

Cook County, Illinois

Actuarial Study of the Workers Compensation and Liability Self-Insured Programs as of November 30, 2018

May 17, 2019



May 17, 2019

Cook County
118 North Clark Street, Room 1072
Chicago, Illinois 60602

Attn: Ms. Deanna Zalas
Director of Risk Management

**Actuarial Study of the
Workers Compensation and Liability
Self-Insured Programs
as of November 30, 2018**

This study has been completed for Cook County for the specific objectives listed in the study. It contains the analysis and conclusions of our work.

Each section and appendix of the study is an integral part of the whole. We recommend a review of the entire study prior to reliance upon this study.

No key personnel have a relationship with Cook County that may impair our objectivity.

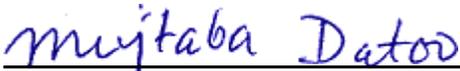
We, Tom Duffy and Mujtaba Dato, are members of the American Academy of Actuaries and meet the Academy's qualification standards to render this opinion. We performed this analysis using generally accepted actuarial principles and all relevant Actuarial Standards of Practice.

Please call if you have any questions. Thank you for the opportunity to be of service.

Respectfully submitted,

Aon Global Risk Consulting

By 
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Director and Actuary

By 
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TD/MD:bc

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I. Background

The self-insurance program for Cook County, Illinois (the County) has three components: workers compensation, medical malpractice, and liability. Liability includes general, automobile, and other liability. Other liability includes public officials liability, employment practices, civil rights violations and police professional liability.

A history of self-insured retentions is shown in Table I-1 (workers compensation), Table I-2 (medical malpractice), and Table I-3 (liability).

**Table I-1
History of Self-Insured Retentions
Workers Compensation**

Claim Period (1)	Specific (2)	Aggregate (3)
12/31/00 to 12/30/01	\$9,500,000	\$40,000,000
12/31/01 to 12/30/02	9,500,000	40,000,000
12/31/02 to 12/30/03	9,500,000	45,000,000

**Table I-2
History of Self-Insured Retentions
Medical Malpractice**

Claim Period (1)	Specific (2)	Aggregate (3)
12/31/00 to 12/30/01	\$10,000,000	\$25,000,000
12/31/01 to 12/30/02	15,000,000	50,000,000
12/31/02 to 12/30/03	20,000,000	80,000,000
12/31/03 to 12/30/04	20,000,000	None
12/31/04 to 12/30/05	20,000,000	None
12/31/05 to 2/28/09	20,000,000	None
3/1/10 to 2/28/13	40,000,000	None
3/1/13 to 6/30/15	30,000,000	None
7/1/15 to present	25,000,000	80,000,000

**Table I-3
History of Self-Insured Retentions
Liability**

Claim Period (1)	Specific (2)	Aggregate (3)
12/31/00 to 12/30/01	\$9,500,000	\$40,000,000
12/31/01 to 12/30/02	9,500,000	40,000,000
12/31/02 to 12/30/03	9,500,000	45,000,000
12/31/03 to 12/30/04	10,000,000	None
12/31/04 to 12/30/06	10,000,000	25,000,000
12/31/06 to 2/28/13	10,000,000	None
3/1/13 to present	15,000,000	None

Cook County currently self-administers and self-funds claims for workers compensation, medical malpractice, general liability, automobile liability, and other liability. All litigation matters are handled by the Cook County State’s Attorney’s Office. In some cases, outside legal counsel may be assigned.

For workers compensation, “Indemnity” includes indemnity, legal, and other losses. “Medical” includes medical and rehabilitation losses. Only workers compensation losses include allocated loss adjustment expenses (ALAE). According to the County, ALAE is not specifically assigned to individual medical malpractice and liability claims. However, litigation expenses are tracked in aggregate and included in our analysis (see Summary Exhibit 7).

The excess coverage for medical malpractice is on a claims-made basis. The estimated outstanding losses and projected ultimate losses for medical malpractice include all claims with loss dates on or before the indicated fiscal year end, consistent with the prior actuarial studies.

Data

Cumulative loss data valued as of November 30, 2018 was provided to us by the County for all coverages. For workers compensation, the analysis is complete net of recoveries. Recovery amounts were not provided for the liability and medical malpractice coverages.

Forest Preserve District department claims were not included in the loss data provided, and are excluded from the workers compensation and liability analysis at the direction of the County.

The County also provided vehicles for 2018/19 and medical malpractice exposures for years through 2018/19. Payroll information used in the workers compensation analysis is from the County Annual Appropriation Bills. County revenue used in the general liability and other liability analysis is from the Comprehensive Annual Financial Report. Exposure projections are based on a 0% trend.

In conducting this analysis, we relied upon the provided data without audit or independent verification; however, we reviewed it for reasonableness and consistency. Any inaccuracies in quantitative data or qualitative representations could have a significant effect on the results of our review and analysis. Any material discrepancies discovered in the loss or exposure data by the County or any other parties should be reported to us immediately, and if warranted, we will make appropriate amendments to the report.

II. Objectives

The specific objectives of this study are the following:

1. **Estimate Outstanding Losses.** Estimate outstanding losses as of November 30, 2018, November 30, 2019, and November 30, 2020.

The estimated outstanding losses are the cost of unpaid claims. The estimated outstanding losses include case reserves, the development of known claims and incurred but not reported (IBNR) claims. The amounts are limited to the self-insured retention.

Estimated outstanding losses for workers compensation include allocated loss adjustment expenses [ALAE]). ALAE are the direct expenses for settling specific claims. These expenses include outside legal defense fees, expert witness fees and court reporting fees. They do not include internal defense costs.

2. **Project Ultimate Limited Losses.** Project ultimate limited losses (including ALAE for workers compensation) for 2018/19, 2019/20, and 2020/21.

The projected ultimate limited losses are the accrual value of losses with accident dates during 2018/19, 2019/20, and 2020/21, regardless of report or payment date. The amounts are limited to the self-insured retention.

3. **Project Losses Paid.** Project losses paid (including ALAE for workers compensation) during the 2018/19, 2019/20, and 2020/21 claim periods.

The projected losses paid are the claim disbursements during 2018/19, 2019/20, and 2020/21, regardless of accident or report date. The amounts are limited to the self-insured retention.

4. **Affirm GASB Statement No. 10.** Provide a statement affirming the conclusions of this report are consistent with GASB Statement No. 10.

III. Conclusions

We have reached the following conclusions:

1. Estimate Outstanding Losses

We estimate outstanding losses as of November 30, 2018 to be as shown in Table III-1A. The estimated outstanding losses include case reserves, the development of known claims and IBNR claims. The amounts are limited to the self-insured retention.

**Table III-1A
Estimated Outstanding Losses
November 30, 2018**

Coverage (1)	Full Value			Present Value		
	Expected (2)	70% Level (3)	90% Level (4)	Expected (5)	70% Level (6)	90% Level (7)
I. Health Care Facilities						
(Ai) WC - Indemnity	\$17,729,458	\$20,211,582	\$25,707,714	\$16,090,400	\$18,343,056	\$23,331,080
(Aii) WC - Medical	<u>4,608,297</u>	<u>5,253,459</u>	<u>6,682,031</u>	<u>4,088,056</u>	<u>4,660,384</u>	<u>5,927,681</u>
(A) Workers compensation	\$22,337,755	\$25,465,041	\$32,389,745	\$20,178,456	\$23,003,440	\$29,258,761
(Bi) Cermak	7,767,000	9,087,390	12,271,860	7,076,086	8,279,021	11,180,216
(Bii) John H. Stroger	125,844,151	147,237,657	198,833,759	118,018,318	138,081,432	186,468,942
(Biii) Oak Forest	90,000	105,300	142,200	80,477	94,158	127,154
(Biv) Provident	5,685,000	6,651,450	8,982,300	5,187,656	6,069,558	8,196,496
(Bv) Unspecified	<u>145,000</u>	<u>169,650</u>	<u>229,100</u>	<u>132,990</u>	<u>155,598</u>	<u>210,124</u>
(B) Medical malpractice	\$139,531,151	\$163,251,447	\$220,459,219	\$130,495,527	\$152,679,767	\$206,182,932
(C) Claim expense	2,651,496	3,022,705	3,844,669	2,479,793	2,826,964	3,595,700
(D) Subtotal	\$164,520,402	\$191,739,193	\$256,693,633	\$153,153,776	\$178,510,171	\$239,037,393
II. General Government						
(Ei) WC - Indemnity	\$81,965,560	\$93,440,738	\$118,850,062	\$73,943,082	\$84,295,113	\$107,217,469
(Eii) WC - Medical	<u>30,615,605</u>	<u>34,901,790</u>	<u>44,392,627</u>	<u>27,719,333</u>	<u>31,600,040</u>	<u>40,193,033</u>
(E) Workers compensation	\$112,581,165	\$128,342,528	\$163,242,689	\$101,662,415	\$115,895,153	\$147,410,502
(F) General liability	917,479	1,045,926	1,330,345	872,977	995,194	1,265,817
(G) Automobile liability	2,880,717	3,284,017	4,177,040	2,751,099	3,136,253	3,989,094
(H) Other liability	181,585,478	212,455,009	286,905,055	164,616,426	192,601,218	260,093,953
(I) Claim expense	53,690,734	61,207,437	77,851,564	48,725,736	55,547,339	70,652,317
(J) Subtotal	\$351,655,573	\$406,334,917	\$533,506,693	\$318,628,653	\$368,175,157	\$483,411,683
(K) Total (D) + (J)	\$516,175,975	\$598,074,110	\$790,200,326	\$471,782,429	\$546,685,328	\$722,449,076

Note: (2) and (5) are from Summary Exhibit 1.
(3), (4), (6), and (7) are based on actuarial judgment.

The present value of the estimated outstanding losses is the estimated outstanding losses discounted to reflect future investment earnings. It is based on a 2.83% interest rate, as provided by the County.

The discount rate used in the prior year's analysis was 1.9%. The change in discount rate had the impact of decreasing the discounted reserves about \$14 million.

Undiscounted outstanding losses increased from \$441.8 million as of November 30, 2017, to \$516.2 million as of November 30, 2018. A comparison of case reserves, IBNR, and total outstanding losses (excluding claim expense reserves) from the prior actuarial study to the current study is shown in Table III-1B.

Table III-1B
Comparison of Outstanding Loss Components (\$000s)
November 30, 2017 to November 30, 2018
All Coverages Combined
(Excluding Claim Expense Reserves)

Year (1)	As of 11/30/17			As of 11/30/18			Change		
	Case Reserves (2)	IBNR (3)	Total (4)	Case Reserves (5)	IBNR (6)	Total (7)	Case Reserves (5) - (2) (8)	IBNR (6) - (3) (9)	Total (7) - (4) (10)
to 1998/99	\$6,611	\$674	\$7,285	\$17,696	\$2,054	\$19,750	\$11,085	\$1,380	\$12,465
1999/00	11	3	14	14	2	16	3	- 1	2
2000/01	642	157	799	993	366	1,359	351	209	560
2001/02	776	241	1,017	734	166	900	- 42	- 75	- 117
2002/03	423	141	564	502	128	630	79	- 13	66
2003/04	1,214	458	1,672	809	193	1,002	- 405	- 265	- 670
2004/05	23,648	2,588	26,236	31,489	3,320	34,809	7,841	732	8,573
2005/06	621	287	908	2,161	972	3,133	1,540	685	2,225
2006/07	1,698	1,018	2,716	1,093	656	1,749	- 605	- 362	- 967
2007/08	6,605	1,410	8,015	1,222	704	1,926	-5,383	- 706	-6,089
2008/09	2,961	1,372	4,333	1,748	1,464	3,212	-1,213	92	-1,121
2009/10	3,351	1,949	5,300	2,207	1,260	3,467	-1,144	- 689	-1,833
2010/11	19,003	4,623	23,626	22,939	5,371	28,310	3,936	748	4,684
2011/12	9,270	4,578	13,848	6,266	4,517	10,783	-3,004	- 61	-3,065
2012/13	68,385	9,763	78,148	53,657	5,894	59,551	-14,728	-3,869	-18,597
2013/14	13,454	12,602	26,056	16,162	12,032	28,194	2,708	- 570	2,138
2014/15	38,253	20,998	59,251	43,617	13,228	56,845	5,364	-7,770	-2,406
2015/16	24,638	32,810	57,448	35,687	21,639	57,326	11,049	-11,171	- 122
2016/17	28,167	53,554	81,721	30,288	36,876	67,164	2,121	-16,678	-14,557
2017/18				25,769	53,937	79,706	25,769	53,937	79,706
Total	\$249,731	\$149,224	\$398,956	\$295,054	\$164,780	\$459,834	\$45,323	\$15,555	\$60,878

Note: (2) through (4) are from the prior actuarial study.
(5) through (7) are from Summary Exhibit 11.

A comparison of estimated outstanding losses as of November 30, 2017 and November 30, 2018 is shown in Summary Exhibit 2. Detail by year and coverage is provided in Summary Exhibits 10 through 23.

Case reserves are up \$45 million from our prior analysis. Most of this increase was driven by a few large Other Liability claims along with a more general increase for Workers Compensation.

For Workers Compensation, total case reserves increased by almost \$7 million compared to the prior study. Unlike Other Liability, this increase was not driven by a few large claims but by increases in the average case reserves on many claims. County officials previously indicated that this increase is driven by an increase in new average monthly losses and related medical expenses.

Estimated outstanding losses as of November 30, 2019, and November 30, 2020 are shown in Summary Exhibit 1.

Summary Exhibit 4 splits the estimated outstanding losses and projected ultimate losses for the liability coverages among Healthcare and Government. Cumulative paid data as of November 30, 2018 was not available separately for Healthcare and Government, so independent analyses could not be completed. We therefore based the estimates on the percentage of case reserve and fiscal year 2017/18 payment data.

In summary, the expected (or central estimate) discounted reserves are up from \$415 million in last year's study to \$472 million in this year's study. The increase is driven by a substantial increase in case reserves for the Other Liability and Workers Compensation segments.

2. Project Ultimate Limited Losses

We project ultimate limited losses for 2018/19 to be as shown in Table III-2. The projected ultimate limited losses are the accrual value of losses with accident dates during 2018/19 regardless of report or payment date.

**Table III-2
Projected Ultimate Losses
2018/19**

Coverage (1)	Full Value			Present Value		
	Expected (2)	70% Level (3)	90% Level (4)	Expected (5)	70% Level (6)	90% Level (7)
I. Health Care Facilities						
(Ai) WC - Indemnity	\$3,482,000	\$4,073,940	\$5,501,560	\$3,124,000	\$3,655,080	\$4,935,920
(Aii) WC - Medical	<u>1,372,000</u>	<u>1,605,240</u>	<u>2,167,760</u>	<u>1,267,000</u>	<u>1,482,390</u>	<u>2,001,860</u>
(A) Workers compensation	\$4,854,000	\$5,679,180	\$7,669,320	\$4,391,000	\$5,137,470	\$6,937,780
(Bi) Cermak	1,747,000	2,096,400	3,074,720	1,471,000	1,765,200	2,588,960
(Bii) John H. Stroger	16,840,000	20,208,000	29,638,400	14,180,000	17,016,000	24,956,800
(Biii) Oak Forest	16,000	19,200	28,160	14,000	16,800	24,640
(Biv) Provident	1,210,000	1,452,000	2,129,600	1,020,000	1,224,000	1,795,200
(Bv) Unspecified	<u>20,000</u>	<u>24,000</u>	<u>35,200</u>	<u>20,000</u>	<u>24,000</u>	<u>35,200</u>
(B) Medical malpractice	\$19,833,000	\$23,799,600	\$34,906,080	\$16,705,000	\$20,046,000	\$29,400,800
(C) Subtotal	\$24,687,000	\$29,478,780	\$42,575,400	\$21,096,000	\$25,183,470	\$36,338,580
II. General Government						
(Di) WC - Indemnity	\$27,601,000	\$32,293,170	\$43,609,580	\$24,699,000	\$28,897,830	\$39,024,420
(Dii) WC - Medical	<u>9,343,000</u>	<u>10,931,310</u>	<u>14,761,940</u>	<u>8,631,000</u>	<u>10,098,270</u>	<u>13,636,980</u>
(D) Workers compensation	\$36,944,000	\$43,224,480	\$58,371,520	\$33,330,000	\$38,996,100	\$52,661,400
(E) General liability	400,000	468,000	632,000	367,000	429,390	579,860
(F) Automobile liability	1,927,000	2,254,590	3,044,660	1,794,000	2,098,980	2,834,520
(G) Other liability	30,838,000	37,005,600	54,274,880	26,340,000	31,608,000	46,358,400
(H) Subtotal	\$70,109,000	\$82,952,670	\$116,323,060	\$61,831,000	\$73,132,470	\$102,434,180
(I) Total (C) + (H)	\$94,796,000	\$112,431,450	\$158,898,460	\$82,927,000	\$98,315,940	\$138,772,760

Note: (2) and (5) are from Summary Exhibit 3.
(3), (4), (6), and (7) are based on actuarial judgment.

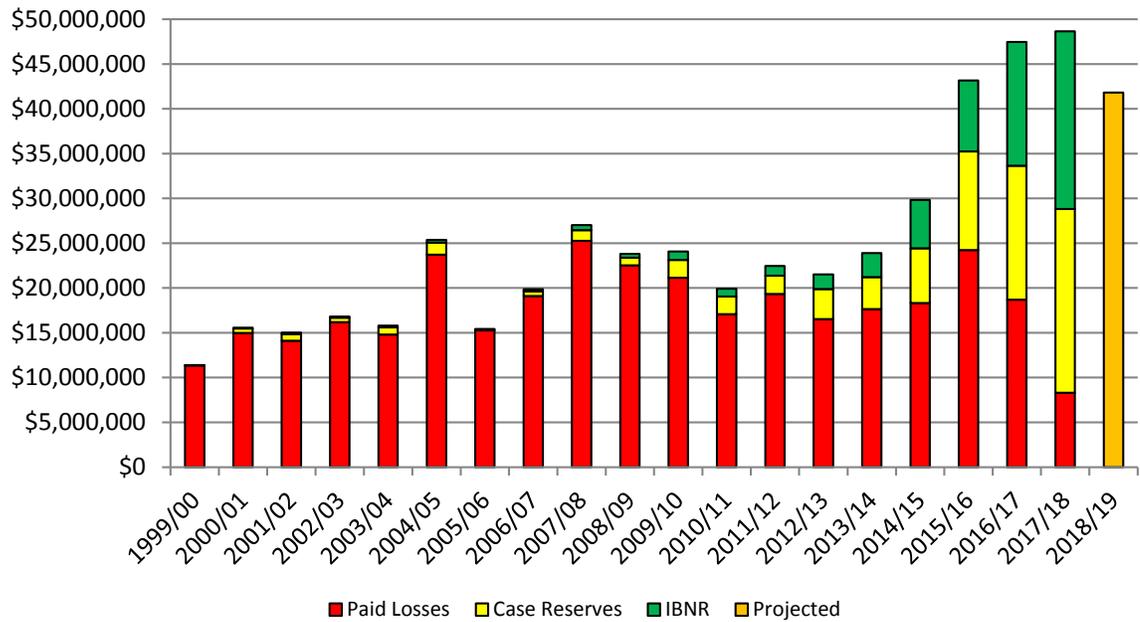
The present value of the estimated outstanding losses is the estimated outstanding losses discounted to reflect future investment earnings. It is based on a 2.83% interest rate, as provided by the County.

Projected ultimate losses for 2019/20 and 2020/21 are shown in Summary Exhibit 3.

Summary Exhibit 10 shows the change in estimates from last year (inclusive of last year's forecast estimate for the 2017/18 claim period). On this basis, our ultimate loss and ALAE estimates for all years through the 2017/18 claim period are up by approximately \$54 million, or 3.0%. The overall increase in estimates is driven largely by increases in estimates for workers compensation, other liability, and Stroger Hospital.

Graph III-1 shows the projected ultimate workers compensation losses (health care facilities and general government combined).

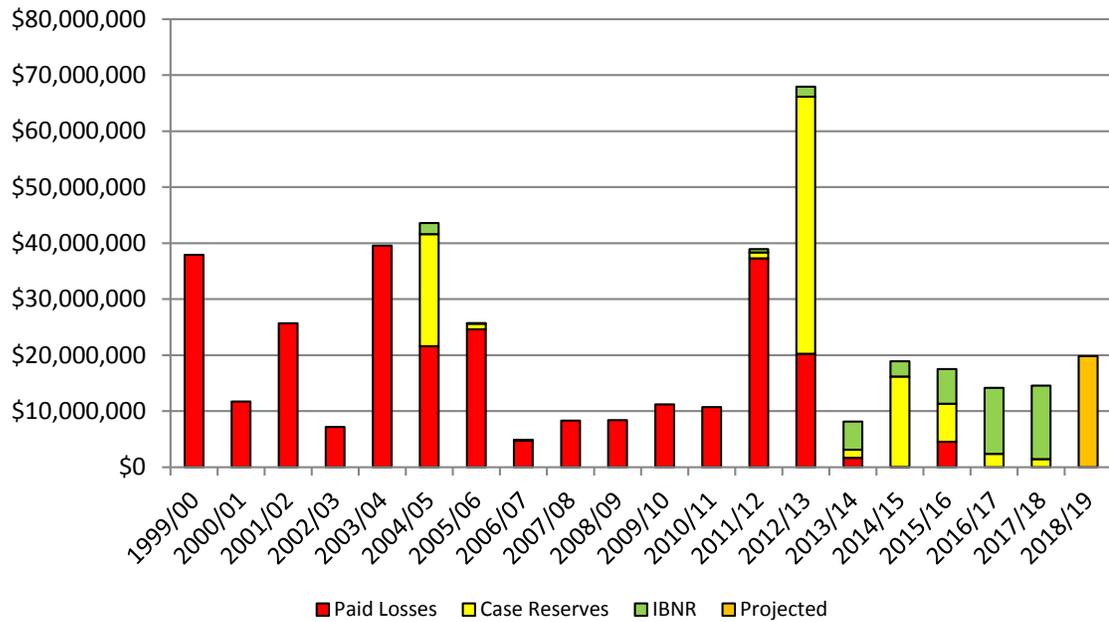
Graph III-1
Composition of Projected Ultimate Limited Losses
(Workers Compensation)



For years through 2016/17, the estimate of the ultimate workers compensation losses has decreased by -1.1% from the prior report.

Graph III-2 shows the projected ultimate medical malpractice losses (all hospitals combined).

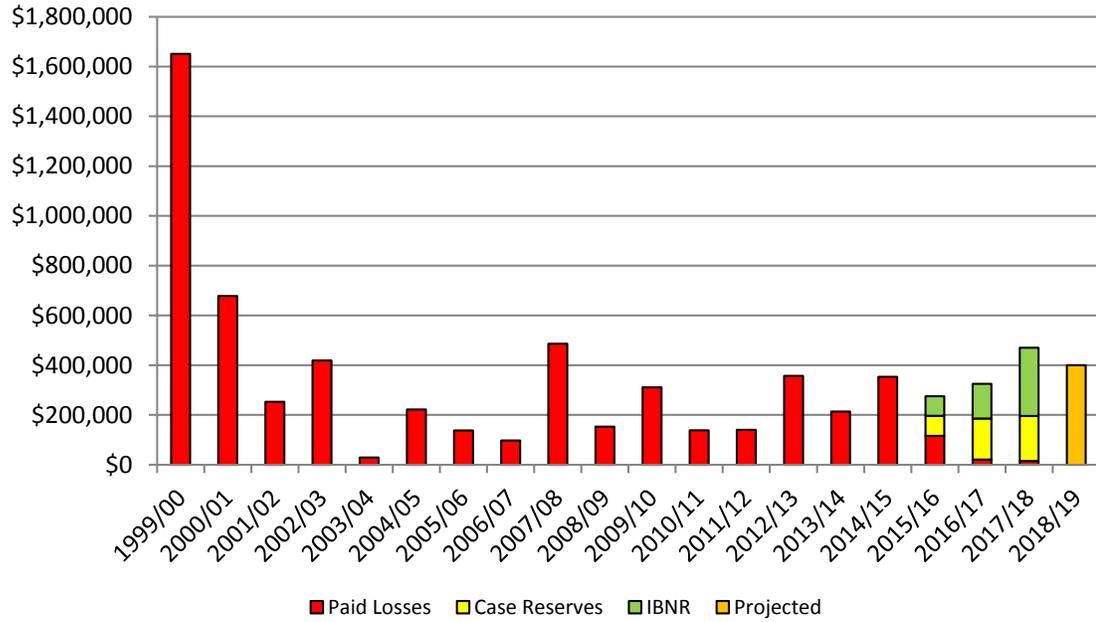
Graph III-2
Composition of Projected Ultimate Limited Losses
(Medical Malpractice)



For years through 2016/17, the estimate of the ultimate medical malpractice losses has increased by 1.7% from the prior report. We note that there is one very large claim in 2012/13.

Graph III-3 shows the projected ultimate general liability losses.

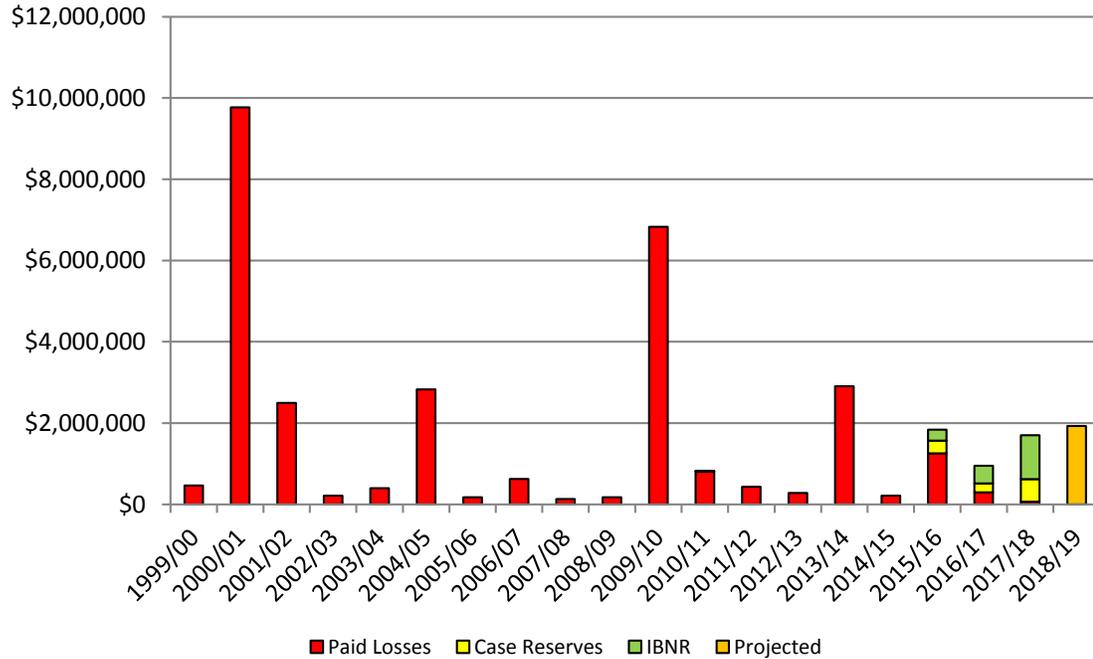
Graph III-3
Composition of Projected Ultimate Limited Losses
(General Liability)



For years through 2016/17, the estimate of the ultimate general liability losses has decreased by -3.2% from the prior report.

Graph III-4 shows the projected ultimate automobile liability losses.

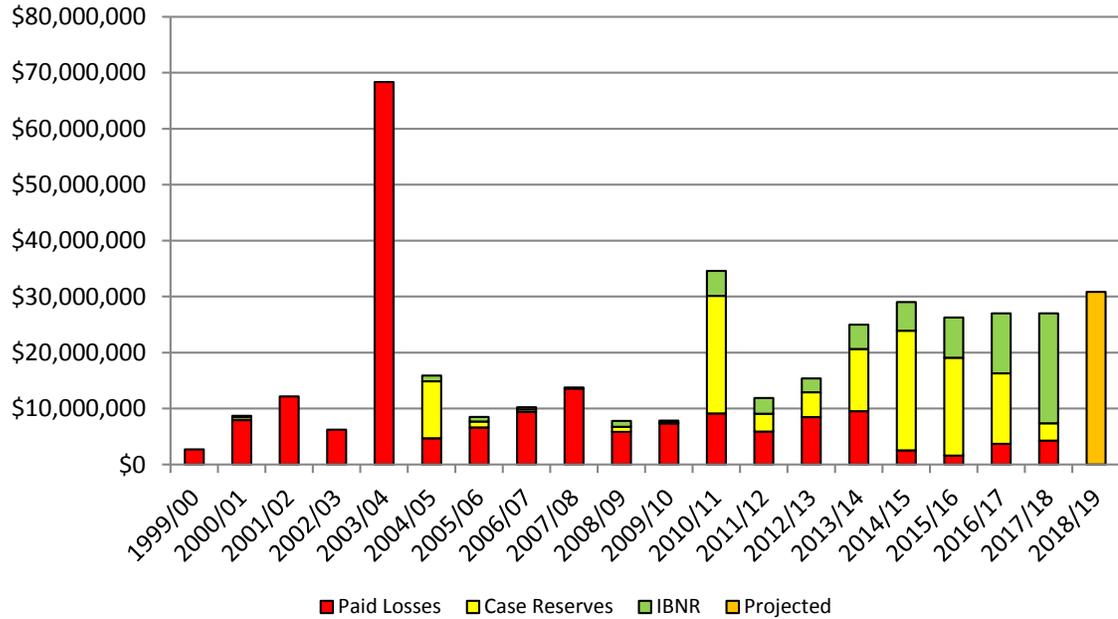
Graph III-4
Composition of Projected Ultimate Limited Losses
(Automobile Liability)



For years through 2016/17, the estimate of the ultimate automobile liability losses has decreased by -1.6% from the prior report.

Graph III-5 shows the projected ultimate other liability losses.

Graph III-5
Composition of Projected Ultimate Limited Losses
(Other Liability)



For years through 2016/17, the estimate of the ultimate other liability losses has increased by 10.3% from the prior report. This increase was driven by 13 newly reported large claims with incurred of over \$1 million each.

3. Project Losses Paid

We project losses paid during 2018/19 through 2020/21 to be as shown in Table III-3. The projected losses paid are the claim disbursements during 2018/19, 2019/20, and 2020/21, regardless of accident or report date.

**Table III-3
Projected Losses Paid
2018/19, 2019/20, and 2020/21**

Coverage (1)	2018/19 (2)	2019/20 (3)	2020/21 (4)
I. Health Care Facilities			
(Ai) WC - Indemnity	\$3,897,922	\$3,822,408	\$3,748,056
(Aii) WC - Medical	<u>1,864,590</u>	<u>1,573,134</u>	<u>1,513,243</u>
(A) Workers compensation	\$5,762,512	\$5,395,542	\$5,261,299
(Bi) Cermak	899,608	1,556,206	1,308,239
(Bii) John H. Stroger	27,658,683	29,529,481	27,029,653
(Biii) Oak Forest	5,257	11,154	15,010
(Biv) Provident	732,870	1,003,876	1,178,449
(Bv) Unspecified	<u>20,765</u>	<u>35,287</u>	<u>20,389</u>
(B) Medical malpractice	\$29,317,183	\$32,136,004	\$29,551,740
(C) Subtotal (A) + (B)	\$35,079,695	\$37,531,546	\$34,813,039
II. General Government			
(Di) WC - Indemnity	\$22,274,506	\$23,545,899	\$24,713,175
(Dii) WC - Medical	<u>12,784,919</u>	<u>11,026,806</u>	<u>10,540,747</u>
(D) Workers compensation	\$35,059,425	\$34,572,705	\$35,253,922
(E) General liability	286,769	380,667	412,359
(F) Automobile liability	1,367,184	1,565,553	1,824,612
(G) Other liability	38,136,665	15,242,614	16,838,047
(H) Subtotal (D)+(E)+(F)+(G)	\$74,850,043	\$51,761,539	\$54,328,940
(I) Total (C) + (H)	\$109,929,738	\$89,293,085	\$89,141,979

Note: (2) through (4) are from Summary Exhibit 5.

4. Affirm GASB Statement No. 10

We affirm the conclusions of this report are consistent with GASB Statement No. 10.

Appendix A
Conditions and Limitations

Conditions and Limitations

It is important to understand the conditions and limitations listed below. Each chapter and section is an integral part of the whole study. If there are questions, please contact Aon Global Risk Consulting for clarification.

- **Data Quality.** We relied upon data provided by the organization shown on the transmittal page or its designated agents. The data was used without verification or audit, other than checks for reasonableness. Unless otherwise stated, we assumed the data to be correct and complete.
- **Economic Environment.** Unless otherwise stated, we assumed the current economic conditions will continue in the foreseeable future.
- **Insurance Coverage.** Unless otherwise stated, we assumed no insurance coverage changes (including coverage provided by the organization to others) subsequent to the date this study was prepared. This includes coverage language, self-insured retention, limitations and similar issues.
- **Insurance Solvency.** Unless otherwise stated, we assumed all insurance purchased by the organization is from solvent sources payable in accordance with terms of the coverage document.
- **Interest Rate.** The exhibits specify the annual interest rate used.
- **Methodology.** In this study, different actuarial methods were applied. In some instances, the methods yield significantly disparate results. The estimates, projections and recommendations in this study reflect our judgments as to the best method or combination of methods that are most reliable and reflective of the exposure to loss.
- **Reproduction.** This study may only be reproduced in its entirety.
- **Risk and Variability.** Insurance is an inherently risky enterprise. Actual losses may vary significantly from our estimates, projections and recommendations. They may emerge higher or lower.
- **Statutory and Judicial Changes.** Legislatures and judiciaries may change statutes that govern indemnification. This includes benefit levels for workers compensation, immunities and limitations for liability, and other similar issues. Unless otherwise stated, we assumed no statutory changes subsequent to the date this study was prepared.
- **Supplemental Data.** In addition to the data provided by the

organization, we supplemented our analysis with data from similar organizations and insurance industry statistics, as we deemed appropriate.

- **Usage.** This study has been prepared for the usage of the organization shown on the transmittal page. It was not prepared for and may not be appropriate for use by other organizations. Other organizations should obtain written permission from Aon Global Risk Consulting prior to use of this study.

Risks and Uncertainties

The greatest uncertainties in our analysis are summarized below:

- The County has high to unlimited retentions for their exposures to loss. Projections and reserve estimates for very large claims are subject to much greater uncertainty at the County's retention levels. It generally takes much longer for large claims to finally settle. These large claims can be quite complex and much more difficult and uncertain in predicting final outcomes. The dollar impact of a relatively few very large claims can have a disproportionate impact on our aggregate estimates of liability.
- Tail development factor beyond 10 years. The tail development factor influences all claim period's loss estimates. Small changes in the tail factor are leveraged in our estimates.
- Reserves for the most recent claim periods are very dependent on "a priori" assumptions as the claims for these periods have not been fully digested at early evaluations. These "a priori" assumptions are largely dependent on historical patterns. If the historical patterns do not prove to be predictive of the losses for the more current years, our estimates will be biased.
- A significant class of large claims related to the Other Liability segment have been newly reported or significantly revalued over the last few years. These claims are in an early stage of valuation at this point. As a result, there is additional uncertainty around this set of claims' ultimate values.

We believe we have made prudent selections based on the reviewed data as of November 30, 2018. Cook County should be aware that these critical assumptions could significantly influence our estimates up or down.

Appendix B
Glossary of Actuarial Terms

Glossary of Actuarial Terms

Actuarial Methods (Most Common)

A major objective of an actuarial study is to statistically project ultimate losses. The following actuarial methods are the most common:

- Developed Paid Losses
- Developed Reported Incurred Losses
- Developed Case Reserves
- Frequency Times Severity Analysis
- Loss Rate Analysis

The following describes each method:

1. **Developed Paid Losses.** Paid losses represent the amounts actually paid to claimants (less excess insurance recoveries). As time goes on, loss payments continue until all claims are closed and there are no remaining payments expected. At this time, the ultimate losses for the claim period are known. This common process is called “paid loss development.”

Paid loss development is an extrapolation of actual dollars paid. It does not depend on case reserve estimates. A potential shortcoming of utilizing this method is that only a small fraction of total payments have been made for the most recent claim periods. Extrapolating ultimate losses based on small amounts of actual payments may be speculative. A second potential shortcoming is that payment patterns can change over time.

2. **Developed Reported Incurred Losses.** Reported incurred losses are paid losses plus case reserves. In most programs, total reported incurred losses underestimate the ultimate losses. Over time, as more information about a body of claims becomes known, they are adjusted either up or down until they are closed. Though many individual claims settle for less than what was estimated, these decreases are generally more than offset by increases in the cost of other claims for which new information has emerged.

The net effect is that total estimated costs are often revised upward over time. This normal process is called “reported incurred loss development.” Actuaries typically review the development patterns of the recent past to make projections of the expected future loss development and, therefore, estimations of ultimate losses.

3. **Developed Case Reserves.** The developed case reserves method is a hybrid of the paid loss development and reported incurred loss development methods. It relies on the historical adequacy of case reserves to predict ultimate losses.
4. **Frequency Times Severity Analysis.** The frequency times severity analysis is an actuarial method that uses a preliminary projection of ultimate losses to project claims severity. The claims severity times the number of claims is a predictor of ultimate losses. The focus of the frequency times severity analysis is that ultimate losses each period are dependent on the number of claims.
5. **Loss Rate Analysis.** The loss rate analysis is based on the historical loss rates per exposure unit (such as payroll, vehicles or property value). The loss rates (projected ultimate losses divided by exposure units) are trended to reflect the effect of claim cost inflation and retention changes. The trended loss rates represent the rates that one would see if all of the claims had been handled in the claim cost environment that will be present in the upcoming period. The trended loss rate times the projected exposure units is a predictor of losses.
6. **Bornhuetter-Ferguson Method (B-F).** The B-F method is an actuarial method that weights a preliminary projection of ultimate losses with projections of ultimate losses determined by other actuarial methods (usually the developed paid losses and developed reported incurred losses methods). For less mature claim periods, the B-F method leans more heavily to the preliminary projection. It gradually converges to the projections of ultimate losses determined by the other actuarial methods as the claim periods mature.

