHP	Ohio Speech and Hearing Professionals Board	0.00		ş -	ş -	15%		0.00%	ş -	ş -	ş -	s -	0%	s -
SOA SOS	Southern Ohio Agricultural & Community Development Ohio Secretary of State	1.00 2.00		\$ - \$ -	ş -	15% 15%		0.00%	\$ 77 \$ 154	\$ 90 \$ 180	\$ 51 \$ 102	\$ 26 \$ 52	51%	\$ 77.06 \$ 77.06
SOS SPA	Ohio Secretary of State Ohio Commission on Hispanic/Latino Affairs	2.00	ə 182 S -	s -	s -	15% 15%			\$ 154 \$ -	\$ 180 \$ -	> 102 S -	5 52 5 -	51% 0%	\$ 77.06 \$ -
TAX	Department of Taxation	39.10			\$ 4,717	15%	3,737	0.17%	\$ 3,717		\$ 2,536	\$ 1,181	47%	\$ 95.06
TOS	Ohio Treasurer of State Petroleum UST Release Compensation Board	3.00		\$ - \$ -	ş -	15% 15%		0.01%		\$ 270 \$ -	\$ 153 \$ -	\$ 78		\$ 77.06 \$ -
VPB	Ohio Vision Professionals Board	0.00	s .	s -	s -	15%		0.00%		s ·	s -	s -	0%	s -
Ē	Total	24,488	\$ 2,231,922	\$ 13,804,146	\$ 2,231,922	250	2,243,818	100.00%	\$ 2,231,922	\$ 2,609,218	\$ 2,360,797	\$ (128,875)	0.0	\$ 91.14
Notes:	Average per Adjusted Vehicle Count								\$ 91.14	\$ 106.55				-

Average per Adjusted Vehicle Count Notes: (1) = Vehicle Count & Relativity to Vehicle Class 310 (2) = (1)/1 (7 table) '(6 Tadle 1 Chail from Enbild Auto-3 (3) incurred Loss developed, trended to 7/1/2020, and caped at \$250,000 (4) = (3)/(3 Tota) '(8 Tota); (8 Tota); trom Exhibit Auto-3

(5) Weights based on the size of the agency
(6) = (4) \* (5) + (2) \* (1 - (5))
(7) = (6) / (6 Total)
(8) = (7) x (8 Total); (8 Total) from Exhibit Auto-3

(9) = (7) x (9 Total); (9 Total) from Exhibit Auto-3 (10) Provided by ORM (11) =(6) - (10) (12) =(6)/(10) - (1 (13) =(6)/(1)

#### State of Ohio - Office of Risk Management Auto Liability As of March 31, 2020 Vehicle Type Classification Relativities

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		FY 2010 - 2020	FY 2010 - 2020 Tren	ded Ult Loss & ALAE	Average Loss & A	LAE Per Vehicle	Relativity to I	Base Class 310	Current	Selected
Vehicle Class	Vehicle Type Description	Vehicles	Uncapped	Capped @ 250K	Uncapped	Capped @ 250K	Uncapped	Capped @ 250K		
310	Passenger Vehicles & Light Trucks	94,335	8,133,055	4,570,280	86.2	48.4	1.000	1.000	1.000	1.000
311	Medium Weight Trucks	17,257	757,237	757,237	43.9	43.9	0.509	0.906	1.100	1.100
312	Heavy Weight Trucks	10,642	4,447,344	3,666,278	417.9	344.5	4.847	7.111	2.500	2.750
313	Emergency Vehicles	19,275	7,226,825	2,974,165	374.9	154.3	4.349	3.185	2.500	2.750
314	Guest Vehicle	490	60,483	60,483	123.6	123.6	1.433	2.550	1.000	1.000
315	Light Equipment	28,160	1,123,802	1,123,802	39.9	39.9	0.463	0.824	0.700	0.700
316	Heavy Equipment	13,112	631,856	501,112	48.2	38.2	0.559	0.789	1.120	1.100
317	Watercraft	5,528	3,432	3,432	0.6	0.6	0.007	0.013	0.100	0.100
Total		188,798	22,384,034	13,656,789	118.6	72.3				

#### Notes:

(1) Provided by Client

(2) Incurred Loss developed and trended to 7/1/2020

(3) Incurred Loss developed, trended to 7/1/2020, and capped at \$250,000

(4) = (2)/(1)

(5) = (3)/(1)

(6) = (4)/(4 for class 310)
(7) = (5)/(5 for class 310)
(8) Provided by Client
(9) EY Select

## **EY |** Assurance | Tax | Strategy and Transactions | Consulting

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