



Oklahoma Schools Insurance Group

Financial Statements
With Supplementary Information
With Independent Auditor's Report Thereon
June 30, 2020 and 2019

Contents

Independent auditor's report	1-2
Management's discussion and analysis	3-7
Financial statements	
Statements of net position	8
Statements of revenues, expenses and changes in net position	9
Statements of cash flows	10
Notes to financial statements	11-17
Required supplementary information	
10-year loss development-unaudited	18-19



RSM US LLP

Independent Auditor's Report

The Board of Trustees
Oklahoma Schools Insurance Group

Report on the Financial Statements

We have audited the accompanying financial statements of Oklahoma Schools Insurance Group, which comprise the statements of net position, as of June 30, 2020 and 2019, and the related statements of revenues, expenses, and changes in net position, and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Oklahoma Schools Insurance Group as of June 30, 2020 and 2019, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and loss development information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

RSM US LLP

Oklahoma City, Oklahoma
November 12, 2020

Oklahoma Schools Insurance Group

Management's Discussion and Analysis

The following Management's Discussion and Analysis (MD&A) of the activities and financial performance of Oklahoma Schools Insurance Group (OSIG) provides an introduction to the financial statements for the years ended June 30, 2020 and 2019.

OSIG, established in July 2001, is an Interlocal Cooperation Act Agency of schools offering membership to public school districts in Oklahoma, with a mission to provide quality, cost effective, risk management products and services to its member school districts.

Activity Highlights

	Years Ended June 30		
	2020	2019	2018
Member schools at beginning of year	400	375	377
Member schools added (lost) during the year, net	52	25	(2)
Total member schools, end of year	452	400	375
Member contributions	\$ 43,471,382	\$ 32,872,092	\$ 26,291,720
Member distributions	-	1,478,521	-

During the years ended June 30, 2020, 2019, and 2018 net position increased \$1,930,300, \$23,333 and \$636,127, respectively. These changes are a direct result of claim experience, the benefit of excess insurance policies protecting against large claim losses and investment income.

The school superintendents who serve on the OSIG Board of Trustees have played an integral part in the formation and critical decisions of OSIG. All member schools have a voice in OSIG. It is a school-owned program, run by its members and in business solely to serve Oklahoma schools.

OSIG operates under the open meeting act similar to school districts. In addition to the property and casualty insurance program available to OSIG members, OSIG offers risk management resources such as online training programs in the areas of child safety and child sexual abuse prevention and various employment practices liability issues to its member schools. OSIG also performs loss control risk assessments free of charge to its members. Additional services may be added in the future.

Board of Trustees:

- Terry Davidson—Finance Director—Comanche Public Schools
- Rick Thomas—Superintendent—Skiatook Public Schools
- Dusty Ricks—Superintendent—Mid America Technology Center
- Brad Overton—Superintendent—Cordell Schools
- Randy Hughes—Superintendent—McAlester Schools
- John Cox—Superintendent—Peggs Schools
- Sherry Durkee—Superintendent—Sand Springs Public Schools

Executive Director: David Martin

Oklahoma Schools Insurance Group

Management's Discussion and Analysis

Financial and Activity Highlights (Continued)

Program administrators: Arthur J. Gallagher Risk Management Services, Inc. (Gallagher):

- Wally Bryce—national vice president business development
- Jay Eshelman—regional president
- Chris Mangum—area president
- Jennifer McKenzie—program manager
- Matt McClaran—assistant program manager—loss control and underwriting
- Brya D'Abrosca—assistant program manager—finance and marketing
- Morgan Rovang—senior customer service representative
- Susan Sullivan—administrative assistant
- Roger Johnson—independent loss control consultant
- Marty Martin—independent loss control consultant

Claims administrators: Alternative Service Concepts, LLC:

- Richard Hall—claims supervisor/senior liability claims adjuster
- Lacrista Medina—liability claims adjuster
- David Sepulveda—liability claims adjuster
- Denise Wilson—claims assistant

Accounting, audit, and actuarial service:

- Hogan and Taylor, L.L.P. (accounting services)
- RSM US LLP (audit services)
- Select Actuarial Services (actuarial services)

Reinsurance coverage and carriers:

Coverage	Reinsurance Providers	AM BEST Financial Rating
Buildings and contents	Alliant Property Insurance Program	A-VIII to A++XV
Automobile physical damage	Alliant Property Insurance Program	A-VIII to A++XV
Cyber liability	Alliant Property Insurance Program	A-VIII to A++XV
Boiler and machinery	Travelers Property & Casualty	A++ XV
General liability	United Educators Insurance Company	A IX
Automobile liability	United Educators Insurance Company	A IX
Educators legal liability	United Educators Insurance Company	A IX
Umbrella liability	United Educators Insurance Company	A IX
Pollution	Interstate Fire & Casualty Insurance Company	A+XV
School violent act protection	Self-funded	N/A
Crime	Self-funded	N/A

Oklahoma Schools Insurance Group

Management's Discussion and Analysis

Overview of the Financial Statements

Included herein are summarized versions of the statements of net position, the statements of revenues, expenses and changes in net position and the statements of cash flows. These statements provide financial information on OSIG as a whole.

These statements include all assets and liabilities using the accrual basis of accounting, which is consistent with the accounting used by private-sector institutions. All of the current year's revenues and expenses are recognized when earned or incurred, regardless of when cash is received or paid. Capital assets are capitalized and depreciated over their useful lives.

This section of the report is designed to provide member school districts, creditors and suppliers with a general overview of OSIG's finances.

The statements of net position: The statements of net position and the statements of revenues, expenses and changes in net position report OSIG's net position and how it has changed over the stated period. Net position, the difference between assets plus deferred outflows of resources and liabilities plus deferred inflows of resources, is one measure of OSIG's financial health or position. OSIG has no deferred outflows or inflows at June 30, 2020, 2019 or 2018. The following summarizes OSIG's assets, liabilities and net position as of June 30, 2020, 2019 and 2018:

	As of June 30		
	2020	2019	2018
Assets:			
Cash, cash equivalents and investments	\$ 20,821,106	\$ 23,003,506	\$ 24,390,499
Net reinsurance receivable	10,651,653	4,787,340	961,957
Other	91,657	82,405	564,364
Total assets	<u>\$ 31,564,416</u>	<u>\$ 27,873,251</u>	<u>\$ 25,916,820</u>
Liabilities:			
Net unpaid losses and loss adjustment expenses	\$ 15,416,602	\$ 12,724,860	\$ 10,870,371
Prepaid member contributions	2,286,484	1,768,368	1,623,772
Other	86,361	1,535,354	1,601,341
Total liabilities	<u>\$ 17,789,447</u>	<u>\$ 16,028,582</u>	<u>\$ 14,095,484</u>
Net position:			
Investment in capital assets	\$ -	\$ -	\$ 13
Unrestricted	13,774,969	11,844,669	11,821,323
Total net position	<u>\$ 13,774,969</u>	<u>\$ 11,844,669</u>	<u>\$ 11,821,336</u>

Oklahoma Schools Insurance Group

Management's Discussion and Analysis

Overview of the Financial Statements (Continued)

The statements of revenues, expenses and changes in net position: The following summarizes OSIG's statements of revenues, expenses and changes in net position for the years ended June 30, 2020, 2019 and 2018:

	Years Ended June 30		
	2020	2019	2018
Operating revenues:			
Member contributions	\$ 43,471,382	\$ 32,872,092	\$ 26,291,720
Operating expenses:			
Losses and loss adjustment expenses	12,229,381	9,950,688	8,931,545
Reinsurance premiums	20,940,436	15,352,691	11,204,265
Agent commissions	4,094,279	3,175,125	2,631,850
Management fees	3,359,429	2,629,767	2,103,338
Claims administration fees	647,117	588,769	617,000
Risk management services	166,397	137,512	-
Other expenses	590,477	289,281	298,942
Total operating expenses	42,027,516	32,123,833	25,786,940
Operating income	1,443,866	748,259	504,780
Nonoperating revenues:			
Investment income	456,713	474,913	318,870
Net change in fair value of investments	29,721	278,682	(187,433)
Net nonoperating revenues	486,434	753,595	131,437
Distributions to members	-	1,478,521	-
Change in net position	1,930,300	23,333	636,217
Net position at beginning of year	11,844,669	11,821,336	11,185,119
Net position at end of year	\$ 13,774,969	\$ 11,844,669	\$ 11,821,336

All of OSIG's member contributions are the premiums charged to provide coverage in the OSIG plan.

The statements of cash flows: The primary purpose of the statements of cash flows is to provide information about the cash receipts and disbursements of an entity during a period. These statements also aid in the assessment of an entity's ability to generate future cash flows, ability to meet obligations as they come due and needs for external financing.

Oklahoma Schools Insurance Group

Management's Discussion and Analysis

Overview of the Financial Statements (Continued)

The following summarizes OSIG's cash flows for the years ended June 30, 2020, 2019 and 2018:

	Years Ended June 30		
	2020	2019	2018
Cash provided by (used in):			
Operating activities	\$ (2,716,771)	\$ (2,171,529)	\$ 3,994,314
Investing activities	3,706,532	3,876,287	(3,731,662)
Net change in cash and cash equivalents	989,761	1,704,758	262,652
Cash and cash equivalents at beginning of year	4,963,642	3,258,884	2,996,232
Cash and cash equivalents at end of year	<u>\$ 5,953,403</u>	<u>\$ 4,963,642</u>	<u>\$ 3,258,884</u>

OSIG's overall liquidity increased during the years ended June 30, 2020, 2019 and 2018, with a net increase to cash and cash equivalents of \$989,761, \$1,704,758 and \$262,652, respectively. The cash provided by or used in operating activities is primarily related to receipts of member contributions, offset by the payment of claims, insurance premiums and management expenses. Cash provided by or used in investing activities relates to net purchases and sales of investments, plus interest and dividend income received. Cash used in financing activities relates to capital asset purchases.

Member Distributions

When underwriting results are favorable, OSIG makes every effort to distribute equity back to its' member schools. OSIG declared a distribution to the members of \$-0-, \$1,478,521 and \$-0- for the years ended June 30, 2020, 2019 and 2018.

Capital Asset and Debt Administration

OSIG had no significant capital asset activity and no debt administration activity during the years ended June 30, 2020, 2019 or 2018.

Economic Factors and Premium Rates

OSIG's management considered many factors when developing the annual operating budget for the fiscal year ending June 30, 2021.

The budget for the fiscal year ending June 30, 2021, was developed based upon the following key assumptions:

- Member contributions are based upon the losses projected to be incurred for the upcoming year and premium costs from the reinsurance markets. These contributions are expected to increase approximately 16.5% due to approximately 10 new members joining OSIG and an increase in reinsurance premium cost.
- Investment income is projected to be approximately 1.3% of the market value of total investments, consistent with the current low interest rate environment.
- Forecasted claim losses are based upon actuarial estimates.

Contacting the OSIG's Financial Management

This financial report is designed to provide a general overview of OSIG. If you have questions about this report or would like to request additional information, contact the Oklahoma Schools Insurance Group at P.O. Box 3068, Tulsa, Oklahoma 74101.

Oklahoma Schools Insurance Group

Statements of Net Position

June 30, 2020 and 2019

	2020	2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 5,953,403	\$ 4,963,642
Investments	8,239,282	1,495,275
Reinsurance receivable:		
Reinsurance receivable on paid and unpaid losses	86,096,822	31,712,286
Less reinsurance receivable on unpaid losses	(75,445,169)	(26,924,946)
Reinsurance receivable on paid losses	10,651,653	4,787,340
Accounts receivable	79,030	21,841
Accrued interest	-	17,652
Dividend receivable	-	30,285
Prepaid expenses	12,627	12,627
Total current assets	24,935,995	11,328,662
Noncurrent assets:		
Long term investments	6,628,421	16,544,589
Total assets	\$ 31,564,416	\$ 27,873,251
Liabilities and Net Position		
Current liabilities:		
Unpaid losses and loss adjustment expenses:		
Gross case reserves	\$ 87,197,771	\$ 37,471,806
Less reinsurance recoverable on unpaid losses	(75,445,169)	(26,924,946)
Net unpaid losses and loss adjustment expenses	11,752,602	10,546,860
Accrued expenses	86,361	56,833
Prepaid member contributions	2,286,484	1,768,368
Distributions payable to members	-	1,478,521
Total current liabilities	14,125,447	13,850,582
Noncurrent liabilities:		
Unpaid losses and loss adjustment expenses:		
Incurred but not reported (IBNR) reserves	3,664,000	2,178,000
Total liabilities	17,789,447	16,028,582
Net position:		
Unrestricted	13,774,969	11,844,669
Total net position	13,774,969	11,844,669
Total liabilities and net position	\$ 31,564,416	\$ 27,873,251

Oklahoma Schools Insurance Group

Statements of Revenues, Expenses, and Changes in Net Position Years Ended June 30, 2020 and 2019

	2020	2019
Operating revenues:		
Member contributions	\$ 43,471,382	\$ 32,872,092
Operating expenses:		
Losses and loss adjustment expenses, net	12,229,381	9,950,688
Reinsurance premiums	20,940,436	15,352,691
Agent commissions	4,094,279	3,175,125
Management fees	3,359,429	2,629,767
Claims administration fees	647,117	588,769
Actuarial and accounting	99,440	92,715
Risk management services	166,397	137,512
Other	491,037	196,566
Total operating expenses	42,027,516	32,123,833
Operating income	1,443,866	748,259
Nonoperating revenues:		
Investment income	456,713	474,913
Net change in the fair value of investments	29,721	278,682
Net nonoperating revenues	486,434	753,595
Change in net position before distributions	1,930,300	1,501,854
Distributions to members	-	1,478,521
Change in net position	1,930,300	23,333
Net position at beginning of year	11,844,669	11,821,336
Net position at end of year	\$ 13,774,969	\$ 11,844,669

See notes to financial statements.

Oklahoma Schools Insurance Group

Statements of Cash Flows

Years Ended June 30, 2020 and 2019

	2020	2019
Operating activities:		
Member contributions received	\$ 40,224,493	\$ 31,248,320
Prepaid member contributions received	2,286,484	1,768,368
Losses collected from reinsurers	22,538,114	20,270,755
Payments for reinsurance premiums, claims, management and administrative fees and other operating expenses	(67,765,862)	(55,458,972)
Net cash used in operating activities	(2,716,771)	(2,171,529)
Investing activities:		
Purchases of investments	(35,000,000)	(9,300,000)
Proceeds from maturity and sales of investments	38,500,000	12,900,000
Interest and dividend income received	206,532	276,287
Net cash provided by investing activities	3,706,532	3,876,287
Net change in cash and cash equivalents	989,761	1,704,758
Cash and cash equivalents at beginning of year	4,963,642	3,258,884
Cash and cash equivalents at end of year	<u>\$ 5,953,403</u>	<u>\$ 4,963,642</u>
Reconciliation of operating income to net cash used in operating activities:		
Operating income	\$ 1,443,866	\$ 748,259
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation expense	-	13
Distributions payable to members applied to contributions	(1,478,521)	-
Changes in assets and liabilities:		
Reinsurance receivable on paid losses	(5,864,313)	(3,825,383)
Accounts receivable	(57,189)	451,005
Accrued expenses	29,528	(116,543)
Advanced reinsurance recoveries	-	(1,427,965)
Prepaid member contributions	518,116	144,596
Unpaid losses and loss adjustment expenses—case reserves and incurred but not reported (IBNR) reserves	2,691,742	1,854,489
Net cash used in operating activities	\$ (2,716,771)	\$ (2,171,529)

See notes to financial statements.

Oklahoma Schools Insurance Group

Notes to Financial Statements

Note 1. Organization and Significant Accounting Policies

Organization: Oklahoma Schools Insurance Group (OSIG) was established by an agreement with an effective date of July 1, 2001, and a duration of fifty years, unless sooner dissolved or extended. OSIG is an Interlocal Cooperation Act Agency of schools offering membership to 452 public school districts (the members) in Oklahoma with a mission to provide quality, cost effective, risk management products and services to its members. OSIG is owned by its members.

OSIG is governed by a seven-member Board of Trustees elected by its members. Trustee responsibilities include reviewing and ensuring compliance with OSIG's policies and services as contemplated in its establishing agreement and bylaws. Title to all assets acquired by OSIG is vested in it. Each participating member pays its share for all costs, premiums or other fees attributable to its respective participation in any plan, policy or service created in the establishing agreement and is responsible for its obligation under any contract entered into with OSIG. In the event of dissolution of OSIG, the funds and other assets not necessary to pay claims or the expenses of OSIG are to be distributed to the members in accordance with the bylaws as determined by the Board of Trustees.

Financial statement presentation: OSIG's financial statements are presented in accordance with the requirements of Governmental Accounting Standards Board (GASB) specific to enterprise fund activities. Under these requirements, OSIG is required to present a statement of net position classified between current and noncurrent assets and liabilities, a statement of revenues, expenses and changes in net position, with separate presentation for operating and nonoperating revenues and expenses and a statement of cash flows, using the direct method.

Basis of accounting: For financial reporting purposes, OSIG is considered a special-purpose government entity engaged only in business-type activities. Accordingly, OSIG's financial statements have been presented using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis, revenues are recognized when earned and expenses are recorded when an obligation has been incurred.

Cash, cash equivalents and other deposits: OSIG considers investments with original maturities of three months or less to be cash equivalents. OSIG had no cash equivalents at June 30, 2020 or 2019.

Investments: Investments, which include, mortgage-backed securities obligations U.S. Treasury bills, are reported at fair value. Certificates of deposit are recorded at cost which approximates fair value. Fair value is the last reported sales price at current exchange rates on a national exchange, as available, or estimated fair value as provided by the investment manager. All investments expected to be liquidated in the next fiscal year to cover claim payments are reported as current. Remaining investments are reported as noncurrent.

Allowance for doubtful accounts: Based on a review of the current status of existing receivables, OSIG's management determined that an allowance for doubtful accounts for reinsurance and accounts receivables at June 30, 2020 and 2019, was not necessary.

Reinsurance: In the ordinary course of business, OSIG has reinsured portions of its liability, property and other insurance coverage to limit the amounts of potential losses on individual claims, although it does not discharge the primary responsibility of OSIG as direct insurance of the risks reinsured. Reinsurance is ceded on an excess of loss basis. OSIG does not report reinsured risks as liabilities unless it is probable that those risks will not be covered by reinsurers. Amounts recoverable from reinsurers are estimated in a manner consistent with the unpaid losses and loss adjustment expenses associated with the reinsurance policy.

Oklahoma Schools Insurance Group

Notes to Financial Statements

Note 1. Organization and Significant Accounting Policies (Continued)

Unpaid losses and loss adjustment expenses: The provision for unpaid losses and loss adjustment expenses includes the estimated costs of investigating and settling all claims incurred as of the date of the statements of net position. Such amounts include estimates for case reserves and incurred but not reported (IBNR) claims and are determined on the basis of claims adjusters' evaluations and independent actuarial estimates. Unpaid losses and loss adjustment expenses are reported net of amounts that are expected to be recovered from reinsurers. Unpaid losses and loss adjustment expenses are not discounted for expected investment rates of return.

Estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Income taxes: OSIG is a public entity organized under the laws of the state of Oklahoma and, as such, is considered to be an instrumentality of a political subdivision exempt from federal income taxes under Internal Revenue Code section 115.

Revenue recognition: Insurance contracts with members are for a one-year period beginning July 1 through June 30. Member contributions are determined on a member-by-member basis and are due at the beginning of each contract period and are recognized as revenue over the period of the contract. OSIG's program administrator calculates each member's contribution using premium rates provided by OSIG's reinsurer's loss rates within the retention as estimated by the actuary, and factors to include underwriting considerations, administrative expenses, claims adjustment expenses and agent commissions. Prepaid member contributions are amounts received for which coverage has not yet been provided.

Classification of revenues: OSIG has classified its revenues as either operating or nonoperating revenues. Operating revenues include transactions that constitute OSIG's principal ongoing operations, such as providing coverage. Nonoperating revenues consist of other revenue sources not directly affiliated with operations, such as investment income.

Custodial credit risk—deposits: Custodial credit risk is the risk that in the event of bank failure, OSIG's cash deposits may be lost. OSIG does not have a deposit policy for custodial credit risk. As of June 30, 2020 and 2019, OSIG had fully insured cash on deposits with financial institutions of approximately \$500,000. As of June 30, 2020, approximately \$6,405,000 of OSIG's bank balance of approximately \$6,905,000 (carrying amount of approximately \$5,953,000) was uninsured and uncollateralized and therefore exposed to custodial credit risk. As of June 30, 2019, approximately \$4,664,000 of OSIG's bank balance of approximately \$5,165,000 (carrying amount of approximately \$4,964,000) was uninsured and uncollateralized and therefore exposed to custodial credit risk.

Credit risk—insurance carriers: As discussed in Note 5, OSIG utilizes reinsurance contracts to minimize its exposure on certain types of claims. Failure of the insurance carrier to honor its obligation under the insurance agreements could result in losses to OSIG. OSIG's management evaluates the financial condition of its insurance carriers to minimize its exposure to significant losses and believes the carriers presently used are financially sound and will be able to meet their contractual obligations. OSIG, through Arthur J. Gallagher, only places coverage with companies rated A-VII or better by A.M. Best, an industry- standard rating company.

Oklahoma Schools Insurance Group

Notes to Financial Statements

Note 2. Investments

Custodial credit risk—investments: For an investment, custodial credit risk is the risk that OSIG will not be able to recover the value of its investments that are in the possession of its safekeeping custodians. All of OSIG's investments are held by its agent in OSIG's name. Accordingly, no investments are subject to custodial credit risk. At June 30, 2020 and 2019, OSIG held negotiable certificates of deposit with an original maturity exceeding three months, totaling \$11,868,353 and \$12,067,642, respectively. The certificates of deposits are fully insured by the Federal Deposit Insurance Corporation (FDIC).

Credit risk: OSIG's investments in mortgage-backed securities may contain provisions that they are callable before maturity at the option of the issuer with call dates of less than one year. The balance of the June 30, 2020 and 2019 mortgage-backed securities are in Federal Farm Credit Bank, Federal Home Loan Bank, Fannie Mae, or Freddie Mac mortgage-backed securities, which total \$0- and \$5,972,222, respectively, and are rated AA+ by Standard & Poor's.

Fair value hierarchy: OSIG categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the assets. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs, including quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets in markets that are not active, and other market corroborated inputs; Level 3 inputs are significant unobservable inputs. The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

OSIG has the following Level 2 fair value of investments and their maturities as of June 30, 2020 are as follows:

Investment Type	Investment Maturities (In Years)				
	Fair Value	Less Than 1	1–5	6–10	More Than 10
Certificates of deposit	\$ 11,868,353	\$ 5,239,932	\$ 6,628,421	\$ -	\$ -
U.S. Treasury Bills	2,999,350	2,999,350	-	-	-
Total	<u>\$ 14,867,703</u>	<u>\$ 8,239,282</u>	<u>\$ 6,628,421</u>	<u>\$ -</u>	<u>\$ -</u>

OSIG has the following Level 2 fair value of investments and their maturities as of June 30, 2019 are as follows:

Investment Type	Investment Maturities (In Years)				
	Fair Value	Less Than 1	1–5	6–10	More Than 10
Certificates of deposit	\$ 12,067,642	\$ 498,684	\$ 11,568,958	\$ -	\$ -
Mortgage-backed securities	5,972,222	996,591	4,975,631	-	-
Total	<u>\$ 18,039,864</u>	<u>\$ 1,495,275</u>	<u>\$ 16,544,589</u>	<u>\$ -</u>	<u>\$ -</u>

Oklahoma Schools Insurance Group

Notes to Financial Statements

Note 2. Investments (Continued)

All investments expected to be liquidated in the next fiscal year to cover claim payments are reported as current in the accompanying statements of net position. Remaining investments are reported as noncurrent.

Interest rate risk: OSIG does not have a formal policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. The majority of OSIG's investments are in certificates of deposit, which are subject to risks associated with rising interest rates.

Concentration of credit risk: OSIG does not have a formal policy that limits the amount of an investment into a single issuer. Exposure to concentration of credit risk is considered to exist when investments in any one issuer represent a significant percent of total investments of OSIG (any over 5% are disclosed). Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools and other pooled investments are excluded from this consideration.

As of June 30, 2020 and 2019, OSIG held securities issued from unsecured issuers that exceeded 5% of total investments. The unsecured issuers and the investment as a percentage of total investments are as follows:

	2020	2019
Federal Farm Credit Bank	0%	16.54%
Federal Home Loan Bank	0%	16.56%

Note 3. Administrative and Other Costs

For the years ended June 30, 2020 and 2019, the Board of Trustees contracted with Arthur J. Gallagher Risk Management Services (Gallagher) to serve as the program administrator. Under the terms of the contract with Gallagher, OSIG agreed to pay Gallagher a fee equal to 8% of member contributions for the years ended June 30, 2020 and 2019. Fees paid to Gallagher for the years ended June 30, 2020 and 2019, totaled approximately \$3,359,000 and \$2,630,000, respectively. Out of its fees, Gallagher pays for loss control and other risk management resources.

For the years ended June 30, 2020 and 2019, the Board of Trustees contracted with Alternative Service Concepts LLC (ASC) to be the third-party administrator responsible for claims processing. Fees paid to ASC for the years ended June 30, 2020 and 2019, totaled approximately \$647,000 and \$589,000, respectively. OSIG also pays a 10% commission independent insurance agents, which totaled approximately \$4,094,000 and \$3,175,000 for the years ended June 30, 2020 and 2019, respectively. Additionally, OSIG contracted with David Martin to serve as OSIG's executive director. Payments to David Martin for services rendered under the contract was approximately \$95,000 and \$93,000 during the years ended June 30, 2020 and 2019, respectively.

Oklahoma Schools Insurance Group

Notes to Financial Statements

Note 4. Unpaid Losses and Loss Adjustment Expenses

The coverage offered by OSIG is on an occurrence basis except educators' legal liability, which is offered to members on a claims-made basis. The liability for unpaid losses and loss adjustment expenses is estimated, based upon an evaluation of reported claims and an estimate for IBNR claims. The IBNR reserve estimates expenses related to incidents which have already occurred, but have not yet been reported as a claim, and expected future development of claims already reported. The estimate is based on a study performed by an independent actuarial service with actual claims data as of June 30, 2020 and 2019.

The accuracy of these estimates cannot be determined prior to the ultimate settlement of each claim. Accordingly, the ultimate cost of settling these claims may vary significantly from the liabilities recorded at year-end and may do so in the near term.

There is a substantial liability for any additional reported claims that could be incurred by OSIG up to the maximum liability as defined under its excess reinsurance contracts.

At June 30, 2020 and 2019, the liability for unpaid losses and loss adjustment expenses excludes approximately \$75,445,000 and \$26,925,000, respectively, for unpaid claims expected to be recoverable from excess carriers.

The following represents changes in the liability of unpaid losses and loss adjustment expenses for OSIG:

	Year Ended June 30, 2020		
	Case Reserves	IBNR	Total
Net unpaid losses and loss adjustment expenses at beginning of year	\$ 10,546,860	\$ 2,178,000	\$ 12,724,860
Incurring losses and loss adjustment expenses:			
Provision for insured events of the current year	10,818,526	2,038,000	12,856,526
Change in provision for insured events of prior years	(75,145)	(552,000)	(627,145)
Net incurred losses and loss adjustment expenses	10,743,381	1,486,000	12,229,381
Payments:			
Losses and loss adjustment expenses attributable to insured events of the current year	6,191,652	-	6,191,652
Losses and loss adjustment expenses attributable to insured events of prior years	3,345,987	-	3,345,987
Net payments	9,537,639	-	9,537,639
Unpaid losses and loss adjustment expenses at end of year, net of reinsurance receivable	\$ 11,752,602	\$ 3,664,000	\$ 15,416,602

The provision for unpaid losses and loss adjustment expenses decreased by approximately \$627,000 in 2020 due to favorable development on case-basis reserves of \$75,000 along with expiration of IBNR risk on older policy years of \$552,000. The liability for unpaid losses and loss adjustment expenses at June 30, 2020 included approximately \$3,664,000 for IBNR claims.

Oklahoma Schools Insurance Group

Notes to Financial Statements

Note 4. Unpaid Losses and Loss Adjustment Expenses (Continued)

	Year Ended June 30, 2019		
	Case Reserves	IBNR	Total
Net unpaid losses and loss adjustment expenses at beginning of year	\$ 8,918,371	\$ 1,952,000	\$ 10,870,371
Incurring losses and loss adjustment expenses:			
Provision for insured events of the current year	8,877,400	1,346,000	10,223,400
Change in provision for insured events of prior years	847,288	(1,120,000)	(272,712)
Net incurred losses and loss adjustment expenses	9,724,688	226,000	9,950,688
Payments:			
Losses and loss adjustment expenses attributable to insured events of the current year	3,199,691	-	3,199,691
Losses and loss adjustment expenses attributable to insured events of prior years	4,896,508	-	4,896,508
Net payments	8,096,199	-	8,096,199
Unpaid losses and loss adjustment expenses at end of year, net of reinsurance receivable	\$ 10,546,860	\$ 2,178,000	\$ 12,724,860

The provision for unpaid losses and loss adjustment expenses decreased by approximately \$272,712 in 2019 due to unfavorable development on case-basis reserves of \$847,288 offset by expiration of IBNR risk on older policy years of \$1,120,000. The liability for unpaid losses and loss adjustment expenses at June 30, 2019 included approximately \$2,178,000 for IBNR claims.

Oklahoma Schools Insurance Group

Notes to Financial Statements

Note 5. Reinsurance Coverage/Structure

OSIG provides its members with property damage, automobile damage, general liability, auto liability, educators legal liability, boiler and machinery, school violent act protection, crime, and cyber liability coverages. Claims have historically been paid with funding from the annual member contributions, with claims in excess of specified thresholds covered by reinsurance coverage.

Thresholds for the years ended June 30, 2020 and 2019, were as follows:

	Per Occurrence		Aggregate
2020:			
Property and automobile damage	\$	250,000 *	N/A
Property and automobile damage—windstorm/hail		500,000 *	N/A
General, automobile and professional liability		100,000	5,537,139
	Per Occurrence		Aggregate
2019:			
Property and automobile damage	\$	250,000 *	N/A
Property and automobile damage—windstorm/hail		250,000 *	N/A
General, automobile and professional liability		100,000	5,056,034

* Property insurance per occurrence reimbursements from reinsurers are subject to a corridor deductible of \$1,400,000. Each property claim that is not related to windstorm or hail damage in excess of \$250,000 first must satisfy the \$250,000 per occurrence threshold, with amounts over \$250,000 applied toward the corridor deductible. Each property claim related to windstorm or hail damage in excess of \$500,000 first must satisfy the \$500,000 per occurrence threshold, with amounts over \$500,000 applied toward the corridor deductible. No amounts are due under the agreement until the \$1,400,000 corridor deductible is satisfied.

In some instances, multiple members can be affected by the same loss event. These reinsurance thresholds are applied to the aggregate loss for these single events. The reinsurance contracts do not relieve OSIG from its obligation to its members.

Reinsurance was not utilized for either the boiler and machinery or crime coverage. Boiler and machinery coverage is 100% reinsured. The boiler and machinery reinsurance contract has a required deductible per claim of \$1,000, which is passed through to the member filing the claim. Crime coverage is self-insured by OSIG, with a maximum limit on each claim of \$10,000 and deductibles per claim of \$1,000.

During the years ended June 30, 2020 and 2019, there was a gross increase in recoverable claims cost, prior to netting cash received from reinsurers, of approximately \$76,922,650 and \$25,524,103, respectively.

Note 6. Commitments and Contingencies

In conducting its activities, OSIG, from time to time, is the subject of various claims arising from the ordinary course of business. OSIG reserves the underlying losses at best estimates as events transpire. In the opinion of management, the ultimate resolution of such claims is not expected to have a material adverse effect upon the financial statements of OSIG.

Required Supplementary Information

Oklahoma Schools Insurance Group

10-Year Loss Development

The following table illustrates how OSIG's earned member contributions and investment income (net of amounts ceded to reinsurance carriers) compare to related costs of loss (net of loss assumed by reinsurers) and other expenses assumed by OSIG as of the end of each of the last ten years. The rows of the table are defined as follows:

- (1) Total earned member contributions and investment revenues, net of costs for reinsurance.
- (2) Other administrative costs of OSIG, including overhead and claims expense not allocable to individual claims.
- (3) Incurred claims and allocated claim adjustment expenses (both paid and reserved, net of losses covered by reinsurance) as originally reported at the end of the first year in which the event that triggered coverage under the contract occurred (policy year).
- (4) Cumulative amounts paid as of the end of successive years for each policy year.
- (5) Latest reestimated amount of losses assumed by reinsurers for each policy year.
- (6) Increase or decrease in estimates of net incurred claims and allocated claim adjustment expenses for each policy year as of the end of successive years. This annual reestimation results from new information received on known claims, reevaluation of existing information on known claims, as well as emergence of new claims not previously reported.
- (7) Compares the latest reestimated incurred claims amount (line 6) and the estimate originally established (line 3). Shows whether the latest estimate of claims cost is greater or less than originally estimated. As data for individual policy years mature, the correlation between original estimates and reestimated amounts is commonly used to evaluate the accuracy of initial loss estimation methods.

(Continued)

Oklahoma Schools Insurance Group

Required Supplementary Information - Schedule of Claims Development - Unaudited

For the 10 Years Ended June 30, 2020

10-Year Loss Development

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
(1) Premiums and investment revenue, as originally reported at end of policy year:										
Earned	\$ 43,957,816	\$ 33,625,687	\$ 26,423,157	\$ 25,536,509	\$ 23,935,709	\$ 25,003,145	\$ 24,339,336	\$ 21,853,448	\$ 22,232,030	\$ 20,781,508
Ceded to reinsurers	20,940,436	15,352,691	11,204,265	11,652,147	10,794,487	10,588,820	11,660,027	10,626,030	12,323,603	10,552,876
Net earned	23,017,380	18,272,996	15,218,892	13,884,362	13,141,222	14,414,325	12,679,309	11,227,418	9,908,427	10,228,632
(2) Unallocated expenses, as originally reported at end of policy year	8,857,699	6,820,454	5,651,130	5,398,914	5,055,814	5,187,826	4,818,166	4,498,793	4,699,233	4,393,058
(3) Estimated losses and expenses, end of policy year:										
Incurred	49,083,889	15,673,463	14,161,187	13,551,154	8,117,000	7,628,500	5,919,500	8,073,854	8,778,575	23,038,065
Recoverable from reinsurers	36,227,363	5,450,063	5,424,260	4,304,154	64,000	26,500	124,500	112,854	612,425	16,746,785
Net incurred	12,856,526	10,223,400	8,736,927	9,247,000	8,053,000	7,602,000	5,795,000	7,961,000	8,166,150	6,291,280
(4) Net paid (cumulative) as of:										
End of policy year	6,191,652	3,199,691	3,728,396	4,862,059	2,843,847	2,810,778	2,044,045	3,050,569	2,930,550	2,876,326
One year later		6,786,997	6,177,935	6,605,071	6,027,267	5,054,326	3,734,202	5,902,181	5,381,794	4,215,360
Two years later			7,213,606	8,104,624	6,947,359	6,305,373	5,080,503	6,236,599	5,949,150	4,736,117
Three years later				8,668,036	7,442,038	6,585,368	5,260,843	6,314,806	6,205,373	4,967,661
Four years later					7,704,211	7,303,736	5,287,810	6,338,490	6,264,951	5,016,410
Five years later						7,438,963	5,306,622	6,392,520	6,323,238	6,201,990
Six years later							5,379,065	6,803,392	6,426,126	6,212,042
Seven years later								6,800,990	6,426,594	6,216,944
Eight years later									6,426,814	6,223,937
Nine years later										6,233,062
(5) Reestimated ceded losses and expenses, recoverable from reinsurers	36,227,363	23,808,684	16,439,714	6,433,024	10,120,538	3,520,420	844,328	1,060,382	2,228,203	23,537,915
(6) Reestimated net incurred losses and expenses:										
End of policy year	12,856,526	10,223,400	8,736,927	9,247,000	8,053,000	7,602,000	5,795,000	7,961,000	8,166,150	6,291,280
One year later		10,299,338	9,292,005	9,545,793	8,141,000	7,164,000	5,678,000	7,207,000	7,486,000	5,968,360
Two years later			8,878,763	10,198,681	8,258,607	7,561,000	5,678,000	6,752,000	6,700,000	5,437,360
Three years later				10,052,386	8,243,873	7,857,981	5,535,000	6,675,000	6,466,000	5,300,360
Four years later					7,970,757	7,807,404	5,418,352	6,587,175	6,449,000	5,223,360
Five years later						7,919,129	5,362,177	6,501,151	6,443,489	6,268,472
Six years later							5,420,194	6,866,675	6,462,489	5,119,360
Seven years later								6,864,892	6,453,489	6,254,472
Eight years later									6,428,000	6,261,805
Nine years later										6,251,805
(7) (Decrease) increase in estimated net incurred losses and expenses from end of policy year	-	75,938	141,836	805,386	(82,243)	317,129	(374,806)	(1,096,008)	(1,738,150)	(39,475)

Forecast Losses for 7/1/20-21

Oklahoma Schools Insurance Group

APRIL 10, 2020

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615-269-4469
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Loss Forecast for 7/1/20-21

Oklahoma Schools Insurance Group

Report Date: April 10, 2020

Report Notes

Based on data as of January 31, 2019

Prepared by



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Sprouse, FCAS, MAAA
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Table of Contents

Section 1	Executive Summary
Section 2	Considerations
Section 3	Description of Exhibits
Section 4	Exhibits – Automobile Liability
Section 5	Exhibits – General Liability
Section 6	Exhibits – Auto Physical Damage
Section 7	Exhibits – Property

Section 1

Executive Summary

The purpose of this report is to provide the Oklahoma Schools Insurance Group (OSIG) with an evaluation of the projected liabilities associated with its property and liability insurance programs. The specific objectives are (a) to forecast ultimate losses for the 7/1/20-21 period; and (b) to analyze the variability inherent in the forecast losses by deriving estimates at various percentiles or confidence levels. Throughout this report the term losses refers to both losses and allocated loss adjustment expenses.

The table below shows the summarizes the results of our study.

<i>Forecast Losses for the 7/1/20-21 Program Year</i>			
	<i>Liability Program</i>	<i>Property Program Option 1</i>	<i>Property Program Option 2</i>
Forecast Retention Layer	\$4,000,000	\$9,114,000	\$10,344,000
Forecast Corridor Losses	na	\$1,400,000	\$3,000,000
Total Expected Losses	\$4,000,000	\$10,514,000	\$13,344,000
<i>75th Percentile Losses</i>	\$4,394,000	\$11,549,000	\$14,623,000
<i>Exposure</i>	481,126 students	\$15,575,216,000 TIV	\$15,575,216,000 TIV
<i>Expected Loss Rate</i>	\$8.31 per student	\$0.068 per \$100 TIV	\$0.086 per \$100 TIV
<i>Retentions</i>	\$100,000	\$500,000 wind/hail \$250,000 AOP	\$750,000 wind/hail \$500,000 Flood, \$250,000 AOP

Tables at the end of this Executive Summary display the results of our analysis in greater detail. Table A summarizes the forecast losses, loss rate per exposure, total expected claims and expected large claims. Table B shows the aggregate distribution of the forecast losses.

Discussion of Results

Automobile Liability

We project that OSIG will incur accident year 7/1/20-21 automobile liability losses of \$1,589,000, at a cost of \$123 per vehicle. This rate is about 1.0% greater than the rate estimated in the previous actuarial report. We estimate a total of 251.8 claims during 7/1/20-21 with two to three of these claims expected

to exceed \$100,000 (Exhibit 5). The total provision for large claims at the \$100,000 retention is \$269,000, which makes up about 17% of the total forecast. There is about a 50% chance that losses will be less than \$1,559,000, and a 10% chance that losses for 2020 will exceed \$1,969,000 (Exhibit 6).

General Liability

We project that OSIG will incur accident year 7/1/20-21 general liability losses of \$2,411,000, at a cost of \$5.01 per student. This rate is about 2.0% less than the rate estimated in the previous actuarial report. We estimate a total of 115.3 claims during 7/1/20-21 with about eight of these claims expected to exceed \$100,000 (Exhibit 5). The total provision for large claims at the \$100,000 retention is \$789,000, which makes up about 33% of the total forecast. There is about a 50% chance that losses will be less than \$2,319,000, and a 10% chance that losses for 2020 will exceed \$3,250,000 (Exhibit 6).

Auto Physical Damage

We project that OSIG will incur accident year 7/1/20-21 APD losses of \$1,113,000. About 11% of the total exposures are written at primary limits of \$100,000 for a total of \$117,000 in losses at a rate of \$84.00 per vehicle. This rate is 9% higher than in the previous report. The remaining exposures have total expected losses of \$996,000 at a rate of \$88.79 per vehicle for losses within the Property retentions discussed below. This rate is 5.8% higher than the rate in last year's study (Exhibit 5). There is a 50% probability that total APD losses will be less than \$1,082,000. There is a 10% probability that they may exceed the 90th percentile of \$1,443,000 (Exhibit 6). We do not expect auto physical damage component of the overall property costs to differ under the two program options.

Property

We have evaluated the property losses under two options. For Option 1, which matches the current program limits, we project that OSIG will incur accident year 7/1/20-21 property losses of \$8,001,000, for losses within the current retentions of \$500,000 wind/hail and \$250,000 for all other perils. This is cost of \$0.051 per \$100 TIV and is about 9% lower than last year's rate. In addition, we expect OSIG to pay the full \$1,400,000 corridor deductible for losses in excess of the retentions. Thus, the total retained losses for property are expected to be \$9,401,000. We expected 11.7 claims over \$250,000. The total large losses within the retention layer are \$4,347,000 which make up about 54% of the retention layer overall (Exhibit 5). There is a 50% probability that total losses will be less than \$9,283,000, and a 10% chance that losses will exceed \$11,528,000 (Exhibit 6).

For Option 2, OSIG is considering retention limits of \$750,000 for wind/hail related losses, \$500,000 for flood, and \$250,000 for all other perils. Losses in the retention layer are expected to be \$9,231,000. In addition, this option has a \$3,000,000 corridor deductible and we expect OSIG to pay the full amount of this deductible for losses in excess of the stated retentions. Thus, the total retained losses for Property under Option 2 are expected to be \$12,231,000. There is a 50% chance that losses will be less than \$12,070,000, and a 10% chance that losses will exceed \$14,895,000 (Exhibit 6).

Oklahoma Schools Insurance Group
Automobile and General Liability (including E&O)

Table A - Liability

Forecast Ultimate Losses for 7/1/20-21

	<i>Automobile Liability</i>	<i>General Liability</i>	<i>Total</i>
<i>Forecast Ultimate Losses</i>	\$1,589,000	\$2,411,000	\$4,000,000
<i>Exposure</i>	12,920	481,126	
<i>Cost per exposure</i>	\$123	\$5.01	\$8.31
<i>Per Occurrence Retention</i>	\$100,000	\$100,000	
<i>Forecast Claim Counts</i>	251.8	115.3	367.1
<i>Total Claims over \$100,000</i>	2.7	7.9	10.6

*Distribution of Forecast Losses for 7/1/20-21
Assuming a \$100,000 SIR*

<i>Percentile</i>	<i>SIR Layer \$100,000</i>	<i>Layer \$900,000 xs \$100,000</i>	<i>Losses Limited to \$1,000,000</i>	<i>Losses Excess of \$1,000,000</i>	<i>Total Incurred Losses</i>
20.0%	\$3,394,000	\$625,000	\$4,193,000	\$0	\$4,194,000
30.0%	\$3,575,000	\$738,000	\$4,477,000	\$0	\$4,478,000
40.0%	\$3,749,000	\$844,000	\$4,720,000	\$0	\$4,725,000
50.0%	\$3,910,000	\$957,000	\$4,944,000	\$0	\$4,950,000
60.0%	\$4,080,000	\$1,081,000	\$5,190,000	\$0	\$5,200,000
70.0%	\$4,281,000	\$1,224,000	\$5,454,000	\$0	\$5,471,000
75.0%	\$4,394,000	\$1,311,000	\$5,607,000	\$0	\$5,628,000
80.0%	\$4,530,000	\$1,407,000	\$5,784,000	\$0	\$5,812,000
85.0%	\$4,684,000	\$1,529,000	\$6,007,000	\$0	\$6,044,000
90.0%	\$4,922,000	\$1,675,000	\$6,273,000	\$0	\$6,329,000
95.0%	\$5,251,000	\$1,912,000	\$6,720,000	\$0	\$6,791,000
99.0%	\$6,060,000	\$2,419,000	\$7,554,000	\$765,000	\$7,852,000
Expected	\$4,000,000	\$1,042,000	\$5,042,000	\$20,000	\$5,062,000
<i>Students</i>	481,126				
<i>Vehicles</i>	12,920				
Cost Per Student	\$8.31	\$2.17	\$10.48	\$0.04	\$10.52

GL Losses	\$2,411,000	\$865,000	\$3,276,000	\$20,000	\$3,296,000
AL Losses	\$1,589,000	\$177,000	\$1,766,000	\$0	\$1,766,000

<i>GL Cost per Student</i>	<i>\$5.01</i>	<i>\$1.80</i>	<i>\$6.81</i>	<i>\$0.04</i>	<i>\$6.85</i>
<i>AL Cost per Student</i>	<i>\$3.30</i>	<i>\$0.37</i>	<i>\$3.67</i>	<i>\$0.00</i>	<i>\$3.67</i>
<i>AL Cost per Vehicle</i>	<i>\$123</i>	<i>\$14</i>	<i>\$137</i>	<i>\$0</i>	<i>\$137</i>

Forecast Ultimate Losses for 7/1/20-21 - Option 1

		<i>AOP Retention</i>	\$250,000	
		<i>Flood Retention</i>	--	
		<i>Wind/Hail Retention</i>	\$500,000	
	<i>Automobile Physical Damage</i>	<i>Property Retention Layer</i>	<i>Corridor</i>	<i>Total (PR and APD)</i>
<i>Forecast Ultimate Losses</i>	\$1,113,000	\$8,001,000	\$1,400,000	\$10,514,000
<i>Total Insured Value (\$100s)</i>		\$155,752,159		
<i>Cost per exposure</i>	\$0.007	\$0.051	\$0.009	\$0.068
<i>Forecast Claim Counts</i>	148.0	141.0		289.0
<i>Total Claims over \$250,000</i>		11.5		11.5
<i>Vehicles at Primary Limit (\$100,000)</i>	1,396			
<i>Rate at Primary Limit</i>	\$84.00			
<i>Vehicles at Program Limits</i>	11,216			
<i>Rate at Program Limits</i>	\$88.79			
<i>Total Vehicles</i>	12,612			
<i>Blended Rate</i>	\$88.25			

Forecast Ultimate Losses for 7/1/20-21 - Option 2

		<i>AOP Retention</i>	\$250,000	
		<i>Flood Retention</i>	\$500,000	
		<i>Wind/Hail Retention</i>	\$750,000	
	<i>Automobile Physical Damage</i>	<i>Property Retention Layer</i>	<i>Corridor</i>	<i>Total (PR and APD)</i>
<i>Forecast Ultimate Losses</i>	\$1,113,000	\$9,231,000	\$3,000,000	\$13,344,000
<i>Total Insured Value (\$100s)</i>		\$155,752,159		
<i>Cost per exposure</i>	\$0.007	\$0.059	\$0.019	\$0.086
<i>Forecast Claim Counts</i>	148.0	141.0		289.0
<i>Total Claims over \$250,000</i>		11.5		11.5
<i>Vehicles at Primary Limit (\$100,000)</i>	1,396			
<i>Rate at Primary Limit</i>	\$84.00			
<i>Vehicles at Program Limits</i>	11,216			
<i>Rate at Program Limits</i>	\$88.79			
<i>Total Vehicles</i>	12,612			
<i>Blended Rate</i>	\$88.25			

Distribution of Forecast Losses for 7/1/20-21 - Renewal

AOP Retention **\$250,000**
Flood Retention **--**
Wind/Hail Retention **\$500,000**
Corridor Deductible **\$1,400,000**

<i>Percentile</i>	<i>Retention Layer</i>	<i>Cost of Corridor Ltd. \$3.0M</i>	<i>Total Retained Losses</i>	<i>Insured Excess Losses</i>	<i>Total Incurred Losses</i>
20.0%	\$7,671,000	\$1,400,000	\$9,071,000	\$7,352,000	\$17,362,000
30.0%	\$8,158,000	\$1,400,000	\$9,557,000	\$9,968,000	\$20,173,000
40.0%	\$8,590,000	\$1,400,000	\$9,990,000	\$12,632,000	\$23,160,000
50.0%	\$8,995,000	\$1,400,000	\$10,395,000	\$15,708,000	\$26,409,000
60.0%	\$9,411,000	\$1,400,000	\$10,811,000	\$19,551,000	\$30,309,000
70.0%	\$9,888,000	\$1,400,000	\$11,288,000	\$23,930,000	\$34,693,000
75.0%	\$10,149,000	\$1,400,000	\$11,549,000	\$26,207,000	\$37,033,000
80.0%	\$10,453,000	\$1,400,000	\$11,853,000	\$29,062,000	\$39,950,000
85.0%	\$10,798,000	\$1,400,000	\$12,198,000	\$32,323,000	\$43,522,000
90.0%	\$11,241,000	\$1,400,000	\$12,641,000	\$36,818,000	\$48,307,000
95.0%	\$11,935,000	\$1,400,000	\$13,335,000	\$44,483,000	\$56,129,000
99.0%	\$13,260,000	\$1,400,000	\$14,660,000	\$59,027,000	\$71,202,000
Expected	\$9,114,000	\$1,400,000	\$10,514,000	\$18,959,000	\$29,473,000
<i>TIV in \$100s</i>	\$155,752,159				
Cost Per \$100 TIV	\$0.059	\$0.009	\$0.068	\$0.122	\$0.189
 Property Losses	\$8,001,000	\$1,400,000	\$9,401,000	\$18,959,000	\$28,360,000
APD Losses	\$1,113,000				
Vehicles	12,612				
 <i>PR Cost per \$100 TIV</i>	<i>\$0.051</i>	<i>\$0.009</i>	<i>\$0.060</i>	<i>\$0.122</i>	<i>\$0.182</i>
<i>APD Cost per Vehicle</i>	<i>\$88.25</i>				

Distribution of Forecast Losses for 7/1/20-21 - Option 1

<i>AOP Retention</i>	\$250,000
<i>Flood Retention</i>	\$500,000
<i>Wind/Hail Retention</i>	\$750,000
<i>Corridor Deductible</i>	\$3,000,000

<i>Percentile</i>	<i>Retention Layer</i>	<i>Cost of Corridor Ltd. \$3.0M</i>	<i>Total Retained Losses</i>	<i>Insured Excess Losses</i>	<i>Total Incurred Losses</i>
20.0%	\$8,535,000	\$3,000,000	\$11,495,000	\$4,746,000	\$17,362,000
30.0%	\$9,144,000	\$3,000,000	\$12,122,000	\$7,234,000	\$20,173,000
40.0%	\$9,686,000	\$3,000,000	\$12,673,000	\$9,857,000	\$23,160,000
50.0%	\$10,194,000	\$3,000,000	\$13,185,000	\$12,856,000	\$26,409,000
60.0%	\$10,722,000	\$3,000,000	\$13,720,000	\$16,619,000	\$30,309,000
70.0%	\$11,292,000	\$3,000,000	\$14,288,000	\$21,045,000	\$34,693,000
75.0%	\$11,626,000	\$3,000,000	\$14,623,000	\$23,320,000	\$37,033,000
80.0%	\$11,985,000	\$3,000,000	\$14,982,000	\$26,093,000	\$39,950,000
85.0%	\$12,444,000	\$3,000,000	\$15,443,000	\$29,275,000	\$43,522,000
90.0%	\$12,998,000	\$3,000,000	\$15,996,000	\$33,723,000	\$48,307,000
95.0%	\$13,856,000	\$3,000,000	\$16,856,000	\$41,380,000	\$56,129,000
99.0%	\$15,535,000	\$3,000,000	\$18,535,000	\$55,484,000	\$71,202,000
<i>Expected</i>	\$10,344,000	\$3,000,000	\$13,344,000	\$16,129,000	\$29,473,000
<i>TIV in \$100s</i>	\$155,752,159				
<i>Cost Per \$100 TIV</i>	\$0.066	\$0.019	\$0.086	\$0.104	\$0.189
 <i>Property Losses</i>	\$9,231,000	\$3,000,000	\$12,231,000	\$16,129,000	\$28,360,000
<i>APD Losses</i>	\$1,113,000				
<i>Vehicles</i>	12,612				
 <i>PR Cost per \$100 TIV</i>	\$0.059	\$0.019	\$0.079	\$0.104	\$0.182
<i>APD Cost per Vehicle</i>	\$88.25				

Section 2

Considerations

Background

Oklahoma Schools Insurance Group was formed in 2002 to insure the liability and property exposures for member School Districts in the state of Oklahoma. The group purchases excess insurance for above a retention layer that varies by line of coverage. Arthur J. Gallagher Risk Management Services, Inc. manages OSIG. Select Actuarial Services has provided actuarial consulting services for OSIG, including loss forecasting and reserving studies since 2002.

Scope

Select Actuarial Services has prepared this report for OSIG at the request of Jennifer McKenzie of Arthur J. Gallagher Risk Management Services, Program Manager for OSIG. The specific objectives are (a) to forecast the ultimate losses for 7/1/20-21 for property and liability; and (b) to analyze the variability inherent in the losses by deriving estimates at various percentiles or confidence levels.

This report is an actuarial analysis of data, conditions, and practices communicated as of February 27, 2020, to Select Actuarial Services as described in this report. While Select Actuarial Services believes these communications to be reliable, it has not attempted to audit the information and cannot guarantee the accuracy of any information supplied. However, the data have been reviewed for reasonableness and internal consistency, comparing the claims experience from year to year, and comparing to prior evaluations.

We have not anticipated any extraordinary changes to the social, legal and economic environment that may affect the frequency, cost or future reporting and settlement patterns of claims. In addition, our estimates do not include any provision for future claims arising out of causes not represented in the current data.

Use and Distribution

The actuarial estimates in this report are based upon appropriate actuarial assumptions and procedures described in the section of this report entitled "Description of Exhibits." Select Actuarial Services assumes no responsibility for any loss or damage that might arise from the use of or reliance upon this report other than for the purposes set forth herein.

This report was prepared for the use of and is only to be relied upon by the management of the Oklahoma Schools Insurance Group. This report may also be provided to OSIG's auditors and insurance brokers. No portion of the report may be provided to any other party without Select Actuarial Services' prior consent. In the event that such consent is provided, the report must be provided in its entirety.

We recommend that any such party have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

Qualifications and Standards of Practice

Laura Sprouse is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. She meets the Qualification Standards of the American Academy of Actuaries to render actuarial opinions for property/casualty reserves. This report is prepared in accordance with Actuarial Standards of Practice No. 23, *Data Quality*, No. 41, *Actuarial Communications*, and No. 53, *Estimating Future Costs for Prospective Property/Casualty Risk Transfer and Risk Retention*.

Coverage

OSIG began writing automobile liability, general liability, errors & omissions, auto physical damage and property coverage for member school districts in the state of Oklahoma in 2002. The Group purchases excess insurance above a retention layer which varies by coverage. This retention sits above the member deductibles, which vary by member and by year.

For the 7/1/20-21 year we are estimating the ultimate losses within a \$100,000 retention for automobile and general liability (including E&O). For Property claims we are estimating losses for two program options with Option 1 matching the current program with deductibles of \$500,000 for wind/hail related claims, \$250,000 for all other perils, and a corridor deductible of \$1,400,000 applied to excess losses. Option 2 has retentions of \$750,000 wind/hail related claims, \$500,000 for flood, and \$250,000 for AOP. The estimated losses within the \$3,000,000 corridor deductible are based on our expectation of claims that exceed the applicable retention for each peril. A few members purchase primary limits of \$100,000 for auto physical damage.

Available Data

Loss information was provided by Jennifer McKenzie, Program Manager for OSIG. This loss information included detail loss runs as of January 31, 2020 and at prior annual evaluations. Exposure data for each member was provided and included vehicle counts, student population and total insured value.

Development is the process in which losses and claim counts for a given accident period change over time. Development is caused by late reporting of claims, case reserve changes, claims reopening, and actual payment and settlement of claims.

Ideally, a client's own patterns should be utilized whenever possible to reflect the client's unique claims administration, reporting procedures, and so forth. Since several historical valuations of the data were available, we have selected patterns based on OSIG's development, supplemented with a benchmark for Oklahoma public entities. A curve-fitting technique is used to smooth and extrapolate the observed development patterns.