Actuary

A specialist trained in mathematics, statistics, and finance who is responsible for rate, reserve, and dividend calculations and other statistical studies.

Allocated Loss Adjustment Expenses

Allocated loss adjustment expenses (ALAE) are the direct expenses to settle specific claims. These expenses are primarily legal expenses.

Governmental Accounting Standards Board (GASB) Statement No. 10 requires that ALAE be included in financial statements and that they be calculated by actuarial methods.

American Academy of Actuaries

A society concerned with the development of education in the field of actuarial science and with the enhancement of standards in the actuarial field. Members may use the designation MAAA (Member, American Academy of Actuaries).

Benefits

The financial reimbursement and other services provided insureds by insurers under the terms of an insurance contract. An example would be the benefits listed under a life or health insurance policy or benefits as prescribed by a workers compensation law.

Casualty Actuarial Society

A professional society for actuaries in areas of property and casualty insurance work. This society grants the designation of Associate of the Casualty Actuarial Society (ACAS) and Fellow of the Casualty Actuarial Society (FCAS).

Claim

Demand by an individual or entity to recover for a loss.

Claims Made

A policy written on this basis covers only those claims that are made during the policy period. Coverage for prior acts is provided back to what is known as the retroactive date, which is the effective date of the original claims made policy with the same insurer.

Composite Rate

A single rate with a single basis of premium (e.g., payroll or sales). For this single rate the insured is covered for a variety of hazards, such as premises and operations, completed operations, products liability, and automobile. Its primary value is to compute premium simply.

Confidence Level

A confidence level is the statistical certainty that an actuary believes funding will be sufficient. For example, an 80% confidence level means that the actuary believes funding will be sufficient in eight years out of ten.

Confidence levels are determined based on mathematical models. Coverages that are low frequency and high severity (such as excess liability) are subject to greater risk than coverages that are high frequency and low severity (such as automobile physical damage). Therefore, they need a greater margin to attain a given confidence level.

GASB Statement No. 10 requires public entities to use “expected” amounts as a liability in financial statements. Expected corresponds to approximately a 55% confidence level. Amounts above expected are prudent, but should be considered equity (not a liability).

Coverage

The scope of the protection provided under a contract of insurance.

Credibility

Credibility is the belief that the sample data is an accurate reflection of the larger population. Credibility is highest when the sample data is large and the standard deviation (discussed later) of the larger population is low.

Dates

There are at least three milestone dates in a claim. They are the date of injury or accident, the date of report and the date of closure. It is best if each of these dates is recorded. Some organizations may also keep the date a claim becomes a lawsuit, as opposed to a demand. Aon Global Risk Consulting recommends this additional level of detail, especially if the data is to be used for litigation management.

Deductible

The portion of an insured loss to be borne by the insured before he is entitled to recovery from the insurer. Deductibles may be expressed as a dollar amount, percentage or waiting period.

Disability

A condition that curtails a person's ability to carry on his normal pursuits. A disability may be partial or total, and temporary or permanent.

Dividend (Policyholder)

The return of part of the premium paid for a policy issued on a participating basis by either a mutual or a stock insurer.

Estimated Outstanding Losses

Estimated outstanding losses are the cost of claims that have occurred but have not yet been paid. They typically include indemnification and allocated loss adjustment expenses (ALAE), but not unallocated loss adjustment expenses (ULAE).

Estimated outstanding losses are calculated as projected ultimate losses less paid losses. Alternatively, they are the sum of case reserves and incurred but not reported (IBNR) claims.

Estimated outstanding losses are usually the largest single item listed as a liability on the balance sheet of a public entity's financial statement. GASB Statement No. 10 requires they be calculated by actuarial methods. Other common names for estimated outstanding losses are outstanding claims liabilities and unpaid claims.

Experience Rating

A method of adjusting the premium for a risk based on past loss experience for that risk compared to loss experience for an average risk.

Exposure Data

Exposure data refers to the activities of the organization. For example, payroll is the most common exposure measure for workers compensation. Aon Global Risk Consulting suggests collecting exposure data with the following characteristics:

- **Readily Available.** The exposure data should be easily obtained. It is best if it is a byproduct of other activities, although this is not always possible. If getting data is arduous, it may discourage collection.
- **Vary With Losses.** The exposure data should correlate directly with losses. The ideal situation is where exposure and expected losses move in tandem. The exposure base needs to be fitting to the coverage. For example, the number of employees may vary with property losses (more employees = more office space = more losses), but property value is a clearly superior exposure base for property losses.

Generally Accepted Accounting Principles (GAAP)

These principles are intended to produce financial results (in the insurance industry) consistent with those of other industries and to assure consistency in financial reporting.

Incurred But Not Reported

IBNR is really comprised of two distinct items. These are the development of known case reserves (incurred but not enough reported [IBNER] and incurred but not yet reported [IBNYR]).

IBNER are the actuary's estimate of the inadequacy of case reserves. Most claims settle at amounts close to what is set by the claims administrator. Some claims close favorably and some emerge as more expensive. On balance, case reserves tend to be too low

(especially for recent years). IBNER is the actuary's estimate of the amount total case reserves will rise upon closure.

IBNYR refers to those claims that have occurred, but have not yet been reported. A classic example is medical malpractice claim reported several years after the medical procedure was performed.

Insurance Services Office (ISO)

An organization of the property and casualty insurance business designed to gather statistics, promulgate rates, and develop policy forms.

Investment Income

The return received by entities from their investment portfolios, including interest, dividends and realized capital gains on stocks. Realized capital gains means the profit realized on assets that have actually been sold for more their purchase price.

Limited

Most programs purchase excess insurance for catastrophic claims. For example, they may purchase coverage for claims above a \$500,000 per occurrence self-insured retention. "Limited" refers to an estimate or projection being limited to the self-insured retention. In contrast, "unlimited" means a loss projection not limited to the self-insured retention.

Other common names for limited are net of excess insurance or capped losses.

Loss Development

The difference between the amount of losses initially estimated by the insurer and the amount reported in an evaluation on a later date. Loss development is typically measured for paid losses, reported incurred losses and claim counts.

Manual Rates

Usually, the published rate for some unit of insurance. An example is in the workers compensation manual, where the rates shown apply to each \$100 of the payroll of the insured, \$100 being the "unit."

National Council on Compensation Insurance (NCCI)

An association of workers compensation insurance companies whose main functions are collecting statistics and calculating rates, establishing policy wording, developing experience and retrospective rating plans, and serving as the filing organization for member companies.

Net

Many pooling programs assign deductibles to members. For example, each member may have a \$5,000 per claim deductible. “Net” refers to a loss estimate or projection that excludes amounts below member deductibles.

Occurrence

An event that results in an insured loss. In some lines of insurance, such as general liability, it is distinguished from accident in that the loss does not have to be sudden and fortuitous and can result from continuous or repeated exposure that results in bodily injury or property damage neither expected nor intended by the insured.

Pool

An organization of entities through which particular types of risks are written with the premiums, losses, and expenses shared in agreed amounts among the members belonging to the organization.

Premium

The price of insurance protection for a specified risk for a specified period of time.

Present Value

The amount of money that future amounts receivable are currently worth. For example, a Life Insurance policy may provide for payments to be made monthly for ten years. The present value of that money would be less than the total amount of the regular periodic payments for 10 years because of the amount of interest that a present lump sum could earn during the term than the payments otherwise would have been made.

Probability

The probability is the likelihood of an event. It is a measure of how likely a value or event is to occur. It can be measured from data by calculating the number of occurrences of the value or event divided by the total number of occurrences. This calculation can be converted to a percentage. For example, tossing a coin has a 50% probability of heads or tails.

Projected Losses Paid

Projected losses paid are the projected claims disbursements in a period, regardless of when the claim occurred. They typically include indemnification and ALAE, but not unallocated loss adjustment expenses (ULAE).

“Projected losses paid” is a cash-flow analysis that can be used in making investment decisions.

Projected Ultimate Losses

Projected ultimate losses are the accrual value of claims. They are the total amount that is expected to be paid in a particular claim period after all claims are closed. Projected ultimate losses are the total loss costs for a particular period. They typically include indemnification and ALAE, but not ULAE.

Other common names for projected ultimate losses are expected losses, ultimate losses and total losses.

Rate

The cost of a given unit of insurance. For example, in life insurance, it is the price of \$1,000 of the face amount. In property insurance, it is the rate per \$100 of value to be insured. The premium is the rate multiplied by the number of units of insurance purchased.

Retrospective Rating

A method for which the final premium is not determined until the end of the coverage period, and is based on the insured's own loss experience for that same period. It is usually subject to a maximum and minimum premium. A plan of this type can be used in various types of insurance, especially workers compensation and liability, and is usually elected by only very large insureds.

Salvage

Property taken over by an entity to reduce its loss. Automobile physical damage losses can be reduced by the sale of recovered vehicles.

Schedule Rating

The application of debits or credits within established ranges for various characteristics of a risk according to an established schedule of items. Under liability and automobile insurance, the schedule rating plan allows credits and debits for various good or bad

features of a particular commercial risk. An example in automobile schedule rating would be allowing credits for driver training classes or fleet maintenance programs.

Self-Insurance Retention (SIR)

That portion of a risk or potential loss assumed by an insured. It is often in the form of a per occurrence deductible.

Society of Actuaries (SOA)

A professional society for actuaries in areas of pensions, and life and health insurance work. The SOA grants the designation Associate of the Society of Actuaries (ASA) and Fellow of the Society of Actuaries (FSA).

Standard Premium

Most often used in connection with retrospective rating for Workers Compensation and General Liability Insurance. It is the premium of which the basic premium is a percentage and is developed by applying the regular rates to an insured's payroll.

State Fund

A fund set up by a state government to finance a mandatory insurance system, such as Workers Compensation or non-occupational disability benefits. Such a fund may be monopolistic, i.e., purchasers of the type of insurance required must place it in the state fund; or it may be competitive, i.e., an alternative to private insurance if the purchaser desires to use it.

Statutory Accounting Principles (SAP)

Those principles required by statute that must be followed by an insurance company or other similar entity when submitting its financial statement to the state insurance department. Such principles differ from (GAAP) in some important respects. For one thing SAP requires that expenses must be recorded immediately and cannot be deferred to track with premiums as they are earned and taken into revenue.

Unallocated Loss Adjustment Expenses

Unallocated loss adjustment expenses (ULAE) are the indirect expenses to settle claims. These expenses are primarily administration and claims handling expenses.

GASB Statement No. 10 requires that ULAE be included in financial statements and that they be calculated by actuarial methods.

Appendix C

Exhibits

Exhibits

The attached exhibits detail our analysis.

Estimated Outstanding Losses

A. Estimated Outstanding Losses as of 11/30/18

	Full Value			Present Value		
	Expected	70%	90%	Expected	70%	90%
I. Health Care Facilities						
(Ai) WC - Indemnity	\$17,729,458	\$20,211,582	\$25,707,714	\$16,090,400	\$18,343,056	\$23,331,080
(Aii) WC - Medical	4,608,297	5,253,459	6,682,031	4,088,056	4,660,384	5,927,681
(A) Workers compensation	\$22,337,755	\$25,465,041	\$32,389,745	\$20,178,456	\$23,003,440	\$29,258,761
(Bi) Cermak	7,767,000	9,087,390	12,271,860	7,076,086	8,279,021	11,180,216
(Bii) John H. Stroger	125,844,151	147,237,657	198,833,759	118,018,318	138,081,432	186,468,942
(Biii) Oak Forest	90,000	105,300	142,200	80,477	94,158	127,154
(Biv) Provident	5,685,000	6,651,450	8,982,300	5,187,656	6,069,558	8,196,496
(Bv) Unspecified	145,000	169,650	229,100	132,990	155,598	210,124
(B) Medical malpractice	\$139,531,151	\$163,251,447	\$220,459,219	\$130,495,527	\$152,679,767	\$206,182,933
(C) Claim Expense Reserves	2,651,496	3,022,706	3,844,669	2,479,793	2,826,964	3,595,700
(D) Subtotal	\$164,520,402	\$191,739,193	\$256,693,633	\$153,153,776	\$178,510,171	\$239,037,394
II. General Government						
(Ei) WC - Indemnity	81,965,560	93,440,738	118,850,062	73,943,082	84,295,113	107,217,469
(Eii) WC - Medical	30,615,605	34,901,790	44,392,627	27,719,333	31,600,040	40,193,033
(E) Workers compensation	\$112,581,165	\$128,342,528	\$163,242,689	\$101,662,415	\$115,895,153	\$147,410,502
(F) General liability	917,479	1,045,926	1,330,345	872,977	995,194	1,265,817
(G) Automobile liability	2,880,717	3,284,017	4,177,040	2,751,099	3,136,253	3,989,094
(H) Other liability	181,585,478	212,455,009	286,905,055	164,616,426	192,601,218	260,093,953
(I) Claim Expense Reserves	53,690,734	61,207,437	77,851,564	48,725,736	55,547,339	70,652,318
(J) Subtotal	\$351,655,573	\$406,334,918	\$533,506,693	\$318,628,653	\$368,175,158	\$483,411,683
Total	\$516,175,975	\$598,074,110	\$790,200,326	\$471,782,429	\$546,685,328	\$722,449,077

B. Estimated Outstanding Losses as of 11/30/19

	Full Value			Present Value		
	Expected	70%	90%	Expected	70%	90%
I. Health Care Facilities						
(Ai) WC - Indemnity	\$17,313,536	\$19,737,431	\$25,104,627	\$15,706,013	\$17,904,855	\$22,773,719
(Aii) WC - Medical	4,115,707	4,691,906	5,967,775	3,615,330	4,121,476	5,242,229
(A) Workers compensation	\$21,429,243	\$24,429,337	\$31,072,402	\$19,321,343	\$22,026,331	\$28,015,947
(Bi) Cermak	8,614,392	10,078,839	13,610,739	7,876,695	9,215,733	12,445,178
(Bii) John H. Stroger	115,025,468	134,579,798	181,740,239	107,354,541	125,604,813	169,620,175
(Biii) Oak Forest	100,743	117,869	159,174	91,277	106,794	144,218
(Biv) Provident	6,162,130	7,209,692	9,736,165	5,638,954	6,597,576	8,909,547
(Bv) Unspecified	144,235	168,755	227,891	133,013	155,625	210,161
(B) Medical malpractice	\$130,046,968	\$152,154,953	\$205,474,209	\$121,094,480	\$141,680,542	\$191,329,278
(C) Claim Expense Reserves	2,471,269	2,817,247	3,583,340	2,311,237	2,634,810	3,351,294
(D) Subtotal	\$153,947,480	\$179,401,536	\$240,129,952	\$142,727,060	\$166,341,683	\$222,696,520
II. General Government						
(Ei) WC - Indemnity	87,292,054	99,512,942	126,573,478	78,790,772	89,821,480	114,246,619
(Eii) WC - Medical	27,173,686	30,978,002	39,401,845	24,416,476	27,834,783	35,403,890
(E) Workers compensation	\$114,465,740	\$130,490,944	\$165,975,323	\$103,207,248	\$117,656,263	\$149,650,510
(F) General liability	1,030,710	1,175,009	1,494,530	984,754	1,122,620	1,427,893
(G) Automobile liability	3,440,533	3,922,208	4,988,773	3,286,785	3,746,935	4,765,838
(H) Other liability	174,286,813	203,915,511	275,373,165	157,988,740	184,846,826	249,622,209
(I) Claim Expense Reserves	51,771,826	59,019,881	75,069,147	46,984,277	53,562,076	68,127,202
(J) Subtotal	\$344,995,622	\$398,523,613	\$522,900,937	\$312,451,804	\$360,934,719	\$473,593,652
Total	\$498,943,102	\$577,925,150	\$763,030,889	\$455,178,864	\$527,276,402	\$696,290,172

C. Estimated Outstanding Losses as of 11/30/20

	Full Value			Present Value		
	Expected	70%	90%	Expected	70%	90%
I. Health Care Facilities						
(Ai) WC - Indemnity	\$16,965,128	\$19,340,246	\$24,599,436	\$15,389,493	\$17,544,022	\$22,314,765
(Aii) WC - Medical	3,969,573	4,525,313	5,755,881	3,476,991	3,963,770	5,041,637
(A) Workers compensation	\$20,934,701	\$23,865,559	\$30,355,316	\$18,866,484	\$21,507,792	\$27,356,402
(Bi) Cermak	8,875,186	10,383,968	14,022,794	8,094,745	9,470,852	12,789,697
(Bii) John H. Stroger	103,015,987	120,528,705	162,765,259	95,305,530	111,507,470	150,582,737
(Biii) Oak Forest	106,589	124,709	168,411	97,268	113,804	153,683
(Biv) Provident	6,418,254	7,509,357	10,140,841	5,871,498	6,869,653	9,276,967
(Bv) Unspecified	128,948	150,869	203,738	118,312	138,425	186,933
(B) Medical malpractice	\$118,544,964	\$138,697,608	\$187,301,043	\$109,487,353	\$128,100,203	\$172,990,018
(C) Claim Expense Reserves	2,252,698	2,568,075	3,266,412	2,106,820	2,401,775	3,054,889
(D) Subtotal	\$141,732,363	\$165,131,242	\$220,922,771	\$130,460,657	\$152,009,769	\$203,401,308
II. General Government						
(Ei) WC - Indemnity	91,761,155	104,607,717	133,053,675	82,870,763	94,472,670	120,162,606
(Eii) WC - Medical	25,798,880	29,410,723	37,408,376	23,096,934	26,330,505	33,490,554
(E) Workers compensation	\$117,560,035	\$134,018,440	\$170,462,051	\$105,967,697	\$120,803,175	\$153,653,161
(F) General liability	1,066,043	1,215,289	1,545,762	1,019,591	1,162,334	1,478,407
(G) Automobile liability	3,868,980	4,410,637	5,610,021	3,700,763	4,218,870	5,366,106
(H) Other liability	191,115,199	223,604,783	301,962,014	173,270,691	202,726,708	273,767,692
(I) Claim Expense Reserves	56,779,975	64,729,171	82,330,963	51,529,303	58,743,405	74,717,489
(J) Subtotal	\$370,390,232	\$427,978,320	\$561,910,812	\$335,488,045	\$387,654,492	\$508,982,855
Total	\$512,122,595	\$593,109,563	\$782,833,583	\$465,948,701	\$539,664,261	\$712,384,163

Estimated Outstanding Losses

Footnotes:

Section I, Ai is from Exhibit WC-HC-Ind-11.

Section I, Aii is from Exhibit WC-HC-Med-11.

Section I, Bi is from Exhibit MM-Cermak-11.

Section I, Bii is from Exhibit MM-Stroger-11.

Section I, Biii is from Exhibit MM-OakForest-11.

Section I, Biv is from Exhibit MM-Provident-11.

Section I, Bv is from Exhibit MM-Unspecified-11.

Section I, C is from Summary Exhibit 7.

Section II, Ei is from Exhibit WC-Gov-Ind-11.

Section II, Eii is from Exhibit WC-Gov-Med-11.

Section II, F is from Exhibit GL-11.

Section II, G is from Exhibit AL-11.

Section II, H is from Exhibit OL-11.

Section II, I is from Summary Exhibit 7.

Comparison of Estimated Outstanding Losses

	As of November 30, 2017			As of November 30, 2018			Change		
	Case Reserves	IBNR	Total	Case Reserves	IBNR	Total	Case Reserves	IBNR	Total
I. Health Care Facilities									
(Ai) WC - Indemnity	\$9,266,639	\$6,575,481	\$15,842,120	\$10,334,484	\$7,394,975	\$17,729,459	\$1,067,845	\$819,494	\$1,887,339
(Aii) WC - Medical	3,172,767	837,388	4,010,155	3,501,152	1,107,143	4,608,295	328,385	269,755	598,140
(A) Workers compensation	\$12,439,406	\$7,412,869	\$19,852,275	\$13,835,635	\$8,502,118	\$22,337,753	\$1,396,230	\$1,089,249	\$2,485,478
(Bi) Cermak	4,550,000	2,795,000	7,345,000	5,000,000	2,767,000	7,767,000	450,000	-28,000	422,000
(Bii) John H. Stroger	85,530,000	38,466,151	123,996,151	88,275,500	37,568,651	125,844,151	2,745,500	-897,500	1,848,000
(Biii) Oak Forest	500,000	260,000	760,000	0	90,000	90,000	-500,000	-170,000	-670,000
(Biv) Provident	3,825,000	3,245,000	7,070,000	2,875,000	2,810,000	5,685,000	-950,000	-435,000	-1,385,000
(Bv) Unspecified	50,000	150,000	200,000	50,000	95,000	145,000	0	-55,000	-55,000
(B) Medical malpractice	\$94,455,000	\$44,916,151	\$139,371,151	\$96,200,500	\$43,330,651	\$139,531,151	\$1,745,500	-\$1,585,500	\$160,000
(C) Claim Expense Reserves		2,672,166	2,672,166		2,651,496	2,651,496	0	-20,670	-20,670
(D) Subtotal	\$106,894,406	\$55,001,186	\$161,895,592	\$110,036,135	\$54,484,265	\$164,520,401	\$3,141,730	-\$516,921	\$2,624,809
II. General Government									
(Ei) WC - Indemnity	37,704,248	36,375,695	74,079,943	42,866,095	39,099,466	81,965,560	5,161,846	2,723,771	7,885,617
(Eii) WC - Medical	20,957,911	9,296,252	30,254,163	21,108,941	9,506,664	30,615,605	151,030	210,412	361,442
(E) Workers compensation	\$58,662,159	\$45,671,947	\$104,334,106	\$63,975,035	\$48,606,130	\$112,581,165	\$5,312,876	\$2,934,183	\$8,247,059
(F) General liability	257,373	591,337	848,710	425,131	492,348	917,479	167,758	-98,989	68,770
(G) Automobile liability	311,855	1,723,249	2,035,103	1,094,271	1,786,446	2,880,717	782,416	63,197	845,613
(H) Other liability	83,605,321	48,908,866	132,514,187	119,523,601	62,061,877	181,585,478	35,918,280	13,153,010	49,071,290
(I) Claim Expense Reserves		40,123,612	40,123,612		53,690,734	53,690,734	0	13,567,122	13,567,122
(J) Subtotal	\$142,836,708	\$137,019,010	\$279,855,718	\$185,018,038	\$166,637,534	\$351,655,573	\$42,181,331	\$29,618,524	\$71,799,855
Total	\$249,731,113	\$192,020,197	\$441,751,310	\$295,054,174	\$221,121,800	\$516,175,973	\$45,323,060	\$29,101,603	\$74,424,663

Projected Ultimate Losses

A. 2018/19 Projected Ultimate Losses

	Full Value			Present Value		
	Expected	70%	90%	Expected	70%	90%
I. Health Care Facilities						
(Ai) WC - Indemnity	\$3,482,000	\$4,073,940	\$5,501,560	\$3,124,000	\$3,655,080	\$4,935,920
(Aii) WC - Medical	1,372,000	1,605,240	2,167,760	1,267,000	1,482,390	2,001,860
(A) Workers compensation	\$4,854,000	\$5,679,180	\$7,669,320	\$4,391,000	\$5,137,470	\$6,937,780
(Bi) Cermak	1,747,000	2,096,400	3,074,720	1,471,000	1,765,200	2,588,960
(Bii) John H. Stroger	16,840,000	20,208,000	29,638,400	14,180,000	17,016,000	24,956,800
(Biii) Oak Forest	16,000	19,200	28,160	14,000	16,800	24,640
(Biv) Provident	1,210,000	1,452,000	2,129,600	1,020,000	1,224,000	1,795,200
(Bv) Unspecified	20,000	24,000	35,200	20,000	24,000	35,200
(B) Medical malpractice	\$19,833,000	\$23,799,600	\$34,906,080	\$16,705,000	\$20,046,000	\$29,400,800
(C) Subtotal	\$24,687,000	\$29,478,780	\$42,575,400	\$21,096,000	\$25,183,470	\$36,338,580
II. General Government						
(Di) WC - Indemnity	27,601,000	32,293,170	43,609,580	24,699,000	28,897,830	39,024,420
(Dii) WC - Medical	9,343,000	10,931,310	14,761,940	8,631,000	10,098,270	13,636,980
(D) Workers compensation	\$36,944,000	\$43,224,480	\$58,371,520	\$33,330,000	\$38,996,100	\$52,661,400
(E) General liability	400,000	468,000	632,000	367,000	429,390	579,860
(F) Automobile liability	1,927,000	2,254,590	3,044,660	1,794,000	2,098,980	2,834,520
(G) Other liability	30,838,000	37,005,600	54,274,880	26,340,000	31,608,000	46,358,400
(H) Subtotal	\$70,109,000	\$82,952,670	\$116,323,060	\$61,831,000	\$73,132,470	\$102,434,180
Total	\$94,796,000	\$112,431,450	\$158,898,460	\$82,927,000	\$98,315,940	\$138,772,760

B. 2019/20 Projected Ultimate Losses

	Full Value			Present Value		
	Expected	70%	90%	Expected	70%	90%
I. Health Care Facilities						
(Ai) WC - Indemnity	\$3,474,000	\$4,064,580	\$5,488,920	\$3,117,000	\$3,646,890	\$4,924,860
(Aii) WC - Medical	1,427,000	1,669,590	2,254,660	1,318,000	1,542,060	2,082,440
(A) Workers compensation	\$4,901,000	\$5,734,170	\$7,743,580	\$4,435,000	\$5,188,950	\$7,007,300
(Bi) Cermak	1,817,000	2,180,400	3,197,920	1,530,000	1,836,000	2,692,800
(Bii) John H. Stroger	17,520,000	21,024,000	30,835,200	14,750,000	17,700,000	25,960,000
(Biii) Oak Forest	17,000	20,400	29,920	14,000	16,800	24,640
(Biv) Provident	1,260,000	1,512,000	2,217,600	1,060,000	1,272,000	1,865,600
(Bv) Unspecified	20,000	24,000	35,200	20,000	24,000	35,200
(B) Medical malpractice	\$20,634,000	\$24,760,800	\$36,315,840	\$17,374,000	\$20,848,800	\$30,578,240
(C) Subtotal	\$25,535,000	\$30,494,970	\$44,059,420	\$21,809,000	\$26,037,750	\$37,585,540
II. General Government						
(Di) WC - Indemnity	28,015,000	32,777,550	44,263,700	25,069,000	29,330,730	39,609,020
(Dii) WC - Medical	9,652,000	11,292,840	15,250,160	8,916,000	10,431,720	14,087,280
(D) Workers compensation	\$37,667,000	\$44,070,390	\$59,513,860	\$33,985,000	\$39,762,450	\$53,696,300
(E) General liability	416,000	486,720	657,280	382,000	446,940	603,560
(F) Automobile liability	1,994,000	2,332,980	3,150,520	1,856,000	2,171,520	2,932,480
(G) Other liability	32,071,000	38,485,200	56,444,960	27,394,000	32,872,800	48,213,440
(H) Subtotal	\$72,148,000	\$85,375,290	\$119,766,620	\$63,617,000	\$75,253,710	\$105,445,780
Total	\$97,683,000	\$115,870,260	\$163,826,040	\$85,426,000	\$101,291,460	\$143,031,320

C. 2020/21 Projected Ultimate Losses

	Full Value			Present Value		
	Expected	70%	90%	Expected	70%	90%
I. Health Care Facilities						
(Ai) WC - Indemnity	\$3,526,000	\$4,125,420	\$5,571,080	\$3,164,000	\$3,701,880	\$4,999,120
(Aii) WC - Medical	1,484,000	1,736,280	2,344,720	1,370,000	1,602,900	2,164,600
(A) Workers compensation	\$5,010,000	\$5,861,700	\$7,915,800	\$4,534,000	\$5,304,780	\$7,163,720
(Bi) Cermak	1,890,000	2,268,000	3,326,400	1,591,000	1,909,200	2,800,160
(Bii) John H. Stroger	18,220,000	21,864,000	32,067,200	15,340,000	18,408,000	26,998,400
(Biii) Oak Forest	18,000	21,600	31,680	15,000	18,000	26,400
(Biv) Provident	1,310,000	1,572,000	2,305,600	1,100,000	1,320,000	1,936,000
(Bv) Unspecified	20,000	24,000	35,200	20,000	24,000	35,200
(B) Medical malpractice	\$21,458,000	\$25,749,600	\$37,766,080	\$18,066,000	\$21,679,200	\$31,796,160
(C) Subtotal	\$26,468,000	\$31,611,300	\$45,681,880	\$22,600,000	\$26,983,980	\$38,959,880
II. General Government						
(Di) WC - Indemnity	28,435,000	33,268,950	44,927,300	397,000	464,490	627,260
(Dii) WC - Medical	10,038,000	11,744,460	15,860,040	9,273,000	10,849,410	14,651,340
(D) Workers compensation	\$38,473,000	\$45,013,410	\$60,787,340	\$9,670,000	\$11,313,900	\$15,278,600
(E) General liability	432,000	505,440	682,560	397,000	464,490	627,260
(F) Automobile liability	2,064,000	2,414,880	3,261,120	1,921,000	2,247,570	3,035,180
(G) Other liability	33,354,000	40,024,800	58,703,040	28,490,000	34,188,000	50,142,400
(H) Subtotal	\$74,323,000	\$87,958,530	\$123,434,060	\$40,478,000	\$48,213,960	\$69,083,440
Total	\$100,791,000	\$119,569,830	\$169,115,940	\$63,078,000	\$75,197,940	\$108,043,320

Projected Ultimate Losses

Footnotes:

Section I, Ai is from Exhibit WC-HC-Ind-10.

Section I, Aii is from Exhibit WC-HC-Med-10.

Section I, Bi is from Exhibit MM-Cermak-10.

Section I, Bii is from Exhibit MM-Stroger-10.

Section I, Biii is from Exhibit MM-OakForest-10.

Section I, Biv is from Exhibit MM-Provident-10.

Section I, Bv is from Exhibit MM-Unspecified-10.

Section II, Ei is from Exhibit WC-Gov-Ind-10.

Section II, Eii is from Exhibit WC-Gov-Med-10.

Section II, F is from Exhibit GL-10.

Section II, G is from Exhibit AL-10.

Section II, H is from Exhibit OL-10.

Split of Liability Losses Among Healthcare and Government

	Coverage (1)	Total (2)	Healthcare (3)	Government (4)
1. 2017/18 Payments				
General liability		\$63,241	\$18,448	\$44,793
Automobile liability		300,787	1,030	299,757
Other liability		18,269,330	6,961,026	11,308,304
Average		\$6,211,120	\$2,326,835	\$3,884,285
2. 11/30/18 Case Reserves				
General liability		\$425,131	\$55,000	\$370,131
Automobile liability		1,094,271	9,614	1,084,656
Other liability		119,523,601	18,612,000	100,911,601
Average		\$40,347,668	\$6,225,538	\$34,122,130
3. Ratio to Total				
		Payments	37.5%	62.5%
		Case Reserves	15.4%	84.6%
		Prior	12.5%	87.5%
		Selected	12.5%	87.5%
4. Estimated Outstanding Losses				
Estimated Outstanding Losses as of 11/30/18				
a. General Liability		\$917,479	\$114,685	\$802,794
b. Automobile Liability		2,880,717	360,090	2,520,627
c. Other Liability		181,585,478	22,698,185	158,887,293
Estimated Outstanding Losses as of 11/30/19				
a. General Liability		\$1,030,710	\$128,839	\$901,871
b. Automobile Liability		3,440,533	430,067	3,010,466
c. Other Liability		174,286,813	21,785,852	152,500,961
Estimated Outstanding Losses as of 11/30/20				
a. General Liability		\$1,066,043	\$133,255	\$932,788
b. Automobile Liability		3,868,980	483,623	3,385,358
c. Other Liability		191,115,199	23,889,400	167,225,799
5. Projected Ultimate Losses				
2018/19				
a. General Liability		\$400,000	\$50,000	\$350,000
b. Automobile Liability		1,927,000	240,875	1,686,125
c. Other Liability		30,838,000	3,854,750	26,983,250
2019/20				
a. General Liability		\$416,000	\$52,000	\$364,000
b. Automobile Liability		1,994,000	249,250	1,744,750
c. Other Liability		32,071,000	4,008,875	28,062,125
2020/21				
a. General Liability		\$432,000	\$54,000	\$378,000
b. Automobile Liability		2,064,000	258,000	1,806,000
c. Other Liability		33,354,000	4,169,250	29,184,750

Actual and Projected Paid Losses (\$Millions)

	Actual Limited Paid Losses 2014/15	Actual Limited Paid Losses 2015/16	Actual Limited Paid Losses 2016/17	Actual Limited Paid Losses 2017/18	Average Paid Losses 2014/15 to 2017/18	Projected Paid Losses 2018/19	Projected Paid Losses 2019/20	Projected Paid Losses 2020/21
I. Health Care Facilities								
(Ai) WC - Indemnity	\$2.41		\$2.77	\$2.60		\$3.90	\$3.82	\$3.75
(Aii) WC - Medical	1.37		0.75	0.83		1.86	1.57	1.51
(A) Workers compensation	\$3.78	\$4.09	\$3.52	\$3.43	\$3.71	\$5.76	\$5.40	\$5.26
(Bi) Cermak	1.00	0.28	0.01	1.98	0.82	0.90	1.56	1.31
(Bii) John H. Stroger	24.76	11.22	11.93	22.78	17.67	27.66	29.53	27.03
(Biii) Oak Forest	0.18	0.00	0.00	0.00	0.04	0.01	0.01	0.02
(Biv) Provident	0.37	1.89	3.11	0.99	1.59	0.73	1.00	1.18
(Bv) Unspecified	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.02
(B) Medical malpractice	\$26.30	\$13.38	\$15.04	\$25.74	\$20.12	\$29.32	\$32.14	\$29.55
(C) Subtotal	\$30.09	\$17.47	\$18.56	\$29.17	\$23.82	\$35.08	\$37.53	\$34.81
II. General Government								
(Di) WC - Indemnity	12.30		21.30	22.44		22.27	23.55	24.71
(Dii) WC - Medical	7.60		8.70	7.52		12.78	11.03	10.54
(D) Workers compensation	\$19.90	\$26.98	\$30.01	\$29.96	\$26.71	\$35.06	\$34.57	\$35.25
(E) General liability	0.22	0.14	0.52	0.06	0.24	0.29	0.38	0.41
(F) Automobile liability	1.02	6.62	3.90	0.30	2.96	1.37	1.57	1.82
(G) Other liability	5.51	10.48	21.03	18.27	13.82	38.14	15.24	16.84
(H) Subtotal	\$26.65	\$44.22	\$55.47	\$48.59	\$43.73	\$74.85	\$51.76	\$54.33
Total	\$56.73	\$61.69	\$74.03	\$77.77	\$67.55	\$109.93	\$89.29	\$89.14

Section I, Ai is from Exhibits WC-HC-Indem-12, WC-HC-Indem-13, and WC-HC-Indem-14.

Section I, Aii is from Exhibits WC-HC-Med-12, WC-HC-Med-13, and WC-HC-Med-14.

Section I, Bi is from Exhibits MM-Cermak-12, MM-Cermak-13, and MM-Cermak-14.

Section I, Bii is from Exhibits MM-Stroger-12, MM-Stroger-13, and MM-Stroger-14.

Section I, Biii is from Exhibits MM-Oak Forest-12, MM-Oak Forest-13, and MM-Oak Forest-14.

Section I, Biv is from Exhibits MM-Provident-12, MM-Provident-13, and MM-Provident-14.

Section I, Bv is from Exhibits MM-Unspecified-12, MM-Unspecified-13, and MM-Unspecified-14.

Section II, Ei is from Exhibits WC-Gov-Indem-12, WC-Gov-Indem-13, and WC-Gov-Indem-14.

Section II, Eii is from Exhibits WC-Gov-Med-12, WC-Gov-Med-13, and WC-Gov-Med-14.

Section II, F is from Exhibits GL-12, GL-13, and GL-14.

Section II, G is from Exhibits AL-12, AL-13, and AL-14.

Section II, H is from Exhibits OL-12, OL-13, and OL-14.

Projected Ultimate Limited Losses (\$Millions)

	Projected Ultimate Limited Losses 2014/15	Projected Ultimate Limited Losses 2015/16	Projected Ultimate Limited Losses 2016/17	Projected Ultimate Limited Losses 2017/18	Average Ultimate Limited Losses 2014/15 to 2017/18	Projected Ultimate Limited Losses 2018/19	Projected Ultimate Limited Losses 2019/20	Projected Ultimate Limited Losses 2020/21
I. Health Care Facilities								
(Ai) WC - Indemnity	\$2.10	\$3.10	\$3.70	\$3.70	\$3.15	\$3.48	\$3.47	\$3.53
(Aii) WC - Medical	0.53	1.05	1.50	1.45	1.13	1.37	1.43	1.48
(A) Workers compensation	\$2.63	\$4.15	\$5.20	\$5.15	\$4.28	\$4.85	\$4.90	\$5.01
(Bi) Cermak	3.50	3.40	1.70	1.00	2.40	1.75	1.82	1.89
(Bii) John H. Stroger	15.00	10.00	11.50	12.50	12.25	16.84	17.52	18.22
(Biii) Oak Forest	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02
(Biv) Provident	0.30	4.10	0.90	1.00	1.58	1.21	1.26	1.31
(Bv) Unspecified	0.10	0.01	0.02	0.02	0.04	0.02	0.02	0.02
(B) Medical malpractice	\$18.92	\$17.53	\$14.14	\$14.55	\$16.28	\$19.83	\$20.63	\$21.46
(C) Subtotal	\$21.54	\$21.68	\$19.34	\$19.70	\$20.57	\$24.69	\$25.54	\$26.47
II. General Government								
(Di) WC - Indemnity	20.19	27.00	29.25	29.50	26.49	27.60	28.02	28.44
(Dii) WC - Medical	7.00	12.00	13.00	14.00	11.50	9.34	9.65	10.04
(D) Workers compensation	\$27.19	\$39.00	\$42.25	\$43.50	\$37.99	\$36.94	\$37.67	\$38.47
(E) General liability	0.35	0.28	0.33	0.47	0.36	0.40	0.42	0.43
(F) Automobile liability	0.21	1.84	0.95	1.70	1.17	1.93	1.99	2.06
(G) Other liability	29.00	26.25	27.00	27.00	27.31	30.84	32.07	33.35
(H) Subtotal	\$56.76	\$67.36	\$70.53	\$72.67	\$66.83	\$70.11	\$72.15	\$74.32
Total	\$78.30	\$89.04	\$89.87	\$92.37	\$87.39	\$94.80	\$97.68	\$100.79

Section I, Ai is from Exhibits WC-HC-Indem-9 and WC-HC-Indem-10.

Section I, Aii is from Exhibits WC-HC-Med-9 and WC-HC-Med-10.

Section I, Bi is from Exhibits MM-Cermak-9 and MM-Cermak-10.

Section I, Bii is from Exhibits MM-Stroger-9 and MM-Stroger-10.

Section I, Biii is from Exhibits MM-Oak Forest-9 and MM-Oak Forest-10.

Section I, Biv is from Exhibits MM-Provident-9 and MM-Provident-10.

Section I, Bv is from Exhibits MM-Unspecified-9 and MM-Unspecified-10.

Section II, Ei is from Exhibits WC-Gov-Indem-9 and WC-Gov-Indem-10.

Section II, Eii is from Exhibits WC-Gov-Med-9 and WC-Gov-Med-10.

Section II, F is from Exhibits GL-9 and GL-10.

Section II, G is from Exhibits AL-9 and AL-10.

Section II, H is from Exhibits OL-9 and OL-10.

Calculation of Claims-Related Expense Reserves

	Fiscal Year (1)	Medical Malpractice and Liability (2)	Medical Malpractice (3)	Liability (4)
1. Expense Payments				
	2000/01	\$2,388,809	\$238,881	\$2,149,928
	2001/02	2,400,000	240,000	2,160,000
	2002/03	3,300,699	330,070	2,970,629
	2003/04	5,625,222	562,522	5,062,700
	2004/05	5,813,337	581,334	5,232,004
	2005/06	5,333,045	533,305	4,799,741
	2006/07	7,372,403	737,240	6,635,162
	2007/08	9,439,841	943,984	8,495,856
	2008/09	10,508,333	1,050,833	9,457,500
	2009/10	10,557,734	1,055,773	9,501,961
	2010/11	8,848,598	884,860	7,963,739
	2011/12	7,002,846	700,285	6,302,562
	2012/13	9,003,473	900,347	8,103,126
	2013/14	8,317,476	831,748	7,485,728
	2014/15	6,732,840	384,101	6,348,739
	2015/16	5,722,540	345,259	5,377,281
	2016/17	7,097,527	709,753	6,387,774
	2017/18	14,449,327	1,444,933	13,004,394
	Average	\$7,217,447	\$693,068	\$6,524,379
2. Average FY 2001-2017 Loss Payments		\$36,871,831	\$21,953,781	\$14,918,051
3. Ratio of Expense Payments to Loss Payments (Section 1 / Section 2)		Actual	3.16%	43.73%
		Prior	2.90%	43.00%
		Selected	2.90%	43.00%
4. Case Reserves as of 11/30/18		\$217,243,503	\$96,200,500	\$121,043,003
5. IBNR Reserves as of 11/30/18		107,671,321	43,330,651	64,340,670
6. Estimated Undiscounted Expense Reserves as of 11/30/18		56,342,230	2,651,496	53,690,734
7. Discount Factor		0.909	0.935	0.908
8. Estimated Discounted Expense Reserves as of 11/30/18		51,205,529	2,479,793	48,725,736
9. Estimated Outstanding Losses as of 11/30/19		308,805,024	130,046,968	178,758,056
9a. Estimated Case Reserves as of 11/30/19		206,378,502	89,661,579	116,716,923
9b. Estimated IBNR Reserves as of 11/30/19		102,426,522	40,385,389	62,041,133
10. Estimated Undiscounted Expense Reserves as of 11/30/19		54,243,095	2,471,269	51,771,826
11. Estimated Discounted Expense Reserves as of 11/30/19		49,295,514	2,311,237	46,984,277
12. Estimated Outstanding Losses as of 11/30/20		314,595,186	118,544,964	196,050,222
12a. Estimated Case Reserves as of 11/30/20		209,738,999	81,731,461	128,007,538
12b. Estimated IBNR Reserves as of 11/30/20		104,856,187	36,813,503	68,042,684
13. Estimated Undiscounted Expense Reserves as of 11/30/20		59,032,673	2,252,698	56,779,975
14. Estimated Discounted Expense Reserves as of 11/30/20		53,636,122	2,106,820	51,529,303

Section 6 = (Section 3 x 50% x Section 4) + (Section 3 x Section 5).

Section 7 is based on the discounted reserves divided by the undiscounted reserves.

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3) + (6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7) x (8) (9)
to 1998/99	\$283,991,424	\$0	\$283,991,424	\$283,991,424	\$0	\$0	1.00	\$0
1999/00	37,925,000	0	37,925,000	37,925,000	0	0	1.00	0
2000/01	11,706,000	0	11,706,000	11,706,000	0	0	1.00	0
2001/02	25,697,540	0	25,697,540	25,697,540	0	0	1.00	0
2002/03	7,162,500	0	7,162,500	7,162,500	0	0	1.00	0
2003/04	39,571,000	0	39,571,000	39,571,000	0	0	1.00	0
2004/05	21,597,600	20,000,000	41,597,600	43,600,750	2,003,150	22,003,150	1.00	22,003,150
2005/06	24,620,000	1,000,000	25,620,000	25,725,000	105,000	1,105,000	1.00	1,105,000
2006/07	4,752,500	100,000	4,852,500	4,862,500	10,000	110,000	1.00	110,000
2007/08	8,302,000	0	8,302,000	8,302,000	0	0	0.99	0
2008/09	8,380,000	0	8,380,000	8,380,000	0	0	0.98	0
2009/10	11,202,500	0	11,202,500	11,202,500	0	0	0.97	0
2010/11	10,718,000	0	10,718,000	10,718,000	0	0	0.96	0
2011/12	37,293,999	1,050,000	38,343,999	38,950,000	606,001	1,656,001	0.95	1,581,194
2012/13	20,255,000	45,900,000	66,155,000	67,925,000	1,770,000	47,670,000	0.94	44,980,345
2013/14	1,675,000	1,450,000	3,125,000	8,125,000	5,000,000	6,450,000	0.94	6,093,099
2014/15	58,000	16,100,000	16,158,000	18,915,000	2,757,000	18,857,000	0.93	17,572,034
2015/16	4,540,000	6,775,000	11,315,000	17,530,000	6,215,000	12,990,000	0.91	11,864,132
2016/17	0	2,375,500	2,375,500	14,140,000	11,764,500	14,140,000	0.89	12,588,949
2017/18	0	1,450,000	1,450,000	14,550,000	13,100,000	14,550,000	0.87	12,597,624
Total	\$559,448,063	\$96,200,500	\$655,648,563	\$698,979,214	\$43,330,651	\$139,531,151		\$130,495,527

Summary of Loss Payments

Claim Period (1)	Workers Compensation (2)	Liability Common Claims (3)	Medical Malpractice (Excluding Large Claims) (4)	Liability Catastrophe Claims and Med Mal Claims (5)	Total (6)
I. Actual Payments					
1995/96	\$10,993,178	\$2,423,315	\$17,479,600	\$750,000	\$31,646,093
1996/97	8,868,321	3,072,412	6,189,500	0	18,130,233
1997/98	9,055,271	2,956,966	23,423,000	0	35,435,237
1998/99	9,294,766	3,339,344	19,898,900	15,772,220	48,305,230
1999/00	9,777,906	3,779,701	36,918,877	11,635,555	62,112,039
2000/01	10,377,014	3,842,381	30,313,000	17,894,722	62,427,117
2001/02	11,711,329	1,231,819	21,071,700	2,975,000	36,989,848
2002/03	11,743,398	2,184,184	28,420,541	5,200,000	47,548,123
2003/04	14,846,640	3,467,845	17,786,500	625,000	36,725,985
2004/05	16,136,301	2,754,958	13,779,500	17,750,000	50,420,759
2005/06	16,824,867	2,573,671	16,605,040	29,567,543	65,571,121
2006/07	16,278,694	7,784,841	24,334,820	16,760,000	65,158,355
2007/08	19,695,589	9,983,268	22,141,450	29,450,250	81,270,557
2008/09	24,349,162	8,530,865	16,469,000	0	49,349,027
2009/10	19,238,537	12,743,402	16,758,000	0	48,739,939
2010/11	21,648,616	6,855,702	18,765,000	44,634,001	91,903,319
2011/12	20,142,760	18,175,329	3,740,000	0	42,058,088
2012/13	18,890,070	9,919,330	9,292,499	20,000,000	58,101,899
2013/14	23,156,358	9,323,194	12,080,000	0	44,559,552
2014/15	23,678,804	6,752,584	14,303,000	12,000,000	56,734,388
2015/16	31,071,950	11,235,817	9,130,000	10,250,000	61,687,767
2016/17	33,526,713	9,334,603	4,039,000	27,125,000	74,025,316
2017/18	33,390,655	5,044,759	7,813,000	31,518,600	77,767,013
II. Estimated Future Payments					
2018/19	40,821,937	39,790,618	29,317,183		109,929,738
2019/20	39,968,247	17,188,834	32,136,004		89,293,085
2020/21	40,515,221	19,075,018	29,551,740		89,141,979

Payments are limited to Cook County's self-insured retentions.

(3) and (4) exclude claims included in (5).

Section I, (5) is defined as payments of at least \$1 million for automobile liability and \$3 million for general liability, other liability, and medical malpractice.

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)
Summary by Coverage

Losses Limited to Actual Retention

Coverage (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9)	Estimated Outstanding Losses 11/30/18 (7) - (10)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Percentage Change in Ultimate (7) / (6) - 1 (9)	Limited Paid Losses 11/30/17 (10)	Limited Paid Losses 11/30/18 (11)	Limited Case Reserves 11/30/17 (2) - (10) (12)	Limited Case Reserves 11/30/18 (3) - (11) (13)	Estimated IBNR 11/30/17 (4)-(12) (14)	Estimated IBNR 11/30/18 (5)-(13) (15)
A. Health Care Facilities														
(Ai) WC - Indemnity	\$88,483	\$92,026	\$15,842	\$17,729	\$98,182	\$99,421	\$1,239	1.3%	\$79,217	\$81,691	\$9,267	\$10,334	\$6,575	\$7,395
(Aii) WC - Medical	27,793	28,906	4,010	4,608	29,849	30,013	165	0.6%	24,620	25,405	3,173	3,501	837	1,107
(Bi) Cermak	23,871	26,299	7,345	7,767	27,926	29,066	1,140	4.1%	19,321	21,299	4,550	5,000	2,795	2,767
(Bii) John H. Stroger	496,486	522,012	123,996	125,844	550,392	559,580	9,188	1.7%	410,956	433,736	85,530	88,276	38,466	37,569
(Biii) Oak Forest	28,700	28,200	760	90	29,000	28,290	(710)	-2.4%	28,200	28,200	500	-	260	90
(Biv) Provident	33,120	33,155	7,070	5,685	37,715	35,965	(1,750)	-4.6%	29,295	30,280	3,825	2,875	3,245	2,810
(Bv) Unspecified	45,983	45,983	200	145	46,153	46,078	(75)	-0.2%	45,933	45,933	50	50	150	95
B. General Government														
(Ei) WC - Indemnity	282,256	308,921	74,080	81,966	343,371	348,020	4,649	1.4%	244,552	266,054	37,704	42,866	36,376	39,099
(Eii) WC - Medical	134,201	141,153	30,254	30,616	152,224	150,659	(1,564)	-1.0%	113,243	120,044	20,958	21,109	9,296	9,507
(F) General liability	10,042	10,273	849	917	11,103	10,765	(338)	-3.0%	9,784	9,847	257	425	591	492
(G) Automobile liability	33,386	34,469	2,035	2,881	36,885	36,256	(630)	-1.7%	33,074	33,375	312	1,094	1,723	1,786
(H) Other liability	342,463	396,651	132,514	181,585	416,243	458,713	42,470	10.2%	258,858	277,127	83,605	119,524	48,909	62,062
Total	\$1,546,785	\$1,668,047	\$398,956	\$459,834	\$1,779,043	\$1,832,826	\$53,783	3.0%	\$1,297,054	\$1,372,992	\$249,731	\$295,054	\$149,224	\$164,780

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)
Summary by Claim Period

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9)	Estimated Outstanding Losses 11/30/18 (7) - (10)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Percentage Change in Ultimate (7) / (6) - 1 (9)	Limited Paid Losses 11/30/17 (10)	Limited Paid Losses 11/30/18 (11)	Limited Case Reserves 11/30/17 (2) - (10) (12)	Limited Case Reserves 11/30/18 (3) - (11) (13)	Estimated IBNR 11/30/17 (4)-(12) (14)	Estimated IBNR 11/30/18 (5)-(13) (15)
to 1998/99	\$539,920	\$550,603	\$7,285	\$19,751	\$540,593	\$552,658	\$12,065	2.2%	\$533,309	\$532,907	\$6,611	\$17,696	\$674	\$2,054
1999/00	54,198	54,141	14	16	54,201	54,143	(58)	-0.1%	54,187	54,127	11	14	3	2
2000/01	45,681	46,069	799	1,359	45,838	46,436	597	1.3%	45,039	45,076	642	993	157	366
2001/02	55,621	55,442	1,017	900	55,862	55,608	(254)	-0.5%	54,845	54,708	776	734	241	166
2002/03	30,640	30,719	564	631	30,781	30,848	67	0.2%	30,217	30,217	423	502	141	128
2003/04	124,234	123,926	1,671	1,003	124,692	124,120	(572)	-0.5%	123,021	123,117	1,214	809	458	193
2004/05	76,672	84,574	26,236	34,809	79,260	87,894	8,634	10.9%	53,024	53,085	23,648	31,489	2,588	3,320
2005/06	47,342	48,982	908	3,133	47,629	49,954	2,325	4.9%	46,721	46,821	621	2,161	287	972
2006/07	35,419	35,025	2,716	1,749	36,436	35,681	(755)	-2.1%	33,721	33,932	1,698	1,093	1,018	656
2007/08	48,525	48,988	8,015	1,926	49,935	49,691	(244)	-0.5%	41,920	47,765	6,605	1,222	1,410	704
2008/09	39,486	38,844	4,333	3,212	40,858	40,308	(550)	-1.3%	36,525	37,096	2,961	1,748	1,372	1,464
2009/10	49,417	49,010	5,300	3,467	51,366	50,270	(1,096)	-2.1%	46,066	46,803	3,351	2,207	1,949	1,260
2010/11	50,907	60,815	23,626	28,310	55,529	66,186	10,656	19.2%	31,903	37,876	19,003	22,939	4,623	5,371
2011/12	67,963	69,349	13,848	10,783	72,541	73,866	1,325	1.8%	58,693	63,083	9,270	6,266	4,578	4,517
2012/13	94,423	99,559	78,147	59,551	104,185	105,453	1,268	1.2%	26,038	45,902	68,385	53,657	9,763	5,894
2013/14	42,204	48,104	26,056	28,194	54,806	60,136	5,330	9.7%	28,751	31,942	13,454	16,162	12,602	12,032
2014/15	56,353	65,071	59,251	56,845	77,352	78,299	947	1.2%	18,100	21,454	38,253	43,617	20,998	13,228
2015/16	48,239	67,401	57,448	57,326	81,049	89,040	7,991	9.9%	23,601	31,714	24,638	35,687	32,810	21,639
2016/17	39,541	52,989	81,720	67,164	93,095	89,865	(3,230)	-3.5%	11,375	22,701	28,167	30,288	53,554	36,876
2017/18		38,433		79,706	83,033	92,370	9,337	11.2%		12,664		25,769		53,937
Total	\$1,546,785	\$1,668,047	\$398,956	\$459,834	\$1,779,043	\$1,832,826	\$53,783	3.0%	\$1,297,054	\$1,372,992	\$249,731	\$295,054	\$149,224	\$164,780
Total (ex FY18)	\$1,546,785	\$1,629,614	\$398,956	\$380,128	\$1,696,010	\$1,740,456	\$44,446	2.6%	\$1,297,054	\$1,360,329	\$249,731	\$269,285	\$149,224	\$110,842

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9)	Estimated Outstanding Losses 11/30/18 (7) - (10)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9) (11)	Limited Case Reserves 11/30/18 (3) - (10) (12)	Estimated IBNR 11/30/17 (4)-(11) (13)	Estimated IBNR 11/30/18 (5)-(12) (14)
to 1998/99	\$50,690	\$51,992	\$3,365	\$4,846	\$51,006	\$52,647	\$1,641	\$47,641	\$47,801	\$3,049	\$4,192	\$316	\$655
1999/00	1,773	1,764	0	0	1,773	1,764	(8)	1,773	1,764	0	0	0	0
2000/01	1,536	1,536	0	0	1,536	1,536	(0)	1,536	1,536	0	0	0	0
2001/02	1,193	1,199	22	24	1,198	1,205	7	1,176	1,181	17	17	5	6
2002/03	3,017	3,013	97	75	3,043	3,034	(9)	2,946	2,959	71	54	26	21
2003/04	1,951	1,967	200	173	2,015	2,020	5	1,815	1,847	135	120	64	53
2004/05	3,134	3,187	869	839	3,250	3,300	50	2,381	2,461	753	725	116	113
2005/06	1,743	1,743	16	16	1,749	1,749	0	1,733	1,733	10	10	6	6
2006/07	2,107	2,102	33	25	2,120	2,112	(8)	2,087	2,087	20	15	13	10
2007/08	1,937	1,961	284	331	2,051	2,103	52	1,767	1,772	170	190	114	142
2008/09	2,075	2,102	189	150	2,144	2,166	22	1,955	2,016	120	87	69	64
2009/10	2,401	2,401	897	740	2,712	2,681	(31)	1,815	1,941	586	460	311	280
2010/11	1,847	1,848	347	286	1,978	1,953	(25)	1,631	1,667	217	181	131	105
2011/12	2,335	2,308	642	367	2,555	2,451	(104)	1,913	2,084	422	223	220	143
2012/13	2,675	2,927	799	780	3,054	3,200	146	2,255	2,420	419	507	379	273
2013/14	2,511	2,495	1,058	784	3,100	2,900	(200)	2,042	2,116	468	379	589	405
2014/15	1,555	1,628	1,187	806	2,250	2,100	(150)	1,063	1,294	492	334	695	472
2015/16	2,123	2,182	2,196	1,608	3,525	3,100	(425)	1,329	1,492	793	690	1,402	918
2016/17	1,882	2,179	3,642	2,680	4,000	3,700	(300)	358	1,020	1,524	1,159	2,118	1,521
2017/18		1,492		3,198	3,123	3,700	577		502		990		2,208
Total	\$88,483	\$92,026	\$15,842	\$17,729	\$98,182	\$99,421	\$1,239	\$79,217	\$81,691	\$9,267	\$10,334	\$6,575	\$7,395
Total (ex FY18)	\$88,483	\$90,534	\$15,842	\$14,531	\$95,059	\$95,721	\$662	\$79,217	\$81,190	\$9,267	\$9,344	\$6,575	\$5,187

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9) (4)	Estimated Outstanding Losses 11/30/18 (7) - (10) (5)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9) (11)	Limited Case Reserves 11/30/18 (3) - (10) (12)	Estimated IBNR 11/30/17 (4)-(11) (13)	Estimated IBNR 11/30/18 (5)-(12) (14)
to 1998/99	\$11,788	\$11,865	\$435	\$440	\$11,828	\$11,905	\$77	\$11,393	\$11,465	\$395	\$400	\$40	\$40
1999/00	831	821	0	0	831	821	(11)	831	821	0	0	0	0
2000/01	711	711	0	0	711	711	(0)	711	711	0	0	0	0
2001/02	621	621	2	2	622	622	0	620	620	1	1	1	1
2002/03	920	919	23	22	922	921	(1)	899	899	21	20	2	2
2003/04	1,330	1,329	258	188	1,354	1,346	(8)	1,096	1,158	234	171	24	17
2004/05	1,272	1,318	23	72	1,274	1,325	51	1,251	1,253	21	65	2	7
2005/06	764	764	0	0	764	764	0	764	764	0	0	0	0
2006/07	925	925	0	0	925	925	0	925	925	0	0	0	0
2007/08	780	760	37	14	783	761	(22)	746	747	34	13	3	1
2008/09	721	700	40	14	725	702	(23)	685	688	36	13	4	2
2009/10	744	789	40	78	749	796	47	709	718	35	71	5	7
2010/11	706	689	52	31	714	693	(21)	662	662	43	27	8	4
2011/12	991	1,168	92	221	1,008	1,198	190	916	977	75	191	17	30
2012/13	979	1,234	148	339	1,004	1,284	280	856	945	123	288	25	50
2013/14	736	700	135	75	766	715	(51)	631	640	105	61	30	15
2014/15	536	496	217	127	600	525	(75)	383	398	154	99	64	29
2015/16	1,037	946	806	443	1,250	1,050	(200)	444	607	593	338	213	104
2016/17	1,400	1,226	1,702	1,267	1,800	1,500	(300)	98	233	1,302	994	400	274
2017/18		925		1,275	1,218	1,450	232		175		750		525
Total	\$27,793	\$28,906	\$4,010	\$4,608	\$29,849	\$30,013	\$165	\$24,620	\$25,405	\$3,173	\$3,501	\$837	\$1,107
Total (ex FY18)	\$27,793	\$27,981	\$4,010	\$3,333	\$28,631	\$28,563	(\$67)	\$24,620	\$25,230	\$3,173	\$2,751	\$837	\$582

Comparison of Projected Ultimate Losses (\$000s)
 Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9) (4)	Estimated Outstanding Losses 11/30/18 (7) - (10) (5)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9) (11)	Limited Case Reserves 11/30/18 (3) - (10) (12)	Estimated IBNR 11/30/17 (4)-(11) (13)	Estimated IBNR 11/30/18 (5)-(12) (14)
to 1998/99	\$8,812	\$8,812	\$0	\$0	\$8,812	\$8,812	\$0	\$8,812	\$8,812	\$0	\$0	\$0	\$0
1999/00	2,250	2,250	0	0	2,250	2,250	0	2,250	2,250	0	0	0	0
2000/01	950	950	0	0	950	950	0	950	950	0	0	0	0
2001/02	1,000	1,000	0	0	1,000	1,000	0	1,000	1,000	0	0	0	0
2002/03	19	19	0	0	19	19	0	19	19	0	0	0	0
2003/04	2,959	2,959	0	0	2,959	2,959	0	2,959	2,959	0	0	0	0
2004/05	1	1	0	0	1	1	0	1	1	0	0	0	0
2005/06	1,000	1,000	0	0	1,000	1,000	0	1,000	1,000	0	0	0	0
2006/07	3	3	0	0	3	3	0	3	3	0	0	0	0
2007/08	1,000	1,000	0	0	1,000	1,000	0	1,000	1,000	0	0	0	0
2008/09	0	0	0	0	0	0	0	0	0	0	0	0	0
2009/10	1,310	1,310	0	0	1,310	1,310	0	1,310	1,310	0	0	0	0
2010/11	3	3	0	0	3	3	0	3	3	0	0	0	0
2011/12	10	10	0	0	10	10	0	10	10	0	0	0	0
2012/13	0	0	150	25	150	25	(125)	0	0	0	0	150	25
2013/14	0	0	200	125	200	125	(75)	0	0	0	0	200	125
2014/15	3,055	3,033	3,495	3,467	3,500	3,500	0	5	33	3,050	3,000	445	467
2015/16	1,500	2,950	2,500	1,450	2,500	3,400	900	0	1,950	1,500	1,000	1,000	450
2016/17	0	1,000	1,000	1,700	1,000	1,700	700	0	0	0	1,000	1,000	700
2017/18		0		1,000	1,260	1,000	(260)		0		0		1,000
Total	\$23,871	\$26,299	\$7,345	\$7,767	\$27,926	\$29,066	\$1,140	\$19,321	\$21,299	\$4,550	\$5,000	\$2,795	\$2,767
Total (ex FY18)	\$23,871	\$26,299	\$7,345	\$6,767	\$26,666	\$28,066	\$1,400	\$19,321	\$21,299	\$4,550	\$5,000	\$2,795	\$1,767

Comparison of Projected Ultimate Losses (\$000s)
 Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9)	Estimated Outstanding Losses 11/30/18 (7) - (10)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9)	Limited Case Reserves 11/30/18 (3) - (10)	Estimated IBNR 11/30/17 (4)-(11)	Estimated IBNR 11/30/18 (5)-(12)
to 1998/99	\$216,281	\$216,281	\$0	\$0	\$216,281	\$216,281	\$0	\$216,281	\$216,281	\$0	\$0	\$0	\$0
1999/00	33,190	33,190	0	0	33,190	33,190	0	33,190	33,190	0	0	0	0
2000/01	10,411	10,411	0	0	10,411	10,411	0	10,411	10,411	0	0	0	0
2001/02	23,648	23,648	0	0	23,648	23,648	0	23,648	23,648	0	0	0	0
2002/03	4,269	4,269	0	0	4,269	4,269	0	4,269	4,269	0	0	0	0
2003/04	8,378	8,378	0	0	8,378	8,378	0	8,378	8,378	0	0	0	0
2004/05	29,607	39,607	11,000	22,003	30,607	41,610	11,003	19,607	19,607	10,000	20,000	1,000	2,003
2005/06	22,825	23,575	275	1,105	22,850	23,680	830	22,575	22,575	250	1,000	25	105
2006/07	4,850	4,850	110	110	4,860	4,860	0	4,750	4,750	100	100	10	10
2007/08	7,002	7,002	0	0	7,002	7,002	0	7,002	7,002	0	0	0	0
2008/09	7,905	7,905	0	0	7,905	7,905	0	7,905	7,905	0	0	0	0
2009/10	9,093	9,093	0	0	9,093	9,093	0	9,093	9,093	0	0	0	0
2010/11	9,965	10,715	5,245	0	10,710	10,715	5	5,465	10,715	4,500	0	745	0
2011/12	35,569	36,519	4,281	1,571	36,750	37,040	290	32,469	35,469	3,100	1,050	1,181	521
2012/13	58,775	63,480	57,100	45,920	62,500	65,000	2,500	5,400	19,080	53,375	44,400	3,725	1,520
2013/14	5,150	2,700	8,600	6,250	9,000	7,500	(1,500)	400	1,250	4,750	1,450	3,850	4,800
2014/15	5,575	13,075	11,975	14,975	12,000	15,000	3,000	25	25	5,550	13,050	6,425	1,925
2015/16	3,620	4,665	12,410	9,910	12,500	10,000	(2,500)	90	90	3,530	4,575	8,880	5,335
2016/17	375	1,301	13,000	11,500	13,000	11,500	(1,500)	0	0	375	1,301	12,625	10,200
2017/18		1,350		12,500	15,440	12,500	(2,940)		0		1,350		11,150
Total	\$496,486	\$522,012	\$123,996	\$125,844	\$550,392	\$559,580	\$9,188	\$410,956	\$433,736	\$85,530	\$88,276	\$38,466	\$37,569
Total (ex FY18)	\$496,486	\$520,662	\$123,996	\$113,344	\$534,952	\$547,080	\$12,128	\$410,956	\$433,736	\$85,530	\$86,926	\$38,466	\$26,419

Comparison of Projected Ultimate Losses (\$000s)
 Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9)	Estimated Outstanding Losses 11/30/18 (7) - (10)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9)	Limited Case Reserves 11/30/18 (3) - (10)	Estimated IBNR 11/30/17 (4)-(11)	Estimated IBNR 11/30/18 (5)-(12)
to 1998/99	\$3,980	\$3,980	\$0	\$0	\$3,980	\$3,980	\$0	\$3,980	\$3,980	\$0	\$0	\$0	\$0
1999/00	0	0	0	0	0	0	0	0	0	0	0	0	0
2000/01	0	0	0	0	0	0	0	0	0	0	0	0	0
2001/02	100	100	0	0	100	100	0	100	100	0	0	0	0
2002/03	1,050	1,050	0	0	1,050	1,050	0	1,050	1,050	0	0	0	0
2003/04	20,375	20,375	0	0	20,375	20,375	0	20,375	20,375	0	0	0	0
2004/05	1,900	1,900	0	0	1,900	1,900	0	1,900	1,900	0	0	0	0
2005/06	620	620	0	0	620	620	0	620	620	0	0	0	0
2006/07	0	0	0	0	0	0	0	0	0	0	0	0	0
2007/08	0	0	0	0	0	0	0	0	0	0	0	0	0
2008/09	175	175	0	0	175	175	0	175	175	0	0	0	0
2009/10	0	0	0	0	0	0	0	0	0	0	0	0	0
2010/11	500	0	580	0	580	0	(580)	0	0	500	0	80	0
2011/12	0	0	30	0	30	0	(30)	0	0	0	0	30	0
2012/13	0	0	30	0	30	0	(30)	0	0	0	0	30	0
2013/14	0	0	30	0	30	0	(30)	0	0	0	0	30	0
2014/15	0	0	30	15	30	15	(15)	0	0	0	0	30	15
2015/16	0	0	30	20	30	20	(10)	0	0	0	0	30	20
2016/17	0	0	30	25	30	25	(5)	0	0	0	0	30	25
2017/18	0	0	0	30	40	30	(10)	0	0	0	0	0	30
Total	\$28,700	\$28,200	\$760	\$90	\$29,000	\$28,290	(\$710)	\$28,200	\$28,200	\$500	\$0	\$260	\$90
Total (ex FY18)	\$28,700	\$28,200	\$760	\$60	\$28,960	\$28,260	(\$700)	\$28,200	\$28,200	\$500	\$0	\$260	\$60

Comparison of Projected Ultimate Losses (\$000s)
 Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9) (4)	Estimated Outstanding Losses 11/30/18 (7) - (10) (5)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9) (11)	Limited Case Reserves 11/30/18 (3) - (10) (12)	Estimated IBNR 11/30/17 (4)-(11) (13)	Estimated IBNR 11/30/18 (5)-(12) (14)
to 1998/99	\$10,535	\$10,535	\$0	\$0	\$10,535	\$10,535	\$0	\$10,535	\$10,535	\$0	\$0	\$0	\$0
1999/00	2,485	2,485	0	0	2,485	2,485	0	2,485	2,485	0	0	0	0
2000/01	345	345	0	0	345	345	0	345	345	0	0	0	0
2001/02	200	200	0	0	200	200	0	200	200	0	0	0	0
2002/03	1,025	1,025	0	0	1,025	1,025	0	1,025	1,025	0	0	0	0
2003/04	7,860	7,860	0	0	7,860	7,860	0	7,860	7,860	0	0	0	0
2004/05	90	90	0	0	90	90	0	90	90	0	0	0	0
2005/06	425	425	0	0	425	425	0	425	425	0	0	0	0
2006/07	0	0	0	0	0	0	0	0	0	0	0	0	0
2007/08	300	300	0	0	300	300	0	300	300	0	0	0	0
2008/09	300	300	0	0	300	300	0	300	300	0	0	0	0
2009/10	800	800	0	0	800	800	0	800	800	0	0	0	0
2010/11	0	0	0	0	0	0	0	0	0	0	0	0	0
2011/12	2,065	1,815	435	85	2,250	1,900	(350)	1,815	1,815	250	0	185	85
2012/13	2,690	2,675	3,310	1,725	3,500	2,900	(600)	190	1,175	2,500	1,500	810	225
2013/14	425	425	225	75	650	500	(150)	425	425	0	0	225	75
2014/15	0	0	500	300	500	300	(200)	0	0	0	0	500	300
2015/16	3,500	3,700	1,600	1,600	4,100	4,100	0	2,500	2,500	1,000	1,200	600	400
2016/17	75	75	1,000	900	1,000	900	(100)	0	0	75	75	925	825
2017/18		100		1,000	1,350	1,000	(350)		0		100		900
Total	\$33,120	\$33,155	\$7,070	\$5,685	\$37,715	\$35,965	(\$1,750)	\$29,295	\$30,280	\$3,825	\$2,875	\$3,245	\$2,810
Total (ex FY18)	\$33,120	\$33,055	\$7,070	\$4,685	\$36,365	\$34,965	(\$1,400)	\$29,295	\$30,280	\$3,825	\$2,775	\$3,245	\$1,910

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9) (4)	Estimated Outstanding Losses 11/30/18 (7) - (10) (5)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9) (11)	Limited Case Reserves 11/30/18 (3) - (10) (12)	Estimated IBNR 11/30/17 (4)-(11) (13)	Estimated IBNR 11/30/18 (5)-(12) (14)
to 1998/99	\$44,383	\$44,383	\$0	\$0	\$44,383	\$44,383	\$0	\$44,383	\$44,383	\$0	\$0	\$0	\$0
1999/00	0	0	0	0	0	0	0	0	0	0	0	0	0
2000/01	0	0	0	0	0	0	0	0	0	0	0	0	0
2001/02	750	750	0	0	750	750	0	750	750	0	0	0	0
2002/03	800	800	0	0	800	800	0	800	800	0	0	0	0
2003/04	0	0	0	0	0	0	0	0	0	0	0	0	0
2004/05	0	0	0	0	0	0	0	0	0	0	0	0	0
2005/06	0	0	0	0	0	0	0	0	0	0	0	0	0
2006/07	0	0	0	0	0	0	0	0	0	0	0	0	0
2007/08	0	0	0	0	0	0	0	0	0	0	0	0	0
2008/09	0	0	0	0	0	0	0	0	0	0	0	0	0
2009/10	0	0	0	0	0	0	0	0	0	0	0	0	0
2010/11	0	0	0	0	0	0	0	0	0	0	0	0	0
2011/12	0	0	0	0	0	0	0	0	0	0	0	0	0
2012/13	0	0	0	0	0	0	0	0	0	0	0	0	0
2013/14	0	0	0	0	0	0	0	0	0	0	0	0	0
2014/15	50	50	100	100	100	100	0	0	0	50	50	50	50
2015/16	0	0	50	10	50	10	(40)	0	0	0	0	50	10
2016/17	0	0	50	15	50	15	(35)	0	0	0	0	50	15
2017/18	0	0	0	20	20	20	0	0	0	0	0	0	20
Total	\$45,983	\$45,983	\$200	\$145	\$46,153	\$46,078	(\$75)	\$45,933	\$45,933	\$50	\$50	\$150	\$95
Total (ex FY18)	\$45,983	\$45,983	\$200	\$125	\$46,133	\$46,058	(\$75)	\$45,933	\$45,933	\$50	\$50	\$150	\$75

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9) (4)	Estimated Outstanding Losses 11/30/18 (7) - (10) (5)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9) (11)	Limited Case Reserves 11/30/18 (3) - (10) (12)	Estimated IBNR 11/30/17 (4)-(11) (13)	Estimated IBNR 11/30/18 (5)-(12) (14)
to 1998/99	\$71,943	\$71,596	\$1,070	\$984	\$72,040	\$71,686	(\$354)	\$70,970	\$70,702	\$973	\$894	\$97	\$90
1999/00	6,226	6,204	13	15	6,229	6,206	(23)	6,216	6,191	10	13	3	2
2000/01	8,762	8,769	655	565	8,902	8,859	(43)	8,247	8,294	516	475	140	90
2001/02	9,063	8,980	955	848	9,293	9,137	(156)	8,338	8,289	724	692	230	157
2002/03	8,514	8,618	411	500	8,623	8,719	96	8,212	8,219	302	399	109	101
2003/04	8,777	8,500	1,099	514	9,133	8,612	(521)	8,034	8,098	743	403	356	112
2004/05	8,649	8,890	457	701	8,809	9,068	259	8,352	8,367	298	523	160	178
2005/06	8,837	8,870	244	117	8,927	8,902	(25)	8,683	8,785	154	85	90	32
2006/07	11,968	11,846	1,239	627	12,464	12,043	(421)	11,225	11,416	743	430	496	197
2007/08	16,997	17,450	890	1,152	17,356	17,834	478	16,466	16,682	531	769	359	384
2008/09	13,907	14,008	1,329	884	14,389	14,320	(69)	13,060	13,436	847	573	482	312
2009/10	13,262	13,418	2,218	1,786	14,025	14,010	(15)	11,807	12,224	1,455	1,194	763	592
2010/11	11,018	11,327	2,036	1,876	11,773	11,974	201	9,737	10,098	1,281	1,228	755	647
2011/12	13,071	13,123	3,273	2,065	14,279	13,946	(333)	11,006	11,881	2,066	1,242	1,208	823
2012/13	10,602	11,151	3,749	3,088	12,344	12,301	(43)	8,595	9,213	2,007	1,938	1,742	1,150
2013/14	12,220	12,472	5,884	4,019	15,354	14,462	(892)	9,470	10,443	2,750	2,029	3,134	1,990
2014/15	14,181	15,993	9,938	8,161	20,248	20,191	(57)	10,310	12,030	3,870	3,962	6,067	4,198
2015/16	19,675	21,588	15,525	12,218	26,444	27,000	556	10,919	14,782	8,755	6,807	6,769	5,412
2016/17	14,585	19,598	23,094	17,678	28,000	29,250	1,250	4,906	11,572	9,679	8,026	13,415	9,652
2017/18		16,519		24,167	24,739	29,500	4,761		5,333		11,185		12,981
Total	\$282,256	\$308,921	\$74,080	\$81,966	\$343,371	\$348,020	\$4,649	\$244,552	\$266,054	\$37,704	\$42,866	\$36,376	\$39,099
Total (ex FY18)	\$282,256	\$292,402	\$74,080	\$57,799	\$318,632	\$318,520	(\$112)	\$244,552	\$260,721	\$37,704	\$31,681	\$36,376	\$26,118