Trends and External Influences

Trends are defined as changes over time in underlying costs. Trend factors are used to adjust losses and exposure costs from past years to the level at which they would have been had they occurred during a future period. This is vital since historical losses and exposure costs may have occurred in a different environment in terms of monetary inflation and/or benefit levels. Trends in average loss costs cannot be clearly discerned from available OSIG data. This analysis explicitly recognizes the effect of external influences upon expected claims costs. Economic inflation is measured by changes in the U.S. Claims Cost Indices as compiled by Willis Towers Watson. We have used the changes in the Consumer Price Index to measure inflation in property values.

Actuarial Central Estimate

The estimates of ultimate losses at the “expected” level in this analysis are actuarial central estimates - estimates that represent an expected value over the range of reasonably possible outcomes. Such a range of reasonably possible outcomes may not include all conceivable outcomes. For example, it would not include conceivable extreme events where the contribution of such events to an expected value estimate is not reliably measurable.

Loss Models

Statistical distributions are often used by the insurance industry to model the loss generating process. This technique allows for the projection of ultimate losses at the expected level and at various confidence levels or percentiles. The variation estimated in this modeling technique is the variation inherent in the historical experience; it does not include potential variation due to unanticipated changes in the environment or to misestimation of parameters.

In forecasting loss experience for 7/1/20-21 we have employed various curves and distributions to model the loss generating process. Aggregate small losses for the forecast period are modeled by the lognormal probability distribution. Large claim frequencies are modeled by a Poisson distribution. The inverse Weibull distribution was used to model large claim severities. We then used a Monte Carlo simulation to generate 10,000 sample years. The percentile estimates are derived from these outcomes. For example 7,500 of the outcomes are below the 75th percentile, while 1,000 of the outcomes are above the 90th percentile.

Subrogation and Recoveries

Subrogation and recoveries are reflected in the primary loss reports. Recoveries were infrequent and did not provide a basis for estimating potential recoveries over and above those reflected in the loss runs. Accordingly, no reductions for collateral sources have been incorporated into the estimates.

Definitions

Accident Period: All of the events with occurrence dates during a period specified make up the corresponding accident period. The dollars associated with those events total the accident period's losses, although they may be paid long after the end of the accident period. Losses are grouped by accident period throughout our analyses.

Ultimate Losses: The total amount that will eventually be paid on all losses for a particular accident period. Our estimate of the ultimate losses for an accident period is the sum of the paid losses, the case reserves, and the IBNR reserve.

Paid Losses: Dollars paid as of the latest available evaluation on losses incurred through the latest available evaluation.

Case Reserves: Reserves established on individual claims by the claims adjusters, as of the latest available evaluation. The case reserve plus the amount paid to date represents the adjuster's best estimate of the ultimate value of a particular claim.

Reported Losses: Paid losses plus case reserves as of the latest available evaluation.

Loss Development: The change in the paid losses or the reported losses over time. As more information is provided, individual claim estimates get closer and closer to the ultimate value of the claims. The increase in the total reported losses through time is the reported loss development. Similarly, as losses are paid out over time, the increase in total paid losses is the paid loss development.

Section 3

Description of Exhibits

Actuarial procedures employed to project ultimate and outstanding losses for Client consist of a number of steps. Exhibits representing the various steps in the process are explained in this section of the report.

Exhibit 1: Summary of Data

Exhibit 1-A summarizes the number of reported claims, open claims, paid and reported losses, and exposures for each accident period evaluated as of January 31, 2020. In this Exhibit, all losses are shown gross of per occurrence retentions and net of member deductibles. The exposure data is also shown. The losses and exposures used in this forecast study are those of the current membership.

Exhibit 1-B contains a listing of large claims that are expected to exceed the forecast retentions in effect during the forecast period. These retentions vary by coverage, and by peril for property claims. The reported losses are multiplied by development and trend factors to determine which claims would exceed the retention. These trended and developed claim values are used to estimate the potential large claim experience for the forecast year.

For auto physical damage, we show the APD losses associated with large property claims. These are excluded from the forecast since the retention has already been counted in the property analysis.

Exhibit 2: Severity Distribution

For all lines except APD, the claims from Exhibit 1-B are fit to an inverse Weibull curve model the size of large losses. The curve assigns probabilities to various claim sizes and allows us to model the variation in the large claim experience. The percentiles of the empirical data (the trended developed claims in Exhibit 1-B) are compared to the percentiles derived from the curve.

Exhibit 3: Forecast Claim Counts

Exhibit 3-A calculates the claim frequency for historical years and projects the number of claims for the 7/1/20-21 year. First the reported claims are developed to ultimate using the development factors from Appendix A. Next these ultimate claims are related to the underlying exposures, adjusted for inflation to the 7/1/20-21 level. A frequency rate is selected based on the experience of the more recent years and is multiplied by the forecast exposure to derive an estimate of the total number of claims for 7/1/20-21.

For all lines except auto physical damage, exhibit 3-B estimates the ultimate number of large claims based on the claims in Exhibit 1-B that develop and trend over a selected threshold. For Property, we

estimate the large wind/hail related claims and large AOP claims separately. The ultimate number of small claims is estimated by subtracting the forecast large claim counts from the total claim counts.

Exhibit 4: Small Loss Forecast

This exhibit calculates the forecast small losses for the 7/1/20-21 period. In Exhibit 4-A, losses for historical accident periods below the large loss threshold are developed to ultimate and trended to the cost level of the forecast period using the trend factors from Appendix B. Losses that would exceed the forecast retention on an ultimate trended basis are removed from the reported and paid loss data. The remaining small losses are developed to ultimate using the loss development factors in Appendix A.

In Exhibit 4-B the ultimate small losses from Exhibit 4-A are compared to the underlying exposure, also trended to the forecast period. In this way, we can compare the experience of each year as if it had happened in 7/1/20-21. We also relate the ultimate small losses to the ultimate small claim counts to derive the small claim severity. The forecast small losses are determined by either selecting a loss rate to apply to the forecast payroll, or selecting the small claim severity to multiply by the forecast number of small claims.

Exhibit 5: Forecast Ultimate Losses

In exhibit 5 the ultimate small losses from exhibit 4 are combined with a forecast of the large claims. The number of large claims from exhibit 3-B is multiplied by an estimated large claim severity, or average claim size, from exhibit 2. The sum of the small and large forecast losses gives the total forecast losses. The total forecast losses are divided by the payroll to derive the overall loss rate, and by the projected number of claims to derive the projected average claim size.

Exhibit 6: Aggregate Loss Distribution with Percentiles

Exhibit 6 presents the forecast of ultimate losses for 7/1/20-21 at percentiles other than expected. The various percentiles are derived by combining the selected distributions for small losses, large claim frequency and large claim severity. Expected losses are average values that one might expect to see if the 2020 year were repeated multiple times. Actual losses will inevitably vary from expected losses. The results at various percentiles give an estimate of the amount of potential variation. For example, we estimate that there is a 75% probability that losses will be less than the 75th percentile, and a 90% probability that they won't exceed the 90th percentile.

Appendix A: Loss and Claim Development Factors

Selected loss development factors are fit to an inverse power curve in Appendices A1 through A3, in order to extrapolate factors at the maturities needed. The selected factors are based on analysis in OSIG's reserves study.

Appendix B: Trend Factors

Trend factors are calculated to adjust losses for inflation based on an index of countrywide claims costs.

Trend factors for insured values for property are based on the Consumer Price Index. Vehicle counts and student population are not inflation sensitive and are not adjusted.

Section 4

Exhibits – Automobile Liability

Exhibit 1	Summary of Data Large Loss Listing
Exhibit 2	Large Loss Severity Distribution
Exhibit 3	Forecast Total Claim Counts Forecast Large Claim Counts
Exhibit 4	Trended and Developed Small Losses Forecast Small Losses
Exhibit 5	Forecast Losses for 7/1/20-21
Exhibit 6	Aggregate Distribution of Forecast with Percentiles
Appendix A	Loss Development Factors
Appendix B	Loss Trend Factors

Summary of Loss and Exposure Data
Total Experience Net of Member Deductibles

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Evaluation Date	Maturity (months)	Reported NonZero Claims	Loss and Expense Payments	Loss and Expense Reserves	Loss and Expense Incurred	Vehicles
7/1/09-10	1/31/2020	127	167	\$647,694	\$0	\$647,694	7,186
7/1/10-11	1/31/2020	115	175	\$843,629	\$0	\$843,629	7,852
7/1/11-12	1/31/2020	103	164	\$855,465	\$0	\$855,465	6,214
7/1/12-13	1/31/2020	91	157	\$651,731	\$0	\$651,731	6,513
7/1/13-14	1/31/2020	79	185	\$724,749	\$0	\$724,749	7,122
7/1/14-15	1/31/2020	67	222	\$1,165,221	\$214,312	\$1,379,532	8,689
7/1/15-16	1/31/2020	55	217	\$1,035,234	\$152,944	\$1,188,178	9,177
7/1/16-17	1/31/2020	43	202	\$970,819	\$277,108	\$1,247,927	9,954
7/1/17-18	1/31/2020	31	166	\$569,918	\$430,735	\$1,000,653	9,924
7/1/18-19	1/31/2020	19	200	\$558,206	\$444,638	\$1,002,844	11,439
7/1/19-20	1/31/2020	7	176	\$356,050	\$885,193	\$1,241,244	12,920
7/1/20-21							12,920

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services
- Loss and Exposure data contains only current OSIG members as of 1/31/2020

Large Claim Listing
Claims Exceeding \$100,000 after Development and Trend

(A)	(B)	(C)	(D)	(E)	(F)	(G)
<i>Occurrence #</i>	<i>Loss Date</i>	<i>Net Paid</i>	<i>Net Incurred</i>	<i>Severity Factor</i>	<i>Trend Factor</i>	<i>Loss After Development & Trend</i>
90075	8/18/2010	\$134,999	\$134,999	1.000	1.374	\$185,466
P625-10-90105	8/27/2010	\$76,778	\$76,778	1.000	1.374	\$105,481
90305	12/8/2010	\$103,684	\$103,684	1.000	1.374	\$142,445
P625-11-90851	9/9/2011	\$96,221	\$96,221	1.000	1.327	\$127,698
91477	9/19/2012	\$135,786	\$135,786	1.000	1.291	\$175,386
92239	1/7/2014	\$130,707	\$130,707	1.001	1.256	\$164,387
93008	3/23/2015	\$206,102	\$206,102	1.003	1.219	\$252,034
P625-15-93019	3/26/2015	\$7,304	\$85,200	1.003	1.219	\$104,187
93063	4/20/2015	\$219,224	\$219,224	1.003	1.219	\$268,079
93186	6/3/2015	\$16,117	\$107,276	1.003	1.219	\$131,183
93397	10/10/2015	\$6,482	\$105,404	1.008	1.175	\$124,871
93477	11/19/2015	\$174,557	\$174,557	1.008	1.175	\$206,796
94052	9/29/2016	\$126,307	\$126,307	1.022	1.134	\$146,381
94363	3/23/2017	\$29,805	\$128,040	1.022	1.134	\$148,388
94907	1/30/2018	\$8,657	\$167,250	1.060	1.100	\$195,037
96137	10/29/2019	\$0	\$263,000	1.107	1.033	\$300,621
96204	11/15/2019	\$37,741	\$102,880	1.107	1.033	\$117,596
		\$1,510,472	\$2,363,417			\$2,896,036

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services

Fitted Large Claim Distribution
Claims Developed and Trended over \$100,000

Inverse Weibull Distribution
Tau = 4.15347
Theta = 134,655.6

<i>Percentile</i>	<i>Observed</i>	<i>Fitted</i>
5%	\$105,175	\$107,601
10%	\$106,053	\$113,111
15%	\$113,555	\$117,862
20%	\$124,919	\$122,232
25%	\$127,681	\$126,413
30%	\$130,267	\$130,593
35%	\$131,050	\$134,773
40%	\$135,660	\$139,144
45%	\$142,856	\$143,704
50%	\$144,531	\$148,645
55%	\$146,117	\$153,965
60%	\$157,156	\$159,856
65%	\$168,683	\$166,507
70%	\$177,355	\$174,107
75%	\$185,457	\$183,228
80%	\$188,464	\$194,819
85%	\$199,126	\$210,211
90%	\$230,450	\$233,393
95%	\$281,073	\$277,478
99%	\$324,415	\$410,681
<i>Limited to \$100,000</i>	\$100,000	\$100,000
<i>Limited to \$125,000</i>	\$121,477	\$122,496
<i>Limited to \$200,000</i>	\$151,623	\$153,492
<i>Limited to \$1,000,000</i>	\$163,888	\$165,575
<i>Unlimited</i>	\$163,888	\$165,646

Projected Total Claim Frequency

(A) Accident Period	(B) Number of Nonzero Claims	(C) CCDF	(D) Ultimate Claims	(E) Exposures (Vehicles)	(F) Exposure Trend	(G) Trended Exposures	(H) Frequency per 1,000 Vehicles
7/1/09-10	167	1.000	167.0	7,186	1.000	7,186	23.2
7/1/10-11	175	1.000	175.0	7,852	1.000	7,852	22.3
7/1/11-12	164	1.000	164.0	6,214	1.000	6,214	26.4
7/1/12-13	157	1.000	157.0	6,513	1.000	6,513	24.1
7/1/13-14	185	1.000	185.0	7,122	1.000	7,122	26.0
7/1/14-15	222	1.000	222.0	8,689	1.000	8,689	25.5
7/1/15-16	217	1.000	217.0	9,177	1.000	9,177	23.6
7/1/16-17	202	1.000	202.0	9,954	1.000	9,954	20.3
7/1/17-18	166	1.000	166.0	9,924	1.000	9,924	16.7
7/1/18-19	200	1.002	200.4	11,439	1.000	11,439	17.5
7/1/19-20	176	1.718	302.4	12,920	1.000	12,920	23.4
Total	2,031		2,157.8	96,990		96,990	22.2
						<u>7/1/19-20</u>	<u>7/1/20-21</u>
				(I) Selected Frequency		19.5	19.5
				(J) Forecast Exposure		12,920	12,920
				(K) Forecast Total Claims		251.8	251.8

(B) - Exhibit 1-A
 (C) - Appendix A3
 (D) - (B) * (C)
 (E), (J) = Exhibit 1-A
 (F) - no trend for vehicle counts
 (G) = (E) * (F)
 (H) = (D) / (G)
 (I) = Four Year Average
 (K) = (I) * (J)

Projected Large Claim Frequency
Claims Exceeding \$100,000 per Occurrence

(A) Accident Period	(B) Number of Claims > \$100,000	(C) CCDF	(D) Ultimate Claims	(E) Trended Exposures	(F) Frequency per 1,000 Vehicles
7/1/09-10	0	1.000	0.0	7,186	0.00
7/1/10-11	3	1.000	3.0	7,852	0.38
7/1/11-12	1	1.000	1.0	6,214	0.16
7/1/12-13	1	1.000	1.0	6,513	0.15
7/1/13-14	1	1.000	1.0	7,122	0.14
7/1/14-15	4	1.000	4.0	8,689	0.46
7/1/15-16	2	1.000	2.0	9,177	0.22
7/1/16-17	2	1.000	2.0	9,954	0.20
7/1/17-18	1	1.000	1.0	9,924	0.10
7/1/18-19	0	1.002	0.0	11,439	0.00
7/1/19-20	2	1.718	3.4	12,920	0.27
Total	17		18.4	96,990	0.19
				<u>7/1/19-20</u>	<u>7/1/20-21</u>
		(G) Selected Frequency		0.21	0.21
		(H) Forecast Exposure		12,920	12,920
		(I) Forecast Number of Large Claims		2.7	2.7
		(J) Forecast Number of Small Claims		249.1	249.1

(B) - Exhibit 1-B

(C) - Appendix A3

(D) - (B) * (C)

(E) = Exhibit 3-A

(F) = (D) / (E) * 1,000

(G) = Average excluding 09-10

(H) - Exhibit 1-A

(I) = (G) * (H)

(J) = (K), Exhibit 3-A - (I)

**Estimation of Ultimate Small Losses
At the Forecast Loss Level**

	(A)	(B)	(C)	(D)	(E)
<i>Accident Period</i>	<i>Reported Losses</i>	<i>Reported on Large Losses</i>	<i>Trend Factor to 7/1/20-21</i>	<i>Reported Develop. Factor</i>	<i>Ultimate on Small Claims</i>
7/1/09-10	\$647,694	\$0	1.424	1.000	\$922,613
7/1/10-11	\$843,629	\$315,462	1.374	1.000	\$725,613
7/1/11-12	\$855,465	\$96,221	1.327	1.000	\$1,007,610
7/1/12-13	\$651,731	\$135,786	1.291	1.000	\$666,413
7/1/13-14	\$724,749	\$130,707	1.256	1.001	\$747,108
7/1/14-15	\$1,379,532	\$617,803	1.219	1.003	\$931,486
7/1/15-16	\$1,188,178	\$279,961	1.175	1.008	\$1,075,953
7/1/16-17	\$1,247,927	\$254,347	1.134	1.022	\$1,151,484
7/1/17-18	\$1,000,653	\$167,250	1.100	1.060	\$971,863
7/1/18-19	\$1,002,844	\$0	1.066	1.109	\$1,185,226
7/1/19-20	\$1,241,244	\$365,880	1.033	1.901	\$1,718,972
<i>Total</i>	\$10,783,645	\$2,363,417			\$11,104,342

	(F)	(G)	(H)	(I)	(J)
<i>Accident Period</i>	<i>Paid Losses</i>	<i>Paid on Large Losses</i>	<i>Trend Factor to 7/1/20-21</i>	<i>Paid Develop. Factor</i>	<i>Ultimate on Small Claims</i>
7/1/09-10	\$647,694	\$0	1.424	1.000	\$922,630
7/1/10-11	\$843,629	\$315,462	1.374	1.000	\$725,654
7/1/11-12	\$855,465	\$96,221	1.327	1.000	\$1,007,781
7/1/12-13	\$651,731	\$135,786	1.291	1.001	\$666,756
7/1/13-14	\$724,749	\$130,707	1.256	1.003	\$748,277
7/1/14-15	\$1,165,221	\$448,747	1.219	1.008	\$880,324
7/1/15-16	\$1,035,234	\$181,039	1.175	1.023	\$1,026,714
7/1/16-17	\$970,819	\$156,112	1.134	1.067	\$986,225
7/1/17-18	\$569,918	\$8,657	1.100	1.202	\$742,144
7/1/18-19	\$558,206	\$0	1.066	1.614	\$960,202
7/1/19-20	\$356,050	\$37,741	1.033	4.277	\$1,406,470
<i>Total</i>	\$8,378,715	\$1,510,472			\$10,073,176

(A) and (F) - Exhibit 1-A

(B) and (G) - Exhibit 1-B

(C) and (H) - Appendix B

(D) - Appendix A1

(E) = [(A) - (B)] * (C) * (D)

(I) - Appendix A2

(J) = [(F) - (G)] * (H) * (I)

**Calculation of Forecast Ultimate Losses for 7/1/20-21
Less than \$100,000 per Occurrence**

(A) Accident Period	(B) Trended Ultimate Losses	(C) Ultimate Small Claims	(D) Small Claim Severity	(E) Trended Exposures	(F) Loss Rate
7/1/09-10	\$923,000	167.0	\$5,500	7,186	\$128
7/1/10-11	\$726,000	172.0	\$4,200	7,852	\$92
7/1/11-12	\$1,008,000	163.0	\$6,200	6,214	\$162
7/1/12-13	\$667,000	156.0	\$4,300	6,513	\$102
7/1/13-14	\$748,000	184.0	\$4,100	7,122	\$105
7/1/14-15	\$906,000	218.0	\$4,200	8,689	\$104
7/1/15-16	\$1,051,000	215.0	\$4,900	9,177	\$115
7/1/16-17	\$1,069,000	200.0	\$5,300	9,954	\$107
7/1/17-18	\$857,000	165.0	\$5,200	9,924	\$86
7/1/18-19	\$1,073,000	200.4	\$5,400	11,439	\$94
7/1/19-20	\$1,563,000	298.9	\$5,200	12,920	\$121
Total	\$10,591,000	2,139.4	\$5,000	96,990	\$109

	<u>7/1/19-20</u>	<u>7/1/20-21</u>
(G) Selected Small Loss Severity	\$5,100	\$5,300
(H) Forecast Small Claim Counts	249.1	249.1
(I) Forecast Small Losses	\$1,270,000	\$1,320,000
(J) Exposures	12,920	12,920
(K) Forecast Small Loss Rate	\$98	\$102

(B) - Average of Columns (E) and (J)
 (C) - Difference in Column (C) from Exhibits 3-A and 3-B
 (D) = (B) / (C)
 (E) - Exhibit 1-A
 (F) = (B) / (E)
 (G) - Average of last four years
 (H) - Exhibit 3-B
 (I) = (G) * (H)
 (J) - Exhibit 1-A
 (K) = (I) / (J)

Forecast Ultimate Losses for 7/1/20-21
Total Experience Net of Member Deductibles

	<u>7/1/19-20</u>	<u>7/1/20-21</u>
(1) Forecast Small Losses {Exhibit 4-B}	\$1,270,000	\$1,320,000
(2) Forecast Number of Claims over \$100,000 {Exhibit 3-B}	2.7	2.7
(3) Expected Severity of Losses over \$100,000: {Exhibit 2}		
Limited to \$100,000	\$100,000	\$100,000
Limited to \$125,000	\$119,000	\$122,496
Limited to \$200,000	\$149,000	\$153,492
Limited to \$1,000,000	\$160,000	\$165,575
Unlimited	\$160,000	\$165,646
(4) Projected Total Losses {Line(1) + [Line(2) * Line (3)] }		
Limited to \$100,000	\$1,539,000	\$1,589,000
Limited to \$125,000	\$1,590,000	\$1,650,000
Limited to \$200,000	\$1,671,000	\$1,733,000
Limited to \$1,000,000	\$1,701,000	\$1,766,000
Unlimited	\$1,701,000	\$1,766,000
(5) Forecast Vehicle Counts	12,920	12,920
(6) Projected Cost per Vehicle {Line (4) / Line (5) }		
Limited to \$100,000	\$119	\$123
Limited to \$125,000	\$123	\$128
Limited to \$200,000	\$129	\$134
Limited to \$1,000,000	\$132	\$137
Unlimited	\$132	\$137
(7) Projected total Claims {Exhibit 3-A }	251.8	251.8
(8) Average Severity {Line (4) / Line (7) }		
Limited to \$100,000	\$6,100	\$6,300
Limited to \$125,000	\$6,300	\$6,600
Limited to \$125,000	\$6,600	\$6,900
Limited to \$125,000	\$6,800	\$7,000
Limited to \$125,000	\$6,800	\$7,000

***Distribution of Forecast Losses for 7/1/20-21
Assuming a \$100,000 SIR***

<i>Percentile</i>	<i>SIR Layer \$100,000</i>	<i>Layer \$900,000 xs \$100,000</i>	<i>Losses Limited to \$1,000,000</i>	<i>Losses Excess of \$1,000,000</i>	<i>Total Incurred Losses</i>
20.0%	\$1,335,000	\$51,000	\$1,437,000	\$0	\$1,437,000
30.0%	\$1,416,000	\$80,000	\$1,539,000	\$0	\$1,539,000
40.0%	\$1,487,000	\$110,000	\$1,628,000	\$0	\$1,628,000
50.0%	\$1,559,000	\$141,000	\$1,722,000	\$0	\$1,722,000
60.0%	\$1,634,000	\$177,000	\$1,819,000	\$0	\$1,819,000
70.0%	\$1,719,000	\$220,000	\$1,929,000	\$0	\$1,929,000
75.0%	\$1,769,000	\$247,000	\$1,991,000	\$0	\$1,991,000
80.0%	\$1,819,000	\$278,000	\$2,069,000	\$0	\$2,069,000
85.0%	\$1,887,000	\$315,000	\$2,154,000	\$0	\$2,154,000
90.0%	\$1,969,000	\$372,000	\$2,265,000	\$0	\$2,265,000
95.0%	\$2,098,000	\$461,000	\$2,432,000	\$0	\$2,433,000
99.0%	\$2,348,000	\$669,000	\$2,787,000	\$0	\$2,789,000
<i>Expected</i>	\$1,589,000	\$177,000	\$1,766,000	\$0	\$1,766,000
<i>Vehicles</i>	12,920				
<i>Students</i>	481,126				
<i>Cost Per Vehicle</i>	\$123	\$14	\$137	\$0	\$137
<i>Cost Per Student</i>	\$3.30	\$0.37	\$3.67	\$0.00	\$3.67

Percentiles based on combined distributions for small and large losses

Aggregate small losses modeled using a lognormal distribution

Large claim size modeled using an inverse Weibull distribution

Large claim counts modeled using a Poisson Distribution

Lognormal

Mu = 14.07694

Sigma = 0.18000

Inverse Weibull

Tau = 4.153472765

Theta = 134655.5963

Poisson

Lambda = 2.69

**Estimation of Cumulative Reported Loss Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
		$LN(1/(X+C))$	$LN(Y-1)$					
24	1.104	-6.9315	-2.2647	48.045	5.1289	15.6977	127	1.000
36	1.041	-6.9431	-3.1942	48.207	10.2030	22.1778	115	1.000
48	1.015	-6.9546	-4.1964	48.367	17.6096	29.1843	103	1.000
60	1.005	-6.9660	-5.2983	48.525	28.0722	36.9082	91	1.000
							79	1.001
							67	1.003
							55	1.008
							43	1.022
							31	1.060
							19	1.109
							7	1.901
Sum		-27.7953	-14.9536	193.1447	61.0136	103.9680		
Average		-6.9488	-3.7384	48.2862	15.2534	25.9920		

N =	4		
A =	1.100E+263		
B =	87.700	R^2 =	0.99812
C =	1000		

* - Appendix A4 from IBNR Study

**Estimation of Cumulative Paid Loss Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.993	-6.9197	-0.0075	47.882	0.0001	0.0519	127	1.000
24	1.397	-6.9315	-0.9232	48.045	0.8523	6.3993	115	1.000
36	1.141	-6.9431	-1.9590	48.207	3.8378	13.6017	103	1.000
48	1.050	-6.9546	-2.9972	48.367	8.9830	20.8443	91	1.001
60	1.017	-6.9660	-4.0866	48.525	16.7006	28.4676	79	1.003
72	1.004	-6.9773	-5.5690	48.682	31.0141	38.8567	67	1.008
							55	1.023
							43	1.067
							31	1.202
							19	1.614
							7	4.277
Sum		-41.6922	-15.5426	289.7092	61.3879	108.2215		
Average		-6.9487	-2.5904	48.2849	10.2313	18.0369		

N =	6		
A =	4.337E+285		
B =	95.024	R^2 =	0.99253
C =	1000		

* - Appendix A5 from IBNR Study

*Estimation of Cumulative Reported Claim Development Factors
Using "The Method of Least Squares"*

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.002						127	1.000
24	1.002						115	1.000
							103	1.000
							91	1.000
							79	1.000
							67	1.000
							55	1.000
							43	1.000
							31	1.000
							19	1.002
							7	1.718
Sum		0.0000	0.0000	0.0000	0.0000	0.0000		
Average		0.0000	0.0000	0.0000	0.0000	0.0000		

N =	2
A =	#DIV/0!
B =	#DIV/0! R^2 = #DIV/0!
C =	0

* - Appendix A6 from IBNR study

***U.S. Claims Cost Index
Automobile Liability***

(A)	(B)	(C)	(D)	(E)	(F)
Year	Index	Annual Percent Increase	Accident Period	Interpolated Index	Trend Factor to 7/1/20-21
2005	100.0				
2006	104.3	4.3%			
2007	109.2	4.7%			
2008	113.7	4.0%			
2009	119.4	5.0%			
2010	123.5	3.5%	7/1/09-10	121.4	1.424
2011	128.3	3.9%	7/1/10-11	125.9	1.374
2012	132.4	3.2%	7/1/11-12	130.4	1.327
2013	135.6	2.4%	7/1/12-13	134.0	1.291
2014	139.8	3.1%	7/1/13-14	137.7	1.256
2015	143.9	2.9%	7/1/14-15	141.9	1.219
2016	150.4	4.5%	7/1/15-16	147.2	1.175
2017	154.6	2.8%	7/1/16-17	152.5	1.134
2018	159.9	3.4%	7/1/17-18	157.2	1.100
2019*	164.7	3.0%	7/1/18-19	162.3	1.066
2020**	170.2	3.3%	7/1/19-20	167.5	1.033
2021**	175.8	3.3%	7/1/20-21	173.0	1.000

(B) and (C) - Towers Watson Claim Cost Index compiled by Jeremy Pecora, FCAS, MAAA

* - Numbers are preliminary

** - future trend estimated based on 2014-2019

(E) - Linear interpolation of column (B)

(F) - [(E), forecast period] / [(E), current period]

Section 5

Exhibits – General Liability

Exhibit 1	Summary of Data Large Loss Listing
Exhibit 2	Large Loss Severity Distribution
Exhibit 3	Forecast Total Claim Counts Forecast Large Claim Counts
Exhibit 4	Trended and Developed Small Losses Forecast Small Losses
Exhibit 5	Forecast Losses for 7/1/20-21
Exhibit 6	Aggregate Distribution of Forecast with Percentiles
Appendix A	Loss Development Factors
Appendix B	Loss Trend Factors

Summary of Loss and Exposure Data
Total Experience Net of Member Deductibles

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Evaluation Date	Maturity (months)	Reported NonZero Claims	Loss and Expense Payments	Loss and Expense Reserves	Loss and Expense Incurred	Students
7/1/09-10	1/31/2020	127	145	\$1,482,955	\$0	\$1,605,112	285,762
7/1/10-11	1/31/2020	115	105	\$2,056,011	\$19,510	\$2,136,383	326,537
7/1/11-12	1/31/2020	103	79	\$3,235,643	\$0	\$3,278,712	289,663
7/1/12-13	1/31/2020	91	109	\$626,494	\$60,367	\$736,528	271,629
7/1/13-14	1/31/2020	79	84	\$858,823	\$52,847	\$921,775	316,080
7/1/14-15	1/31/2020	67	114	\$1,979,607	\$113,859	\$2,151,283	370,755
7/1/15-16	1/31/2020	55	119	\$1,661,220	\$315,235	\$2,071,075	371,881
7/1/16-17	1/31/2020	43	133	\$2,768,604	\$758,814	\$3,583,148	383,868
7/1/17-18	1/31/2020	31	77	\$387,779	\$1,373,908	\$1,775,142	375,951
7/1/18-19	1/31/2020	19	113	\$250,571	\$1,294,929	\$1,565,301	432,856
7/1/19-20	1/31/2020	7	64	\$24,226	\$668,968	\$694,463	481,126
7/1/20-21							481,126

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services
- Loss and Exposure data contains only current OSIG members as of 1/31/2020

Large Claim Listing
Claims Exceeding \$100,000 after Development and Trend

(A)	(B)	(C)	(D)	(E)	(F)	(G)
<i>Occurrence #</i>	<i>Loss Date</i>	<i>Net Paid</i>	<i>Net Incurred</i>	<i>Severity Factor</i>	<i>Trend Factor</i>	<i>Loss After Development & Trend</i>
03267	11/4/2009	\$107,144	\$107,144	1.000	1.408	\$150,926
03567	2/18/2010	\$117,345	\$119,845	1.000	1.408	\$168,816
P625-10-03568	3/11/2010	\$86,866	\$86,866	1.000	1.408	\$122,361
90906	5/10/2010	\$304,711	\$304,711	1.000	1.408	\$429,222
P625-10-03653	5/19/2010	\$89,348	\$89,348	1.000	1.408	\$125,857
P625-10-03728	6/17/2010	\$85,569	\$88,069	1.000	1.408	\$124,055
P625-10-90080	8/19/2010	\$94,545	\$94,545	1.000	1.367	\$129,316
90084	8/22/2010	\$115,615	\$115,615	1.000	1.367	\$158,135
90118	9/1/2010	\$136,645	\$136,645	1.000	1.367	\$186,899
90205	10/14/2010	\$123,444	\$123,444	1.000	1.367	\$168,843
90236	10/25/2010	\$290,942	\$290,942	1.000	1.367	\$397,941
90297	12/6/2010	\$157,221	\$162,221	1.000	1.367	\$221,881
90313	12/14/2010	\$104,163	\$106,663	1.000	1.367	\$145,891
90519	3/11/2011	\$122,502	\$122,502	1.000	1.367	\$167,555
90838	6/30/2011	\$280,047	\$280,047	1.000	1.367	\$383,041
P625-11-91010	8/25/2011	\$84,730	\$84,730	1.001	1.322	\$112,100
91394	9/1/2011	\$149,418	\$149,418	1.001	1.322	\$197,682
91388	10/25/2011	\$443,010	\$443,010	1.001	1.322	\$586,111
P625-11-90962	10/26/2011	\$95,962	\$95,962	1.001	1.322	\$126,960
P625-11-90991	10/28/2011	\$97,912	\$97,912	1.001	1.322	\$129,539
91040	11/11/2011	\$1,708,795	\$1,708,795	1.001	1.322	\$2,260,766
91564	5/28/2012	\$210,533	\$210,533	1.001	1.322	\$278,539
92222	12/23/2013	\$145,266	\$150,266	1.004	1.252	\$188,906
92382	1/29/2014	\$100,352	\$100,352	1.004	1.252	\$126,156
92492	4/1/2014	\$55,153	\$108,000	1.004	1.252	\$135,771
92867	4/4/2014	\$176,221	\$176,221	1.004	1.252	\$221,535
92975	9/1/2014	\$99,630	\$142,500	1.009	1.218	\$175,219
92999	3/2/2015	\$240,862	\$240,862	1.009	1.218	\$296,165
P625-15-93000	3/11/2015	\$78,728	\$83,728	1.009	1.218	\$102,953
93289	3/22/2015	\$211,827	\$211,827	1.009	1.218	\$260,463
P625-15-93028	3/22/2015	\$84,519	\$87,019	1.009	1.218	\$106,999
94241	4/16/2015	\$366,221	\$366,221	1.009	1.218	\$450,307
93143	5/15/2015	\$141,576	\$141,576	1.009	1.218	\$174,083
P625-15-93609	12/3/2015	\$60,763	\$87,021	1.022	1.181	\$105,026
93680	3/7/2016	\$175,028	\$185,028	1.022	1.181	\$223,311
94063	3/24/2016	\$153,730	\$153,730	1.022	1.181	\$185,537
94446	5/5/2016	\$167,801	\$167,801	1.022	1.181	\$202,520
P625-16-93885	7/8/2016	\$91,628	\$94,128	1.053	1.143	\$113,297
P625-16-94009	9/13/2016	\$90,461	\$92,961	1.053	1.143	\$111,892
94168	11/3/2016	\$98,805	\$105,000	1.053	1.143	\$126,383
94291	12/16/2016	\$141,328	\$146,328	1.053	1.143	\$176,128
94280	1/27/2017	\$1,325,161	\$1,325,161	1.053	1.143	\$1,595,029
P625-17-94491	5/17/2017	\$87,382	\$87,382	1.053	1.143	\$105,178
P625-17-95484	6/26/2017	\$45,535	\$95,000	1.053	1.143	\$114,347
96032	9/12/2017	\$15,429	\$160,000	1.127	1.109	\$200,023

Large Claim Listing
Claims Exceeding \$100,000 after Development and Trend

(A)	(B)	(C)	(D)	(E)	(F)	(G)
<i>Occurrence #</i>	<i>Loss Date</i>	<i>Net Paid</i>	<i>Net Incurred</i>	<i>Severity Factor</i>	<i>Trend Factor</i>	<i>Loss After Development & Trend</i>
P625-17-95106	9/14/2017	\$11,501	\$91,500	1.127	1.109	\$114,388
P625-17-95154	12/1/2017	\$44,499	\$95,000	1.127	1.109	\$118,764
95506	1/11/2018	\$8,401	\$167,582	1.127	1.109	\$209,502
P625-18-95168	3/2/2018	\$18,213	\$95,958	1.127	1.109	\$119,962
P625-18-95025	4/12/2018	\$5,787	\$93,000	1.127	1.109	\$116,263
95055	5/3/2018	\$5,417	\$117,850	1.127	1.109	\$147,329
95249	5/15/2018	\$21,301	\$183,000	1.127	1.109	\$228,776
95302	7/25/2018	\$10,250	\$111,500	1.302	1.070	\$155,393
95512	9/29/2018	\$18,153	\$196,000	1.302	1.070	\$273,157
95577	12/23/2018	\$20,529	\$104,391	1.302	1.070	\$145,485
P625-19-95837	4/29/2019	\$7,389	\$72,200	1.302	1.070	\$100,622
		\$9,331,314	\$10,855,061			\$13,999,305

(A) through (D) - Provided by Jennifer McKenzie, Arthur J. Gallagher Risk Services

(E) = RLDF / CCDF

(F) - Appendix B

(G) = (D) * (E) * (F)

Fitted Large Claim Distribution
Claims Developed and Trended over \$100,000

Inverse Weibull Distribution
Tau = 2.76172
Theta = 145,992.0

<i>Percentile</i>	<i>Observed</i>	<i>Fitted</i>
5%	\$105,331	\$108,701
10%	\$112,118	\$115,952
15%	\$114,506	\$122,622
20%	\$118,377	\$129,003
25%	\$123,213	\$135,384
30%	\$126,309	\$142,054
35%	\$129,091	\$148,725
40%	\$141,155	\$155,976
45%	\$148,509	\$163,516
50%	\$158,148	\$171,927
55%	\$168,846	\$180,918
60%	\$175,829	\$191,359
65%	\$187,124	\$203,250
70%	\$199,715	\$217,462
75%	\$215,680	\$234,863
80%	\$224,730	\$257,196
85%	\$270,575	\$288,519
90%	\$348,425	\$337,244
95%	\$435,692	\$437,594
99%	\$1,051,752	\$789,109
<i>Limited to \$100,000</i>	\$100,000	\$100,000
<i>Limited to \$125,000</i>	\$121,686	\$123,066
<i>Limited to \$200,000</i>	\$158,614	\$165,946
<i>Limited to \$1,000,000</i>	\$216,893	\$209,727
<i>Unlimited</i>	\$250,097	\$212,262

Projected Total Claim Frequency

(A) Accident Period	(B) Number of Nonzero Claims	(C) CCDF	(D) Ultimate Claims	(E) Exposures (Students)	(F) Exposure Trend	(G) Trended Exposures	(H) Frequency per 1,000 Students
7/1/09-10	145	1.000	145.0	285,762	1.000	285,762	0.51
7/1/10-11	105	1.000	105.0	326,537	1.000	326,537	0.32
7/1/11-12	79	1.000	79.0	289,663	1.000	289,663	0.27
7/1/12-13	109	1.000	109.0	271,629	1.000	271,629	0.40
7/1/13-14	84	1.000	84.0	316,080	1.000	316,080	0.27
7/1/14-15	114	1.000	114.0	370,755	1.000	370,755	0.31
7/1/15-16	119	1.000	119.0	371,881	1.000	371,881	0.32
7/1/16-17	133	1.000	133.0	383,868	1.000	383,868	0.35
7/1/17-18	77	1.001	77.1	375,951	1.000	375,951	0.21
7/1/18-19	113	1.009	114.1	432,856	1.000	432,856	0.26
7/1/19-20	64	1.883	120.5	481,126	1.000	481,126	0.25
Total	1,142		1,199.7	3,906,108		3,906,108	0.31
						<u>7/1/19-20</u>	<u>7/1/20-21</u>
(I) Selected Frequency						0.24	0.24
(J) Forecast Exposure						481,126	481,126
(K) Forecast Total Claims						115.3	115.3

(B) - Exhibit 1-A

(C) - Appendix A3

(D) - (B) * (C)

(E) = Exhibit 1-A

(F) - no trend for student population

(G) = (E) * (F)

(H) = (D) / (G)

(I) = Three year average

(J) - Exhibit 1-A

(K) = (I) * (J)

Projected Large Claim Frequency
Claims Exceeding \$100,000 per Occurrence

(A) Accident Period	(B) Number of Claims > \$100,000	(C) CCDF	(D) Ultimate Claims	(E) Trended Exposures	(F) Frequency per 1,000 Students
7/1/09-10	6	1.000	6.0	285,762	0.021
7/1/10-11	9	1.000	9.0	326,537	0.028
7/1/11-12	7	1.000	7.0	289,663	0.024
7/1/12-13	0	1.000	0.0	271,629	0.000
7/1/13-14	4	1.000	4.0	316,080	0.013
7/1/14-15	7	1.000	7.0	370,755	0.019
7/1/15-16	4	1.000	4.0	371,881	0.011
7/1/16-17	7	1.000	7.0	383,868	0.018
7/1/17-18	8	1.001	8.0	375,951	0.021
7/1/18-19	4	1.009	4.0	432,856	0.009
7/1/19-20	0	1.883	0.0	481,126	0.000
Total	56		56.1	3,906,108	0.014
				<u>7/1/19-20</u>	<u>7/1/20-21</u>
		(G) Selected Frequency		0.016	0.016
		(H) Forecast Exposure		481,126	481,126
		(I) Forecast Number of Large Claims		7.9	7.9
		(J) Forecast Number of Small Claims		107.4	107.4

(B) - Exhibit 1-B

(C) - Appendix A3

(D) - (B) * (C)

(E) = Exhibit 3-A

(F) = (D) / (E) * 1,000

(G) = Average Excluding 19-20

(H) - Exhibit 1-A

(I) = (G) * (H)

(J) = (K) from Exhibit 3-A - (I)

**Estimation of Ultimate Small Losses
At the Forecast Loss Level**

	(A)	(B)	(C)	(D)	(E)
Accident Period	Reported Losses	Reported on Large Losses	Trend Factor to 7/1/20-21	Reported Develop. Factor	Ultimate on Small Claims
7/1/09-10	\$1,605,112	\$795,982	1.408	1.000	\$1,140,000
7/1/10-11	\$2,136,383	\$1,432,624	1.367	1.000	\$963,000
7/1/11-12	\$3,278,712	\$2,790,361	1.322	1.001	\$646,000
7/1/12-13	\$736,528	\$0	1.285	1.002	\$948,000
7/1/13-14	\$921,775	\$534,838	1.252	1.004	\$486,000
7/1/14-15	\$2,151,283	\$1,273,733	1.218	1.009	\$1,079,000
7/1/15-16	\$2,071,075	\$593,580	1.181	1.022	\$1,783,000
7/1/16-17	\$3,583,148	\$1,945,960	1.143	1.053	\$1,971,000
7/1/17-18	\$1,775,142	\$1,003,891	1.109	1.129	\$966,000
7/1/18-19	\$1,565,301	\$484,091	1.070	1.314	\$1,521,000
7/1/19-20	\$694,463	\$0	1.032	2.816	\$2,019,000
Total	\$20,518,921	\$10,855,061			\$13,522,000

	(F)	(G)	(H)	(I)	(J)
Accident Period	Paid Losses	Paid on Large Losses	Trend Factor to 7/1/20-21	Paid Develop. Factor	Ultimate on Small Claims
7/1/09-10	\$1,482,955	\$790,982	1.408	1.001	\$975,000
7/1/10-11	\$2,056,011	\$1,425,124	1.367	1.002	\$864,000
7/1/11-12	\$3,235,643	\$2,790,361	1.322	1.003	\$591,000
7/1/12-13	\$626,494	\$0	1.285	1.007	\$811,000
7/1/13-14	\$858,823	\$476,992	1.252	1.015	\$486,000
7/1/14-15	\$1,979,607	\$1,223,364	1.218	1.038	\$956,000
7/1/15-16	\$1,661,220	\$557,322	1.181	1.103	\$1,438,000
7/1/16-17	\$2,768,604	\$1,880,300	1.143	1.310	\$1,330,000
7/1/17-18	\$387,779	\$130,548	1.109	2.067	\$590,000
7/1/18-19	\$250,571	\$56,320	1.070	5.385	\$1,119,000
7/1/19-20	\$24,226	\$0	1.032	28.755	\$719,000
Total	\$15,331,933	\$9,331,314			\$9,879,000

(A) and (F) - Exhibit 1-A
 (B) and (G) - Exhibit 1-B
 (C) and (H) - Appendix B
 (D) - Appendix A1
 (E) = [(A) - (B)] * (C) * (D)
 (I) - Appendix A2
 (J) = [(F) - (G)] * (H) * (I)

**Calculation of Forecast Ultimate Losses for 7/1/20-21
Less than \$100,000 per Occurrence**

(A) Accident Period	(B) Trended Ultimate Losses	(C) Ultimate Small Claims	(D) Small Claim Severity	(E) Trended Exposures	(F) Loss Rate
7/1/09-10	\$1,058,000	139.0	\$7,600	285,762	\$3.70
7/1/10-11	\$914,000	96.0	\$9,500	326,537	\$2.80
7/1/11-12	\$619,000	72.0	\$8,600	289,663	\$2.14
7/1/12-13	\$880,000	109.0	\$8,100	271,629	\$3.24
7/1/13-14	\$486,000	80.0	\$6,100	316,080	\$1.54
7/1/14-15	\$1,018,000	107.0	\$9,500	370,755	\$2.75
7/1/15-16	\$1,783,000	115.0	\$15,500	371,881	\$4.79
7/1/16-17	\$1,971,000	126.0	\$15,600	383,868	\$5.13
7/1/17-18	\$966,000	69.1	\$14,000	375,951	\$2.57
7/1/18-19	\$1,521,000	110.0	\$13,800	432,856	\$3.51
7/1/19-20	\$2,019,000	120.5	\$16,800	481,126	\$4.20
Total	\$13,235,000	1,143.7	\$11,600	3,906,108	\$3.39
				<u>7/1/19-20</u>	<u>7/1/20-21</u>
(G) Selected Small Loss Severity				\$14,600	\$15,100
(H) Forecast Small Claim Counts				107.4	107.4
(I) Forecast Small Losses				\$1,569,000	\$1,622,000
(J) Exposures				481,126	481,126
(K) Forecast Small Loss Rate				\$3.26	\$3.37

(B) - Average of Columns (E) and (J) through 14-15, (E) for other years

(C) - Difference in Column (C) from Exhibits 3-A and 3-B

(D) = (B) / (C)

(E) - Exhibit 1-A

(F) = (B) / (E)

(G) - Average of last five years

(H) - Exhibit 3-B

(I) = (G) * (H)

(J) - Exhibit 1-A

(K) = (I) / (J)

Forecast Ultimate Losses for 7/1/20-21
Total Experience Net of Member Deductibles

	<u>7/1/19-20</u>	<u>7/1/20-21</u>
(1) Forecast Small Losses {Exhibit 4-B}	\$1,569,000	\$1,622,000
(2) Forecast Number of Claims over \$100,000 {Exhibit 3-B}	7.9	7.9
(3) Expected Severity of Losses over \$100,000: { Exhibit 2 }		
Limited to \$100,000	\$100,000	\$100,000
Limited to \$125,000	\$119,200	\$123,100
Limited to \$200,000	\$160,700	\$165,900
Limited to \$1,000,000	\$203,100	\$209,700
Unlimited	\$205,600	\$212,300
(4) Projected Total Losses { Line(1) + [Line(2) * Line (3)] }		
Limited to \$100,000	\$2,358,000	\$2,411,000
Limited to \$125,000	\$2,509,000	\$2,593,000
Limited to \$200,000	\$2,836,000	\$2,930,000
Limited to \$1,000,000	\$3,171,000	\$3,276,000
Unlimited	\$3,190,000	\$3,296,000
(5) Forecast Student Population	481,126	481,126
(6) Projected Cost per Student { Line (4) / Line (5) }		
Limited to \$100,000	\$4.90	\$5.01
Limited to \$125,000	\$5.21	\$5.39
Limited to \$200,000	\$5.89	\$6.09
Limited to \$1,000,000	\$6.59	\$6.81
Unlimited	\$6.63	\$6.85
(7) Projected Total Claims { Exhibit 3-A }	115.3	115.3
(8) Average Severity { Line (4) / Line (7) }		
Limited to \$100,000	\$20,400	\$20,900
Limited to \$125,000	\$21,800	\$22,500
Limited to \$125,000	\$24,600	\$25,400
Limited to \$125,000	\$27,500	\$28,400
Limited to \$125,000	\$27,700	\$28,600

***Distribution of Forecast Losses for 7/1/20-21
Assuming a \$100,000 SIR***

<i>Percentile</i>	<i>SIR Layer \$100,000</i>	<i>Layer \$900,000 xs \$100,000</i>	<i>Losses Limited to \$1,000,000</i>	<i>Losses Excess of \$1,000,000</i>	<i>Total Incurred Losses</i>
20.0%	\$1,876,000	\$467,000	\$2,498,000	\$0	\$2,499,000
30.0%	\$2,027,000	\$573,000	\$2,750,000	\$0	\$2,752,000
40.0%	\$2,167,000	\$675,000	\$2,970,000	\$0	\$2,974,000
50.0%	\$2,319,000	\$778,000	\$3,184,000	\$0	\$3,190,000
60.0%	\$2,472,000	\$901,000	\$3,405,000	\$0	\$3,412,000
70.0%	\$2,644,000	\$1,036,000	\$3,663,000	\$0	\$3,677,000
75.0%	\$2,752,000	\$1,113,000	\$3,802,000	\$0	\$3,819,000
80.0%	\$2,877,000	\$1,207,000	\$3,954,000	\$0	\$3,986,000
85.0%	\$3,036,000	\$1,317,000	\$4,152,000	\$0	\$4,194,000
90.0%	\$3,250,000	\$1,469,000	\$4,400,000	\$0	\$4,456,000
95.0%	\$3,574,000	\$1,717,000	\$4,786,000	\$0	\$4,871,000
99.0%	\$4,354,000	\$2,191,000	\$5,727,000	\$759,000	\$5,926,000
<i>Expected</i>	\$2,411,000	\$865,000	\$3,276,000	\$20,000	\$3,296,000
<i>Students</i>	481,126				
<i>Cost Per Student</i>	\$5.01	\$1.80	\$6.81	\$0.04	\$6.85

Percentiles based on combined distributions for small and large losses

Aggregate small losses modeled using a lognormal distribution

Large claim size modeled using an inverse Weibull distribution

Large claim counts modeled using a Poisson Distribution

Lognormal

Mu = 14.23792

Sigma= 0.35000

Inverse Weibull

Tau = 2.761723198

Theta = 145991.9807

Poisson

Lambda = 7.89

**Estimation of Cumulative Reported Loss Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.507	-6.9197	-0.6800	47.882	0.4624	4.7054	127	1.000
24	1.200	-6.9315	-1.6118	48.045	2.5979	11.1720	115	1.000
36	1.100	-6.9431	-2.3023	48.207	5.3008	15.9854	103	1.001
48	1.041	-6.9546	-3.1926	48.367	10.1929	22.2036	91	1.002
60	1.016	-6.9660	-4.1559	48.525	17.2715	28.9501	79	1.004
72	1.006	-6.9773	-5.1317	48.682	26.3346	35.8055	67	1.009
							55	1.022
							43	1.053
							31	1.129
							19	1.314
							7	2.816
Sum		-41.6922	-17.0744	289.7092	62.1600	118.8220		
Average		-6.9487	-2.8457	48.2849	10.3600	19.8037		

N =	6		
A =	1.202E+229		
B =	76.319	R^2 =	0.99667
C =	1000		

* - Appendix A4 from IBNR Study

*Estimation of Cumulative Paid Loss Development Factors
Using "The Method of Least Squares"*

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
		$LN(1/(X+C))$	$LN(Y-1)$					
12	12.479	-4.2767	2.4405	18.290	5.9559	-10.4371	127	1.001
24	3.159	-4.4308	0.7695	19.632	0.5922	-3.4096	115	1.002
36	1.630	-4.5643	-0.4627	20.833	0.2141	2.1121	103	1.003
48	1.229	-4.6821	-1.4722	21.922	2.1673	6.8930	91	1.007
60	1.057	-4.7875	-2.8598	22.920	8.1787	13.6915	79	1.015
72	1.027	-4.8828	-3.6126	23.842	13.0506	17.6394	67	1.038
84	1.011	-4.9698	-4.5203	24.699	20.4327	22.4648	55	1.103
							43	1.310
							31	2.067
							19	5.385
							7	28.755
Sum		-32.5941	-9.7176	152.1385	50.5916	48.9541		
Average		-4.6563	-1.3882	21.7341	7.2274	6.9934		

N =	7		
A =	4.017E+19		
B =	9.992	R^2 =	0.99817
C =	60		

* - Appendix A5 from IBNR Study

**Estimation of Cumulative Reported Claim Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.046	-2.8736	-3.0763	8.257	9.4634	8.8398	127	1.000
24	1.004	-3.3911	-5.5052	11.500	30.3070	18.6689	115	1.000
36	1.001	-3.7305	-7.2296	13.917	52.2673	26.9701	103	1.000
							91	1.000
							79	1.000
							67	1.000
							55	1.000
							43	1.000
							31	1.001
							19	1.009
							7	1.883
Sum		-9.9952	-15.8111	33.6739	92.0377	54.4788		
Average		-3.3317	-5.2704	11.2246	30.6792	18.1596		

N =	3		
A =	5.079E+04		
B =	4.834	R^2 =	0.99952
C =	5.7		

* - Appendix A6 from IBNR study

**U.S. Claims Cost Index
General Liability**

(A)	(B)	(C)	(D)	(E)	(F)
Year	Index	Annual Percent Increase	Accident Period	Interpolated Index	Trend Factor to 7/1/20-21
2005	100.0				
2006	104.4	4.4%			
2007	109.0	4.5%			
2008	113.2	3.8%			
2009	115.7	2.3%			
2010	118.4	2.3%	7/1/09-10	117.1	1.408
2011	122.8	3.7%	7/1/10-11	120.6	1.367
2012	126.7	3.2%	7/1/11-12	124.7	1.322
2013	129.9	2.5%	7/1/12-13	128.3	1.285
2014	133.5	2.8%	7/1/13-14	131.7	1.252
2015	137.2	2.8%	7/1/14-15	135.3	1.218
2016	142.1	3.6%	7/1/15-16	139.6	1.181
2017	146.4	3.0%	7/1/16-17	144.2	1.143
2018	150.9	3.1%	7/1/17-18	148.7	1.109
2019*	157.2	4.1%	7/1/18-19	154.1	1.070
2020**	162.3	3.2%	7/1/19-20	159.7	1.032
2021**	167.5	3.2%	7/1/20-21	164.9	1.000

(B) and (C) - Towers Watson Claim Cost Index compiled by Jeremy Pecora, FCAS, MAAA

* - Numbers are preliminary

** - future trend estimated based on 2014-2019

(E) - Linear interpolation of column (B)

(F) - [(E), forecast period] / [(E), current period]

Section 6

Exhibits – Auto Physical Damage

Exhibit 1	Summary of Data Large Loss Listing
Exhibit 2	NA
Exhibit 3	Forecast Total Claim Counts
Exhibit 4	Forecast Losses Limited to Primary Limits Forecast Losses Limited to Retention
Exhibit 5	Forecast Losses for 7/1/20-21
Exhibit 6	Aggregate Distribution of Forecast with Percentiles
Appendix A	Loss Development Factors
Appendix B	Loss Trend Factors

Summary of Loss and Exposure Data
Total Experience Net of Member Deductibles

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
Accident Period	Evaluation Date	Maturity (months)	Reported NonZero Claims	Losses Paid	Loss Reserves	Expense & Legal Paid	Expense & Legal Reserves	Total Loss and Expenses Incurred	Vehicles
7/1/09-10	1/31/2020	127	95	\$541,477	\$0	\$13,549	\$0	\$555,026	7,176
7/1/10-11	1/31/2020	115	90	\$426,977	\$0	\$13,212	\$0	\$440,189	7,842
7/1/11-12	1/31/2020	103	76	\$419,072	\$0	\$18,441	\$0	\$437,513	6,769
7/1/12-13	1/31/2020	91	78	\$495,899	\$0	\$24,822	\$0	\$520,721	5,999
7/1/13-14	1/31/2020	79	66	\$453,288	\$0	\$20,671	\$0	\$473,959	6,591
7/1/14-15	1/31/2020	67	113	\$692,898	\$0	\$38,548	\$0	\$731,447	8,327
7/1/15-16	1/31/2020	55	95	\$579,993	\$1,001	\$36,572	\$3,178	\$620,744	8,658
7/1/16-17	1/31/2020	43	109	\$640,996	\$1,000	\$40,340	\$3,772	\$686,108	9,425
7/1/17-18	1/31/2020	31	110	\$913,677	\$1,138	\$53,987	\$92	\$968,894	9,633
7/1/18-19	1/31/2020	19	117	\$589,067	\$11,352	\$53,208	\$29,971	\$683,599	12,117
7/1/19-20	1/31/2020	7	97	\$536,586	\$131,195	\$31,417	\$5,085	\$704,283	12,612
7/1/20-21									12,612

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services
- Loss and Exposure data contains only current OSIG members as of 1/31/2020

Large Claim Listing
Claims Exceeding \$100,000 after Development and Trend

(A)	(B)	(C)	(D)	(E)	(F) W/H Total Claim Over \$750,000	(G) Excess \$100,000	(H) AOP Excess \$250,000 WH xs \$750,000
Occurrence #	Loss Date	Net Paid	Net Incurred	AOP or Wind/Hail			
ADP Only Claims over \$100,000							
92831	12/3/2014	\$129,683	\$129,683	AOP		\$29,683	\$0
P625-16-93824	5/23/2016	\$158,279	\$158,279	AOP		\$58,279	\$0
94879	1/11/2018	\$318,916	\$318,916	AOP		\$218,916	\$68,916
Loss Amounts for ADP portion of Property Claims over \$250,000							
0041	5/10/2010	\$134,159	\$134,159	Wind/Hail	y	\$134,159	\$134,159
0050	5/22/2011	\$79,727	\$79,727	Wind/Hail	y	\$79,727	\$79,727
90999	11/7/2011	\$8,377	\$8,377	Wind/Hail		\$8,377	\$0
91287	5/4/2012	\$25,923	\$25,923	Wind/Hail		\$25,923	\$0
91351	5/29/2012	\$33,321	\$33,321	Wind/Hail		\$33,321	\$0
91392	7/14/2012	\$89,430	\$89,430	Wind/Hail		\$89,430	\$0
91393	7/16/2012	\$29,596	\$29,596	AOP		\$29,596	\$29,596
0052	4/26/2013	\$18,963	\$18,963	Wind/Hail	y	\$18,963	\$18,963
0054	5/30/2013	\$24,369	\$24,369	Wind/Hail	y	\$24,369	\$24,369
0055	3/25/2015	\$23,713	\$23,713	Wind/Hail	y	\$23,713	\$23,713
0060	7/14/2016	\$6,051	\$6,051	Wind/Hail	y	\$6,051	\$6,051
0064	5/27/2017	\$43,839	\$43,839	Wind/Hail	y	\$43,839	\$43,839
0069	3/24/2019	\$3,519	\$3,519	Wind/Hail	y	\$3,519	\$3,519
0070	5/22/2019	\$28,238	\$28,238	Wind/Hail	y	\$28,238	\$28,238
		\$1,156,103	\$1,156,103			\$856,103	\$461,091

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services

Projected Total Claim Frequency

(A) Accident Period	(B) Number of Nonzero Claims	(C) CCDF	(D) Ultimate Claims	(E) Exposures (Vehicles)	(F) Exposure Trend	(G) Trended Exposures	(H) Frequency per 1,000 Vehicles
7/1/09-10	95	1.000	95.0	7,176	1.000	7,176	13.2
7/1/10-11	90	1.000	90.0	7,842	1.000	7,842	11.5
7/1/11-12	76	1.000	76.0	6,769	1.000	6,769	11.2
7/1/12-13	78	1.000	78.0	5,999	1.000	5,999	13.0
7/1/13-14	66	1.000	66.0	6,591	1.000	6,591	10.0
7/1/14-15	113	1.000	113.0	8,327	1.000	8,327	13.6
7/1/15-16	95	1.000	95.0	8,658	1.000	8,658	11.0
7/1/16-17	109	1.000	109.0	9,425	1.000	9,425	11.6
7/1/17-18	110	1.000	110.0	9,633	1.000	9,633	11.4
7/1/18-19	117	1.000	117.0	12,117	1.000	12,117	9.7
7/1/19-20	97	1.857	180.1	12,612	1.000	12,612	14.3
Total	1,046		1,129.1	95,149		95,149	11.9

7/1/19-20 7/1/20-21

(I) Selected Frequency 11.7 11.7

(J) Forecast Exposure 12,612 12,612

(K) Forecast Total Claims 148.0 148.0

(B) - Exhibit 1-A

(C) - Appendix A3

(D) - (B) * (C)

(E) and (J) = Exhibit 1-A

(F) - no trend for vehicle counts

(G) = (E) * (F)

(H) = (D) / (G) * 1000

(I) = four year average

(K) = (I) * (J) / 1000

**Estimation of Ultimate Limited
Limited to \$100,000 per Occurrence**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Accident Period	Reported Losses	Excess Reported Losses	Limited Reported Losses	Trend Factor to 7/1/20-21	Reported Develop. Factor	Ultimate on Small Claims	Vehicles	Loss Rate
7/1/09-10	\$555,026	\$134,159	\$420,867	1.212	1.000	\$509,903	7,176	\$71.05
7/1/10-11	\$440,189	\$79,727	\$360,462	1.190	1.000	\$428,892	7,842	\$54.69
7/1/11-12	\$437,513	\$67,621	\$369,893	1.176	1.000	\$435,134	6,769	\$64.28
7/1/12-13	\$520,721	\$162,358	\$358,363	1.167	1.000	\$418,361	5,999	\$69.74
7/1/13-14	\$473,959	\$0	\$473,959	1.149	1.000	\$544,962	6,591	\$82.68
7/1/14-15	\$731,447	\$53,396	\$678,051	1.129	1.001	\$766,554	8,327	\$92.05
7/1/15-16	\$620,744	\$58,279	\$562,466	1.110	1.003	\$626,223	8,658	\$72.33
7/1/16-17	\$686,108	\$49,890	\$636,217	1.094	1.009	\$702,310	9,425	\$74.52
7/1/17-18	\$968,894	\$218,916	\$749,978	1.075	1.028	\$829,225	9,633	\$86.08
7/1/18-19	\$683,599	\$31,757	\$651,843	1.047	1.086	\$740,491	12,117	\$61.11
7/1/19-20	\$704,283	\$0	\$704,283	1.020	2.070	\$1,486,984	12,612	\$117.90
Total	\$6,822,483	\$856,103	\$5,966,380			\$7,489,039	95,149	\$78.71

(J) Selected Loss Rate \$84.00

(K) Forecast Vehicle Count 1,396

(L) Forecast Ultimate Losses \$117,000

(A) - Exhibit 1-A

(B) - Exhibit 1-B

(C) = (A) - (B)

(D) - Appenidx B

(E) - Appendix A1

(G) = (D) * (E) * (F)

(H) and (K) - Exhibit 1-A

(I) = (G) / (H)

(J) = Average of last six years

(L) = (J) * (K)

Estimation of Ultimate Limited Losses
Limited to \$250,000 - AOP or \$750,000 - Wind/Hail

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Accident Period	Reported Losses	Excess Reported Losses	Limited Reported Losses	Trend Factor to 7/1/20-21	Reported Develop. Factor	Ultimate on Small Claims	Vehicles	Loss Rate
7/1/09-10	\$555,026	\$134,159	\$420,867	1.212	1.000	\$509,903	7,176	\$71.05
7/1/10-11	\$440,189	\$79,727	\$360,462	1.190	1.000	\$428,892	7,842	\$54.69
7/1/11-12	\$437,513	\$0	\$437,513	1.176	1.000	\$514,681	6,769	\$76.03
7/1/12-13	\$520,721	\$72,928	\$447,793	1.167	1.000	\$522,764	5,999	\$87.15
7/1/13-14	\$473,959	\$0	\$473,959	1.149	1.000	\$544,962	6,591	\$82.68
7/1/14-15	\$731,447	\$23,713	\$707,733	1.129	1.001	\$800,111	8,327	\$96.08
7/1/15-16	\$620,744	\$0	\$620,744	1.110	1.003	\$691,108	8,658	\$79.83
7/1/16-17	\$686,108	\$49,890	\$636,217	1.094	1.009	\$702,310	9,425	\$74.52
7/1/17-18	\$968,894	\$68,916	\$899,978	1.075	1.028	\$995,075	9,633	\$103.30
7/1/18-19	\$683,599	\$31,757	\$651,843	1.047	1.086	\$740,491	12,117	\$61.11
7/1/19-20	\$704,283	\$0	\$704,283	1.020	2.070	\$1,486,984	12,612	\$117.90
Total	\$6,822,483	\$461,091	\$6,361,392			\$7,937,281	95,149	\$83.42

(J) Selected Loss Rate \$88.79

(K) Forecast Vehicle Count 11,216

(L) Forecast Ultimate Losses \$996,000

(A) - Exhibit 1-A

(B) - Exhibit 1-B

(C) = (A) - (B)

(D) - Appenidx B

(E) - Appendix A1

(G) = (D) * (E) * (F)

(H) and (K) - Exhibit 1-A

(I) = (G) / (H)

(J) = Average of last six years

(L) = (J) * (K)

***Forecast Ultimate Losses for 7/1/20-21
Total Experience Net of Member Deductibles***

	(A) <i>Vehicles</i>	(B) <i>Forecast Loss Rate</i>	(C) <i>Ultimate Losses</i>
<i>Limited to \$100,000</i>	1,396	\$84.00	\$117,000
<i>Limited to \$250,000 AOP/ \$500,000 W/H</i>	11,216	\$88.79	\$996,000
<i>Total Forecast for 7/1/20-21</i>	12,612	\$88.25	\$1,113,000

(A) - Provided by OSIG

(B) - Exhibit 4

(C) = (A) * (B)

Distribution of Forecast Losses for 7/1/20-21

<i>Percentile</i>	<i>Forecast Losses</i>
20.0%	\$892,000
30.0%	\$959,000
40.0%	\$1,018,000
50.0%	\$1,082,000
60.0%	\$1,145,000
70.0%	\$1,219,000
75.0%	\$1,261,000
80.0%	\$1,309,000
85.0%	\$1,363,000
90.0%	\$1,443,000
95.0%	\$1,558,000
99.0%	\$1,829,000
<i>Expected</i>	\$1,113,000

***Estimation of Cumulative Reported Loss Development Factors
Using "The Method of Least Squares"***

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
		$LN(1/(X+C))$	$LN(Y-1)$					
12	1.156	-6.9197	-1.8604	47.882	3.4611	12.8735	127	1.000
24	1.050	-6.9315	-2.9975	48.045	8.9848	20.7769	115	1.000
36	1.024	-6.9431	-3.7101	48.207	13.7648	25.7596	103	1.000
48	1.005	-6.9546	-5.2983	48.367	28.0722	36.8479	91	1.000
							79	1.000
							67	1.001
							55	1.003
							43	1.009
							31	1.028
							19	1.086
							7	2.070
Sum		-27.7489	-13.8663	192.5013	54.2829	96.2578		
Average		-6.9372	-3.4666	48.1253	13.5707	24.0645		

N =	4		
A =	2.917E+283		
B =	94.587	R^2 =	0.97726
C =	1000		

* - Appendix A4 from IBNR Study

**Estimation of Cumulative Reported Claim Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.000						127	1.000
24	1.000						115	1.000
							103	1.000
							91	1.000
							79	1.000
							67	1.000
							55	1.000
							43	1.000
							31	1.000
							19	1.000
							7	1.857
Sum		0.0000	0.0000	0.0000	0.0000	0.0000		
Average		0.0000	0.0000	0.0000	0.0000	0.0000		

N =	2		
A =			
B =		R^2 =	
C =	0		

* - Appendix A6 from IBNR study

**U.S. Claims Cost Index
Auto Physical Damage**

(A)	(B)	(C)	(D)	(E)	(F)
Year	Index	Annual Percent Increase	Accident Period	Interpolated Index	Trend Factor to 7/1/20-21
2005	100.0				
2006	102.4	2.4%			
2007	105.1	2.7%			
2008	107.9	2.6%			
2009	118.2	9.6%			
2010	120.3	1.7%	7/1/09-10	119.3	1.212
2011	122.6	1.9%	7/1/10-11	121.4	1.190
2012	123.1	0.4%	7/1/11-12	122.8	1.176
2013	124.5	1.2%	7/1/12-13	123.8	1.167
2014	126.9	1.9%	7/1/13-14	125.7	1.149
2015	129.0	1.6%	7/1/14-15	127.9	1.129
2016	131.4	1.9%	7/1/15-16	130.2	1.110
2017	132.8	1.1%	7/1/16-17	132.1	1.094
2018	135.9	2.3%	7/1/17-18	134.4	1.075
2019*	140.2	3.2%	7/1/18-19	138.1	1.047
2020**	143.0	2.0%	7/1/19-20	141.6	1.020
2021**	145.9	2.0%	7/1/20-21	144.5	1.000

(B) and (C) - Towers Watson Claim Cost Index compiled by Jeremy Pecora, FCAS, MAAA

* - Numbers are preliminary

** - future trend estimated based on 2014-2019

(E) - Linear interpolation of column (B)

(F) - [(E), forecast period] / [(E), current period]

Section 7

Exhibits – Property

Exhibit 1	Summary of Data Large Loss Listing
Exhibit 2	Large Loss Severity Distribution
Exhibit 3	Forecast Total Claim Counts Forecast Large Claim Counts AOP Forecast Large Claim Counts Wind/Hail
Exhibit 4	Trended and Developed Small Losses Forecast Small Losses
Exhibit 5	Forecast Losses for 7/1/20-21
Exhibit 6	Aggregate Distribution of Forecast with Percentiles
Appendix A	Loss Development Factors
Appendix B	Loss Trend Factors Exposure Trend Factors

Summary of Loss and Exposure Data
Total Experience Net of Member Deductibles

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
Accident Period	Evaluation Date	Maturity (months)	Reported NonZero Claims	Loss Payments	Loss Reserves	Expense Payments	Expense Reserves	Loss and Expense Incurred	Total Insured Value in \$100s
7/1/05-06	1/31/2020	175	114	\$2,367,403	\$0	\$113,519	\$0	\$2,480,921	\$44,317,442
7/1/06-07	1/31/2020	163	140	\$4,825,754	\$0	\$130,105	\$0	\$4,955,859	\$56,278,180
7/1/07-08	1/31/2020	151	148	\$26,282,269	\$0	\$181,748	\$0	\$26,464,017	\$61,641,514
7/1/08-09	1/31/2020	139	102	\$12,397,636	\$0	\$162,180	\$0	\$12,559,816	\$65,144,251
7/1/09-10	1/31/2020	127	136	\$15,700,143	\$0	\$196,758	\$0	\$15,896,901	\$68,862,087
7/1/10-11	1/31/2020	115	119	\$23,783,831	\$0	\$35,447	\$0	\$23,819,278	\$72,462,078
7/1/11-12	1/31/2020	103	85	\$3,424,900	\$0	\$45,334	\$0	\$3,470,234	\$68,774,610
7/1/12-13	1/31/2020	91	78	\$5,083,345	\$0	\$11,922	\$0	\$5,095,267	\$62,790,129
7/1/13-14	1/31/2020	79	85	\$4,050,701	\$0	\$32,448	\$0	\$4,083,150	\$69,196,749
7/1/14-15	1/31/2020	67	89	\$5,152,615	\$1,245,158	\$314,716	\$12,459	\$6,724,949	\$78,885,557
7/1/15-16	1/31/2020	55	75	\$9,638,482	\$4,230,859	\$215,318	\$2,515	\$14,087,174	\$79,767,233
7/1/16-17	1/31/2020	43	112	\$7,966,741	\$2,384,998	\$164,764	\$3,043	\$10,519,546	\$90,676,197
7/1/17-18	1/31/2020	31	80	\$12,355,578	\$7,782,474	\$197,991	\$112,513	\$20,448,556	\$89,793,708
7/1/18-19	1/31/2020	19	104	\$12,770,665	\$8,864,914	\$96,227	\$12,299	\$21,744,104	\$119,477,724
7/1/19-20	1/31/2020	7	65	\$1,959,964	\$2,710,460	\$50,997	\$28,512	\$4,749,932	\$155,270,625
7/1/20-21									\$155,752,159

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services
- Loss and Exposure data contains only current OSIG members as of 1/31/2020

Large Claim Listing
Claims Exceeding \$250,000 after Development and Trend

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Occurrence #	Loss Date	Pure loss Net Paid	Pure Loss Net Incurred	Severity Factor	Trend Factor	Loss After Development & Trend	AOP or Wind/Hail	Policy Year
0003	7/3/2005	\$509,241	\$509,241	1.000	1.496	\$761,816	Wind/Hail	7/1/05-06
01070	4/1/2006	\$249,726	\$249,726	1.000	1.496	\$373,586	Wind/Hail	7/1/05-06
01069	4/9/2006	\$196,964	\$196,964	1.000	1.496	\$294,655	AOP	7/1/05-06
0010	1/13/2007	\$652,354	\$652,354	1.000	1.437	\$937,438	AOP	7/1/06-07
01446	1/14/2007	\$2,391,851	\$2,391,851	1.000	1.437	\$3,437,107	AOP	7/1/06-07
01603	4/1/2007	\$450,156	\$450,156	1.000	1.437	\$646,877	AOP	7/1/06-07
01932	10/20/2007	\$4,417,502	\$4,417,502	1.000	1.386	\$6,121,858	AOP	7/1/07-08
02010	12/10/2007	\$7,939,099	\$7,939,099	1.000	1.386	\$11,002,154	AOP	7/1/07-08
02077	1/27/2008	\$4,048,087	\$4,048,087	1.000	1.386	\$5,609,916	AOP	7/1/07-08
02095	2/12/2008	\$1,330,642	\$1,330,642	1.000	1.386	\$1,844,029	AOP	7/1/07-08
0017	4/9/2008	\$623,294	\$623,294	1.000	1.386	\$863,772	Wind/Hail	7/1/07-08
02205	4/10/2008	\$264,208	\$264,208	1.000	1.386	\$366,144	AOP	7/1/07-08
02283	5/10/2008	\$1,079,655	\$1,079,655	1.000	1.386	\$1,496,206	Wind/Hail	7/1/07-08
0020	5/22/2008	\$737,893	\$737,893	1.000	1.386	\$1,022,586	Wind/Hail	7/1/07-08
P625-08-02314	5/26/2008	\$188,000	\$188,000	1.000	1.386	\$260,534	Wind/Hail	7/1/07-08
0022	6/1/2008	\$2,626,315	\$2,626,315	1.000	1.386	\$3,639,598	Wind/Hail	7/1/07-08
0019	6/5/2008	\$1,617,657	\$1,617,657	1.000	1.386	\$2,241,779	Wind/Hail	7/1/07-08
02442	8/5/2008	\$253,900	\$253,900	1.000	1.330	\$337,603	AOP	7/1/08-09
0024	11/5/2008	\$1,767,059	\$1,767,059	1.000	1.330	\$2,349,599	Wind/Hail	7/1/08-09
02724	1/21/2009	\$359,928	\$359,928	1.000	1.330	\$478,585	AOP	7/1/08-09
0026	1/26/2009	\$324,184	\$324,184	1.000	1.330	\$431,057	AOP	7/1/08-09
0027	2/10/2009	\$403,324	\$403,324	1.000	1.330	\$536,287	Wind/Hail	7/1/08-09
02786	2/27/2009	\$2,319,259	\$2,319,259	1.000	1.330	\$3,083,840	AOP	7/1/08-09
0030	3/27/2009	\$2,162,396	\$2,162,396	1.000	1.330	\$2,875,265	AOP	7/1/08-09
0031	4/9/2009	\$855,773	\$855,773	1.000	1.330	\$1,137,892	Wind/Hail	7/1/08-09
0033	4/25/2009	\$304,044	\$304,044	1.000	1.330	\$404,277	AOP	7/1/08-09
0037	4/29/2009	\$212,817	\$212,817	1.000	1.330	\$282,975	Wind/Hail	7/1/08-09
0034	5/13/2009	\$1,359,353	\$1,359,353	1.000	1.330	\$1,807,486	Wind/Hail	7/1/08-09
0036	6/11/2009	\$276,220	\$276,220	1.000	1.330	\$367,280	Wind/Hail	7/1/08-09
03081	7/27/2009	\$304,502	\$304,502	1.000	1.255	\$382,292	AOP	7/1/09-10
03122	8/21/2009	\$4,975,483	\$4,975,483	1.000	1.255	\$6,246,549	AOP	7/1/09-10
0038	12/28/2009	\$202,684	\$202,684	1.000	1.255	\$254,463	AOP	7/1/09-10
0039	1/9/2010	\$976,159	\$976,159	1.000	1.255	\$1,225,535	AOP	7/1/09-10
0040	1/30/2010	\$696,007	\$696,007	1.000	1.255	\$873,814	AOP	7/1/09-10
0041	5/10/2010	\$3,693,345	\$3,693,345	1.000	1.255	\$4,636,869	Wind/Hail	7/1/09-10
0042	5/14/2010	\$1,901,313	\$1,901,313	1.000	1.255	\$2,387,034	Wind/Hail	7/1/09-10
93604	6/12/2010	\$248,774	\$248,774	1.000	1.255	\$312,327	Wind/Hail	7/1/09-10
90050	8/4/2010	\$247,854	\$247,854	1.000	1.215	\$301,194	AOP	7/1/10-11
90336	12/30/2010	\$854,448	\$854,448	1.000	1.215	\$1,038,330	AOP	7/1/10-11
0043	2/2/2011	\$977,316	\$977,316	1.000	1.215	\$1,187,641	AOP	7/1/10-11
0044	2/3/2011	\$536,699	\$536,699	1.000	1.215	\$652,200	AOP	7/1/10-11
0046	2/10/2011	\$326,255	\$326,255	1.000	1.215	\$396,467	AOP	7/1/10-11
0048	4/14/2011	\$11,366,776	\$11,366,776	1.000	1.215	\$13,812,974	Wind/Hail	7/1/10-11
0050	5/23/2011	\$7,312,367	\$7,312,367	1.000	1.215	\$8,886,032	Wind/Hail	7/1/10-11
90999	11/7/2011	\$418,868	\$418,868	1.000	1.222	\$511,836	Wind/Hail	7/1/11-12
91234	4/15/2012	\$485,893	\$485,893	1.000	1.222	\$593,737	AOP	7/1/11-12
91287	5/4/2012	\$458,303	\$458,303	1.000	1.222	\$560,024	Wind/Hail	7/1/11-12
91351	5/29/2012	\$308,905	\$308,905	1.000	1.222	\$377,467	Wind/Hail	7/1/11-12
91392	7/14/2012	\$483,485	\$483,485	1.001	1.215	\$587,895	Wind/Hail	7/1/12-13
91393	7/16/2012	\$402,217	\$402,217	1.001	1.215	\$489,077	AOP	7/1/12-13
91814	4/18/2013	\$454,242	\$454,242	1.001	1.215	\$552,337	Wind/Hail	7/1/12-13

Large Claim Listing
Claims Exceeding \$250,000 after Development and Trend

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Occurrence #	Loss Date	Pure loss Net Paid	Pure Loss Net Incurred	Severity Factor	Trend Factor	Loss After Development & Trend	AOP or Wind/Hail	Policy Year
0052	4/26/2013	\$1,653,539	\$1,653,539	1.001	1.215	\$2,010,626	Wind/Hail	7/1/12-13
0054	5/31/2013	\$976,468	\$976,468	1.001	1.215	\$1,187,340	Wind/Hail	7/1/12-13
92144	11/6/2013	\$299,442	\$299,442	1.001	1.179	\$353,326	AOP	7/1/13-14
P625-14-92417	4/13/2014	\$214,978	\$214,978	1.001	1.179	\$253,663	Wind/Hail	7/1/13-14
92546	6/28/2014	\$2,284,671	\$2,284,671	1.001	1.179	\$2,695,791	AOP	7/1/13-14
0055	3/25/2015	\$2,198,146	\$3,443,305	1.003	1.148	\$3,962,176	Wind/Hail	7/1/14-15
93164	4/11/2015	\$331,500	\$331,500	1.003	1.148	\$381,454	Wind/Hail	7/1/14-15
0056	5/6/2015	\$406,091	\$406,091	1.003	1.148	\$467,285	Wind/Hail	7/1/14-15
0061	5/19/2015	\$620,862	\$620,862	1.003	1.148	\$714,420	Wind/Hail	7/1/14-15
0063	11/17/2015	\$792,926	\$792,926	1.006	1.116	\$890,075	AOP	7/1/15-16
0058	4/29/2016	\$681,598	\$681,598	1.006	1.116	\$765,108	Wind/Hail	7/1/15-16
0059	5/9/2016	\$1,201,103	\$1,201,103	1.006	1.116	\$1,348,262	Wind/Hail	7/1/15-16
94123	5/13/2016	\$756,610	\$756,611	1.006	1.116	\$849,311	Wind/Hail	7/1/15-16
95188	5/29/2016	\$4,569,142	\$8,800,000	1.006	1.116	\$9,878,172	Wind/Hail	7/1/15-16
0060	7/14/2016	\$2,575,182	\$2,575,182	1.017	1.085	\$2,842,285	Wind/Hail	7/1/16-17
93959	8/23/2016	\$458,500	\$458,500	1.017	1.085	\$506,056	AOP	7/1/16-17
94256	11/16/2016	\$1,099,838	\$2,300,000	1.017	1.085	\$2,538,561	AOP	7/1/16-17
94217	12/19/2016	\$347,321	\$347,322	1.017	1.085	\$383,347	AOP	7/1/16-17
94806	3/26/2017	\$0	\$1,100,000	1.017	1.085	\$1,214,094	Wind/Hail	7/1/16-17
0064	5/27/2017	\$1,034,337	\$1,034,337	1.017	1.085	\$1,141,621	Wind/Hail	7/1/16-17
0065	6/17/2017	\$339,169	\$377,722	1.017	1.085	\$416,900	Wind/Hail	7/1/16-17
P625-17-95832	7/3/2017	\$155,805	\$240,000	1.053	1.084	\$273,833	Wind/Hail	7/1/17-18
94628	8/29/2017	\$4,795,357	\$8,344,000	1.053	1.084	\$9,520,272	AOP	7/1/17-18
P625-17-94679	9/21/2017	\$227,239	\$227,239	1.053	1.084	\$259,273	AOP	7/1/17-18
95267	3/19/2018	\$506,240	\$4,000,000	1.053	1.084	\$4,563,889	Wind/Hail	7/1/17-18
95052	5/4/2018	\$732,883	\$733,050	1.053	1.084	\$836,390	AOP	7/1/17-18
0067	5/29/2018	\$3,095,758	\$3,653,841	1.053	1.084	\$4,168,931	Wind/Hail	7/1/17-18
0068	6/12/2018	\$1,012,374	\$1,110,000	1.053	1.084	\$1,266,479	Wind/Hail	7/1/17-18
0069	3/24/2019	\$711,559	\$732,468	1.195	1.062	\$930,125	Wind/Hail	7/1/18-19
0077	4/3/2019	\$90,750	\$1,890,750	1.195	1.062	\$2,400,968	Wind/Hail	7/1/18-19
95689	4/15/2019	\$2,010,581	\$2,735,000	1.195	1.062	\$3,473,039	AOP	7/1/18-19
0076	5/1/2019	\$1,181,082	\$1,638,318	1.195	1.062	\$2,080,418	Wind/Hail	7/1/18-19
0070	5/22/2019	\$6,025,614	\$9,109,104	1.195	1.062	\$11,567,193	Wind/Hail	7/1/18-19
95851	6/10/2019	\$107,688	\$415,000	1.195	1.062	\$526,988	Wind/Hail	7/1/18-19
0073	6/19/2019	\$257,653	\$2,274,885	1.195	1.062	\$2,888,762	Wind/Hail	7/1/18-19
0074	6/23/2019	\$630,400	\$865,495	1.195	1.062	\$1,099,049	Wind/Hail	7/1/18-19
0075	8/26/2019	\$510,663	\$749,935	1.520	1.025	\$1,168,547	Wind/Hail	7/1/19-20
95976	8/27/2019	\$430,823	\$550,000	1.520	1.025	\$857,009	AOP	7/1/19-20
P625-19-95990	8/31/2019	\$182,315	\$185,000	1.520	1.025	\$288,267	AOP	7/1/19-20
0078	10/19/2019	\$67,090	\$1,698,964	1.520	1.025	\$2,647,323	Wind/Hail	7/1/19-20
		\$123,126,097	\$149,362,006			\$186,894,923		

(A) through (D), (H) and (I) - from loss data provided by Jennifer McKenzie, Arthur J. Gallagher Risk Services

(E) = RLDF / CCDF

(F) - Appendix B1

(G) = (D) * (E) * (F)

Fitted Large Claim Distribution
Claims Developed and Trended over \$250,000

<i>All Other Perils</i>			<i>Wind/Hail</i>		
<u>Inverse Weibull Distribution</u>			<u>Inverse Weibull Distribution</u>		
<i>Tau = 1.22588</i>			<i>Tau = 1.16527</i>		
<i>Theta = 599,847.5</i>			<i>Theta = 749,274.6</i>		
<i>Percentile</i>	<i>Observed</i>	<i>Fitted</i>	<i>Percentile</i>	<i>Observed</i>	<i>Fitted</i>
5%	\$285,368	\$303,330	5%	\$278,861	\$330,983
10%	\$299,886	\$352,710	10%	\$367,911	\$396,165
15%	\$348,609	\$402,090	15%	\$380,059	\$459,371
20%	\$375,833	\$451,470	20%	\$476,195	\$524,552
25%	\$389,907	\$502,825	25%	\$533,962	\$591,709
30%	\$414,989	\$560,106	30%	\$568,385	\$664,791
35%	\$481,733	\$621,337	35%	\$754,707	\$743,799
40%	\$523,592	\$690,469	40%	\$855,095	\$834,658
45%	\$647,409	\$769,477	45%	\$1,017,963	\$935,394
50%	\$836,390	\$862,311	50%	\$1,139,757	\$1,053,905
55%	\$872,134	\$968,972	55%	\$1,188,678	\$1,196,120
60%	\$927,965	\$1,099,335	60%	\$1,315,549	\$1,365,987
65%	\$1,142,848	\$1,259,326	65%	\$1,837,957	\$1,577,333
70%	\$1,596,631	\$1,466,722	70%	\$2,193,371	\$1,853,860
75%	\$2,617,176	\$1,745,225	75%	\$2,390,518	\$2,225,198
80%	\$2,958,695	\$2,142,239	80%	\$2,803,293	\$2,764,426
85%	\$3,447,887	\$2,772,327	85%	\$3,752,500	\$3,623,637
90%	\$5,712,304	\$3,941,644	90%	\$4,524,393	\$5,249,225
95%	\$6,573,921	\$7,084,183	95%	\$9,332,495	\$9,719,097
99%	\$10,439,039	\$20,000,000	99%	\$12,667,626	\$20,000,000
<i>Limited to \$500,000</i>			<i>Limited to \$500,000</i>		
<i>Limited to \$750,000</i>			<i>Limited to \$750,000</i>		
<i>Unlimited</i>			<i>Unlimited</i>		
	\$446,667	\$469,547		\$466,679	\$478,850
	\$585,100	\$632,492		\$639,559	\$661,192
	\$1,900,346	\$1,894,388		\$2,168,873	\$2,355,947

Projected Total Claim Frequency

(A) Accident Period	(B) Number of Nonzero Claims	(C) CCDF	(D) Ultimate Claims	(E) Exposures TIV (\$100s)	(F) Exposure Trend	(G) Trended Exposures	(H) Frequency per \$1M TIV
7/1/05-06	114	1.000	114.0	\$44,317,442	1.330	\$58,940,943	0.019
7/1/06-07	140	1.000	140.0	\$56,278,180	1.291	\$72,638,995	0.019
7/1/07-08	148	1.000	148.0	\$61,641,514	1.249	\$76,984,089	0.019
7/1/08-09	102	1.000	102.0	\$65,144,251	1.228	\$79,991,985	0.013
7/1/09-10	136	1.000	136.0	\$68,862,087	1.220	\$84,004,085	0.016
7/1/10-11	119	1.000	119.0	\$72,462,078	1.191	\$86,328,451	0.014
7/1/11-12	85	1.000	85.0	\$68,774,610	1.161	\$79,860,419	0.011
7/1/12-13	78	1.000	78.0	\$62,790,129	1.141	\$71,645,509	0.011
7/1/13-14	85	1.000	85.0	\$69,196,749	1.124	\$77,757,047	0.011
7/1/14-15	89	1.000	89.0	\$78,885,557	1.114	\$87,886,601	0.010
7/1/15-16	75	1.000	75.0	\$79,767,233	1.106	\$88,255,938	0.008
7/1/16-17	112	1.000	112.0	\$90,676,197	1.088	\$98,644,552	0.011
7/1/17-18	80	1.000	80.0	\$89,793,708	1.064	\$95,501,410	0.008
7/1/18-19	104	1.000	104.0	\$119,477,724	1.041	\$124,431,835	0.008
7/1/19-20	65	1.857	120.7	\$155,270,625	1.021	\$158,577,889	0.008
Total	1,532		1,587.7	\$1,183,338,084		\$1,341,449,748	0.012

7/1/19-20 7/1/20-21

(I) Selected Frequency

0.009

0.009

(J) Forecast Exposure

\$155,270,625

\$155,752,159

(K) Forecast Total Claims

143.6

141.0

(L) Large AOP Claims

5.1

5.0

(M) Large Wind/Hail Claims

6.6

6.5

(N) Forecast Small Losses

131.9

129.6

(B) - Exhibit 1-A

(C) - Appendix A3

(D) - (B) * (C)

(E) and (I) = Exhibit 1-A

(F) - Appndix B2

(G) = (E) * (F)

(H) = (D) / (G) * 10,000

(I) - Six year average, detrended for 19-20

(K) = (I) * (J) / 10,000

(L) and (M) - Exhibit 3-B and 3-C

(N) = (K) - (L) - (M)

Projected Large Claim Frequency - AOP
Claims Exceeding \$250,000 per Occurrence

(A) Accident Period	(B) Number of Claims > \$250,000	(C) CCDF	(D) Ultimate Claims	(E) Trended Exposures	(F) Frequency per \$1M TIV
7/1/05-06	1	1.000	1.0	\$58,940,943	0.0002
7/1/06-07	3	1.000	3.0	\$72,638,995	0.0004
7/1/07-08	5	1.000	5.0	\$76,984,089	0.0006
7/1/08-09	6	1.000	6.0	\$79,991,985	0.0008
7/1/09-10	5	1.000	5.0	\$84,004,085	0.0006
7/1/10-11	5	1.000	5.0	\$86,328,451	0.0006
7/1/11-12	1	1.000	1.0	\$79,860,419	0.0001
7/1/12-13	1	1.000	1.0	\$71,645,509	0.0001
7/1/13-14	2	1.000	2.0	\$77,757,047	0.0003
7/1/14-15	0	1.000	0.0	\$87,886,601	0.0000
7/1/15-16	1	1.000	1.0	\$88,255,938	0.0001
7/1/16-17	3	1.000	3.0	\$98,644,552	0.0003
7/1/17-18	3	1.000	3.0	\$95,501,410	0.0003
7/1/18-19	1	1.000	1.0	\$124,431,835	0.0001
7/1/19-20	2	1.857	3.7	\$158,577,889	0.0002
Total	39		40.7	\$1,341,449,748	0.0003
				<u>7/1/19-20</u>	<u>7/1/20-21</u>
			(G) Selected Frequency	0.0003	0.0003
			(H) Forecast Exposure	155,270,625	\$155,752,159
			(I) Forecast Number of AOP claims over \$250,000	5.1	5.0

(B) - Exhibit 1-B
(C) - Appendix A3
(D) - (B) * (C) / 10,000
(E) and (H) = Exhibit 3-A
(F) = (D) / (E) * 10,000
(G) - Average Excluding 19-20
(I) = (G) * (H) / 10,000

**Projected Large Claim Frequency - Wind/Hail
Claims Exceeding \$250,000 per Occurrence**

(A) Accident Period	(B) Number of Claims > \$250,000	(C) CCDF	(D) Ultimate Claims	(E) Trended Exposures	(F) Frequency per \$1M TIV
7/1/05-06	2	1.000	2.0	\$58,940,943	0.0003
7/1/06-07	0	1.000	0.0	\$72,638,995	0.0000
7/1/07-08	6	1.000	6.0	\$76,984,089	0.0008
7/1/08-09	6	1.000	6.0	\$79,991,985	0.0008
7/1/09-10	3	1.000	3.0	\$84,004,085	0.0004
7/1/10-11	2	1.000	2.0	\$86,328,451	0.0002
7/1/11-12	3	1.000	3.0	\$79,860,419	0.0004
7/1/12-13	4	1.000	4.0	\$71,645,509	0.0006
7/1/13-14	1	1.000	1.0	\$77,757,047	0.0001
7/1/14-15	4	1.000	4.0	\$87,886,601	0.0005
7/1/15-16	4	1.000	4.0	\$88,255,938	0.0005
7/1/16-17	4	1.000	4.0	\$98,644,552	0.0004
7/1/17-18	4	1.000	4.0	\$95,501,410	0.0004
7/1/18-19	7	1.000	7.0	\$124,431,835	0.0006
7/1/19-20	2	1.857	3.7	\$158,577,889	0.0002
Total	52		53.7	\$1,341,449,748	0.0004

7/1/19-20 7/1/20-21

(G) Selected Frequency 0.0004 0.0004

(H) Forecast Exposure 155,270,625 \$155,752,159

(I) Forecast Number of Wind/Hail claims over \$250,000 6.6 6.5

(B) - Exhibit 1-B

(C) - Appendix A3

(D) - (B) * (C) / 10,000

(E) and (H) = Exhibit 3-A

(F) = (D) / (E) * 10,000

(G) - Average Excluding 19-20

(I) = (G) * (H) / 10,000

Oklahoma Schools Insurance Group
Property

Exhibit 4-A

*Estimation of Ultimate Small Losses
Less than \$250,000 per Occurrence*

<i>Accident Period</i>	<i>(A) Reported Losses</i>	<i>(B) Reported on Large Losses</i>	<i>(C) Trend Factor to 7/1/20-21</i>	<i>(D) Reported Develop. Factor</i>	<i>(E) Ultimate on Small Claims</i>
7/1/05-06	\$2,480,921	\$955,930	1.496	1.000	\$2,281,343
7/1/06-07	\$4,955,859	\$3,494,362	1.437	1.000	\$2,100,149
7/1/07-08	\$26,464,017	\$24,872,351	1.386	1.000	\$2,205,705
7/1/08-09	\$12,559,816	\$10,598,258	1.330	1.000	\$2,608,108
7/1/09-10	\$15,896,901	\$12,998,268	1.255	1.000	\$3,638,878
7/1/10-11	\$23,819,278	\$21,621,714	1.215	1.000	\$2,670,168
7/1/11-12	\$3,470,234	\$1,671,969	1.222	1.000	\$2,196,918
7/1/12-13	\$5,095,267	\$3,969,952	1.215	1.000	\$1,367,797
7/1/13-14	\$4,083,150	\$2,799,091	1.179	1.000	\$1,514,025
7/1/14-15	\$6,724,949	\$4,801,758	1.148	1.001	\$2,209,895
7/1/15-16	\$14,087,174	\$12,232,240	1.116	1.003	\$2,076,057
7/1/16-17	\$10,519,546	\$8,193,063	1.085	1.009	\$2,549,020
7/1/17-18	\$20,448,556	\$18,308,130	1.084	1.028	\$2,385,429
7/1/18-19	\$21,744,104	\$19,661,022	1.062	1.086	\$2,402,332
7/1/19-20	\$4,749,932	\$3,183,899	1.025	2.070	\$3,323,290
<i>Total</i>	\$177,099,705	\$149,362,006			\$35,529,114

(A) and (F) - Exhibit 1-A

(B) and (G) - Exhibit 1-B

(C) and (H) - Appendix B

(D) - Appendix A1

(E) = [(A) - (B)] * (C) * (D)

(I) - Appendix A2

(J) = [(F) - (G)] * (H) * (I)

**Calculation of Forecast Ultimate Losses for 7/1/20-21
Less than \$250,000 per Occurrence**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Period	Trended Ultimate Losses	Ultmate Small Claims	Small Claim Severity	Trended Exposures	Loss Rate
7/1/05-06	\$2,281,343	111.0	\$20,600	\$58,940,943	\$0.039
7/1/06-07	\$2,100,149	137.0	\$15,300	\$72,638,995	\$0.029
7/1/07-08	\$2,205,705	137.0	\$16,100	\$76,984,089	\$0.029
7/1/08-09	\$2,608,108	90.0	\$29,000	\$79,991,985	\$0.033
7/1/09-10	\$3,638,878	128.0	\$28,400	\$84,004,085	\$0.043
7/1/10-11	\$2,670,168	112.0	\$23,800	\$86,328,451	\$0.031
7/1/11-12	\$2,196,918	81.0	\$27,100	\$79,860,419	\$0.028
7/1/12-13	\$1,367,797	73.0	\$18,700	\$71,645,509	\$0.019
7/1/13-14	\$1,514,025	82.0	\$18,500	\$77,757,047	\$0.019
7/1/14-15	\$2,209,895	85.0	\$26,000	\$87,886,601	\$0.025
7/1/15-16	\$2,076,057	70.0	\$29,700	\$88,255,938	\$0.024
7/1/16-17	\$2,549,020	105.0	\$24,300	\$98,644,552	\$0.026
7/1/17-18	\$2,385,429	73.0	\$32,700	\$95,501,410	\$0.025
7/1/18-19	\$2,402,332	96.0	\$25,000	\$124,431,835	\$0.019
7/1/19-20	\$3,323,290	113.3	\$29,300	\$158,577,889	\$0.021
Total	\$35,529,114	1,493.3	\$23,800	\$1,341,449,748	\$0.026
				7/1/19-20	7/1/20-21
	(G) Selected Small Loss Severity			\$27,500	\$28,200
	(H) Forecast Small Claim Counts			131.9	129.6
	(I) Forecast Small Losses			\$3,627,000	\$3,654,000
	(J) Exposures			\$155,270,625	\$155,752,159
	(K) Forecast Small Loss Rate			\$0.023	\$0.023

(B) - Exhibit 4-A

(C) - Exhibit 3, Total Ultimate Claims less Ultimate large claims

(D) = (B) / (C)

(E) and (J) - Exhibit 3-A

(F) = (C) / (E)

(G) - Average of last five years

(H) - Exhibit 3-A

(I) = (G) * (H)

(K) = (I) / (J)

Forecast Ultimate Losses for 7/1/20-21
Total Experience Net of Member Deductibles

				<u>7/1/20-21</u>
(1) Forecast Small Losses {Exhibit 4-B}				\$3,654,000
(2) Forecast Number of Claims over \$250,000 { Exhibit 3-B and 3-C, one full Flood retention every ten years }	<u>AOP</u>	<u>Flood</u>	<u>Wind/Hail</u>	
	5.0	0.1	6.5	11.5
(3) Expected Severity of Losses over \$250,000 { Exhibit 2 }				
Limited to \$250,000	\$250,000		\$250,000	
Limited to \$500,000		\$500,000	\$478,850	
Limited to \$750,000			\$661,192	
Unlimited	\$1,894,388		\$2,355,947	
(4) Projected Total Losses { Line(1) + [Line(2) * Line (3)] }				
Option 1: Limited to \$250,000 AOP/ \$500,000 Wind				\$8,001,000
Option 2: Limited to \$250,000 AOP/ \$500,000 Flood / \$750,000 Wind				\$9,231,000
Unlimited				\$28,360,000
(5) Cost of Corridor { Losses Excess of Retention, Limited to Corridor }			<u>Corridor Level</u>	
			\$1,400,000	\$3,000,000
(6) Projected Total Losses including Corridor { Line (4) + Line (5) }				
			<u>Corridor \$1.4M</u>	<u>Corridor \$3.0M</u>
Option 1: Limited to \$250,000 AOP/ \$500,000 Wind			\$9,401,000	
Option 2: Limited to \$250,000 AOP/ \$500,000 Flood / \$750,000 Wind				\$12,231,000
(7) Forecast TIV in \$100s				155,752,159
(8) Projected Cost per \$100 TIV, including Corridor { Line (6) / Line (7) }				
			<u>Corridor \$1.4M</u>	<u>Corridor \$3.0M</u>
Option 1: Limited to \$250,000 AOP/ \$500,000 Wind			\$0.060	
Option 2: Limited to \$250,000 AOP/ \$500,000 Flood / \$750,000 Wind				\$0.079

Distribution of Forecast Losses for 7/1/20-21 - Option 1

AOP Retention \$250,000
Flood Retention --
Wind/Hail Retention \$500,000
Corridor Deductible \$1,400,000

<i>Percentile</i>	<i>Retention Layer</i>	<i>Cost of Corridor Ltd. \$1.4M</i>	<i>Total Retained Losses</i>	<i>Insured Excess Losses</i>	<i>Total Incurred Losses</i>
20.0%	\$6,576,000	\$1,400,000	\$7,976,000	\$7,352,000	\$16,236,000
30.0%	\$7,052,000	\$1,400,000	\$8,451,000	\$9,968,000	\$19,058,000
40.0%	\$7,476,000	\$1,400,000	\$8,876,000	\$12,632,000	\$22,036,000
50.0%	\$7,883,000	\$1,400,000	\$9,283,000	\$15,708,000	\$25,291,000
60.0%	\$8,299,000	\$1,400,000	\$9,699,000	\$19,551,000	\$29,219,000
70.0%	\$8,758,000	\$1,400,000	\$10,158,000	\$23,930,000	\$33,551,000
75.0%	\$9,017,000	\$1,400,000	\$10,417,000	\$26,207,000	\$35,939,000
80.0%	\$9,315,000	\$1,400,000	\$10,715,000	\$29,062,000	\$38,843,000
85.0%	\$9,675,000	\$1,400,000	\$11,075,000	\$32,323,000	\$42,404,000
90.0%	\$10,128,000	\$1,400,000	\$11,528,000	\$36,818,000	\$47,206,000
95.0%	\$10,788,000	\$1,400,000	\$12,188,000	\$44,483,000	\$54,979,000
99.0%	\$12,137,000	\$1,400,000	\$13,537,000	\$59,027,000	\$70,127,000
Expected	\$8,001,000	\$1,400,000	\$9,401,000	\$18,959,000	\$28,360,000
<i>TIV in \$100s</i>	155,752,159				
Cost Per Student	\$0.051	\$0.009	\$0.060	\$0.122	\$0.182

Percentiles based on combined distributions for small and large losses

Aggregate small losses modeled using a lognormal distribution

Large claim size modeled using an inverse Weibull distribution

Large claim counts modeled using a Poisson Distribution

Lognormal
 Mu = 15.08008
 Sigma= 0.25

	AOP	Wind/Hail
	<u>Inverse Weibull</u>	<u>Inverse Weibull</u>
Tau =	1.22588	1.16768
Theta =	599847.5	744958.6
	<u>Poisson</u>	<u>Poisson</u>
Lambda =	5.00	6.47

Distribution of Forecast Losses for 7/1/20-21 - Option 2

AOP Retention \$250,000
Flood Retention \$500,000
Wind/Hail Retention \$750,000
Corridor Deductible \$3,000,000

<i>Percentile</i>	<i>Retention Layer</i>	<i>Cost of Corridor Ltd. \$3.0M</i>	<i>Total Retained Losses</i>	<i>Insured Excess Losses</i>	<i>Total Incurred Losses</i>
20.0%	\$7,435,000	\$3,000,000	\$10,405,000	\$4,746,000	\$16,236,000
30.0%	\$8,046,000	\$3,000,000	\$11,029,000	\$7,234,000	\$19,058,000
40.0%	\$8,569,000	\$3,000,000	\$11,557,000	\$9,857,000	\$22,036,000
50.0%	\$9,077,000	\$3,000,000	\$12,070,000	\$12,856,000	\$25,291,000
60.0%	\$9,603,000	\$3,000,000	\$12,600,000	\$16,619,000	\$29,219,000
70.0%	\$10,180,000	\$3,000,000	\$13,177,000	\$21,045,000	\$33,551,000
75.0%	\$10,495,000	\$3,000,000	\$13,493,000	\$23,320,000	\$35,939,000
80.0%	\$10,852,000	\$3,000,000	\$13,851,000	\$26,093,000	\$38,843,000
85.0%	\$11,320,000	\$3,000,000	\$14,320,000	\$29,275,000	\$42,404,000
90.0%	\$11,897,000	\$3,000,000	\$14,895,000	\$33,723,000	\$47,206,000
95.0%	\$12,727,000	\$3,000,000	\$15,727,000	\$41,380,000	\$54,979,000
99.0%	\$14,372,000	\$3,000,000	\$17,372,000	\$55,484,000	\$70,127,000
Expected	\$9,231,000	\$3,000,000	\$12,231,000	\$16,129,000	\$28,360,000
<i>TIV in \$100s</i>	155,752,159				
Cost Per Student	\$0.059	\$0.019	\$0.079	\$0.104	\$0.182

Percentiles based on combined distributions for small and large losses

Aggregate small losses modeled using a lognormal distribution

Large claim size modeled using an inverse Weibull distribution

Large claim counts modeled using a Poisson Distribution

Lognormal

Mu = 15.08008
Sigma= 0.25

AOP

Wind/Hail

Inverse Weibull

Inverse Weibull

Tau = 1.22588
Theta = 599847.5

1.16768
744958.6

Poisson

Poisson

Lambda = 5.00

6.47

Estimation of Cumulative Reported Loss Development Factors
Losses Limited to \$250,000 per Occurrence
Using "The Method of Least Squares"

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.156	-6.9197	-1.8604	47.882	3.4611	12.8735	175	1.000
24	1.050	-6.9315	-2.9975	48.045	8.9848	20.7769	163	1.000
36	1.024	-6.9431	-3.7101	48.207	13.7648	25.7596	151	1.000
48	1.005	-6.9546	-5.2983	48.367	28.0722	36.8479	139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.000
							79	1.000
							67	1.001
							55	1.003
							43	1.009
Sum		-27.7489	-13.8663	192.5013	54.2829	96.2578	31	1.028
Average		-6.9372	-3.4666	48.1253	13.5707	24.0645	19	1.086
							7	2.070

N =	4	
A =	2.917E+283	
B =	94.587	R^2 = 0.97726
C =	1000	

* - Appendix A4 from IBNR Study

**Estimation of Cumulative Reported Loss Development Factors
Unlimited Reported Losses
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.486	-4.2047	-0.7213	17.679	0.5203	3.0330	175	1.000
24	1.092	-4.3694	-2.3825	19.092	5.6765	10.4104	163	1.000
36	1.040	-4.5109	-3.2114	20.348	10.3131	14.4862	151	1.000
48	1.010	-4.6347	-4.6052	21.481	21.2076	21.3437	139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.001
							79	1.001
							67	1.003
							55	1.006
							43	1.017
Sum		-17.7197	-10.9205	78.6001	37.7176	49.2734	31	1.053
Average		-4.4299	-2.7301	19.6500	9.4294	12.3183	19	1.195
							7	2.823

N =	4
A =	3.781E+15
B =	8.713
C =	55
R^2 =	0.98828

* - Appendix A5 from IBNR Study

**Estimation of Cumulative Reported Claim Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.000						175	1.000
24	1.000						163	1.000
							151	1.000
							139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.000
							79	1.000
							67	1.000
							55	1.000
							43	1.000
Sum		0.0000	0.0000	0.0000	0.0000	0.0000	31	1.000
Average		0.0000	0.0000	0.0000	0.0000	0.0000	19	1.000
							7	1.857

N =	2		
A =	#DIV/0!		
B =	#DIV/0!	R^2 =	#DIV/0!
C =	0		

* - Appendix A6 from IBNR study

***Derivation of Loss Trend Factors
Base on U.S. Claims Cost Index - Commerical Property***

(A)	(B)	(C)	(D)	(E)	(F)
Year	Index	Annual Percent Increase	Accident Period	Interpolated Index	Trend Factor to 7/1/20-21
2005	100.0				
2006	104.7	4.7%	7/1/05-06	102.3	1.496
2007	108.4	3.6%	7/1/06-07	106.5	1.437
2008	112.5	3.8%	7/1/07-08	110.5	1.386
2009	117.7	4.6%	7/1/08-09	115.1	1.330
2010	126.2	7.2%	7/1/09-10	121.9	1.255
2011	125.8	-0.3%	7/1/10-11	126.0	1.215
2012	124.8	-0.8%	7/1/11-12	125.3	1.222
2013	127.1	1.9%	7/1/12-13	126.0	1.215
2014	132.6	4.3%	7/1/13-14	129.9	1.179
2015	134.1	1.1%	7/1/14-15	133.4	1.148
2016	140.3	4.6%	7/1/15-16	137.2	1.116
2017	141.8	1.0%	7/1/16-17	141.0	1.085
2018	140.7	-0.7%	7/1/17-18	141.2	1.084
2019*	147.5	4.8%	7/1/18-19	144.1	1.062
2020**	151.2	2.5%	7/1/19-20	149.3	1.025
2021**	155.0	2.5%	7/1/20-21	153.1	1.000

(B) and (C) - Towers Watson Claim Cost Index compiled by Jeremy Pecora, FCAS, MAAA

* - Numbers are preliminary

** - future trend estimated based on 2014-2019

(E) - Linear interpolation of column (B)

(F) - [(E), forecast period] / [(E), current period]

*Derivation of Exposure Trend Factors
Based on the Consumer Price Index*

(A)	(B)	(C)	(D)	(E)	(F)
Year	Index	Annual Percent Increase	Accident Period	Interpolated Index	Trend Factor to 7/1/20-21
2005	195.3				
2006	201.6	3.2%	7/1/05-06	198.4	1.330
2007	207.3	2.9%	7/1/06-07	204.5	1.291
2008	215.3	3.8%	7/1/07-08	211.3	1.249
2009	214.6	-0.3%	7/1/08-09	214.9	1.228
2010	218.1	1.6%	7/1/09-10	216.3	1.220
2011	224.9	3.1%	7/1/10-11	221.5	1.191
2012	229.6	2.1%	7/1/11-12	227.3	1.161
2013	233.0	1.5%	7/1/12-13	231.3	1.141
2014	236.7	1.6%	7/1/13-14	234.8	1.124
2015	237.0	0.1%	7/1/14-15	236.9	1.114
2016	240.0	1.3%	7/1/15-16	238.5	1.106
2017	245.1	2.1%	7/1/16-17	242.6	1.088
2018	251.1	2.4%	7/1/17-18	248.1	1.064
2019	255.7	1.8%	7/1/18-19	253.4	1.041
2020*	261.1	2.1%	7/1/19-20	258.4	1.021
2021*	266.7	2.1%	7/1/20-21	263.9	1.000

(B) and (C) - CPI data published by U.S. Department of Labor, Bureau of Statistics

* - future trend estimated based on last three years

(E) - Linear interpolation of column (B)

(F) - [(E), forecast period] / [(E), current period]

Reserve Evaluation

Oklahoma Schools Insurance Group

APRIL 10, 2020

28 White Bridge Road, Suite 205
Nashville, TN 37205-1428
info@SelectActuarial.com

615-269-4469
SelectActuarial.com

Reserve Evaluation

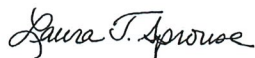
Oklahoma Schools Insurance Group

Report Date: April 10, 2020

Report Notes

Based on data as of January 31, 2020

Prepared by



Digitally signed by Laura
Sprouse, FCAS, MAAA
Date: 2020-04-10 10:27:
26

Laura Sprouse, FCAS, MAAA
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Table of Contents

Section 1	Executive Summary
Section 2	Considerations
Section 3	Description of Exhibits
Section 4	Exhibits – Automobile Liability
Section 5	Exhibits – General Liability
Section 6	Exhibits – Property including Auto Physical Damage

Section 1

Executive Summary

The purpose of this report is to provide the Oklahoma Schools Insurance Group (OSIG) with an evaluation of the projected liabilities associated with the retained losses and allocated loss adjustment expenses for its property and liability programs. The specific objectives are (a) to estimate the liability for unpaid losses and allocated loss adjustment expenses as of January 31, 2020, and projected to June 30, 2020; and (b) to analyze the variability inherent in the outstanding losses and IBNR reserves by deriving estimates at various percentiles or confidence levels. Throughout this report the term losses refers to both losses and allocated loss adjustment expenses.

The table below shows the outstanding losses projected as of June 30, 2020, broken down between case reserves and IBNR reserves. Losses shown are undiscounted.

<i>Estimated Unpaid Liabilities as of June 30, 2020</i>			
	<i>Case Reserves</i>	<i>IBNR Reserves</i>	<i>Total Reserve</i>
<i>Liability</i>	\$5,918,000	\$1,852,000	\$7,770,000
<i>Property</i>	\$4,334,000	\$1,751,000	\$6,084,000
<i>Total</i>	\$10,252,000	\$3,603,000	\$13,854,000

Tables at the end of this Executive Summary display the results of our analysis in greater detail. Table A summarizes the ultimate and outstanding losses and IBNR by policy year. Table B shows the IBNR estimates at various percentiles. Table C shows the change in experience since the previous actuarial report.

Discussion of Results

Automobile Liability

Outstanding losses as of January 31, 2020, are \$2,469,000 undiscounted. This includes \$2,131,000 in case reserves and \$338,000 in IBNR reserves. The estimated reserves at the end of the year are expected to be \$2,150,000 with \$356,000 of this due to IBNR (Exhibits 5-A&B).

Compared to the projections in the previous actuarial study as of June 30, 2019, reported losses have developed about \$109,000 less than expected in total. Experience by year was mixed with accident

years 16-17, 17-18 and 19-20 developing more than expected, and the other years developing less than expected.

We have adjusted the ultimate losses tracking these changes in reported and paid loss development. On a combined basis, the selected ultimate losses for years through 19-20 have been decreased by \$100,000 (Exhibit 4-A).