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9) (4)	Estimated Outstanding Losses 11/30/18 (7) - (10) (5)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9) (11)	Limited Case Reserves 11/30/18 (3) - (10) (12)	Estimated IBNR 11/30/17 (4)-(11) (13)	Estimated IBNR 11/30/18 (5)-(12) (14)
to 1998/99	\$25,294	\$24,945	\$214	\$232	\$25,313	\$24,966	(\$347)	\$25,099	\$24,734	\$194	\$210	\$20	\$21
1999/00	2,607	2,591	2	1	2,607	2,591	(16)	2,605	2,590	1	1	0	0
2000/01	4,479	4,462	29	21	4,482	4,464	(18)	4,453	4,443	26	18	3	2
2001/02	4,133	4,040	27	27	4,135	4,043	(92)	4,109	4,016	24	24	2	3
2002/03	4,150	4,131	34	33	4,153	4,134	(19)	4,119	4,101	30	30	3	3
2003/04	3,847	3,808	104	128	3,857	3,819	(38)	3,753	3,692	94	116	10	12
2004/05	11,698	11,666	24	26	11,701	11,668	(33)	11,677	11,642	21	24	3	2
2005/06	4,002	3,998	20	17	4,005	4,000	(5)	3,985	3,983	17	15	3	2
2006/07	4,821	4,751	142	111	4,843	4,767	(76)	4,701	4,656	120	95	22	16
2007/08	6,265	6,281	326	263	6,325	6,323	(2)	5,999	6,060	265	221	60	42
2008/09	6,773	6,573	627	216	6,893	6,613	(280)	6,266	6,397	508	176	120	40
2009/10	6,762	6,520	690	351	6,894	6,589	(305)	6,204	6,238	558	281	132	69
2010/11	5,194	5,169	755	638	5,324	5,289	(35)	4,569	4,651	624	518	130	120
2011/12	4,872	4,768	734	470	5,032	4,856	(176)	4,298	4,386	573	382	160	88
2012/13	4,726	4,561	1,096	785	4,965	4,724	(241)	3,869	3,939	856	622	239	163
2013/14	5,896	5,542	1,888	1,379	6,269	5,813	(456)	4,381	4,434	1,515	1,108	373	271
2014/15	6,556	6,306	3,242	2,410	7,449	7,000	(449)	4,207	4,590	2,349	1,716	893	694
2015/16	11,180	10,533	6,915	4,654	13,250	12,000	(1,250)	6,335	7,346	4,844	3,187	2,070	1,467
2016/17	10,950	10,635	13,387	7,142	16,000	13,000	(3,000)	2,613	5,858	8,337	4,777	5,050	2,365
2017/18		9,873		11,714	8,726	14,000	5,274		2,286		7,587		4,127
Total	\$134,201	\$141,153	\$30,254	\$30,616	\$152,224	\$150,659	(\$1,564)	\$113,243	\$120,044	\$20,958	\$21,109	\$9,296	\$9,507
Total (ex FY18)	\$134,201	\$131,280	\$30,254	\$18,902	\$143,498	\$136,659	(\$6,838)	\$113,243	\$117,758	\$20,958	\$13,522	\$9,296	\$5,379

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9)	Estimated Outstanding Losses 11/30/18 (7) - (10)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9) (11)	Limited Case Reserves 11/30/18 (3) - (10) (12)	Estimated IBNR 11/30/17 (4)-(11) (13)	Estimated IBNR 11/30/18 (5)-(12) (14)
to 1998/99	\$4,055	\$4,055	\$0	\$0	\$4,055	\$4,055	\$0	\$4,055	\$4,055	\$0	\$0	\$0	\$0
1999/00	1,651	1,651	0	0	1,651	1,651	0	1,651	1,651	0	0	0	0
2000/01	678	678	0	0	678	678	0	678	678	0	0	0	0
2001/02	252	252	0	0	252	252	0	252	252	0	0	0	0
2002/03	419	419	0	0	419	419	0	419	419	0	0	0	0
2003/04	30	30	0	0	30	30	0	30	30	0	0	0	0
2004/05	222	222	0	0	222	222	0	222	222	0	0	0	0
2005/06	138	138	0	0	138	138	0	138	138	0	0	0	0
2006/07	98	98	0	0	98	98	0	98	98	0	0	0	0
2007/08	486	486	0	0	486	486	0	486	486	0	0	0	0
2008/09	153	153	0	0	153	153	0	153	153	0	0	0	0
2009/10	311	311	0	0	311	311	0	311	311	0	0	0	0
2010/11	139	139	0	0	139	139	0	139	139	0	0	0	0
2011/12	140	140	0	0	140	140	0	140	140	0	0	0	0
2012/13	356	356	0	0	356	356	0	356	356	0	0	0	0
2013/14	242	214	68	0	280	214	(66)	212	214	31	0	38	0
2014/15	364	353	122	0	460	353	(107)	338	353	26	0	96	0
2015/16	236	196	296	159	400	275	(125)	104	116	133	80	164	79
2016/17	71	186	362	304	365	325	(40)	3	21	68	165	294	139
2017/18		196		455	470	470	0		15		180		274
Total	\$ 10,042	\$ 10,273	\$ 849	\$ 917	\$ 11,103	\$ 10,765	\$ (338)	\$ 9,784	\$ 9,847	\$ 257	\$ 425	\$ 591	\$ 492
Total (ex FY18)	\$ 10,042	\$ 10,077	\$ 849	\$ 463	\$ 10,633	\$ 10,295	\$ (338)	\$ 9,784	\$ 9,832	\$ 257	\$ 245	\$ 591	\$ 218

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period (1)	Limited Reported Incurred Losses 11/30/17 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Estimated Outstanding Losses 11/30/17 (6) - (9)	Estimated Outstanding Losses 11/30/18 (7) - (10)	Projected Ultimate Limited Losses 11/30/17 (6)	Projected Ultimate Limited Losses 11/30/18 (7)	Change in Ultimate (7) - (6) (8)	Limited Paid Losses 11/30/17 (9)	Limited Paid Losses 11/30/18 (10)	Limited Case Reserves 11/30/17 (2) - (9) (11)	Limited Case Reserves 11/30/18 (3) - (10) (12)	Estimated IBNR 11/30/17 (4)-(11) (13)	Estimated IBNR 11/30/18 (5)-(12) (14)
to 1998/99	\$3,007	\$3,007	\$0	\$0	\$3,007	\$3,007	\$0	\$3,007	\$3,007	\$0	\$0	\$0	\$0
1999/00	465	465	0	0	465	465	0	465	465	0	0	0	0
2000/01	9,771	9,771	0	0	9,771	9,771	0	9,771	9,771	0	0	0	0
2001/02	2,498	2,498	0	0	2,498	2,498	0	2,498	2,498	0	0	0	0
2002/03	213	213	0	0	213	213	0	213	213	0	0	0	0
2003/04	397	397	0	0	397	397	0	397	397	0	0	0	0
2004/05	2,828	2,828	0	0	2,828	2,828	0	2,828	2,828	0	0	0	0
2005/06	176	176	0	0	176	176	0	176	176	0	0	0	0
2006/07	624	624	0	0	624	624	0	624	624	0	0	0	0
2007/08	132	132	0	0	132	132	0	132	132	0	0	0	0
2008/09	174	174	0	0	174	174	0	174	174	0	0	0	0
2009/10	6,830	6,830	0	0	6,830	6,830	0	6,830	6,830	0	0	0	0
2010/11	809	819	0	11	809	820	11	809	809	0	10	0	1
2011/12	432	432	0	0	432	432	0	432	432	0	0	0	0
2012/13	282	282	0	0	282	282	0	282	282	0	0	0	0
2013/14	2,907	2,907	0	0	2,907	2,907	0	2,907	2,907	0	0	0	0
2014/15	215	215	0	0	215	215	0	215	215	0	0	0	0
2015/16	1,331	1,566	780	579	2,000	1,835	(165)	1,220	1,256	111	310	669	269
2016/17	296	514	1,255	655	1,350	950	(400)	95	295	201	219	1,054	436
2017/18		620		1,635	1,776	1,700	(76)		65		555		1,080
Total	\$ 33,386	\$ 34,469	\$ 2,035	\$ 2,881	\$ 36,885	\$ 36,256	\$ (630)	\$ 33,074	\$ 33,375	\$ 312	\$ 1,094	\$ 1,723	\$ 1,786
Total (ex FY18)	\$ 33,386	\$ 33,849	\$ 2,035	\$ 1,245	\$ 35,109	\$ 34,556	\$ (554)	\$ 33,074	\$ 33,310	\$ 312	\$ 539	\$ 1,723	\$ 706

Comparison of Projected Ultimate Losses (\$000s)
Loss & ALAE (Excludes Claims Handling Expenses)

Losses Limited to Actual Retention

Claim Period	Limited Reported Incurred Losses 11/30/17	Limited Reported Incurred Losses 11/30/18	Estimated Outstanding Losses 11/30/17	Estimated Outstanding Losses 11/30/18	Projected Ultimate Limited Losses 11/30/17	Projected Ultimate Limited Losses 11/30/18	Change in Ultimate (7) - (6)	Limited Paid Losses 11/30/17	Limited Paid Losses 11/30/18	Limited Case Reserves 11/30/17 (2) - (9)	Limited Case Reserves 11/30/18 (3) - (10)	Estimated IBNR 11/30/17 (4)-(11)	Estimated IBNR 11/30/18 (5)-(12)
(1)	(2)	(3)	(6) - (9)	(7) - (10)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
to 1998/99	\$ 89,151	\$ 99,151	\$2,200	\$13,249	\$ 89,352	\$100,400	\$11,048	\$ 87,151	\$87,151	\$2,000	\$12,000	\$200	\$1,249
1999/00	2,721	2,721	0	0	2,721	2,721	0	2,721	2,721	0	0	0	0
2000/01	8,038	8,438	115	774	8,053	8,712	659	7,938	7,938	100	500	15	274
2001/02	12,164	12,154	12	0	12,166	12,154	(12)	12,154	12,154	10	0	2	0
2002/03	6,245	6,245	0	0	6,245	6,245	0	6,245	6,245	0	0	0	0
2003/04	68,333	68,326	10	0	68,336	68,326	(10)	68,326	68,326	8	0	3	0
2004/05	17,270	14,866	13,863	11,167	18,578	15,882	(2,696)	4,715	4,715	12,555	10,152	1,308	1,016
2005/06	6,812	7,673	353	1,878	6,975	8,500	1,525	6,622	6,622	190	1,051	163	827
2006/07	10,024	9,827	1,191	876	10,500	10,250	(250)	9,309	9,374	715	453	476	423
2007/08	13,627	13,615	6,478	165	14,500	13,750	(750)	8,022	13,585	5,605	30	873	135
2008/09	7,303	6,753	2,147	1,947	8,000	7,800	(200)	5,853	5,853	1,450	900	697	1,047
2009/10	7,903	7,538	1,455	513	8,642	7,850	(792)	7,187	7,337	716	201	739	312
2010/11	20,727	30,106	14,612	25,468	23,500	34,600	11,100	8,888	9,132	11,839	20,975	2,773	4,494
2011/12	8,478	9,065	4,361	6,005	10,055	11,893	1,838	5,694	5,888	2,785	3,177	1,577	2,828
2012/13	13,338	12,892	11,765	6,890	16,000	15,381	(619)	4,235	8,491	9,104	4,401	2,662	2,489
2013/14	12,117	20,649	7,967	15,486	16,250	25,000	8,750	8,283	9,514	3,834	11,136	4,133	4,351
2014/15	24,266	23,922	28,446	26,483	30,000	29,000	(1,000)	1,554	2,517	22,712	21,406	5,734	5,078
2015/16	4,038	19,075	14,341	24,674	15,000	26,250	11,250	659	1,576	3,379	17,500	10,962	7,175
2016/17	9,908	16,275	23,198	23,298	26,500	27,000	500	3,302	3,702	6,606	12,573	16,592	10,725
2017/18		7,359		22,712	24,871	27,000	2,129		4,288	0	3,071		19,641
Total	\$ 342,463	\$ 396,651	\$ 132,514	\$ 181,585	\$ 416,243	\$ 458,713	\$ 42,470	\$ 258,858	\$ 277,127	\$ 83,605	\$ 119,524	\$ 48,909	\$ 62,062
Total (ex FY18)	\$ 342,463	\$ 389,292	\$ 132,514	\$ 158,873	\$ 391,372	\$ 431,713	\$ 40,341	\$ 258,858	\$ 272,840	\$ 83,605	\$ 116,453	\$ 48,909	\$ 42,421



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-1 (page 1)

Data Summary as of November 30, 2018
Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	6,154	16	\$47,800,742	\$4,191,654	\$51,992,397
1999/00	Unlimited	None	228.0	Not Provided	635	0	1,764,218	0	1,764,218
2000/01	9,500,000	None	216.0	425,788	625	0	1,535,565	0	1,535,565
2001/02	9,500,000	None	204.0	434,846	490	1	1,181,479	17,221	1,198,700
2002/03	9,500,000	None	192.0	441,142	514	2	2,958,903	53,694	3,012,597
2003/04	Unlimited	None	180.0	453,644	593	2	1,846,628	120,156	1,966,783
2004/05	Unlimited	None	168.0	458,776	518	2	2,461,259	725,287	3,186,546
2005/06	Unlimited	None	156.0	464,619	510	1	1,732,797	10,000	1,742,797
2006/07	Unlimited	None	144.0	448,051	318	3	2,086,766	15,000	2,101,766
2007/08	Unlimited	None	132.0	445,664	274	7	1,771,580	189,772	1,961,352
2008/09	Unlimited	None	120.0	501,624	280	8	2,015,686	86,568	2,102,253
2009/10	Unlimited	None	108.0	526,535	214	8	1,941,047	460,259	2,401,307
2010/11	Unlimited	None	96.0	489,053	202	12	1,667,035	181,236	1,848,271
2011/12	Unlimited	None	84.0	515,084	169	12	2,084,374	223,408	2,307,782
2012/13	Unlimited	None	72.0	482,783	143	18	2,419,729	507,384	2,927,113
2013/14	Unlimited	None	60.0	482,783	158	18	2,116,320	378,749	2,495,069
2014/15	Unlimited	None	48.0	468,483	158	20	1,293,672	334,167	1,627,839
2015/16	Unlimited	None	36.0	497,031	176	35	1,491,884	690,415	2,182,299
2016/17	Unlimited	None	24.0	529,113	166	48	1,020,004	1,159,051	2,179,056
2017/18	Unlimited	None	12.0	539,050	174	89	501,636	990,463	1,492,099
Total					12,471	302	\$81,691,325	\$10,334,484	\$92,025,808

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/77	Unlimited
12/01/00	9,500,000
12/01/03	Unlimited

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Data Summary as of November 30, 2018
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	6,154	16	\$47,800,742	\$4,191,654	\$51,992,397
1999/00	Unlimited	None	228.0	Not Provided	635	0	1,764,218	0	1,764,218
2000/01	Unlimited	None	216.0	425,788	625	0	1,535,565	0	1,535,565
2001/02	Unlimited	None	204.0	434,846	490	1	1,181,479	17,221	1,198,700
2002/03	Unlimited	None	192.0	441,142	514	2	2,958,903	53,694	3,012,597
2003/04	Unlimited	None	180.0	453,644	593	2	1,846,628	120,156	1,966,783
2004/05	Unlimited	None	168.0	458,776	518	2	2,461,259	725,287	3,186,546
2005/06	Unlimited	None	156.0	464,619	510	1	1,732,797	10,000	1,742,797
2006/07	Unlimited	None	144.0	448,051	318	3	2,086,766	15,000	2,101,766
2007/08	Unlimited	None	132.0	445,664	274	7	1,771,580	189,772	1,961,352
2008/09	Unlimited	None	120.0	501,624	280	8	2,015,686	86,568	2,102,253
2009/10	Unlimited	None	108.0	526,535	214	8	1,941,047	460,259	2,401,307
2010/11	Unlimited	None	96.0	489,053	202	12	1,667,035	181,236	1,848,271
2011/12	Unlimited	None	84.0	515,084	169	12	2,084,374	223,408	2,307,782
2012/13	Unlimited	None	72.0	482,783	143	18	2,419,729	507,384	2,927,113
2013/14	Unlimited	None	60.0	482,783	158	18	2,116,320	378,749	2,495,069
2014/15	Unlimited	None	48.0	468,483	158	20	1,293,672	334,167	1,627,839
2015/16	Unlimited	None	36.0	497,031	176	35	1,491,884	690,415	2,182,299
2016/17	Unlimited	None	24.0	529,113	166	48	1,020,004	1,159,051	2,179,056
2017/18	Unlimited	None	12.0	539,050	174	89	501,636	990,463	1,492,099
Total					12,471	302	\$81,691,325	\$10,334,484	\$92,025,808

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-1 (page 3)

Data Summary as of November 30, 2018
Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	6,154	16	\$47,892,248	\$4,191,654	\$52,083,902
1999/00	Unlimited	None	228.0	Not Provided	635	0	1,772,683	0	1,772,683
2000/01	Unlimited	None	216.0	425,788	625	0	1,535,829	0	1,535,829
2001/02	Unlimited	None	204.0	434,846	490	1	1,181,479	17,221	1,198,700
2002/03	Unlimited	None	192.0	441,142	514	2	2,964,628	53,694	3,018,322
2003/04	Unlimited	None	180.0	453,644	593	2	1,846,628	120,156	1,966,783
2004/05	Unlimited	None	168.0	458,776	518	2	2,461,525	725,287	3,186,812
2005/06	Unlimited	None	156.0	464,619	510	1	1,732,797	10,000	1,742,797
2006/07	Unlimited	None	144.0	448,051	318	3	2,086,766	15,000	2,101,766
2007/08	Unlimited	None	132.0	445,664	274	7	1,771,580	189,772	1,961,352
2008/09	Unlimited	None	120.0	501,624	280	8	2,015,706	86,568	2,102,274
2009/10	Unlimited	None	108.0	526,535	214	8	1,941,050	460,259	2,401,310
2010/11	Unlimited	None	96.0	489,053	202	12	1,667,035	181,236	1,848,271
2011/12	Unlimited	None	84.0	515,084	169	12	2,107,720	223,408	2,331,128
2012/13	Unlimited	None	72.0	482,783	143	18	2,421,749	507,384	2,929,133
2013/14	Unlimited	None	60.0	482,783	158	18	2,116,538	378,749	2,495,287
2014/15	Unlimited	None	48.0	468,483	158	20	1,298,058	334,167	1,632,225
2015/16	Unlimited	None	36.0	497,031	176	35	1,493,979	690,415	2,184,394
2016/17	Unlimited	None	24.0	529,113	166	48	1,020,651	1,159,051	2,179,703
2017/18	Unlimited	None	12.0	539,050	174	89	505,128	990,463	1,495,591
Total					12,471	302	\$81,833,777	\$10,334,484	\$92,168,260

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	99.9%	100.0%	100.0%
336.0	99.9%	100.0%	100.0%
324.0	99.9%	100.0%	100.0%
312.0	99.8%	100.0%	100.0%
300.0	99.8%	100.0%	100.0%
288.0	99.6%	100.0%	100.0%
276.0	99.5%	100.0%	100.0%
264.0	99.3%	100.0%	100.0%
252.0	99.0%	100.0%	100.0%
240.0	98.5%	99.8%	100.0%
228.0	98.4%	99.7%	100.0%
216.0	98.3%	99.6%	100.0%
204.0	98.1%	99.5%	100.0%
192.0	97.9%	99.4%	100.0%
180.0	97.7%	99.3%	100.0%
168.0	97.5%	99.1%	100.0%
156.0	97.2%	98.9%	100.0%
144.0	96.8%	98.7%	100.0%
132.0	96.3%	98.4%	100.0%
120.0	95.3%	98.0%	100.0%
108.0	93.7%	97.6%	100.0%
96.0	90.3%	96.4%	100.0%
84.0	86.0%	94.5%	99.9%
72.0	78.2%	92.2%	99.8%
60.0	70.4%	86.4%	99.7%
48.0	60.2%	79.6%	99.6%
36.0	48.6%	70.5%	99.3%
24.0	32.9%	58.7%	98.9%
12.0	14.6%	36.1%	96.5%

(2) is from Exhibit WC-HC-Indem-2 (page 2).

(3) is from Exhibit WC-HC-Indem-2 (page 3).

(4) is from Exhibit WC-HC-Indem-2 (page 4).

COOK COUNTY, ILLINOIS
WORKERS COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-UIT
to 1998/99																				
1999/00						1,310	1,440	1,441	1,464	1,482	1,548	\$40,331	\$41,728	\$42,091	\$42,604	\$42,046	\$43,369	\$43,690	\$44,056	\$47,892
2000/01						975	1,327	1,352	1,383	1,383	1,383	1,648	1,652	1,652	1,652	1,652	1,652	1,773	1,773	
2001/02					902	1,415	1,041	1,046	1,069	1,069	1,093	1,093	1,402	1,402	1,402	1,536	1,536	1,536	1,773	
2002/03						1,386	1,366	2,362	2,426	2,575	2,697	2,731	2,748	2,930	2,946	2,965	2,965	2,965	2,965	
2003/04						1,101	1,002	1,137	1,437	1,547	1,648	1,653	1,659	1,773	1,773	1,773	1,773	1,773	1,773	
2004/05						784	518	920	1,136	1,221	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	
2005/06						809	518	920	1,136	1,221	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	
2006/07						368	809	920	1,136	1,221	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	
2007/08						442	931	1,263	1,481	1,629	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	
2008/09						309	575	756	985	1,148	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	
2009/10						332	791	1,032	1,146	1,246	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	
2010/11						503	758	947	1,115	1,281	1,594	1,594	1,594	1,594	1,594	1,594	1,594	1,594	1,594	
2011/12						558	903	1,169	1,368	1,711	2,108	2,108	2,108	2,108	2,108	2,108	2,108	2,108	2,108	
2012/13						334	930	1,179	1,711	2,255	2,422	2,422	2,422	2,422	2,422	2,422	2,422	2,422	2,422	
2013/14						480	1,031	1,686	2,042	2,117	2,117	2,117	2,117	2,117	2,117	2,117	2,117	2,117	2,117	
2014/15						283	881	1,063	1,298	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494	
2015/16						722	1,329	1,663	1,988	2,117	2,117	2,117	2,117	2,117	2,117	2,117	2,117	2,117	2,117	
2016/17						358	1,021	1,298	1,663	1,988	2,117	2,117	2,117	2,117	2,117	2,117	2,117	2,117	2,117	
2017/18						505														

II. Limited Paid Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-UIT
to 1998/99																				
1999/00																				
2000/01																				
2001/02																				
2002/03																				
2003/04																				
2004/05																				
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2011/12																				
2012/13																				
2013/14																				
2014/15																				
2015/16																				
2016/17																				
2017/18																				

Average All
Wtd 3
Last 5
Last 5 x-high

2000/01																				
2001/02																				
2002/03																				
2003/04																				
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2005/06																				
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2012/13																				
2013/14																				
2014/15																				
2015/16																				
2016/17																				
2017/18																				

The County changed data systems during 2016, resulting in a shift between indemnity and medical. The amounts in the 2016 diagonal are not consistent with prior diagonals.

Amounts are limited (net of excess insurance) and gross of recoveries.

Data was provided by the County.

COOK COUNTY, ILLINOIS
WORKERS COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Historical Limited Reported Incurred Losses (\$000) and Limited Reported Incurred Loss Development

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00							2,585	2,602	2,615	1,612	1,741	\$47,938	\$48,234	\$46,267	\$44,330	\$44,468	\$44,584	\$44,804	\$45,102	\$52,084	
2000/01					1,223	1,822	1,876	1,893	1,406	1,612	1,741	1,648	1,652	1,652	1,667	1,655	1,773	1,773	1,773		
2001/02					2,182	1,324	1,386	1,586	1,057	1,406	1,393	1,648	1,402	1,433	1,433	1,536	1,536	1,536			
2002/03					1,999	2,359	2,528	2,528	2,715	2,637	2,743	2,763	2,858	3,020	3,077	3,018	3,018	1,536			
2003/04				1,843	1,864	1,910	1,701	1,701	1,648	1,663	1,802	1,801	1,890	1,951	1,967	1,991	1,991	1,991			
2004/05		1,571	1,810	2,022	1,774	1,874	1,828	1,934	1,937	2,819	2,868	3,134	3,134	3,187	3,187	3,187	3,187				
2005/06		1,388	1,835	1,995	1,427	1,344	1,437	1,442	1,442	1,632	1,629	1,743	1,743								
2006/07		1,075	1,615	1,509	1,653	1,723	2,041	2,054	2,054	2,054	2,107	2,102									
2007/08		1,084	1,282	1,716	1,506	1,580	1,947	1,828	1,828	1,924	1,937	2,102									
2008/09		879	1,171	848	1,031	1,181	1,789	1,802	2,045	2,075	1,961										
2009/10		789	918	1,055	1,200	1,982	2,201	2,201	2,401	2,401											
2010/11		783	837	1,111	1,730	1,788	1,847	1,847	1,848												
2011/12		783	1,014	1,772	1,844	2,116	2,335	2,335													
2012/13		552	1,014	1,979	2,336	2,675	2,929	2,929													
2013/14		1,181	1,764	2,308	2,511	2,495															
2014/15		760	1,419	1,555	1,632																
2015/16		1,623	2,123																		
2016/17		1,882	2,180																		
2017/18		1,496																			

II. Limited Reported Incurred Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-UIT
to 1998/99																				
1999/00																				
2000/01																				
2001/02					1,083	1,029	1,009	1,005	0,616	1,080	0,947	1,006	0,961	0,956	1,003	1,002	1,005	1,007	1,155	
2002/03					1,081	1,048	0,761	1,023	0,989	0,991	1,000	1,006	1,000	1,006	0,993	1,071	1,000	1,000		
2003/04				1,044	1,072	1,074	0,971	0,971	1,040	1,000	1,000	1,034	1,056	1,074	1,001	1,005	1,000			
2004/05		1,006	1,078	1,057	0,805	1,057	0,984	0,984	1,003	1,090	1,000	1,049	1,032	1,008	1,000					
2005/06		1,153	1,117	0,878	1,057	0,975	1,058	1,001	1,456	1,017	1,093	1,000	1,017							
2006/07		1,342	1,342	1,102	0,942	1,185	1,068	1,054	1,009	1,000	0,998									
2007/08		1,503	0,934	1,083	1,012	1,042	1,069	1,003	1,132	1,000										
2008/09		1,192	1,329	0,878	1,051	0,998	1,233	0,938	1,054	1,013										
2009/10		1,332	0,724	1,216	1,145	1,515	1,134	1,091	1,000	1,013										
2010/11		1,163	1,150	1,137	1,652	1,096	1,134	1,091	1,000											
2011/12		1,070	1,327	1,557	1,034	0,944	1,091	1,000												
2012/13		1,295	1,747	1,448	1,148	0,988														
2013/14		3,119	1,151	1,181	1,145															
2014/15		1,494	1,309	1,088	0,984															
2015/16		1,867	1,096	1,050																
2016/17		1,308	1,029																	
2017/18		1,158																		
Average All	1,474	1,191	1,088	1,107	1,076	1,053	1,005	0,995	1,013	1,032	1,006	1,014	1,013	1,008	1,013	1,019	1,002	1,003	1,155	
Wtd 3	1,341	1,140	1,109	1,089	1,098	0,987	1,076	1,021	1,010	1,024	1,039	1,013	1,035	1,016	1,018	1,028	1,005	1,002		
Last 3	1,444	1,145	1,106	1,086	1,098	0,985	1,075	1,023	1,010	1,028	1,030	1,016	1,035	1,027	1,023	1,025	1,002			
Last 5	1,556	1,185	1,106	1,109	1,098	1,006	1,032	1,028	1,010	1,033	1,016	1,016	1,025	1,006	1,002	1,002	1,005	1,002		
x-Hi,low																				
Similar	1,418	1,113	1,049	1,020	1,009	1,002	1,001	1,001	1,002	1,001	1,000	1,001	1,001	1,000	1,001	1,001	1,000	1,001	1,012	1,001
Previous	1,650	1,220	1,133	1,085	1,067	1,025	1,020	1,013	1,004	1,004	1,003	1,002	1,002	1,002	1,001	1,001	1,001	1,001	1,001	1,001
Selected	1,625	1,200	1,130	1,085	1,067	1,025	1,020	1,013	1,004	1,004	1,003	1,002	1,002	1,002	1,001	1,001	1,001	1,001	1,001	1,002
Cumulative	2,767	1,703	1,419	1,256	1,157	1,085	1,058	1,038	1,024	1,020	1,016	1,013	1,011	1,009	1,007	1,006	1,005	1,004	1,003	1,002
Percent	36.1%	58.7%	70.5%	79.6%	86.4%	92.2%	94.5%	96.4%	97.6%	98.0%	98.4%	98.7%	98.9%	99.1%	99.3%	99.4%	99.5%	99.6%	99.7%	99.8%

The County changed data systems during 2016, resulting in a shift between indemnity and medical. The amounts in the 2016 diagonal are not consistent with prior diagonals.

Amounts are limited (net of excess insurance) and gross of recoveries.

Data was provided by the County.

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Historical Reported Claims and Reported Claim Development

Claim Period	Months of Development:																				
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/09																					
1999/00																					
2000/01																					
2001/02																					
2002/03																					
2003/04																					
2004/05																					
2005/06																					
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2007/08																					
2008/09																					
2009/10																					
2010/11																					
2011/12																					
2012/13																					
2013/14																					
2014/15																					
2015/16																					
2016/17																					
2017/18																					

II. Reported Claim Development

Claim Period	Months of Development:										240-Ult										
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132		132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	
to 1998/09																					
1999/00																					
2000/01																					
2001/02																					
2002/03																					
2003/04																					
2004/05																					
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2010/11																					
2011/12																					
2012/13																					
2013/14																					
2014/15																					
2015/16																					
2016/17																					
2017/18																					
Average All	1.044	1.018	1.006	1.003	1.004	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd 3	1.064	1.010	1.004	1.000	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Last 3	1.065	1.011	1.004	1.000	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Last 5	1.050	1.016	1.004	1.000	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
x-Follow																					
Similar	1.131	1.019	1.010	1.007	1.007	1.005	1.005	1.006	1.006	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
Previous	1.025	1.004	1.003	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.025	1.004	1.003	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.036	1.011	1.007	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Percent	96.5%	98.9%	98.3%	99.6%	99.7%	99.8%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Data was provided by the County.

COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)
 Historical Ratio of Limited Paid Losses and Limited Reported Incurred Losses

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
to 1/99/99																				
1999/00																				
2000/01																				
2001/02																				
2002/03																				
2003/04																				
2004/05																				
2005/06																				
2006/07																				
2007/08																				
2008/09																				
2009/10																				
2010/11																				
2011/12																				
2012/13																				
2013/14																				
2014/15																				
2015/16																				
2016/17																				
2017/18																				
Average																				
All	42.3%	62.1%	71.1%	78.7%	81.4%	84.3%	84.8%	87.3%	91.3%	94.4%	93.4%	94.2%	93.8%	93.5%	97.2%	98.7%	99.0%	99.2%	98.8%	92.0%
Last 3	32.4%	57.2%	69.9%	78.0%	84.0%	82.0%	85.4%	86.6%	88.5%	95.4%	96.3%	91.1%	89.7%	89.1%	96.8%	98.9%	99.5%	99.2%	98.8%	92.0%
Last 5	37.2%	58.2%	67.6%	75.7%	79.6%	79.8%	84.4%	89.8%	92.2%	95.4%	93.7%	96.7%	96.2%	95.9%	97.9%	98.9%	99.5%	99.2%	98.8%	92.0%
x-high																				
Implicit	40.5%	58.1%	68.9%	75.6%	81.5%	84.8%	91.0%	93.7%	96.0%	97.3%	97.8%	98.0%	98.2%	98.4%	98.4%	98.5%	98.6%	98.7%	98.7%	98.7%



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-3

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$47,800,742	98.5%	\$48,517,753
1999/00	228.0	1,764,218	98.4%	1,792,472
2000/01	216.0	1,535,565	98.3%	1,561,717
2001/02	204.0	1,181,479	98.1%	1,204,004
2002/03	192.0	2,958,903	97.9%	3,021,346
2003/04	180.0	1,846,628	97.7%	1,889,368
2004/05	168.0	2,461,259	97.5%	2,523,262
2005/06	156.0	1,732,797	97.2%	1,783,555
2006/07	144.0	2,086,766	96.8%	2,156,484
2007/08	132.0	1,771,580	96.3%	1,839,922
2008/09	120.0	2,015,686	95.3%	2,114,378
2009/10	108.0	1,941,047	93.7%	2,070,699
2010/11	96.0	1,667,035	90.3%	1,845,963
2011/12	84.0	2,084,374	86.0%	2,423,501
2012/13	72.0	2,419,729	78.2%	3,094,760
2013/14	60.0	2,116,320	70.4%	3,004,447
2014/15	48.0	1,293,672	60.2%	2,148,786
2015/16	36.0	1,491,884	48.6%	3,072,740
2016/17	24.0	1,020,004	32.9%	3,098,738
2017/18	12.0	501,636	14.6%	3,428,895
Total		\$81,691,325		\$92,592,791

(3) is from Exhibit WC-HC-Indem-1.

(4) is from Exhibit WC-HC-Indem-2.



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-4

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$51,992,397	99.8%	\$52,096,381
1999/00	228.0	1,764,218	99.7%	1,769,514
2000/01	216.0	1,535,565	99.6%	1,541,715
2001/02	204.0	1,198,700	99.5%	1,204,704
2002/03	192.0	3,012,597	99.4%	3,030,715
2003/04	180.0	1,966,783	99.3%	1,980,590
2004/05	168.0	3,186,546	99.1%	3,215,334
2005/06	156.0	1,742,797	98.9%	1,762,059
2006/07	144.0	2,101,766	98.7%	2,129,245
2007/08	132.0	1,961,352	98.4%	1,992,956
2008/09	120.0	2,102,253	98.0%	2,144,672
2009/10	108.0	2,401,307	97.6%	2,459,559
2010/11	96.0	1,848,271	96.4%	1,917,718
2011/12	84.0	2,307,782	94.5%	2,442,385
2012/13	72.0	2,927,113	92.2%	3,175,284
2013/14	60.0	2,495,069	86.4%	2,887,953
2014/15	48.0	1,627,839	79.6%	2,044,319
2015/16	36.0	2,182,299	70.5%	3,096,919
2016/17	24.0	2,179,056	58.7%	3,710,781
2017/18	12.0	1,492,099	36.1%	4,129,030
Total		\$92,025,808		\$98,731,833

(3) is from Exhibit WC-HC-Indem-1.

(4) is from Exhibit WC-HC-Indem-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-5

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	98.5%	99.8%	86.5%	\$47,800,742	\$4,191,654	\$52,646,939
1999/00	228.0	98.4%	99.7%	81.0%	1,764,218	0	1,764,218
2000/01	216.0	98.3%	99.6%	76.2%	1,535,565	0	1,535,565
2001/02	204.0	98.1%	99.5%	73.4%	1,181,479	17,221	1,204,954
2002/03	192.0	97.9%	99.4%	71.1%	2,958,903	53,694	3,034,450
2003/04	180.0	97.7%	99.3%	69.2%	1,846,628	120,156	2,020,303
2004/05	168.0	97.5%	99.1%	63.6%	2,461,259	725,287	3,602,285
2005/06	156.0	97.2%	98.9%	61.6%	1,732,797	10,000	1,749,034
2006/07	144.0	96.8%	98.7%	60.1%	2,086,766	15,000	2,111,732
2007/08	132.0	96.3%	98.4%	57.3%	1,771,580	189,772	2,102,731
2008/09	120.0	95.3%	98.0%	57.6%	2,015,686	86,568	2,165,908
2009/10	108.0	93.7%	97.6%	62.2%	1,941,047	460,259	2,681,328
2010/11	96.0	90.3%	96.4%	62.6%	1,667,035	181,236	1,956,367
2011/12	84.0	86.0%	94.5%	60.6%	2,084,374	223,408	2,452,937
2012/13	72.0	78.2%	92.2%	64.2%	2,419,729	507,384	3,210,441
2013/14	60.0	70.4%	86.4%	54.0%	2,116,320	378,749	2,817,990
2014/15	48.0	60.2%	79.6%	48.8%	1,293,672	334,167	1,978,348
2015/16	36.0	48.6%	70.5%	42.6%	1,491,884	690,415	3,112,740
2016/17	24.0	32.9%	58.7%	38.5%	1,020,004	1,159,051	4,033,037
2017/18	12.0	14.6%	36.1%	25.2%	501,636	990,463	4,433,179
Total					\$81,691,325	\$10,334,484	\$100,614,488

(3) and (4) are from Exhibit WC-HC-Indem-2.

(6) and (7) are from Exhibit WC-HC-Indem-1.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-6

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$48,517,753	\$52,096,381	\$52,646,939	\$52,646,939
1999/00	1,792,472	1,769,514	1,764,218	1,764,218
2000/01	1,561,717	1,541,715	1,535,565	1,535,565
2001/02	1,204,004	1,204,704	1,204,954	1,204,954
2002/03	3,021,346	3,030,715	3,034,450	3,034,450
2003/04	1,889,368	1,980,590	2,020,303	2,020,303
2004/05	2,523,262	3,215,334	3,602,285	3,602,285
2005/06	1,783,555	1,762,059	1,749,034	1,749,034
2006/07	2,156,484	2,129,245	2,111,732	2,111,732
2007/08	1,839,922	1,992,956	2,102,731	2,102,731
2008/09	2,114,378	2,144,672	2,165,908	2,165,908
2009/10	2,070,699	2,459,559	2,681,328	2,681,328
2010/11	1,845,963	1,917,718	1,956,367	1,952,502
2011/12	2,423,501	2,442,385	2,452,937	2,450,827
2012/13	3,094,760	3,175,284	3,210,441	3,199,894
2013/14	3,004,447	2,887,953	2,817,990	2,845,975
2014/15	2,148,786	2,044,319	1,978,348	2,021,780
2015/16	3,072,740	3,096,919	3,112,740	3,098,412
2016/17	3,098,738	3,710,781	4,033,037	3,717,275
2017/18	3,428,895	4,129,030	4,433,179	4,110,663
Total	\$92,592,791	\$98,731,833	\$100,614,488	\$100,016,775

(2) is from Exhibit WC-HC-Indem-3.

(3) is from Exhibit WC-HC-Indem-4.

(4) is from Exhibit WC-HC-Indem-5.

(5) is based on (2) to (4) and actuarial judgment.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-7

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Payroll (000) (3)	Limited Loss Rate per \$100 of Payroll (2)/(3)/10 (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)X(5) (6)	Projected A-priori Loss Rate per \$100 of Payroll (7)/(5) (8)
2008/09	\$2,165,908	\$501,624	\$0.43	1.157	\$0.50	\$0.52
2009/10	2,681,328	526,535	0.51	1.133	0.58	0.53
2010/11	1,952,502	489,053	0.40	1.124	0.45	0.53
2011/12	2,450,827	515,084	0.48	1.128	0.54	0.53
2012/13	3,199,894	482,783	0.66	1.110	0.74	0.54
2013/14	2,845,975	482,783	0.59	1.092	0.64	0.55
2014/15	2,021,780	468,483	0.43	1.072	0.46	0.56
2015/16	3,098,412	497,031	0.62	1.049	0.65	0.57
2016/17	3,717,275	529,113	0.70	1.031	0.72	0.58
2017/18	4,110,663	539,050	0.76	1.015	0.77	0.59
				Prior Selected	\$ 0.58	\$0.60

(7) Projected 2018/19 a-priori loss rate per \$100 of Payroll

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per \$100 of Payroll (4)	Payroll (000) (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5)X10 (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$2,116,320	70.4%	\$0.55	\$482,783	\$784,494	\$2,900,814
2014/15	1,293,672	60.2%	0.56	468,483	1,043,830	2,337,502
2015/16	1,491,884	48.6%	0.57	497,031	1,461,916	2,953,800
2016/17	1,020,004	32.9%	0.58	529,113	2,065,998	3,086,002
2017/18	501,636	14.6%	0.59	539,050	2,720,330	3,221,966

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per \$100 of Payroll (4)	Payroll (000) (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5)X10 (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$2,495,069	86.4%	\$0.55	\$482,783	\$361,038	\$2,856,107
2014/15	1,627,839	79.6%	0.56	468,483	534,373	2,162,212
2015/16	2,182,299	70.5%	0.57	497,031	839,203	3,021,502
2016/17	2,179,056	58.7%	0.58	529,113	1,271,251	3,450,307
2017/18	1,492,099	36.1%	0.59	539,050	2,035,004	3,527,104

Section I, (2) is from Exhibit WC-HC-Indem-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit WC-HC-Indem-10.

Section I, (5) is from Exhibit WC-HC-Indem-15.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit WC-HC-Indem-1.

Sections II and III, (3) are from Exhibit WC-HC-Indem-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Payroll (000) (6)	Frequency (per \$1M of Payroll) (5)/(6)X1,000 (7)
2008/09	120.0	280	100.0%	280	\$501,624	0.56
2009/10	108.0	214	100.0%	214	526,535	0.41
2010/11	96.0	202	100.0%	202	489,053	0.41
2011/12	84.0	169	99.9%	169	515,084	0.33
2012/13	72.0	143	99.8%	143	482,783	0.30
2013/14	60.0	158	99.7%	158	482,783	0.33
2014/15	48.0	158	99.6%	159	468,483	0.34
2015/16	36.0	176	99.3%	177	497,031	0.36
2016/17	24.0	166	98.9%	168	529,113	0.32
2017/18	12.0	174	96.5%	180	539,050	0.33

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$2,165,908	280	\$7,735	1.555	\$12,031	\$12,859	\$3,600,437
2009/10	2,681,328	214	12,530	1.479	18,527	13,526	2,894,524
2010/11	1,952,502	202	9,666	1.423	13,757	14,052	2,838,588
2011/12	2,450,827	169	14,502	1.387	20,114	14,420	2,436,976
2012/13	3,199,894	143	22,377	1.325	29,649	15,094	2,158,491
2013/14	2,845,975	158	18,012	1.265	22,792	15,806	2,497,336
2014/15	2,021,780	159	12,716	1.206	15,337	16,582	2,636,525
2015/16	3,098,412	177	17,505	1.147	20,075	17,440	3,086,831
2016/17	3,717,275	168	22,127	1.094	24,198	18,288	3,072,426
2017/18	4,110,663	180	22,837	1.045	23,875	19,131	3,443,493
				Prior Selected	\$ 18,188		
	(7) Projected 2018/19 average claim severity				\$20,000		

Section I, (3) is from Exhibit WC-HC-Indem-1.

Section I, (4) is from Exhibit WC-HC-Indem-2.

Section I, (6) is from Exhibit WC-HC-Indem-10.

Section II, (2) is from Exhibit WC-HC-Indem-6.

Section II, (3) is from Section I, (5).

Section II, (5) is from Exhibit WC-HC-Indem-15.

Section II, (7) is based on (6) and actuarial judgment.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-9

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$48,517,753	\$52,096,381	\$52,646,939				\$51,006,433	\$52,647,000
1999/00	1,792,472	1,769,514	1,764,218				1,772,683	1,764,218
2000/01	1,561,717	1,541,715	1,535,565				1,535,829	1,535,565
2001/02	1,204,004	1,204,704	1,204,954				1,198,000	1,205,000
2002/03	3,021,346	3,030,715	3,034,450				3,043,000	3,034,000
2003/04	1,889,368	1,980,590	2,020,303				2,015,000	2,020,000
2004/05	2,523,262	3,215,334	3,602,285				3,250,000	3,300,000
2005/06	1,783,555	1,762,059	1,749,034				1,749,000	1,749,000
2006/07	2,156,484	2,129,245	2,111,732				2,120,000	2,112,000
2007/08	1,839,922	1,992,956	2,102,731				2,051,000	2,103,000
2008/09	2,114,378	2,144,672	2,165,908				2,144,000	2,166,000
2009/10	2,070,699	2,459,559	2,681,328				2,712,000	2,681,000
2010/11	1,845,963	1,917,718	1,956,367				1,978,000	1,953,000
2011/12	2,423,501	2,442,385	2,452,937				2,555,000	2,451,000
2012/13	3,094,760	3,175,284	3,210,441				3,054,000	3,200,000
2013/14	3,004,447	2,887,953	2,817,990	2,900,814	2,856,107	2,497,336	3,100,000	2,900,000
2014/15	2,148,786	2,044,319	1,978,348	2,337,502	2,162,212	2,636,525	2,250,000	2,100,000
2015/16	3,072,740	3,096,919	3,112,740	2,953,800	3,021,502	3,086,831	3,525,000	3,100,000
2016/17	3,098,738	3,710,781	4,033,037	3,086,002	3,450,307	3,072,426	4,000,000	3,700,000
2017/18	3,428,895	4,129,030	4,433,179	3,221,966	3,527,104	3,443,493	3,123,000	3,700,000
Total	\$92,592,791	\$98,731,833	\$100,614,488				\$98,181,945	\$99,420,783
2013/14 - 2017/18	14,753,606	15,869,002	16,375,294	14,500,085	15,017,231	14,736,611	15,998,000	15,500,000
to 2012/13	77,839,186	82,862,832	84,239,193				82,183,945	83,920,783
						Change		
						All years		\$1,238,838
						2013/14 - 2017/18		-498,000
						to 2012/13		1,736,838

(2) is from Exhibit WC-HC-Indem-3.

(3) is from Exhibit WC-HC-Indem-4.

(4) is from Exhibit WC-HC-Indem-5.

(5) and (6) are from Exhibit WC-HC-Indem-7.

(7) is from Exhibit WC-HC-Indem-8.

(8) is based on (2) to (7) and actuarial judgment.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-10

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Payroll (000) (3)	Limited Loss Rate per \$100 of Payroll (2)/(3)/10 (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)X(5) (6)
2008/09	\$2,166,000	\$501,624	\$0.43	1.157	\$0.50
2009/10	2,681,000	526,535	0.51	1.133	0.58
2010/11	1,953,000	489,053	0.40	1.124	0.45
2011/12	2,451,000	515,084	0.48	1.128	0.54
2012/13	3,200,000	482,783	0.66	1.110	0.74
2013/14	2,900,000	482,783	0.60	1.092	0.66
2014/15	2,100,000	468,483	0.45	1.072	0.48
2015/16	3,100,000	497,031	0.62	1.049	0.65
2016/17	3,700,000	529,113	0.70	1.031	0.72
2017/18	3,700,000	539,050	0.69	1.015	0.70
Total	\$27,951,000	\$5,031,539	\$0.56		\$0.60

Claim Period (1)	Projected Limited Loss Rate per \$100 of Payroll (7)	Projected Payroll (000) (8)	Projected Ultimate Limited Losses (7)X(8)X10 (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per \$100 of Payroll (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11)X10 (12)
2018/19	\$0.60	\$580,283	\$3,482,000	0.90	\$0.54	\$3,124,000
2019/20	0.60	580,283	3,474,000	0.90	0.54	3,117,000
2020/21	0.61	580,283	3,526,000	0.90	0.55	3,164,000

(2) is from Exhibit WC-HC-Indem-9.

(3) was provided by the County.

(5) is from Exhibit WC-HC-Indem-15.

(7) 2018/19 is based on an average of the limited paid and limited reported incurred B-F and development methods using 12 months of experience. Other period(s) based on 2018/19 plus the trend in Exhibit WC-HC-Indem-15.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Indem-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-11

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$47,800,742	\$4,191,654	\$51,992,397	\$52,647,000	\$654,603	\$4,846,257	0.93	\$4,496,890
1999/00	1,764,218	0	1,764,218	1,764,218	0	0	0.91	0
2000/01	1,535,565	0	1,535,565	1,535,565	0	0	0.89	0
2001/02	1,181,479	17,221	1,198,700	1,205,000	6,300	23,521	0.88	20,629
2002/03	2,958,903	53,694	3,012,597	3,034,000	21,403	75,097	0.87	64,998
2003/04	1,846,628	120,156	1,966,783	2,020,000	53,217	173,373	0.85	148,093
2004/05	2,461,259	725,287	3,186,546	3,300,000	113,454	838,741	0.84	707,075
2005/06	1,732,797	10,000	1,742,797	1,749,000	6,203	16,203	0.84	13,652
2006/07	2,086,766	15,000	2,101,766	2,112,000	10,234	25,234	0.84	21,179
2007/08	1,771,580	189,772	1,961,352	2,103,000	141,648	331,420	0.84	277,809
2008/09	2,015,686	86,568	2,102,253	2,166,000	63,747	150,315	0.85	127,781
2009/10	1,941,047	460,259	2,401,307	2,681,000	279,693	739,952	0.87	641,742
2010/11	1,667,035	181,236	1,848,271	1,953,000	104,729	285,965	0.89	255,636
2011/12	2,084,374	223,408	2,307,782	2,451,000	143,218	366,626	0.91	331,883
2012/13	2,419,729	507,384	2,927,113	3,200,000	272,887	780,271	0.92	716,488
2013/14	2,116,320	378,749	2,495,069	2,900,000	404,931	783,680	0.92	718,950
2014/15	1,293,672	334,167	1,627,839	2,100,000	472,161	806,328	0.92	738,860
2015/16	1,491,884	690,415	2,182,299	3,100,000	917,701	1,608,116	0.91	1,467,620
2016/17	1,020,004	1,159,051	2,179,056	3,700,000	1,520,944	2,679,995	0.91	2,440,147
2017/18	501,636	990,463	1,492,099	3,700,000	2,207,901	3,198,364	0.91	2,900,968
Total	\$81,691,325	\$10,334,484	\$92,025,808	\$99,420,783	\$7,394,974	\$17,729,458		\$16,090,400

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit WC-HC-Indem-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Indem-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-12

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	98.5%	252.0	99.0%	20.0% *	\$4,846,257	\$969,251	\$3,877,006	0.93	\$3,599,825
1999/00	228.0	98.4%	240.0	98.5%	6.2% *	0	0	0	0.93	0
2000/01	216.0	98.3%	228.0	98.4%	5.9% *	0	0	0	0.91	0
2001/02	204.0	98.1%	216.0	98.3%	10.5% *	23,521	2,467	21,054	0.89	18,711
2002/03	192.0	97.9%	204.0	98.1%	9.5% *	75,097	7,117	67,980	0.88	59,621
2003/04	180.0	97.7%	192.0	97.9%	8.6% *	173,373	14,981	158,392	0.87	137,092
2004/05	168.0	97.5%	180.0	97.7%	7.9% *	838,741	66,589	772,152	0.85	659,561
2005/06	156.0	97.2%	168.0	97.5%	13.7% *	16,203	2,213	13,990	0.84	11,794
2006/07	144.0	96.8%	156.0	97.2%	12.0% *	25,234	3,021	22,213	0.84	18,715
2007/08	132.0	96.3%	144.0	96.8%	13.0% *	331,420	42,956	288,464	0.84	242,112
2008/09	120.0	95.3%	132.0	96.3%	20.0% *	150,315	30,063	120,252	0.84	100,800
2009/10	108.0	93.7%	120.0	95.3%	20.0% *	739,952	147,990	591,962	0.85	503,221
2010/11	96.0	90.3%	108.0	93.7%	20.0% *	285,965	57,193	228,772	0.87	198,408
2011/12	84.0	86.0%	96.0	90.3%	20.0% *	366,626	73,325	293,301	0.89	262,194
2012/13	72.0	78.2%	84.0	86.0%	20.0% *	780,271	156,054	624,217	0.91	565,063
2013/14	60.0	70.4%	72.0	78.2%	20.0% *	783,680	156,736	626,944	0.92	575,694
2014/15	48.0	60.2%	60.0	70.4%	20.0% *	806,328	161,266	645,062	0.92	591,781
2015/16	36.0	48.6%	48.0	60.2%	20.0% *	1,608,116	321,623	1,286,493	0.92	1,178,848
2016/17	24.0	32.9%	36.0	48.6%	20.0% *	2,679,995	535,999	2,143,996	0.91	1,956,682
2017/18	12.0	14.6%	24.0	32.9%	20.0% *	3,198,364	639,673	2,558,691	0.91	2,329,699
2018/19	0.0	0.0%	12.0	14.6%	14.6% *	3,482,000	509,405	2,972,595	0.91	2,696,192
Total						\$21,211,458	\$3,897,922	\$17,313,536		\$15,706,013

* - Limited to a maximum of 20% per actuarial judgment.

(3) and (5) are from Exhibit WC-HC-Indem-2.

(7) to 2017/18 is from Exhibit WC-HC-Indem-11. The amount for 2018/19 is from Exhibit WC-HC-Indem-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Indem-2.

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	99.0%	264.0	99.3%	20.0% *	\$3,877,006	\$775,401	\$3,101,605	0.93	\$2,882,577
1999/00	240.0	98.5%	252.0	99.0%	20.0% *	0	0	0	0.93	0
2000/01	228.0	98.4%	240.0	98.5%	6.2% *	0	0	0	0.93	0
2001/02	216.0	98.3%	228.0	98.4%	5.9% *	21,054	1,236	19,818	0.91	17,987
2002/03	204.0	98.1%	216.0	98.3%	10.5% *	67,980	7,131	60,849	0.89	54,077
2003/04	192.0	97.9%	204.0	98.1%	9.5% *	158,392	15,011	143,381	0.88	125,750
2004/05	180.0	97.7%	192.0	97.9%	8.6% *	772,152	66,722	705,430	0.87	610,567
2005/06	168.0	97.5%	180.0	97.7%	7.9% *	13,990	1,111	12,879	0.85	11,001
2006/07	156.0	97.2%	168.0	97.5%	13.7% *	22,213	3,033	19,180	0.84	16,169
2007/08	144.0	96.8%	156.0	97.2%	12.0% *	288,464	34,537	253,927	0.84	213,941
2008/09	132.0	96.3%	144.0	96.8%	13.0% *	120,252	15,586	104,666	0.84	87,848
2009/10	120.0	95.3%	132.0	96.3%	20.0% *	591,962	118,392	473,570	0.84	396,965
2010/11	108.0	93.7%	120.0	95.3%	20.0% *	228,772	45,754	183,018	0.85	155,582
2011/12	96.0	90.3%	108.0	93.7%	20.0% *	293,301	58,660	234,641	0.87	203,498
2012/13	84.0	86.0%	96.0	90.3%	20.0% *	624,217	124,843	499,374	0.89	446,411
2013/14	72.0	78.2%	84.0	86.0%	20.0% *	626,944	125,389	501,555	0.91	454,025
2014/15	60.0	70.4%	72.0	78.2%	20.0% *	645,062	129,012	516,050	0.92	473,865
2015/16	48.0	60.2%	60.0	70.4%	20.0% *	1,286,493	257,299	1,029,194	0.92	944,185
2016/17	36.0	48.6%	48.0	60.2%	20.0% *	2,143,996	428,799	1,715,197	0.92	1,571,682
2017/18	24.0	32.9%	36.0	48.6%	20.0% *	2,558,691	511,738	2,046,953	0.91	1,868,118
2018/19	12.0	14.6%	24.0	32.9%	20.0% *	2,972,595	594,519	2,378,076	0.91	2,165,248
2019/20	0.0	0.0%	12.0	14.6%	14.6% *	3,474,000	508,235	2,965,765	0.91	2,689,997
Total						\$20,787,536	\$3,822,408	\$16,965,128		\$15,389,493

* - Limited to a maximum of 20% per actuarial judgment.

(3) and (5) are from Exhibit WC-HC-Indem-2.

(7) to 2018/19 is from Exhibit WC-HC-Indem-12, (9). The amount for 2019/20 is from Exhibit WC-HC-Indem-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Indem-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-14

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	99.3%	276.0	99.5%	20.0% *	\$3,101,605	\$620,321	\$2,481,284	0.93	\$2,309,255
1999/00	252.0	99.0%	264.0	99.3%	20.0% *	0	0	0	0.93	0
2000/01	240.0	98.5%	252.0	99.0%	20.0% *	0	0	0	0.93	0
2001/02	228.0	98.4%	240.0	98.5%	6.2% *	19,818	1,237	18,581	0.93	17,241
2002/03	216.0	98.3%	228.0	98.4%	5.9% *	60,849	3,573	57,276	0.91	51,984
2003/04	204.0	98.1%	216.0	98.3%	10.5% *	143,381	15,041	128,340	0.89	114,056
2004/05	192.0	97.9%	204.0	98.1%	9.5% *	705,430	66,855	638,575	0.88	560,051
2005/06	180.0	97.7%	192.0	97.9%	8.6% *	12,879	1,113	11,766	0.87	10,184
2006/07	168.0	97.5%	180.0	97.7%	7.9% *	19,180	1,523	17,657	0.85	15,082
2007/08	156.0	97.2%	168.0	97.5%	13.7% *	253,927	34,675	219,252	0.84	184,834
2008/09	144.0	96.8%	156.0	97.2%	12.0% *	104,666	12,531	92,135	0.84	77,627
2009/10	132.0	96.3%	144.0	96.8%	13.0% *	473,570	61,380	412,190	0.84	345,957
2010/11	120.0	95.3%	132.0	96.3%	20.0% *	183,018	36,604	146,414	0.84	122,730
2011/12	108.0	93.7%	120.0	95.3%	20.0% *	234,641	46,928	187,713	0.85	159,573
2012/13	96.0	90.3%	108.0	93.7%	20.0% *	499,374	99,875	399,499	0.87	346,476
2013/14	84.0	86.0%	96.0	90.3%	20.0% *	501,555	100,311	401,244	0.89	358,689
2014/15	72.0	78.2%	84.0	86.0%	20.0% *	516,050	103,210	412,840	0.91	373,717
2015/16	60.0	70.4%	72.0	78.2%	20.0% *	1,029,194	205,839	823,355	0.92	756,050
2016/17	48.0	60.2%	60.0	70.4%	20.0% *	1,715,197	343,039	1,372,158	0.92	1,258,821
2017/18	36.0	48.6%	48.0	60.2%	20.0% *	2,046,953	409,391	1,637,562	0.92	1,500,542
2018/19	24.0	32.9%	36.0	48.6%	20.0% *	2,378,076	475,615	1,902,461	0.91	1,736,249
2019/20	12.0	14.6%	24.0	32.9%	20.0% *	2,965,765	593,153	2,372,612	0.91	2,160,273
2020/21	0.0	0.0%	12.0	14.6%	14.6% *	3,526,000	515,842	3,010,158	0.91	2,730,262
Total						\$20,491,128	\$3,748,056	\$16,743,072		\$15,189,653

* - Limited to a maximum of 20% per actuarial judgment.

(3) and (5) are from Exhibit WC-HC-Indem-2.

(7) to 2019/20 is from Exhibit WC-HC-Indem-13, (9). The amount for 2020/21 is from Exhibit WC-HC-Indem-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Indem-2.

Loss Rate and Severity Trend

I. Benefit Level Changes

Effective Date (1)	Benefit Level Change (2)	Cumulative Benefit Level Change (3)
01/15/09	1.002	1.002
07/01/09	1.001	1.003
07/15/09	1.002	1.005
01/15/10	1.004	1.009
07/01/10	1.001	1.009
07/15/10	1.002	1.012
06/28/11	0.989	1.001
07/01/11	1.001	1.002
09/01/11	0.983	0.984
01/15/13	1.001	0.985
07/15/13	1.001	0.986
01/15/14	1.001	0.987
01/15/15	1.002	0.989
07/01/15	1.002	0.991
07/15/15	1.002	0.993
01/15/16	1.002	0.995
07/01/16	1.002	0.997
07/15/16	1.002	0.999

II. Loss Rate and Severity Trend

Claim Period (1)	Benefit Trend (2018/19 = 1.000) (2)	Residual Trend (2018/19 = 1.000) (3)	Retention Index (2018/19 = 1.000) (4)	Loss Rate Trend (2018/19 = 1.000) (2)X(3)X(4) (5)	Wage Trend (2018/19 = 1.000) (6)	Severity Trend (2018/19 = 1.000) (5)X(6) (7)
2008/09	0.997	1.161	1.000	1.157	1.344	1.555
2009/10	0.991	1.143	1.000	1.133	1.305	1.479
2010/11	0.997	1.126	1.000	1.124	1.267	1.423
2011/12	1.016	1.110	1.000	1.128	1.230	1.387
2012/13	1.015	1.093	1.000	1.110	1.194	1.325
2013/14	1.013	1.077	1.000	1.092	1.159	1.265
2014/15	1.010	1.061	1.000	1.072	1.126	1.206
2015/16	1.004	1.046	1.000	1.049	1.093	1.147
2016/17	1.001	1.030	1.000	1.031	1.061	1.094
2017/18	1.000	1.015	1.000	1.015	1.030	1.045
2018/19	1.000	1.000	1.000	1.000	1.000	1.000
2019/20	1.000	0.985	1.000	0.985	0.971	0.957

Section I, (2) and (3) reflect data published by the NCCI.

Section II, (2) is based on Section I, (2).

Section II, (3) is based on 1.5% trend per actuarial judgment.

Section II, (4) is based on industry statistics and actuarial judgment.

Section II, (6) is based on 3% trend.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (INDEMNITY)

Exhibit WC-HC-Indem-16

List of Large Claims
Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
20040024	07/28/89	to 1998/99	Unlimited	\$703,679	\$435,415	\$1,139,094
951084	06/14/95	to 1998/99	Unlimited	173,763	1,637,553	1,811,316
960092	11/12/95	to 1998/99	Unlimited	759,789	676,501	1,436,290
20050890	05/08/05	2004/05	Unlimited	659,547	719,440	1,378,987

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	4,810	2	5	4	3	5	4,829		
0.01 - 5,000	4,859	112	101	126	118	128	5,444	5,444	71.2%
5,000 - 10,000	625	8	18	9	6	3	669	6,113	80.0%
10,000 - 25,000	659	9	17	9	13	12	719	6,832	89.4%
25,000 - 50,000	339	7	8	11	10	18	393	7,225	94.5%
50,000 - 100,000	207	13	5	10	11	7	253	7,478	97.9%
100,000 - 250,000	102	7	4	7	5	1	126	7,604	99.5%
250,000 - 500,000	22	0	0	0	0	0	22	7,626	99.8%
500,000 - 750,000	9	0	0	0	0	0	9	7,635	99.9%
750,000 - 1,000,000	3	0	0	0	0	0	3	7,638	99.9%
Over 1,000,000	4	0	0	0	0	0	4	7,642	100.0%
Total	11,639	158	158	176	166	174	12,471	7,642	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	5,013,881	50,561	43,746	82,338	59,331	82,297	5,332,154	5,332,154	5.8%
5,000 - 10,000	4,494,073	60,639	135,559	64,624	50,954	24,562	4,830,412	10,162,566	11.0%
10,000 - 25,000	10,339,637	131,400	259,755	124,139	224,523	241,062	11,320,516	21,483,083	23.3%
25,000 - 50,000	11,620,802	229,026	286,365	384,717	364,059	601,668	13,486,636	34,969,719	38.0%
50,000 - 100,000	14,089,193	868,865	394,998	625,780	775,810	427,510	17,182,155	52,151,874	56.7%
100,000 - 250,000	15,492,086	1,154,579	507,415	900,702	704,378	115,000	18,874,159	71,026,033	77.2%
250,000 - 500,000	6,996,249	0	0	0	0	0	6,996,249	78,022,282	84.8%
500,000 - 750,000	5,647,540	0	0	0	0	0	5,647,540	83,669,822	90.9%
750,000 - 1,000,000	2,590,300	0	0	0	0	0	2,590,300	86,260,122	93.7%
Over 1,000,000	5,765,686	0	0	0	0	0	5,765,686	92,025,808	100.0%
Total	\$82,049,447	\$2,495,069	\$1,627,839	\$2,182,299	\$2,179,056	\$1,492,099	\$92,025,808	\$92,025,808	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-1 (page 1)

Data Summary as of November 30, 2018
Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	6,154	16	\$11,464,949	\$400,023	\$11,864,971
1999/00	Unlimited	None	228.0	Not Provided	635	0	820,535	0	820,535
2000/01	9,500,000	None	216.0	425,788	625	0	710,561	0	710,561
2001/02	9,500,000	None	204.0	434,846	490	1	620,425	1,000	621,425
2002/03	9,500,000	None	192.0	441,142	514	2	898,593	20,056	918,650
2003/04	Unlimited	None	180.0	453,644	593	2	1,158,403	170,582	1,328,985
2004/05	Unlimited	None	168.0	458,776	518	2	1,253,028	65,205	1,318,233
2005/06	Unlimited	None	156.0	464,619	510	1	763,576	0	763,576
2006/07	Unlimited	None	144.0	448,051	318	3	925,319	0	925,319
2007/08	Unlimited	None	132.0	445,664	274	7	747,148	12,752	759,900
2008/09	Unlimited	None	120.0	501,624	280	8	687,506	12,987	700,494
2009/10	Unlimited	None	108.0	526,535	214	8	718,040	70,513	788,553
2010/11	Unlimited	None	96.0	489,053	202	12	662,445	26,732	689,176
2011/12	Unlimited	None	84.0	515,084	169	12	976,924	191,296	1,168,219
2012/13	Unlimited	None	72.0	482,783	143	18	945,357	288,425	1,233,782
2013/14	Unlimited	None	60.0	482,783	158	18	639,523	60,725	700,248
2014/15	Unlimited	None	48.0	468,483	158	20	397,714	98,607	496,321
2015/16	Unlimited	None	36.0	497,031	176	35	607,408	338,491	945,898
2016/17	Unlimited	None	24.0	529,113	166	48	232,585	993,712	1,226,297
2017/18	Unlimited	None	12.0	539,050	174	89	174,875	750,048	924,923
Total					12,471	302	\$25,404,915	\$3,501,152	\$28,906,066

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/77	Unlimited
12/01/00	9,500,000
12/01/03	Unlimited

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-1 (page 2)

Data Summary as of November 30, 2018
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	6,154	16	\$11,464,949	\$400,023	\$11,864,971
1999/00	Unlimited	None	228.0	Not Provided	635	0	820,535	0	820,535
2000/01	Unlimited	None	216.0	425,788	625	0	710,561	0	710,561
2001/02	Unlimited	None	204.0	434,846	490	1	620,425	1,000	621,425
2002/03	Unlimited	None	192.0	441,142	514	2	898,593	20,056	918,650
2003/04	Unlimited	None	180.0	453,644	593	2	1,158,403	170,582	1,328,985
2004/05	Unlimited	None	168.0	458,776	518	2	1,253,028	65,205	1,318,233
2005/06	Unlimited	None	156.0	464,619	510	1	763,576	0	763,576
2006/07	Unlimited	None	144.0	448,051	318	3	925,319	0	925,319
2007/08	Unlimited	None	132.0	445,664	274	7	747,148	12,752	759,900
2008/09	Unlimited	None	120.0	501,624	280	8	687,506	12,987	700,494
2009/10	Unlimited	None	108.0	526,535	214	8	718,040	70,513	788,553
2010/11	Unlimited	None	96.0	489,053	202	12	662,445	26,732	689,176
2011/12	Unlimited	None	84.0	515,084	169	12	976,924	191,296	1,168,219
2012/13	Unlimited	None	72.0	482,783	143	18	945,357	288,425	1,233,782
2013/14	Unlimited	None	60.0	482,783	158	18	639,523	60,725	700,248
2014/15	Unlimited	None	48.0	468,483	158	20	397,714	98,607	496,321
2015/16	Unlimited	None	36.0	497,031	176	35	607,408	338,491	945,898
2016/17	Unlimited	None	24.0	529,113	166	48	232,585	993,712	1,226,297
2017/18	Unlimited	None	12.0	539,050	174	89	174,875	750,048	924,923
Total					12,471	302	\$25,404,915	\$3,501,152	\$28,906,066

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-1 (page 3)

Data Summary as of November 30, 2018
Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	6,154	16	\$11,493,784	\$400,023	\$11,893,807
1999/00	Unlimited	None	228.0	Not Provided	635	0	831,292	0	831,292
2000/01	Unlimited	None	216.0	425,788	625	0	710,937	0	710,937
2001/02	Unlimited	None	204.0	434,846	490	1	620,425	1,000	621,425
2002/03	Unlimited	None	192.0	441,142	514	2	899,025	20,056	919,081
2003/04	Unlimited	None	180.0	453,644	593	2	1,158,403	170,582	1,328,985
2004/05	Unlimited	None	168.0	458,776	518	2	1,253,122	65,205	1,318,327
2005/06	Unlimited	None	156.0	464,619	510	1	763,576	0	763,576
2006/07	Unlimited	None	144.0	448,051	318	3	925,319	0	925,319
2007/08	Unlimited	None	132.0	445,664	274	7	747,148	12,752	759,900
2008/09	Unlimited	None	120.0	501,624	280	8	687,511	12,987	700,498
2009/10	Unlimited	None	108.0	526,535	214	8	718,042	70,513	788,554
2010/11	Unlimited	None	96.0	489,053	202	12	662,445	26,732	689,176
2011/12	Unlimited	None	84.0	515,084	169	12	978,584	191,296	1,169,879
2012/13	Unlimited	None	72.0	482,783	143	18	946,247	288,425	1,234,672
2013/14	Unlimited	None	60.0	482,783	158	18	639,591	60,725	700,316
2014/15	Unlimited	None	48.0	468,483	158	20	400,119	98,607	498,726
2015/16	Unlimited	None	36.0	497,031	176	35	608,246	338,491	946,737
2016/17	Unlimited	None	24.0	529,113	166	48	232,860	993,712	1,226,572
2017/18	Unlimited	None	12.0	539,050	174	89	175,767	750,048	925,814
Total					12,471	302	\$25,452,441	\$3,501,152	\$28,953,593

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	99.9%	100.0%	100.0%
348.0	99.9%	100.0%	100.0%
336.0	99.8%	100.0%	100.0%
324.0	99.7%	100.0%	100.0%
312.0	99.6%	100.0%	100.0%
300.0	99.4%	100.0%	100.0%
288.0	99.2%	100.0%	100.0%
276.0	98.8%	100.0%	100.0%
264.0	98.3%	100.0%	100.0%
252.0	97.6%	100.0%	100.0%
240.0	96.6%	100.0%	100.0%
228.0	96.5%	100.0%	100.0%
216.0	96.4%	100.0%	100.0%
204.0	96.3%	100.0%	100.0%
192.0	96.1%	100.0%	100.0%
180.0	95.9%	100.0%	100.0%
168.0	95.7%	100.0%	100.0%
156.0	95.3%	100.0%	100.0%
144.0	94.8%	99.9%	100.0%
132.0	94.2%	99.7%	100.0%
120.0	93.7%	99.5%	100.0%
108.0	92.8%	99.3%	100.0%
96.0	91.9%	99.1%	100.0%
84.0	90.6%	98.6%	99.9%
72.0	89.2%	98.1%	99.8%
60.0	86.4%	97.6%	99.7%
48.0	83.1%	96.2%	99.6%
36.0	77.6%	94.3%	99.3%
24.0	60.9%	82.0%	98.9%
12.0	22.1%	58.6%	96.0%

(2) is from Exhibit WC-HC-Med-2 (page 2).

(3) is from Exhibit WC-HC-Med-2 (page 3).

(4) is from Exhibit WC-HC-Med-2 (page 4).

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)
Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00							818	948	949	949	949	\$13,179	\$13,383	\$13,556	\$13,857	\$13,888	\$13,919	\$13,907	\$13,916	\$11,494	
2000/01						660	702	702	702	702	702	949	949	949	949	949	949	949	851	711	
2001/02						1,029	1,042	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	
2002/03			827		933	959	972	1,011	1,051	1,051	1,053	1,053	1,057	1,057	1,057	1,057	1,057	1,057	1,057	1,057	
2003/04					1,330	1,357	1,376	1,399	1,409	1,428	1,436	1,436	1,436	1,436	1,436	1,436	1,436	1,436	1,436	1,436	
2004/05	964				763	834	875	875	877	877	877	877	877	877	877	877	877	877	877	877	
2005/06	669	720			863	975	977	985	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	
2006/07	338	849	840		827	799	828	828	852	852	852	852	852	852	852	852	852	852	852	852	
2007/08	315	656	636		702	738	766	766	778	778	778	778	778	778	778	778	778	778	778	778	
2008/09	217	526	608		697	734	743	743	684	684	684	684	684	684	684	684	684	684	684	684	
2009/10	119	381	608		674	697	709	718	662	662	662	662	662	662	662	662	662	662	662	662	
2010/11	278	590	711		723	734	734	734	662	662	662	662	662	662	662	662	662	662	662	662	
2011/12	167	569	772		884	894	916	916	662	662	662	662	662	662	662	662	662	662	662	662	
2012/13	87	557	811		987	987	987	987	979	979	979	979	979	979	979	979	979	979	979	979	
2013/14	223	722	581		774	774	774	774	774	774	774	774	774	774	774	774	774	774	774	774	
2014/15	240	311	631		640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	
2015/16	138	444	400																		
2016/17	98	233	608																		
2017/18	176																				

II. Limited Paid Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult
to 1998/99																				
1999/00							1.001	1.000	1.000	1.000	1.000	1.016	1.013	1.022	1.002	1.002	0.999	1.001	1.000	0.826
2000/01						1.014	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.876	1.000	1.000	1.000	
2001/02					1.080	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.851	1.000	1.000	1.000	
2002/03					1.013	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.884	1.000	1.000	1.000	
2003/04			1.128		1.014	1.040	1.038	1.021	1.027	1.003	1.001	1.001	0.850	1.000	1.000	1.000	1.000	1.000	1.000	
2004/05	1.182				1.020	1.014	1.017	1.007	1.013	1.006	0.870	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
2005/06	1.700	1.077	1.060		1.050	1.008	1.050	1.000	0.895	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2006/07	2.515	0.989	1.146		1.013	1.002	1.008	1.050	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2007/08	2.081	1.238	1.019		0.965	1.037	1.037	1.000	0.875	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2008/09	2.422	1.209	1.051		1.037	1.000	1.015	1.015	0.880	1.002	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2009/10	3.199	1.597	1.108		1.066	1.066	0.939	1.016	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2010/11	2.122	1.206	1.016		0.902	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2011/12	3.402	1.357	1.291		1.025	1.069	1.069	1.069	1.069	1.069	1.069	1.069	1.069	1.069	1.069	1.069	1.069	1.069	1.069	
2012/13	6.416	1.455	0.955		1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106	1.106	
2013/14	3.246	0.818	1.068		1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	
2014/15	1.295	1.230	1.045																	
2015/16	3.207	1.371																		
2016/17	2.384																			
2017/18																				

Average All
Wtd 3
Last 3
Last 5
x-Hi,low

2.832	1.228	1.090	1.021	1.029	1.029	1.009	1.003	0.993	0.994	0.987	0.984	0.991	0.993	0.994	0.971	0.970	1.000	1.000	1.000	1.005
2.074	1.071	1.011	0.995	1.016	1.008	1.008	0.982	0.957	0.957	0.956	0.940	0.959	0.980	0.983	0.947	0.949	0.999	1.000	1.000	1.001
2.236	1.140	1.022	1.005	1.011	1.003	1.003	0.965	0.963	0.966	0.957	0.957	0.971	0.980	0.980	0.950	0.959	1.000	1.000	1.000	1.001
2.946	1.320	1.043	1.021	1.043	1.005	1.005	1.015	1.001	1.001	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001
2.323	1.319	1.165	1.097	1.057	1.036	1.036	1.022	1.014	1.010	1.008	1.005	1.005	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002
2.750	1.643	1.288	1.204	1.158	1.121	1.121	1.104	1.088	1.077	1.068	1.061	1.055	1.050	1.046	1.042	1.040	1.038	1.037	1.036	1.035
22.1%	60.9%	77.6%	83.1%	86.4%	89.2%	89.2%	90.6%	91.9%	92.8%	93.7%	94.2%	94.8%	95.3%	95.7%	95.9%	96.1%	96.3%	96.4%	96.5%	96.6%

The County changed data systems during 2016, resulting in a shift between indemnity and medical. The amounts in the 2016 diagonal are not consistent with prior diagonals. Amounts are limited (net of excess insurance) and gross of recoveries. Data was provided by the County.