General Liability

Outstanding losses as of January 31, 2020, are \$5,821,000 undiscounted. This includes \$4,306,000 in case reserves and \$1,516,000 in IBNR reserves. The estimated reserves at the end of the year are expected to be \$5,620,000 with \$1,496,000 of this due to IBNR (Exhibits 5-A&B).

Compared to the projections in the previous actuarial study as of June 30, 2019, reported losses have developed about \$383,000 less than expected in total. Experience by year was mixed with accident years 13-14, 16-17 and 17-18 developing more than expected, and the other years developing less than expected.

We have adjusted the ultimate losses tracking these changes in reported and paid loss development. On a combined basis, the selected ultimate losses for years through 19-20 have been decreased by \$204,000 (Exhibit 4-A).

Property including Auto Physical Damage

Outstanding losses as of January 31, 2020, are \$5,427,000 undiscounted. This includes \$3,459,000 in case reserves and \$1,969,000 in IBNR reserves. The estimated reserves at the end of the year are expected to be \$6,085,000 with \$1,751,000 of this due to IBNR (Exhibit 5-A&B). This IBNR is all associated with losses within the retention. As of January 31, 2020, reported excess losses have already exceeded the \$1,400,000 corridor deductible.

Compared to the projections in the previous actuarial study as of June 30, 2019, reported losses have developed about \$2,196,000 less than expected in total for the retention layer + the corridor. Much of this difference is in the 19-20 year. There was some adverse development on the 16-17 and 17-18 years, which was offset by improved experience for 18-19.

We have adjusted the ultimate losses tracking these changes in reported and paid loss development. On a combined basis, the selected ultimate losses for years through 18-19 have been decreased by \$269,000 (Exhibit 4-A). We have not reduced the ultimate losses for 19-20, as this year is incomplete and the upcoming spring months tend to be the most eventful.

Oklahoma Schools Insurance Group
Automobile and General Liability

Table A - Liability

Projection of Outstanding Losses
As of June 30, 2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Ultimate Losses	Projected Paid Losses	Projected Reported Losses	Projected Case Reserves	IBNR Losses	Outstanding Losses
7/1/02-03	\$233,996	\$233,996	\$233,996	\$0	\$0	\$0
7/1/03-04	\$1,197,571	\$1,197,571	\$1,197,571	\$0	\$0	\$0
7/1/04-05	\$1,107,309	\$1,107,309	\$1,107,309	\$0	\$0	\$0
7/1/05-06	\$1,704,377	\$1,704,377	\$1,704,377	\$0	\$0	\$0
7/1/06-07	\$1,488,442	\$1,488,442	\$1,488,442	\$0	\$0	\$0
7/1/07-08	\$2,192,521	\$2,192,521	\$2,192,521	\$0	\$0	\$0
7/1/08-09	\$2,582,887	\$2,582,887	\$2,582,887	\$0	\$0	\$0
7/1/09-10	\$1,975,261	\$1,975,261	\$1,975,261	\$0	\$0	\$0
7/1/10-11	\$2,682,333	\$2,667,333	\$2,681,333	\$14,000	\$1,000	\$15,000
7/1/11-12	\$2,409,511	\$2,408,511	\$2,408,511	\$0	\$1,000	\$1,000
7/1/12-13	\$1,432,317	\$1,388,317	\$1,431,317	\$43,000	\$1,000	\$44,000
7/1/13-14	\$1,509,842	\$1,475,842	\$1,507,842	\$32,000	\$2,000	\$34,000
7/1/14-15	\$2,816,000	\$2,620,000	\$2,802,000	\$182,000	\$14,000	\$196,000
7/1/15-16	\$3,046,000	\$2,703,000	\$3,009,000	\$306,000	\$37,000	\$343,000
7/1/16-17	\$3,787,000	\$2,980,000	\$3,684,000	\$704,000	\$103,000	\$807,000
7/1/17-18	\$2,705,000	\$1,437,000	\$2,541,000	\$1,104,000	\$164,000	\$1,268,000
7/1/18-19	\$3,091,000	\$1,197,000	\$2,568,000	\$1,371,000	\$523,000	\$1,894,000
7/1/19-20	\$4,084,000	\$916,000	\$3,078,000	\$2,162,000	\$1,006,000	\$3,168,000
Total	\$40,045,366	\$32,275,366	\$38,193,366	\$5,918,000	\$1,852,000	\$7,770,000

(B) through (D) - Exhibit 5-B, sum of AL and GL losses within OSIG Retention

(E) = (D) - (C)

(F) = (B) - (D)

(G) = (B) - (C)

*Percentile Distribution of IBNR
For Liability Coverages
As of June 30, 2020*

<i>percentile</i>	<i>Ultimate Losses</i>	<i>IBNR Reserve</i>	<i>Total Reserve</i>
Expected	\$40,045,366	\$1,852,000	\$7,770,000
40%	\$39,713,000	\$1,520,000	\$7,438,000
50%	\$39,945,000	\$1,752,000	\$7,670,000
60%	\$40,209,000	\$2,016,000	\$7,934,000
70%	\$40,515,000	\$2,322,000	\$8,240,000
75%	\$40,658,000	\$2,465,000	\$8,383,000
80%	\$40,827,000	\$2,634,000	\$8,552,000
90%	\$41,287,000	\$3,094,000	\$9,012,000
95%	\$41,681,000	\$3,488,000	\$9,406,000

<i>Total Expected Ultimate Losses</i>	\$40,045,366
<i>Total Paid Losses as of 6/30/20</i>	\$32,275,366
<i>Total Case Reserves as of 6/30/20</i>	\$5,918,000
<i>Total IBNR Reserves as of 6/30/20</i>	\$1,852,000
<i>Total Outstanding Losses as of 6/30/20</i>	\$7,770,000

Oklahoma Schools Insurance Group
Automobile and General Liability

Table C - Liability

Comparison of Results with Previous Estimates as of 06/30/19

(A) Accident Period	(B) Actual Reported Losses 6/30/2019	(C) Projected Reported Losses 1/31/2020	(D) Actual Reported Losses 1/31/2020	(E) Percent Difference	(F) Expected Ultimate Losses 6/30/2019	(F) Actual Ultimate Losses 1/31/2020	(H) Percent Difference
7/1/02-03	\$233,996	\$233,996	\$233,996	0.0%	\$233,996	\$233,996	0.0%
7/1/03-04	\$1,197,571	\$1,197,571	\$1,197,571	0.0%	\$1,197,571	\$1,197,571	0.0%
7/1/04-05	\$1,107,309	\$1,107,309	\$1,107,309	0.0%	\$1,107,309	\$1,107,309	0.0%
7/1/05-06	\$1,704,377	\$1,704,377	\$1,704,377	0.0%	\$1,704,377	\$1,704,377	0.0%
7/1/06-07	\$1,488,442	\$1,488,442	\$1,488,442	0.0%	\$1,488,442	\$1,488,442	0.0%
7/1/07-08	\$2,192,521	\$2,192,521	\$2,192,521	0.0%	\$2,192,521	\$2,192,521	0.0%
7/1/08-09	\$2,582,887	\$2,582,887	\$2,582,887	0.0%	\$2,582,887	\$2,582,887	0.0%
7/1/09-10	\$1,975,261	\$1,976,430	\$1,975,261	-0.1%	\$1,978,413	\$1,975,261	-0.2%
7/1/10-11	\$2,681,419	\$2,685,493	\$2,681,419	-0.2%	\$2,692,333	\$2,682,333	-0.4%
7/1/11-12	\$2,433,399	\$2,434,040	\$2,408,325	-1.1%	\$2,435,000	\$2,409,511	-1.0%
7/1/12-13	\$1,431,182	\$1,432,216	\$1,431,182	-0.1%	\$1,434,000	\$1,432,317	-0.1%
7/1/13-14	\$1,448,686	\$1,451,476	\$1,506,686	3.8%	\$1,456,000	\$1,509,842	3.7%
7/1/14-15	\$2,870,110	\$2,883,088	\$2,796,598	-3.0%	\$2,902,000	\$2,816,000	-3.0%
7/1/15-16	\$3,113,318	\$3,146,344	\$2,993,111	-4.9%	\$3,197,000	\$3,046,000	-4.7%
7/1/16-17	\$3,463,685	\$3,528,748	\$3,639,531	3.1%	\$3,629,000	\$3,787,000	4.4%
7/1/17-18	\$2,265,421	\$2,362,925	\$2,472,653	4.6%	\$2,522,000	\$2,705,000	7.3%
7/1/18-19	\$2,699,200	\$3,009,625	\$2,436,663	-19.0%	\$3,600,000	\$3,091,000	-14.1%
7/1/19-20		\$1,691,142	\$1,768,558	4.6%	\$3,997,000	\$4,084,000	2.2%
Total	\$34,888,783	\$37,108,631	\$36,617,090	-1.3%	\$40,349,849	\$40,045,366	-0.8%

(I) Accident Period	(I) Actual Paid Losses 6/30/2019	(J) Projected Paid Losses 1/31/2020	(K) Actual Paid Losses 1/31/2020	(L) Percent Difference	(M) Expected Ultimate Losses 6/30/2019	(N) Actual Ultimate Losses 1/31/2020	(O) Percent Difference
7/1/02-03	\$233,996	\$233,996	\$233,996	0.0%	\$233,996	\$233,996	0.0%
7/1/03-04	\$1,197,571	\$1,197,571	\$1,197,571	0.0%	\$1,197,571	\$1,197,571	0.0%
7/1/04-05	\$1,107,309	\$1,107,309	\$1,107,309	0.0%	\$1,107,309	\$1,107,309	0.0%
7/1/05-06	\$1,704,377	\$1,704,377	\$1,704,377	0.0%	\$1,704,377	\$1,704,377	0.0%
7/1/06-07	\$1,488,442	\$1,488,442	\$1,488,442	0.0%	\$1,488,442	\$1,488,442	0.0%
7/1/07-08	\$2,192,521	\$2,192,521	\$2,192,521	0.0%	\$2,192,521	\$2,192,521	0.0%
7/1/08-09	\$2,582,887	\$2,582,887	\$2,582,887	0.0%	\$2,582,887	\$2,582,887	0.0%
7/1/09-10	\$1,975,261	\$1,976,264	\$1,975,261	-0.1%	\$1,978,413	\$1,975,261	-0.2%
7/1/10-11	\$2,654,465	\$2,667,158	\$2,661,908	-0.2%	\$2,692,333	\$2,682,333	-0.4%
7/1/11-12	\$2,408,105	\$2,419,531	\$2,408,325	-0.5%	\$2,435,000	\$2,409,511	-1.0%
7/1/12-13	\$1,370,717	\$1,394,367	\$1,370,815	-1.7%	\$1,434,000	\$1,432,317	-0.1%
7/1/13-14	\$1,400,445	\$1,422,377	\$1,461,839	2.8%	\$1,456,000	\$1,509,842	3.7%
7/1/14-15	\$2,433,074	\$2,633,538	\$2,518,204	-4.4%	\$2,902,000	\$2,816,000	-3.0%
7/1/15-16	\$2,364,275	\$2,715,068	\$2,530,337	-6.8%	\$3,197,000	\$3,046,000	-4.7%
7/1/16-17	\$2,359,100	\$2,852,415	\$2,593,365	-9.1%	\$3,629,000	\$3,787,000	4.4%
7/1/17-18	\$782,761	\$1,292,570	\$963,692	-25.4%	\$2,522,000	\$2,705,000	7.3%
7/1/18-19	\$622,482	\$1,136,113	\$808,986	-28.8%	\$3,600,000	\$3,091,000	-14.1%
7/1/19-20		\$491,423	\$380,276	-22.6%	\$3,997,000	\$4,084,000	2.2%
Total	\$28,877,788	\$31,507,926	\$30,180,111	-4.2%	\$40,349,849	\$40,045,366	-0.8%

(B), (F), (I) and (M) - From Previous actuarial report as of 6/30/2019

(C) and (J) - Based on information available as of 6/30/2019

(D) and (K) - Exhibit 1-C

(E) = [(D) / (C)] - 1

(G) and (N) - Exhibit 3

(H) = [(G) / (F)] - 1

(L) = [(K) / (J)] - 1

(O) = [(N) / (M)] - 1

**Projection of Outstanding Losses
As of June 30, 2020**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	SIR	Ultimate Losses	Projected Paid Losses	Projected Reported Losses	Projected Case Reserves	IBNR Losses	Outstanding Losses
7/1/02-03	\$100k/\$200k	\$312,045	\$312,045	\$312,045	\$0	\$0	\$0
7/1/03-04	\$100k/\$200k	\$1,287,169	\$1,287,169	\$1,287,169	\$0	\$0	\$0
7/1/04-05	\$100k/\$200k	\$1,266,993	\$1,266,993	\$1,266,993	\$0	\$0	\$0
7/1/05-06	\$100k/\$200k	\$2,616,997	\$2,616,997	\$2,616,997	\$0	\$0	\$0
7/1/06-07	\$100k/\$200k	\$2,604,514	\$2,604,514	\$2,604,514	\$0	\$0	\$0
7/1/07-08	\$100k/\$200k	\$3,915,481	\$3,915,481	\$3,915,481	\$0	\$0	\$0
7/1/08-09	\$100k/\$200k	\$4,560,946	\$4,560,946	\$4,560,946	\$0	\$0	\$0
7/1/09-10	\$100k/\$200k	\$4,870,042	\$4,870,041	\$4,870,042	\$0	\$0	\$0
7/1/10-11	\$100k/\$200k	\$3,569,472	\$3,569,472	\$3,569,472	\$0	\$0	\$0
Subtotal		\$25,003,657	\$25,003,657	\$25,003,657	\$0	\$0	\$0
7/1/11-12	\$250,000	\$3,282,543	\$3,282,543	\$3,282,543	\$0	\$0	\$0
7/1/12-13	\$250,000	\$3,032,675	\$3,032,675	\$3,032,675	\$0	\$0	\$0
7/1/13-14	\$250,000	\$2,505,352	\$2,505,352	\$2,505,352	\$0	\$0	\$0
7/1/14-15	\$250,000	\$3,470,662	\$3,470,662	\$3,470,662	\$0	\$0	\$0
7/1/15-16	\$250,000	\$3,694,000	\$3,682,757	\$3,686,377	\$3,620	\$8,000	\$11,000
7/1/16-17	\$250,000	\$4,708,000	\$4,480,797	\$4,680,035	\$199,238	\$28,000	\$227,000
7/1/17-18	\$250,000	\$4,860,000	\$4,725,692	\$4,774,577	\$48,884	\$85,000	\$134,000
7/1/18-19	\$250,000	\$5,110,000	\$4,519,421	\$4,820,970	\$301,550	\$289,000	\$591,000
7/1/19-20	\$250,000 / \$500,000	\$8,600,000	\$4,513,688	\$7,259,025	\$2,745,337	\$1,341,000	\$4,086,000
Subtotal		\$39,263,232	\$34,213,586	\$37,512,216	\$3,298,629	\$1,751,000	\$5,049,000
Corridor Losses							
7/1/11-12	\$2,700,000	\$735,946	\$735,946	\$735,946	\$0	\$0	\$0
7/1/12-13	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$0	\$0	\$0
7/1/13-14	\$1,400,000	\$1,400,000	\$1,400,000	\$1,400,000	\$0	\$0	\$0
7/1/14-15	\$1,400,000	\$1,400,000	\$1,400,000	\$1,400,000	\$0	\$0	\$0
7/1/15-16	\$1,400,000	\$1,400,000	\$1,400,000	\$1,400,000	\$0	\$0	\$0
7/1/16-17	\$1,400,000	\$1,400,000	\$1,400,000	\$1,400,000	\$0	\$0	\$0
7/1/17-18	\$1,400,000	\$1,400,000	\$1,400,000	\$1,400,000	\$0	\$0	\$0
7/1/18-19	\$1,400,000	\$1,400,000	\$1,400,000	\$1,400,000	\$0	\$0	\$0
7/1/19-20	\$1,400,000	\$1,400,000	\$364,539	\$1,400,000	\$1,035,461	\$0	\$1,035,000
Subtotal		\$12,935,946	\$11,900,485	\$12,935,946	\$1,035,461	\$0	\$1,035,000
Total		\$77,202,835	\$71,117,729	\$75,451,819	\$4,334,090	\$1,751,000	\$6,084,000

(C) - Ultimate losses are equal to limited reported losses in (E) through 10-11

Exhibit 3 for 11-12 to present

(D) and (E) - Projected using loss development factors

(F) = (E) - (D)

(G) = (C) - (E)

(H) = (C) - (D)

*Percentile Distribution of IBNR
For Property Coverages
As of June 30, 2020*

<i>percentile</i>	<i>Ultimate Losses</i>	<i>IBNR Reserve</i>	<i>Total Reserve</i>
Expected	\$77,202,835	\$1,751,000	\$6,084,000
40%	\$76,554,000	\$1,102,000	\$5,436,000
50%	\$77,032,000	\$1,580,000	\$5,914,000
60%	\$77,544,000	\$2,092,000	\$6,426,000
70%	\$78,089,000	\$2,637,000	\$6,971,000
75%	\$78,401,000	\$2,949,000	\$7,283,000
80%	\$78,780,000	\$3,328,000	\$7,662,000
90%	\$79,818,000	\$4,366,000	\$8,700,000
95%	\$80,709,000	\$5,257,000	\$9,591,000

<i>Total Expected Ultimate Losses</i>	\$77,202,835
<i>Total Paid Losses as of 6/30/20</i>	\$71,117,729
<i>Total Case Reserves as of 6/30/20</i>	\$4,334,090
<i>Total IBNR Reserves as of 6/30/20</i>	\$1,751,000
<i>Total Outstanding Losses as of 6/30/20</i>	\$6,084,000

Comparison of Results with Previous Estimates as of 6/30/19

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Prior	Expected	Actual		Prior	Current	
Accident	Reported	Reported	Reported	Percent	Ultimate	Ultimate	Percent
Period	6/30/2019	1/31/2020	1/31/2020	Difference	6/30/2019	1/31/2020	Difference
<u>Limited to SIR</u>							
7/1/11-12	\$3,282,543	\$3,282,543	\$3,282,543	0.0%	\$3,282,543	\$3,282,543	0.0%
7/1/12-13	\$3,032,675	\$3,032,675	\$3,032,675	0.0%	\$3,032,675	\$3,032,675	0.0%
7/1/13-14	\$2,506,177	\$2,506,177	\$2,505,352	0.0%	\$2,506,177	\$2,505,352	0.0%
7/1/14-15	\$3,470,662	\$3,470,662	\$3,470,662	0.0%	\$3,470,662	\$3,470,662	0.0%
7/1/15-16	\$3,682,092	\$3,695,000	\$3,682,092	-0.3%	\$3,695,000	\$3,694,000	0.0%
7/1/16-17	\$4,409,508	\$4,509,266	\$4,664,189	3.4%	\$4,603,000	\$4,708,000	2.3%
7/1/17-18	\$4,618,077	\$4,650,005	\$4,726,369	1.6%	\$4,680,000	\$4,860,000	3.8%
7/1/18-19	\$5,217,986	\$5,442,548	\$4,664,196	-14.3%	\$5,663,000	\$5,110,000	-9.8%
7/1/19-20		\$4,480,212	\$3,684,286	-17.8%	\$8,600,000	\$8,600,000	0.0%
Total	\$30,219,720	\$35,069,088	\$33,712,365	-3.9%	\$39,533,057	\$39,263,232	-0.7%
<u>SIR + Corridor</u>							
7/1/11-12	\$4,018,489	\$4,018,489	\$4,018,489	0.0%	\$4,018,489	\$4,018,489	0.0%
7/1/12-13	\$5,432,675	\$5,432,675	\$5,432,675	0.0%	\$5,432,675	\$5,432,675	0.0%
7/1/13-14	\$3,906,177	\$3,906,177	\$3,905,352	0.0%	\$3,906,177	\$3,905,352	0.0%
7/1/14-15	\$4,870,662	\$4,870,662	\$4,870,662	0.0%	\$4,870,662	\$4,870,662	0.0%
7/1/15-16	\$5,082,092	\$5,095,000	\$5,082,092	-0.3%	\$5,095,000	\$5,094,000	0.0%
7/1/16-17	\$5,809,508	\$5,909,266	\$6,064,189	2.6%	\$6,003,000	\$6,108,000	1.7%
7/1/17-18	\$6,018,077	\$6,050,005	\$6,126,369	1.3%	\$6,080,000	\$6,260,000	3.0%
7/1/18-19	\$6,617,986	\$6,842,548	\$6,064,196	-11.4%	\$7,063,000	\$6,510,000	-7.8%
7/1/19-20		\$6,719,859	\$5,084,286	-24.3%	\$10,000,000	\$10,000,000	0.0%
Total	\$41,755,666	\$48,844,680	\$46,648,311	-4.5%	\$52,469,002	\$52,199,177	-0.5%

(B) and (F) - From Previous actuarial report as of 6/30/2019
 (C) - Derived from (B) and (F) using loss development patterns
 (D) - Exhibit 1-C
 (E) = [(D) / (C)] - 1
 (G) - Exhibit 3
 (H) = [(G) / (F)] - 1

Section 2

Considerations

Background

Oklahoma Schools Insurance Group was formed in 2002 to insure the liability and property exposures for member School Districts in the state of Oklahoma. The group purchases excess insurance for above a retention layer that varies by line of coverage. Arthur J. Gallagher Risk Management Services, Inc. manages OSIG. Select Actuarial Services has provided actuarial consulting services for OSIG, including loss forecasting and reserving studies since 2002.

Scope

Select Actuarial Services has prepared this report for OSIG at the request of Jennifer McKenzie of Arthur J. Gallagher Risk Management Services, Program Manager for OSIG. The specific objectives are (a) to estimate ultimate and outstanding losses and ALAE for the group's property and liability experience as of January 31, 2020, and projected to June 30, 2020; and (b) to analyze the variability inherent in the losses by deriving estimates at various percentiles or confidence levels.

This report is an actuarial analysis of data, conditions, and practices communicated as of February 27, 2020, to Select Actuarial Services as described in this report. While Select Actuarial Services believes these communications to be reliable, it has not attempted to audit the information and cannot guarantee the accuracy of any information supplied. However, the data have been reviewed for reasonableness and internal consistency, comparing the claims experience from year to year, and comparing to prior evaluations.

We have not anticipated any extraordinary changes to the social, legal and economic environment that may affect the frequency, cost or future reporting and settlement patterns of claims. In addition, our estimates do not include any provision for future claims arising out of causes not represented in the current data.

Use and Distribution

The actuarial estimates in this report are based upon appropriate actuarial assumptions and procedures described in the section of this report entitled "Description of Exhibits." Select Actuarial Services assumes no responsibility for any loss or damage that might arise from the use of or reliance upon this report other than for the purposes set forth herein.

This report was prepared for the use of and is only to be relied upon by the management of Oklahoma Schools Insurance Group. This report may also be provided to OSIG's auditors and insurance brokers. No portion of the report may be provided to any other party without Select Actuarial Services' prior

consent. In the event that such consent is provided, the report must be provided in its entirety. We recommend that any such party have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

Qualifications and Standards of Practice

Laura Sprouse is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. She meets the Qualification Standards of the American Academy of Actuaries to render actuarial opinions for property/casualty reserves. This report is prepared in accordance with Actuarial Standards of Practice No. 23, *Data Quality*, No. 41, *Actuarial Communications*, and No. 43, *Property/Casualty Unpaid Claim Estimates*.

Coverage

OSIG began writing automobile liability, general liability, errors & omissions, auto physical damage and property coverage for member school districts in the state of Oklahoma in 2002. The Group retains \$100,000 combined loss and ALAE for liability losses per occurrence, above the member deductibles, which vary by member and by year. The Group is further protected by aggregate coverage.

The group initially retained property losses of \$200,000 per occurrence for wind/hail related claims and \$100,000 for all other perils. Beginning with the 7/1/11-12 policy year, the per occurrence retention increased to \$250,000 for losses, with OSIG retaining most of the ALAE. Coverage also included a corridor deductible above the \$250,000 retention. Effective with the 7/1/19-20 policy year, the per occurrence retention for wind/hail related claims increased to \$500,000.

Available Data

Loss information was provided by Jennifer McKenzie, Program Manager for OSIG. This loss information included detail loss runs as of January 31, 2020 and at prior annual evaluations. Exposure data for each member was provided and included vehicle counts, student population and total insured value.

Development

Development is the process in which losses and claim counts for a given accident period change over time. Development is caused by late reporting of claims, case reserve changes, claims reopening, and actual payment and settlement of claims.

Ideally, a client's own patterns should be utilized whenever possible to reflect the client's unique claims administration, reporting procedures, and so forth. Since several historical valuations of the data were available, we have selected patterns based on OSIG's development, supplemented with a benchmark for Oklahoma public entities. A curve-fitting technique is used to smooth and extrapolate the observed development patterns.

Actuarial Central Estimate

The estimates of ultimate losses at the “expected” level in this analysis are actuarial central estimates - estimates that represent an expected value over the range of reasonably possible outcomes. Such a range of reasonably possible outcomes may not include all conceivable outcomes. For example, it would not include conceivable extreme events where the contribution of such events to an expected value estimate is not reliably measurable.

Loss Models

Statistical distributions are often used by the insurance industry to model the loss generating process. In this analysis, the lognormal probability distribution has been used to model the required reserves. This technique allows for the projection of ultimate losses at the expected level and at various confidence levels or percentiles. The variation estimated in this modeling technique is the variation inherent in the historical experience; it does not include potential variation due to unanticipated changes in the environment or to misestimation of parameters. A Monte Carlo simulation was used to estimate the percentiles for the combined loss distributions for liability and property. This process randomly generates 10,000 sample outcomes for OSIG. The percentiles are based on these outcomes. For example, the 75th percentile estimate is a value that 7,500 of the outcomes are less than.

Discounting

OSIG does not discount its loss reserves.

Subrogation and Recoveries

Subrogation and recoveries are reflected in the primary loss reports. Recoveries were infrequent and did not provide a basis for estimating potential recoveries over and above those reflected in the loss runs. Accordingly, no reductions for collateral sources have been incorporated into the estimates.

Definitions

Accident Period: All of the events with occurrence dates during a period specified make up the corresponding accident period. The dollars associated with those events total the accident period's losses, although they may be paid long after the end of the accident period. Losses are grouped by accident period throughout our analyses.

Ultimate Losses: The total amount that will eventually be paid on all losses for a particular accident period. Our estimate of the ultimate losses for an accident period is the sum of the paid losses, the case reserves, and the IBNR reserve.

Paid Losses: Dollars paid as of the latest available evaluation on losses incurred through the latest available evaluation.

Case Reserves: Reserves established on individual claims by the claims adjusters, as of the latest available evaluation. The case reserve plus the amount paid to date represents the adjuster's best estimate of the ultimate value of a particular claim.

Reported Losses: Paid losses plus case reserves as of the latest available evaluation.

IBNR Reserve: ("Incurred **B**ut **N**ot **R**eported") This is the dollar amount which we estimate will be added to the reported losses between the date when the losses were compiled and final settlement of all claims for the accident period. Some of these additional dollars will be added to claims which are already known and currently open but which will finally cost more than they are currently reserved for. Other of these dollars are associated with claims which are known and closed but will be reopened before final closure. The balance of the IBNR reserve is for late-reported events.

Outstanding Losses: The losses not yet paid. Outstanding losses equal the difference between the ultimate losses and the paid losses. They are also the sum of the case reserves and the IBNR reserve.

Loss Development: The change in the paid losses or the reported losses over time. As more information is provided, individual claim estimates get closer and closer to the ultimate value of the claims. The increase in the total reported losses through time is the reported loss development. Similarly, as losses are paid out over time, the increase in total paid losses is the paid loss development.

Section 3

Description of Exhibits

Actuarial procedures employed to project ultimate and outstanding losses consist of a number of steps. Exhibits representing the various steps in the process are explained in this section of the report.

Exhibit 1: Summary of Data

Exhibit 1-A summarizes the number of reported claims, open claims, paid and reported losses, and exposures for each accident period evaluated as of January 31, 2020. In this Exhibit, all losses are shown gross of per occurrence retentions, but net of member deductibles.

Exhibit 1-B contains a listing of large claims that are expected to exceed the retention in effect during each claim's accident period. The applicable retentions are discussed in the "Considerations" section of this report.

In Exhibit 1-C, limited paid and reported losses are calculated by capping each claim at the applicable retention level for each accident period.

Exhibit 2: Estimation Methods for Ultimate Losses

In Exhibit 2, reported and paid losses are developed to ultimate using various standard actuarial methods. Exhibit 2-A displays the reported and paid loss development methods. These methods apply the loss development factors derived in Appendix A to the reported and paid losses from Exhibit 1. Any individual claims which are expected to exceed the historic retention are first deducted from the aggregate losses before the factors are applied. Then a provision for the large claims equal to the retention plus an allowance for the probability of an as yet unreported large loss is added to the developed small losses to derive estimates of limited ultimate losses.

In Exhibit 2-B, the Bornhuetter-Ferguson methods are used to calculate additional estimates of ultimate losses. These methods, also referred to as the estimated unpaid and estimated unreported methods, combine the previous estimates of ultimate losses with current paid and reported losses to produce a blended estimate. The purpose of the Bornhuetter-Ferguson method is to dampen the effect of short-term swings in reporting and payment patterns that may not be reflective of long-term development. The estimates of ultimate losses for each policy year from the previous actuarial report are used as the *a priori* estimates for those years.

Property losses for years 7/1/11-12 through 7/1/19-20 are estimated both limited to the per occurrence retentions and on an unlimited basis.

Exhibit 3: Selection of Ultimate Losses

The results of the estimation methods are compared in Exhibit 3, along with the prior estimate. A selection of our best estimate of the ultimate cost for each accident period is made based on the reasonableness of the various estimates when compared to loss experience to date, and the reasonableness of the estimates of ultimate losses and resulting unreported losses from year to year.

For Property, we have selected ultimate losses limited to the retention and unlimited. The difference in these estimates is compared to estimate the ultimate corridor losses.

Exhibit 4: Comparison to Previous Actuarial Report

Exhibit 4 compares the current loss experience with projections based on previous actuarial studies. A comparison of this actual versus expected experience can help pinpoint changes in the ultimate losses and serves as a check of reasonableness. Exhibit 4-A compares to the 6/30/2019 study and Exhibit 4-B compares to the 1/31/2019 study.

Exhibit 5: Outstanding Losses

Ultimate and outstanding losses as of January 31, 2020, are shown in Exhibit 5-A. Limited paid losses are subtracted from the ultimate losses to estimate outstanding losses. Similarly, limited reported losses are subtracted from the ultimate losses to estimate the IBNR reserves.

Exhibit 5-B shows the outstanding losses projected to June 30, 2020. The reported and paid losses as of June 30, 2020 are projected using the loss development factors in Appendix A.

Exhibit 6: Historical Summary

This exhibit shows the ultimate number of claims, average claim size (severity), the rate of claims per \$1M payroll (claim frequency) and the rate of ultimate losses per exposure unit.

Appendix A: Loss and Claim Development Factors

Selected loss development factors are fit to an inverse power curve in Appendices A1 through A3, in order to extrapolate factors at the maturities needed. The selected factors are based on the triangles shown in Appendices A4-A6. In Appendix A7 we measure the variability in the reported loss development history in order to select parameters for the lognormal distributions for each accident year.

Section 4

Exhibits – General Liability including E&O

Exhibit 1	Summary of Data Large Loss Listing Calculation of Limited Losses
Exhibit 2	Loss Development Methods Bornhuetter-Ferguson Methods
Exhibit 3	Summary and Selection of Ultimate Losses
Exhibit 4	Comparison to Previous Actuarial Report
Exhibit 5	Outstanding Losses as of 1/31/2020 Projected Outstanding Losses and IBNR as of 6/30/2020
Exhibit 6	Historical Claim Frequency, Severity and Loss Rates
Appendix A	Loss Development Factors

Summary of Loss Data as of January 31, 2020
Total Experience Net of Member Deductibles

(A)	(B)	(C)	(D)		(E)	(F)	(G)	(H)
Accident Period	Evaluation Date	Maturity (months)	Total Claims	Open Claims	Loss and Expense Payments	Loss and Expense Reserves	Loss and Expense Incurred	Students
7/1/02-03	1/31/2020	211	28	0	\$168,909	\$0	\$168,909	
7/1/03-04	1/31/2020	199	88	0	\$848,061	\$0	\$848,061	
7/1/04-05	1/31/2020	187	115	0	\$525,685	\$0	\$525,685	198,498
7/1/05-06	1/31/2020	175	136	0	\$1,330,178	\$0	\$1,330,178	249,419
7/1/06-07	1/31/2020	163	132	0	\$1,351,835	\$0	\$1,351,835	267,684
7/1/07-08	1/31/2020	151	163	0	\$1,501,995	\$0	\$1,501,995	308,999
7/1/08-09	1/31/2020	139	155	0	\$2,172,804	\$0	\$2,172,804	313,473
7/1/09-10	1/31/2020	127	144	0	\$1,503,548	\$0	\$1,503,548	314,947
7/1/10-11	1/31/2020	115	110	1	\$2,415,251	\$19,510	\$2,434,762	356,970
7/1/11-12	1/31/2020	103	87	0	\$3,688,203	\$0	\$3,688,203	309,147
7/1/12-13	1/31/2020	91	109	3	\$1,065,966	\$60,367	\$1,126,334	282,168
7/1/13-14	1/31/2020	79	86	1	\$883,836	\$52,847	\$936,683	325,035
7/1/14-15	1/31/2020	67	116	3	\$2,122,513	\$113,859	\$2,236,372	381,156
7/1/15-16	1/31/2020	55	119	11	\$1,728,728	\$315,235	\$2,043,962	381,204
7/1/16-17	1/31/2020	43	134	19	\$2,803,668	\$802,097	\$3,605,765	393,462
7/1/17-18	1/31/2020	31	77	22	\$393,774	\$1,373,908	\$1,767,682	393,700
7/1/18-19	1/31/2020	19	112	45	\$250,780	\$1,294,929	\$1,545,709	448,676
7/1/19-20	1/31/2020	7	64	52	\$24,226	\$668,968	\$693,194	481,126
7/1/20-21								481,126
			1,975	157	\$24,779,958	\$4,701,721	\$29,481,679	5,886,790

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services
- Claims are grouped by occurrence, exclude claims with \$0 incurred
- Losses are net of member deductibles

Claims over \$75,000

Occurrence #	School	Loss Date	Net Paid	Net Incurred	Policy Year	SIR	Excess Recoveries	Excess Reported	Severity Factor	Ultimate Net
P625-02-00016	SAND SPRINGS PUBLIC SCHOOLS	9/27/2002	\$94,296	\$94,296	7/1/02-03	\$100,000	\$0	\$0	1.000	\$94,297
P625-03-00239	CHISHOLM PUBLIC SCHOOLS	11/1/2003	\$93,704	\$93,704	7/1/03-04	\$100,000	\$0	\$0	1.000	\$93,704
P625-03-00194	PICHER-CARDIN PUBLIC SCHOOL	12/12/2003	\$78,884	\$78,884	7/1/03-04	\$100,000	\$0	\$0	1.000	\$78,884
P625-04-00191	POCOLA ISD	1/16/2004	\$81,429	\$81,429	7/1/03-04	\$100,000	\$0	\$0	1.000	\$81,429
00286	BOISE CITY ISD	5/3/2004	\$107,737	\$107,737	7/1/03-04	\$100,000	\$7,787	\$7,787	1.000	\$107,737
P625-04-00383	TAHLEQUAH PUBLIC SCHOOL	7/31/2004	\$87,331	\$87,331	7/1/04-05	\$100,000	\$0	\$0	1.000	\$87,331
00709	HARDESTY ISD	9/1/2004	\$136,712	\$136,712	7/1/04-05	\$100,000	\$36,712	\$36,712	1.000	\$136,713
P625-05-00789	MOUNDS PUBLIC SCHOOLS	9/9/2005	\$79,708	\$79,708	7/1/05-06	\$100,000	\$0	\$0	1.000	\$79,708
00919	MANNFORD PUBLIC SCHOOL	10/31/2005	\$139,329	\$139,329	7/1/05-06	\$100,000	\$39,329	\$39,329	1.000	\$139,330
00951	GORE ISD #6	1/9/2006	\$137,400	\$137,400	7/1/05-06	\$100,000	\$37,400	\$37,400	1.000	\$137,401
P625-06-01176	LAWTON BOARD OF EDUCATION ISD#8	6/15/2006	\$81,043	\$81,043	7/1/05-06	\$100,000	\$0	\$0	1.000	\$81,044
01194	Oologah Talala ISD	7/7/2006	\$104,657	\$104,657	7/1/06-07	\$100,000	\$4,657	\$4,657	1.000	\$104,658
01213	POCOLA ISD	7/26/2006	\$113,021	\$113,021	7/1/06-07	\$100,000	\$13,021	\$13,021	1.000	\$113,023
02076	DEER CREEK ISD	4/6/2007	\$470,603	\$470,603	7/1/06-07	\$100,000	\$370,603	\$370,603	1.000	\$470,609
01955	MIDWAY PUBLIC SCHOOL	5/15/2007	\$110,316	\$110,316	7/1/06-07	\$100,000	\$10,316	\$10,316	1.000	\$110,318
02387	KIAMICHI TECHNOLOGY CENTER	7/31/2007	\$102,095	\$102,095	7/1/07-08	\$100,000	\$2,095	\$2,095	1.000	\$102,098
P625-07-01847	ROFF PUBLIC SCHOOL	8/24/2007	\$76,067	\$76,067	7/1/07-08	\$100,000	\$0	\$0	1.000	\$76,069
02047	POTEAU ISD	10/19/2007	\$109,798	\$109,798	7/1/07-08	\$100,000	\$9,798	\$9,798	1.000	\$109,801
01968	GUTHRIE PUBLIC SCHOOLS	11/2/2007	\$121,452	\$121,452	7/1/07-08	\$100,000	\$26,452	\$26,452	1.000	\$121,455
P625-08-02155	BENNINGTON ISD #40	3/7/2008	\$75,234	\$75,234	7/1/07-08	\$100,000	\$0	\$0	1.000	\$75,236
02250	BLANCHARD PUBLIC SCHOOL	4/25/2008	\$131,036	\$131,036	7/1/07-08	\$100,000	\$31,036	\$31,036	1.000	\$131,040
02595	BYNG SCHOOL DISTRICT I-16	10/20/2008	\$1,075,745	\$1,075,745	7/1/08-09	\$100,000	\$975,745	\$975,745	1.000	\$1,075,814
P625-08-02785	PRUE PUBLIC SCHOOL	12/8/2008	\$96,997	\$96,997	7/1/08-09	\$100,000	\$0	\$0	1.000	\$97,000
02711	SHAWNEE PUBLIC SCHOOL	1/13/2009	\$124,447	\$124,447	7/1/08-09	\$100,000	\$24,447	\$24,447	1.000	\$124,455
03297	BIXBY PUBLIC SCHOOLS	5/28/2009	\$113,070	\$113,070	7/1/08-09	\$100,000	\$13,070	\$13,070	1.000	\$113,077
03267	LAWTON BOARD OF EDUCATION ISD#8	11/4/2009	\$107,144	\$107,144	7/1/09-10	\$100,000	\$7,144	\$7,144	1.000	\$107,160
03567	Oologah Talala ISD	2/18/2010	\$117,345	\$117,345	7/1/09-10	\$100,000	\$19,845	\$19,845	1.000	\$117,362
P625-10-03568	Oologah Talala ISD	3/11/2010	\$86,866	\$86,866	7/1/09-10	\$100,000	\$0	\$0	1.000	\$86,878
90906	MOUNDS PUBLIC SCHOOLS	5/10/2010	\$304,711	\$304,711	7/1/09-10	\$100,000	\$204,711	\$204,711	1.000	\$304,755
P625-10-03653	DUNCAN ISD #1	5/19/2010	\$89,348	\$89,348	7/1/09-10	\$100,000	\$0	\$0	1.000	\$89,361
P625-10-03728	SOPER ISD	6/17/2010	\$85,569	\$85,569	7/1/09-10	\$100,000	\$0	\$0	1.000	\$85,581
90054	CANTON ISD	7/29/2010	\$114,574	\$114,574	7/1/10-11	\$100,000	\$17,074	\$17,074	1.000	\$114,612
P625-10-90080	WYANDOTTE PUBLIC SCHOOL	8/19/2010	\$94,545	\$94,545	7/1/10-11	\$100,000	\$0	\$0	1.000	\$94,576
90084	PUTNAM CITY ISD	8/22/2010	\$115,615	\$115,615	7/1/10-11	\$100,000	\$15,615	\$15,615	1.000	\$115,653
90118	JAY PUBLIC SCHOOLS	9/1/2010	\$136,645	\$136,645	7/1/10-11	\$100,000	\$36,645	\$36,645	1.000	\$136,690
90205	HOMINY BOARD OF EDUCATION	10/14/2010	\$123,444	\$123,444	7/1/10-11	\$100,000	\$23,444	\$23,444	1.000	\$123,484
P625-10-90921	LOCUST GROVE ISD	10/14/2010	\$76,348	\$76,348	7/1/10-11	\$100,000	\$0	\$0	1.000	\$76,373
90236	ARDMORE ISD #19	10/25/2010	\$290,942	\$290,942	7/1/10-11	\$100,000	\$190,942	\$190,942	1.000	\$291,037
90297	LAWTON BOARD OF EDUCATION ISD#8	12/6/2010	\$157,221	\$157,221	7/1/10-11	\$100,000	\$62,221	\$62,221	1.000	\$157,272
90313	BOSWELL PUBLIC SCHOOL	12/14/2010	\$104,163	\$104,163	7/1/10-11	\$100,000	\$6,663	\$6,663	1.000	\$104,197
90519	VERDIGRIS PUBLIC SCHOOL	3/11/2011	\$122,502	\$122,502	7/1/10-11	\$100,000	\$22,502	\$22,502	1.000	\$122,542
90708	CHOUTEAU MAZIE SCHOOL DISTRICT	3/22/2011	\$141,522	\$141,522	7/1/10-11	\$100,000	\$41,522	\$41,522	1.000	\$141,568
90838	TAHLEQUAH PUBLIC SCHOOL	6/30/2011	\$280,047	\$280,047	7/1/10-11	\$100,000	\$180,047	\$180,047	1.000	\$280,139
P625-11-91010	PUTNAM CITY ISD	8/25/2011	\$84,730	\$84,730	7/1/11-12	\$100,000	\$0	\$0	1.001	\$84,793
91394	ALTUS PUBLIC SCHOOL	9/1/2011	\$149,418	\$149,418	7/1/11-12	\$100,000	\$49,418	\$49,418	1.001	\$149,529
91014	PADEN PUBLIC SCHOOL	10/13/2011	\$153,190	\$153,190	7/1/11-12	\$100,000	\$53,190	\$53,190	1.001	\$153,304
91388	NOWATA ISD	10/25/2011	\$443,010	\$443,010	7/1/11-12	\$100,000	\$343,010	\$343,010	1.001	\$443,340
P625-11-90962	MIDWEST CITY-DEL CITY ISD	10/26/2011	\$95,962	\$95,962	7/1/11-12	\$100,000	\$0	\$0	1.001	\$96,034
P625-11-90991	HAWORTH PUBLIC SCHOOL I-06	10/28/2011	\$97,912	\$97,912	7/1/11-12	\$100,000	\$0	\$0	1.001	\$97,984
91040	MCLoud ISD	11/11/2011	\$1,708,795	\$1,708,795	7/1/11-12	\$200,000	\$1,508,795	\$1,508,795	1.001	\$1,710,068
91405	FAIRLAND ISD	4/20/2012	\$263,443	\$263,443	7/1/11-12	\$100,000	\$163,443	\$163,443	1.001	\$263,639
91564	LAWTON BOARD OF EDUCATION ISD#8	5/28/2012	\$210,533	\$210,533	7/1/11-12	\$100,000	\$110,533	\$110,533	1.001	\$210,690
91445	CHOUTEAU MAZIE SCHOOL DISTRICT	8/29/2012	\$420,468	\$420,468	7/1/12-13	\$100,000	\$320,468	\$320,468	1.002	\$421,190
92222	SPIRO PUBLIC SCHOOLS	12/23/2013	\$145,266	\$145,266	7/1/13-14	\$100,000	\$45,266	\$45,266	1.004	\$145,843
92382	BROKEN ARROW PUBLIC SCHOOLS	1/29/2014	\$100,352	\$100,352	7/1/13-14	\$100,000	\$352	\$352	1.004	\$100,750
92492	COMMERCE ISD #18	4/1/2014	\$55,153	\$108,000	7/1/13-14	\$100,000	\$0	\$8,000	1.004	\$108,428
92867	HOLLIS ISD	4/4/2014	\$176,221	\$176,221	7/1/13-14	\$100,000	\$76,221	\$76,221	1.004	\$176,920
92975	TALOGA ISD #10	9/1/2014	\$99,630	\$142,500	7/1/14-15	\$100,000	\$0	\$42,500	1.009	\$143,828
P625-14-93098	PURCELL ISD	9/1/2014	\$92,631	\$92,631	7/1/14-15	\$100,000	\$0	\$0	1.009	\$93,495
92999	SAPULPA ISD	3/2/2015	\$240,862	\$240,862	7/1/14-15	\$100,000	\$140,862	\$140,862	1.009	\$243,107
P625-15-93000	KIAMICHI TECHNOLOGY CENTER	3/11/2015	\$78,728	\$78,728	7/1/14-15	\$100,000	\$0	\$0	1.009	\$79,462
93289	JAY PUBLIC SCHOOLS	3/22/2015	\$211,827	\$211,827	7/1/14-15	\$100,000	\$111,827	\$111,827	1.009	\$213,801
P625-15-93028	HULBERT SCHOOLS 11-1016	3/22/2015	\$84,519	\$84,519	7/1/14-15	\$100,000	\$0	\$0	1.009	\$85,307
94241	LUTHER PUBLIC SCHOOLS	4/16/2015	\$366,221	\$366,221	7/1/14-15	\$100,000	\$266,221	\$266,221	1.009	\$369,635
93143	POTEAU ISD	5/15/2015	\$141,576	\$141,576	7/1/14-15	\$100,000	\$41,576	\$41,576	1.009	\$142,896
P625-15-93595	MUSTANG PUBLIC SCHOOL	8/1/2015	\$53,580	\$80,000	7/1/15-16	\$100,000	\$0	\$0	1.022	\$81,768
P625-15-93609	BARTLESVILLE PUBLIC SCHOOL #30	12/3/2015	\$60,763	\$87,021	7/1/15-16	\$100,000	\$0	\$0	1.022	\$88,944
P625-16-94143	BURNS FLAT-DILL CITY ISD	2/10/2016	\$39,606	\$82,000	7/1/15-16	\$100,000	\$0	\$0	1.022	\$83,812
93680	ARDMORE ISD #19	3/7/2016	\$175,028	\$175,028	7/1/15-16	\$100,000	\$75,028	\$75,028	1.022	\$178,895
94063	KIAMICHI TECHNOLOGY CENTER	3/24/2016	\$153,730	\$153,730	7/1/15-16	\$100,000	\$53,730	\$53,730	1.022	\$157,127
94446	VIAN PUBLIC SCHOOLS	5/5/2016	\$167,801	\$167,801	7/1/15-16	\$100,000	\$67,801	\$67,801	1.022	\$171,509
P625-16-93857	SAPULPA ISD	6/14/2016	\$75,000	\$75,000	7/1/15-16	\$100,000	\$0	\$0	1.022	\$76,657
P625-16-93885	TENKILLER SCHOOL	7/8/2016	\$91,628	\$91,628	7/1/16-17	\$100,000	\$0	\$0	1.053	\$96,469
P625-16-94009	MUSTANG PUBLIC SCHOOL	9/13/2016	\$90,461	\$90,461	7/1/16-17	\$100,000	\$0	\$0	1.053	\$95,240
P625-16-94082	MULDROW SCHOOLS	9/29/2016	\$28,961	\$77,000	7/1/16-17	\$100,000	\$0	\$0	1.053	\$81,068
P625-16-94356	ANADARKO ISD	10/20/2016	\$3,463	\$82,000	7/1/16-17	\$100,000	\$0	\$0	1.053	\$86,332
94168	NEWKIRK PUBLIC SCHOOLS	11/3/2016	\$98,805	\$105,000	7/1/16-17	\$100,000	\$0	\$5,000	1.053	\$110,547

Claims over \$75,000

Occurrence #	School	Loss Date	Net Paid	Net Incurred	Policy Year	SIR	Excess Recoveries	Excess Reported	Severity Factor	Ultimate Net
P625-16-94698	GRANITE SCHOOL DISTRICT 1-3	11/30/2016	\$14,157	\$80,000	7/1/16-17	\$100,000	\$0	\$0	1.053	\$84,226
94291	MORRIS ISD #3	12/16/2016	\$141,328	\$141,328	7/1/16-17	\$100,000	\$41,328	\$41,328	1.053	\$148,794
P625-17-94229	BLAIR PUBLIC SCHOOLS	1/2/2017	\$78,439	\$78,439	7/1/16-17	\$100,000	\$0	\$0	1.053	\$82,583
94280	PERRY ISD	1/27/2017	\$1,325,161	\$1,325,161	7/1/16-17	\$200,000	\$1,125,161	\$1,125,161	1.053	\$1,395,166
P625-17-94730	CANADIAN VALLEY TECHNOLOGY CENTER	1/31/2017	\$32,933	\$78,000	7/1/16-17	\$100,000	\$0	\$0	1.053	\$82,121
P625-17-94841	LEXINGTON PUBLIC SCHOOLS	3/28/2017	\$33,453	\$81,000	7/1/16-17	\$100,000	\$0	\$0	1.053	\$85,279
P625-17-94864	BARTLESVILLE PUBLIC SCHOOL #30	5/9/2017	\$25,894	\$82,000	7/1/16-17	\$100,000	\$0	\$0	1.053	\$86,332
P625-17-94491	COMMERCE ISD #18	5/17/2017	\$87,382	\$87,382	7/1/16-17	\$100,000	\$0	\$0	1.053	\$91,998
P625-17-95484	PONCA CITY ISD	6/26/2017	\$45,535	\$95,000	7/1/16-17	\$100,000	\$0	\$0	1.053	\$100,019
96032	JENKS ISD	9/12/2017	\$15,429	\$160,000	7/1/17-18	\$100,000	\$0	\$60,000	1.127	\$180,336
P625-17-95106	PIEDMONT ISD	9/14/2017	\$11,501	\$91,500	7/1/17-18	\$100,000	\$0	\$0	1.127	\$103,130
P625-17-95154	MCLOUD ISD	12/1/2017	\$44,499	\$95,000	7/1/17-18	\$100,000	\$0	\$0	1.127	\$107,075
95506	PRESTON PUBLIC SCHOOL	1/11/2018	\$8,401	\$167,582	7/1/17-18	\$100,000	\$0	\$67,582	1.127	\$188,882
P625-18-95168	HARRAH ISD	3/2/2018	\$18,213	\$95,958	7/1/17-18	\$100,000	\$0	\$0	1.127	\$108,155
P625-18-95025	SAYRE PUBLIC SCHOOLS	4/12/2018	\$5,787	\$93,000	7/1/17-18	\$100,000	\$0	\$0	1.127	\$104,821
95055	MIDWEST CITY-DEL CITY ISD	5/3/2018	\$5,417	\$117,850	7/1/17-18	\$100,000	\$0	\$17,850	1.127	\$132,829
95249	BROKEN ARROW PUBLIC SCHOOLS	5/15/2018	\$21,301	\$183,000	7/1/17-18	\$100,000	\$0	\$83,000	1.127	\$206,260
95302	MACOMB PUBLIC SCHOOL	7/25/2018	\$10,250	\$111,500	7/1/18-19	\$100,000	\$0	\$11,500	1.302	\$145,192
95512	PUTNAM CITY ISD	9/29/2018	\$18,153	\$196,000	7/1/18-19	\$100,000	\$0	\$96,000	1.302	\$255,225
95577	PONCA CITY ISD	12/23/2018	\$20,529	\$104,391	7/1/18-19	\$100,000	\$0	\$4,391	1.302	\$135,934
			\$14,913,701	\$16,737,590			\$7,025,075	\$7,420,898		

Calculation of Limited Losses

(A) <i>Policy Period</i>	(B) <i>Retention</i>	(C) <i>Unlimited Paid Losses</i>	(D) <i>Unlimited Reported Losses</i>	(E) <i>Paid Excess of Primary</i>	(F) <i>Reported Excess of Primary</i>	(G) <i>Paid Limited to Primary</i>	(H) <i>Reported Limited to Primary</i>
7/1/02-03	\$100,000	\$168,909	\$168,909	\$0	\$0	\$168,909	\$168,909
7/1/03-04	\$100,000	\$848,061	\$848,061	\$7,787	\$7,787	\$840,274	\$840,274
7/1/04-05	\$100,000	\$525,685	\$525,685	\$36,712	\$36,712	\$488,972	\$488,972
7/1/05-06	\$100,000	\$1,330,178	\$1,330,178	\$76,729	\$76,729	\$1,253,449	\$1,253,449
7/1/06-07	\$100,000	\$1,351,835	\$1,351,835	\$398,598	\$398,598	\$953,237	\$953,237
7/1/07-08	\$100,000	\$1,501,995	\$1,501,995	\$69,380	\$69,380	\$1,432,614	\$1,432,614
7/1/08-09	\$100,000	\$2,172,804	\$2,172,804	\$1,013,263	\$1,013,263	\$1,159,541	\$1,159,541
7/1/09-10	\$100,000	\$1,503,548	\$1,503,548	\$231,700	\$231,700	\$1,271,848	\$1,271,848
7/1/10-11	\$100,000	\$2,415,251	\$2,434,762	\$596,676	\$596,676	\$1,818,575	\$1,838,086
7/1/11-12	\$100,000	\$3,688,203	\$3,688,203	\$2,228,390	\$2,228,390	\$1,459,814	\$1,459,814
7/1/12-13	\$100,000	\$1,065,966	\$1,126,334	\$320,468	\$320,468	\$745,498	\$805,866
7/1/13-14	\$100,000	\$883,836	\$936,683	\$121,838	\$129,838	\$761,998	\$806,844
7/1/14-15	\$100,000	\$2,122,513	\$2,236,372	\$560,486	\$602,986	\$1,562,027	\$1,633,386
7/1/15-16	\$100,000	\$1,728,728	\$2,043,962	\$196,559	\$196,559	\$1,532,168	\$1,847,403
7/1/16-17	\$100,000	\$2,803,668	\$3,605,765	\$1,166,489	\$1,171,489	\$1,637,179	\$2,434,276
7/1/17-18	\$100,000	\$393,774	\$1,767,682	\$0	\$228,432	\$393,774	\$1,539,250
7/1/18-19	\$100,000	\$250,780	\$1,545,709	\$0	\$111,891	\$250,780	\$1,433,818
7/1/19-20	\$100,000	\$24,226	\$693,194	\$0	\$0	\$24,226	\$693,194
<i>Total</i>		\$24,779,958	\$29,481,679	\$7,025,075	\$7,420,898	\$17,754,883	\$22,060,781

(C) and (D) - Exhibit 1-A

(E) and (F) - Excess amounts from claims in Exhibit 1-B

(G) = (C) - (E)

(H) = (D) - (F)

*Estimated Ultimate Losses Limited to OSIG Retentions
Using Loss Development Methods*

(A) Accident Period	(B) Net Reported Losses	(C) Net Reported on Large Losses	(D) Reported Develop. Factor	(E) Ultimate on Small Claims	(F) Provision for Large Claims	(G) Estimated Ultimate Net Losses
7/1/02-03	\$168,909	\$0	1.000	\$168,909	\$0	\$169,000
7/1/03-04	\$848,061	\$107,737	1.000	\$740,325	\$100,000	\$840,000
7/1/04-05	\$525,685	\$136,712	1.000	\$388,973	\$100,000	\$489,000
7/1/05-06	\$1,330,178	\$276,729	1.000	\$1,053,455	\$200,000	\$1,253,000
7/1/06-07	\$1,351,835	\$798,598	1.000	\$553,245	\$400,000	\$953,000
7/1/07-08	\$1,501,995	\$464,380	1.000	\$1,037,644	\$400,000	\$1,438,000
7/1/08-09	\$2,172,804	\$1,313,263	1.000	\$859,596	\$300,000	\$1,160,000
7/1/09-10	\$1,503,548	\$529,200	1.000	\$974,488	\$300,000	\$1,274,000
7/1/10-11	\$2,434,762	\$1,586,676	1.000	\$848,362	\$1,000,000	\$1,848,000
7/1/11-12	\$3,688,203	\$2,928,390	1.001	\$760,380	\$700,000	\$1,460,000
7/1/12-13	\$1,126,334	\$420,468	1.002	\$707,077	\$100,000	\$807,000
7/1/13-14	\$936,683	\$529,838	1.004	\$408,468	\$400,010	\$808,000
7/1/14-15	\$2,236,372	\$1,102,986	1.009	\$1,144,009	\$500,025	\$1,644,000
7/1/15-16	\$2,043,962	\$496,559	1.022	\$1,581,786	\$300,037	\$1,882,000
7/1/16-17	\$3,605,765	\$1,666,489	1.053	\$2,042,445	\$500,177	\$2,543,000
7/1/17-18	\$1,767,682	\$1,003,891	1.129	\$862,066	\$801,110	\$1,663,000
7/1/18-19	\$1,545,709	\$411,891	1.314	\$1,490,312	\$302,822	\$1,793,000
Total	\$28,788,485	\$13,773,806		\$15,621,540	\$6,404,180	\$22,024,000

	(H)	(I)	(J)	(K)	(L)	(M)
	Net	Net				Estimated
Accident	Paid	Paid	Paid	Ultimate	Provision	Ultimate
Period	Paid	on Large	Develop.	on Small	for Large	Net
	Losses	Losses	Factor	Claims	Claims	Losses
7/1/02-03	\$168,909	\$0	1.000	\$168,912	\$0	\$169,000
7/1/03-04	\$848,061	\$107,737	1.000	\$740,347	\$100,000	\$840,000
7/1/04-05	\$525,685	\$136,712	1.000	\$388,992	\$100,000	\$489,000
7/1/05-06	\$1,330,178	\$276,729	1.000	\$1,053,534	\$200,000	\$1,254,000
7/1/06-07	\$1,351,835	\$798,598	1.000	\$553,314	\$400,000	\$953,000
7/1/07-08	\$1,501,995	\$464,380	1.000	\$1,037,862	\$400,000	\$1,438,000
7/1/08-09	\$2,172,804	\$1,313,263	1.000	\$859,910	\$300,000	\$1,160,000
7/1/09-10	\$1,503,548	\$529,200	1.001	\$975,126	\$300,000	\$1,275,000
7/1/10-11	\$2,415,251	\$1,586,676	1.002	\$829,860	\$1,000,000	\$1,830,000
7/1/11-12	\$3,688,203	\$2,928,390	1.003	\$762,209	\$700,000	\$1,462,000
7/1/12-13	\$1,065,966	\$420,468	1.007	\$649,868	\$100,000	\$750,000
7/1/13-14	\$883,836	\$476,992	1.015	\$413,144	\$400,010	\$813,000
7/1/14-15	\$2,122,513	\$1,060,117	1.038	\$1,102,947	\$500,025	\$1,603,000
7/1/15-16	\$1,728,728	\$496,559	1.103	\$1,358,968	\$300,037	\$1,659,000
7/1/16-17	\$2,803,668	\$1,610,829	1.310	\$1,562,049	\$500,177	\$2,062,000
7/1/17-18	\$393,774	\$130,548	2.067	\$544,141	\$801,110	\$1,345,000
7/1/18-19	\$250,780	\$48,931	5.385	\$1,086,868	\$302,822	\$1,390,000
Total	\$24,755,732	\$12,386,128		\$14,088,050	\$6,404,180	\$20,492,000

(B) and (H)- Exhibit 1-A

(C) and (I) - Exhibit 1-B

(D) - Appendix A1

(E) = [(B) - (C)] x (D)

(F) and (L) = # large x SIR x ccdf

(G) = (E) + (F)

(J) - Appendix A2

(K) = [(H) - (I)] x (J)

(M) = (K) + (L)

*Estimated Ultimate Losses Limited to OSIG Retention
Using Bornhuetter-Ferguson Method*

(A) Accident Period	(B) Prior Ultimate or Forecast	(C) Reported Develop. Factor	(D) Expected % Unreported	(E) Expected Unreported Losses	(F) Limited Reported Losses	(G) Estimated Ultimate Losses
7/1/02-03	\$168,909	1.000	0%	\$0	\$168,909	\$169,000
7/1/03-04	\$840,274	1.000	0%	\$1	\$840,274	\$840,000
7/1/04-05	\$488,972	1.000	0%	\$1	\$488,972	\$489,000
7/1/05-06	\$1,253,449	1.000	0%	\$7	\$1,253,449	\$1,253,000
7/1/06-07	\$953,237	1.000	0%	\$12	\$953,237	\$953,000
7/1/07-08	\$1,432,614	1.000	0%	\$41	\$1,432,614	\$1,433,000
7/1/08-09	\$1,159,541	1.000	0%	\$74	\$1,159,541	\$1,160,000
7/1/09-10	\$1,275,000	1.000	0%	\$184	\$1,271,848	\$1,272,000
7/1/10-11	\$1,849,000	1.000	0%	\$603	\$1,838,086	\$1,839,000
7/1/11-12	\$1,461,000	1.001	0%	\$1,087	\$1,459,814	\$1,461,000
7/1/12-13	\$809,000	1.002	0%	\$1,386	\$805,866	\$807,000
7/1/13-14	\$781,000	1.004	0%	\$3,105	\$806,844	\$810,000
7/1/14-15	\$1,693,000	1.009	1%	\$15,721	\$1,633,386	\$1,649,000
7/1/15-16	\$1,998,000	1.022	2%	\$43,430	\$1,847,403	\$1,891,000
7/1/16-17	\$2,402,000	1.053	5%	\$121,331	\$2,434,276	\$2,556,000
7/1/17-18	\$1,569,000	1.129	11%	\$178,863	\$1,539,250	\$1,718,000
7/1/18-19	\$2,131,000	1.314	24%	\$509,751	\$1,433,818	\$1,944,000
7/1/19-20	\$2,466,000	2.816	64%	\$1,590,274	\$693,194	\$2,283,000
Total	\$24,730,996			\$2,465,873	\$22,060,781	\$24,527,000

(A) Accident Period	(H) Prior Ultimate or Forecast	(I) Paid Develop. Factor	(J) Expected % Unpaid	(K) Expected Unpaid Losses	(L) Limited Paid Losses	(M) Estimated Ultimate Losses
7/1/02-03	\$168,909	1.000	0%	\$3	\$168,909	\$169,000
7/1/03-04	\$840,274	1.000	0%	\$26	\$840,274	\$840,000
7/1/04-05	\$488,972	1.000	0%	\$24	\$488,972	\$489,000
7/1/05-06	\$1,253,449	1.000	0%	\$102	\$1,253,449	\$1,254,000
7/1/06-07	\$953,237	1.000	0%	\$131	\$953,237	\$953,000
7/1/07-08	\$1,432,614	1.000	0%	\$342	\$1,432,614	\$1,433,000
7/1/08-09	\$1,159,541	1.000	0%	\$497	\$1,159,541	\$1,160,000
7/1/09-10	\$1,275,000	1.001	0%	\$1,018	\$1,271,848	\$1,273,000
7/1/10-11	\$1,849,000	1.002	0%	\$2,862	\$1,818,575	\$1,821,000
7/1/11-12	\$1,461,000	1.003	0%	\$4,592	\$1,459,814	\$1,464,000
7/1/12-13	\$809,000	1.007	1%	\$5,440	\$745,498	\$751,000
7/1/13-14	\$781,000	1.015	2%	\$11,909	\$761,998	\$774,000
7/1/14-15	\$1,693,000	1.038	4%	\$62,245	\$1,562,027	\$1,624,000
7/1/15-16	\$1,998,000	1.103	9%	\$186,424	\$1,532,168	\$1,719,000
7/1/16-17	\$2,402,000	1.310	24%	\$567,744	\$1,637,179	\$2,205,000
7/1/17-18	\$1,569,000	2.067	52%	\$810,002	\$393,774	\$1,204,000
7/1/18-19	\$2,131,000	5.385	81%	\$1,735,239	\$250,780	\$1,986,000
7/1/19-20	\$2,466,000	28.755	97%	\$2,380,240	\$24,226	\$2,404,000
Total	\$24,730,996			\$5,768,840	\$17,754,883	\$23,523,000

(B) and (H) - Exhibit 3

(C) - Appendix A1

(D) = 1 - 1/(C)

(E) = (B) * (D)

(F) and (L) - Exhibit I-C

(G) = (E) + (F)

(I) - Appendix A2

(J) = 1 - 1/(I)

(K) = (H) * (J)

(M) = (K) + (L)

Summary and Selection of Ultimate Limited Loss Estimates

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Prior Ultimate	Reported Loss Development Method	Paid Loss Development Method	Expected Unreported Method	Expected Unpaid Method	Selected Ultimate Loss Estimate
7/1/02-03	\$168,909	\$169,000	\$169,000	\$169,000	\$169,000	\$168,909
7/1/03-04	\$840,274	\$840,000	\$840,000	\$840,000	\$840,000	\$840,274
7/1/04-05	\$488,972	\$489,000	\$489,000	\$489,000	\$489,000	\$488,972
7/1/05-06	\$1,253,449	\$1,253,000	\$1,254,000	\$1,253,000	\$1,254,000	\$1,253,449
7/1/06-07	\$953,237	\$953,000	\$953,000	\$953,000	\$953,000	\$953,237
7/1/07-08	\$1,432,614	\$1,438,000	\$1,438,000	\$1,433,000	\$1,433,000	\$1,432,614
7/1/08-09	\$1,159,541	\$1,160,000	\$1,160,000	\$1,160,000	\$1,160,000	\$1,159,541
7/1/09-10	\$1,275,000	\$1,274,000	\$1,275,000	\$1,272,000	\$1,273,000	\$1,271,848
7/1/10-11	\$1,849,000	\$1,848,000	\$1,830,000	\$1,839,000	\$1,821,000	\$1,839,000
7/1/11-12	\$1,461,000	\$1,460,000	\$1,462,000	\$1,461,000	\$1,464,000	\$1,461,000
7/1/12-13	\$809,000	\$807,000	\$750,000	\$807,000	\$751,000	\$807,000
7/1/13-14	\$781,000	\$808,000	\$813,000	\$810,000	\$774,000	\$810,000
7/1/14-15	\$1,693,000	\$1,644,000	\$1,603,000	\$1,649,000	\$1,624,000	\$1,649,000
7/1/15-16	\$1,998,000	\$1,882,000	\$1,659,000	\$1,891,000	\$1,719,000	\$1,891,000
7/1/16-17	\$2,402,000	\$2,543,000	\$2,062,000	\$2,556,000	\$2,205,000	\$2,556,000
7/1/17-18	\$1,569,000	\$1,663,000	\$1,345,000	\$1,718,000	\$1,204,000	\$1,718,000
7/1/18-19	\$2,131,000	\$1,793,000	\$1,390,000	\$1,944,000	\$1,986,000	\$1,944,000
7/1/19-20	\$2,466,000			\$2,283,000	\$2,404,000	\$2,283,000
Total	\$24,730,996	\$22,024,000	\$20,492,000	\$24,527,000	\$23,523,000	\$24,526,844

(B) - From Previous Report as of 6/30/2019

(C) and (D) - Exhibit 2-A

(E) and (F) - Exhibit 2-B

(G) - Selected as Noted:

Limited Reported Losses for 02-03 through 09-10

(E) for 10-11 through 19-20

Comparison of Results with Previous Estimates as of 06/30/19

(A)	(B)	(C)	(D)	(E)	(F)	(F)	(H)
Accident	Actual	Projected	Actual		Expected	Actual	
Period	Reported	Reported	Reported	Percent	Ultimate	Ultimate	Percent
Losses	Losses	Losses	Losses	Difference	Losses	Losses	Difference
6/30/2019	1/31/2020	1/31/2020			6/30/2019	1/31/2020	
7/1/02-03	\$168,909	\$168,909	\$168,909	0.0%	\$168,909	\$168,909	0.0%
7/1/03-04	\$840,274	\$840,274	\$840,274	0.0%	\$840,274	\$840,274	0.0%
7/1/04-05	\$488,972	\$488,972	\$488,972	0.0%	\$488,972	\$488,972	0.0%
7/1/05-06	\$1,253,449	\$1,253,449	\$1,253,449	0.0%	\$1,253,449	\$1,253,449	0.0%
7/1/06-07	\$953,237	\$953,237	\$953,237	0.0%	\$953,237	\$953,237	0.0%
7/1/07-08	\$1,432,614	\$1,432,614	\$1,432,614	0.0%	\$1,432,614	\$1,432,614	0.0%
7/1/08-09	\$1,159,541	\$1,159,541	\$1,159,541	0.0%	\$1,159,541	\$1,159,541	0.0%
7/1/09-10	\$1,271,848	\$1,273,017	\$1,271,848	-0.1%	\$1,275,000	\$1,271,848	-0.2%
7/1/10-11	\$1,838,086	\$1,842,161	\$1,838,086	-0.2%	\$1,849,000	\$1,839,000	-0.5%
7/1/11-12	\$1,459,814	\$1,460,259	\$1,459,814	0.0%	\$1,461,000	\$1,461,000	0.0%
7/1/12-13	\$805,866	\$807,049	\$805,866	-0.1%	\$809,000	\$807,000	-0.2%
7/1/13-14	\$773,844	\$776,559	\$806,844	3.9%	\$781,000	\$810,000	3.7%
7/1/14-15	\$1,669,436	\$1,678,390	\$1,633,386	-2.7%	\$1,693,000	\$1,649,000	-2.6%
7/1/15-16	\$1,927,015	\$1,953,865	\$1,847,403	-5.4%	\$1,998,000	\$1,891,000	-5.4%
7/1/16-17	\$2,268,430	\$2,318,007	\$2,434,276	5.0%	\$2,402,000	\$2,556,000	6.4%
7/1/17-18	\$1,365,884	\$1,437,545	\$1,539,250	7.1%	\$1,569,000	\$1,718,000	9.5%
7/1/18-19	\$1,418,058	\$1,641,849	\$1,433,818	-12.7%	\$2,131,000	\$1,944,000	-8.8%
7/1/19-20		\$957,761	\$693,194	-27.6%	\$2,466,000	\$2,283,000	-7.4%
Total	\$21,095,276	\$22,443,460	\$22,060,781	-1.7%	\$24,730,996	\$24,526,844	-0.8%

(I)	(J)	(K)	(L)	(M)	(N)	(O)
Actual	Projected	Actual		Expected	Actual	
Paid	Paid	Paid	Percent	Ultimate	Ultimate	Percent
Losses	Losses	Losses	Difference	Losses	Losses	Difference
6/30/2019	1/31/2020	1/31/2020		6/30/2019	1/31/2020	
7/1/02-03	\$168,909	\$168,909	0.0%	\$168,909	\$168,909	0.0%
7/1/03-04	\$840,274	\$840,274	0.0%	\$840,274	\$840,274	0.0%
7/1/04-05	\$488,972	\$488,972	0.0%	\$488,972	\$488,972	0.0%
7/1/05-06	\$1,253,449	\$1,253,449	0.0%	\$1,253,449	\$1,253,449	0.0%
7/1/06-07	\$953,237	\$953,237	0.0%	\$953,237	\$953,237	0.0%
7/1/07-08	\$1,432,614	\$1,432,614	0.0%	\$1,432,614	\$1,432,614	0.0%
7/1/08-09	\$1,159,541	\$1,159,541	0.0%	\$1,159,541	\$1,159,541	0.0%
7/1/09-10	\$1,271,848	\$1,272,851	-0.1%	\$1,275,000	\$1,271,848	-0.2%
7/1/10-11	\$1,811,132	\$1,823,825	-0.3%	\$1,849,000	\$1,839,000	-0.5%
7/1/11-12	\$1,459,814	\$1,460,234	0.0%	\$1,461,000	\$1,461,000	0.0%
7/1/12-13	\$745,401	\$769,187	-3.1%	\$809,000	\$807,000	-0.2%
7/1/13-14	\$725,604	\$747,467	1.9%	\$781,000	\$810,000	3.7%
7/1/14-15	\$1,532,310	\$1,598,586	-2.3%	\$1,693,000	\$1,649,000	-2.6%
7/1/15-16	\$1,409,052	\$1,654,510	-7.4%	\$1,998,000	\$1,891,000	-5.4%
7/1/16-17	\$1,416,950	\$1,791,375	-8.6%	\$2,402,000	\$2,556,000	6.4%
7/1/17-18	\$250,424	\$601,897	-34.6%	\$1,569,000	\$1,718,000	9.5%
7/1/18-19	\$86,271	\$327,405	-23.4%	\$2,131,000	\$1,944,000	-8.8%
7/1/19-20		\$99,225	-75.6%	\$2,466,000	\$2,283,000	-7.4%
Total	\$17,005,801	\$18,443,557	-3.7%	\$24,730,996	\$24,526,844	-0.8%

(B), (F), (I) and (M) - From Previous actuarial report as of 6/30/2019

(C) and (J) - Based on information available as of 6/30/2019

(D) and (K) - Exhibit 1-C

(E) = [(D) / (C)] - 1

(G) and (N) - Exhibit 3

(H) = [(G) / (F)] - 1

(L) = [(K) / (J)] - 1

(O) = [(N) / (M)] - 1

Comparison of Results with Previous Estimates as of 01/31/19

(A)	(B) Actual Reported Losses 1/31/2019	(C) Projected Reported Losses 1/31/2020	(D) Actual Reported Losses 1/31/2020	(E) Percent Difference	(F) Expected Ultimate Losses 1/31/2019	(F) Actual Ultimate Losses 1/31/2020	(H) Percent Difference
Accident Period							
7/1/02-03	\$168,909	\$168,909	\$168,909	0.0%	\$168,909	\$168,909	0.0%
7/1/03-04	\$840,274	\$840,274	\$840,274	0.0%	\$840,274	\$840,274	0.0%
7/1/04-05	\$488,972	\$488,972	\$488,972	0.0%	\$488,972	\$488,972	0.0%
7/1/05-06	\$1,253,449	\$1,253,449	\$1,253,449	0.0%	\$1,253,449	\$1,253,449	0.0%
7/1/06-07	\$953,237	\$953,237	\$953,237	0.0%	\$953,237	\$953,237	0.0%
7/1/07-08	\$1,432,614	\$1,432,614	\$1,432,614	0.0%	\$1,432,614	\$1,432,614	0.0%
7/1/08-09	\$1,159,541	\$1,159,541	\$1,159,541	0.0%	\$1,159,541	\$1,159,541	0.0%
7/1/09-10	\$1,292,498	\$1,293,872	\$1,271,848	-1.7%	\$1,295,000	\$1,271,848	-1.8%
7/1/10-11	\$1,838,086	\$1,844,108	\$1,838,086	-0.3%	\$1,849,000	\$1,839,000	-0.5%
7/1/11-12	\$1,459,814	\$1,460,472	\$1,459,814	0.0%	\$1,461,000	\$1,461,000	0.0%
7/1/12-13	\$805,866	\$807,621	\$805,866	-0.2%	\$809,000	\$807,000	-0.2%
7/1/13-14	\$773,844	\$777,995	\$806,844	3.7%	\$781,000	\$810,000	3.7%
7/1/14-15	\$1,636,936	\$1,658,409	\$1,633,386	-1.5%	\$1,673,000	\$1,649,000	-1.4%
7/1/15-16	\$1,904,515	\$1,958,475	\$1,847,403	-5.7%	\$1,998,000	\$1,891,000	-5.4%
7/1/16-17	\$2,167,357	\$2,294,998	\$2,434,276	6.1%	\$2,402,000	\$2,556,000	6.4%
7/1/17-18	\$1,103,704	\$1,257,559	\$1,539,250	22.4%	\$1,394,000	\$1,718,000	23.2%
7/1/18-19	\$853,759	\$1,778,618	\$1,433,818	-19.4%	\$2,231,000	\$1,944,000	-12.9%
7/1/19-20		\$893,289	\$693,194	-22.4%	\$2,300,000	\$2,283,000	-0.7%
Total	\$20,133,374	\$22,322,413	\$22,060,781	-1.2%	\$24,489,996	\$24,526,844	0.2%

(I)	(J) Actual Paid Losses 1/31/2019	(J) Projected Paid Losses 1/31/2020	(K) Actual Paid Losses 1/31/2020	(L) Percent Difference	(M) Expected Ultimate Losses 1/31/2019	(N) Actual Ultimate Losses 1/31/2020	(O) Percent Difference
Accident Period							
7/1/02-03	\$168,909	\$168,909	\$168,909	0.0%	\$168,909	\$168,909	0.0%
7/1/03-04	\$840,274	\$840,274	\$840,274	0.0%	\$840,274	\$840,274	0.0%
7/1/04-05	\$488,972	\$488,972	\$488,972	0.0%	\$488,972	\$488,972	0.0%
7/1/05-06	\$1,253,449	\$1,253,449	\$1,253,449	0.0%	\$1,253,449	\$1,253,449	0.0%
7/1/06-07	\$953,237	\$953,237	\$953,237	0.0%	\$953,237	\$953,237	0.0%
7/1/07-08	\$1,432,614	\$1,432,614	\$1,432,614	0.0%	\$1,432,614	\$1,432,614	0.0%
7/1/08-09	\$1,159,541	\$1,159,541	\$1,159,541	0.0%	\$1,159,541	\$1,159,541	0.0%
7/1/09-10	\$1,271,848	\$1,283,095	\$1,271,848	-0.9%	\$1,295,000	\$1,271,848	-1.8%
7/1/10-11	\$1,809,227	\$1,829,440	\$1,818,575	-0.6%	\$1,849,000	\$1,839,000	-0.5%
7/1/11-12	\$1,459,814	\$1,460,445	\$1,459,814	0.0%	\$1,461,000	\$1,461,000	0.0%
7/1/12-13	\$744,187	\$803,377	\$745,498	-7.2%	\$809,000	\$807,000	-0.2%
7/1/13-14	\$725,604	\$768,737	\$761,998	-0.9%	\$781,000	\$810,000	3.7%
7/1/14-15	\$1,473,135	\$1,610,171	\$1,562,027	-3.0%	\$1,673,000	\$1,649,000	-1.4%
7/1/15-16	\$1,377,029	\$1,810,096	\$1,532,168	-15.4%	\$1,998,000	\$1,891,000	-5.4%
7/1/16-17	\$1,216,709	\$1,839,708	\$1,637,179	-11.0%	\$2,402,000	\$2,556,000	6.4%
7/1/17-18	\$154,356	\$690,245	\$393,774	-43.0%	\$1,394,000	\$1,718,000	23.2%
7/1/18-19	\$14,067	\$447,854	\$250,780	-44.0%	\$2,231,000	\$1,944,000	-12.9%
7/1/19-20		\$92,546	\$24,226	-73.8%	\$2,300,000	\$2,283,000	-0.7%
Total	\$16,542,972	\$18,932,711	\$17,754,883	-6.2%	\$24,489,996	\$24,526,844	0.2%

(B), (F), (I) and (M) - From Previous actuarial report as of 1/31/2019

(C) and (J) - Based on information available as of 1/31/2019

(D) and (K) - Exhibit 1-C

(E) = [(D) / (C)] - 1

(G) and (N) - Exhibit 3

(H) = [(G) / (F)] - 1

Oklahoma Schools Insurance Group
General Liability including E&O

Exhibit 5-A

*Estimated Outstanding Losses
As of January 31, 2020*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
<i>Accident Period</i>	<i>Estimated Ultimate Losses</i>	<i>Limited Paid Losses</i>	<i>Limited Reported Losses</i>	<i>Limited Case Reserves</i>	<i>IBNR Losses</i>	<i>Outstanding Losses</i>
7/1/02-03	\$168,909	\$168,909	\$168,909	\$0	\$0	\$0
7/1/03-04	\$840,274	\$840,274	\$840,274	\$0	\$0	\$0
7/1/04-05	\$488,972	\$488,972	\$488,972	\$0	\$0	\$0
7/1/05-06	\$1,253,449	\$1,253,449	\$1,253,449	\$0	\$0	\$0
7/1/06-07	\$953,237	\$953,237	\$953,237	\$0	\$0	\$0
7/1/07-08	\$1,432,614	\$1,432,614	\$1,432,614	\$0	\$0	\$0
7/1/08-09	\$1,159,541	\$1,159,541	\$1,159,541	\$0	\$0	\$0
7/1/09-10	\$1,271,848	\$1,271,848	\$1,271,848	\$0	\$0	\$0
7/1/10-11	\$1,839,000	\$1,818,575	\$1,838,086	\$19,510	\$1,000	\$20,000
7/1/11-12	\$1,461,000	\$1,459,814	\$1,459,814	\$0	\$1,000	\$1,000
7/1/12-13	\$807,000	\$745,498	\$805,866	\$60,367	\$1,000	\$62,000
7/1/13-14	\$810,000	\$761,998	\$806,844	\$44,847	\$3,000	\$48,000
7/1/14-15	\$1,649,000	\$1,562,027	\$1,633,386	\$71,359	\$16,000	\$87,000
7/1/15-16	\$1,891,000	\$1,532,168	\$1,847,403	\$315,235	\$44,000	\$359,000
7/1/16-17	\$2,556,000	\$1,637,179	\$2,434,276	\$797,097	\$122,000	\$919,000
7/1/17-18	\$1,718,000	\$393,774	\$1,539,250	\$1,145,476	\$179,000	\$1,324,000
7/1/18-19	\$1,944,000	\$250,780	\$1,433,818	\$1,183,038	\$510,000	\$1,693,000
7/1/19-1/31/20	\$1,332,000	\$24,226	\$693,194	\$668,968	\$639,000	\$1,308,000
<i>Total</i>	\$23,575,844	\$17,754,883	\$22,060,781	\$4,305,898	\$1,516,000	\$5,821,000
2/1-6/30/20	\$951,000					

(B) - Exhibit 3

(C) and (D) - Exhibit 1-C

(E) = (D) - (C)

(F) = (B) - (D)

(G) = (B) - (C)

Projected Outstanding Losses
As of June 30, 2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Estimated Ultimate Losses	Projected Paid Losses	Projected Reported Losses	Limited Case Reserves	IBNR Losses	Outstanding Losses
7/1/02-03	\$168,909	\$168,909	\$168,909	\$0	\$0	\$0
7/1/03-04	\$840,274	\$840,274	\$840,274	\$0	\$0	\$0
7/1/04-05	\$488,972	\$488,972	\$488,972	\$0	\$0	\$0
7/1/05-06	\$1,253,449	\$1,253,449	\$1,253,449	\$0	\$0	\$0
7/1/06-07	\$953,237	\$953,237	\$953,237	\$0	\$0	\$0
7/1/07-08	\$1,432,614	\$1,432,614	\$1,432,614	\$0	\$0	\$0
7/1/08-09	\$1,159,541	\$1,159,541	\$1,159,541	\$0	\$0	\$0
7/1/09-10	\$1,271,848	\$1,271,848	\$1,271,848	\$0	\$0	\$0
7/1/10-11	\$1,839,000	\$1,824,000	\$1,838,000	\$14,000	\$1,000	\$15,000
7/1/11-12	\$1,461,000	\$1,460,000	\$1,460,000	\$0	\$1,000	\$1,000
7/1/12-13	\$807,000	\$763,000	\$806,000	\$43,000	\$1,000	\$44,000
7/1/13-14	\$810,000	\$776,000	\$808,000	\$32,000	\$2,000	\$34,000
7/1/14-15	\$1,649,000	\$1,589,000	\$1,638,000	\$49,000	\$11,000	\$60,000
7/1/15-16	\$1,891,000	\$1,649,000	\$1,860,000	\$211,000	\$31,000	\$242,000
7/1/16-17	\$2,556,000	\$1,928,000	\$2,470,000	\$542,000	\$86,000	\$628,000
7/1/17-18	\$1,718,000	\$731,000	\$1,590,000	\$859,000	\$128,000	\$987,000
7/1/18-19	\$1,944,000	\$481,000	\$1,565,000	\$1,084,000	\$379,000	\$1,463,000
7/1/19-20	\$2,283,000	\$137,000	\$1,427,000	\$1,290,000	\$856,000	\$2,146,000
Total	\$24,526,844	\$18,906,844	\$23,030,844	\$4,124,000	\$1,496,000	\$5,620,000

(B) - Exhibit 3

(C) and (D) - Projected using loss development factors

(E) = (D) - (C)

(F) = (B) - (D)

(G) = (B) - (C)

Average Ultimate Claim Sizes

(A)	(B)	(C)	(D)	(E)	(F)	(F)	(H)
<i>Accident Period</i>	<i>Reported Claims</i>	<i>Reported Claim Development</i>	<i>Estimated Ultimate Claims</i>	<i>Estimated Ultimate Losses</i>	<i>Estimated Average Ultimate Claim</i>	<i>Exposure (Students)</i>	<i>Loss Rate</i>
7/1/02-03	28	1.000	28.0	\$168,909	\$6,000		
7/1/03-04	88	1.000	88.0	\$840,274	\$9,500		
7/1/04-05	115	1.000	115.0	\$488,972	\$4,300	198,498	\$2.46
7/1/05-06	136	1.000	136.0	\$1,253,449	\$9,200	249,419	\$5.03
7/1/06-07	132	1.000	132.0	\$953,237	\$7,200	267,684	\$3.56
7/1/07-08	163	1.000	163.0	\$1,432,614	\$8,800	308,999	\$4.64
7/1/08-09	155	1.000	155.0	\$1,159,541	\$7,500	313,473	\$3.70
7/1/09-10	144	1.000	144.0	\$1,271,848	\$8,800	314,947	\$4.04
7/1/10-11	110	1.000	110.0	\$1,839,000	\$16,700	356,970	\$5.15
7/1/11-12	87	1.000	87.0	\$1,461,000	\$16,800	309,147	\$4.73
7/1/12-13	109	1.000	109.0	\$807,000	\$7,400	282,168	\$2.86
7/1/13-14	86	1.000	86.0	\$810,000	\$9,400	325,035	\$2.49
7/1/14-15	116	1.000	116.0	\$1,649,000	\$14,200	381,156	\$4.33
7/1/15-16	119	1.000	119.0	\$1,891,000	\$15,900	381,204	\$4.96
7/1/16-17	134	1.000	134.0	\$2,556,000	\$19,100	393,462	\$6.50
7/1/17-18	77	1.001	77.1	\$1,718,000	\$22,300	393,700	\$4.36
7/1/18-19	112	1.009	113.1	\$1,944,000	\$17,200	448,676	\$4.33
7/1/19-20	64	1.883	120.5	\$2,283,000	\$18,900	481,126	\$4.75
7/1/20-21			115.3	\$2,411,000	\$20,900	481,126	\$5.01
<i>Total</i>	1,975		2,148.1	\$26,937,844	\$12,500	5,886,790	\$4.58

- Results for 7/1/20-21 are from Forecast Report

(B) - Exhibit 1-A

(C) - Appendix A3

(D) = (B) x (C)

(E) = Exhibit 3

(F) = (E) / (D)

(G) - Exhibit 1-A, provided by OSIG

(H) = (E) / (G)

**Estimation of Cumulative Reported Loss Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.507	-6.9197	-0.6800	47.882	0.4624	4.7054	211	1.000
24	1.200	-6.9315	-1.6118	48.045	2.5979	11.1720	199	1.000
36	1.100	-6.9431	-2.3023	48.207	5.3008	15.9854	187	1.000
48	1.041	-6.9546	-3.1926	48.367	10.1929	22.2036	175	1.000
60	1.016	-6.9660	-4.1559	48.525	17.2715	28.9501	163	1.000
72	1.006	-6.9773	-5.1317	48.682	26.3346	35.8055	151	1.000
							139	1.000
							127	1.000
							115	1.000
							103	1.001
							91	1.002
							79	1.004
Sum		-41.6922	-17.0744	289.7092	62.1600	118.8220	67	1.009
Average		-6.9487	-2.8457	48.2849	10.3600	19.8037	55	1.022
							43	1.053
							31	1.129
							19	1.314
							7	2.816

N =	6
A =	1.202E+229
B =	76.319
C =	1000
R^2 =	0.996670

* - Appendix A4

**Estimation of Cumulative Paid Loss Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	12.479	-4.2767	2.4405	18.290	5.9559	-10.4371	211	1.000
24	3.159	-4.4308	0.7695	19.632	0.5922	-3.4096	199	1.000
36	1.630	-4.5643	-0.4627	20.833	0.2141	2.1121	187	1.000
48	1.229	-4.6821	-1.4722	21.922	2.1673	6.8930	175	1.000
60	1.057	-4.7875	-2.8598	22.920	8.1787	13.6915	163	1.000
72	1.027	-4.8828	-3.6126	23.842	13.0506	17.6394	151	1.000
84	1.011	-4.9698	-4.5203	24.699	20.4327	22.4648	139	1.000
							127	1.001
							115	1.002
							103	1.003
							91	1.007
							79	1.015
Sum		-32.5941	-9.7176	152.1385	50.5916	48.9541	67	1.038
Average		-4.6563	-1.3882	21.7341	7.2274	6.9934	55	1.103
							43	1.310
							31	2.067
							19	5.385
							7	28.755

N =	7
A =	4.017E+19
B =	9.992
C =	60
R^2 = 0.998166	

* - Appendix A5

**Estimation of Cumulative Reported Claim Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
		$LN(1/(X+C))$	$LN(Y-1)$					
12	1.046	-2.8736	-3.0763	8.257	9.4634	8.8398	211	1.000
24	1.004	-3.3911	-5.5052	11.500	30.3070	18.6689	199	1.000
36	1.001	-3.7305	-7.2296	13.917	52.2673	26.9701	187	1.000
							175	1.000
							163	1.000
							151	1.000
							139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.000
							79	1.000
Sum		-9.9952	-15.8111	33.6739	92.0377	54.4788	67	1.000
Average		-3.3317	-5.2704	11.2246	30.6792	18.1596	55	1.000
							43	1.000
							31	1.001
							19	1.009
							7	1.883

N =	3	
A =	5.079E+04	
B =	4.834	R^2 = 0.999521
C =	5.7	

* - Appendix A6

Analysis of Reported Loss Development
Reported Losses and ALAE Net of Member Deductibles

Year	Reported Losses and ALAE as of (months):									
	12	24	36	48	60	72	84	96	108	120
7/1/04-05	\$334,164	\$494,404	\$546,889	\$667,336	\$536,764	\$525,685	\$525,685	\$525,685	\$525,685	\$525,685
7/1/05-06	\$816,923	\$1,112,049	\$1,229,274	\$1,405,786	\$1,398,668	\$1,318,468	\$1,335,203	\$1,330,178	\$1,330,178	\$1,330,178
7/1/06-07	\$980,380	\$1,099,400	\$1,048,254	\$1,108,562	\$1,328,586	\$1,351,525	\$1,411,197	\$1,411,197	\$1,351,835	\$1,351,835
7/1/07-08	\$1,546,988	\$1,678,303	\$1,820,948	\$1,681,989	\$1,578,663	\$1,528,365	\$1,501,995	\$1,501,995	\$1,501,995	\$1,501,995
7/1/08-09	\$1,818,383	\$1,498,349	\$1,690,273	\$1,328,980	\$1,211,633	\$1,303,460	\$2,248,460	\$2,172,804	\$2,172,804	\$2,172,804
7/1/09-10	\$1,911,271	\$1,672,753	\$1,443,458	\$1,751,670	\$1,603,126	\$1,564,138	\$1,524,198	\$1,524,198	\$1,524,198	\$1,503,548
7/1/10-11	\$2,532,003	\$2,683,693	\$2,774,100	\$2,589,243	\$2,532,090	\$2,434,762	\$2,434,762	\$2,434,762	\$2,434,762	
7/1/11-12	\$1,927,480	\$2,611,099	\$3,751,625	\$3,977,466	\$3,919,928	\$3,747,985	\$3,688,203	\$3,688,203		
7/1/12-13	\$1,311,489	\$1,442,277	\$1,150,970	\$1,348,515	\$1,213,833	\$1,167,520	\$1,126,334			
7/1/13-14	\$1,136,920	\$1,270,561	\$1,003,224	\$1,041,935	\$943,543	\$895,683				
7/1/14-15	\$1,195,898	\$1,507,077	\$1,985,502	\$2,246,921	\$2,242,422					
7/1/15-16	\$1,726,427	\$1,880,174	\$2,190,719	\$2,132,574						
7/1/16-17	\$2,362,228	\$3,423,590	\$3,517,430							
7/1/17-18	\$917,464	\$1,493,734								
7/1/18-19	\$1,445,316									

Year	Age-to-Age Factors									
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:ult
7/1/04-05	1.480	1.106	1.220	0.804	0.979	1.000	1.000	1.000	1.000	
7/1/05-06	1.361	1.105	1.144	0.995	0.943	1.013	0.996	1.000	1.000	
7/1/06-07	1.121	0.953	1.058	1.198	1.017	1.044	1.000	0.958	1.000	
7/1/07-08	1.085	1.085	0.924	0.939	0.968	0.983	1.000	1.000	1.000	
7/1/08-09	0.824	1.128	0.786	0.912	1.076	1.725	0.966	1.000	1.000	
7/1/09-10	0.875	0.863	1.214	0.915	0.976	0.974	1.000	1.000	0.986	
7/1/10-11	1.060	1.034	0.933	0.978	0.962	1.000	1.000	1.000		
7/1/11-12	1.355	1.437	1.060	0.986	0.956	0.984	1.000			
7/1/12-13	1.100	0.798	1.172	0.900	0.962	0.965				
7/1/13-14	1.118	0.790	1.039	0.906	0.949					
7/1/14-15	1.260	1.317	1.132	0.998						
7/1/15-16	1.089	1.165	0.973							
7/1/16-17	1.449	1.027								
7/1/17-18	1.628									

Average	1.200	1.062	1.054	0.957	0.979	1.076	0.995	0.994	0.998	
Wtd. Avg.	1.163	1.080	1.031	0.967	0.974	1.057	0.995	0.995	0.998	
5 year average	1.309	1.020	1.075	0.953	0.961	1.130	0.993	0.992	0.997	
OK Benchmark	2.018	1.232	0.958	0.954	0.956	1.000	1.000	1.000	1.000	1.000
Prior	1.203	1.101	1.038	1.017	1.010	1.006	1.000	1.000	1.000	1.000
	12	24	36	48	60	72	84	96	108	120
Selected	1.256	1.090	1.057	1.025	1.010	1.006	1.000	1.000	1.000	1.000
Cumulative	1.507	1.200	1.100	1.041	1.016	1.006	1.000	1.000	1.000	1.000

Analysis of Paid Loss Development
Paid Losses and ALAE Net of Member Deductibles

Year	Paid Losses and ALAE as of (months):									
	12	24	36	48	60	72	84	96	108	120
7/1/04-05	\$135,749	\$315,927	\$386,597	\$490,920	\$536,764	\$525,685	\$525,685	\$525,685	\$525,685	\$525,685
7/1/05-06	\$231,455	\$584,973	\$771,010	\$1,092,719	\$1,312,650	\$1,313,442	\$1,330,178	\$1,330,178	\$1,330,178	\$1,330,178
7/1/06-07	\$322,617	\$678,216	\$787,689	\$943,320	\$1,208,914	\$1,271,236	\$1,344,837	\$1,351,835	\$1,351,835	\$1,351,835
7/1/07-08	\$170,163	\$665,391	\$1,286,746	\$1,455,173	\$1,501,494	\$1,501,995	\$1,501,995	\$1,501,995	\$1,501,995	\$1,501,995
7/1/08-09	\$158,208	\$609,160	\$939,799	\$984,969	\$1,127,969	\$1,163,044	\$2,170,476	\$2,172,804	\$2,172,804	\$2,172,804
7/1/09-10	\$297,737	\$767,474	\$1,041,914	\$1,347,942	\$1,505,891	\$1,496,609	\$1,503,479	\$1,502,945	\$1,503,515	\$1,503,548
7/1/10-11	\$201,545	\$1,303,203	\$2,109,602	\$2,299,143	\$2,347,892	\$2,385,861	\$2,395,912	\$2,400,815	\$2,407,808	
7/1/11-12	\$128,159	\$704,902	\$1,700,471	\$2,356,202	\$3,580,758	\$3,685,134	\$3,688,203	\$3,688,203		
7/1/12-13	\$148,090	\$496,864	\$655,081	\$980,783	\$1,004,467	\$1,058,497	\$1,065,869			
7/1/13-14	\$70,272	\$359,375	\$563,792	\$811,678	\$838,630	\$847,442				
7/1/14-15	\$131,121	\$604,571	\$1,391,247	\$1,592,115	\$2,092,796					
7/1/15-16	\$275,027	\$824,838	\$1,304,248	\$1,605,611						
7/1/16-17	\$236,290	\$740,126	\$2,540,308							
7/1/17-18	\$56,435	\$250,424								
7/1/18-19	\$86,271									

Year	Age-to-Age Factors									
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:ult
7/1/04-05	2.327	1.224	1.270	1.093	0.979	1.000	1.000	1.000	1.000	
7/1/05-06	2.527	1.318	1.417	1.201	1.001	1.013	1.000	1.000	1.000	
7/1/06-07	2.102	1.161	1.198	1.282	1.052	1.058	1.005	1.000	1.000	
7/1/07-08	3.910	1.934	1.131	1.032	1.000	1.000	1.000	1.000	1.000	
7/1/08-09	3.850	1.543	1.048	1.145	1.031	1.866	1.001	1.000	1.000	
7/1/09-10	2.578	1.358	1.294	1.117	0.994	1.005	1.000	1.000	1.000	
7/1/10-11	6.466	1.619	1.090	1.021	1.016	1.004	1.002	1.003		
7/1/11-12	5.500	2.412	1.386	1.520	1.029	1.001	1.000			
7/1/12-13	3.355	1.318	1.497	1.024	1.054	1.007				
7/1/13-14	5.114	1.569	1.440	1.033	1.011					
7/1/14-15	4.611	2.301	1.144	1.314						
7/1/15-16	2.999	1.581	1.231							
7/1/16-17	3.132	3.432								
7/1/17-18	4.437									
Average	3.779	1.752	1.262	1.162	1.017	1.106	1.001	1.000	1.000	
Wtd. Avg.	3.475	1.788	1.234	1.188	1.019	1.078	1.001	1.001	1.000	
5 year average	4.059	2.040	1.340	1.183	1.021	1.177	1.001	1.001	1.000	
OK benchmark	2.552	1.975	1.312	1.082	1.038	1.016	1.008	1.003	1.000	1.000
Prior	3.842	1.836	1.311	1.143	1.038	1.016	1.008	1.003	1.000	1.000
	12	24	36	48	60	72	84	96	108	120
Selected	3.951	1.938	1.325	1.163	1.029	1.016	1.008	1.003	1.000	1.000
Cumulative	12.479	3.159	1.630	1.229	1.057	1.027	1.011	1.003	1.000	1.000

Analysis of Reported Occurrences

Year	Reported Claims as of (months):									
	12	24	36	48	60	72	84	96	108	120
7/1/04-05		115	116	116	116	115	115	115	115	115
7/1/05-06	114	136	137	138	136	136	136	136	136	136
7/1/06-07	128	132	133	132	132	132	132	132	132	132
7/1/07-08	148	161	164	164	163	163	163	163	163	163
7/1/08-09	146	155	155	155	155	155	155	155	155	155
7/1/09-10	139	143	144	144	144	144	144	144	144	144
7/1/10-11	108	109	109	110	110	110	110	110	110	
7/1/11-12	89	87	87	87	87	87	87	87		
7/1/12-13	110	109	109	109	109	109	109			
7/1/13-14	83	85	86	86	86	86				
7/1/14-15	103	116	116	116	116					
7/1/15-16	120	122	119	119						
7/1/16-17	125	135	133							
7/1/17-18	80	77								
7/1/18-19	122									

Year	Age-to-Age Factors									
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:ult
7/1/04-05		1.009	1.000	1.000	0.991	1.000	1.000	1.000	1.000	
7/1/05-06	1.193	1.007	1.007	0.986	1.000	1.000	1.000	1.000	1.000	
7/1/06-07	1.031	1.008	0.992	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/07-08	1.088	1.019	1.000	0.994	1.000	1.000	1.000	1.000	1.000	
7/1/08-09	1.062	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/09-10	1.029	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/10-11	1.009	1.000	1.009	1.000	1.000	1.000	1.000	1.000		
7/1/11-12	0.978	1.000	1.000	1.000	1.000	1.000	1.000			
7/1/12-13	0.991	1.000	1.000	1.000	1.000	1.000				
7/1/13-14	1.024	1.012	1.000	1.000	1.000					
7/1/14-15	1.126	1.000	1.000	1.000						
7/1/15-16	1.017	0.975	1.000							
7/1/16-17	1.080	0.985								
7/1/17-18	0.963									
<hr/>										
Average	1.045	1.002	1.001	0.998	0.999	1.000	1.000	1.000	1.000	
Wtd. Avg.	1.050	1.002	1.001	0.998	0.999	1.000	1.000	1.000	1.000	
5 year average	1.042	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
OK benchmark	1.268	1.014	1.005	1.002	1.001	1.000	1.000	1.000	1.000	1.000
Prior	1.054	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<hr/>										
	12	24	36	48	60	72	84	96	108	120
Selected	1.042	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	1.046	1.004	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000

*Derivation of Lognomoral Parameters
Based on Reported Loss Development*

Year	Natural Logarithm of Age to Age Factors									
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:ult
7/1/04-05	0.392	0.101	0.199	-0.218	-0.021	0.000	0.000	0.000	0.000	
7/1/05-06	0.308	0.100	0.134	-0.005	-0.059	0.013	-0.004	0.000	0.000	
7/1/06-07	0.115	-0.048	0.056	0.181	0.017	0.043	0.000	-0.043	0.000	
7/1/07-08	0.081	0.082	-0.079	-0.063	-0.032	-0.017	0.000	0.000	0.000	
7/1/08-09	-0.194	0.121	-0.240	-0.092	0.073		-0.034	0.000	0.000	
7/1/09-10	-0.133	-0.147	0.194	-0.089	-0.025	-0.026	0.000	0.000	-0.014	
7/1/10-11	0.058	0.033	-0.069	-0.022	-0.039	0.000	0.000	0.000		
7/1/11-12	0.304	0.362	0.058	-0.015	-0.045	-0.016	0.000			
7/1/12-13	0.095	-0.226	0.158	-0.105	-0.039	-0.036				
7/1/13-14	0.111	-0.236	0.038	-0.099	-0.052					
7/1/14-15	0.231	0.276	0.124	-0.002						
7/1/15-16	0.085	0.153	-0.027							
7/1/16-17	0.371	0.027								
7/1/17-18	0.487									
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	
Variance	0.038	0.031	0.017	0.010	0.002	0.001	0.000	0.000	0.000	
Cum. Variance	0.099	0.061	0.029	0.012	0.003	0.001	0.000	0.000	0.000	
SD	0.314	0.247	0.172	0.111	0.051	0.033	0.021	0.017	0.006	

Section 5

Exhibits – Automobile Liability

Exhibit 1	Summary of Data Large Loss Listing Calculation of Limited Losses
Exhibit 2	Loss Development Methods Bornhuetter-Ferguson Methods
Exhibit 3	Summary and Selection of Ultimate Losses
Exhibit 4	Comparison to Previous Actuarial Report
Exhibit 5	Outstanding Losses as of 1/31/2020 Projected Outstanding Losses and IBNR as of 6/30/2020
Exhibit 6	Historical Claim Frequency, Severity and Loss Rates
Appendix A	Loss Development Factors

Summary of Loss Data as of January 31, 2020
Total Experience Net of Member Deductibles

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Evaluation Date	Maturity (months)	Total Claims	Open Claims	Net Loss and Expense Payments	Net Loss and Expense Reserves	Net Loss and Expense Incurred Vehicles
7/1/02-03	1/31/2020	211	24	0	\$65,087	\$0	\$65,087
7/1/03-04	1/31/2020	199	81	0	\$433,514	\$0	\$433,514
7/1/04-05	1/31/2020	187	109	0	\$1,097,512	\$0	\$1,097,512 5,046
7/1/05-06	1/31/2020	175	134	0	\$450,928	\$0	\$450,928 6,391
7/1/06-07	1/31/2020	163	145	0	\$549,344	\$0	\$549,344 7,017
7/1/07-08	1/31/2020	151	178	0	\$759,907	\$0	\$759,907 7,753
7/1/08-09	1/31/2020	139	207	0	\$1,465,586	\$0	\$1,465,586 7,641
7/1/09-10	1/31/2020	127	182	0	\$703,413	\$0	\$703,413 8,309
7/1/10-11	1/31/2020	115	187	0	\$882,016	\$0	\$882,016 9,022
7/1/11-12	1/31/2020	103	177	0	\$948,511	\$0	\$948,511 6,650
7/1/12-13	1/31/2020	91	162	0	\$661,103	\$0	\$661,103 6,979
7/1/13-14	1/31/2020	79	186	0	\$730,549	\$0	\$730,549 7,460
7/1/14-15	1/31/2020	67	226	4	\$1,181,503	\$214,312	\$1,395,815 9,047
7/1/15-16	1/31/2020	55	227	3	\$1,072,725	\$152,944	\$1,225,669 9,517
7/1/16-17	1/31/2020	43	207	5	\$982,494	\$277,108	\$1,259,602 10,334
7/1/17-18	1/31/2020	31	166	6	\$569,918	\$430,735	\$1,000,653 10,113
7/1/18-19	1/31/2020	19	200	36	\$558,206	\$444,638	\$1,002,844 11,525
7/1/19-20	1/31/2020	7	176	107	\$356,050	\$885,193	\$1,241,244 12,920
7/1/20-21							12,920
			2974	161	\$13,468,368	\$2,404,930	\$15,873,298 148,643

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services
- Claims are grouped by occurrence, claims with \$0 incurred are excluded
- Losses are net of member deductibles

Claims over \$80,000

Occurrence #	School	Loss Date	Net Paid	Net Incurred	Policy Year	SIR	Excess Paid	Excess Incurred	Severity Factor	Ultimate Net
00203	NEWKIRK PUBLIC SCHOOLS	1/30/2004	\$176,217	\$176,217	7/1/03-04	\$100,000	\$76,217	\$76,217	1.000	\$176,217
00513	CHICKASHA PUBLIC SCHOOLS	12/20/2004	\$129,748	\$129,748	7/1/04-05	\$100,000	\$29,748	\$29,748	1.000	\$129,748
00596	RIPLEY ISD	3/29/2005	\$549,427	\$549,427	7/1/04-05	\$100,000	\$449,427	\$449,427	1.000	\$549,427
01433	VELMA-ALMA ISD #5	12/20/2006	\$114,139	\$114,139	7/1/06-07	\$100,000	\$14,139	\$14,139	1.000	\$114,140
P625-07-02018	BLANCHARD PUBLIC SCHOOL	12/4/2007	\$81,113	\$81,113	7/1/07-08	\$100,000	\$0	\$0	1.000	\$81,113
02638	ALTUS PUBLIC SCHOOL	11/14/2008	\$104,466	\$104,466	7/1/08-09	\$100,000	\$4,466	\$4,466	1.000	\$104,467
02678	CHICKASHA PUBLIC SCHOOLS	12/15/2008	\$131,271	\$131,271	7/1/08-09	\$100,000	\$31,271	\$31,271	1.000	\$131,272
P625-09-02824	COLCORD PUBLIC SCHOOLS	3/26/2009	\$99,346	\$99,346	7/1/08-09	\$100,000	\$0	\$0	1.000	\$99,347
02940	CANEY VALLEY PUBLIC SCHOOL	5/7/2009	\$106,504	\$106,504	7/1/08-09	\$100,000	\$6,504	\$6,504	1.000	\$106,505
90075	PAOLI ISD	8/18/2010	\$134,999	\$134,999	7/1/10-11	\$100,000	\$34,999	\$34,999	1.000	\$135,007
90305	GUTHRIE PUBLIC SCHOOLS	12/8/2010	\$103,684	\$103,684	7/1/10-11	\$100,000	\$3,684	\$3,684	1.000	\$103,691
P625-11-90851	LAWTON BOARD OF EDUCATION ISD#8	9/9/2011	\$96,221	\$96,221	7/1/11-12	\$100,000	\$0	\$0	1.000	\$96,237
91477	LAWTON BOARD OF EDUCATION ISD#8	9/19/2012	\$135,786	\$135,786	7/1/12-13	\$100,000	\$35,786	\$35,786	1.000	\$135,843
92239	PUTNAM CITY ISD	1/7/2014	\$130,707	\$130,707	7/1/13-14	\$100,000	\$30,707	\$30,707	1.001	\$130,852
93008	WESTERN HEIGHTS ISD	3/23/2015	\$206,102	\$206,102	7/1/14-15	\$100,000	\$106,102	\$106,102	1.003	\$206,711
P625-15-93019	YUKON PUBLIC SCHOOLS	3/26/2015	\$7,304	\$85,200	7/1/14-15	\$100,000	\$0	\$0	1.003	\$85,452
93063	MIDWEST CITY-DEL CITY ISD	4/20/2015	\$219,224	\$219,224	7/1/14-15	\$100,000	\$119,224	\$119,224	1.003	\$219,871
93186	JONES ISD	6/3/2015	\$16,117	\$107,276	7/1/14-15	\$100,000	\$0	\$7,276	1.003	\$107,593
93397	BARTLESVILLE PUBLIC SCHOOL #30	10/10/2015	\$6,482	\$105,404	7/1/15-16	\$100,000	\$0	\$5,404	1.008	\$106,243
93477	HAYWOOD ISD	11/19/2015	\$174,557	\$174,557	7/1/15-16	\$100,000	\$74,557	\$74,557	1.008	\$175,947
94052	PUTNAM CITY ISD	9/29/2016	\$126,307	\$126,307	7/1/16-17	\$100,000	\$26,307	\$26,307	1.022	\$129,050
94363	ADAIR ISD	3/23/2017	\$29,805	\$128,040	7/1/16-17	\$100,000	\$0	\$28,040	1.022	\$130,820
P625-17-94995	NEWKIRK PUBLIC SCHOOLS	5/8/2017	\$10,327	\$82,500	7/1/16-17	\$100,000	\$0	\$0	1.022	\$84,291
94907	NORTH ROCK CREEK ISD	1/30/2018	\$8,657	\$167,250	7/1/17-18	\$100,000	\$0	\$67,250	1.060	\$177,270
P625-18-94968	LITTLE AXE PUBLIC SCHOOLS	3/6/2018	\$6,750	\$85,692	7/1/17-18	\$100,000	\$0	\$0	1.060	\$90,826
P625-19-95984	PRYOR SCHOOL DISTRICT	8/29/2019	\$149	\$83,500	7/1/19-20	\$100,000	\$0	\$0	1.107	\$92,393
96137	CLEVELAND PUBLIC SCHOOLS	10/29/2019	\$0	\$263,000	7/1/19-20	\$100,000	\$0	\$163,000	1.107	\$291,011
96204	ARDMORE ISD #19	11/15/2019	\$37,741	\$102,880	7/1/19-20	\$100,000	\$0	\$2,880	1.107	\$113,837
			\$2,943,151	\$4,030,562			\$1,043,140	\$1,316,989		

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services
Excess paid and incurred losses for closed claims are equal to the excess recoveries, or amounts over SIR if no recovery yet
Excess paid and incurred losses for open claims are amounts in excess of SIR regardless of recoveries.