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Historical Limited Reported Incurred Losses (\$000) and Limited Reported Incurred Loss Development

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00							1,710	1,712	1,712	1,027	1,027	\$14,939	\$15,104	\$14,472	\$14,317	\$14,324	\$14,359	\$14,369	\$14,407	\$11,894	
2000/01					1,596	1,596	1,598	1,598	861	861	855	849	849	854	854	854	851	851	851	831	
2001/02					1,170	1,170	1,164	1,075	705	705	702	702	702	702	702	702	711	711	711	711	
2002/03				1,811	1,787	1,789	1,075	1,056	1,056	1,056	1,056	1,061	1,078	1,078	1,078	919	919	919	919	919	
2003/04			1,620	2,066	1,666	999	1,050	1,054	1,076	1,076	1,104	1,430	1,330	1,330	1,330	1,329	1,330	1,330	1,330	1,330	
2004/05	1,817	1,681	1,726	824	1,427	1,395	1,385	1,437	1,443	1,443	1,443	1,272	1,272	1,318	1,318	1,318	1,318	1,318	1,318	1,318	
2005/06	1,393	1,023	1,534	1,159	863	875	875	877	877	877	877	764	764	764	764	764	764	764	764	764	
2006/07	1,023	954	1,062	849	1,004	977	977	977	1,033	1,033	1,033	925	925	925	925	925	925	925	925	925	
2007/08	768	693	849	720	800	828	828	828	872	872	872	780	780	780	780	780	780	780	780	780	
2008/09	429	480	690	691	753	794	794	794	711	711	711	744	744	744	744	744	744	744	744	744	
2009/10	442	676	662	778	787	763	706	689	789	789	789	700	700	700	700	700	700	700	700	700	
2010/11	367	722	869	1,104	1,004	991	1,170	1,170	689	689	689	700	700	700	700	700	700	700	700	700	
2011/12	385	977	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	
2012/13	608	1,088	886	736	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	
2013/14	608	1,088	886	736	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	
2014/15	758	615	536	499																	
2015/16	1,379	1,037	947																		
2016/17	1,400	1,227																			
2017/18	926																				

II. Limited Reported Incurred Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-UIT
to 1998/99																				
1999/00																				
2000/01							1,001	1,000	0,600	1,000	0,924	1,011	0,958	0,989	1,001	1,002	1,001	1,003	1,000	
2001/02					1,023	0,995	1,001	0,539	0,999	0,970	1,000	1,000	1,000	1,005	0,985	0,976	1,000	1,000	1,000	
2002/03					1,001	0,601	0,997	1,000	0,995	1,000	1,000	1,000	1,000	1,000	0,851	1,000	1,000	1,000	1,000	
2003/04			0,987		1,001	0,603	0,977	0,986	1,000	1,002	1,003	1,014	0,854	1,001	0,999	1,000	1,000	1,000	1,000	
2004/05		1,102	1,032	0,691	0,977	0,983	1,038	1,000	1,004	1,000	0,882	1,000	1,036	1,000	1,000	1,000	1,000	1,000	1,000	
2005/06	1,207	1,027	0,477	1,084	0,980	0,973	1,008	1,000	1,004	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2006/07	1,500	0,718	1,051	0,866	0,973	1,008	1,050	1,000	0,895	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2007/08	0,977	1,139	0,799	0,942	1,036	1,000	1,053	0,890	1,004	0,974	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2008/09	1,164	0,775	1,040	1,045	1,055	1,006	0,890	1,014	0,871											
2009/10	1,120	1,437	1,001	1,072	1,051	0,996	0,960	1,060												
2010/11	1,528	1,127	1,020	1,012	1,020	0,970	0,925	0,976												
2011/12	1,966	1,203	1,270	0,910	0,987	1,180														
2012/13	1,996	1,270	0,991	1,011	1,261															
2013/14	1,790	0,814	0,831	0,951																
2014/15	0,812	0,872	0,930																	
2015/16	0,752	0,913																		
2016/17	0,876																			
2017/18																				

Average All
Wtd 3
Last 3
Last 5
x-Hi,low

1,307	1,033	0,954	0,965	0,993	0,980	0,985	0,965	0,955	0,949	0,980	1,013	0,994	0,978	0,980	0,970	0,970	1,000	1,001	1,001	1,000
0,814	0,865	0,918	0,955	1,079	1,047	0,941	0,982	0,950	0,950	0,946	0,946	0,971	0,970	0,972	0,948	0,949	1,001	1,001	1,001	1,000
0,813	0,866	0,917	0,957	1,073	1,034	0,942	0,988	0,957	0,946	0,961	0,961	0,977	0,964	0,961	0,951	0,959	1,000	1,000	1,000	1,000
1,159	0,896	0,960	0,991	1,031	1,001	0,995	1,005	0,992	0,991	0,991	1,001	1,000	1,000	1,000	0,996	1,000	1,000	1,000	1,000	1,000
1,418	1,113	1,049	1,020	1,009	1,002	1,001	1,001	1,002	1,002	1,001	1,000	1,001	1,001	1,000	1,001	1,001	1,000	1,001	1,001	1,000
1,450	1,165	1,020	1,015	1,005	1,005	1,005	1,005	1,002	1,002	1,002	1,002	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1,400	1,150	1,020	1,015	1,005	1,005	1,005	1,005	1,002	1,002	1,002	1,002	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1,707	1,219	1,060	1,040	1,024	1,019	1,014	1,009	1,007	1,007	1,005	1,003	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
56.6%	82.0%	94.3%	96.2%	97.6%	98.1%	98.6%	99.1%	99.3%	99.3%	99.5%	99.7%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The County changed data systems during 2016, resulting in a shift between indemnity and medical. The amounts in the 2016 diagonal are not consistent with prior diagonals.

Amounts are limited (net of excess insurance) and gross of recoveries.

Data was provided by the County.

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)
Historical Ratio of Limited Paid Losses and Limited Reported Incurred Losses

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00																					
2000/01																					
2001/02																					
2002/03																					
2003/04																					
2004/05																					
2005/06																					
2006/07																					
2007/08																					
2008/09																					
2009/10																					
2010/11																					
2011/12																					
2012/13																					
2013/14																					
2014/15																					
2015/16																					
2016/17																					
2017/18																					
Average																					
All	29.6%	59.5%	73.0%	82.6%	85.3%	85.5%	86.6%	90.6%	93.7%	98.2%	98.9%	95.9%	95.1%	95.6%	96.9%	98.9%	99.2%	96.9%	98.3%	96.6%	
Last 3	12.0%	37.4%	67.4%	81.9%	89.2%	85.3%	89.2%	95.9%	94.0%	97.9%	99.4%	99.4%	91.3%	91.8%	95.0%	99.2%	99.9%	98.9%	98.9%	96.6%	
Last 5	20.2%	53.3%	73.7%	85.4%	91.2%	91.5%	93.7%	96.7%	97.0%	99.0%	99.8%	99.3%	98.9%	97.6%	99.1%	99.2%	99.9%	98.9%	98.9%	96.6%	
x-high																					
Implicit	37.8%	74.2%	82.3%	86.3%	88.5%	90.9%	91.8%	92.8%	93.5%	94.1%	94.5%	94.9%	95.3%	95.7%	95.9%	96.1%	96.3%	96.4%	96.5%	96.6%	

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$11,464,949	96.6%	\$11,866,222
1999/00	228.0	820,535	96.5%	850,103
2000/01	216.0	710,561	96.4%	736,903
2001/02	204.0	620,425	96.3%	644,068
2002/03	192.0	898,593	96.1%	934,703
2003/04	180.0	1,158,403	95.9%	1,207,363
2004/05	168.0	1,253,028	95.7%	1,309,904
2005/06	156.0	763,576	95.3%	801,428
2006/07	144.0	925,319	94.8%	976,046
2007/08	132.0	747,148	94.2%	792,836
2008/09	120.0	687,506	93.7%	733,925
2009/10	108.0	718,040	92.8%	773,419
2010/11	96.0	662,445	91.9%	720,671
2011/12	84.0	976,924	90.6%	1,078,733
2012/13	72.0	945,357	89.2%	1,059,534
2013/14	60.0	639,523	86.4%	740,416
2014/15	48.0	397,714	83.1%	478,877
2015/16	36.0	607,408	77.6%	782,559
2016/17	24.0	232,585	60.9%	382,058
2017/18	12.0	174,875	22.1%	789,965
Total		\$25,404,915		\$27,659,733

(3) is from Exhibit WC-HC-Med-1.

(4) is from Exhibit WC-HC-Med-2.



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-4

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$11,864,971	100.0%	\$11,864,971
1999/00	228.0	820,535	100.0%	820,535
2000/01	216.0	710,561	100.0%	710,561
2001/02	204.0	621,425	100.0%	621,425
2002/03	192.0	918,650	100.0%	918,650
2003/04	180.0	1,328,985	100.0%	1,328,985
2004/05	168.0	1,318,233	100.0%	1,318,233
2005/06	156.0	763,576	100.0%	763,576
2006/07	144.0	925,319	99.9%	926,244
2007/08	132.0	759,900	99.7%	762,182
2008/09	120.0	700,494	99.5%	704,002
2009/10	108.0	788,553	99.3%	794,087
2010/11	96.0	689,176	99.1%	695,401
2011/12	84.0	1,168,219	98.6%	1,184,664
2012/13	72.0	1,233,782	98.1%	1,257,406
2013/14	60.0	700,248	97.6%	717,224
2014/15	48.0	496,321	96.2%	515,979
2015/16	36.0	945,898	94.3%	1,003,030
2016/17	24.0	1,226,297	82.0%	1,495,419
2017/18	12.0	924,923	58.6%	1,579,068
Total		\$28,906,066		\$29,981,641

(3) is from Exhibit WC-HC-Med-1.

(4) is from Exhibit WC-HC-Med-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-5

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	96.6%	100.0%	100.0%	\$11,464,949	\$400,023	\$11,864,971
1999/00	228.0	96.5%	100.0%	100.0%	820,535	0	820,535
2000/01	216.0	96.4%	100.0%	100.0%	710,561	0	710,561
2001/02	204.0	96.3%	100.0%	100.0%	620,425	1,000	621,425
2002/03	192.0	96.1%	100.0%	100.0%	898,593	20,056	918,650
2003/04	180.0	95.9%	100.0%	100.0%	1,158,403	170,582	1,328,985
2004/05	168.0	95.7%	100.0%	100.0%	1,253,028	65,205	1,318,233
2005/06	156.0	95.3%	100.0%	100.0%	763,576	0	763,576
2006/07	144.0	94.8%	99.9%	98.1%	925,319	0	925,319
2007/08	132.0	94.2%	99.7%	94.8%	747,148	12,752	760,599
2008/09	120.0	93.7%	99.5%	92.1%	687,506	12,987	701,605
2009/10	108.0	92.8%	99.3%	90.3%	718,040	70,512	796,156
2010/11	96.0	91.9%	99.1%	88.9%	662,445	26,732	692,507
2011/12	84.0	90.6%	98.6%	85.3%	976,924	191,296	1,201,208
2012/13	72.0	89.2%	98.1%	82.6%	945,357	288,425	1,294,686
2013/14	60.0	86.4%	97.6%	82.6%	639,523	60,725	713,014
2014/15	48.0	83.1%	96.2%	77.5%	397,714	98,607	524,914
2015/16	36.0	77.6%	94.3%	74.6%	607,408	338,491	1,061,445
2016/17	24.0	60.9%	82.0%	54.0%	232,585	993,712	2,072,778
2017/18	12.0	22.1%	58.6%	46.8%	174,875	750,048	1,777,671
Total					\$25,404,915	\$3,501,152	\$30,868,836

(3) and (4) are from Exhibit WC-HC-Med-2.

(6) and (7) are from Exhibit WC-HC-Med-1.

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$11,866,222	\$11,864,971	\$11,864,971	\$11,904,974
1999/00	850,103	820,535	820,535	820,535
2000/01	736,903	710,561	710,561	710,561
2001/02	644,068	621,425	621,425	621,525
2002/03	934,703	918,650	918,650	920,655
2003/04	1,207,363	1,328,985	1,328,985	1,346,043
2004/05	1,309,904	1,318,233	1,318,233	1,324,753
2005/06	801,428	763,576	763,576	763,576
2006/07	976,046	926,244	925,319	925,319
2007/08	792,836	762,182	760,599	761,176
2008/09	733,925	704,002	701,605	701,793
2009/10	773,419	794,087	796,156	796,156
2010/11	720,671	695,401	692,507	692,796
2011/12	1,078,733	1,184,664	1,201,208	1,197,900
2012/13	1,059,534	1,257,406	1,294,686	1,283,502
2013/14	740,416	717,224	713,014	714,698
2014/15	478,877	515,979	524,914	516,736
2015/16	782,559	1,003,030	1,061,445	982,302
2016/17	382,058	1,495,419	2,072,778	1,503,690
2017/18	789,965	1,579,068	1,777,671	1,500,688
Total	\$27,659,733	\$29,981,641	\$30,868,836	\$29,989,377

(2) is from Exhibit WC-HC-Med-3.

(3) is from Exhibit WC-HC-Med-4.

(4) is from Exhibit WC-HC-Med-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Payroll (000) (3)	Limited Loss Rate per \$100 of Payroll (2)/(3)/10 (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)X(5) (6)	Projected A-priori Loss Rate per \$100 of Payroll (7)/(5) (8)
2008/09	\$701,793	\$501,624	\$0.14	1.335	\$0.19	\$0.18
2009/10	796,156	526,535	0.15	1.288	0.19	0.18
2010/11	692,796	489,053	0.14	1.269	0.18	0.19
2011/12	1,197,900	515,084	0.23	1.358	0.32	0.17
2012/13	1,283,502	482,783	0.27	1.301	0.35	0.18
2013/14	714,698	482,783	0.15	1.241	0.18	0.19
2014/15	516,736	468,483	0.11	1.181	0.13	0.20
2015/16	982,302	497,031	0.20	1.132	0.22	0.21
2016/17	1,503,690	529,113	0.28	1.082	0.31	0.22
2017/18	1,500,688	539,050	0.28	1.040	0.29	0.23

(7) Projected 2018/19 a-priori loss rate per \$100 of Payroll \$0.24

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per \$100 of Payroll (4)	Payroll (000) (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5)X10 (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$639,523	86.4%	\$0.19	\$482,783	\$125,009	\$764,531
2014/15	397,714	83.1%	0.20	468,483	158,457	556,172
2015/16	607,408	77.6%	0.21	497,031	231,715	839,122
2016/17	232,585	60.9%	0.22	529,113	450,999	683,585
2017/18	174,875	22.1%	0.23	539,050	951,499	1,126,374

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per \$100 of Payroll (4)	Payroll (000) (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5)X10 (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$700,248	97.6%	\$0.19	\$482,783	\$21,714	\$721,962
2014/15	496,321	96.2%	0.20	468,483	35,619	531,940
2015/16	945,898	94.3%	0.21	497,031	58,968	1,004,867
2016/17	1,226,297	82.0%	0.22	529,113	207,458	1,433,755
2017/18	924,923	58.6%	0.23	539,050	506,233	1,431,156

Section I, (2) is from Exhibit WC-HC-Med-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit WC-HC-Med-10.

Section I, (5) is from Exhibit WC-HC-Med-15.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit WC-HC-Med-1.

Sections II and III, (3) are from Exhibit WC-HC-Med-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Payroll (000) (6)	Frequency (per \$1M of Payroll) (5)/(6)X1,000 (7)
2008/09	120.0	280	100.0%	280	\$501,624	0.56
2009/10	108.0	214	100.0%	214	526,535	0.41
2010/11	96.0	202	100.0%	202	489,053	0.41
2011/12	84.0	169	99.9%	169	515,084	0.33
2012/13	72.0	143	99.8%	143	482,783	0.30
2013/14	60.0	158	99.7%	158	482,783	0.33
2014/15	48.0	158	99.6%	159	468,483	0.34
2015/16	36.0	176	99.3%	177	497,031	0.36
2016/17	24.0	166	98.9%	168	529,113	0.32
2017/18	12.0	174	96.0%	181	539,050	0.34

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$701,793	280	\$2,506	1.795	\$4,498	\$4,396	\$1,230,890
2009/10	796,156	214	3,720	1.680	6,251	4,695	1,004,737
2010/11	692,796	202	3,430	1.608	5,514	4,907	991,198
2011/12	1,197,900	169	7,088	1.670	11,836	4,724	798,408
2012/13	1,283,502	143	8,976	1.553	13,941	5,079	726,307
2013/14	714,698	158	4,523	1.438	6,506	5,485	866,580
2014/15	516,736	159	3,250	1.330	4,321	5,933	943,340
2015/16	982,302	177	5,550	1.237	6,864	6,378	1,128,939
2016/17	1,503,690	168	8,951	1.148	10,276	6,872	1,154,424
2017/18	1,500,688	181	8,291	1.071	8,881	7,365	1,332,983

(7) Projected 2018/19 average claim severity \$7,889

Section I, (3) is from Exhibit WC-HC-Med-1.

Section I, (4) is from Exhibit WC-HC-Med-2.

Section I, (6) is from Exhibit WC-HC-Med-10.

Section II, (2) is from Exhibit WC-HC-Med-6.

Section II, (3) is from Section I, (5).

Section II, (5) is from Exhibit WC-HC-Med-15.

Section II, (7) is based on (6) and actuarial judgment.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-9

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$11,866,222	\$11,864,971	\$11,864,971				\$11,828,000	\$11,905,000
1999/00	850,103	820,535	820,535				831,292	820,535
2000/01	736,903	710,561	710,561				710,937	710,561
2001/02	644,068	621,425	621,425				622,000	622,000
2002/03	934,703	918,650	918,650				922,000	921,000
2003/04	1,207,363	1,328,985	1,328,985				1,354,000	1,346,043
2004/05	1,309,904	1,318,233	1,318,233				1,274,250	1,325,000
2005/06	801,428	763,576	763,576				763,576	763,576
2006/07	976,046	926,244	925,319				925,319	925,319
2007/08	792,836	762,182	760,599				783,266	761,176
2008/09	733,925	704,002	701,605				725,000	702,000
2009/10	773,419	794,087	796,156				749,000	796,000
2010/11	720,671	695,401	692,507				714,000	693,000
2011/12	1,078,733	1,184,664	1,201,208				1,008,000	1,198,000
2012/13	1,059,534	1,257,406	1,294,686				1,004,000	1,284,000
2013/14	740,416	717,224	713,014	764,531	721,962	866,580	766,000	715,000
2014/15	478,877	515,979	524,914	556,172	531,940	943,340	600,000	525,000
2015/16	782,559	1,003,030	1,061,445	839,122	1,004,867	1,128,939	1,250,000	1,050,000
2016/17	382,058	1,495,419	2,072,778	683,585	1,433,755	1,154,424	1,800,000	1,500,000
2017/18	789,965	1,579,068	1,777,671	1,126,374	1,431,156	1,332,983	1,218,000	1,450,000
Total	\$27,659,733	\$29,981,641	\$30,868,836				\$29,848,638	\$30,013,210
2013/14 - 2017/18	3,173,875	5,310,720	6,149,821	3,969,784	5,123,680	5,426,265	5,634,000	5,240,000
to 2012/13	24,485,858	24,670,921	24,719,015				24,214,638	24,773,210
						Change		
						All years		\$164,572
						2013/14 - 2017/18		-394,000
						to 2012/13		558,572

- (2) is from Exhibit WC-HC-Med-3.
- (3) is from Exhibit WC-HC-Med-4.
- (4) is from Exhibit WC-HC-Med-5.
- (5) and (6) are from Exhibit WC-HC-Med-7.
- (7) is from Exhibit WC-HC-Med-8.
- (8) is based on (2) to (7) and actuarial judgment.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-10

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Payroll (000) (3)	Limited Loss Rate per \$100 of Payroll (2)/(3)/10 (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)X(5) (6)
2008/09	\$702,000	\$501,624	\$0.14	1.335	\$0.19
2009/10	796,000	526,535	0.15	1.288	0.19
2010/11	693,000	489,053	0.14	1.269	0.18
2011/12	1,198,000	515,084	0.23	1.358	0.32
2012/13	1,284,000	482,783	0.27	1.301	0.35
2013/14	715,000	482,783	0.15	1.241	0.18
2014/15	525,000	468,483	0.11	1.181	0.13
2015/16	1,050,000	497,031	0.21	1.132	0.24
2016/17	1,500,000	529,113	0.28	1.082	0.31
2017/18	1,450,000	539,050	0.27	1.040	0.28
Total	\$9,913,000	\$5,031,539	\$0.20		\$0.24

Claim Period (1)	Projected Limited Loss Rate per \$100 of Payroll (7)	Projected Payroll (000) (8)	Projected Ultimate Limited Losses (7)X(8)X10 (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per \$100 of Payroll (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11)X10 (12)
2018/19	\$0.24	\$580,283	\$1,372,000	0.92	\$0.22	\$1,267,000
2019/20	0.25	580,283	1,427,000	0.92	0.23	1,318,000
2020/21	0.26	580,283	1,484,000	0.92	0.24	1,370,000

(2) is from Exhibit WC-HC-Med-9.

(3) was provided by the County.

(5) is from Exhibit WC-HC-Med-15.

(7) 2018/19 is based on (6) and actuarial judgment.
Other period(s) based on 2018/19 plus the trend in Exhibit WC-HC-Med-15.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Med-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-11

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$11,464,949	\$400,023	\$11,864,971	\$11,905,000	\$40,029	\$440,052	0.93	\$408,329
1999/00	820,535	0	820,535	820,535	0	0	0.90	0
2000/01	710,561	0	710,561	710,561	0	0	0.88	0
2001/02	620,425	1,000	621,425	622,000	575	1,575	0.86	1,357
2002/03	898,593	20,056	918,650	921,000	2,350	22,406	0.85	18,942
2003/04	1,158,403	170,582	1,328,985	1,346,043	17,058	187,640	0.83	155,719
2004/05	1,253,028	65,205	1,318,233	1,325,000	6,767	71,972	0.82	58,936
2005/06	763,576	0	763,576	763,576	0	0	0.81	0
2006/07	925,319	0	925,319	925,319	0	0	0.81	0
2007/08	747,148	12,752	759,900	761,176	1,275	14,027	0.80	11,289
2008/09	687,506	12,987	700,494	702,000	1,506	14,493	0.80	11,605
2009/10	718,040	70,513	788,553	796,000	7,447	77,960	0.80	62,594
2010/11	662,445	26,732	689,176	693,000	3,824	30,556	0.80	24,572
2011/12	976,924	191,296	1,168,219	1,198,000	29,781	221,077	0.81	179,384
2012/13	945,357	288,425	1,233,782	1,284,000	50,218	338,643	0.81	275,504
2013/14	639,523	60,725	700,248	715,000	14,752	75,477	0.83	62,793
2014/15	397,714	98,607	496,321	525,000	28,679	127,286	0.84	107,399
2015/16	607,408	338,491	945,898	1,050,000	104,102	442,593	0.86	380,958
2016/17	232,585	993,712	1,226,297	1,500,000	273,703	1,267,415	0.90	1,141,751
2017/18	174,875	750,048	924,923	1,450,000	525,077	1,275,125	0.93	1,186,924
Total	\$25,404,915	\$3,501,152	\$28,906,066	\$30,013,210	\$1,107,143	\$4,608,297		\$4,088,056

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit WC-HC-Med-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Med-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-12

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	96.6%	252.0	97.6%	30.0%	\$440,052	\$132,016	\$308,036	0.93	\$286,013
1999/00	228.0	96.5%	240.0	96.6%	2.8%	0	0	0	0.93	0
2000/01	216.0	96.4%	228.0	96.5%	2.7%	0	0	0	0.90	0
2001/02	204.0	96.3%	216.0	96.4%	2.6%	1,575	41	1,534	0.88	1,354
2002/03	192.0	96.1%	204.0	96.3%	5.0%	22,406	1,115	21,291	0.86	18,347
2003/04	180.0	95.9%	192.0	96.1%	4.7%	187,640	8,879	178,761	0.85	151,122
2004/05	168.0	95.7%	180.0	95.9%	6.6%	71,972	4,757	67,215	0.83	55,780
2005/06	156.0	95.3%	168.0	95.7%	8.1%	0	0	0	0.82	0
2006/07	144.0	94.8%	156.0	95.3%	9.1%	0	0	0	0.81	0
2007/08	132.0	94.2%	144.0	94.8%	9.8%	14,027	1,376	12,651	0.81	10,213
2008/09	120.0	93.7%	132.0	94.2%	8.9%	14,493	1,288	13,205	0.80	10,627
2009/10	108.0	92.8%	120.0	93.7%	11.7%	77,960	9,098	68,862	0.80	55,139
2010/11	96.0	91.9%	108.0	92.8%	11.4%	30,556	3,476	27,080	0.80	21,742
2011/12	84.0	90.6%	96.0	91.9%	14.4%	221,077	31,821	189,256	0.80	152,192
2012/13	72.0	89.2%	84.0	90.6%	12.4%	338,643	42,058	296,585	0.81	240,651
2013/14	60.0	86.4%	72.0	89.2%	20.9%	75,477	15,788	59,689	0.81	48,560
2014/15	48.0	83.1%	60.0	86.4%	19.6%	127,286	24,949	102,337	0.83	85,139
2015/16	36.0	77.6%	48.0	83.1%	24.3%	442,593	107,441	335,152	0.84	282,789
2016/17	24.0	60.9%	36.0	77.6%	42.8%	1,267,415	542,341	725,074	0.86	624,101
2017/18	12.0	22.1%	24.0	60.9%	49.8%	1,275,125	634,425	640,700	0.90	577,175
2018/19	0.0	0.0%	12.0	22.1%	22.1%	1,372,000	303,721	1,068,279	0.93	994,386
Total						\$5,980,297	\$1,864,590	\$4,115,707		\$3,615,330

(3) and (5) are from Exhibit WC-HC-Med-2.

(7) to 2017/18 is from Exhibit WC-HC-Med-11. The amount for 2018/19 is from Exhibit WC-HC-Med-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Med-2.

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	97.6%	264.0	98.3%	30.0%	\$308,036	\$92,411	\$215,625	0.93	\$200,398
1999/00	240.0	96.6%	252.0	97.6%	30.0%	0	0	0	0.93	0
2000/01	228.0	96.5%	240.0	96.6%	2.8%	0	0	0	0.93	0
2001/02	216.0	96.4%	228.0	96.5%	2.7%	1,534	41	1,493	0.90	1,351
2002/03	204.0	96.3%	216.0	96.4%	2.6%	21,291	559	20,732	0.88	18,299
2003/04	192.0	96.1%	204.0	96.3%	5.0%	178,761	8,897	169,864	0.86	146,377
2004/05	180.0	95.9%	192.0	96.1%	4.7%	67,215	3,181	64,034	0.85	54,133
2005/06	168.0	95.7%	180.0	95.9%	6.6%	0	0	0	0.83	0
2006/07	156.0	95.3%	168.0	95.7%	8.1%	0	0	0	0.82	0
2007/08	144.0	94.8%	156.0	95.3%	9.1%	12,651	1,154	11,497	0.81	9,332
2008/09	132.0	94.2%	144.0	94.8%	9.8%	13,205	1,296	11,909	0.81	9,614
2009/10	120.0	93.7%	132.0	94.2%	8.9%	68,862	6,120	62,742	0.80	50,494
2010/11	108.0	92.8%	120.0	93.7%	11.7%	27,080	3,160	23,920	0.80	19,153
2011/12	96.0	91.9%	108.0	92.8%	11.4%	189,256	21,532	167,724	0.80	134,665
2012/13	84.0	90.6%	96.0	91.9%	14.4%	296,585	42,689	253,896	0.80	204,173
2013/14	72.0	89.2%	84.0	90.6%	12.4%	59,689	7,413	52,276	0.81	42,417
2014/15	60.0	86.4%	72.0	89.2%	20.9%	102,337	21,406	80,931	0.81	65,842
2015/16	48.0	83.1%	60.0	86.4%	19.6%	335,152	65,692	269,460	0.83	224,176
2016/17	36.0	77.6%	48.0	83.1%	24.3%	725,074	176,014	549,060	0.84	463,276
2017/18	24.0	60.9%	36.0	77.6%	42.8%	640,700	274,162	366,538	0.86	315,494
2018/19	12.0	22.1%	24.0	60.9%	49.8%	1,068,279	531,511	536,768	0.90	483,548
2019/20	0.0	0.0%	12.0	22.1%	22.1%	1,427,000	315,896	1,111,104	0.93	1,034,249
Total						\$5,542,707	\$1,573,134	\$3,969,573		\$3,476,991

(3) and (5) are from Exhibit WC-HC-Med-2.

(7) to 2018/19 is from Exhibit WC-HC-Med-12, (9). The amount for 2019/20 is from Exhibit WC-HC-Med-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Med-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-14

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	98.3%	276.0	98.8%	30.0%	\$215,625	\$64,687	\$150,938	0.93	\$140,473
1999/00	252.0	97.6%	264.0	98.3%	30.0%	0	0	0	0.93	0
2000/01	240.0	96.6%	252.0	97.6%	30.0%	0	0	0	0.93	0
2001/02	228.0	96.5%	240.0	96.6%	2.8%	1,493	41	1,452	0.93	1,347
2002/03	216.0	96.4%	228.0	96.5%	2.7%	20,732	559	20,173	0.90	18,250
2003/04	204.0	96.3%	216.0	96.4%	2.6%	169,864	4,457	165,407	0.88	145,999
2004/05	192.0	96.1%	204.0	96.3%	5.0%	64,034	3,187	60,847	0.86	52,434
2005/06	180.0	95.9%	192.0	96.1%	4.7%	0	0	0	0.85	0
2006/07	168.0	95.7%	180.0	95.9%	6.6%	0	0	0	0.83	0
2007/08	156.0	95.3%	168.0	95.7%	8.1%	11,497	928	10,569	0.82	8,655
2008/09	144.0	94.8%	156.0	95.3%	9.1%	11,909	1,086	10,823	0.81	8,785
2009/10	132.0	94.2%	144.0	94.8%	9.8%	62,742	6,156	56,586	0.81	45,680
2010/11	120.0	93.7%	132.0	94.2%	8.9%	23,920	2,126	21,794	0.80	17,539
2011/12	108.0	92.8%	120.0	93.7%	11.7%	167,724	19,572	148,152	0.80	118,628
2012/13	96.0	91.9%	108.0	92.8%	11.4%	253,896	28,886	225,010	0.80	180,659
2013/14	84.0	90.6%	96.0	91.9%	14.4%	52,276	7,524	44,752	0.80	35,988
2014/15	72.0	89.2%	84.0	90.6%	12.4%	80,931	10,051	70,880	0.81	57,513
2015/16	60.0	86.4%	72.0	89.2%	20.9%	269,460	56,364	213,096	0.81	173,365
2016/17	48.0	83.1%	60.0	86.4%	19.6%	549,060	107,620	441,440	0.83	367,255
2017/18	36.0	77.6%	48.0	83.1%	24.3%	366,538	88,978	277,560	0.84	234,195
2018/19	24.0	60.9%	36.0	77.6%	42.8%	536,768	229,689	307,079	0.86	264,316
2019/20	12.0	22.1%	24.0	60.9%	49.8%	1,111,104	552,818	558,286	0.90	502,932
2020/21	0.0	0.0%	12.0	22.1%	22.1%	1,484,000	328,514	1,155,486	0.93	1,075,561
Total						\$5,453,573	\$1,513,243	\$3,940,330		\$3,449,574

(3) and (5) are from Exhibit WC-HC-Med-2.

(7) to 2019/20 is from Exhibit WC-HC-Med-13, (9). The amount for 2020/21 is from Exhibit WC-HC-Med-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-HC-Med-2.

Loss Rate and Severity Trend

I. Benefit Level Changes

Effective Date (1)	Benefit Level Change (2)	Cumulative Benefit Level Change (3)
01/01/09	1.029	1.029
02/01/09	1.048	1.078
01/01/10	0.992	1.070
01/01/11	1.015	1.086
09/01/11	0.853	0.926
01/01/12	1.015	0.940
11/20/12	0.994	0.934
01/01/13	1.009	0.943
01/01/14	1.008	0.950
01/01/15	1.010	0.960
01/01/16	1.003	0.963
01/01/17	1.006	0.969

II. Loss Rate and Severity Trend

Claim Period (1)	Benefit Trend (2018/19 = 1.000) (2)	Residual Trend (2018/19 = 1.000) (3)	Retention Index (2018/19 = 1.000) (4)	Loss Rate Trend (2018/19 = 1.000) (2)X(3)X(4) (5)	Wage Trend (2018/19 = 1.000) (6)	Severity Trend (2018/19 = 1.000) (5)X(6) (7)
2008/09	0.902	1.480	1.000	1.335	1.344	1.795
2009/10	0.905	1.423	1.000	1.288	1.305	1.680
2010/11	0.927	1.369	1.000	1.269	1.267	1.608
2011/12	1.032	1.316	1.000	1.358	1.230	1.670
2012/13	1.028	1.265	1.000	1.301	1.194	1.553
2013/14	1.020	1.217	1.000	1.241	1.159	1.438
2014/15	1.010	1.170	1.000	1.181	1.126	1.330
2015/16	1.006	1.125	1.000	1.132	1.093	1.237
2016/17	1.001	1.082	1.000	1.082	1.061	1.148
2017/18	1.000	1.040	1.000	1.040	1.030	1.071
2018/19	1.000	1.000	1.000	1.000	1.000	1.000
2019/20	1.000	0.962	1.000	0.962	0.971	0.934

Section I, (2) and (3) reflect data published by the NCCI.

Section II, (2) is based on Section I, (2).

Section II, (3) is based on 4% trend per actuarial judgment.

Section II, (4) is based on industry statistics and actuarial judgment.