Calculation of Limited Losses

(A) Policy Period	(B) Retention	(C) Unlimited Paid Losses	(D) Unlimited Reported Losses	(E) Paid Excess of Primary	(F) Reported Excess of Primary	(G) Paid Limited to Primary	(H) Reported Limited to Primary
7/1/02-03	\$100,000	\$65,087	\$65,087	\$0	\$0	\$65,087	\$65,087
7/1/03-04	\$100,000	\$433,514	\$433,514	\$76,217	\$76,217	\$357,297	\$357,297
7/1/04-05	\$100,000	\$1,097,512	\$1,097,512	\$479,175	\$479,175	\$618,336	\$618,336
7/1/05-06	\$100,000	\$450,928	\$450,928	\$0	\$0	\$450,928	\$450,928
7/1/06-07	\$100,000	\$549,344	\$549,344	\$14,139	\$14,139	\$535,205	\$535,205
7/1/07-08	\$100,000	\$759,907	\$759,907	\$0	\$0	\$759,907	\$759,907
7/1/08-09	\$100,000	\$1,465,586	\$1,465,586	\$42,241	\$42,241	\$1,423,346	\$1,423,346
7/1/09-10	\$100,000	\$703,413	\$703,413	\$0	\$0	\$703,413	\$703,413
7/1/10-11	\$100,000	\$882,016	\$882,016	\$38,683	\$38,683	\$843,333	\$843,333
7/1/11-12	\$100,000	\$948,511	\$948,511	\$0	\$0	\$948,511	\$948,511
7/1/12-13	\$100,000	\$661,103	\$661,103	\$35,786	\$35,786	\$625,317	\$625,317
7/1/13-14	\$100,000	\$730,549	\$730,549	\$30,707	\$30,707	\$699,842	\$699,842
7/1/14-15	\$100,000	\$1,181,503	\$1,395,815	\$225,326	\$232,603	\$956,177	\$1,163,213
7/1/15-16	\$100,000	\$1,072,725	\$1,225,669	\$74,557	\$79,961	\$998,168	\$1,145,708
7/1/16-17	\$100,000	\$982,494	\$1,259,602	\$26,307	\$54,347	\$956,187	\$1,205,255
7/1/17-18	\$100,000	\$569,918	\$1,000,653	\$0	\$67,250	\$569,918	\$933,403
7/1/18-19	\$100,000	\$558,206	\$1,002,844	\$0	\$0	\$558,206	\$1,002,844
7/1/19-20	\$100,000	\$356,050	\$1,241,244	\$0	\$165,880	\$356,050	\$1,075,364
Total		\$13,468,368	\$15,873,298	\$1,043,140	\$1,316,989	\$12,425,228	\$14,556,309

(C) and (D) - Exhibit 1-A

(E) and (F) - Excess amounts from claims in Exhibit 1-B

(G) = (C) - (E)

(H) = (D) - (F)

*Estimated Ultimate Losses Limited to OSIG Retentions
Using Loss Development Methods*

(A) Accident Period	(B) Reported Losses	(C) Reported on Large Losses	(D) Reported Develop. Factor	(E) Ultimate on Small Claims	(F) Provision for Large Claims	(G) Estimated Ultimate Losses
7/1/02-03	\$65,087	\$0	1.000	\$65,087	\$0	\$65,000
7/1/03-04	\$433,514	\$176,217	1.000	\$257,297	\$100,000	\$357,000
7/1/04-05	\$1,097,512	\$679,175	1.000	\$418,336	\$200,000	\$618,000
7/1/05-06	\$450,928	\$0	1.000	\$450,928	\$0	\$451,000
7/1/06-07	\$549,344	\$114,139	1.000	\$435,206	\$100,000	\$535,000
7/1/07-08	\$759,907	\$0	1.000	\$759,910	\$0	\$760,000
7/1/08-09	\$1,465,586	\$342,241	1.000	\$1,123,356	\$300,000	\$1,423,000
7/1/09-10	\$703,413	\$0	1.000	\$703,430	\$0	\$703,000
7/1/10-11	\$882,016	\$238,683	1.000	\$643,373	\$200,000	\$843,000
7/1/11-12	\$948,511	\$0	1.000	\$948,664	\$0	\$949,000
7/1/12-13	\$661,103	\$135,786	1.000	\$525,537	\$100,000	\$626,000
7/1/13-14	\$730,549	\$130,707	1.001	\$600,506	\$100,000	\$701,000
7/1/14-15	\$1,395,815	\$532,603	1.003	\$865,762	\$300,000	\$1,166,000
7/1/15-16	\$1,225,669	\$279,961	1.008	\$953,238	\$200,000	\$1,153,000
7/1/16-17	\$1,259,602	\$254,347	1.022	\$1,027,083	\$200,000	\$1,227,000
7/1/17-18	\$1,000,653	\$167,250	1.060	\$883,331	\$100,000	\$983,000
7/1/18-19	\$1,002,844	\$0	1.109	\$1,112,039	\$0	\$1,112,000
7/1/19-20	\$1,241,244	\$365,880	1.901	\$1,664,020	\$343,595	\$2,008,000
Total	\$15,873,298	\$3,416,989		\$13,437,105	\$2,243,595	\$15,680,000

(H) Accident Period	(I) Paid on Large Losses	(J) Paid Develop. Factor	(K) Ultimate on Small Claims	(L) Provision for Large Claims	(M) Estimated Ultimate Losses
7/1/02-03	\$65,087	\$0	1.000	\$65,087	\$65,000
7/1/03-04	\$433,514	\$176,217	1.000	\$257,297	\$357,000
7/1/04-05	\$1,097,512	\$679,175	1.000	\$418,336	\$618,000
7/1/05-06	\$450,928	\$0	1.000	\$450,928	\$451,000
7/1/06-07	\$549,344	\$114,139	1.000	\$435,206	\$535,000
7/1/07-08	\$759,907	\$0	1.000	\$759,911	\$760,000
7/1/08-09	\$1,465,586	\$342,241	1.000	\$1,123,363	\$1,423,000
7/1/09-10	\$703,413	\$0	1.000	\$703,443	\$703,000
7/1/10-11	\$882,016	\$238,683	1.000	\$643,409	\$843,000
7/1/11-12	\$948,511	\$0	1.000	\$948,825	\$949,000
7/1/12-13	\$661,103	\$135,786	1.001	\$525,808	\$626,000
7/1/13-14	\$730,549	\$130,707	1.003	\$601,445	\$701,000
7/1/14-15	\$1,181,503	\$441,443	1.008	\$745,786	\$1,046,000
7/1/15-16	\$1,072,725	\$181,039	1.023	\$911,895	\$1,112,000
7/1/16-17	\$982,494	\$156,112	1.067	\$881,921	\$1,082,000
7/1/17-18	\$569,918	\$8,657	1.202	\$674,538	\$775,000
7/1/18-19	\$558,206	\$0	1.614	\$900,911	\$901,000
7/1/19-20	\$356,050	\$37,741	4.277	\$1,361,509	\$1,705,000
Total	\$13,468,368	\$2,641,941		\$12,409,619	\$14,652,000

(B) and (H)- Exhibit 1-A

(C) and (I) - Exhibit 1-B

(D) - Appendix A1

(E) = [(B) - (C)] x (D)

(F) and (L) = # large x SIR x ccdf

(G) = (E) + (F)

(J) - Appendix A2

(K) = [(H) - (I)] x (J)

(M) = (K) + (L)

**Estimated Ultimate Losses Limited to OSIG Retention
Using Bornhuetter-Ferguson Method**

(A) Accident Period	(B) Prior Ultimate or Forecast	(C) Reported Develop. Factor	(D) Expected % Unreported	(E) Expected Unreported Losses	(F) Limited Reported Losses	(G) Estimated Ultimate Losses
7/1/02-03	\$65,087	1.000	0%	\$0	\$65,087	\$65,000
7/1/03-04	\$357,297	1.000	0%	\$0	\$357,297	\$357,000
7/1/04-05	\$618,336	1.000	0%	\$0	\$618,336	\$618,000
7/1/05-06	\$450,928	1.000	0%	\$0	\$450,928	\$451,000
7/1/06-07	\$535,205	1.000	0%	\$1	\$535,205	\$535,000
7/1/07-08	\$759,907	1.000	0%	\$3	\$759,907	\$760,000
7/1/08-09	\$1,423,346	1.000	0%	\$14	\$1,423,346	\$1,423,000
7/1/09-10	\$703,413	1.000	0%	\$17	\$703,413	\$703,000
7/1/10-11	\$843,333	1.000	0%	\$53	\$843,333	\$843,000
7/1/11-12	\$974,000	1.000	0%	\$157	\$948,511	\$949,000
7/1/12-13	\$625,000	1.000	0%	\$262	\$625,317	\$626,000
7/1/13-14	\$675,000	1.001	0%	\$747	\$699,842	\$701,000
7/1/14-15	\$1,209,000	1.003	0%	\$3,560	\$1,163,213	\$1,167,000
7/1/15-16	\$1,199,000	1.008	1%	\$9,471	\$1,145,708	\$1,155,000
7/1/16-17	\$1,227,000	1.022	2%	\$26,077	\$1,205,255	\$1,231,000
7/1/17-18	\$953,000	1.060	6%	\$53,866	\$933,403	\$987,000
7/1/18-19	\$1,469,000	1.109	10%	\$144,246	\$1,002,844	\$1,147,000
7/1/19-20	\$1,531,000	1.901	47%	\$725,612	\$1,075,364	\$1,801,000
Total	\$15,618,852			\$964,085	\$14,556,309	\$15,519,000

(H) Accident Period	(H) Prior Ultimate or Forecast	(I) Paid Develop. Factor	(J) Expected % Unpaid	(K) Expected Unpaid Losses	(L) Limited Paid Losses	(M) Estimated Ultimate Losses
7/1/02-03	\$65,087	1.000	0%	\$0	\$65,087	\$65,000
7/1/03-04	\$357,297	1.000	0%	\$0	\$357,297	\$357,000
7/1/04-05	\$618,336	1.000	0%	\$0	\$618,336	\$618,000
7/1/05-06	\$450,928	1.000	0%	\$0	\$450,928	\$451,000
7/1/06-07	\$535,205	1.000	0%	\$1	\$535,205	\$535,000
7/1/07-08	\$759,907	1.000	0%	\$4	\$759,907	\$760,000
7/1/08-09	\$1,423,346	1.000	0%	\$22	\$1,423,346	\$1,423,000
7/1/09-10	\$703,413	1.000	0%	\$30	\$703,413	\$703,000
7/1/10-11	\$843,333	1.000	0%	\$100	\$843,333	\$843,000
7/1/11-12	\$974,000	1.000	0%	\$322	\$948,511	\$949,000
7/1/12-13	\$625,000	1.001	0%	\$584	\$625,317	\$626,000
7/1/13-14	\$675,000	1.003	0%	\$1,800	\$699,842	\$702,000
7/1/14-15	\$1,209,000	1.008	1%	\$9,282	\$956,177	\$965,000
7/1/15-16	\$1,199,000	1.023	2%	\$26,571	\$998,168	\$1,025,000
7/1/16-17	\$1,227,000	1.067	6%	\$77,271	\$956,187	\$1,033,000
7/1/17-18	\$953,000	1.202	17%	\$160,040	\$569,918	\$730,000
7/1/18-19	\$1,469,000	1.614	38%	\$558,804	\$558,206	\$1,117,000
7/1/19-20	\$1,531,000	4.277	77%	\$1,173,065	\$356,050	\$1,529,000
Total	\$15,618,852			\$2,007,896	\$12,425,228	\$14,431,000

(B) and (H) - Exhibit 3

(C) - Appendix A1

(D) = 1 - 1/(C)

(E) = (B) * (D)

(F) and (L) - Exhibit I-C

(G) = (E) + (F)

(I) - Appendix A2

(J) = 1 - 1/(I)

(K) = (H) * (J)

(M) = (K) + (L)

Summary and Selection of Ultimate Limited Loss Estimates

(A) <i>Accident Period</i>	(B) <i>Prior Ultimate or Forecast</i>	(C) <i>Reported Loss Development Method</i>	(D) <i>Paid Loss Development Method</i>	(E) <i>Expected Unreported Method</i>	(F) <i>Expected Unpaid Method</i>	(G) <i>Selected Ultimate Loss Estimate</i>
7/1/02-03	\$65,087	\$65,000	\$65,000	\$65,000	\$65,000	\$65,087
7/1/03-04	\$357,297	\$357,000	\$357,000	\$357,000	\$357,000	\$357,297
7/1/04-05	\$618,336	\$618,000	\$618,000	\$618,000	\$618,000	\$618,336
7/1/05-06	\$450,928	\$451,000	\$451,000	\$451,000	\$451,000	\$450,928
7/1/06-07	\$535,205	\$535,000	\$535,000	\$535,000	\$535,000	\$535,205
7/1/07-08	\$759,907	\$760,000	\$760,000	\$760,000	\$760,000	\$759,907
7/1/08-09	\$1,423,346	\$1,423,000	\$1,423,000	\$1,423,000	\$1,423,000	\$1,423,346
7/1/09-10	\$703,413	\$703,000	\$703,000	\$703,000	\$703,000	\$703,413
7/1/10-11	\$843,333	\$843,000	\$843,000	\$843,000	\$843,000	\$843,333
7/1/11-12	\$974,000	\$949,000	\$949,000	\$949,000	\$949,000	\$948,511
7/1/12-13	\$625,000	\$626,000	\$626,000	\$626,000	\$626,000	\$625,317
7/1/13-14	\$675,000	\$701,000	\$701,000	\$701,000	\$702,000	\$699,842
7/1/14-15	\$1,209,000	\$1,166,000	\$1,046,000	\$1,167,000	\$965,000	\$1,167,000
7/1/15-16	\$1,199,000	\$1,153,000	\$1,112,000	\$1,155,000	\$1,025,000	\$1,155,000
7/1/16-17	\$1,227,000	\$1,227,000	\$1,082,000	\$1,231,000	\$1,033,000	\$1,231,000
7/1/17-18	\$953,000	\$983,000	\$775,000	\$987,000	\$730,000	\$987,000
7/1/18-19	\$1,469,000	\$1,112,000	\$901,000	\$1,147,000	\$1,117,000	\$1,147,000
7/1/19-20	\$1,531,000	\$2,008,000	\$1,705,000	\$1,801,000	\$1,529,000	\$1,801,000
<i>Total</i>	\$15,618,852	\$15,680,000	\$14,652,000	\$15,519,000	\$14,431,000	\$15,518,522

(B) - From Previous Report as of 6/30/2019

(C) and (D) - Exhibit 2-A

(E) and (F) - Exhibit 2-B

(G) - Selected as Noted:

Limited Reported Losses for 02-03 through 13-14

(E) for 14-15 through 19-20

Comparison of Results with Previous Estimates as of 6/30/19

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Actual Reported Losses 6/30/2019	Expected Reported Losses 1/31/2020	Actual Reported Losses 1/31/2020	Percent Difference	Expected Ultimate Losses 6/30/2019	Actual Ultimate Losses 1/31/2020	Percent Difference
7/1/02-03	\$65,087	\$65,087	\$65,087	0.0%	\$65,087	\$65,087	0.0%
7/1/03-04	\$357,297	\$357,297	\$357,297	0.0%	\$357,297	\$357,297	0.0%
7/1/04-05	\$618,336	\$618,336	\$618,336	0.0%	\$618,336	\$618,336	0.0%
7/1/05-06	\$450,928	\$450,928	\$450,928	0.0%	\$450,928	\$450,928	0.0%
7/1/06-07	\$535,205	\$535,205	\$535,205	0.0%	\$535,205	\$535,205	0.0%
7/1/07-08	\$759,907	\$759,907	\$759,907	0.0%	\$759,907	\$759,907	0.0%
7/1/08-09	\$1,423,346	\$1,423,346	\$1,423,346	0.0%	\$1,423,346	\$1,423,346	0.0%
7/1/09-10	\$703,413	\$703,413	\$703,413	0.0%	\$703,413	\$703,413	0.0%
7/1/10-11	\$843,333	\$843,333	\$843,333	0.0%	\$843,333	\$843,333	0.0%
7/1/11-12	\$973,586	\$973,781	\$948,511	-2.6%	\$974,000	\$948,511	-2.6%
7/1/12-13	\$625,317	\$625,166	\$625,317	0.0%	\$625,000	\$625,317	0.1%
7/1/13-14	\$674,842	\$674,918	\$699,842	3.7%	\$675,000	\$699,842	3.7%
7/1/14-15	\$1,200,674	\$1,204,697	\$1,163,213	-3.4%	\$1,209,000	\$1,167,000	-3.5%
7/1/15-16	\$1,186,303	\$1,192,479	\$1,145,708	-3.9%	\$1,199,000	\$1,155,000	-3.7%
7/1/16-17	\$1,195,255	\$1,210,741	\$1,205,255	-0.5%	\$1,227,000	\$1,231,000	0.3%
7/1/17-18	\$899,537	\$925,380	\$933,403	0.9%	\$953,000	\$987,000	3.6%
7/1/18-19	\$1,281,141	\$1,367,776	\$1,002,844	-26.7%	\$1,469,000	\$1,147,000	-21.9%
7/1/19-20		\$733,381	\$1,075,364	46.6%	\$1,531,000	\$1,801,000	17.6%
Total	\$13,793,507	\$14,665,171	\$14,556,309	-0.7%	\$15,618,852	\$15,518,522	-0.6%

	(I)	(J)	(K)	(L)	(M)	(N)	(O)
	Actual	Expected	Actual		Expected	Actual	
	Paid	Paid	Paid		Ultimate	Ultimate	
Accident	Losses	Losses	Losses	Percent	Losses	Losses	Percent
Period	6/30/2019	1/31/2020	1/31/2020	Difference	6/30/2019	1/31/2020	Difference
7/1/02-03	\$65,087	\$65,087	\$65,087	0.0%	\$65,087	\$65,087	0.0%
7/1/03-04	\$357,297	\$357,297	\$357,297	0.0%	\$357,297	\$357,297	0.0%
7/1/04-05	\$618,336	\$618,336	\$618,336	0.0%	\$618,336	\$618,336	0.0%
7/1/05-06	\$450,928	\$450,928	\$450,928	0.0%	\$450,928	\$450,928	0.0%
7/1/06-07	\$535,205	\$535,205	\$535,205	0.0%	\$535,205	\$535,205	0.0%
7/1/07-08	\$759,907	\$759,907	\$759,907	0.0%	\$759,907	\$759,907	0.0%
7/1/08-09	\$1,423,346	\$1,423,346	\$1,423,346	0.0%	\$1,423,346	\$1,423,346	0.0%
7/1/09-10	\$703,413	\$703,413	\$703,413	0.0%	\$703,413	\$703,413	0.0%
7/1/10-11	\$843,333	\$843,333	\$843,333	0.0%	\$843,333	\$843,333	0.0%
7/1/11-12	\$948,291	\$959,297	\$948,511	-1.1%	\$974,000	\$948,511	-2.6%
7/1/12-13	\$625,317	\$625,180	\$625,317	0.0%	\$625,000	\$625,317	0.1%
7/1/13-14	\$674,842	\$674,910	\$699,842	3.7%	\$675,000	\$699,842	3.7%
7/1/14-15	\$900,763	\$1,034,951	\$956,177	-7.6%	\$1,209,000	\$1,167,000	-3.5%
7/1/15-16	\$955,223	\$1,060,558	\$998,168	-5.9%	\$1,199,000	\$1,155,000	-3.7%
7/1/16-17	\$942,150	\$1,061,040	\$956,187	-9.9%	\$1,227,000	\$1,231,000	0.3%
7/1/17-18	\$532,337	\$690,674	\$569,918	-17.5%	\$953,000	\$987,000	3.6%
7/1/18-19	\$536,211	\$808,708	\$558,206	-31.0%	\$1,469,000	\$1,147,000	-21.9%
7/1/19-20		\$392,198	\$356,050	-9.2%	\$1,531,000	\$1,801,000	17.6%
Total	\$11,871,987	\$13,064,368	\$12,425,228	-4.9%	\$15,618,852	\$15,518,522	-0.6%

(B), (F), (I) and (M) - From Previous actuarial report as of 6/30/2019

(C) and (J) - Based on information available as of 6/30/2019

(D) and (K) - Exhibit 1-C

(E) = [(D) / (C)] - 1

(G) and (N) - Exhibit 3

(H) = [(G) / (F)] - 1

(L) = [(K) / (J)] - 1

(O) = [(N) / (M)] - 1

Comparison of Results with Previous Estimates as of 1/31/19

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Actual Reported Losses 1/31/2019	Expected Reported Losses 1/31/2020	Actual Reported Losses 1/31/2020	Percent Difference	Expected Ultimate Losses 1/31/2019	Actual Ultimate Losses 1/31/2020	Percent Difference
7/1/02-03	\$65,087	\$65,087	\$65,087	0.0%	\$65,087	\$65,087	0.0%
7/1/03-04	\$357,297	\$357,297	\$357,297	0.0%	\$357,297	\$357,297	0.0%
7/1/04-05	\$618,336	\$618,336	\$618,336	0.0%	\$618,336	\$618,336	0.0%
7/1/05-06	\$450,928	\$450,928	\$450,928	0.0%	\$450,928	\$450,928	0.0%
7/1/06-07	\$535,205	\$535,205	\$535,205	0.0%	\$535,205	\$535,205	0.0%
7/1/07-08	\$759,907	\$759,907	\$759,907	0.0%	\$759,907	\$759,907	0.0%
7/1/08-09	\$1,423,346	\$1,423,346	\$1,423,346	0.0%	\$1,423,346	\$1,423,346	0.0%
7/1/09-10	\$703,413	\$703,413	\$703,413	0.0%	\$703,413	\$703,413	0.0%
7/1/10-11	\$843,333	\$843,333	\$843,333	0.0%	\$843,333	\$843,333	0.0%
7/1/11-12	\$973,586	\$973,862	\$948,511	-2.6%	\$974,000	\$948,511	-2.6%
7/1/12-13	\$625,317	\$625,104	\$625,317	0.0%	\$625,000	\$625,317	0.1%
7/1/13-14	\$674,842	\$674,948	\$699,842	3.7%	\$675,000	\$699,842	3.7%
7/1/14-15	\$1,180,674	\$1,182,930	\$1,163,213	-1.7%	\$1,184,000	\$1,167,000	-1.4%
7/1/15-16	\$1,139,699	\$1,146,037	\$1,145,708	0.0%	\$1,149,000	\$1,155,000	0.5%
7/1/16-17	\$1,122,718	\$1,142,688	\$1,205,255	5.5%	\$1,152,000	\$1,231,000	6.9%
7/1/17-18	\$742,385	\$800,122	\$933,403	16.7%	\$828,000	\$987,000	19.2%
7/1/18-19	\$705,465	\$1,311,898	\$1,002,844	-23.6%	\$1,419,000	\$1,147,000	-19.2%
7/1/19-20		\$672,066	\$1,075,364	60.0%	\$1,403,000	\$1,801,000	28.4%
Total	\$12,921,537	\$14,286,508	\$14,556,309	1.9%	\$15,165,852	\$15,518,522	2.3%

	(I)	(J)	(K)	(L)	(M)	(N)	(O)
	Actual	Expected	Actual		Expected	Actual	
	Paid	Paid	Paid		Ultimate	Ultimate	
Accident	Losses	Losses	Losses	Percent	Losses	Losses	Percent
Period	1/31/2019	1/31/2020	1/31/2020	Difference	1/31/2019	1/31/2020	Difference
7/1/02-03	\$65,087	\$65,087	\$65,087	0.0%	\$65,087	\$65,087	0.0%
7/1/03-04	\$357,297	\$357,297	\$357,297	0.0%	\$357,297	\$357,297	0.0%
7/1/04-05	\$618,336	\$618,336	\$618,336	0.0%	\$618,336	\$618,336	0.0%
7/1/05-06	\$450,928	\$450,928	\$450,928	0.0%	\$450,928	\$450,928	0.0%
7/1/06-07	\$535,205	\$535,205	\$535,205	0.0%	\$535,205	\$535,205	0.0%
7/1/07-08	\$759,907	\$759,907	\$759,907	0.0%	\$759,907	\$759,907	0.0%
7/1/08-09	\$1,423,346	\$1,423,346	\$1,423,346	0.0%	\$1,423,346	\$1,423,346	0.0%
7/1/09-10	\$703,413	\$703,413	\$703,413	0.0%	\$703,413	\$703,413	0.0%
7/1/10-11	\$843,333	\$843,333	\$843,333	0.0%	\$843,333	\$843,333	0.0%
7/1/11-12	\$948,273	\$964,150	\$948,511	-1.6%	\$974,000	\$948,511	-2.6%
7/1/12-13	\$625,317	\$625,120	\$625,317	0.0%	\$625,000	\$625,317	0.1%
7/1/13-14	\$674,842	\$674,940	\$699,842	3.7%	\$675,000	\$699,842	3.7%
7/1/14-15	\$890,251	\$1,073,626	\$956,177	-10.9%	\$1,184,000	\$1,167,000	-1.4%
7/1/15-16	\$944,181	\$1,070,855	\$998,168	-6.8%	\$1,149,000	\$1,155,000	0.5%
7/1/16-17	\$861,228	\$1,034,611	\$956,187	-7.6%	\$1,152,000	\$1,231,000	6.9%
7/1/17-18	\$452,599	\$654,083	\$569,918	-12.9%	\$828,000	\$987,000	19.2%
7/1/18-19	\$274,924	\$867,417	\$558,206	-35.6%	\$1,419,000	\$1,147,000	-19.2%
7/1/19-20		\$359,408	\$356,050	-0.9%	\$1,403,000	\$1,801,000	28.4%
Total	\$11,428,466	\$13,081,063	\$12,425,228	-5.0%	\$15,165,852	\$15,518,522	2.3%

(B), (F), (I) and (M) - From Previous actuarial report as of 1/31/2019

(C) and (J) - Based on information available as of 1/31/2019

(D) and (K) - Exhibit 1-C

(E) = [(D) / (C)] - 1

(G) and (N) - Exhibit 3

(H) = [(G) / (F)] - 1

(L) = [(K) / (J)] - 1

(O) = [(N) / (M)] - 1

Estimated Outstanding Losses
As of January 31, 2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Estimated Ultimate Losses	Limited Paid Losses	Limited Reported Losses	Limited Case Reserves	IBNR Losses	Outstanding Losses
7/1/02-03	\$65,087	\$65,087	\$65,087	\$0	\$0	\$0
7/1/03-04	\$357,297	\$357,297	\$357,297	\$0	\$0	\$0
7/1/04-05	\$618,336	\$618,336	\$618,336	\$0	\$0	\$0
7/1/05-06	\$450,928	\$450,928	\$450,928	\$0	\$0	\$0
7/1/06-07	\$535,205	\$535,205	\$535,205	\$0	\$0	\$0
7/1/07-08	\$759,907	\$759,907	\$759,907	\$0	\$0	\$0
7/1/08-09	\$1,423,346	\$1,423,346	\$1,423,346	\$0	\$0	\$0
7/1/09-10	\$703,413	\$703,413	\$703,413	\$0	\$0	\$0
7/1/10-11	\$843,333	\$843,333	\$843,333	\$0	\$0	\$0
7/1/11-12	\$948,511	\$948,511	\$948,511	\$0	\$0	\$0
7/1/12-13	\$625,317	\$625,317	\$625,317	\$0	\$0	\$0
7/1/13-14	\$699,842	\$699,842	\$699,842	\$0	\$0	\$0
7/1/14-15	\$1,167,000	\$956,177	\$1,163,213	\$207,036	\$4,000	\$211,000
7/1/15-16	\$1,155,000	\$998,168	\$1,145,708	\$147,540	\$9,000	\$157,000
7/1/16-17	\$1,231,000	\$956,187	\$1,205,255	\$249,069	\$26,000	\$275,000
7/1/17-18	\$987,000	\$569,918	\$933,403	\$363,485	\$54,000	\$417,000
7/1/18-19	\$1,147,000	\$558,206	\$1,002,844	\$444,638	\$144,000	\$589,000
7/1/19-1/31/20	\$1,176,000	\$356,050	\$1,075,364	\$719,314	\$101,000	\$820,000
Total	\$14,894,000	\$12,425,228	\$14,556,309	\$2,131,081	\$338,000	\$2,469,000
2/1-6/30/20	\$625,000					

(B) - Exhibit 3

(C) and (D) - Exhibit 1-C

(E) = (D) - (C)

(F) = (B) - (D)

(G) = (B) - (C)

**Projected Outstanding Losses
As of June 30, 2020**

(A) <i>Accident Period</i>	(B) <i>Estimated Ultimate Losses</i>	(C) <i>Projected Paid Losses</i>	(D) <i>Projected Reported Losses</i>	(E) <i>Limited Case Reserves</i>	(F) <i>IBNR Losses</i>	(G) <i>Outstanding Losses</i>
7/1/02-03	\$65,087	\$65,087	\$65,087	\$0	\$0	\$0
7/1/03-04	\$357,297	\$357,297	\$357,297	\$0	\$0	\$0
7/1/04-05	\$618,336	\$618,336	\$618,336	\$0	\$0	\$0
7/1/05-06	\$450,928	\$450,928	\$450,928	\$0	\$0	\$0
7/1/06-07	\$535,205	\$535,205	\$535,205	\$0	\$0	\$0
7/1/07-08	\$759,907	\$759,907	\$759,907	\$0	\$0	\$0
7/1/08-09	\$1,423,346	\$1,423,346	\$1,423,346	\$0	\$0	\$0
7/1/09-10	\$703,413	\$703,413	\$703,413	\$0	\$0	\$0
7/1/10-11	\$843,333	\$843,333	\$843,333	\$0	\$0	\$0
7/1/11-12	\$948,511	\$948,511	\$948,511	\$0	\$0	\$0
7/1/12-13	\$625,317	\$625,317	\$625,317	\$0	\$0	\$0
7/1/13-14	\$699,842	\$699,842	\$699,842	\$0	\$0	\$0
7/1/14-15	\$1,167,000	\$1,031,000	\$1,164,000	\$133,000	\$3,000	\$136,000
7/1/15-16	\$1,155,000	\$1,054,000	\$1,149,000	\$95,000	\$6,000	\$101,000
7/1/16-17	\$1,231,000	\$1,052,000	\$1,214,000	\$162,000	\$17,000	\$179,000
7/1/17-18	\$987,000	\$706,000	\$951,000	\$245,000	\$36,000	\$281,000
7/1/18-19	\$1,147,000	\$716,000	\$1,003,000	\$287,000	\$144,000	\$431,000
7/1/19-20	\$1,801,000	\$779,000	\$1,651,000	\$872,000	\$150,000	\$1,022,000
<i>Total</i>	\$15,519,000	\$13,368,522	\$15,162,522	\$1,794,000	\$356,000	\$2,150,000

(B) - Exhibit 3

(C) and (D) - Projected using loss development factors

(E) = (D) - (C)

(F) = (B) - (D)

(G) = (B) - (C)

Average Ultimate Claim Sizes

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Reported Claims	Reported Claim Development	Estimated Ultimate Claims	Estimated Ultimate Losses	Estimated Average Ultimate Claim	Exposure (Vehicles)	Loss Rate
7/1/02-03	24	1.000	24.0	\$65,087	\$2,700		
7/1/03-04	81	1.000	81.0	\$357,297	\$4,400		
7/1/04-05	109	1.000	109.0	\$618,336	\$5,700	5,046	\$123
7/1/05-06	134	1.000	134.0	\$450,928	\$3,400	6,391	\$71
7/1/06-07	145	1.000	145.0	\$535,205	\$3,700	7,017	\$76
7/1/07-08	178	1.000	178.0	\$759,907	\$4,300	7,753	\$98
7/1/08-09	207	1.000	207.0	\$1,423,346	\$6,900	7,641	\$186
7/1/09-10	182	1.000	182.0	\$703,413	\$3,900	8,309	\$85
7/1/10-11	187	1.000	187.0	\$843,333	\$4,500	9,022	\$93
7/1/11-12	177	1.000	177.0	\$948,511	\$5,400	6,650	\$143
7/1/12-13	162	1.000	162.0	\$625,317	\$3,900	6,979	\$90
7/1/13-14	186	1.000	186.0	\$699,842	\$3,800	7,460	\$94
7/1/14-15	226	1.000	226.0	\$1,167,000	\$5,200	9,047	\$129
7/1/15-16	227	1.000	227.0	\$1,155,000	\$5,100	9,517	\$121
7/1/16-17	207	1.000	207.0	\$1,231,000	\$5,900	10,334	\$119
7/1/17-18	166	1.000	166.0	\$987,000	\$5,900	10,113	\$98
7/1/18-19	200	1.002	200.4	\$1,147,000	\$5,700	11,525	\$100
7/1/19-20	176	1.718	302.4	\$1,801,000	\$6,000	12,920	\$139
7/1/20-21			251.8	\$1,589,000	\$6,300	12,920	\$123
Total	2974		3352.559	\$17,107,522	\$5,100	148,643	\$115

- 7/1/20-21 from forecast

(B) - Exhibit 1-A

(C) - Appendix A3

(D) = (B) x (C)

(E) = Exhibit 3

(F) = (E) / (D)

(G) - Exhibit 1-A, provided by OSIG

(H) = (E) / (G)

**Estimation of Cumulative Reported Loss Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
		LN(1/(X+C))	LN(Y-1)					
24	1.104	-6.9315	-2.2647	48.045	5.1289	15.6977	211	1.000
36	1.041	-6.9431	-3.1942	48.207	10.2030	22.1778	199	1.000
48	1.015	-6.9546	-4.1964	48.367	17.6096	29.1843	187	1.000
60	1.005	-6.9660	-5.2983	48.525	28.0722	36.9082	175	1.000
							163	1.000
							151	1.000
							139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.000
Sum		-27.7953	-14.9536	193.1447	61.0136	103.9680	79	1.001
Average		-6.9488	-3.7384	48.2862	15.2534	25.9920	67	1.003
							55	1.008
							43	1.022
							31	1.060
							19	1.109
							7	1.901

N =	4		
A =	1.100E+263		
B =	87.700	R^2 =	0.99812
C =	1000		

* - Appendix A4

**Estimation of Cumulative Paid Loss Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.993	-6.9197	-0.0075	47.882	0.0001	0.0519	211	1.000
24	1.397	-6.9315	-0.9232	48.045	0.8523	6.3993	199	1.000
36	1.141	-6.9431	-1.9590	48.207	3.8378	13.6017	187	1.000
48	1.050	-6.9546	-2.9972	48.367	8.9830	20.8443	175	1.000
60	1.017	-6.9660	-4.0866	48.525	16.7006	28.4676	163	1.000
72	1.004	-6.9773	-5.5690	48.682	31.0141	38.8567	151	1.000
							139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.001
Sum		-41.6922	-15.5426	289.7092	61.3879	108.2215	79	1.003
Average		-6.9487	-2.5904	48.2849	10.2313	18.0369	67	1.008
							55	1.023
							43	1.067
							31	1.202
							19	1.614
							7	4.277

N =	6
A =	4.337E+285
B =	95.024
C =	1000
R^2 = 0.992525	

* - Appendix A5

**Estimation of Cumulative Reported Claim Development Factors
Using "The Method of Least Squares"**

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.002	-2.4849	-6.1416	6.175	37.7193	15.2613	211	1.000
24	1.002	-3.1781	-6.1416	10.100	37.7193	19.5184	199	1.000
							187	1.000
							175	1.000
							163	1.000
							151	1.000
							139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.000
Sum		-5.6630	-12.2832	16.2748	75.4387	34.7797	79	1.000
Average		-2.8315	-6.1416	8.1374	37.7193	17.3898	67	1.000
							55	1.000
							43	1.000
							31	1.000
							19	1.002
							7	1.718

N =	2		
A =	2.151E-03		
B =	0.000	R^2 =	#DIV/0!
C =	0		

* - Appendix A6

Analysis of Reported Loss Development
Total Loss and ALAE Net of Member Deductibles

Year	Reported Losses and ALAE as of (months):									
	12	24	36	48	60	72	84	96	108	120
7/1/04-05	\$1,047,750	\$1,095,895	\$1,133,243	\$1,145,262	\$1,145,262	\$1,145,262	\$1,097,512	\$1,097,512	\$1,097,512	\$1,097,512
7/1/05-06	\$456,117	\$547,145	\$662,524	\$632,070	\$450,928	\$450,928	\$450,928	\$450,928	\$450,928	\$450,928
7/1/06-07	\$890,604	\$608,898	\$583,493	\$524,344	\$549,344	\$549,344	\$549,344	\$549,344	\$549,344	\$549,344
7/1/07-08	\$847,622	\$783,605	\$855,237	\$856,228	\$856,441	\$759,907	\$759,907	\$759,907	\$759,907	\$759,907
7/1/08-09	\$1,417,952	\$1,726,246	\$1,741,617	\$1,664,608	\$1,594,733	\$1,576,121	\$1,465,586	\$1,465,586	\$1,465,586	\$1,465,586
7/1/09-10	\$941,486	\$765,020	\$725,671	\$725,680	\$701,085	\$706,085	\$706,085	\$706,085	\$703,413	\$703,413
7/1/10-11	\$942,102	\$880,763	\$858,871	\$882,516	\$882,516	\$882,016	\$882,016	\$882,016	\$882,016	
7/1/11-12	\$987,456	\$965,945	\$1,000,368	\$1,002,546	\$1,003,435	\$1,003,435	\$973,586	\$973,586		
7/1/12-13	\$777,945	\$702,440	\$663,518	\$661,103	\$661,103	\$661,103	\$661,103			
7/1/13-14	\$878,884	\$737,621	\$731,921	\$731,921	\$705,549	\$705,549				
7/1/14-15	\$909,436	\$947,227	\$1,251,043	\$1,483,264	\$1,433,246					
7/1/15-16	\$1,112,258	\$1,173,527	\$1,234,344	\$1,260,860						
7/1/16-17	\$1,204,106	\$1,168,469	\$1,249,602							
7/1/17-18	\$940,038	\$899,537								
7/1/18-19	\$1,281,141									

Year	Age-to-Age Factors									
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:ult
7/1/04-05	1.046	1.034	1.011	1.000	1.000	0.958	1.000	1.000	1.000	
7/1/05-06	1.200	1.211	0.954	0.713	1.000	1.000	1.000	1.000	1.000	
7/1/06-07	0.684	0.958	0.899	1.048	1.000	1.000	1.000	1.000	1.000	
7/1/07-08	0.924	1.091	1.001	1.000	0.887	1.000	1.000	1.000	1.000	
7/1/08-09	1.217	1.009	0.956	0.958	0.988	0.930	1.000	1.000	1.000	
7/1/09-10	0.813	0.949	1.000	0.966	1.007	1.000	1.000	0.996	1.000	
7/1/10-11	0.935	0.975	1.028	1.000	0.999	1.000	1.000	1.000		
7/1/11-12	0.978	1.036	1.002	1.001	1.000	0.970	1.000			
7/1/12-13	0.903	0.945	0.996	1.000	1.000	1.000				
7/1/13-14	0.839	0.992	1.000	0.964	1.000					
7/1/14-15	1.042	1.321	1.186	0.966						
7/1/15-16	1.055	1.052	1.021							
7/1/16-17	0.970	1.069								
7/1/17-18	0.957									

Average	0.969	1.049	1.004	0.965	0.988	0.984	1.000	0.999	1.000	
Wtd. Avg.	0.974	1.049	1.011	0.968	0.987	0.976	1.000	1.000	1.000	
5 year average	0.973	1.076	1.041	0.986	1.001	0.980	1.000	0.999	1.000	
OK Benchmark	1.347	1.092	1.023	1.010	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.090	1.045	1.010	1.005	1.000	1.000	1.000	1.000	1.000	1.000
	12	24	36	48	60	72	84	96	108	120
Selected	1.000	1.060	1.026	1.010	1.005	1.000	1.000	1.000	1.000	1.000
Cumulative	1.104	1.104	1.041	1.015	1.005	1.000	1.000	1.000	1.000	1.000

Analysis of Paid Loss Development
Total Loss and ALAE Net of Member Deductibles

Year	Paid Losses and ALAE as of (months):									
	12	24	36	48	60	72	84	96	108	120
7/1/04-05	\$373,545	\$848,811	\$1,035,459	\$1,095,262	\$1,095,262	\$1,097,512	\$1,097,512	\$1,097,512	\$1,097,512	\$1,097,512
7/1/05-06	\$245,922	\$315,713	\$386,966	\$415,031	\$450,928	\$450,928	\$450,928	\$450,928	\$450,928	\$450,928
7/1/06-07	\$306,414	\$364,626	\$488,241	\$524,344	\$549,344	\$549,344	\$549,344	\$549,344	\$549,344	\$549,344
7/1/07-08	\$382,647	\$542,781	\$699,055	\$711,020	\$726,360	\$759,907	\$759,907	\$759,907	\$759,907	\$759,907
7/1/08-09	\$527,674	\$1,042,468	\$1,233,445	\$1,312,558	\$1,427,617	\$1,439,750	\$1,465,586	\$1,465,586	\$1,465,586	\$1,465,586
7/1/09-10	\$454,322	\$567,769	\$662,046	\$677,216	\$682,330	\$686,578	\$687,068	\$687,068	\$703,413	\$703,413
7/1/10-11	\$398,166	\$711,060	\$836,794	\$882,516	\$882,516	\$882,016	\$882,016	\$882,016	\$882,016	\$882,016
7/1/11-12	\$636,923	\$793,177	\$875,075	\$935,985	\$940,184	\$948,005	\$947,823	\$948,291		
7/1/12-13	\$384,700	\$492,970	\$661,008	\$661,103	\$661,103	\$661,103	\$661,103			
7/1/13-14	\$489,337	\$688,008	\$703,536	\$704,744	\$705,549	\$705,549				
7/1/14-15	\$489,849	\$598,952	\$825,663	\$1,099,572	\$1,126,059					
7/1/15-16	\$612,592	\$780,728	\$999,322	\$1,029,781						
7/1/16-17	\$544,386	\$879,661	\$968,458							
7/1/17-18	\$390,369	\$532,337								
7/1/18-19	\$536,211									

Year	Age-to-Age Factors									
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:ult
7/1/04-05	2.272	1.220	1.058	1.000	1.002	1.000	1.000	1.000	1.000	
7/1/05-06	1.284	1.226	1.073	1.086	1.000	1.000	1.000	1.000	1.000	
7/1/06-07	1.190	1.339	1.074	1.048	1.000	1.000	1.000	1.000	1.000	
7/1/07-08	1.418	1.288	1.017	1.022	1.046	1.000	1.000	1.000	1.000	
7/1/08-09	1.976	1.183	1.064	1.088	1.008	1.018	1.000	1.000	1.000	
7/1/09-10	1.250	1.166	1.023	1.008	1.006	1.001	1.000	1.024	1.000	
7/1/10-11	1.786	1.177	1.055	1.000	0.999	1.000	1.000	1.000		
7/1/11-12	1.245	1.103	1.070	1.004	1.008	1.000	1.000			
7/1/12-13	1.281	1.341	1.000	1.000	1.000	1.000				
7/1/13-14	1.406	1.023	1.002	1.001	1.000					
7/1/14-15	1.223	1.379	1.332	1.024						
7/1/15-16	1.274	1.280	1.030							
7/1/16-17	1.616	1.101								
7/1/17-18	1.364									

Average	1.470	1.217	1.066	1.026	1.007	1.002	1.000	1.003	1.000	
Wtd. Avg.	1.469	1.203	1.068	1.025	1.007	1.003	1.000	1.003	1.000	
5 year average	1.377	1.225	1.087	1.006	1.003	1.004	1.000	1.005	1.000	
OK benchmark	1.622	1.372	1.054	1.040	1.018	1.004	1.000	1.000	1.000	1.000
Prior	1.476	1.214	1.073	1.033	1.013	1.004	1.000	1.000	1.000	1.000

	12	24	36	48	60	72	84	96	108	120
Selected	1.426	1.225	1.087	1.033	1.013	1.004	1.000	1.000	1.000	1.000
Cumulative	1.993	1.397	1.141	1.050	1.017	1.004	1.000	1.000	1.000	1.000

Analysis of Reported Occurrences

Year	Reported Claims as of (months):									
	12	24	36	48	60	72	84	96	108	120
7/1/04-05		108	109	109	109	109	109	109	109	109
7/1/05-06	133	134	135	134	134	134	134	134	134	134
7/1/06-07	142	143	145	145	145	145	145	145	145	145
7/1/07-08	172	178	178	178	178	178	178	178	178	178
7/1/08-09	205	207	207	207	207	207	207	207	207	207
7/1/09-10	183	182	182	182	182	182	182	182	182	182
7/1/10-11	182	187	188	188	188	187	187	187	187	
7/1/11-12	177	178	177	177	177	177	177	177		
7/1/12-13	163	164	164	162	162	162	162			
7/1/13-14	196	185	185	185	185	185				
7/1/14-15	228	225	226	226	226					
7/1/15-16	225	227	226	226						
7/1/16-17	213	206	207							
7/1/17-18	191	167								
7/1/18-19	231									

Year	Age-to-Age Factors									
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:ult
7/1/04-05		1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/05-06	1.008	1.007	0.993	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/06-07	1.007	1.014	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/07-08	1.035	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/08-09	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/09-10	0.995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/10-11	1.027	1.005	1.000	1.000	0.995	1.000	1.000	1.000		
7/1/11-12	1.006	0.994	1.000	1.000	1.000	1.000	1.000			
7/1/12-13	1.006	1.000	0.988	1.000	1.000	1.000				
7/1/13-14	0.944	1.000	1.000	1.000	1.000					
7/1/14-15	0.987	1.004	1.000	1.000						
7/1/15-16	1.009	0.996	1.000							
7/1/16-17	0.967	1.005								
7/1/17-18	0.874									
Average	0.990	1.003	0.998	1.000	0.999	1.000	1.000	1.000	1.000	
Wtd. Avg.	0.989	1.002	0.999	1.000	0.999	1.000	1.000	1.000	1.000	
5 year average	0.956	1.001	0.998	1.000	0.999	1.000	1.000	1.000	1.000	
OK benchmark	1.128	1.005	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

*Derivation of Lognomoral Parameters
Based on Reported Loss Development*

Year	Natural Logarithm of Age to Age Factors									
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:ult
7/1/04-05	0.045	0.034	0.011	0.000	0.000	-0.043	0.000	0.000	0.000	
7/1/05-06	0.182	0.191	-0.047		0.000	0.000	0.000	0.000	0.000	
7/1/06-07		-0.043	-0.107	0.047	0.000	0.000	0.000	0.000	0.000	
7/1/07-08	-0.079	0.087	0.001	0.000	-0.120	0.000	0.000	0.000	0.000	
7/1/08-09	0.197	0.009	-0.045	-0.043	-0.012	-0.073	0.000	0.000	0.000	
7/1/09-10	-0.208	-0.053	0.000	-0.034	0.007	0.000	0.000	-0.004	0.000	
7/1/10-11	-0.067	-0.025	0.027	0.000	-0.001	0.000	0.000	0.000		
7/1/11-12	-0.022	0.035	0.002	0.001	0.000	-0.030	0.000			
7/1/12-13	-0.102	-0.057	-0.004	0.000	0.000	0.000				
7/1/13-14	-0.175	-0.008	0.000	-0.037	0.000					
7/1/14-15	0.041	0.278	0.170	-0.034						
7/1/15-16	0.054	0.051	0.021							
7/1/16-17	-0.030	0.067								
7/1/17-18	-0.044									

	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>
Variance	0.014	0.010	0.004	0.001	0.001	0.001	0.000	0.000	0.000
Cum. Variance	0.031	0.017	0.007	0.003	0.002	0.001	0.000	0.000	0.000
SD	0.176	0.129	0.084	0.054	0.046	0.027	0.001	0.001	0.000

Section 6

Exhibits – Property including APD

Exhibit 1	Summary of Data Large Loss Listing Calculation of Limited Losses
Exhibit 2	Loss Development Methods Bornhuetter-Ferguson Methods
Exhibit 3	Summary and Selection of Ultimate Losses
Exhibit 4	Comparison to Previous Actuarial Report
Exhibit 5	Outstanding Losses as of 1/31/2020 Projected Outstanding Losses and IBNR as of 6/30/2020
Exhibit 6	Historical Claim Frequency, Severity and Loss Rates
Appendix A	Loss Development Factors

Summary of Loss Data as of January 31, 2020
Total Experience Net of Deductibles

(A)	(B)	(C)	(D)		(E)	(F)	(G)	(H)	(I)	(J)
Accident Period	Evaluation Date	Maturity (months)	Total Claims	Open Claims	Loss Payment	Loss Reserve	Expense and Legal Payment	Expense and Legal Reserve	Total Reported	Total Insured Value in \$100s
7/1/02-03	1/31/2020	211	24	0	\$282,938	\$0	\$29,106	\$0	\$312,045	
7/1/03-04	1/31/2020	199	104	0	\$2,447,356	\$0	\$66,143	\$0	\$2,513,499	
7/1/04-05	1/31/2020	187	122	0	\$1,235,815	\$0	\$69,782	\$0	\$1,305,598	\$37,566,889
7/1/05-06	1/31/2020	175	190	0	\$3,080,547	\$0	\$142,157	\$0	\$3,222,704	\$50,583,768
7/1/06-07	1/31/2020	163	232	0	\$7,508,252	\$0	\$164,672	\$0	\$7,672,924	\$63,964,027
7/1/07-08	1/31/2020	151	255	0	\$27,287,989	\$0	\$261,094	\$0	\$27,549,083	\$70,532,585
7/1/08-09	1/31/2020	139	211	0	\$14,558,071	\$0	\$226,138	\$0	\$14,784,209	\$74,780,448
7/1/09-10	1/31/2020	127	266	0	\$17,140,491	\$0	\$250,287	\$0	\$17,390,777	\$78,018,968
7/1/10-11	1/31/2020	115	225	0	\$26,419,286	\$0	\$52,656	\$0	\$26,471,942	\$82,140,365
7/1/11-12	1/31/2020	103	173	0	\$3,946,066	\$0	\$72,423	\$0	\$4,018,489	\$75,216,040
7/1/12-13	1/31/2020	91	163	0	\$6,097,006	\$0	\$39,448	\$0	\$6,136,455	\$67,433,533
7/1/13-14	1/31/2020	79	157	0	\$4,537,170	\$0	\$53,119	\$0	\$4,590,290	\$72,841,534
7/1/14-15	1/31/2020	67	208	1	\$6,006,545	\$1,245,158	\$354,138	\$12,459	\$7,618,301	\$82,912,577
7/1/15-16	1/31/2020	55	182	3	\$10,355,529	\$4,231,860	\$256,530	\$5,693	\$14,849,612	\$83,651,052
7/1/16-17	1/31/2020	43	228	7	\$8,682,149	\$2,385,998	\$208,362	\$6,815	\$11,283,324	\$95,166,463
7/1/17-18	1/31/2020	31	194	9	\$13,574,733	\$7,783,612	\$254,513	\$112,605	\$21,725,463	\$91,897,115
7/1/18-19	1/31/2020	19	217	22	\$13,359,732	\$8,876,266	\$149,435	\$42,270	\$22,427,703	\$120,498,610
7/1/19-20	1/31/2020	7	160	55	\$2,496,550	\$2,841,655	\$82,414	\$33,596	\$5,454,215	\$155,270,625
7/1/20-21										\$158,376,038
			3311	97	\$169,016,227	\$27,364,550	\$2,732,418	\$213,439	\$199,326,634	\$1,460,850,637

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services
- Claims are grouped by occurrence, and exclude claims with \$0 incurred
- Losses are net of member deductibles

Losses over SIR

CAT# or Occ#	Loss Date	Claim Status	Coverage	Paid Pure Losses	Reported Pure Losses	SIR	Deductibles	Excess Recoveries	Excess Paid	Excess Reported	Severity Factor	Net Ultimate
00120	9/26/2003	Closed	AOP	\$160,863	\$160,863	\$100,000	\$2,500	\$63,363	\$63,363	\$63,363	1.000	\$160,863
00280	4/23/2004	Closed	Wind	\$501,173	\$501,173	\$200,000	\$10,000	\$311,173	\$311,173	\$311,173	1.000	\$501,173
00312	5/29/2004	Closed	Wind	\$1,051,795	\$1,051,795	\$200,000	\$5,000	\$851,795	\$851,795	\$851,795	1.000	\$1,051,795
00622	4/19/2005	Closed	AOP	\$137,015	\$137,015	\$100,000	\$2,500	\$38,605	\$38,605	\$38,605	1.000	\$137,015
0003	7/3/2005	Closed	Wind	\$509,241	\$509,241	\$200,000	\$15,000	\$329,241	\$329,241	\$329,241	1.000	\$509,241
00974	2/4/2006	Closed	AOP	\$123,265	\$123,265	\$100,000	\$1,000	\$24,265	\$24,265	\$24,265	1.000	\$123,265
0006	3/12/2006	Closed	Wind	\$302,863	\$302,863	\$200,000	\$17,500	\$98,003	\$98,003	\$98,003	1.000	\$302,863
01070	4/1/2006	Closed	Wind	\$249,726	\$249,726	\$200,000	\$10,000	\$54,736	\$54,736	\$54,736	1.000	\$249,726
01069	4/9/2006	Closed	AOP	\$196,964	\$196,964	\$100,000	\$2,500	\$99,464	\$99,464	\$99,464	1.000	\$196,964
0010	1/13/2007	Closed	AOP	\$2,728,534	\$2,728,534	\$100,000	\$125,000	\$2,213,033	\$2,213,033	\$2,213,033	1.000	\$2,728,534
01446	1/14/2007	Closed	AOP	\$2,391,851	\$2,391,851	\$100,000	\$2,500	\$2,294,351	\$2,294,351	\$2,294,351	1.000	\$2,391,851
01603	4/1/2007	Closed	AOP	\$498,897	\$498,897	\$100,000	\$5,500	\$409,043	\$409,043	\$409,043	1.000	\$498,897
0014	5/26/2007	Closed	AOP	\$258,761	\$258,761	\$100,000	\$125,000	\$151,982	\$151,982	\$151,982	1.000	\$258,761
01932	10/20/2007	Closed	AOP	\$4,417,502	\$4,417,502	\$100,000	\$2,500	\$4,320,002	\$4,320,002	\$4,320,002	1.000	\$4,417,502
02010	12/10/2007	Closed	AOP	\$7,939,099	\$7,939,099	\$100,000	\$2,500	\$7,839,099	\$7,839,099	\$7,839,099	1.000	\$7,939,099
02077	1/27/2008	Closed	AOP	\$4,048,087	\$4,048,087	\$100,000	\$5,000	\$3,953,087	\$3,953,087	\$3,953,087	1.000	\$4,048,087
02095	2/12/2008	Closed	AOP	\$1,330,642	\$1,330,642	\$100,000	\$2,500	\$1,233,142	\$1,233,142	\$1,233,142	1.000	\$1,330,642
02123	2/24/2008	Closed	AOP	\$142,203	\$142,203	\$100,000	\$2,500	\$44,693	\$44,693	\$44,693	1.000	\$142,203
0017	4/9/2008	Closed	Wind	\$642,619	\$642,619	\$200,000	\$68,000	\$497,819	\$497,819	\$497,819	1.000	\$642,619
02205	4/10/2008	Closed	AOP	\$264,208	\$264,208	\$100,000	\$2,500	\$166,708	\$166,708	\$166,708	1.000	\$264,208
02283	5/10/2008	Closed	Wind	\$1,079,655	\$1,079,655	\$200,000	\$5,000	\$884,655	\$884,655	\$884,655	1.000	\$1,079,655
0020	5/22/2008	Closed	Wind	\$737,893	\$737,893	\$200,000	\$20,000	\$537,893	\$537,893	\$537,893	1.000	\$737,893
0022	6/1/2008	Closed	Wind	\$2,874,505	\$2,874,505	\$200,000	\$47,000	\$2,755,868	\$2,755,868	\$2,755,868	1.000	\$2,874,505
0019	6/5/2008	Closed	Wind	\$1,617,657	\$1,617,657	\$200,000	\$50,000	\$1,400,637	\$1,400,637	\$1,400,637	1.000	\$1,617,657
02412	7/15/2008	Closed	AOP	\$118,000	\$118,000	\$100,000	\$2,500	\$20,500	\$20,500	\$20,500	1.000	\$118,000
02442	8/5/2008	Closed	AOP	\$253,900	\$253,900	\$100,000	\$2,500	\$155,155	\$155,155	\$155,155	1.000	\$253,900
0024	11/5/2008	Closed	Wind	\$1,825,926	\$1,825,926	\$200,000	\$41,000	\$1,620,926	\$1,620,926	\$1,620,926	1.000	\$1,825,926
02724	1/21/2009	Closed	AOP	\$359,928	\$359,928	\$100,000	\$2,500	\$262,428	\$262,428	\$262,428	1.000	\$359,928
0026	1/26/2009	Closed	AOP	\$333,470	\$333,470	\$100,000	\$38,500	\$233,474	\$233,474	\$233,474	1.000	\$333,470
0027	2/10/2009	Closed	Wind	\$403,324	\$403,324	\$200,000	\$40,000	\$203,324	\$203,324	\$203,324	1.000	\$403,324
02786	2/27/2009	Closed	AOP	\$2,319,259	\$2,319,259	\$100,000	\$2,500	\$2,219,259	\$2,219,259	\$2,219,259	1.000	\$2,319,259
0030	3/27/2009	Closed	AOP	\$2,372,142	\$2,372,142	\$100,000	\$22,500	\$2,372,114	\$2,372,114	\$2,372,114	1.000	\$2,372,142
0031	4/9/2009	Closed	Wind	\$855,773	\$855,773	\$200,000	\$35,000	\$660,773	\$660,773	\$660,773	1.000	\$855,773
0033	4/25/2009	Closed	Wind	\$391,102	\$391,102	\$200,000	\$51,000	\$188,354	\$188,354	\$188,354	1.000	\$391,102
0037	4/29/2009	Closed	Wind	\$212,817	\$212,817	\$200,000	\$25,000	\$7,888	\$7,888	\$7,888	1.000	\$212,817
0032	5/1/2009	Closed	AOP	\$1,097,400	\$1,097,400	\$100,000	\$50,000	\$987,387	\$987,387	\$987,387	1.000	\$1,097,400
0034	5/13/2009	Closed	Wind	\$1,363,503	\$1,363,503	\$200,000	\$72,000	\$1,163,503	\$1,163,503	\$1,163,503	1.000	\$1,363,503
0036	6/12/2009	Closed	Wind	\$311,981	\$311,981	\$200,000	\$62,500	\$128,176	\$128,176	\$128,176	1.000	\$311,981
03078	7/21/2009	Closed	Wind	\$332,689	\$332,689	\$200,000	\$10,000	\$132,689	\$132,689	\$132,689	1.000	\$332,689
03081	7/27/2009	Closed	AOP	\$304,502	\$304,502	\$100,000	\$5,000	\$204,502	\$204,502	\$204,502	1.000	\$304,502
03122	8/21/2009	Closed	AOP	\$4,975,483	\$4,975,483	\$100,000	\$2,500	\$4,877,983	\$4,877,983	\$4,877,983	1.000	\$4,975,483
03138	8/29/2009	Closed	AOP	\$139,641	\$139,641	\$100,000	\$2,500	\$39,641	\$39,641	\$39,641	1.000	\$139,641
03179	9/20/2009	Closed	AOP	\$134,098	\$134,098	\$100,000	\$2,500	\$34,101	\$34,101	\$34,101	1.000	\$134,098
0038	12/27/2009	Closed	AOP	\$206,927	\$206,927	\$100,000	\$12,500	\$102,361	\$102,361	\$102,361	1.000	\$206,927
0039	1/9/2010	Closed	AOP	\$976,159	\$976,159	\$100,000	\$32,500	\$875,889	\$875,889	\$875,889	1.000	\$976,159
0040	1/30/2010	Closed	AOP	\$719,056	\$719,056	\$100,000	\$142,500	\$632,790	\$632,790	\$632,790	1.000	\$719,056
03548	4/4/2010	Closed	AOP	\$189,327	\$189,327	\$100,000	\$2,500	\$91,827	\$91,827	\$91,827	1.000	\$189,327
0041	5/10/2010	Closed	Wind	\$3,827,504	\$3,827,504	\$200,000	\$102,000	\$3,608,302	\$3,608,302	\$3,608,302	1.000	\$3,827,504
0042	5/13/2010	Closed	Wind	\$2,084,566	\$2,084,566	\$200,000	\$65,000	\$1,893,566	\$1,893,566	\$1,893,566	1.000	\$2,084,566
93604	6/12/2010	Closed	Wind	\$248,774	\$248,774	\$200,000	\$10,000	\$27,083	\$27,083	\$27,083	1.000	\$248,774
90050	8/4/2010	Closed	AOP	\$247,854	\$247,854	\$100,000	\$2,500	\$242,204	\$242,204	\$242,204	1.000	\$247,854
90125	8/6/2010	Closed	AOP	\$105,400	\$105,400	\$100,000	\$2,500	\$0	\$5,400	\$5,400	1.000	\$105,400
90229	10/23/2010	Closed	AOP	\$170,445	\$170,445	\$100,000	\$2,500	\$70,445	\$70,445	\$70,445	1.000	\$170,445
90336	12/30/2010	Closed	AOP	\$854,448	\$854,448	\$100,000	\$2,500	\$754,448	\$754,448	\$754,448	1.000	\$854,448
90334	12/31/2010	Closed	AOP	\$518,228	\$518,228	\$100,000	\$5,000	\$418,228	\$418,228	\$418,228	1.000	\$518,228
0043	2/2/2011	Closed	AOP	\$1,042,859	\$1,042,859	\$100,000	\$85,000	\$942,862	\$942,862	\$942,862	1.000	\$1,042,859
0044	2/3/2011	Closed	AOP	\$536,699	\$536,699	\$100,000	\$10,000	\$455,061	\$455,061	\$455,061	1.000	\$536,699
0045	2/10/2011	Closed	AOP	\$125,469	\$125,469	\$100,000	\$15,000	\$25,469	\$25,469	\$25,469	1.000	\$125,469
0046	2/10/2011	Closed	AOP	\$459,599	\$459,599	\$100,000	\$85,000	\$364,899	\$364,899	\$364,899	1.000	\$459,599
90532	4/8/2011	Closed	AOP	\$181,084	\$181,084	\$100,000	\$2,500	\$81,084	\$81,084	\$81,084	1.000	\$181,084
0048	4/14/2011	Closed	Wind	\$11,842,873	\$11,842,873	\$200,000	\$79,500	\$11,642,991	\$11,642,991	\$11,642,991	1.000	\$11,842,873
0050	5/22/2011	Closed	Wind	\$8,131,959	\$8,131,959	\$200,000	\$128,000	\$7,899,380	\$7,899,380	\$7,899,380	1.000	\$8,131,959
				\$84,779,185	\$84,779,185			\$76,213,724	\$76,213,724	\$76,213,724		

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services

Excess paid and incurred losses for closed claims are equal to the excess recoveries, or amounts over SIR if no recovery yet
Excess paid and incurred losses for open claims are amounts in excess of SIR regardless of recoveries.

\$200,000 SIR = Wind/Hail
\$100,000 SIR = other

Losses over SIR

CAT# or Occ#	Loss Date	Claim Status	Coverage	Paid Losses	Reported Losses	Paid Expenses	Reported Expenses	SIR	Retained Expenses	Excess Paid	Excess Reported	Severity Factor	Net Ultimate
91234	4/15/2012	Closed	Any	\$485,893	\$485,893	\$26,825	\$26,825	\$250,000	\$26,825	\$235,893	\$235,893	1.000	\$486,020
91287	5/4/2012	Closed	Any	\$483,077	\$483,077	\$1,149	\$1,149	\$250,000	\$1,149	\$233,077	\$233,077	1.000	\$483,204
90999	11/7/2011	Closed	Any	\$426,749	\$426,749	\$497	\$497	\$250,000	\$497	\$176,749	\$176,749	1.000	\$426,861
91351	5/29/2012	Closed	Any	\$340,228	\$340,228	\$2,049	\$2,049	\$250,000	\$2,049	\$90,228	\$90,228	1.000	\$340,318
Total Excess Losses for 11/12										\$735,946	\$735,946		
Applied to \$2,700,000 Corridor for 11/12										\$735,946	\$735,946		
0052	4/26/2013	Closed	Any	\$1,670,786	\$1,670,786	\$2,832	\$2,832	\$250,000	\$2,832	\$1,420,786	\$1,420,786	1.001	\$1,671,662
0054	5/30/2013	Closed	Any	\$1,003,799	\$1,003,799	\$2,291	\$2,291	\$250,000	\$2,291	\$753,799	\$753,799	1.001	\$1,004,325
91392	7/14/2012	Closed	Any	\$570,302	\$570,302	\$7,681	\$7,681	\$250,000	\$7,681	\$320,302	\$320,302	1.001	\$570,601
91814	4/18/2013	Closed	Any	\$454,242	\$454,242	\$290	\$290	\$250,000	\$290	\$204,242	\$204,242	1.001	\$454,480
91861	4/22/2013	Closed	Any	\$473,316	\$473,316	\$0	\$0	\$250,000	\$0	\$223,316	\$223,316	1.001	\$473,563
91393	7/16/2012	Closed	Any	\$431,334	\$431,334	\$1,627	\$1,627	\$250,000	\$1,627	\$181,334	\$181,334	1.001	\$431,560
Total Excess Losses for 12/13										\$3,103,780	\$3,103,780		
Applied to \$2,400,000 Corridor for 12/13										\$2,400,000	\$2,400,000		
Insured Excess of Corridor										\$703,780	\$703,780		
92546	6/28/2014	Closed	Any	\$2,284,671	\$2,284,671	\$13,223	\$13,223	\$250,000	\$13,223	\$2,034,671	\$2,034,671	1.001	\$2,287,197
92144	11/6/2013	Closed	Any	\$300,267	\$300,267	\$5,694	\$5,694	\$250,000	\$5,694	\$50,267	\$50,267	1.001	\$300,600
Total Excess Losses for 13/14										\$2,084,938	\$2,084,938		
Applied to \$1,400,000 Corridor for 13/14										\$1,400,000	\$1,400,000		
Insured excess of Corridor										\$684,938	\$684,938		
0055	3/25/2015	Open	Any	\$2,220,408	\$3,465,566	\$247,651	\$260,110	\$250,000	\$3,159	\$2,214,900	\$3,472,518	1.003	\$3,474,246
0061	5/19/2015	Closed	Any	\$620,862	\$620,862	\$30,861	\$30,861	\$250,000	\$5,786	\$395,937	\$395,937	1.003	\$622,417
0056	5/6/2015	Closed	Any	\$406,091	\$406,091	\$5,088	\$5,088	\$250,000	\$5,088	\$156,091	\$156,091	1.003	\$407,108
93164	4/11/2015	Closed	Any	\$331,500	\$331,500	\$22,090	\$22,090	\$250,000	\$1,600	\$101,990	\$101,990	1.003	\$332,330
92831	12/3/2014	Closed	Any	\$271,103	\$271,103	\$5,271	\$5,271	\$250,000	\$5,271	\$21,103	\$21,103	1.003	\$271,782
Total Excess Losses for 14/15										\$2,890,021	\$4,147,639		
Applied to \$1,400,000 Corridor for 14/15										\$1,400,000	\$1,400,000		
Insured excess of Corridor										\$1,490,021	\$2,747,639		
95188	5/29/2016	Open	Any	\$4,569,142	\$8,800,000	\$42,475	\$44,990	\$250,000	\$495	\$4,361,122	\$8,594,495	1.006	\$8,854,329
0059	5/9/2016	Closed	Any	\$1,201,103	\$1,201,103	\$26,978	\$26,978	\$250,000	\$2,000	\$976,081	\$976,081	1.006	\$1,208,519
94123	5/13/2016	Open	Any	\$756,610	\$756,611	\$85,646	\$85,646	\$250,000	\$1,494	\$590,763	\$590,764	1.006	\$761,283
0063	11/17/2015	Closed	Any	\$792,926	\$792,926	\$22,313	\$22,313	\$250,000	\$322	\$564,918	\$564,918	1.006	\$797,822
0058	4/29/2016	Closed	Any	\$681,598	\$681,598	\$9,674	\$9,674	\$250,000	\$10	\$441,262	\$441,262	1.006	\$685,806
Total Excess Losses for 15/16										\$6,934,146	\$11,167,520		
Applied to \$1,400,000 Corridor for 15/16										\$1,400,000	\$1,400,000		
Insured excess of Corridor										\$5,534,146	\$9,767,520		
0060	7/14/2016	Closed	Any	\$2,583,479	\$2,583,479	\$36,536	\$36,536	\$250,000	\$678	\$2,369,337	\$2,369,337	1.017	\$2,627,117
94256	11/16/2016	Open	Any	\$1,099,838	\$2,300,000	\$31,966	\$35,000	\$250,000	\$0	\$881,804	\$2,085,000	1.017	\$2,338,850
0064	5/27/2017	Closed	Any	\$1,076,986	\$1,076,986	\$55,274	\$55,274	\$250,000	\$4,681	\$877,580	\$877,580	1.017	\$1,095,178
94806	3/26/2017	Open	Any	\$0	\$1,100,000	\$10	\$10	\$250,000	\$10	\$0	\$850,000	1.017	\$1,118,580
93959	8/23/2016	Closed	Any	\$458,500	\$458,500	\$2,639	\$2,639	\$250,000	\$2,639	\$208,500	\$208,500	1.017	\$466,244
0065	6/17/2017	Open	Any	\$339,169	\$377,722	\$103	\$103	\$250,000	\$103	\$89,169	\$127,722	1.017	\$384,102
94217	12/19/2016	Open	Any	\$347,321	\$347,322	\$3,674	\$3,674	\$250,000	\$0	\$100,995	\$100,996	1.017	\$353,188
Total Excess Losses for 16/17										\$4,527,385	\$6,619,135		
Applied to \$1,400,000 Corridor for 16/17										\$1,400,000	\$1,400,000		
Insured excess of Corridor										\$3,127,385	\$5,219,135		
94628	8/29/2017	Open	Any	\$4,795,357	\$8,344,000	\$33,912	\$115,000	\$250,000	\$2,912	\$4,576,356	\$8,206,088	1.053	\$8,783,856
95267	3/19/2018	Open	Any	\$506,240	\$4,000,000	\$106,875	\$133,000	\$250,000	\$88	\$363,027	\$3,882,912	1.053	\$4,210,861
0067	5/29/2018	Open	Any	\$3,095,758	\$3,653,841	\$38,922	\$38,932	\$250,000	\$641	\$2,884,039	\$3,442,132	1.053	\$3,846,454
0068	6/12/2018	Open	Any	\$1,014,797	\$1,112,423	\$3,610	\$8,900	\$250,000	\$322	\$768,085	\$871,001	1.053	\$1,171,064
95052	5/4/2018	Open	Any	\$732,883	\$733,050	\$0	\$0	\$250,000	\$0	\$482,883	\$483,050	1.053	\$771,693
94879	1/11/2018	Closed	Any	\$357,185	\$357,185	\$12,318	\$12,318	\$250,000	\$5,591	\$113,912	\$113,912	1.053	\$376,014
Total Excess Losses for 17/18										\$9,188,302	\$16,999,094		
Applied to \$1,400,000 Corridor for 17/18										\$1,400,000	\$1,400,000		

Losses over SIR

<i>CAT# or Occ#</i>	<i>Loss Date</i>	<i>Claim Status</i>	<i>Coverage</i>	<i>Paid Losses</i>	<i>Reported Losses</i>	<i>Paid Expenses</i>	<i>Reported Expenses</i>	<i>SIR</i>	<i>Retained Expenses</i>	<i>Excess Paid</i>	<i>Excess Reported</i>	<i>Severity Factor</i>	<i>Net Ultimate</i>
<i>Insured excess of Corridor</i>										\$7,788,302	\$15,599,094		
0070	5/22/2019	Open	Any	\$6,052,361	\$9,135,851	\$21,234	\$23,801	\$250,000	\$4,777	\$5,818,818	\$8,904,875	1.195	\$10,919,737
95689	4/15/2019	Open	Any	\$2,010,581	\$2,735,000	\$6,560	\$7,500	\$250,000	\$0	\$1,767,141	\$2,492,500	1.195	\$3,269,042
0073	6/19/2019	Open	Any	\$257,653	\$2,274,885	\$1,025	\$3,525	\$250,000	\$7,468	\$1,210	\$2,020,942	1.195	\$2,719,084
0077	4/3/2019	Open	Any	\$90,750	\$1,890,750	\$0	\$0	\$250,000	\$0	\$0	\$1,640,750	1.195	\$2,259,942
0076	5/1/2019	Open	Any	\$1,181,082	\$1,638,318	\$0	\$0	\$250,000	\$0	\$931,082	\$1,388,318	1.195	\$1,958,220
0074	6/23/2019	Open	Any	\$630,400	\$865,495	\$43,964	\$45,000	\$250,000	\$0	\$424,364	\$660,495	1.195	\$1,034,494
0069	3/24/2019	Open	Any	\$714,044	\$734,953	\$2,360	\$6,198	\$250,000	\$526	\$465,878	\$490,625	1.195	\$878,462
95851	6/10/2019	Open	Any	\$107,688	\$415,000	\$0	\$0	\$250,000	\$0	\$0	\$165,000	1.195	\$496,034
<i>Total Excess Losses for 18/19</i>										\$9,408,494	\$17,763,507		
<i>Applied to \$1,400,000 Corridor for 18/19</i>										\$1,400,000	\$1,400,000		
<i>Insured excess of Corridor</i>										\$8,008,494	\$16,363,507		
0078	10/19/2019	Open	Wind	\$67,090	\$1,698,964	\$3,222	\$13,000	\$500,000	\$3,222	\$0	\$1,208,743	1.520	\$2,582,124
0075	8/26/2019	Open	Wind	\$510,663	\$749,935	\$16,274	\$16,291	\$500,000	\$15,040	\$11,897	\$251,186	1.520	\$1,139,768
95976	8/27/2019	Open	AOP	\$430,823	\$550,000	\$0	\$10,000	\$250,000	\$0	\$180,823	\$310,000	1.520	\$835,902
<i>Total Excess Losses for 19/20</i>										\$192,720	\$1,769,929		
<i>Applied to \$1,400,000 Corridor for 19-20</i>										\$192,720	\$1,400,000		
<i>Insured excess of Corridor</i>										\$0	\$369,929		

- Loss and policy information provided by Jennifer McKenzie, Arthur J. Gallagher Risk Management Services

Calculation of Limited Losses

(A) Policy Period	(B) Per Occurrence SIR	(C) Unlimited Paid Loss & ALAE	(D) Unlimited Reported Loss & ALAE	(E) Paid Excess of SIR	(F) Reported Excess of SIR	(G) Paid Limited to SIR	(H) Reported Limited to SIR
7/1/02-03	\$100k/\$200k	\$312,045	\$312,045	\$0	\$0	\$312,045	\$312,045
7/1/03-04	\$100k/\$200k	\$2,513,499	\$2,513,499	\$1,226,330	\$1,226,330	\$1,287,169	\$1,287,169
7/1/04-05	\$100k/\$200k	\$1,305,598	\$1,305,598	\$38,605	\$38,605	\$1,266,993	\$1,266,993
7/1/05-06	\$100k/\$200k	\$3,222,704	\$3,222,704	\$605,708	\$605,708	\$2,616,997	\$2,616,997
7/1/06-07	\$100k/\$200k	\$7,672,924	\$7,672,924	\$5,068,410	\$5,068,410	\$2,604,514	\$2,604,514
7/1/07-08	\$100k/\$200k	\$27,549,083	\$27,549,083	\$23,633,602	\$23,633,602	\$3,915,481	\$3,915,481
7/1/08-09	\$100k/\$200k	\$14,784,209	\$14,784,209	\$10,223,263	\$10,223,263	\$4,560,946	\$4,560,946
7/1/09-10	\$100k/\$200k	\$17,390,777	\$17,390,777	\$12,520,736	\$12,520,736	\$4,870,041	\$4,870,042
7/1/10-11	\$100k/\$200k	\$26,471,942	\$26,471,942	\$22,902,470	\$22,902,470	\$3,569,472	\$3,569,472
7/1/11-12	\$250,000	\$4,018,489	\$4,018,489	\$735,946	\$735,946	\$3,282,543	\$3,282,543
7/1/12-13	\$250,000	\$6,136,455	\$6,136,455	\$3,103,780	\$3,103,780	\$3,032,675	\$3,032,675
7/1/13-14	\$250,000	\$4,590,290	\$4,590,290	\$2,084,938	\$2,084,938	\$2,505,352	\$2,505,352
7/1/14-15	\$250,000	\$6,360,683	\$7,618,301	\$2,890,021	\$4,147,639	\$3,470,662	\$3,470,662
7/1/15-16	\$250,000	\$10,612,059	\$14,849,612	\$6,934,146	\$11,167,520	\$3,677,913	\$3,682,092
7/1/16-17	\$250,000	\$8,890,511	\$11,283,324	\$4,527,385	\$6,619,135	\$4,363,126	\$4,664,189
7/1/17-18	\$250,000	\$13,829,246	\$21,725,463	\$9,188,302	\$16,999,094	\$4,640,944	\$4,726,369
7/1/18-19	\$250,000	\$13,509,167	\$22,427,703	\$9,408,494	\$17,763,507	\$4,100,674	\$4,664,196
7/1/19-20	\$250k/\$500k	\$2,578,964	\$5,454,215	\$192,720	\$1,769,929	\$2,386,243	\$3,684,286
Total		\$171,748,645	\$199,326,634	\$115,284,856	\$140,610,612	\$56,463,789	\$58,716,022

Period	Corridor	Paid	Reported
7/1/11-12	\$2,700,000	\$735,946	\$735,946
7/1/12-13	\$2,400,000	\$2,400,000	\$2,400,000
7/1/13-14	\$1,400,000	\$1,400,000	\$1,400,000
7/1/14-15	\$1,400,000	\$1,400,000	\$1,400,000
7/1/15-16	\$1,400,000	\$1,400,000	\$1,400,000
7/1/16-17	\$1,400,000	\$1,400,000	\$1,400,000
7/1/17-18	\$1,400,000	\$1,400,000	\$1,400,000
7/1/18-19	\$1,400,000	\$1,400,000	\$1,400,000
7/1/19-20	\$1,400,000	\$192,720	\$1,400,000

(C) and (D) - Exhibit 1-A

(E) and (F) - Excess amount from claims in Exhibit 1-B

(G) = (C) - (E)

(H) = (D) - (F)

**Estimated Ultimate Losses
Using Loss Development Methods**

Limited to \$250,000 SIR

(A)	(B)	(C)	(D)	(E)	(F)
Accident Period	Unlimited Reported Losses	Excess on Large Losses	Limited Reported Losses	Reported Develop. Factor	Limited Ultimate Losses
7/1/11-12	\$4,018,489	\$735,946	\$3,282,543	1.000	\$3,283,000
7/1/12-13	\$6,136,455	\$3,103,780	\$3,032,675	1.000	\$3,033,000
7/1/13-14	\$4,590,290	\$2,084,938	\$2,505,352	1.000	\$2,506,000
7/1/14-15	\$7,618,301	\$4,147,639	\$3,470,662	1.001	\$3,474,000
7/1/15-16	\$14,849,612	\$11,167,520	\$3,682,092	1.003	\$3,694,000
7/1/16-17	\$11,283,324	\$6,619,135	\$4,664,189	1.009	\$4,708,000
7/1/17-18	\$21,725,463	\$16,999,094	\$4,726,369	1.028	\$4,860,000
7/1/18-19	\$22,427,703	\$17,763,507	\$4,664,196	1.086	\$5,063,000
7/1/19-20	\$5,454,215	\$1,769,929	\$3,684,286	2.070	\$7,626,000
Total	\$98,103,852	\$64,391,488	\$33,712,365		\$38,247,000

Unlimited Losses

	(G)	(H)	(I)
Accident Period	Unlimited Reported Losses	Unlimited Reported Develop. Factor	Unlimited Ultimate Losses
7/1/11-12	\$4,018,489	1.000	\$4,020,000
7/1/12-13	\$6,136,455	1.001	\$6,140,000
7/1/13-14	\$4,590,290	1.001	\$4,595,000
7/1/14-15	\$7,618,301	1.003	\$7,637,000
7/1/15-16	\$14,849,612	1.006	\$14,941,000
7/1/16-17	\$11,283,324	1.017	\$11,474,000
7/1/17-18	\$21,725,463	1.053	\$22,871,000
7/1/18-19	\$22,427,703	1.195	\$26,807,000
7/1/19-20	\$5,454,215	2.823	\$15,395,000
Total	\$98,103,852		\$113,880,000

(B) and (G) - Exhibit 1-A
(C) - Exhibit 1-B
(D) = (B) - (C)
(E) and (H) = Appendix A
(F) = (D) * (E)
(I) = (G) * (H)

**Estimated Ultimate Losses
Using Bornhuetter-Ferguson Method**

Limited to \$250,000 SIR

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Prior Ultimate or Forecast	Reported Develop. Factor	Expected % Unreported	Expected Unreported Losses	Reported Losses	Estimated Ultimate Losses
7/1/11-12	\$3,282,543	1.000	0%	\$0	\$3,282,543	\$3,283,000
7/1/12-13	\$3,032,675	1.000	0%	\$0	\$3,032,675	\$3,033,000
7/1/13-14	\$2,506,177	1.000	0%	\$1,000	\$2,505,352	\$2,506,000
7/1/14-15	\$3,470,662	1.001	0%	\$4,000	\$3,470,662	\$3,475,000
7/1/15-16	\$3,695,000	1.003	0%	\$12,000	\$3,682,092	\$3,694,000
7/1/16-17	\$4,603,000	1.009	1%	\$43,000	\$4,664,189	\$4,707,000
7/1/17-18	\$4,680,000	1.028	3%	\$129,000	\$4,726,369	\$4,855,000
7/1/18-19	\$5,663,000	1.086	8%	\$446,000	\$4,664,196	\$5,110,000
7/1/19-20	\$8,600,000	2.070	52%	\$4,445,000	\$3,684,286	\$8,129,000
Total	\$39,533,057			\$5,080,000	\$33,712,365	\$38,792,000

Unlimited Losses

	(H) Prior	(I) Reported	(J) Expected	(K) Expected	(L)	(M) Estimated
Accident Period	Ultimate or Forecast	Develop. Factor	Expected % Unreported	Unreported Losses	Reported Losses	Ultimate Losses
7/1/11-12	\$4,018,489	1.000	0%	\$1,000	\$4,018,489	\$4,019,000
7/1/12-13	\$6,136,455	1.001	0%	\$3,000	\$6,136,455	\$6,139,000
7/1/13-14	\$4,590,290	1.001	0%	\$5,000	\$4,590,290	\$4,595,000
7/1/14-15	\$6,517,000	1.003	0%	\$16,000	\$7,618,301	\$7,634,000
7/1/15-16	\$10,498,000	1.006	1%	\$64,000	\$14,849,612	\$14,914,000
7/1/16-17	\$10,244,000	1.017	2%	\$170,000	\$11,283,324	\$11,453,000
7/1/17-18	\$16,870,000	1.053	5%	\$845,000	\$21,725,463	\$22,570,000
7/1/18-19	\$16,290,000	1.195	16%	\$2,661,000	\$22,427,703	\$25,089,000
7/1/19-20	\$26,128,000	2.823	65%	\$16,871,000	\$5,454,215	\$22,325,000
Total	\$101,292,233			\$20,636,000	\$98,103,852	\$118,738,000

(B) and (H) - Exhibit 3

(C) and (I) - Appendix A

(D) = $1 - 1/(C)$

(E) = (B) * (D)

(F) and (L) - Exhibit 1-C

(G) = (E) + (F)

(J) = $1 - 1/(I)$

(K) = (H) * (J)

(M) = (K) + (L)

Summary and Selection of Ultimate Limited Loss Estimates

(A) Accident Period	(B) SIR	(C) Prior Selection or Forecast	(D) Loss Development Method	(E) Bornhuetter- Ferguson Method	(F) Selected Ultimate Losses
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Limited to SIR

7/1/11-12	\$250,000	\$3,282,543	\$3,283,000	\$3,283,000	\$3,282,543
7/1/12-13	\$250,000	\$3,032,675	\$3,033,000	\$3,033,000	\$3,032,675
7/1/13-14	\$250,000	\$2,506,177	\$2,506,000	\$2,506,000	\$2,505,352
7/1/14-15	\$250,000	\$3,470,662	\$3,474,000	\$3,475,000	\$3,470,662
7/1/15-16	\$250,000	\$3,695,000	\$3,694,000	\$3,694,000	\$3,694,000
7/1/16-17	\$250,000	\$4,603,000	\$4,708,000	\$4,707,000	\$4,708,000
7/1/17-18	\$250,000	\$4,680,000	\$4,860,000	\$4,855,000	\$4,860,000
7/1/18-19	\$250,000	\$5,663,000	\$5,063,000	\$5,110,000	\$5,110,000
7/1/19-20	\$250,000/\$500,000	\$8,600,000	\$7,626,000	\$8,129,000	\$8,600,000

Unlimited Losses

7/1/11-12		\$4,018,489	\$4,020,000	\$4,019,000	\$4,018,489
7/1/12-13		\$6,136,455	\$6,140,000	\$6,139,000	\$6,136,455
7/1/13-14		\$4,590,290	\$4,595,000	\$4,595,000	\$4,590,290
7/1/14-15		\$6,517,000	\$7,637,000	\$7,634,000	\$7,637,000
7/1/15-16		\$10,498,000	\$14,941,000	\$14,914,000	\$14,941,000
7/1/16-17		\$10,244,000	\$11,474,000	\$11,453,000	\$11,474,000
7/1/17-18		\$16,870,000	\$22,871,000	\$22,570,000	\$22,871,000
7/1/18-19		\$16,290,000	\$26,807,000	\$25,089,000	\$25,089,000
7/1/19-20		\$26,128,000	\$15,395,000	\$22,325,000	\$26,128,000

Accident Period	Corridor	(G) Ultimate Excess of SIR	(H) Capped Excess Losses	(I) Total Ultimate Retained
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Difference in Unlimited and Limited, Capped at Corridor

7/1/11-12	\$2,700,000	\$735,946	\$735,946	\$4,018,489
7/1/12-13	\$2,400,000	\$3,103,780	\$2,400,000	\$5,432,675
7/1/13-14	\$1,400,000	\$2,084,938	\$1,400,000	\$3,905,352
7/1/14-15	\$1,400,000	\$4,166,338	\$1,400,000	\$4,870,662
7/1/15-16	\$1,400,000	\$11,247,000	\$1,400,000	\$5,094,000
7/1/16-17	\$1,400,000	\$6,766,000	\$1,400,000	\$6,108,000
7/1/17-18	\$1,400,000	\$18,011,000	\$1,400,000	\$6,260,000
7/1/18-19	\$1,400,000	\$19,979,000	\$1,400,000	\$6,510,000
7/1/19-20	\$1,400,000	\$17,528,000	\$1,400,000	\$10,000,000

(C) - From previous report as of 6/30/2019

(D) - Exhibit 2-A

(E) - Exhibit 2-B

(F) - Selected as noted:

Limited to \$250,000:

Limited reported losses from 11-12 through 14-15

Column (D) for 15-16 through 17-18

Column (E) for 18-19

Prior for 19-20

Unlimited Losses:

Limited reported losses from 11-12 through 13-14

Column (D) for 14-15 through 17-18

Column (E) for 18-19

Prior for 19-20

(G) - Difference in Unlimited and Limited Losses

(H) = Minimum of (G) and Corridor Limit

(I) = (F, Limited) + (H)

Comparison of Results with Previous Estimates as of 6/30/19

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Prior Reported Losses 6/30/2019	Expected Reported Losses 1/31/2020	Actual Reported Losses 1/31/2020	Percent Difference	Prior Ultimate Losses 6/30/2019	Current Ultimate Losses 1/31/2020	Percent Difference
Limited to SIR							
7/1/11-12	\$3,282,543	\$3,282,543	\$3,282,543	0.0%	\$3,282,543	\$3,282,543	0.0%
7/1/12-13	\$3,032,675	\$3,032,675	\$3,032,675	0.0%	\$3,032,675	\$3,032,675	0.0%
7/1/13-14	\$2,506,177	\$2,506,177	\$2,505,352	0.0%	\$2,506,177	\$2,505,352	0.0%
7/1/14-15	\$3,470,662	\$3,470,662	\$3,470,662	0.0%	\$3,470,662	\$3,470,662	0.0%
7/1/15-16	\$3,682,092	\$3,695,000	\$3,682,092	-0.3%	\$3,695,000	\$3,694,000	0.0%
7/1/16-17	\$4,409,508	\$4,509,266	\$4,664,189	3.4%	\$4,603,000	\$4,708,000	2.3%
7/1/17-18	\$4,618,077	\$4,650,005	\$4,726,369	1.6%	\$4,680,000	\$4,860,000	3.8%
7/1/18-19	\$5,217,986	\$5,442,548	\$4,664,196	-14.3%	\$5,663,000	\$5,110,000	-9.8%
7/1/19-20		\$4,480,212	\$3,684,286	-17.8%	\$8,600,000	\$8,600,000	0.0%
Total	\$30,219,720	\$35,069,088	\$33,712,365	-3.9%	\$39,533,057	\$39,263,232	-0.7%
Unlimited							
7/1/11-12	\$4,018,489	\$4,018,489	\$4,018,489	0.0%	\$4,018,489	\$4,018,489	0.0%
7/1/12-13	\$6,136,455	\$6,136,455	\$6,136,455	0.0%	\$6,136,455	\$6,136,455	0.0%
7/1/13-14	\$4,590,290	\$4,590,290	\$4,590,290	0.0%	\$4,590,290	\$4,590,290	0.0%
7/1/14-15	\$6,503,301	\$6,503,301	\$7,618,301	17.1%	\$6,517,000	\$7,637,000	17.2%
7/1/15-16	\$10,487,332	\$10,493,421	\$14,849,612	41.5%	\$10,498,000	\$14,941,000	42.3%
7/1/16-17	\$10,178,642	\$10,217,882	\$11,283,324	10.4%	\$10,244,000	\$11,474,000	12.0%
7/1/17-18	\$16,267,082	\$16,644,494	\$21,725,463	30.5%	\$16,870,000	\$22,871,000	35.6%
7/1/18-19	\$11,601,006	\$14,471,419	\$22,427,703	55.0%	\$16,290,000	\$25,089,000	54.0%
7/1/19-20		\$6,719,859	\$5,454,215	-18.8%	\$17,018,000	\$26,128,000	53.5%
Total	\$69,782,596	\$79,795,610	\$98,103,852	22.9%	\$92,182,233	\$122,885,233	33.3%
SIR + Corridor							
7/1/11-12	\$4,018,489	\$4,018,489	\$4,018,489	0.0%	\$4,018,489	\$4,018,489	0.0%
7/1/12-13	\$5,432,675	\$5,432,675	\$5,432,675	0.0%	\$5,432,675	\$5,432,675	0.0%
7/1/13-14	\$3,906,177	\$3,906,177	\$3,905,352	0.0%	\$3,906,177	\$3,905,352	0.0%
7/1/14-15	\$4,870,662	\$4,870,662	\$4,870,662	0.0%	\$4,870,662	\$4,870,662	0.0%
7/1/15-16	\$5,082,092	\$5,095,000	\$5,082,092	-0.3%	\$5,095,000	\$5,094,000	0.0%
7/1/16-17	\$5,809,508	\$5,909,266	\$6,064,189	2.6%	\$6,003,000	\$6,108,000	1.7%
7/1/17-18	\$6,018,077	\$6,050,005	\$6,126,369	1.3%	\$6,080,000	\$6,260,000	3.0%
7/1/18-19	\$6,617,986	\$6,842,548	\$6,064,196	-11.4%	\$7,063,000	\$6,510,000	-7.8%
7/1/19-20		\$6,719,859	\$5,084,286	-24.3%	\$10,000,000	\$10,000,000	0.0%
Total	\$41,755,666	\$48,844,680	\$46,648,311	-4.5%	\$52,469,002	\$52,199,177	-0.5%

(B) and (F) - From Previous actuarial report as of 6/30/2019
 (C) - Derived from (B) and (F) using loss development patterns
 (D) - Exhibit 1-C
 (E) = [(D) / (C)] - 1
 (G) - Exhibit 3
 (H) = [(G) / (F)] - 1

Comparison of Results with Previous Estimates as of 1/31/19

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Prior Reported Losses 1/31/2019	Expected Reported Losses 1/31/2020	Actual Reported Losses 1/31/2020	Percent Difference	Prior Ultimate Losses 1/31/2019	Current Ultimate Losses 1/31/2020	Percent Difference
<u>Limited to SIR</u>							
7/1/11-12	\$3,282,543	\$3,282,543	\$3,282,543	0.0%	\$3,282,543	\$3,282,543	0.0%
7/1/12-13	\$3,032,675	\$3,032,675	\$3,032,675	0.0%	\$3,032,675	\$3,032,675	0.0%
7/1/13-14	\$2,505,352	\$2,505,352	\$2,505,352	0.0%	\$2,505,352	\$2,505,352	0.0%
7/1/14-15	\$3,470,662	\$3,470,662	\$3,470,662	0.0%	\$3,470,662	\$3,470,662	0.0%
7/1/15-16	\$3,682,092	\$3,695,000	\$3,682,092	-0.3%	\$3,695,000	\$3,694,000	0.0%
7/1/16-17	\$4,547,880	\$4,587,105	\$4,664,189	1.7%	\$4,603,000	\$4,708,000	2.3%
7/1/17-18	\$4,485,867	\$4,623,715	\$4,726,369	2.2%	\$4,680,000	\$4,860,000	3.8%
7/1/18-19	\$1,205,182	\$3,815,127	\$4,664,196	22.3%	\$4,063,000	\$5,110,000	25.8%
7/1/19-20		\$3,650,852	\$3,684,286	0.9%	\$7,008,000	\$8,600,000	22.7%
Total	\$26,212,252	\$32,663,031	\$33,712,365	3.2%	\$36,340,232	\$39,263,232	8.0%
<u>Unlimited</u>							
7/1/11-12	\$4,018,489	\$4,018,489	\$4,018,489	0.0%	\$4,018,489	\$4,018,489	0.0%
7/1/12-13	\$6,136,455	\$6,136,455	\$6,136,455	0.0%	\$6,136,455	\$6,136,455	0.0%
7/1/13-14	\$4,590,290	\$4,590,290	\$4,590,290	0.0%	\$4,590,290	\$4,590,290	0.0%
7/1/14-15	\$7,613,301	\$7,613,301	\$7,618,301	0.1%	\$7,617,000	\$7,637,000	0.3%
7/1/15-16	\$8,878,582	\$8,893,557	\$14,849,612	67.0%	\$8,898,000	\$14,941,000	67.9%
7/1/16-17	\$10,565,943	\$10,707,991	\$11,283,324	5.4%	\$10,744,000	\$11,474,000	6.8%
7/1/17-18	\$15,147,881	\$16,145,277	\$21,725,463	34.6%	\$16,370,000	\$22,871,000	39.7%
7/1/18-19	\$1,205,182	\$11,439,431	\$22,427,703	96.1%	\$13,290,000	\$25,089,000	88.8%
7/1/19-20		\$8,236,546	\$5,454,215	-33.8%	\$20,859,000	\$26,128,000	25.3%
Total	\$58,156,123	\$77,781,336	\$98,103,852	26.1%	\$92,523,233	#####	32.8%
<u>SIR + Corridor</u>							
7/1/11-12	\$4,018,489	\$4,018,489	\$4,018,489	0.0%	\$4,018,489	\$4,018,489	0.0%
7/1/12-13	\$5,432,675	\$5,432,675	\$5,432,675	0.0%	\$5,432,675	\$5,432,675	0.0%
7/1/13-14	\$3,905,352	\$3,905,352	\$3,905,352	0.0%	\$3,905,352	\$3,905,352	0.0%
7/1/14-15	\$4,870,662	\$4,870,662	\$4,870,662	0.0%	\$4,870,662	\$4,870,662	0.0%
7/1/15-16	\$5,082,092	\$5,095,000	\$5,082,092	-0.3%	\$5,095,000	\$5,094,000	0.0%
7/1/16-17	\$5,947,880	\$5,987,105	\$6,064,189	1.3%	\$6,003,000	\$6,108,000	1.7%
7/1/17-18	\$5,885,867	\$6,023,715	\$6,126,369	1.7%	\$6,080,000	\$6,260,000	3.0%
7/1/18-19	\$1,205,182	\$5,215,127	\$6,064,196	16.3%	\$5,463,000	\$6,510,000	19.2%
7/1/19-20		\$5,050,852	\$5,084,286	0.7%	\$8,408,000	\$10,000,000	18.9%
Total	\$36,348,198	\$45,598,977	\$46,648,311	2.3%	\$49,276,177	\$52,199,177	5.9%

(B) and (F) - From Previous actuarial report as of 1/31/2019
 (C) - Derived from (B) and (F) using loss development patterns
 (D) - Exhibit 1-C
 (E) = [(D) / (C)] - 1
 (G) - Exhibit 3
 (H) = [(G) / (F)] - 1

**Estimated Outstanding Losses
As of January 31, 2020**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	SIR	Limited Ultimate Losses	Limited Paid Losses	Limited Reported Losses	Limited Case Reserves	IBNR Losses	Outstanding Losses
7/1/02-03	\$100k/\$200k	\$312,045	\$312,045	\$312,045	\$0	\$0	\$0
7/1/03-04	\$100k/\$200k	\$1,287,169	\$1,287,169	\$1,287,169	\$0	\$0	\$0
7/1/04-05	\$100k/\$200k	\$1,266,993	\$1,266,993	\$1,266,993	\$0	\$0	\$0
7/1/05-06	\$100k/\$200k	\$2,616,997	\$2,616,997	\$2,616,997	\$0	\$0	\$0
7/1/06-07	\$100k/\$200k	\$2,604,514	\$2,604,514	\$2,604,514	\$0	\$0	\$0
7/1/07-08	\$100k/\$200k	\$3,915,481	\$3,915,481	\$3,915,481	\$0	\$0	\$0
7/1/08-09	\$100k/\$200k	\$4,560,946	\$4,560,946	\$4,560,946	\$0	\$0	\$0
7/1/09-10	\$100k/\$200k	\$4,870,042	\$4,870,041	\$4,870,042	\$0	\$0	\$0
7/1/10-11	\$100k/\$200k	\$3,569,472	\$3,569,472	\$3,569,472	\$0	\$0	\$0
7/1/11-12	\$250,000 /\$2.7M corridor	\$4,018,489	\$4,018,489	\$4,018,489	\$0	\$0	\$0
7/1/12-13	\$250,000 /\$2.4M corridor	\$5,432,675	\$5,432,675	\$5,432,675	\$0	\$0	\$0
7/1/13-14	\$250,000 /\$1.4M corridor	\$3,905,352	\$3,905,352	\$3,905,352	\$0	\$0	\$0
7/1/14-15	\$250,000 /\$1.4M corridor	\$4,870,662	\$4,870,662	\$4,870,662	\$0	\$0	\$0
7/1/15-16	\$250,000 /\$1.4M corridor	\$5,094,000	\$5,077,913	\$5,082,092	\$4,179	\$12,000	\$16,000
7/1/16-17	\$250,000 /\$1.4M corridor	\$6,108,000	\$5,763,126	\$6,064,189	\$301,064	\$44,000	\$345,000
7/1/17-18	\$250,000 /\$1.4M corridor	\$6,260,000	\$6,040,944	\$6,126,369	\$85,425	\$134,000	\$219,000
7/1/18-19	\$250,000 /\$1.4M corridor	\$6,510,000	\$5,500,674	\$6,064,196	\$563,522	\$446,000	\$1,009,000
7/1/19-1/31/20	\$250k/\$500k + \$1.4M corr.	\$6,417,000	\$2,578,964	\$5,084,286	\$2,505,323	\$1,333,000	\$3,838,000
Total		\$73,619,835	\$68,192,455	\$71,651,968	\$3,459,513	\$1,969,000	\$5,427,000
2/1-6/30/20		\$3,583,000					

(C) - Ultimate losses are equal to limited reported losses in (E) through 10-11

Exhibit 3 for 11-12 to present

(D) and (E) - Exhibit 1-C

(F) = (E) - (D)

(G) = (C) - (E)

(H) = (C) - (D)

*Projection of Outstanding Losses
As of June 30, 2020*

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
<i>Accident Period</i>	<i>SIR</i>	<i>Ultimate Losses</i>	<i>Projected Paid Losses</i>	<i>Projected Reported Losses</i>	<i>Projected Case Reserves</i>	<i>IBNR Losses</i>	<i>Outstanding Losses</i>
7/1/02-03	\$100k/\$200k	\$312,045	\$312,045	\$312,045	\$0	\$0	\$0
7/1/03-04	\$100k/\$200k	\$1,287,169	\$1,287,169	\$1,287,169	\$0	\$0	\$0
7/1/04-05	\$100k/\$200k	\$1,266,993	\$1,266,993	\$1,266,993	\$0	\$0	\$0
7/1/05-06	\$100k/\$200k	\$2,616,997	\$2,616,997	\$2,616,997	\$0	\$0	\$0
7/1/06-07	\$100k/\$200k	\$2,604,514	\$2,604,514	\$2,604,514	\$0	\$0	\$0
7/1/07-08	\$100k/\$200k	\$3,915,481	\$3,915,481	\$3,915,481	\$0	\$0	\$0
7/1/08-09	\$100k/\$200k	\$4,560,946	\$4,560,946	\$4,560,946	\$0	\$0	\$0
7/1/09-10	\$100k/\$200k	\$4,870,042	\$4,870,041	\$4,870,042	\$0	\$0	\$0
7/1/10-11	\$100k/\$200k	\$3,569,472	\$3,569,472	\$3,569,472	\$0	\$0	\$0
7/1/11-12	\$250,000 /\$2.7M corridor	\$4,018,489	\$4,018,489	\$4,018,489	\$0	\$0	\$0
7/1/12-13	\$250,000 /\$2.4M corridor	\$5,432,675	\$5,432,675	\$5,432,675	\$0	\$0	\$0
7/1/13-14	\$250,000 /\$1.4M corridor	\$3,905,352	\$3,905,352	\$3,905,352	\$0	\$0	\$0
7/1/14-15	\$250,000 /\$1.4M corridor	\$4,870,662	\$4,870,662	\$4,870,662	\$0	\$0	\$0
7/1/15-16	\$250,000 /\$1.4M corridor	\$5,094,000	\$5,082,757	\$5,086,377	\$3,620	\$8,000	\$11,000
7/1/16-17	\$250,000 /\$1.4M corridor	\$6,108,000	\$5,880,797	\$6,080,035	\$199,238	\$28,000	\$227,000
7/1/17-18	\$250,000 /\$1.4M corridor	\$6,260,000	\$6,125,692	\$6,174,577	\$48,884	\$85,000	\$134,000
7/1/18-19	\$250,000 /\$1.4M corridor	\$6,510,000	\$5,919,421	\$6,220,970	\$301,550	\$289,000	\$591,000
7/1/19-20	\$250k/\$500k + \$1.4M corr.	\$10,000,000	\$4,878,227	\$8,659,025	\$3,780,798	\$1,341,000	\$5,122,000
<i>Total</i>		\$77,202,835	\$71,117,729	\$75,451,819	\$4,334,090	\$1,751,000	\$6,085,000

(C) - Ultimate losses are equal to limited reported losses in (E) through 10-11

Exhibit 3 for 11-12 to present

(D) and (E) - Projected using loss development factors

(F) = (E) - (D)

(G) = (C) - (E)

(H) = (C) - (D)

Oklahoma Schools Insurance Group
Property including Auto Physical Damage

Exhibit 6

Average Ultimate Claim Sizes

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Reported Occurrences	Reported Claim Development	Estimated Ultimate Occurrences	Estimated Ultimate Limited Losses	Average Ultimate Limited Occurrence	Exposure Total Value in \$100s	Loss Rate
7/1/02-03	24	1.000	24.0	\$312,045	\$13,000		
7/1/03-04	104	1.000	104.0	\$1,287,169	\$12,400		
7/1/04-05	122	1.000	122.0	\$1,266,993	\$10,400	\$37,566,889	\$0.034
7/1/05-06	190	1.000	190.0	\$2,616,997	\$13,800	\$50,583,768	\$0.052
7/1/06-07	232	1.000	232.0	\$2,604,514	\$11,200	\$63,964,027	\$0.041
7/1/07-08	255	1.000	255.0	\$3,915,481	\$15,400	\$70,532,585	\$0.056
7/1/08-09	211	1.000	211.0	\$4,560,946	\$21,600	\$74,780,448	\$0.061
7/1/09-10	266	1.000	266.0	\$4,870,042	\$18,300	\$78,018,968	\$0.062
7/1/10-11	225	1.000	225.0	\$3,569,472	\$15,900	\$82,140,365	\$0.043
7/1/11-12	173	1.000	173.0	\$4,018,489	\$23,200	\$75,216,040	\$0.053
7/1/12-13	163	1.000	163.0	\$5,432,675	\$33,300	\$67,433,533	\$0.081
7/1/13-14	157	1.000	157.0	\$3,905,352	\$24,900	\$72,841,534	\$0.054
7/1/14-15	208	1.000	208.0	\$4,870,662	\$23,400	\$82,912,577	\$0.059
7/1/15-16	182	1.000	182.0	\$5,094,000	\$28,000	\$83,651,052	\$0.061
7/1/16-17	228	1.000	228.0	\$6,108,000	\$26,800	\$95,166,463	\$0.064
7/1/17-18	194	1.000	194.0	\$6,260,000	\$32,300	\$91,897,115	\$0.068
7/1/18-19	217	1.000	217.0	\$6,510,000	\$30,000	\$120,498,610	\$0.054
7/1/19-20	160	1.857	297.1	\$10,000,000	\$33,700	\$155,270,625	\$0.064
7/1/20-21			291.5	\$13,507,000	\$46,300	\$158,376,038	\$0.085
Total	3311		3,739.6	\$90,709,835	\$24,300	\$1,460,850,637	\$6.209

- Results for 7/1/20-21 from Forecast

(B) - Exhibit 1-A

(C) - Appendix A3

(D) = (B) x (C)

(E) = Exhibit 3

(F) = (E) / (D)

(G) - Exhibit 1-A, provided by OSIG

(H) = (E) / (G) * 100

Estimation of Cumulative Reported Loss Development Factors
Losses Limited to \$250,000 per Occurrence
Using "The Method of Least Squares"

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.156	-6.9197	-1.8604	47.882	3.4611	12.8735	211	1.000
24	1.050	-6.9315	-2.9975	48.045	8.9848	20.7769	199	1.000
36	1.024	-6.9431	-3.7101	48.207	13.7648	25.7596	187	1.000
48	1.005	-6.9546	-5.2983	48.367	28.0722	36.8479	175	1.000
							163	1.000
							151	1.000
							139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.000
Sum		-27.7489	-13.8663	192.5013	54.2829	96.2578	79	1.000
Average		-6.9372	-3.4666	48.1253	13.5707	24.0645	67	1.001
							55	1.003
							43	1.009
							31	1.028
							19	1.086
							7	2.070

N =	4		
A =	2.917E+283		
B =	94.587	R^2 =	0.97726
C =	1000		

* - Appendix A4, Page 1

Estimation of Cumulative Reported Loss Development Factors
Unlimited Reported Losses
Using "The Method of Least Squares"

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.486	-4.2047	-0.7213	17.679	0.5203	3.0330	211	1.000
24	1.092	-4.3694	-2.3825	19.092	5.6765	10.4104	199	1.000
36	1.040	-4.5109	-3.2114	20.348	10.3131	14.4862	187	1.000
48	1.010	-4.6347	-4.6052	21.481	21.2076	21.3437	175	1.000
							163	1.000
							151	1.000
							139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.001
Sum		-17.7197	-10.9205	78.6001	37.7176	49.2734	79	1.001
Average		-4.4299	-2.7301	19.6500	9.4294	12.3183	67	1.003
							55	1.006
							43	1.017
							31	1.053
							19	1.195
							7	2.823

N =	4
A =	3.781E+15
B =	8.713
C =	55
R^2 =	0.98828

* - Appendix A4, page 2

***Implied Payment Pattern for Limited Losses
Using "The Method of Least Squares"***

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
		$LN(1/(X+C))$	$LN(Y-1)$					
							103	1.001
							91	1.001
							79	1.002
							67	1.004
55	1.004	-4.3438	-5.4321	18.869	29.5075	23.5959	55	1.009
43	1.079	-4.1744	-2.5378	17.426	6.4402	10.5936	43	1.023
31	1.047	-3.9703	-3.0533	15.763	9.3229	12.1227	31	1.073
19	1.246	-3.7136	-1.4019	13.791	1.9652	5.2059	19	1.318
7	3.604	-3.3673	0.9570	11.339	0.9159	-3.2227	7	3.319
Sum		-19.5694	-11.4680	77.1867	48.1519	48.2955		
Average		-3.9139	-2.2936	15.4373	9.6304	9.6591		

N =	5		
A =	5.658E+08		
B =	5.735	R^2 =	0.895433
C =	22		

* - Limited Ultimate Losses / Limited Paid Losses

*Estimation of Cumulative Reported Claim Development Factors
Using "The Method of Least Squares"*

Curve : $Y = A(1/(X+C))^B + 1$ (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.000						211	1.000
24	1.000						199	1.000
							187	1.000
							175	1.000
							163	1.000
							151	1.000
							139	1.000
							127	1.000
							115	1.000
							103	1.000
							91	1.000
Sum		0.0000	0.0000	0.0000	0.0000	0.0000	79	1.000
Average		0.0000	0.0000	0.0000	0.0000	0.0000	67	1.000
							55	1.000
							43	1.000
							31	1.000
							19	1.000
							7	1.857

N =	2
A =	
B =	R^2 =
C =	

* - Appendix A6

Analysis of Reported Loss Development
Pure Loss Limited to \$250,000 ALAE unlimited

Limited Reported Losses and ALAE as of (months):										
Year	12	24	36	48	60	72	84	96	108	120
7/1/04-05							\$1,305,598	\$1,305,598	\$1,305,598	\$1,305,598
7/1/05-06					\$2,912,297	\$2,912,297	\$2,912,297	\$2,912,297	\$2,912,297	\$2,912,297
7/1/06-07				\$2,801,109	\$2,794,881	\$2,794,881	\$2,794,881	\$2,794,881	\$2,794,881	\$2,794,881
7/1/07-08			\$5,083,453	\$5,097,217	\$5,097,217	\$5,097,217	\$5,097,217	\$5,097,217	\$5,097,217	\$5,097,217
7/1/08-09		\$5,799,194	\$5,831,587	\$5,900,011	\$5,897,574	\$5,897,276	\$5,897,026	\$5,897,026	\$5,897,026	\$5,897,026
7/1/09-10	\$5,643,910	\$5,633,310	\$5,639,110	\$5,639,110	\$5,639,110	\$5,909,210	\$5,909,210	\$5,909,210	\$5,909,210	\$5,920,817
7/1/10-11	\$5,333,937	\$4,814,020	\$4,639,787	\$4,830,071	\$4,835,277	\$4,835,277	\$4,835,277	\$4,835,277	\$4,835,277	
7/1/11-12	\$3,532,085	\$3,363,887	\$3,271,113	\$3,282,543	\$3,282,543	\$3,201,043	\$3,201,043	\$3,282,543		
7/1/12-13	\$3,149,150	\$2,937,773	\$3,011,624	\$3,042,344	\$2,629,175	\$2,629,175	\$3,032,675			
7/1/13-14	\$2,524,519	\$2,329,236	\$2,545,000	\$2,496,177	\$2,496,177	\$2,506,177				
7/1/14-15	\$3,537,706	\$3,700,538	\$3,491,903	\$3,488,282	\$3,758,178					
7/1/15-16	\$3,246,383	\$3,430,061	\$3,419,370	\$3,866,204						
7/1/16-17	\$3,957,883	\$4,366,030	\$4,534,634							
7/1/17-18	\$4,064,314	\$4,864,790								
7/1/18-19	\$5,241,163									

Age-to-Age Factors										
Year	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:ult
7/1/04-05							1.000	1.000	1.000	
7/1/05-06						1.000	1.000	1.000	1.000	
7/1/06-07					0.998	1.000	1.000	1.000	1.000	
7/1/07-08				1.003	1.000	1.000	1.000	1.000	1.000	
7/1/08-09			1.006	1.012	1.000	1.000	1.000	1.000	1.000	
7/1/09-10		0.998	1.001	1.000	1.000	1.048	1.000	1.000	1.000	1.002
7/1/10-11	0.903	0.964	1.041	1.001	1.000	1.000	1.000	1.000		
7/1/11-12	0.952	0.972	1.003	1.000	0.975	1.000	1.025			
7/1/12-13	0.933	1.025	1.010	0.864	1.000	1.153				
7/1/13-14	0.923	1.093	0.981	1.000	1.004					
7/1/14-15	1.046	0.944	0.999	1.077						
7/1/15-16	1.057	0.997	1.131							
7/1/16-17	1.103	1.039								
7/1/17-18	1.197									
Average	1.014	1.004	1.021	0.995	0.997	1.025	1.003	1.000	1.000	
Wtd. Average	1.016	0.999	1.024	0.998	0.998	1.022	1.003	1.000	1.000	
5 yr average	1.065	1.019	1.025	0.989	0.996	1.040	1.005	1.000	1.000	
OK Benchmark	1.083	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Prior	1.060	1.020	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	12	24	36	48	60	72	84	96	108	120
Selected	1.101	1.025	1.019	1.005	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	1.156	1.050	1.024	1.005	1.000	1.000	1.000	1.000	1.000	1.000

Analysis of Unlimited Reported Loss Development
Total Experience Net of Member Deductibles

Unlimited Reported Losses and ALAE as of (months):										
Year	12	24	36	48	60	72	84	96	108	120
7/1/04-05	\$1,368,113	\$1,280,634	\$1,304,691	\$1,304,691	\$1,304,691	\$1,304,691	\$1,305,598	\$1,305,598	\$1,305,598	\$1,305,598
7/1/05-06	\$3,110,731	\$3,128,836	\$3,224,284	\$3,224,400	\$3,224,400	\$3,224,400	\$3,224,400	\$3,224,400	\$3,224,400	\$3,224,400
7/1/06-07	\$6,628,583	\$8,027,416	\$7,594,525	\$7,688,597	\$7,676,617	\$7,672,924	\$7,672,924	\$7,672,924	\$7,672,924	\$7,672,924
7/1/07-08	\$29,183,950	\$32,191,764	\$27,838,808	\$27,549,083	\$27,549,083	\$27,549,083	\$27,549,083	\$27,549,083	\$27,549,083	\$27,549,083
7/1/08-09	\$14,390,753	\$15,321,794	\$14,550,076	\$14,727,379	\$14,787,721	\$14,785,284	\$14,784,986	\$14,784,736	\$14,784,661	\$14,784,611
7/1/09-10	\$13,583,620	\$18,081,798	\$17,074,377	\$17,109,070	\$17,109,070	\$17,109,070	\$17,429,170	\$17,390,777	\$17,390,777	\$17,390,777
7/1/10-11	\$18,938,242	\$29,188,873	\$27,961,920	\$26,296,810	\$26,471,942	\$26,471,942	\$26,471,942	\$26,471,942	\$26,471,942	\$26,471,942
7/1/11-12	\$4,269,177	\$4,298,833	\$4,007,059	\$4,018,489	\$4,018,489	\$4,018,489	\$4,018,489	\$4,018,489		
7/1/12-13	\$5,180,489	\$6,310,374	\$6,225,528	\$6,146,124	\$6,136,455	\$6,136,455	\$6,136,455			
7/1/13-14	\$2,684,519	\$3,549,504	\$4,629,938	\$4,590,290	\$4,590,290	\$4,590,290				
7/1/14-15	\$4,080,491	\$4,423,676	\$4,662,017	\$5,663,301	\$6,503,301					
7/1/15-16	\$3,782,538	\$5,700,632	\$5,459,248	\$10,487,332						
7/1/16-17	\$8,750,280	\$11,383,917	\$10,178,642							
7/1/17-18	\$10,242,898	\$16,267,082								
7/1/18-19	\$11,601,006									

Age-to-Age Factors										
Year	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:
7/1/04-05	0.936	1.019	1.000	1.000	1.000	1.001	1.000	1.000	1.000	
7/1/05-06	1.006	1.031	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/06-07	1.211	0.946	1.012	0.998	1.000	1.000	1.000	1.000	1.000	
7/1/07-08	1.103	0.865	0.990	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/08-09	1.065	0.950	1.012	1.004	1.000	1.000	1.000	1.000	1.000	
7/1/09-10	1.331	0.944	1.002	1.000	1.000	1.019	0.998	1.000	1.000	
7/1/10-11	1.541	0.958	0.940	1.007	1.000	1.000	1.000	1.000		
7/1/11-12	1.007	0.932	1.003	1.000	1.000	1.000	1.000			
7/1/12-13	1.218	0.987	0.987	0.998	1.000	1.000				
7/1/13-14	1.322	1.304	0.991	1.000	1.000					
7/1/14-15	1.084	1.054	1.215	1.148						
7/1/15-16	1.507	0.958	1.921							
7/1/16-17	1.301	0.894								
7/1/17-18	1.588									
Average	1.230	0.988	1.090	1.014	1.000	1.002	1.000	1.000	1.000	
Wtd. Average	1.261	0.943	1.034	1.009	1.000	1.003	1.000	1.000	1.000	
5 yr average	1.361	1.039	1.223	1.031	1.000	1.004	1.000	1.000	1.000	
OK Benchmark	1.300	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.228	1.050	1.005	1.002	1.000	1.000	1.000	1.000	1.000	1.000
	12	24	36	48	60	72	84	96	108	120
Selected	1.361	1.050	1.030	1.010	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	1.486	1.092	1.040	1.010	1.000	1.000	1.000	1.000	1.000	1.000

Analysis of Report Occurrences

<i>Reported Occurrences as of (months):</i>										
<i>Year</i>	<i>12</i>	<i>24</i>	<i>36</i>	<i>48</i>	<i>60</i>	<i>72</i>	<i>84</i>	<i>96</i>	<i>108</i>	<i>120</i>
7/1/04-05			124	124	124	124	124	124	122	122
7/1/05-06		194	182	191	191	191	191	190	190	190
7/1/06-07	260	237	241	237	236	236	232	232	232	232
7/1/07-08	232	260	260	263	264	255	255	255	255	255
7/1/08-09	231	213	216	218	211	211	211	211	211	211
7/1/09-10	256	269	271	265	265	265	266	266	266	
7/1/10-11	232	230	223	224	225	225	225	225		
7/1/11-12	172	173	173	173	173	173	173			
7/1/12-13	167	161	161	162	162	163				
7/1/13-14	150	157	158	157	157					
7/1/14-15	218	207	205	206						
7/1/15-16	179	180	180							
7/1/16-17	231	230								
7/1/17-18	185									

<i>Age-to-Age Factors</i>										
<i>Year</i>	<i>12:24</i>	<i>24:36</i>	<i>36:48</i>	<i>48:60</i>	<i>60:72</i>	<i>72:84</i>	<i>84:96</i>	<i>96:108</i>	<i>108:120</i>	<i>120:ult</i>
7/1/04-05			1.000	1.000	1.000	1.000	1.000	0.984	1.000	
7/1/05-06		0.938	1.049	1.000	1.000	1.000	0.995	1.000	1.000	
7/1/06-07	0.912	1.017	0.983	0.996	1.000	0.983	1.000	1.000	1.000	
7/1/07-08	1.121	1.000	1.012	1.004	0.966	1.000	1.000	1.000	1.000	
7/1/08-09	0.922	1.014	1.009	0.968	1.000	1.000	1.000	1.000	1.000	
7/1/09-10	1.051	1.007	0.978	1.000	1.000	1.004	1.000	1.000		
7/1/10-11	0.991	0.970	1.004	1.004	1.000	1.000	1.000			
7/1/11-12	1.006	1.000	1.000	1.000	1.000	1.000				
7/1/12-13	0.964	1.000	1.006	1.000	1.006					
7/1/13-14	1.047	1.006	0.994	1.000						
7/1/14-15	0.950	0.990	1.005							
7/1/15-16	1.006	1.000								
7/1/16-17	0.996									
<i>Average</i>	0.997	0.995	1.004	0.997	0.997	0.998	0.999	0.997	1.000	
<i>Wtd. Average</i>	0.995	0.995	1.003	0.997	0.996	0.998	0.999	0.998	1.000	
<i>5 yr average</i>	0.992	0.999	1.002	1.001	1.001	1.001	1.000	1.000	1.000	
<i>OK benchmark</i>	1.200	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>Prior</i>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	<i>12</i>	<i>24</i>	<i>36</i>	<i>48</i>	<i>60</i>	<i>72</i>	<i>84</i>	<i>96</i>	<i>108</i>	<i>120</i>
<i>Selected</i>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<i>Cumulative</i>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

August 25, 2020

Ms. Jennifer McKenzie
Oklahoma Schools Insurance Group
Arthur J. Gallagher Risk Management Services, Inc.
1300 S. Main
Tulsa, OK 74119

RE: OSIG Actuarial Review as of 6/30/2020

Dear Jennifer,

The purpose of this review is to update the IBNR estimate as of June 30, 2020, based on the actual loss data for the Oklahoma Schools Insurance Group (OSIG) as of June 30, 2020, and to revise the forecast ultimate losses for 7/1/20-21 based on the exposures written on July 1, 2020. I have compared the current data to the data used in the prior actuarial report as of January 31, 2020. For those accident periods where actual losses deviated from expected losses by a significant amount, the ultimate losses for those periods were increased or decreased accordingly. Since IBNR is calculated as the difference in the ultimate losses and the limited reported losses, the level of IBNR may fluctuate although ultimate losses may be relatively stable, or vice versa. Changes in ultimate losses generally track the changes in reported and paid losses compared to expectations. The overall change in ultimate losses is summarized below.