Section II, (6) is based on 3% trend.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - HEALTH CARE FACILITIES (MEDICAL)

Exhibit WC-HC-Med-16

List of Large Claims
Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
894134	07/23/91	to 1998/99	Unlimited	\$1,176,293	\$23,707	\$1,200,000

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	7,321	108	100	96	97	70	7,792		
0.01 - 5,000	3,536	23	34	52	37	73	3,755	3,755	80.3%
5,000 - 10,000	292	4	8	10	10	10	334	4,089	87.4%
10,000 - 25,000	295	13	10	5	6	8	337	4,426	94.6%
25,000 - 50,000	115	9	4	9	9	11	157	4,583	97.9%
50,000 - 100,000	55	0	2	3	7	2	69	4,652	99.4%
100,000 - 250,000	17	1	0	1	0	0	19	4,671	99.8%
250,000 - 500,000	5	0	0	0	0	0	5	4,676	99.9%
500,000 - 750,000	2	0	0	0	0	0	2	4,678	100.0%
750,000 - 1,000,000	0	0	0	0	0	0	0	4,678	100.0%
Over 1,000,000	1	0	0	0	0	0	1	4,679	100.0%
Total	11,639	158	158	176	166	174	12,471	4,679	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	3,492,338	21,947	53,026	74,348	68,649	134,814	3,845,121	3,845,121	13.3%
5,000 - 10,000	2,107,302	30,313	51,902	77,953	76,175	80,000	2,423,645	6,268,766	21.7%
10,000 - 25,000	4,683,976	214,156	145,099	89,352	121,674	150,109	5,404,367	11,673,133	40.4%
25,000 - 50,000	4,026,714	307,435	126,075	346,112	369,831	420,000	5,596,167	17,269,300	59.7%
50,000 - 100,000	3,722,987	0	120,219	218,134	589,969	140,000	4,791,309	22,060,609	76.3%
100,000 - 250,000	2,391,407	126,397	0	140,000	0	0	2,657,803	24,718,412	85.5%
250,000 - 500,000	1,749,702	0	0	0	0	0	1,749,702	26,468,114	91.6%
500,000 - 750,000	1,237,952	0	0	0	0	0	1,237,952	27,706,066	95.8%
750,000 - 1,000,000	0	0	0	0	0	0	0	27,706,066	95.8%
Over 1,000,000	1,200,000	0	0	0	0	0	1,200,000	28,906,066	100.0%
Total	\$24,612,379	\$700,248	\$496,321	\$945,898	\$1,226,297	\$924,923	\$28,906,066	\$28,906,066	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Data Summary as of November 30, 2018
 Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	13	0	\$8,812,000	\$0	\$8,812,000
1999/00	Unlimited	None	228.0	Not Provided	3	0	2,250,000	0	2,250,000
2000/01	10,000,000	None	216.0	Not Provided	9	0	950,000	0	950,000
2001/02	15,000,000	None	204.0	Not Provided	16	0	1,000,000	0	1,000,000
2002/03	20,000,000	None	192.0	Not Provided	10	0	19,000	0	19,000
2003/04	20,000,000	None	180.0	792	18	0	2,958,500	0	2,958,500
2004/05	20,000,000	None	168.0	754	16	0	750	0	750
2005/06	20,000,000	None	156.0	737	18	0	1,000,000	0	1,000,000
2006/07	20,000,000	None	144.0	616	13	0	2,500	0	2,500
2007/08	20,000,000	None	132.0	Not Provided	8	0	1,000,000	0	1,000,000
2008/09	20,000,000	None	120.0	Not Provided	1	0	0	0	0
2009/10	40,000,000	None	108.0	Not Provided	4	0	1,310,000	0	1,310,000
2010/11	40,000,000	None	96.0	Not Provided	1	0	3,000	0	3,000
2011/12	40,000,000	None	84.0	936	3	0	10,000	0	10,000
2012/13	30,000,000	None	72.0	869	7	0	0	0	0
2013/14	30,000,000	None	60.0	869	0	0	0	0	0
2014/15	25,000,000	None	48.0	885	5	1	33,000	3,000,000	3,033,000
2015/16	25,000,000	None	36.0	970	2	1	1,950,000	1,000,000	2,950,000
2016/17	25,000,000	None	24.0	1,312	1	1	0	1,000,000	1,000,000
2017/18	25,000,000	None	12.0	1,311	0	0	0	0	0
Total					148	3	\$21,298,750	\$5,000,000	\$26,298,750

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/75	Unlimited
12/01/00	10,000,000
12/01/01	15,000,000
12/01/02	20,000,000
03/01/10	40,000,000
03/01/13	30,000,000
07/01/15	25,000,000

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
 Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	13	0	\$8,812,000	\$0	\$8,812,000
1999/00	Unlimited	None	228.0	Not Provided	3	0	2,250,000	0	2,250,000
2000/01	Unlimited	None	216.0	Not Provided	9	0	950,000	0	950,000
2001/02	Unlimited	None	204.0	Not Provided	16	0	1,000,000	0	1,000,000
2002/03	Unlimited	None	192.0	Not Provided	10	0	19,000	0	19,000
2003/04	Unlimited	None	180.0	792	18	0	2,958,500	0	2,958,500
2004/05	Unlimited	None	168.0	754	16	0	750	0	750
2005/06	Unlimited	None	156.0	737	18	0	1,000,000	0	1,000,000
2006/07	Unlimited	None	144.0	616	13	0	2,500	0	2,500
2007/08	Unlimited	None	132.0	Not Provided	8	0	1,000,000	0	1,000,000
2008/09	Unlimited	None	120.0	Not Provided	1	0	0	0	0
2009/10	Unlimited	None	108.0	Not Provided	4	0	1,310,000	0	1,310,000
2010/11	Unlimited	None	96.0	Not Provided	1	0	3,000	0	3,000
2011/12	Unlimited	None	84.0	936	3	0	10,000	0	10,000
2012/13	Unlimited	None	72.0	869	7	0	0	0	0
2013/14	Unlimited	None	60.0	869	0	0	0	0	0
2014/15	Unlimited	None	48.0	885	5	1	33,000	3,000,000	3,033,000
2015/16	Unlimited	None	36.0	970	2	1	1,950,000	1,000,000	2,950,000
2016/17	Unlimited	None	24.0	1,312	1	1	0	1,000,000	1,000,000
2017/18	Unlimited	None	12.0	1,311	0	0	0	0	0
Total					148	3	\$21,298,750	\$5,000,000	\$26,298,750

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Data Summary as of November 30, 2018
 Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	13	0	\$8,812,000	\$0	\$8,812,000
1999/00	Unlimited	None	228.0	Not Provided	3	0	2,250,000	0	2,250,000
2000/01	Unlimited	None	216.0	Not Provided	9	0	950,000	0	950,000
2001/02	Unlimited	None	204.0	Not Provided	16	0	1,000,000	0	1,000,000
2002/03	Unlimited	None	192.0	Not Provided	10	0	19,000	0	19,000
2003/04	Unlimited	None	180.0	792	18	0	2,958,500	0	2,958,500
2004/05	Unlimited	None	168.0	754	16	0	750	0	750
2005/06	Unlimited	None	156.0	737	18	0	1,000,000	0	1,000,000
2006/07	Unlimited	None	144.0	616	13	0	2,500	0	2,500
2007/08	Unlimited	None	132.0	Not Provided	8	0	1,000,000	0	1,000,000
2008/09	Unlimited	None	120.0	Not Provided	1	0	0	0	0
2009/10	Unlimited	None	108.0	Not Provided	4	0	1,310,000	0	1,310,000
2010/11	Unlimited	None	96.0	Not Provided	1	0	3,000	0	3,000
2011/12	Unlimited	None	84.0	936	3	0	10,000	0	10,000
2012/13	Unlimited	None	72.0	869	7	0	0	0	0
2013/14	Unlimited	None	60.0	869	0	0	0	0	0
2014/15	Unlimited	None	48.0	885	5	1	33,000	3,000,000	3,033,000
2015/16	Unlimited	None	36.0	970	2	1	1,950,000	1,000,000	2,950,000
2016/17	Unlimited	None	24.0	1,312	1	1	0	1,000,000	1,000,000
2017/18	Unlimited	None	12.0	1,311	0	0	0	0	0
Total					148	3	\$21,298,750	\$5,000,000	\$26,298,750

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	100.0%	100.0%	100.0%
336.0	100.0%	100.0%	100.0%
324.0	100.0%	100.0%	100.0%
312.0	100.0%	100.0%	100.0%
300.0	100.0%	100.0%	100.0%
288.0	100.0%	100.0%	100.0%
276.0	100.0%	100.0%	100.0%
264.0	100.0%	100.0%	100.0%
252.0	100.0%	100.0%	100.0%
240.0	100.0%	100.0%	100.0%
228.0	100.0%	100.0%	100.0%
216.0	100.0%	100.0%	100.0%
204.0	100.0%	100.0%	100.0%
192.0	100.0%	100.0%	100.0%
180.0	100.0%	100.0%	100.0%
168.0	100.0%	100.0%	100.0%
156.0	100.0%	100.0%	100.0%
144.0	100.0%	100.0%	100.0%
132.0	98.0%	100.0%	100.0%
120.0	94.3%	100.0%	100.0%
108.0	89.8%	99.0%	100.0%
96.0	80.2%	97.1%	100.0%
84.0	67.9%	95.2%	100.0%
72.0	56.6%	93.3%	100.0%
60.0	28.3%	88.9%	100.0%
48.0	10.9%	82.7%	99.0%
36.0	2.2%	73.5%	96.1%
24.0	0.0%	60.0%	87.4%
12.0	0.0%	37.5%	72.8%

(2) is from Exhibit MM-Cermak-2 (page 2).

(3) is from Exhibit MM-Cermak-2 (page 3).

(4) is from Exhibit MM-Cermak-2 (page 4).

COOK COUNTY, ILLINOIS
MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

I. Historical Limited Paid Losses (\$000)

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
to 1998/99																				
1999/00	0	12,065	12,065	17,115	17,650	23,830	27,830	37,830	37,935	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925
2000/01	0	0	156	551	1,046	4,466	4,706	4,706	4,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706
2001/02	0	0	30	9,351	12,349	16,054	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061
2002/03	10	12	1,260	3,248	4,468	4,888	4,988	4,988	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316
2003/04	0	0	0	8,781	16,656	18,246	19,496	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646
2004/05	0	90	107	5,775	16,665	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715
2005/06	0	1	516	528	6,778	9,228	9,908	9,908	11,533	11,603	23,603	24,028	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
2006/07	0	16	16	26	2,016	2,016	4,766	4,766	4,766	4,766	4,766	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753
2007/08	0	127	127	3,677	6,027	8,427	8,427	8,427	8,427	8,427	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302
2008/09	0	0	2,445	3,155	3,155	4,405	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155
2009/10	0	0	0	2,318	7,653	10,438	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203
2010/11	0	0	0	2,850	4,878	5,168	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468
2011/12	0	20,100	20,825	24,390	26,195	34,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294
2012/13	0	850	850	0	2,330	5,690	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255
2013/14	0	0	0	0	825	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675
2014/15	0	25	30	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2015/16	90	2,590	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540
2016/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

II. Limited Paid Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult
to 1998/99																				
1999/00	1,000	1,000	1,419	1,031	1,350	1,168	1,359	1,003	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2000/01	1,000	1,000	3,532	1,898	4,212	1,068	1,000	1,000	2,487	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2001/02	1,150	108,585	311,700	1,321	1,300	1,561	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2002/03	1,000	1,000	1,002	2,572	1,982	1,089	1,020	1,066	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2003/04	1,000	1,000	1,000	1,897	1,985	1,069	1,008	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2004/05	1,189	1,000	53,971	2,886	1,123	1,000	1,000	1,000	1,053	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2005/06	1,000	1,000	1,000	12,837	1,361	1,074	1,164	1,006	2,034	1,018	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2006/07	1,000	1,000	1,621	77,245	1,000	2,364	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2007/08	1,000	1,000	28,953	1,639	1,398	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2008/09	1,000	1,000	1,290	3,302	1,396	1,170	1,582	1,006	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2009/10	1,000	1,000	1,171	1,712	1,059	1,073	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2010/11	1,036	1,074	1,309	1,058	1,087	1,087	1,960	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2011/12	1,000	2,741	2,399	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623	3,623
2012/13	1,000	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933	1,933
2013/14	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2014/15	1,200	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753	1,753
2015/16	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778	28,778
2016/17	14,964	115,074	34,196	7,656	1,641	1,214	1,174	1,007	1,256	1,002	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2017/18	29,056	1,748	3,651	1,215	1,639	1,081	1,378	1,002	694	1,011	0,989	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Average																				
All																				
Wtd 3																				
Last 3																				
Last 5																				
x=hi,low																				
Previous	2,000	120,000	5,000	2,600	2,000	1,200	1,180	1,120	1,050	1,040	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Selected	2,000	120,000	5,000	2,600	2,000	1,200	1,180	1,120	1,050	1,040	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Cumulative	11022,717	5511,359	45,928	9,186	3,533	1,766	1,472	1,248	1,114	1,061	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Percent	0.0%	0.0%	2.2%	10.9%	28.3%	56.6%	67.9%	80.2%	89.8%	94.3%	98.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Amounts are limited (net of excess insurance).

Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Historical Limited Reported Incurred Losses (\$000) and Limited Reported Incurred Loss Development

I. Historical Limited Reported Incurred Losses (\$000)

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1/98/99																					
1999/00	15,495	25,810	35,720	44,185	46,475	46,930	40,630	46,630	46,225	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925
2000/01	8,668	7,778	8,093	8,911	8,706	15,706	15,706	15,706	14,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706
2001/02	53,740	25,655	29,808	24,761	25,134	31,305	25,861	26,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061
2002/03	26,711	16,022	5,770	8,413	8,248	6,788	5,668	5,336	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316
2003/04	28,331	39,505	26,840	38,771	29,756	28,646	20,246	20,446	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646
2004/05	9,450	27,041	20,842	24,110	21,345	19,465	18,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715
2005/06	14,276	35,957	22,631	24,828	17,228	16,759	13,858	15,603	25,603	25,603	24,028	24,250	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
2006/07	11,046	13,126	8,721	5,787	4,726	5,646	5,496	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766
2007/08	24,827	12,544	17,152	18,477	12,927	12,227	10,927	8,427	8,427	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302
2008/09	5,235	6,890	9,775	10,255	9,555	10,005	8,255	8,405	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205
2009/10	5,095	8,253	15,550	16,368	13,503	12,388	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203
2010/11	770	3,900	8,530	11,105	11,183	9,968	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718
2011/12	23,923	34,253	39,927	39,455	39,045	37,644	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344
2012/13	6,925	12,000	29,150	39,255	61,465	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155
2013/14	1,560	7,155	6,400	5,575	3,125																
2014/15	7,000	8,225	16,630	16,108																	
2015/16	5,190	8,620	11,315																		
2016/17	450	2,376																			
2017/18	1,450																				

II. Limited Reported Incurred Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1/98/99																					
1999/00	1,666	1,384	1,236	1,052	1,010	0,866	1,148	0,891	0,820	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2000/01	0,897	1,041	1,101	0,977	2,436	0,741	1,008	0,836	0,796	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2001/02	0,760	1,162	0,831	1,015	1,246	0,826	1,008	0,862	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2002/03	0,600	0,360	1,458	0,980	0,823	0,838	0,938	0,896	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2003/04	1,394	0,679	1,445	0,767	0,963	0,707	0,995	0,975	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2004/05	2,861	0,771	1,157	0,885	0,912	0,961	1,053	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2005/06	2,519	0,629	1,097	0,694	0,973	0,827	1,126	1,641	1,000	1,000	1,000	1,000	1,337	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2006/07	1,188	0,664	0,664	0,817	1,195	0,973	0,867	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2007/08	0,505	1,367	1,077	0,700	0,946	0,884	0,771	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2008/09	1,316	1,419	1,049	0,932	1,047	0,825	1,018	0,976	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2009/10	1,620	1,884	1,053	0,825	1,017	0,904	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2010/11	5,065	2,187	1,302	1,007	0,954	0,934	1,075	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2011/12	1,733	2,429	1,347	1,566	1,076	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019	
2012/13	4,557	0,894	0,871	0,561																	
2013/14	1,175	1,049	1,867																		
2014/15	1,661	1,313																			
2015/16	5,279																				
2016/17																					
2017/18																					
Average	2,014	1,200	1,159	0,918	1,104	0,870	1,000	1,043	0,960	0,995	1,001	1,077	1,052	1,000	0,998	1,000	1,000	1,000	1,000	1,000	
All	1,521	1,098	1,379	1,230	1,035	0,980	1,031	0,983	0,984	0,982	1,005	1,169	1,175	1,000	0,985	1,000	1,000	1,000	1,000	1,000	
Wtd 3	2,705	1,085	1,361	1,039	0,986	0,952	1,031	0,892	0,895	0,896	1,003	1,179	1,165	1,000	0,997	1,000	1,000	1,000	1,000	1,000	
Last 3	2,860	1,176	1,212	0,941	0,989	0,911	0,962	1,000	1,000	1,000	1,000	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
x-Hilow																					
Previous	1,600	1,250	1,100	1,075	1,050	1,020	1,020	1,020	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Selected	1,600	1,225	1,125	1,075	1,050	1,020	1,020	1,020	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Cumulative	2,668	1,667	1,361	1,210	1,072	1,051	1,030	1,030	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Percent	37.5%	60.0%	73.5%	82.7%	88.9%	93.3%	95.2%	97.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Amounts are limited (net of excess insurance).

Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES
 Historical Reported Claims and Reported Claim Development

I. Historical Reported Claims

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
1998/99																					
2000/01																					
2001/02																					
2002/03																					
2003/04																					
2004/05																					
2005/06																					
2006/07																					
2007/08																					
2008/09																					
2009/10																					
2010/11																					
2011/12																					
2012/13																					
2013/14																					
2014/15																					
2015/16																					
2016/17																					
2017/18																					

II. Reported Claim Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult		
1998/99																						
1999/00																						
2000/01																						
2001/02																						
2002/03																						
2003/04																						
2004/05																						
2005/06																						
2006/07																						
2007/08																						
2008/09																						
2009/10																						
2010/11																						
2011/12																						
2012/13																						
2013/14																						
2014/15																						
2015/16																						
2016/17																						
2017/18																						
Average All	1.449	1.228	1.035	1.008	1.000	1.009	1.008	1.000	1.000	1.007	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd 3																						
Last 3																						
Last 5																						
x-tiltlow																						
Previous	1.175	1.030	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.200	1.100	1.030	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.373	1.144	1.040	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Percent	72.8%	87.4%	96.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Data was provided by the County and is for Cermak, Stroger and Provident combined.

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$8,812,000	100.0%	\$8,812,000
1999/00	228.0	2,250,000	100.0%	2,250,000
2000/01	216.0	950,000	100.0%	950,000
2001/02	204.0	1,000,000	100.0%	1,000,000
2002/03	192.0	19,000	100.0%	19,000
2003/04	180.0	2,958,500	100.0%	2,958,500
2004/05	168.0	750	100.0%	750
2005/06	156.0	1,000,000	100.0%	1,000,000
2006/07	144.0	2,500	100.0%	2,500
2007/08	132.0	1,000,000	98.0%	1,020,000
2008/09	120.0	0	94.3%	0
2009/10	108.0	1,310,000	89.8%	1,459,130
2010/11	96.0	3,000	80.2%	3,743
2011/12	84.0	10,000	67.9%	14,721
2012/13	72.0	0	56.6%	0
2013/14	60.0	0	28.3%	0
2014/15	48.0	33,000	10.9%	303,125
2015/16	36.0	1,950,000	2.2%	25,000,000 *
2016/17	24.0	0	0.0%	0
2017/18	12.0	0	0.0%	0
Total		\$21,298,750		\$44,793,468

* - Indicates large claim(s) limited to retention. For details, see Exhibit MM-Cermak-15.

(3) is from Exhibit MM-Cermak-1.

(4) is from Exhibit MM-Cermak-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Exhibit MM-Cermak-4

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$8,812,000	100.0%	\$8,812,000
1999/00	228.0	2,250,000	100.0%	2,250,000
2000/01	216.0	950,000	100.0%	950,000
2001/02	204.0	1,000,000	100.0%	1,000,000
2002/03	192.0	19,000	100.0%	19,000
2003/04	180.0	2,958,500	100.0%	2,958,500
2004/05	168.0	750	100.0%	750
2005/06	156.0	1,000,000	100.0%	1,000,000
2006/07	144.0	2,500	100.0%	2,500
2007/08	132.0	1,000,000	100.0%	1,000,000
2008/09	120.0	0	100.0%	0
2009/10	108.0	1,310,000	99.0%	1,323,100
2010/11	96.0	3,000	97.1%	3,091
2011/12	84.0	10,000	95.2%	10,508
2012/13	72.0	0	93.3%	0
2013/14	60.0	0	88.9%	0
2014/15	48.0	3,033,000	82.7%	3,669,375
2015/16	36.0	2,950,000	73.5%	4,015,080
2016/17	24.0	1,000,000	60.0%	1,667,279
2017/18	12.0	0	37.5%	0
Total		\$26,298,750		\$28,681,182

(3) is from Exhibit MM-Cermak-1.

(4) is from Exhibit MM-Cermak-2.

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	100.0%	100.0%	100.0%	\$8,812,000	\$0	\$8,812,000
1999/00	228.0	100.0%	100.0%	100.0%	2,250,000	0	2,250,000
2000/01	216.0	100.0%	100.0%	100.0%	950,000	0	950,000
2001/02	204.0	100.0%	100.0%	100.0%	1,000,000	0	1,000,000
2002/03	192.0	100.0%	100.0%	100.0%	19,000	0	19,000
2003/04	180.0	100.0%	100.0%	100.0%	2,958,500	0	2,958,500
2004/05	168.0	100.0%	100.0%	100.0%	750	0	750
2005/06	156.0	100.0%	100.0%	100.0%	1,000,000	0	1,000,000
2006/07	144.0	100.0%	100.0%	100.0%	2,500	0	2,500
2007/08	132.0	98.0%	100.0%	100.0%	1,000,000	0	1,000,000
2008/09	120.0	94.3%	100.0%	100.0%	0	0	0
2009/10	108.0	89.8%	99.0%	90.3%	1,310,000	0	1,310,000
2010/11	96.0	80.2%	97.1%	85.2%	3,000	0	3,000
2011/12	84.0	67.9%	95.2%	84.9%	10,000	0	10,000
2012/13	72.0	56.6%	93.3%	84.6%	0	0	0
2013/14	60.0	28.3%	88.9%	84.5%	0	0	0
2014/15	48.0	10.9%	82.7%	80.5%	33,000	3,000,000	3,757,930
2015/16	36.0	2.2%	73.5%	72.9%	1,950,000	1,000,000	3,322,070
2016/17	24.0	0.0%	60.0%	60.0%	0	1,000,000	1,667,481
2017/18	12.0	0.0%	37.5%	37.5%	0	0	0
Total					\$21,298,750	\$5,000,000	\$28,063,231

(3) and (4) are from Exhibit MM-Cermak-2.

(6) and (7) are from Exhibit MM-Cermak-1.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Exhibit MM-Cermak-6

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$8,812,000	\$8,812,000	\$8,812,000	\$8,812,000
1999/00	2,250,000	2,250,000	2,250,000	2,250,000
2000/01	950,000	950,000	950,000	950,000
2001/02	1,000,000	1,000,000	1,000,000	1,000,000
2002/03	19,000	19,000	19,000	19,000
2003/04	2,958,500	2,958,500	2,958,500	2,958,500
2004/05	750	750	750	750
2005/06	1,000,000	1,000,000	1,000,000	1,000,000
2006/07	2,500	2,500	2,500	2,500
2007/08	1,020,000	1,000,000	1,000,000	1,000,000
2008/09	0	0	0	0
2009/10	1,459,130	1,323,100	1,310,000	1,310,000
2010/11	3,743	3,091	3,000	3,000
2011/12	14,721	10,508	10,000	10,000
2012/13	0	0	0	0
2013/14	0	0	0	0
2014/15	303,125	3,669,375	3,757,930	3,377,027
2015/16	25,000,000	4,015,080	3,322,070	7,934,860
2016/17	0	1,667,279	1,667,481	1,333,904
2017/18	0	0	0	0
Total	\$44,793,468	\$28,681,182	\$28,063,231	\$31,961,541

(2) is from Exhibit MM-Cermak-3.

(3) is from Exhibit MM-Cermak-4.

(4) is from Exhibit MM-Cermak-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)	Projected A-priori Loss Rate per Occupied Bed Equivalent (7)/(5) (8)
2008/09	\$0	776	\$0.00	1.495	\$0.00	\$1,145.33
2009/10	1,310,000	776	1,688.18	1.401	2,364.58	1,222.51
2010/11	3,000	776	3.87	1.335	5.16	1,282.46
2011/12	10,000	936	10.68	1.284	13.71	1,333.76
2012/13	0	869	0.00	1.248	0.00	1,371.76
2013/14	0	869	0.00	1.205	0.00	1,421.48
2014/15	3,377,027	885	3,816.10	1.163	4,438.63	1,472.17
2015/16	7,934,860	970	8,180.16	1.125	9,201.57	1,522.25
2016/17	1,333,904	1,312	1,016.66	1.082	1,099.62	1,583.14
2017/18	0	1,311	0.00	1.040	0.00	1,646.47

(7) Projected 2018/19 a-priori loss rate per Occupied Bed Equivalent \$1,712.33

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$0	28.3%	\$1,421.48	869	\$885,723	\$885,723
2014/15	33,000	10.9%	1,472.17	885	1,160,955	1,193,955
2015/16	1,950,000	2.2%	1,522.25	970	1,444,454	3,394,454
2016/17	0	0.0%	1,583.14	1,312	2,076,779	2,076,779
2017/18	0	0.0%	1,646.47	1,311	2,157,896	2,157,896

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$0	88.9%	\$1,421.48	869	\$137,669	\$137,669
2014/15	3,033,000	82.7%	1,472.17	885	225,940	3,258,940
2015/16	2,950,000	73.5%	1,522.25	970	391,699	3,341,699
2016/17	1,000,000	60.0%	1,583.14	1,312	831,320	1,831,320
2017/18	0	37.5%	1,646.47	1,311	1,349,105	1,349,105

Section I, (2) is from Exhibit MM-Cermak-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit MM-Cermak-10.

Section I, (5) is based on a 4% trend and adjusted for change in retention.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit MM-Cermak-1.

Sections II and III, (3) are from Exhibit MM-Cermak-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Occupied Bed Equivalents (6)	Frequency (per Occupied Bed Equivalent) (5)/(6) (7)
2008/09	120.0	1	100.0%	1	776	0.00
2009/10	108.0	4	100.0%	4	776	0.01
2010/11	96.0	1	100.0%	1	776	0.00
2011/12	84.0	3	100.0%	3	936	0.00
2012/13	72.0	7	100.0%	7	869	0.01
2013/14	60.0	0	100.0%	0	869	0.00
2014/15	48.0	5	99.0%	5	885	0.01
2015/16	36.0	2	96.1%	2	970	0.00
2016/17	24.0	1	87.4%	1	1,312	0.00
2017/18	12.0	0	72.8%	0	1,311	0.00

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$0	1	\$0	1.495	\$0	\$478,792	\$478,792
2009/10	1,310,000	4	327,500	1.401	458,718	511,054	2,044,215
2010/11	3,000	1	3,000	1.335	4,006	536,116	536,116
2011/12	10,000	3	3,333	1.284	4,279	557,560	1,672,681
2012/13	0	7	0	1.248	0	573,446	4,014,122
2013/14	0	0	0	1.205	0	594,232	0
2014/15	3,377,027	5	675,405	1.163	785,585	615,421	3,077,107
2015/16	7,934,860	2	3,967,430	1.125	4,462,819	636,358	1,272,715
2016/17	1,333,904	1	1,333,904	1.082	1,442,750	661,812	661,812
2017/18	0	0	0	1.040	0	688,284	0
						(7) Projected 2018/19 average claim severity	\$715,816

Section I, (3) is from Exhibit MM-Cermak-1.

Section I, (4) is from Exhibit MM-Cermak-2.

Section I, (6) is from Exhibit MM-Cermak-10.

Section II, (2) is from Exhibit MM-Cermak-6.

Section II, (3) is from Section I, (5).

Section II, (5) is based on a 4% trend and adjusted for change in retention.

Section II, (7) is based on (6) and actuarial judgment.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Exhibit MM-Cermak-9

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$8,812,000	\$8,812,000	\$8,812,000				\$8,812,000	\$8,812,000
1999/00	2,250,000	2,250,000	2,250,000				2,250,000	2,250,000
2000/01	950,000	950,000	950,000				950,000	950,000
2001/02	1,000,000	1,000,000	1,000,000				1,000,000	1,000,000
2002/03	19,000	19,000	19,000				19,000	19,000
2003/04	2,958,500	2,958,500	2,958,500				2,958,500	2,958,500
2004/05	750	750	750				750	750
2005/06	1,000,000	1,000,000	1,000,000				1,000,000	1,000,000
2006/07	2,500	2,500	2,500				2,500	2,500
2007/08	1,020,000	1,000,000	1,000,000				1,000,000	1,000,000
2008/09	0	0	0				0	0
2009/10	1,459,130	1,323,100	1,310,000				1,310,000	1,310,000
2010/11	3,743	3,091	3,000				3,000	3,000
2011/12	14,721	10,508	10,000				10,000	10,000
2012/13	0	0	0				150,000	25,000
2013/14	0	0	0	885,723	137,669		200,000	125,000
2014/15	303,125	3,669,375	3,757,930	1,193,955	3,258,940	3,077,107	3,500,000	3,500,000
2015/16	25,000,000	4,015,080	3,322,070	3,394,454	3,341,699	1,272,715	2,500,000	3,400,000
2016/17	0	1,667,279	1,667,481	2,076,779	1,831,320	661,812	1,000,000	1,700,000
2017/18	0	0	0	2,157,896	1,349,105		1,260,000	1,000,000
Total	\$44,793,468	\$28,681,182	\$28,063,231				\$27,925,750	\$29,065,750
2013/14 - 2017/18	25,303,125	9,351,734	8,747,481	9,708,807	9,918,732	5,011,634	8,460,000	9,725,000
to 2012/13	19,490,343	19,329,449	19,315,750				19,465,750	19,340,750
						Change		
						All years		\$1,140,000
						2013/14 - 2017/18		1,265,000
						to 2012/13		-125,000

- (2) is from Exhibit MM-Cermak-3.
- (3) is from Exhibit MM-Cermak-4.
- (4) is from Exhibit MM-Cermak-5.
- (5) and (6) are from Exhibit MM-Cermak-7.
- (7) is from Exhibit MM-Cermak-8.
- (8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)	
2008/09	\$0	776	\$0.00	1.495	\$0.00	
2009/10	1,310,000	776	1,688.18	1.401	2,364.58	
2010/11	3,000	776	3.87	1.335	5.16	
2011/12	10,000	936	10.68	1.284	13.71	
2012/13	25,000	869	28.77	1.248	35.91	
2013/14	125,000	869	143.83	1.205	173.26	
2014/15	3,500,000	885	3,955.07	1.163	4,600.26	
2015/16	3,400,000	970	3,505.11	1.125	3,942.77	
2016/17	1,700,000	1,312	1,295.69	1.082	1,401.41	
2017/18	1,000,000	1,311	762.93	1.040	793.45	
Total	\$11,073,000	9,480	\$1,168.01		\$1,333.05	

Claim Period (1)	Projected Limited Loss Rate per Occupied Bed Equivalent (7)	Projected Occupied Bed Equivalents (8)	Projected Ultimate Limited Losses (7)X(8) (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per Occupied Bed Equivalent (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11) (12)
2018/19	\$1,333.05	1,311	\$1,747,000	0.84	\$1,122.43	\$1,471,000
2019/20	1,386.37	1,311	1,817,000	0.84	1,167.33	1,530,000
2020/21	1,441.83	1,311	1,890,000	0.84	1,214.02	1,591,000

(2) is from Exhibit MM-Cermak-9.

(3) 2011/12, 2012/13, 2013/14, 2014/15, 2015/16, 2016/17 and 2017/18 were provided by the County. Other periods assume a 0% trend.

(5) is based on a 4% trend and adjusted for change in retention.

(7) 2018/19 is based on (6) and actuarial judgment.
 Other period(s) based on 2018/19 plus a 4% trend.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Cermak-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Exhibit MM-Cermak-11

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$8,812,000	\$0	\$8,812,000	\$8,812,000	\$0	\$0	1.00	\$0
1999/00	2,250,000	0	2,250,000	2,250,000	0	0	1.00	0
2000/01	950,000	0	950,000	950,000	0	0	1.00	0
2001/02	1,000,000	0	1,000,000	1,000,000	0	0	1.00	0
2002/03	19,000	0	19,000	19,000	0	0	1.00	0
2003/04	2,958,500	0	2,958,500	2,958,500	0	0	1.00	0
2004/05	750	0	750	750	0	0	1.00	0
2005/06	1,000,000	0	1,000,000	1,000,000	0	0	1.00	0
2006/07	2,500	0	2,500	2,500	0	0	1.00	0
2007/08	1,000,000	0	1,000,000	1,000,000	0	0	0.99	0
2008/09	0	0	0	0	0	0	0.98	0
2009/10	1,310,000	0	1,310,000	1,310,000	0	0	0.97	0
2010/11	3,000	0	3,000	3,000	0	0	0.96	0
2011/12	10,000	0	10,000	10,000	0	0	0.95	0
2012/13	0	0	0	25,000	25,000	25,000	0.94	23,589
2013/14	0	0	0	125,000	125,000	125,000	0.94	118,083
2014/15	33,000	3,000,000	3,033,000	3,500,000	467,000	3,467,000	0.93	3,230,749
2015/16	1,950,000	1,000,000	2,950,000	3,400,000	450,000	1,450,000	0.91	1,324,326
2016/17	0	1,000,000	1,000,000	1,700,000	700,000	1,700,000	0.89	1,513,523
2017/18	0	0	0	1,000,000	1,000,000	1,000,000	0.87	865,816
Total	\$21,298,750	\$5,000,000	\$26,298,750	\$29,065,750	\$2,767,000	\$7,767,000		\$7,076,086

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit MM-Cermak-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Cermak-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Exhibit MM-Cermak-12

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	100.0%	252.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2009/10	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2010/11	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2011/12	84.0	67.9%	96.0	80.2%	38.1%	0	0	0	0.96	0
2012/13	72.0	56.6%	84.0	67.9%	26.1%	25,000	6,523	18,477	0.95	17,642
2013/14	60.0	28.3%	72.0	56.6%	39.5%	125,000	49,350	75,650	0.94	71,382
2014/15	48.0	10.9%	60.0	28.3%	19.5%	3,467,000	677,678	2,789,322	0.94	2,634,979
2015/16	36.0	2.2%	48.0	10.9%	8.9%	1,450,000	129,095	1,320,905	0.93	1,230,895
2016/17	24.0	0.0%	36.0	2.2%	2.2%	1,700,000	36,713	1,663,287	0.91	1,519,127
2017/18	12.0	0.0%	24.0	0.0%	0.0%	1,000,000	91	999,909	0.89	890,226
2018/19	0.0	0.0%	12.0	0.0%	0.0%	1,747,000	158	1,746,842	0.87	1,512,444
Total						\$9,514,000	\$899,608	\$8,614,392		\$7,876,695

(3) and (5) are from Exhibit MM-Cermak-2.

(7) to 2017/18 is from Exhibit MM-Cermak-11. The amount for 2018/19 is from Exhibit MM-Cermak-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Cermak-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Exhibit MM-Cermak-13

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	100.0%	264.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2010/11	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2011/12	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2012/13	84.0	67.9%	96.0	80.2%	38.1%	18,477	7,046	11,431	0.96	10,997
2013/14	72.0	56.6%	84.0	67.9%	26.1%	75,650	19,740	55,910	0.95	53,384
2014/15	60.0	28.3%	72.0	56.6%	39.5%	2,789,322	1,101,227	1,688,095	0.94	1,592,849
2015/16	48.0	10.9%	60.0	28.3%	19.5%	1,320,905	258,191	1,062,714	0.94	1,003,910
2016/17	36.0	2.2%	48.0	10.9%	8.9%	1,663,287	148,085	1,515,202	0.93	1,411,952
2017/18	24.0	0.0%	36.0	2.2%	2.2%	999,909	21,594	978,315	0.91	893,522
2018/19	12.0	0.0%	24.0	0.0%	0.0%	1,746,842	158	1,746,684	0.89	1,555,086
2019/20	0.0	0.0%	12.0	0.0%	0.0%	1,817,000	165	1,816,835	0.87	1,573,045
Total						\$10,431,392	\$1,556,206	\$8,875,186		\$8,094,745

(3) and (5) are from Exhibit MM-Cermak-2.

(7) to 2018/19 is from Exhibit MM-Cermak-12, (9). The amount for 2019/20 is from Exhibit MM-Cermak-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Cermak-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - CERMAK HEALTH SERVICES

Exhibit MM-Cermak-14

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	100.0%	276.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	252.0	100.0%	264.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2011/12	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2012/13	96.0	80.2%	108.0	89.8%	48.5%	11,431	5,542	5,889	0.97	5,688
2013/14	84.0	67.9%	96.0	80.2%	38.1%	55,910	21,319	34,591	0.96	33,277
2014/15	72.0	56.6%	84.0	67.9%	26.1%	1,688,095	440,491	1,247,604	0.95	1,191,246
2015/16	60.0	28.3%	72.0	56.6%	39.5%	1,062,714	419,560	643,154	0.94	606,866
2016/17	48.0	10.9%	60.0	28.3%	19.5%	1,515,202	296,169	1,219,033	0.94	1,151,580
2017/18	36.0	2.2%	48.0	10.9%	8.9%	978,315	87,101	891,214	0.93	830,484
2018/19	24.0	0.0%	36.0	2.2%	2.2%	1,746,684	37,721	1,708,963	0.91	1,560,844
2019/20	12.0	0.0%	24.0	0.0%	0.0%	1,816,835	165	1,816,670	0.89	1,617,395
2020/21	0.0	0.0%	12.0	0.0%	0.0%	1,890,000	171	1,889,829	0.87	1,636,244
Total						\$10,765,186	\$1,308,239	\$9,456,947		\$8,633,624

(3) and (5) are from Exhibit MM-Cermak-2.

(7) to 2019/20 is from Exhibit MM-Cermak-13, (9). The amount for 2020/21 is from Exhibit MM-Cermak-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Cermak-2.

List of Large Claims
 Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
97001725	10/29/96	to 1998/99	Unlimited	\$8,000,000	\$0	\$8,000,000
97003095	08/14/00	1999/00	Unlimited	1,350,000	0	1,350,000
97004651	08/21/02	2001/02	15,000,000	1,000,000	0	1,000,000
97004871	01/05/04	2003/04	20,000,000	2,500,000	0	2,500,000
97006724	09/03/06	2005/06	20,000,000	1,000,000	0	1,000,000
97007443	12/21/07	2007/08	20,000,000	1,000,000	0	1,000,000
97008627	12/19/09	2009/10	20,000,000	1,000,000	0	1,000,000
201502270	01/26/15	2014/15	30,000,000	0	3,000,000	3,000,000
97012728	12/01/15	2015/16	25,000,000	1,950,000 *	0	1,950,000
201604335	03/20/16	2015/16	25,000,000	0	1,000,000	1,000,000
201704333	12/12/16	2016/17	25,000,000	0	1,000,000	1,000,000

The claim(s) indicated by a "*" have been limited in development.

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	115	0	2	0	0	0	117		
0.01 - 5,000	4	0	1	0	0	0	5	5	16.1%
5,000 - 10,000	3	0	0	0	0	0	3	8	25.8%
10,000 - 25,000	1	0	0	0	0	0	1	9	29.0%
25,000 - 50,000	3	0	1	0	0	0	4	13	41.9%
50,000 - 100,000	0	0	0	0	0	0	0	13	41.9%
100,000 - 250,000	3	0	0	0	0	0	3	16	51.6%
250,000 - 500,000	2	0	0	0	0	0	2	18	58.1%
500,000 - 750,000	0	0	0	0	0	0	0	18	58.1%
750,000 - 1,000,000	6	0	0	1	1	0	8	26	83.9%
Over 1,000,000	3	0	1	1	0	0	5	31	100.0%
Total	140	0	5	2	1	0	148	31	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	9,650	0	5,000	0	0	0	14,650	14,650	0.1%
5,000 - 10,000	27,100	0	0	0	0	0	27,100	41,750	0.2%
10,000 - 25,000	19,000	0	0	0	0	0	19,000	60,750	0.2%
25,000 - 50,000	125,000	0	28,000	0	0	0	153,000	213,750	0.8%
50,000 - 100,000	0	0	0	0	0	0	0	213,750	0.8%
100,000 - 250,000	645,000	0	0	0	0	0	645,000	858,750	3.3%
250,000 - 500,000	790,000	0	0	0	0	0	790,000	1,648,750	6.3%
500,000 - 750,000	0	0	0	0	0	0	0	1,648,750	6.3%
750,000 - 1,000,000	5,850,000	0	0	1,000,000	1,000,000	0	7,850,000	9,498,750	36.1%
Over 1,000,000	11,850,000	0	3,000,000	1,950,000	0	0	16,800,000	26,298,750	100.0%
Total	\$19,315,750	\$0	\$3,033,000	\$2,950,000	\$1,000,000	\$0	\$26,298,750	\$26,298,750	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.

Calculation of Occupied Bed Equivalents

Occurrence Period (1)	Inpatients (2)	ER Visits (3)	Other Visits (4)	Other Visits (5)	Other Visits (6)	Physicians (7)	Occupied Bed Equivalents (8)
to 1998/99							
1999/00							0
2000/01							0
2001/02							0
2002/03							0
2003/04	615	37,188	42,405	42,050	1,175	33	792
2004/05	584	33,691	47,114	37,977	1,057	33	754
2005/06	592	31,496	50,948	32,574	1,105	23	737
2006/07	512	22,505	43,250	28,912	802	14	616
2007/08							0
2008/09							0
2009/10							0
2010/11							0
2011/12	773	24,144	62,000	43,000		35	936
2012/13	713	23,909	28,000	60,000		35	869
2013/14	713	23,909	28,000	60,000		35	869
2014/15	713	29,765	29,186	34,544		41	885
2015/16	779	35,708	29,444	35,555		45	970
2016/17	1,124	29,524	18,266	64,198		46	1,312
2017/18	1,124	29,278	15,879	32,158		52	1,311
2018/19	1,124	29,278	15,879	32,158		52	1,311

(2) through (7) were provided by the County.