Change in Selected Ultimate Losses for years 02/03 through 19/20 Compared to Report as of 1/31/20	
Automobile Liability	-\$275,000
General Liability with E&O	-\$525,000
Property including APD	\$1,450,000
Total	\$650,000

Discussion of experience by line of business follows, including a reconciliation of the reserves as of June 30, 2020 for liability and property.

Mary Frances Miller, FCAS, MAAA
Cheryl White, FCAS, MAAA
Thomas E. Meyer, FCAS, MAAA
Laura T. Sprouse, FCAS, MAAA

Daniel A. Linton, FCAS, MAAA
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Automobile Liability

Schools were closed in mid-March due to the COVID-19 pandemic and this led to a reduction in automobile liability claims for the months of March through June 2020. As a result, the ultimate losses for the 19-20 year were reduced by \$250,000 compared to our estimate in the 1/31/20 actuarial study. We also recommend a reduction of \$25,000 to the 15-16 year. The outstanding losses for automobile liability are estimated to be \$2,288,000 including \$1,951,000 in case reserves and \$338,000 in IBNR.

General Liability

The claim activity for general liability for the 19-20 year is below expected levels and we observed reduced claim activity for the months of March through June 2020. As a result, the ultimate losses for the 19-20 year were reduced by \$550,000 compared to our estimate in the 1/31/20 actuarial study. There was a decrease on the 15-16 year of \$75,000 and increases of \$50,000 to each of years 17-18 and 18-19. The outstanding losses for general liability are estimated to be \$5,786,000, including \$4,406,000 in case reserves and \$1,380,000 in IBNR.

The table below shows the reconciliation of the projected reserves as of June 30, 2020 based on the data and an analysis as of 1/31/20, compared to the actual year end reserves. This shows that although the ultimate losses were decreased by \$850,000, the ending reserve requirement has increased from \$7,770,000 to \$8,073,000. This is because actual claim payments were less than expected.

OSIG Liability Program	Actual as of 6/30/2020	Projected 6/30/2020 Based on Report as of 1/31/20
Beginning Reserve as of 1/31/2020	\$8,290,000	\$8,290,000
Ultimate Losses Incurred 2/1-6/30/2020	\$1,576,000	\$1,576,000
Payments During 2/1-6/30/2020	-\$993,000	-\$2,096,000
Change in Ultimate Losses	-\$800,000	\$0
Ending Reserve as of 6/30/2020	\$8,073,000	\$7,770,000

The total IBNR for automobile liability and general liability is \$1,716,000. There is a 25% probability that the IBNR reserves could exceed the 75th percentile estimate of \$2,274,000, and a 10% probability that they could exceed the 90th percentile estimate of \$2,872,000.

Property/Auto Physical Damage

Experience since the previous actuarial report as of 1/31/20 has been worse than expected due to two catastrophic weather events in April and increased costs of claims on older years. Losses within the \$250,000 SIR were increased by \$750,000 on the 19-20 year. We decreased the ultimate losses for 18-19 by \$200,000 but increased the ultimate losses for years 13-14 through 17-18 by a total of \$900,000. Losses excess of the \$250,000/\$500,000 retention layer for 19-20 are \$43,200,000, and excess losses on the 18-19 year also grew by \$7,550,000 to \$27,500,000. OSIG will pay only the corridor deductibles of \$1,400,000 on each of these years.

The outstanding losses for OSIG's retained property and APD losses are estimated to be \$7,065,000, including \$5,116,000 in case reserves and \$1,948,000 in IBNR. All of this IBNR is associated with losses within the \$250,000/\$500,000 deductibles. There is a 25% probability that the IBNR reserve need is \$3,270,000, and a 10% probability that the IBNR is \$4,986,000.

The table below shows that the actual reserve is \$980,000 more than projected in the January study. Ultimate losses were increased by \$1,450,000. Claim payments were \$470,000 more than expected.

OSIG Property Program	Actual	Projected @1/31/20
Beginning Reserve as of 1/31/2020	\$5,427,000	\$5,427,000
Ultimate Losses Incurred 2/1-6/30/2020	\$3,583,000	\$3,583,000
Payments During 2/1-6/30/2020	-\$3,395,000	-\$2,925,000
Change in Ultimate Losses	+\$1,450,000	\$0
Ending Reserve as of 6/30/2020	\$7,065,000	\$6,085,000

Forecast Losses for 7/1/20-21

We adjusted the forecast losses for 7/1/20-21 for the change in the amount of exposures to be underwritten in this period. It is possible that schools in some districts could close for a period of time. Because of this uncertainty, we have not tried to anticipate any such action in our

estimates. We applied the selected loss rates from the 1/31/20 actuarial report to the updated exposure estimates to derive the ultimate losses for the 7/1/20-21 year.

The forecast for liability increased 0.4% to \$4,017,000. Vehicle counts are about 0.4% less than the prior estimate, so that ultimate losses for automobile liability have been decreased by 0.4%. Student population has increased by 1.0% compared to the original estimate, so general liability losses have also increased by 1.0%.

Forecast Losses for OSIG's Liability Program for 7/1/20-21 Losses Limited to \$100,000 per occurrence		
	<i>Ultimate Losses</i>	<i>Loss Rate</i>
<i>Automobile Liability</i>	\$1,583,000	\$123 <i>per vehicle</i>
<i>General Liability</i>	\$2,434,000	\$5.01 <i>per student</i>
<i>Total Forecast</i>	\$4,017,000	\$8.27 <i>per student</i>

The Property forecast for 7/1/20-21 increased 1.15% to \$13,497,000. The APD forecast is \$1,109,000 which is just \$4,000 less than the original forecast. Property losses are about \$157,000 or 1.7% more than the prior estimate due to an increase in the estimate of total insured value (TIV).

Forecast Losses for OSIG's Property Program for 7/1/20-21		
	<i>Ultimate Losses</i>	<i>Loss Rate</i>
<i>Losses within the SIR</i> <i>\$750,000 wind/hail \$250,000 AOP</i>	\$10,497,000	\$0.066 <i>per \$100 TIV</i>
<i>Corridor Deductible</i>	\$3,000,000	\$0.019 <i>per \$100 TIV</i>
<i>Total Forecast</i>	\$13,497,000	\$0.085 <i>per \$100 TIV</i>

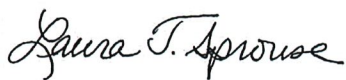
Description of attached Tables and Exhibits

Table A summarizes the ultimate and outstanding losses by policy year. The outstanding losses are broken down between case reserves and IBNR. This table also include the percentile estimates of the IBNR reserve and total reserve. Table B shows the comparison of experience between 1/31 and 6/30. Table C summarizes the forecast losses and Table D displays the percentile estimates for losses with various layers of insurance.

We have also included Exhibits 4 and 5 for automobile liability and general liability to show the changes in these individual coverages and the resulting IBNR and outstanding losses.

It has been a pleasure working with you on this year end review. If you have any questions, please do not hesitate to call me. We also can answer questions from your auditors as they arise.

Sincerely,



Digitally signed by Laura
Sprouse, FCAS, MAAA
Date: 2020-08-25 15:33:39

Laura T. Sprouse, FCAS, MAAA
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Oklahoma Schools Insurance Group
Automobile and General Liability (including E&O)

Table A

Estimated Outstanding Losses
As of June 30, 2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Aggregate Limit	Estimated Ultimate Losses	Limited Paid Losses	Limited Reported Losses	Limited Case Reserves	IBNR Losses	Outstanding Losses
7/1/02-03	\$449,474	\$233,996	\$233,996	\$233,996	\$0	\$0	\$0
7/1/03-04	\$1,338,694	\$1,197,571	\$1,197,571	\$1,197,571	\$0	\$0	\$0
7/1/04-05	\$1,908,987	\$1,107,309	\$1,107,309	\$1,107,309	\$0	\$0	\$0
7/1/05-06	\$2,340,252	\$1,704,377	\$1,704,377	\$1,704,377	\$0	\$0	\$0
7/1/06-07	\$2,528,886	\$1,488,442	\$1,488,442	\$1,488,442	\$0	\$0	\$0
7/1/07-08	\$3,396,123	\$2,192,521	\$2,192,521	\$2,192,521	\$0	\$0	\$0
7/1/08-09	\$3,454,325	\$2,582,887	\$2,582,887	\$2,582,887	\$0	\$0	\$0
7/1/09-10	\$3,547,868	\$1,975,261	\$1,975,261	\$1,975,261	\$0	\$0	\$0
7/1/10-11	\$3,869,920	\$2,682,333	\$2,663,590	\$2,681,419	\$17,829	\$1,000	\$19,000
7/1/11-12	\$3,416,075	\$2,409,511	\$2,408,325	\$2,408,325	\$0	\$1,000	\$1,000
7/1/12-13	\$2,788,172	\$1,432,317	\$1,368,315	\$1,403,664	\$35,349	\$29,000	\$64,000
7/1/13-14	\$3,473,373	\$1,509,842	\$1,472,888	\$1,506,686	\$33,797	\$3,000	\$37,000
7/1/14-15	\$3,994,646	\$2,816,000	\$2,573,301	\$2,796,598	\$223,297	\$19,000	\$242,000
7/1/15-16	\$4,017,890	\$2,946,000	\$2,628,083	\$2,883,164	\$255,080	\$63,000	\$318,000
7/1/16-17	\$4,147,089	\$3,787,000	\$2,653,988	\$3,654,251	\$1,000,263	\$133,000	\$1,133,000
7/1/17-18	\$4,271,645	\$2,755,000	\$1,170,471	\$2,554,653	\$1,384,182	\$200,000	\$1,584,000
7/1/18-19	\$5,061,877	\$3,141,000	\$985,597	\$2,662,205	\$1,676,608	\$479,000	\$2,156,000
7/1/19-20	\$5,549,812	\$3,284,000	\$764,831	\$2,495,717	\$1,730,886	\$788,000	\$2,519,000
Total		\$39,245,366	\$31,171,753	\$37,529,045	\$6,357,292	\$1,716,000	\$8,073,000

	<u>IBNR</u>	<u>Total Reserve</u>
Central estimate	\$1,716,000	\$8,073,000
Percentiles		
40%	\$1,428,000	\$7,785,000
50%	\$1,656,000	\$8,013,000
55%	\$1,772,000	\$8,129,000
60%	\$1,887,000	\$8,244,000
65%	\$2,012,000	\$8,369,000
75%	\$2,274,000	\$8,631,000
85%	\$2,632,000	\$8,989,000
90%	\$2,872,000	\$9,229,000

(B) - Provided by Jennifer McKenzie, OSIG
(C) - Updated based on Experience through 6/30/2020
(D) and (E) - Losses limited to SIR
(F) = (E) - (D)
(G) = (C) - (E)
(H) = (F) + (G)

Oklahoma Schools Insurance Group
Automobile and General Liability (including E&O)

Table B

Comparison of Results with Previous Estimates as of 01/31/2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Accident	Actual	Projected	Actual		Actual	Projected	Actual		Expected	Actual		
Period	Reported	Reported	Reported	Percent	Paid	Paid	Paid	Percent	Ultimate	Ultimate	Year End	Percent
	Losses	Losses	Losses	Difference	Losses	Losses	Losses	Difference	Losses	Losses	Adjustment	Difference
	1/31/2020	6/30/2020	6/30/2020		1/31/2020	6/30/2020	6/30/2020		1/31/2020	6/30/2020		
7/1/02-03	\$233,996	\$233,996	\$233,996	0.0%	\$233,996	\$233,996	\$233,996	0.0%	\$233,996	\$233,996	\$0	0.0%
7/1/03-04	\$1,197,571	\$1,197,571	\$1,197,571	0.0%	\$1,197,571	\$1,197,571	\$1,197,571	0.0%	\$1,197,571	\$1,197,571	\$0	0.0%
7/1/04-05	\$1,107,309	\$1,107,309	\$1,107,309	0.0%	\$1,107,309	\$1,107,309	\$1,107,309	0.0%	\$1,107,309	\$1,107,309	\$0	0.0%
7/1/05-06	\$1,704,377	\$1,704,377	\$1,704,377	0.0%	\$1,704,377	\$1,704,377	\$1,704,377	0.0%	\$1,704,377	\$1,704,377	\$0	0.0%
7/1/06-07	\$1,488,442	\$1,488,442	\$1,488,442	0.0%	\$1,488,442	\$1,488,442	\$1,488,442	0.0%	\$1,488,442	\$1,488,442	\$0	0.0%
7/1/07-08	\$2,192,521	\$2,192,521	\$2,192,521	0.0%	\$2,192,521	\$2,192,521	\$2,192,521	0.0%	\$2,192,521	\$2,192,521	\$0	0.0%
7/1/08-09	\$2,582,887	\$2,582,887	\$2,582,887	0.0%	\$2,582,887	\$2,582,887	\$2,582,887	0.0%	\$2,582,887	\$2,582,887	\$0	0.0%
7/1/09-10	\$1,975,261	\$1,975,261	\$1,975,261	0.0%	\$1,975,261	\$1,975,261	\$1,975,261	0.0%	\$1,975,261	\$1,975,261	\$0	0.0%
7/1/10-11	\$2,681,419	\$2,681,683	\$2,681,419	0.0%	\$2,661,908	\$2,666,914	\$2,663,590	-0.1%	\$2,682,333	\$2,682,333	\$0	0.0%
7/1/11-12	\$2,408,325	\$2,408,671	\$2,408,325	0.0%	\$2,408,325	\$2,408,634	\$2,408,325	0.0%	\$2,409,511	\$2,409,511	\$0	0.0%
7/1/12-13	\$1,431,182	\$1,431,516	\$1,403,664	-1.9%	\$1,370,815	\$1,387,820	\$1,368,315	-1.4%	\$1,432,317	\$1,432,317	\$0	0.0%
7/1/13-14	\$1,506,686	\$1,507,621	\$1,506,686	-0.1%	\$1,461,839	\$1,475,967	\$1,472,888	-0.2%	\$1,509,842	\$1,509,842	\$0	0.0%
7/1/14-15	\$2,796,598	\$2,802,525	\$2,796,598	-0.2%	\$2,518,204	\$2,620,590	\$2,573,301	-1.8%	\$2,816,000	\$2,816,000	\$0	0.0%
7/1/15-16	\$2,993,111	\$3,009,253	\$2,883,164	-4.2%	\$2,530,337	\$2,702,757	\$2,628,083	-2.8%	\$3,046,000	\$2,946,000	-\$100,000	-3.3%
7/1/16-17	\$3,639,531	\$3,684,124	\$3,654,251	-0.8%	\$2,593,365	\$2,980,258	\$2,653,988	-10.9%	\$3,787,000	\$3,787,000	\$0	0.0%
7/1/17-18	\$2,472,653	\$2,541,165	\$2,554,653	0.5%	\$963,692	\$1,437,351	\$1,170,471	-18.6%	\$2,705,000	\$2,755,000	\$50,000	1.8%
7/1/18-19	\$2,436,663	\$2,567,405	\$2,662,205	3.7%	\$808,986	\$1,197,038	\$985,597	-17.7%	\$3,091,000	\$3,141,000	\$50,000	1.6%
7/1/19-20	\$1,768,558	\$3,077,480	\$2,495,717	-18.9%	\$380,276	\$916,004	\$764,831	-16.5%	\$4,084,000	\$3,284,000	-\$800,000	-19.6%
Total	\$36,617,090	\$38,193,807	\$37,529,045	-1.7%	\$30,180,111	\$32,275,696	\$31,171,753	-3.4%	\$40,045,366	\$39,245,366	-\$800,000	-2.0%
Difference in Actual and Expected			-\$664,762									

(B), (F) and (J) - From Previous actuarial report as of 1/31/2020

(C) and (G) - Based on information available as of 1/31/2020

(D) and (H) - Exhibit 1-C

(E) = [(D) / (C)] - 1

(I) = [(H) / (G)] - 1

(K) - Exhibit 3

(L) - Judgmentally selected

(M) = (K) / (J) - 1

Oklahoma Schools Insurance Group
Automobile and General Liability (including E&O)

Table C

Forecast Ultimate Losses for 7/1/20-21

	<i>Automobile Liability</i>	<i>General Liability</i>	<i>Total</i>
<i>Forecast Ultimate Losses</i>	\$1,583,000	\$2,434,000	\$4,017,000
<i>Exposures {vehicles/students}</i>	12,871	485,913	
<i>Cost per exposure</i>	\$123	\$5.01	\$8.27
<i>Per Occurrence Retention</i>	\$100,000	\$100,000	
<i>Forecast Claim Counts</i>	250.8	116.5	367.3
<i>Total Claims over \$100,000</i>	2.7	8.0	10.6

*Distribution of Forecast Losses for 7/1/20-21
Assuming a \$100,000 SIR*

<i>Percentile</i>	<i>SIR Layer \$100,000</i>	<i>Layer \$900,000 xs \$100,000</i>	<i>Losses Limited to \$1,000,000</i>	<i>Losses Excess of \$1,000,000</i>	<i>Total Incurred Losses</i>
20.0%	\$3,413,000	\$619,000	\$4,220,000	\$0	\$4,221,000
30.0%	\$3,600,000	\$743,000	\$4,490,000	\$0	\$4,492,000
40.0%	\$3,773,000	\$853,000	\$4,738,000	\$0	\$4,742,000
50.0%	\$3,941,000	\$969,000	\$4,983,000	\$0	\$4,986,000
60.0%	\$4,107,000	\$1,092,000	\$5,209,000	\$0	\$5,218,000
70.0%	\$4,306,000	\$1,232,000	\$5,487,000	\$0	\$5,501,000
75.0%	\$4,417,000	\$1,312,000	\$5,642,000	\$0	\$5,660,000
80.0%	\$4,548,000	\$1,397,000	\$5,821,000	\$0	\$5,844,000
85.0%	\$4,715,000	\$1,512,000	\$6,020,000	\$0	\$6,058,000
90.0%	\$4,930,000	\$1,673,000	\$6,282,000	\$0	\$6,332,000
95.0%	\$5,274,000	\$1,913,000	\$6,709,000	\$0	\$6,817,000
99.0%	\$6,035,000	\$2,387,000	\$7,554,000	\$747,000	\$7,741,000
Expected	\$4,017,000	\$1,050,000	\$5,067,000	\$21,000	\$5,088,000
<i>Students</i>	485,913				
<i>Vehicles</i>	12,871				
Cost Per Student	\$8.27	\$2.16	\$10.43	\$0.04	\$10.47
GL Losses	\$2,434,000	\$874,000	\$3,308,000	\$21,000	\$3,329,000
AL Losses	\$1,583,000	\$176,000	\$1,759,000	\$0	\$1,759,000
<i>GL Cost per Student</i>	<i>\$5.01</i>	<i>\$1.80</i>	<i>\$6.81</i>	<i>\$0.04</i>	<i>\$6.85</i>
<i>AL Cost per Student</i>	<i>\$3.26</i>	<i>\$0.36</i>	<i>\$3.62</i>	<i>\$0.00</i>	<i>\$3.62</i>
<i>AL Cost per Vehicle</i>	<i>\$123</i>	<i>\$14</i>	<i>\$137</i>	<i>\$0</i>	<i>\$137</i>

**Estimated Outstanding Losses
As of June 30, 2020**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	SIR	Limited Ultimate Losses	Limited Paid Losses	Limited Reported Losses	Limited Case Reserves	IBNR Losses	Outstanding Losses
7/1/02-03	\$100k/\$200k	\$312,045	\$312,045	\$312,045	\$0	\$0	\$0
7/1/03-04	\$100k/\$200k	\$1,287,169	\$1,287,169	\$1,287,169	\$0	\$0	\$0
7/1/04-05	\$100k/\$200k	\$1,266,993	\$1,266,993	\$1,266,993	\$0	\$0	\$0
7/1/05-06	\$100k/\$200k	\$2,616,997	\$2,616,997	\$2,616,997	\$0	\$0	\$0
7/1/06-07	\$100k/\$200k	\$2,604,514	\$2,604,514	\$2,604,514	\$0	\$0	\$0
7/1/07-08	\$100k/\$200k	\$3,915,481	\$3,915,481	\$3,915,481	\$0	\$0	\$0
7/1/08-09	\$100k/\$200k	\$4,560,696	\$4,560,696	\$4,560,696	\$0	\$0	\$0
7/1/09-10	\$100k/\$200k	\$4,870,042	\$4,870,042	\$4,870,042	\$0	\$0	\$0
7/1/10-11	\$100k/\$200k	\$3,569,472	\$3,569,472	\$3,569,472	\$0	\$0	\$0
7/1/11-12	\$250,000 /\$2.7M corridor	\$4,018,489	\$4,018,489	\$4,018,489	\$0	\$0	\$0
7/1/12-13	\$250,000 /\$2.4M corridor	\$5,432,675	\$5,432,675	\$5,432,675	\$0	\$0	\$0
7/1/13-14	\$250,000 /\$1.4M corridor	\$3,910,352	\$3,906,177	\$3,906,177	\$0	\$4,000	\$4,000
7/1/14-15	\$250,000 /\$1.4M corridor	\$5,140,662	\$4,865,662	\$5,120,690	\$255,028	\$20,000	\$275,000
7/1/15-16	\$250,000 /\$1.4M corridor	\$5,144,000	\$5,076,128	\$5,124,762	\$48,634	\$19,000	\$68,000
7/1/16-17	\$250,000 /\$1.4M corridor	\$6,233,000	\$6,014,048	\$6,099,189	\$85,141	\$134,000	\$219,000
7/1/17-18	\$250,000 /\$1.4M corridor	\$6,710,000	\$6,043,135	\$6,438,789	\$395,653	\$271,000	\$667,000
7/1/18-19	\$250,000 /\$1.4M corridor	\$6,310,000	\$5,801,400	\$6,060,002	\$258,602	\$250,000	\$509,000
7/1/19-20	\$250k/\$500k + \$1.4M corr.	\$10,750,000	\$5,426,821	\$9,500,294	\$4,073,473	\$1,250,000	\$5,323,000
Total		\$78,652,585	\$71,587,942	\$76,704,474	\$5,116,532	\$1,948,000	\$7,065,000

	<u>IBNR</u>	<u>Total Reserve</u>
Central estimate	\$1,948,000	\$7,065,000
Percentiles		
40%	\$844,000	\$5,961,000
50%	\$1,475,000	\$6,592,000
55%	\$1,798,000	\$6,915,000
60%	\$2,146,000	\$7,263,000
65%	\$2,495,000	\$7,611,000
75%	\$3,270,000	\$8,386,000
85%	\$4,249,000	\$9,365,000
90%	\$4,986,000	\$10,103,000

(C) - Ultimate losses are equal to limited reported losses in (E) through 10-11

Exhibit 3 for 11-12 to present

(D) and (E) - Exhibit 1-C

(F) = (E) - (D)

(G) = (C) - (E)

(H) = (F) + (G)

Comparison of Results with Previous Estimates as of 1/31/20

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Accident Period	Prior Reported Losses 1/31/2020	Expected Reported Losses 6/30/2020	Actual Reported Losses 6/30/2020	Percent Difference	Prior Ultimate Losses 1/31/2020	Current Ultimate Losses 6/30/2020	Year End Adjustment	Percent Difference
Limited to SIR								
7/1/11-12	\$3,282,543	\$3,282,543	\$3,282,543	0.0%	\$3,282,543	\$3,282,543	\$0	0.0%
7/1/12-13	\$3,032,675	\$3,032,675	\$3,032,675	0.0%	\$3,032,675	\$3,032,675	\$0	0.0%
7/1/13-14	\$2,505,352	\$2,505,352	\$2,506,177	0.0%	\$2,505,352	\$2,510,352	\$5,000	0.2%
7/1/14-15	\$3,470,662	\$3,470,662	\$3,720,690	7.2%	\$3,470,662	\$3,740,662	\$270,000	7.8%
7/1/15-16	\$3,682,092	\$3,686,377	\$3,724,762	1.0%	\$3,694,000	\$3,744,000	\$50,000	1.4%
7/1/16-17	\$4,664,189	\$4,680,035	\$4,699,189	0.4%	\$4,708,000	\$4,833,000	\$125,000	2.7%
7/1/17-18	\$4,726,369	\$4,774,577	\$5,038,789	5.5%	\$4,860,000	\$5,310,000	\$450,000	9.3%
7/1/18-19	\$4,664,196	\$4,820,970	\$4,660,002	-3.3%	\$5,110,000	\$4,910,000	-\$200,000	-3.9%
7/1/19-20	\$3,684,286	\$7,906,888	\$8,100,294	2.4%	\$8,600,000	\$9,350,000	\$750,000	8.7%
Total	\$33,712,365	\$38,160,079	\$38,765,120	1.6%	\$39,263,232	\$40,713,232	\$1,450,000	3.7%
Unlimited								
7/1/11-12	\$4,018,489	\$4,018,489	\$4,018,489	0.0%	\$4,018,489	\$4,018,489	\$0	0.0%
7/1/12-13	\$6,136,455	\$6,136,455	\$6,136,455	0.0%	\$6,136,455	\$6,136,455	\$0	0.0%
7/1/13-14	\$4,590,290	\$4,590,290	\$4,590,290	0.0%	\$4,590,290	\$4,590,290	\$0	0.0%
7/1/14-15	\$7,618,301	\$7,618,301	\$7,768,693	2.0%	\$7,637,000	\$7,787,000	\$150,000	2.0%
7/1/15-16	\$14,849,612	\$14,878,836	\$14,849,611	-0.2%	\$14,941,000	\$14,941,000	\$0	0.0%
7/1/16-17	\$11,283,324	\$11,349,681	\$11,283,323	-0.6%	\$11,474,000	\$11,474,000	\$0	0.0%
7/1/17-18	\$21,725,463	\$22,156,995	\$21,777,841	-1.7%	\$22,871,000	\$22,496,000	-\$375,000	-1.6%
7/1/18-19	\$22,427,703	\$23,468,536	\$29,947,726	27.6%	\$25,089,000	\$32,439,000	\$7,350,000	29.3%
7/1/19-20	\$5,454,215	\$19,574,268	\$44,221,069	125.9%	\$26,128,000	\$52,528,000	\$26,400,000	101.0%
Total	\$98,103,852	\$113,791,850	\$144,593,496	27.1%	\$122,885,233	\$156,410,233	\$33,525,000	27.3%
SIR + Corridor								
7/1/11-12	\$4,018,489	\$4,018,489	\$4,018,489	0.0%	\$4,018,489	\$4,018,489	\$0	0.0%
7/1/12-13	\$5,432,675	\$5,432,675	\$5,432,675	0.0%	\$5,432,675	\$5,432,675	\$0	0.0%
7/1/13-14	\$3,905,352	\$3,905,352	\$3,906,177	0.0%	\$3,905,352	\$3,910,352	\$5,000	0.1%
7/1/14-15	\$4,870,662	\$4,870,662	\$5,120,690	5.1%	\$4,870,662	\$5,140,662	\$270,000	5.5%
7/1/15-16	\$5,082,092	\$5,086,377	\$5,124,762	0.8%	\$5,094,000	\$5,144,000	\$50,000	1.0%
7/1/16-17	\$6,064,189	\$6,080,035	\$6,099,189	0.3%	\$6,108,000	\$6,233,000	\$125,000	2.0%
7/1/17-18	\$6,126,369	\$6,174,577	\$6,438,789	4.3%	\$6,260,000	\$6,710,000	\$450,000	7.2%
7/1/18-19	\$6,064,196	\$6,220,970	\$6,060,002	-2.6%	\$6,510,000	\$6,310,000	-\$200,000	-3.1%
7/1/19-20	\$5,084,286	\$9,306,888	\$9,500,294	2.1%	\$10,000,000	\$10,750,000	\$750,000	7.5%
Total	\$46,648,311	\$51,096,025	\$51,701,066	1.2%	\$52,199,177	\$53,649,177	\$1,450,000	2.8%

(B) and (F) - From Previous actuarial report as of 1/31/2020

(C) - Derived from (B) and (F) using loss development patterns

(D) - Exhibit 1-C

(E) = [(D) / (C)] - 1

(G) - Exhibit 3

(H) - judgementally selected

(I) = [(G) / (F)] - 1

Forecast Ultimate Losses for 7/1/20-21

		<i>AOP Retention</i>	\$250,000	
		<i>Flood Retention</i>	--	
		<i>Wind/Hail Retention</i>	\$750,000	
	<i>Automobile Physical Damage</i>	<i>Property Retention Layer</i>	<i>Corridor</i>	<i>Total (PR and APD)</i>
<i>Forecast Ultimate Losses</i>	\$1,109,000	\$9,388,000	\$3,000,000	\$13,497,000
<i>Total Insured Value (\$100s)</i>		\$159,283,478		
<i>Cost per exposure</i>	\$0.007	\$0.059	\$0.019	\$0.085
<i>Forecast Claim Counts</i>	147.4	144.2		291.6
<i>Total Claims over \$250,000</i>		11.7		11.7
<i>Vehicles at Primary Limit (\$100,000)</i>	1,359			
<i>Rate at Primary Limit</i>	\$84.00			
<i>Vehicles at Program Limits</i>	11,202			
<i>Rate at Program Limits</i>	\$88.79			
<i>Total Vehicles</i>	12,561			
<i>Blended Rate</i>	\$88.29			

Distribution of Forecast Losses for 7/1/20-21

AOP Retention \$250,000
Flood Retention --
Wind/Hail Retention \$750,000
Corridor Deductible \$3,000,000

<i>Percentile</i>	<i>Retention Layer</i>	<i>Cost of Corridor Ltd. \$3.0M</i>	<i>Total Retained Losses</i>	<i>Insured Excess Losses</i>	<i>Total Incurred Losses</i>
20.0%	\$8,708,000	\$3,000,000	\$11,683,000	\$5,118,000	\$17,883,000
30.0%	\$9,315,000	\$3,000,000	\$12,302,000	\$7,655,000	\$20,857,000
40.0%	\$9,848,000	\$3,000,000	\$12,839,000	\$10,446,000	\$23,877,000
50.0%	\$10,369,000	\$3,000,000	\$13,366,000	\$13,525,000	\$27,314,000
60.0%	\$10,913,000	\$3,000,000	\$13,911,000	\$17,344,000	\$31,152,000
70.0%	\$11,511,000	\$3,000,000	\$14,510,000	\$21,525,000	\$35,389,000
75.0%	\$11,836,000	\$3,000,000	\$14,835,000	\$23,883,000	\$37,811,000
80.0%	\$12,230,000	\$3,000,000	\$15,229,000	\$26,591,000	\$40,818,000
85.0%	\$12,666,000	\$3,000,000	\$15,664,000	\$29,842,000	\$44,293,000
90.0%	\$13,241,000	\$3,000,000	\$16,241,000	\$34,215,000	\$48,841,000
95.0%	\$14,082,000	\$3,000,000	\$17,082,000	\$42,215,000	\$57,016,000
99.0%	\$15,859,000	\$3,000,000	\$18,859,000	\$56,964,000	\$72,634,000
<i>Expected</i>	\$10,497,000	\$3,000,000	\$13,497,000	\$16,614,000	\$30,111,000
<i>TIV in \$100s</i>	\$159,283,478				
<i>Cost Per \$100 TIV</i>	\$0.066	\$0.019	\$0.085	\$0.104	\$0.189

<i>Property Losses</i>	\$9,388,000	\$3,000,000	\$12,388,000	\$16,614,000	\$29,002,000
<i>APD Losses</i>	\$1,109,000				
<i>Vehicles</i>	12,561				
<i>PR Cost per \$100 TIV</i>	\$0.059	\$0.019	\$0.078	\$0.104	\$0.182
<i>APD Cost per Vehicle</i>	\$88.29				

Oklahoma Schools Insurance Group
Automobile Liability

Exhibit 4-A

Comparison of Results with Previous Estimates as of 1/31/2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Accident Period	Actual Reported Losses 1/31/2020	Expected Reported Losses 6/30/2020	Actual Reported Losses 6/30/2020	Percent Difference	Actual Paid Losses 1/31/2020	Expected Paid Losses 6/30/2020	Actual Paid Losses 6/30/2020	Percent Difference	Expected Ultimate Losses 1/31/2020	Actual Ultimate Losses 6/30/2020	Year End Adjustment	Percent Difference
7/1/02-03	\$65,087	\$65,087	\$65,087	0.0%	\$65,087	\$65,087	\$65,087	0.0%	\$65,087	\$65,087	\$0	0.0%
7/1/03-04	\$357,297	\$357,297	\$357,297	0.0%	\$357,297	\$357,297	\$357,297	0.0%	\$357,297	\$357,297	\$0	0.0%
7/1/04-05	\$618,336	\$618,336	\$618,336	0.0%	\$618,336	\$618,336	\$618,336	0.0%	\$618,336	\$618,336	\$0	0.0%
7/1/05-06	\$450,928	\$450,928	\$450,928	0.0%	\$450,928	\$450,928	\$450,928	0.0%	\$450,928	\$450,928	\$0	0.0%
7/1/06-07	\$535,205	\$535,205	\$535,205	0.0%	\$535,205	\$535,205	\$535,205	0.0%	\$535,205	\$535,205	\$0	0.0%
7/1/07-08	\$759,907	\$759,907	\$759,907	0.0%	\$759,907	\$759,907	\$759,907	0.0%	\$759,907	\$759,907	\$0	0.0%
7/1/08-09	\$1,423,346	\$1,423,346	\$1,423,346	0.0%	\$1,423,346	\$1,423,346	\$1,423,346	0.0%	\$1,423,346	\$1,423,346	\$0	0.0%
7/1/09-10	\$703,413	\$703,413	\$703,413	0.0%	\$703,413	\$703,413	\$703,413	0.0%	\$703,413	\$703,413	\$0	0.0%
7/1/10-11	\$843,333	\$843,333	\$843,333	0.0%	\$843,333	\$843,333	\$843,333	0.0%	\$843,333	\$843,333	\$0	0.0%
7/1/11-12	\$948,511	\$948,511	\$948,511	0.0%	\$948,511	\$948,511	\$948,511	0.0%	\$948,511	\$948,511	\$0	0.0%
7/1/12-13	\$625,317	\$625,317	\$625,317	0.0%	\$625,317	\$625,317	\$625,317	0.0%	\$625,317	\$625,317	\$0	0.0%
7/1/13-14	\$699,842	\$699,842	\$699,842	0.0%	\$699,842	\$699,842	\$699,842	0.0%	\$699,842	\$699,842	\$0	0.0%
7/1/14-15	\$1,163,213	\$1,164,484	\$1,163,213	-0.1%	\$956,177	\$1,031,424	\$1,005,084	-2.6%	\$1,167,000	\$1,167,000	\$0	0.0%
7/1/15-16	\$1,145,708	\$1,148,845	\$1,120,077	-2.5%	\$998,168	\$1,054,119	\$1,020,269	-3.2%	\$1,155,000	\$1,130,000	-\$25,000	-2.2%
7/1/16-17	\$1,205,255	\$1,213,950	\$1,205,255	-0.7%	\$956,187	\$1,052,442	\$963,388	-8.5%	\$1,231,000	\$1,231,000	\$0	0.0%
7/1/17-18	\$933,403	\$951,236	\$938,403	-1.3%	\$569,918	\$706,254	\$579,729	-17.9%	\$987,000	\$987,000	\$0	0.0%
7/1/18-19	\$1,002,844	\$1,002,844	\$1,038,474	3.6%	\$558,206	\$716,259	\$652,301	-8.9%	\$1,147,000	\$1,147,000	\$0	0.0%
7/1/19-20	\$1,075,364	\$1,650,661	\$1,411,066	-14.5%	\$356,050	\$779,452	\$704,657	-9.6%	\$1,801,000	\$1,551,000	-\$250,000	-13.9%
Total	\$14,556,309	\$15,162,543	\$14,907,010	-1.7%	\$12,425,228	\$13,370,472	\$12,955,950	-3.1%	\$15,518,522	\$15,243,522	-\$275,000	-1.8%
Difference in Actual and Expected			-\$255,533									

(B), (F) and (J) - From Previous actuarial report as of 1/31/2020

(C) and (G) - Based on information available as of 1/31/2020

(D) and (H) - Exhibit 1-C

(E) = [(D) / (C)] - 1

(I) = [(H) / (G)] - 1

(K) - Exhibit 3

(L) - Judgmentally selected

(M) = (K) / (J) - 1

***Estimated Outstanding Losses
As of June 30, 2020***

(A) <i>Accident Period</i>	(B) <i>Estimated Ultimate Losses</i>	(C) <i>Limited Paid Losses</i>	(D) <i>Limited Reported Losses</i>	(E) <i>Limited Case Reserves</i>	(F) <i>IBNR Losses</i>	(G) <i>Outstanding Losses</i>
7/1/02-03	\$65,087	\$65,087	\$65,087	\$0	\$0	\$0
7/1/03-04	\$357,297	\$357,297	\$357,297	\$0	\$0	\$0
7/1/04-05	\$618,336	\$618,336	\$618,336	\$0	\$0	\$0
7/1/05-06	\$450,928	\$450,928	\$450,928	\$0	\$0	\$0
7/1/06-07	\$535,205	\$535,205	\$535,205	\$0	\$0	\$0
7/1/07-08	\$759,907	\$759,907	\$759,907	\$0	\$0	\$0
7/1/08-09	\$1,423,346	\$1,423,346	\$1,423,346	\$0	\$0	\$0
7/1/09-10	\$703,413	\$703,413	\$703,413	\$0	\$0	\$0
7/1/10-11	\$843,333	\$843,333	\$843,333	\$0	\$0	\$0
7/1/11-12	\$948,511	\$948,511	\$948,511	\$0	\$0	\$0
7/1/12-13	\$625,317	\$625,317	\$625,317	\$0	\$0	\$0
7/1/13-14	\$699,842	\$699,842	\$699,842	\$0	\$0	\$0
7/1/14-15	\$1,167,000	\$1,005,084	\$1,163,213	\$158,129	\$4,000	\$162,000
7/1/15-16	\$1,130,000	\$1,020,269	\$1,120,077	\$99,808	\$10,000	\$110,000
7/1/16-17	\$1,231,000	\$963,388	\$1,205,255	\$241,867	\$26,000	\$268,000
7/1/17-18	\$987,000	\$579,729	\$938,403	\$358,674	\$49,000	\$407,000
7/1/18-19	\$1,147,000	\$652,301	\$1,038,474	\$386,172	\$109,000	\$495,000
7/1/19-20	\$1,551,000	\$704,657	\$1,411,066	\$706,409	\$140,000	\$846,000
<i>Total</i>	\$15,244,000	\$12,955,950	\$14,907,010	\$1,951,060	\$338,000	\$2,288,000

(B) - Exhibit 3

(C) and (D) - Exhibit 1-C

(E) = (D) - (C)

(F) = (B) - (D)

(G) = (B) - (C)

Oklahoma Schools Insurance Group
General Liability including E&O

Exhibit 4-A

Comparison of Results with Previous Estimates as of 01/31/2020

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Accident	Actual	Projected	Actual		Actual	Projected	Actual		Expected	Actual		
Period	Reported	Reported	Reported	Percent	Paid	Paid	Paid	Percent	Ultimate	Ultimate	Year End	Percent
	1/31/2020	6/30/2020	6/30/2020	Difference	1/31/2020	6/30/2020	6/30/2020	Difference	1/31/2020	6/30/2020	Adjustment	Difference
7/1/02-03	\$168,909	\$168,909	\$168,909	0.0%	\$168,909	\$168,909	\$168,909	0.0%	\$168,909	\$168,909	\$0	0.0%
7/1/03-04	\$840,274	\$840,274	\$840,274	0.0%	\$840,274	\$840,274	\$840,274	0.0%	\$840,274	\$840,274	\$0	0.0%
7/1/04-05	\$488,972	\$488,972	\$488,972	0.0%	\$488,972	\$488,972	\$488,972	0.0%	\$488,972	\$488,972	\$0	0.0%
7/1/05-06	\$1,253,449	\$1,253,449	\$1,253,449	0.0%	\$1,253,449	\$1,253,449	\$1,253,449	0.0%	\$1,253,449	\$1,253,449	\$0	0.0%
7/1/06-07	\$953,237	\$953,237	\$953,237	0.0%	\$953,237	\$953,237	\$953,237	0.0%	\$953,237	\$953,237	\$0	0.0%
7/1/07-08	\$1,432,614	\$1,432,614	\$1,432,614	0.0%	\$1,432,614	\$1,432,614	\$1,432,614	0.0%	\$1,432,614	\$1,432,614	\$0	0.0%
7/1/08-09	\$1,159,541	\$1,159,541	\$1,159,541	0.0%	\$1,159,541	\$1,159,541	\$1,159,541	0.0%	\$1,159,541	\$1,159,541	\$0	0.0%
7/1/09-10	\$1,271,848	\$1,271,848	\$1,271,848	0.0%	\$1,271,848	\$1,271,848	\$1,271,848	0.0%	\$1,271,848	\$1,271,848	\$0	0.0%
7/1/10-11	\$1,838,086	\$1,838,350	\$1,838,086	0.0%	\$1,818,575	\$1,823,581	\$1,820,257	-0.2%	\$1,839,000	\$1,839,000	\$0	0.0%
7/1/11-12	\$1,459,814	\$1,460,160	\$1,459,814	0.0%	\$1,459,814	\$1,460,122	\$1,459,814	0.0%	\$1,461,000	\$1,461,000	\$0	0.0%
7/1/12-13	\$805,866	\$806,199	\$778,348	-3.5%	\$745,498	\$762,503	\$742,998	-2.6%	\$807,000	\$807,000	\$0	0.0%
7/1/13-14	\$806,844	\$807,780	\$806,844	-0.1%	\$761,998	\$776,125	\$773,047	-0.4%	\$810,000	\$810,000	\$0	0.0%
7/1/14-15	\$1,633,386	\$1,638,041	\$1,633,386	-0.3%	\$1,562,027	\$1,589,165	\$1,568,217	-1.3%	\$1,649,000	\$1,649,000	\$0	0.0%
7/1/15-16	\$1,847,403	\$1,860,408	\$1,763,087	-5.2%	\$1,532,168	\$1,648,638	\$1,607,814	-2.5%	\$1,891,000	\$1,816,000	-\$75,000	-4.0%
7/1/16-17	\$2,434,276	\$2,470,173	\$2,448,996	-0.9%	\$1,637,179	\$1,927,817	\$1,690,600	-12.3%	\$2,556,000	\$2,556,000	\$0	0.0%
7/1/17-18	\$1,539,250	\$1,589,929	\$1,616,250	1.7%	\$393,774	\$731,097	\$590,742	-19.2%	\$1,718,000	\$1,768,000	\$50,000	2.9%
7/1/18-19	\$1,433,818	\$1,564,561	\$1,623,731	3.8%	\$250,780	\$480,779	\$333,296	-30.7%	\$1,944,000	\$1,994,000	\$50,000	2.6%
7/1/19-20	\$693,194	\$1,426,820	\$1,084,651	-24.0%	\$24,226	\$136,552	\$60,174	-55.9%	\$2,283,000	\$1,733,000	-\$550,000	-24.1%
Total	\$22,060,781	\$23,031,265	\$22,622,036	-1.8%	\$17,754,883	\$18,905,223	\$18,215,803	-3.6%	\$24,526,844	\$24,001,844	-\$525,000	-2.1%
Difference in Actual and Expected			-\$409,229									

(B), (F) and (I) - From Previous actuarial report as of 1/31/2020

(C) and (G) - Based on information available as of 1/31/2020

(D) and (H) - Exhibit 1-C

(E) = [(D) / (C)] - 1

(I) = [(H) / (G)] - 1

(K) - Exhibit 3

(L) - Judgmentally selected based on experience

(M) = (K) / (I) - 1

***Estimated Outstanding Losses
As of June 30, 2020***

(A)	(B)	(C)	(D)	(E)	(F)	(G)
<i>Accident Period</i>	<i>Estimated Ultimate Losses</i>	<i>Limited Paid Losses</i>	<i>Limited Reported Losses</i>	<i>Limited Case Reserves</i>	<i>IBNR Losses</i>	<i>Outstanding Losses</i>
7/1/02-03	\$168,909	\$168,909	\$168,909	\$0	\$0	\$0
7/1/03-04	\$840,274	\$840,274	\$840,274	\$0	\$0	\$0
7/1/04-05	\$488,972	\$488,972	\$488,972	\$0	\$0	\$0
7/1/05-06	\$1,253,449	\$1,253,449	\$1,253,449	\$0	\$0	\$0
7/1/06-07	\$953,237	\$953,237	\$953,237	\$0	\$0	\$0
7/1/07-08	\$1,432,614	\$1,432,614	\$1,432,614	\$0	\$0	\$0
7/1/08-09	\$1,159,541	\$1,159,541	\$1,159,541	\$0	\$0	\$0
7/1/09-10	\$1,271,848	\$1,271,848	\$1,271,848	\$0	\$0	\$0
7/1/10-11	\$1,839,000	\$1,820,257	\$1,838,086	\$17,829	\$1,000	\$19,000
7/1/11-12	\$1,461,000	\$1,459,814	\$1,459,814	\$0	\$1,000	\$1,000
7/1/12-13	\$807,000	\$742,998	\$778,348	\$35,349	\$29,000	\$64,000
7/1/13-14	\$810,000	\$773,047	\$806,844	\$33,797	\$3,000	\$37,000
7/1/14-15	\$1,649,000	\$1,568,217	\$1,633,386	\$65,168	\$16,000	\$81,000
7/1/15-16	\$1,816,000	\$1,607,814	\$1,763,087	\$155,273	\$53,000	\$208,000
7/1/16-17	\$2,556,000	\$1,690,600	\$2,448,996	\$758,396	\$107,000	\$865,000
7/1/17-18	\$1,768,000	\$590,742	\$1,616,250	\$1,025,508	\$152,000	\$1,177,000
7/1/18-19	\$1,994,000	\$333,296	\$1,623,731	\$1,290,435	\$370,000	\$1,661,000
7/1/19-20	\$1,733,000	\$60,174	\$1,084,651	\$1,024,476	\$648,000	\$1,673,000
<i>Total</i>	\$24,001,844	\$18,215,803	\$22,622,036	\$4,406,233	\$1,380,000	\$5,786,000

(B) - Exhibit 3

(C) and (D) - Exhibit 1-C

(E) = (D) - (C)

(F) = (B) - (D)

(G) = (B) - (C)

Statement of Actuarial Opinion

Net Retained Liabilities as of June 30, 2020

Premium Adequacy for the Policy Year 7/1/20-21

Oklahoma Schools Insurance Group

I, Laura T. Sprouse, am an independent consultant to Oklahoma Schools Insurance Group (OSIG). I am a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries and meet the Academy's qualification standards for prescribed Statements of Actuarial Opinion. Although no formal appointment was made by the Board of Directors of OSIG, I have been asked to opine on the adequacy of the loss and loss adjustment expense reserves as of June 30, 2020, and the adequacy of premiums for the 7/1/20-21 policy period. This opinion is prepared in accordance with Actuarial Standards of Practice No. 36, *Statements of Actuarial Opinion Regarding Property/Casualty Loss and Loss Adjustment Expense Reserves*, No. 43, *Property/Casualty Unpaid Claim Estimates*, and No. 53, *Estimating Future Costs for Prospective Property/Casualty Risk Transfer and Risk Retention*.

Loss and ALAE Reserves as of June 30, 2020

I have examined the reserves listed below and in the financial statements of the Oklahoma Schools Insurance Group as prepared for filing with state regulatory officials as of June 30, 2020. These amounts represent the estimates by management of OSIG for all unpaid losses and the related loss adjustment expenses as of June 30, 2020.

Net Liabilities for Losses and ALAE as of June 30, 2020	
Unpaid Losses and Loss adjustment Expenses	\$11,752,602
Incurred But Not Reported Reserves	\$3,664,000
Total Net Unpaid loss and ALAE reserves	\$15,416,602

In forming my opinion on the loss and loss adjustment expense reserves, I relied upon data provided by Jennifer McKenzie, Program Manager for OSIG, valued through June 30, 2020. I evaluated that data for reasonableness and consistency through comparison to previous reports. In other respects, my examination included such review of the actuarial assumptions and methods used and such tests of the calculations as I considered necessary.

Mary Frances Miller, FCAS, MAAA
Cheryl White, FCAS, MAAA
Thomas E. Meyer, FCAS, MAAA
Laura T. Sprouse, FCAS, MAAA

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My own analysis produced a central estimate of the outstanding losses of \$15,138,000 as of June 30, 2020, including IBNR reserves of \$3,664,000. My estimate is about \$278,602 lower than OSIG's carried reserves. My understanding is that OSIG updates the case reserve values using losses valued as of September 30, 2020.

Opinion on Reserves

In my opinion, the amounts recorded in the financial statements of OSIG:

- Meet the requirements of the insurance laws of the state of Oklahoma.
- Are consistent with the reserves computed in accordance with accepted actuarial standards of practice.
- Make a reasonable provision for all unpaid loss and loss adjustment expense obligations of OSIG under the terms of its contracts and agreements.

Risk of Material Adverse Deviation

Due to the nature of third-party liability claims and OSIG's relatively large retention, it is possible that OSIG could experience a fluctuation of material size from the expected outstanding losses. We continue to observe some late emergence of property losses. To the extent that this is not captured in the loss development patterns, there is some risk that IBNR reserves are inadequate. However, such losses would be capped to \$250,000 per occurrence, and the corridor deductible has already been exhausted for each of the last six years. We have selected a materiality threshold of \$2,755,000 or 20% of surplus. While it is possible that losses could develop by more than \$2,755,000, this amount of adverse deviation is not likely. Therefore, I would conclude there is not a significant risk of material adverse deviation.

Premium Adequacy for the 7/1/20-21 Policy Period

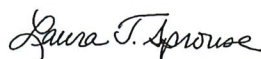
My analysis produced a forecast of the ultimate retained losses for the period 7/1/20-21 of \$17,514,000. OSIG has budgeted roughly \$35,021,000 for reinsurance premiums and other expenses for a total premium need of \$52,535,000. OSIG expects to collect about \$50,633,000 in member contributions and earn another \$205,000 in investment income. Thus, there is an expected shortfall of \$1,697,000. This shortfall represents about 12% of surplus, and OSIG currently has a reserve to surplus ratio of just 1.12. I would consider this amount of surplus to supplement the 7/1/20-21 budget to be a suitable use of surplus. Therefore, it is my opinion that the premiums for 7/1/20-21 are adequate.

Actuarial Reports

This opinion was based on the actuarial study for OSIG dated April 10, 2020, and the update dated August 25, 2020. The two documents together constitute the actuarial report for OSIG for the fiscal year ending June 30, 2020.

This opinion was prepared solely for the purpose of filing with regulatory agencies and is not intended for any other purpose.

Best regards,



Digitally signed by Laura
Sprouse, FCAS, MAAA
Date: 2020-12-01 12:02:
23

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December 1, 2020