The exposures in (2) through (7) are converted to occupied bed equivalents using the following exposure conversion factors, which were published in the Aon/ASHRM Hospital Professional Liability and Physician Liability Benchmark Analysis published in October 2017. The weight for Housestaff is based on actuarial judgement.

Exposure	Conversion Factor
Inpatients	1.000
ER Visits	0.200 per 100
Other Visits	0.040 per 100
Class 1 physician	2.100
Housestaff	0.800 (residents and interns)

From page 2 of HPL benchmark study (October 2017):
 2,750 loss rate per occupied bed
 5,710 loss rate per class 1 physician

Data Summary as of November 30, 2018
 Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	307	0	\$216,281,357	\$0	\$216,281,357
1999/00	Unlimited	None	228.0	2,039	40	0	33,190,000	0	33,190,000
2000/01	10,000,000	None	216.0	2,104	89	0	10,411,000	0	10,411,000
2001/02	15,000,000	None	204.0	2,173	90	0	23,647,540	0	23,647,540
2002/03	20,000,000	None	192.0	2,119	87	0	4,268,500	0	4,268,500
2003/04	20,000,000	None	180.0	2,141	129	0	8,377,500	0	8,377,500
2004/05	20,000,000	None	168.0	2,112	92	1	19,606,850	20,000,000	39,606,850
2005/06	20,000,000	None	156.0	2,037	74	1	22,575,000	1,000,000	23,575,000
2006/07	20,000,000	None	144.0	1,900	57	1	4,750,000	100,000	4,850,000
2007/08	20,000,000	None	132.0	1,942	40	0	7,002,000	0	7,002,000
2008/09	20,000,000	None	120.0	2,027	42	0	7,905,000	0	7,905,000
2009/10	40,000,000	None	108.0	1,884	42	0	9,092,500	0	9,092,500
2010/11	40,000,000	None	96.0	1,898	58	0	10,715,000	0	10,715,000
2011/12	40,000,000	None	84.0	1,898	50	2	35,468,999	1,050,000	36,518,999
2012/13	30,000,000	None	72.0	1,926	54	9	19,080,000	44,400,000	63,480,000
2013/14	30,000,000	None	60.0	1,926	39	7	1,250,000	1,450,000	2,700,000
2014/15	25,000,000	None	48.0	1,812	39	7	25,000	13,050,000	13,075,000
2015/16	25,000,000	None	36.0	1,871	48	21	90,000	4,575,000	4,665,000
2016/17	25,000,000	None	24.0	1,863	15	13	0	1,300,500	1,300,500
2017/18	25,000,000	None	12.0	1,858	26	12	0	1,350,000	1,350,000
Total					1,418	74	\$433,736,246	\$88,275,500	\$522,011,746

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/70	Unlimited
12/01/00	10,000,000
12/01/01	15,000,000
12/01/02	20,000,000
03/01/10	40,000,000
03/01/13	30,000,000
07/01/15	25,000,000

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
 Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	307	0	\$216,281,357	\$0	\$216,281,357
1999/00	Unlimited	None	228.0	2,039	40	0	33,190,000	0	33,190,000
2000/01	Unlimited	None	216.0	2,104	89	0	10,411,000	0	10,411,000
2001/02	Unlimited	None	204.0	2,173	90	0	23,647,540	0	23,647,540
2002/03	Unlimited	None	192.0	2,119	87	0	4,268,500	0	4,268,500
2003/04	Unlimited	None	180.0	2,141	129	0	8,377,500	0	8,377,500
2004/05	Unlimited	None	168.0	2,112	92	1	19,606,850	20,000,000	39,606,850
2005/06	Unlimited	None	156.0	2,037	74	1	22,575,000	1,000,000	23,575,000
2006/07	Unlimited	None	144.0	1,900	57	1	4,750,000	100,000	4,850,000
2007/08	Unlimited	None	132.0	1,942	40	0	7,002,000	0	7,002,000
2008/09	Unlimited	None	120.0	2,027	42	0	7,905,000	0	7,905,000
2009/10	Unlimited	None	108.0	1,884	42	0	9,092,500	0	9,092,500
2010/11	Unlimited	None	96.0	1,898	58	0	10,715,000	0	10,715,000
2011/12	Unlimited	None	84.0	1,898	50	2	35,468,999	1,050,000	36,518,999
2012/13	Unlimited	None	72.0	1,926	54	9	19,080,000	44,400,000	63,480,000
2013/14	Unlimited	None	60.0	1,926	39	7	1,250,000	1,450,000	2,700,000
2014/15	Unlimited	None	48.0	1,812	39	7	25,000	13,050,000	13,075,000
2015/16	Unlimited	None	36.0	1,871	48	21	90,000	4,575,000	4,665,000
2016/17	Unlimited	None	24.0	1,863	15	13	0	1,300,500	1,300,500
2017/18	Unlimited	None	12.0	1,858	26	12	0	1,350,000	1,350,000
Total					1,418	74	\$433,736,246	\$88,275,500	\$522,011,746

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	307	0	\$216,281,357	\$0	\$216,281,357
1999/00	Unlimited	None	228.0	2,039	40	0	33,190,000	0	33,190,000
2000/01	Unlimited	None	216.0	2,104	89	0	10,411,000	0	10,411,000
2001/02	Unlimited	None	204.0	2,173	90	0	23,647,540	0	23,647,540
2002/03	Unlimited	None	192.0	2,119	87	0	4,268,500	0	4,268,500
2003/04	Unlimited	None	180.0	2,141	129	0	8,377,500	0	8,377,500
2004/05	Unlimited	None	168.0	2,112	92	1	19,606,850	20,000,000	39,606,850
2005/06	Unlimited	None	156.0	2,037	74	1	22,575,000	1,000,000	23,575,000
2006/07	Unlimited	None	144.0	1,900	57	1	4,750,000	100,000	4,850,000
2007/08	Unlimited	None	132.0	1,942	40	0	7,002,000	0	7,002,000
2008/09	Unlimited	None	120.0	2,027	42	0	7,905,000	0	7,905,000
2009/10	Unlimited	None	108.0	1,884	42	0	9,092,500	0	9,092,500
2010/11	Unlimited	None	96.0	1,898	58	0	10,715,000	0	10,715,000
2011/12	Unlimited	None	84.0	1,898	50	2	35,468,999	1,050,000	36,518,999
2012/13	Unlimited	None	72.0	1,926	54	9	19,080,000	44,400,000	63,480,000
2013/14	Unlimited	None	60.0	1,926	39	7	1,250,000	1,450,000	2,700,000
2014/15	Unlimited	None	48.0	1,812	39	7	25,000	13,050,000	13,075,000
2015/16	Unlimited	None	36.0	1,871	48	21	90,000	4,575,000	4,665,000
2016/17	Unlimited	None	24.0	1,863	15	13	0	1,300,500	1,300,500
2017/18	Unlimited	None	12.0	1,858	26	12	0	1,350,000	1,350,000
Total					1,418	74	\$433,736,246	\$88,275,500	\$522,011,746

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	100.0%	100.0%	100.0%
336.0	100.0%	100.0%	100.0%
324.0	100.0%	100.0%	100.0%
312.0	100.0%	100.0%	100.0%
300.0	100.0%	100.0%	100.0%
288.0	100.0%	100.0%	100.0%
276.0	100.0%	100.0%	100.0%
264.0	100.0%	100.0%	100.0%
252.0	100.0%	100.0%	100.0%
240.0	100.0%	100.0%	100.0%
228.0	100.0%	100.0%	100.0%
216.0	100.0%	100.0%	100.0%
204.0	100.0%	100.0%	100.0%
192.0	100.0%	100.0%	100.0%
180.0	100.0%	100.0%	100.0%
168.0	100.0%	100.0%	100.0%
156.0	100.0%	100.0%	100.0%
144.0	100.0%	100.0%	100.0%
132.0	98.0%	100.0%	100.0%
120.0	94.3%	100.0%	100.0%
108.0	89.8%	99.0%	100.0%
96.0	80.2%	97.1%	100.0%
84.0	67.9%	95.2%	100.0%
72.0	56.6%	93.3%	100.0%
60.0	28.3%	88.9%	100.0%
48.0	10.9%	82.7%	99.0%
36.0	2.2%	73.5%	96.1%
24.0	0.0%	60.0%	87.4%
12.0	0.0%	37.5%	72.8%

(2) is from Exhibit MM-Stroger-2 (page 2).

(3) is from Exhibit MM-Stroger-2 (page 3).

(4) is from Exhibit MM-Stroger-2 (page 4).

COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - JOHN H. STROGER, JR. HOSPITAL

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

I. Historical Limited Paid Losses (\$000)

Claim Period	Months of Development:																				
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																				\$235,628	\$235,628
1999/00	0	12,065	12,065	17,115	17,650	23,830	27,830	37,830	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925
2000/01	0	0	156	551	1,046	4,406	4,706	4,706	4,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706
2001/02	0	0	30	9,351	12,349	16,054	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	24,848	24,848	24,848
2002/03	10	12	1,260	1,263	3,248	4,488	4,888	4,986	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,313	5,313	5,313
2003/04	0	0	0	8,781	16,656	18,246	19,496	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,196	19,196	19,196
2004/05	0	90	107	5,775	16,665	18,715	18,715	18,715	18,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,698	19,698	19,698	19,698
2005/06	0	1	516	528	6,778	9,228	9,908	11,533	11,603	23,603	24,028	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
2006/07	0	16	16	26	2,016	2,016	4,766	4,766	4,766	4,766	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753
2007/08	0	127	127	3,677	6,027	8,427	8,427	8,427	8,427	8,427	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302
2008/09	0	0	2,445	3,155	3,155	4,405	5,155	8,155	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205
2009/10	0	0	0	2,318	7,653	10,438	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203
2010/11	0	0	0	2,850	4,878	5,168	5,468	10,718	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203
2011/12	0	20,100	20,825	24,390	26,195	34,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294
2012/13	0	850	850	2,330	5,590	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255
2013/14	0	0	0	825	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675
2014/15	0	25	30	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2015/16	90	2,590	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540
2016/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

II. Limited Paid Loss Development

Claim Period	Months of Development:																					
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult		
to 1998/99																				1.000	1.000	
1999/00		1.000	1.419	1.031	1.350	1.168	1.359	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2000/01			3.532	1.898	4.212	1.068	1.000	1.000	2.487	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2001/02			311.700	1.321	1.300	1.561	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2002/03	1.150	109.565	1.002	2.572	1.382	1.089	1.020	1.066	1.000	1.000	1.000	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	
2003/04				1.897	1.095	1.069	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.977	1.000	1.000	1.000	1.000	1.000	1.000	
2004/05		1.189	53.971	2.886	1.123	1.000	1.000	1.000	1.053	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2005/06		1032.000	1.023	12.837	1.361	1.074	1.164	1.006	2.034	1.018	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2006/07		1.000	1.621	77.245	1.000	2.364	1.000	1.000	1.000	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2007/08		1.000	28.953	1.639	1.398	1.000	1.000	1.000	1.000	0.985	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2008/09			1.290	1.000	1.396	1.170	1.582	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2009/10				3.302	1.364	1.073	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2010/11				1.712	1.059	1.058	1.960	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2011/12		1.036	1.171	1.074	1.309	1.087	1.087	1.087	1.087	1.087	1.087	1.087	1.087	1.087	1.087	1.087	1.087	1.087	1.087	1.087	1.087	
2012/13		1.000	2.741	2.399	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	3.623	
2013/14				2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	2.030	
2014/15		1.200	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	1.933	
2015/16	28.778	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	1.753	
2016/17																						
2017/18																						
Average																						
All	14.964	115.074	34.196	7.656	1.641	1.214	1.174	1.007	1.256	1.002	1.000	1.000	0.996	1.000	0.998	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd 3	29.056	1.748	3.651	1.215	1.629	1.081	1.378	1.002	0.994	1.011	0.999	1.000	0.990	1.000	0.995	1.000	1.000	1.000	1.000	1.000	1.000	
Last 3				1.834	1.997	1.073	1.514	1.002	0.995	1.005	1.000	1.000	0.992	1.000	0.997	1.000	1.000	1.000	1.000	1.000	1.000	
Last 5				2.047	1.356	1.073	1.194	1.002	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
x-hi,low																						
Previous	2.000	120.000	5.000	2.600	2.000	1.200	1.180	1.120	1.050	1.040	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	2.000	120.000	5.000	2.600	2.000	1.200	1.180	1.120	1.050	1.040	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	11022.717	5511.359	45.928	9.186	3.533	1.766	1.472	1.248	1.114	1.061	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Percent	0.0%	0.0%	2.2%	10.9%	28.3%	56.6%	67.9%	80.2%	89.8%	94.3%	98.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Amounts are limited (net of excess insurance).

Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - JOHN H. STROGER, JR. HOSPITAL

Historical Limited Reported Incurred Losses (\$000) and Limited Reported Incurred Loss Development

I. Historical Limited Reported Incurred Losses (\$000)

Claim Period	Months of Development:																				
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																				\$235,628	\$235,628
1999/00	15,495	25,810	35,730	44,165	46,475	46,930	40,630	46,630	46,225	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925
2000/01	8,668	7,778	8,093	8,911	8,706	21,206	15,706	15,706	14,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706
2001/02	33,740	25,655	29,808	24,761	25,134	31,305	25,861	26,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	24,848	24,848
2002/03	26,711	16,022	5,770	8,413	8,248	6,788	5,688	5,336	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,313	5,313	5,313	5,313	5,313
2003/04	28,331	39,505	26,840	38,771	29,756	28,646	20,246	20,146	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,196	19,196	19,196	19,196	19,196
2004/05	9,450	27,041	20,842	24,110	21,345	19,465	18,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	29,698	29,698
2005/06	14,276	35,957	22,631	24,828	17,228	16,758	13,858	15,603	25,603	25,603	24,028	24,250	25,000								
2006/07	11,046	13,126	8,721	5,787	4,726	5,646	5,496	4,766	4,766	4,766	4,853	4,853									
2007/08	24,827	12,544	17,152	18,477	12,927	12,227	10,927	8,427	8,427	8,302											
2008/09	5,235	6,890	9,775	10,255	9,555	10,005	8,255	8,405	8,205	8,205											
2009/10	5,095	8,253	15,550	16,368	13,503	12,388	11,203	11,203													
2010/11	770	3,900	8,530	11,105	11,183	10,673	9,968	10,718													
2011/12	23,923	34,253	39,927	39,455	39,045	37,644	38,344														
2012/13	6,925	12,000	29,150	39,255	61,465	66,155															
2013/14	1,560	7,155	6,400	5,575	3,125																
2014/15	7,000	8,225	8,630	16,108																	
2015/16	5,190	8,620	11,315																		
2016/17	450	2,376																			
2017/18	1,450																				

II. Limited Reported Incurred Loss Development

Claim Period	Months of Development:																				
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1998/99																				1.000	
1999/00	1.666	1.384	1.236	1.052	1.010	0.866	1.148	0.991	0.820	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2000/01	0.897	1.041	1.101	0.977	2.436	0.741	1.000	0.936	0.796	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2001/02	0.760	1.162	0.831	1.015	1.246	0.826	1.008	0.962	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.992	1.000	
2002/03	0.600	0.360	1.458	0.980	0.823	0.838	0.938	0.996	1.000	1.000	1.000	1.000	1.000	1.000	0.999	1.000					
2003/04	1.394	0.679	1.445	0.767	0.963	0.707	0.995	0.975	1.000	1.000	1.000	1.000	1.000	0.977	1.000						
2004/05	2.861	0.771	1.157	0.885	0.912	0.961	1.053	1.000	1.000	1.000	1.000	1.506	1.337								
2005/06	2.519	0.629	1.097	0.694	0.973	0.827	1.126	1.641	1.000	0.938	1.009	1.031									
2006/07	1.188	0.664	0.664	0.817	1.195	0.973	0.867	1.000	1.000	1.018	1.000										
2007/08	0.505	1.367	1.077	0.700	0.946	0.894	0.771	1.000	0.985	1.000											
2008/09	1.316	1.419	1.049	0.932	1.047	0.825	1.018	0.976	1.000												
2009/10	1.620	1.884	1.053	0.825	0.917	0.904	1.000	1.000													
2010/11	5.065	2.187	1.302	1.007	0.954	0.934	1.075														
2011/12	1.432	1.166	0.988	0.990	0.964	1.019															
2012/13	1.733	2.429	1.347	1.566	1.076																
2013/14	4.587	0.894	0.871	0.561																	
2014/15	1.175	1.049	1.867																		
2015/16	1.661	1.313																			
2016/17	5.279																				
2017/18																					
Average																					
All	2.014	1.200	1.159	0.918	1.104	0.870	1.000	1.043	0.960	0.995	1.001	1.077	1.052	1.000	0.998	1.000	1.000	1.000	1.000	1.000	
Wtd 3	1.521	1.098	1.379	1.230	1.025	0.980	1.031	0.993	0.994	0.962	1.005	1.169	1.175	1.000	0.995	1.000					
Last 3	2.705	1.085	1.361	1.039	0.998	0.952	1.031	0.992	0.995	0.986	1.003	1.179	1.105	1.000	0.997	1.000					
Last 5	2.660	1.176	1.212	0.941	0.989	0.911	0.962	1.000	1.000												
x-hi,low																					
Previous	1.600	1.250	1.100	1.075	1.050	1.020	1.020	1.020	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.600	1.225	1.125	1.075	1.050	1.020	1.020	1.020	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	2.668	1.667	1.361	1.210	1.125	1.072	1.051	1.030	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Percent	37.5%	60.0%	73.5%	82.7%	88.9%	93.3%	95.2%	97.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Amounts are limited (net of excess insurance).

Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - JOHN H. STROGER, JR. HOSPITAL

Historical Reported Claims and Reported Claim Development

I. Historical Reported Claims

Claim Period	Months of Development:																			
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
to 1998/99																				
1999/00																		365	365	365
2000/01																	48	48	48	
2001/02																107	107	107		
2002/03															118	118	118			
2003/04															111	111	111			
2004/05													161	161	161					
2005/06											100	121	121	121						
2006/07										72	73	73								
2007/08									51	51	51									
2008/09								46	46	46										
2009/10								51	51	51										
2010/11								59	59	59										
2011/12					56	59	57	60												
2012/13				64	65	65														
2013/14			41	42	42															
2014/15		33	43	45																
2015/16	35	46	53																	
2016/17	12	19																		
2017/18	28																			

II. Reported Claim Development

Claim Period	Months of Development:																			
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult
to 1998/99																				
1999/00																		1.000	1.000	1.000
2000/01																	1.000	1.000		
2001/02															1.000	1.000				
2002/03														1.000	1.000					
2003/04													1.000	1.000						
2004/05												1.000	1.000							
2005/06										1.014	1.010	1.000								
2006/07									1.000	1.000										
2007/08									1.000	1.000										
2008/09									1.000	1.000										
2009/10								1.000	1.000											
2010/11					1.000	1.000														
2011/12					1.016	1.018														
2012/13				1.024	1.000															
2013/14			1.047	1.000																
2014/15		1.303																		
2015/16	1.314	1.152																		
2016/17	1.583																			
2017/18																				
Average																				
All	1.449	1.228	1.035	1.008	1.000	1.009	1.008	1.000	1.000	1.007	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd 3																				
Last 3																				
Last 5																				
x-hi,low																				
Previous	1.175	1.030	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.200	1.100	1.030	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.373	1.144	1.040	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Percent	72.8%	87.4%	96.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - JOHN H. STROGER, JR. HOSPITAL

Historical Ratio of Limited Paid Losses and Limited Reported Incurred Losses

Claim Period	Months of Development:																			
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
to 1998/99																				
1999/00	0.0%	46.7%	33.8%	38.8%	38.0%	50.8%	68.5%	81.1%	82.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2000/01	0.0%	0.0%	1.9%	6.2%	12.0%	20.8%	30.0%	30.0%	32.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2001/02	0.0%	0.0%	0.1%	37.8%	49.1%	51.3%	96.9%	96.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2002/03	0.0%	0.1%	21.8%	15.0%	39.4%	66.1%	85.9%	93.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2003/04	0.0%	0.0%	0.0%	22.6%	56.0%	63.7%	96.3%	97.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2004/05	0.0%	0.3%	0.5%	24.0%	78.1%	96.1%	100.0%	94.9%	94.9%	100.0%	100.0%	100.0%	100.0%	66.3%	49.6%					
2005/06	0.0%	0.0%	2.3%	2.1%	39.3%	55.1%	71.5%	73.9%	45.3%	92.2%	100.0%	99.0%	96.0%							
2006/07	0.0%	0.1%	0.2%	0.5%	42.7%	35.7%	86.7%	100.0%	100.0%	100.0%	97.9%	97.9%								
2007/08	0.0%	1.0%	0.7%	19.9%	46.6%	68.9%	77.1%	100.0%	100.0%	100.0%	100.0%									
2008/09	0.0%	0.0%	25.0%	30.8%	33.0%	44.0%	62.4%	97.0%	100.0%	100.0%										
2009/10	0.0%	0.0%	0.0%	14.2%	56.7%	84.3%	100.0%	100.0%	100.0%											
2010/11	0.0%	0.0%	0.0%	25.7%	43.6%	48.4%	54.9%	100.0%												
2011/12	0.0%	58.7%	52.2%	61.8%	67.1%	91.1%	97.3%													
2012/13	0.0%	7.1%	2.9%	5.9%	9.1%	30.6%														
2013/14	0.0%	0.0%	0.0%	14.8%	53.6%															
2014/15	0.0%	0.3%	0.3%	0.4%																
2015/16	1.7%	30.0%	40.1%																	
2016/17	0.0%	0.0%																		
2017/18	0.0%																			
Average																				
All	0.1%	8.0%	10.7%	20.0%	44.3%	57.6%	79.0%	88.7%	86.8%	99.2%	99.8%	99.6%	94.6%	91.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Last 3	0.6%	10.1%	13.5%	7.0%	43.3%	56.7%	84.0%	99.0%	100.0%	100.0%	99.3%	99.0%	87.4%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Last 5	0.0%	2.5%	14.5%	15.5%	51.3%	58.9%	78.9%	100.0%	100.0%	100.0%	100.0%	99.7%	98.7%	100.0%	100.0%					
x-hi,low																				
Implicit	0.0%	0.0%	3.0%	13.2%	31.9%	60.7%	71.4%	82.6%	90.7%	94.3%	98.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - JOHN H. STROGER, JR. HOSPITAL

Exhibit MM-Stroger-3

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$216,281,357	100.0%	\$216,281,357
1999/00	228.0	33,190,000	100.0%	33,190,000
2000/01	216.0	10,411,000	100.0%	10,411,000
2001/02	204.0	23,647,540	100.0%	23,647,540
2002/03	192.0	4,268,500	100.0%	4,268,500
2003/04	180.0	8,377,500	100.0%	8,377,500
2004/05	168.0	19,606,850	100.0%	19,606,850
2005/06	156.0	22,575,000	100.0%	22,575,000
2006/07	144.0	4,750,000	100.0%	4,750,000
2007/08	132.0	7,002,000	98.0%	7,142,040
2008/09	120.0	7,905,000	94.3%	8,385,624
2009/10	108.0	9,092,500	89.8%	10,127,590
2010/11	96.0	10,715,000	80.2%	13,366,971
2011/12	84.0	35,468,999	67.9%	52,212,173
2012/13	72.0	19,080,000	56.6%	33,704,078
2013/14	60.0	1,250,000	28.3%	4,416,153
2014/15	48.0	25,000	10.9%	229,640
2015/16	36.0	90,000	2.2%	4,133,519
2016/17	24.0	0	0.0%	0
2017/18	12.0	0	0.0%	0
Total		\$433,736,246		\$476,825,536

(3) is from Exhibit MM-Stroger-1.

(4) is from Exhibit MM-Stroger-2.

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$216,281,357	100.0%	\$216,281,357
1999/00	228.0	33,190,000	100.0%	33,190,000
2000/01	216.0	10,411,000	100.0%	10,411,000
2001/02	204.0	23,647,540	100.0%	23,647,540
2002/03	192.0	4,268,500	100.0%	4,268,500
2003/04	180.0	8,377,500	100.0%	8,377,500
2004/05	168.0	39,606,850	100.0%	39,606,850
2005/06	156.0	23,575,000	100.0%	23,575,000
2006/07	144.0	4,850,000	100.0%	4,850,000
2007/08	132.0	7,002,000	100.0%	7,002,000
2008/09	120.0	7,905,000	100.0%	7,905,000
2009/10	108.0	9,092,500	99.0%	9,183,425
2010/11	96.0	10,715,000	97.1%	11,038,593
2011/12	84.0	36,518,999	95.2%	38,374,310
2012/13	72.0	63,480,000	93.3%	65,884,536 *
2013/14	60.0	2,700,000	88.9%	3,038,610
2014/15	48.0	13,075,000	82.7%	15,818,356
2015/16	36.0	4,665,000	73.5%	6,349,270
2016/17	24.0	1,300,500	60.0%	2,168,296
2017/18	12.0	1,350,000	37.5%	3,601,323
Total		\$522,011,746		\$534,571,467

* - Indicates large claim(s) limited to retention. For details, see Exhibit MM-Stroger-15.

(3) is from Exhibit MM-Stroger-1.

(4) is from Exhibit MM-Stroger-2.

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	100.0%	100.0%	100.0%	\$216,281,357	\$0	\$216,281,357
1999/00	228.0	100.0%	100.0%	100.0%	33,190,000	0	33,190,000
2000/01	216.0	100.0%	100.0%	100.0%	10,411,000	0	10,411,000
2001/02	204.0	100.0%	100.0%	100.0%	23,647,540	0	23,647,540
2002/03	192.0	100.0%	100.0%	100.0%	4,268,500	0	4,268,500
2003/04	180.0	100.0%	100.0%	100.0%	8,377,500	0	8,377,500
2004/05	168.0	100.0%	100.0%	100.0%	19,606,850	20,000,000	39,606,850
2005/06	156.0	100.0%	100.0%	100.0%	22,575,000	1,000,000	23,575,000
2006/07	144.0	100.0%	100.0%	100.0%	4,750,000	100,000	4,850,000
2007/08	132.0	98.0%	100.0%	100.0%	7,002,000	0	7,002,000
2008/09	120.0	94.3%	100.0%	100.0%	7,905,000	0	7,905,000
2009/10	108.0	89.8%	99.0%	90.3%	9,092,500	0	9,092,500
2010/11	96.0	80.2%	97.1%	85.2%	10,715,000	0	10,715,000
2011/12	84.0	67.9%	95.2%	84.9%	35,468,999	1,050,000	36,705,411
2012/13	72.0	56.6%	93.3%	84.6%	19,080,000	44,400,000	66,109,977 *
2013/14	60.0	28.3%	88.9%	84.5%	1,250,000	1,450,000	2,966,852
2014/15	48.0	10.9%	82.7%	80.5%	25,000	13,050,000	16,228,445
2015/16	36.0	2.2%	73.5%	72.9%	90,000	4,575,000	6,367,221
2016/17	24.0	0.0%	60.0%	60.0%	0	1,300,500	2,168,559
2017/18	12.0	0.0%	37.5%	37.5%	0	1,350,000	3,601,867
Total					\$433,736,246	\$88,275,500	\$533,070,579

* - Indicates large claim(s) limited to retention. For details, see Exhibit MM-Stroger-15.

(3) and (4) are from Exhibit MM-Stroger-2.

(6) and (7) are from Exhibit MM-Stroger-1.

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$216,281,357	\$216,281,357	\$216,281,357	\$216,281,357
1999/00	33,190,000	33,190,000	33,190,000	33,190,000
2000/01	10,411,000	10,411,000	10,411,000	10,411,000
2001/02	23,647,540	23,647,540	23,647,540	23,647,540
2002/03	4,268,500	4,268,500	4,268,500	4,268,500
2003/04	8,377,500	8,377,500	8,377,500	8,377,500
2004/05	19,606,850	39,606,850	39,606,850	41,606,850
2005/06	22,575,000	23,575,000	23,575,000	23,675,000
2006/07	4,750,000	4,850,000	4,850,000	4,860,000
2007/08	7,142,040	7,002,000	7,002,000	7,002,000
2008/09	8,385,624	7,905,000	7,905,000	7,905,000
2009/10	10,127,590	9,183,425	9,092,500	9,092,500
2010/11	13,366,971	11,038,593	10,715,000	10,715,000
2011/12	52,212,173	38,374,310	36,705,411	37,039,191
2012/13	33,704,078	65,884,536	66,109,977	67,920,000
2013/14	4,416,153	3,038,610	2,966,852	2,995,555
2014/15	229,640	15,818,356	16,228,445	14,464,529
2015/16	4,133,519	6,349,270	6,367,221	5,913,300
2016/17	0	2,168,296	2,168,559	2,168,428
2017/18	0	3,601,323	3,601,867	3,601,595
Total	\$476,825,536	\$534,571,467	\$533,070,579	\$535,134,845

(2) is from Exhibit MM-Stroger-3.

(3) is from Exhibit MM-Stroger-4.

(4) is from Exhibit MM-Stroger-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)	Projected A-priori Loss Rate per Occupied Bed Equivalent (7)/(5) (8)
2008/09	\$7,905,000	2,027	\$3,899.54	1.495	\$5,829.99	\$5,176.42
2009/10	9,092,500	1,884	4,825.15	1.401	6,758.43	5,525.22
2010/11	10,715,000	1,898	5,645.70	1.335	7,538.08	5,796.17
2011/12	37,039,191	1,898	19,515.84	1.284	25,055.14	6,028.02
2012/13	67,920,000	1,926	35,256.93	1.248	44,010.18	6,199.77
2013/14	2,995,555	1,926	1,554.98	1.205	1,873.14	6,424.49
2014/15	14,464,529	1,812	7,983.88	1.163	9,286.30	6,653.58
2015/16	5,913,300	1,871	3,160.42	1.125	3,555.05	6,879.93
2016/17	2,168,428	1,863	1,163.92	1.082	1,258.89	7,155.13
2017/18	3,601,595	1,858	1,938.25	1.040	2,015.78	7,441.33

(7) Projected 2018/19 a-priori loss rate per Occupied Bed Equivalent \$7,738.99

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$1,250,000	28.3%	\$6,424.49	1,926	\$8,873,191	\$10,123,191
2014/15	25,000	10.9%	6,653.58	1,812	10,742,088	10,767,088
2015/16	90,000	2.2%	6,879.93	1,871	12,592,396	12,682,396
2016/17	0	0.0%	7,155.13	1,863	13,327,891	13,327,891
2017/18	0	0.0%	7,441.33	1,858	13,826,025	13,826,025

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$2,700,000	88.9%	\$6,424.49	1,926	\$1,379,167	\$4,079,167
2014/15	13,075,000	82.7%	6,653.58	1,812	2,090,579	15,165,579
2015/16	4,665,000	73.5%	6,879.93	1,871	3,414,733	8,079,733
2016/17	1,300,500	60.0%	7,155.13	1,863	5,335,061	6,635,561
2017/18	1,350,000	37.5%	7,441.33	1,858	8,643,954	9,993,954

Section I, (2) is from Exhibit MM-Stroger-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit MM-Stroger-10.

Section I, (5) is based on a 4% trend and adjusted for change in retention.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit MM-Stroger-1.

Sections II and III, (3) are from Exhibit MM-Stroger-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Occupied Bed Equivalents (6)	Frequency (per Occupied Bed Equivalent) (5)/(6) (7)
2008/09	120.0	42	100.0%	42	2,027	0.02
2009/10	108.0	42	100.0%	42	1,884	0.02
2010/11	96.0	58	100.0%	58	1,898	0.03
2011/12	84.0	50	100.0%	50	1,898	0.03
2012/13	72.0	54	100.0%	54	1,926	0.03
2013/14	60.0	39	100.0%	39	1,926	0.02
2014/15	48.0	39	99.0%	39	1,812	0.02
2015/16	36.0	48	96.1%	50	1,871	0.03
2016/17	24.0	15	87.4%	17	1,863	0.01
2017/18	12.0	26	72.8%	36	1,858	0.02

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$7,905,000	42	\$188,214	1.495	\$281,389	\$212,645	\$8,931,107
2009/10	9,092,500	42	216,488	1.401	303,228	226,974	9,532,908
2010/11	10,715,000	58	184,741	1.335	246,665	238,105	13,810,071
2011/12	37,039,191	50	740,784	1.284	951,045	247,629	12,381,443
2012/13	67,920,000	54	1,257,778	1.248	1,570,047	254,684	13,752,949
2013/14	2,995,555	39	76,809	1.205	92,525	263,916	10,292,718
2014/15	14,464,529	39	370,885	1.163	431,388	273,327	10,659,743
2015/16	5,913,300	50	118,266	1.125	133,033	282,625	14,131,256
2016/17	2,168,428	17	127,555	1.082	137,963	293,930	4,996,812
2017/18	3,601,595	36	100,044	1.040	104,046	305,687	11,004,744
						(7) Projected 2018/19 average claim severity \$317,915	

Section I, (3) is from Exhibit MM-Stroger-1.

Section I, (4) is from Exhibit MM-Stroger-2.

Section I, (6) is from Exhibit MM-Stroger-10.

Section II, (2) is from Exhibit MM-Stroger-6.

Section II, (3) is from Section I, (5).

Section II, (5) is based on a 4% trend and adjusted for change in retention.

Section II, (7) is based on (6) and actuarial judgment.

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$216,281,357	\$216,281,357	\$216,281,357				\$216,281,357	\$216,281,357
1999/00	33,190,000	33,190,000	33,190,000				33,190,000	33,190,000
2000/01	10,411,000	10,411,000	10,411,000				10,411,000	10,411,000
2001/02	23,647,540	23,647,540	23,647,540				23,647,540	23,647,540
2002/03	4,268,500	4,268,500	4,268,500				4,268,500	4,268,500
2003/04	8,377,500	8,377,500	8,377,500				8,377,500	8,377,500
2004/05	19,606,850	39,606,850	39,606,850				30,607,000	41,610,000
2005/06	22,575,000	23,575,000	23,575,000				22,850,000	23,680,000
2006/07	4,750,000	4,850,000	4,850,000				4,860,000	4,860,000
2007/08	7,142,040	7,002,000	7,002,000				7,002,000	7,002,000
2008/09	8,385,624	7,905,000	7,905,000				7,905,000	7,905,000
2009/10	10,127,590	9,183,425	9,092,500				9,092,500	9,092,500
2010/11	13,366,971	11,038,593	10,715,000				10,710,000	10,715,000
2011/12	52,212,173	38,374,310	36,705,411				36,750,000	37,040,000
2012/13	33,704,078	65,884,536	66,109,977				62,500,000	65,000,000
2013/14	4,416,153	3,038,610	2,966,852	10,123,191	4,079,167	10,292,718	9,000,000	7,500,000
2014/15	229,640	15,818,356	16,228,445	10,767,088	15,165,579	10,659,743	12,000,000	15,000,000
2015/16	4,133,519	6,349,270	6,367,221	12,682,396	8,079,733	14,131,256	12,500,000	10,000,000
2016/17	0	2,168,296	2,168,559	13,327,891	6,635,561	4,996,812	13,000,000	11,500,000
2017/18	0	3,601,323	3,601,867	13,826,025	9,993,954	11,004,744	15,440,000	12,500,000
Total	\$476,825,536	\$534,571,467	\$533,070,579				\$550,392,397	\$559,580,397
2013/14 - 2017/18	8,779,312	30,975,855	31,332,943	60,726,591	43,953,994	51,085,272	61,940,000	56,500,000
to 2012/13	468,046,225	503,595,612	501,737,636				488,452,397	503,080,397
						Change		
						All years		\$9,188,000
						2013/14 - 2017/18		-5,440,000
						to 2012/13		14,628,000

(2) is from Exhibit MM-Stroger-3.

(3) is from Exhibit MM-Stroger-4.

(4) is from Exhibit MM-Stroger-5.

(5) and (6) are from Exhibit MM-Stroger-7.

(7) is from Exhibit MM-Stroger-8.

(8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)
2008/09	\$7,905,000	2,027	\$3,899.54	1.495	\$5,829.99
2009/10	9,092,500	1,884	4,825.15	1.401	6,758.43
2010/11	10,715,000	1,898	5,645.70	1.335	7,538.08
2011/12	37,040,000	1,898	19,516.27	1.284	25,055.68
2012/13	65,000,000	1,926	33,741.17	1.248	42,118.11
2013/14	7,500,000	1,926	3,893.21	1.205	4,689.79
2014/15	15,000,000	1,812	8,279.44	1.163	9,630.07
2015/16	10,000,000	1,871	5,344.60	1.125	6,011.95
2016/17	11,500,000	1,863	6,172.70	1.082	6,676.39
2017/18	12,500,000	1,858	6,727.04	1.040	6,996.12
Total	\$186,252,500	18,964	\$9,821.27		\$12,130.46

Claim Period (1)	Projected Limited Loss Rate per Occupied Bed Equivalent (7)	Projected Occupied Bed Equivalents (8)	Projected Ultimate Limited Losses (7)X(8) (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per Occupied Bed Equivalent (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11) (12)
2018/19	\$9,063.77	1,858	\$16,840,000	0.84	\$7,631.70	\$14,180,000
2019/20	9,426.32	1,858	17,520,000	0.84	7,936.97	14,750,000
2020/21	9,803.37	1,858	18,220,000	0.84	8,254.45	15,340,000

(2) is from Exhibit MM-Stroger-9.

(3) was provided by the County.

(5) is based on a 4% trend and adjusted for change in retention.

(7) 2018/19 is based on (6) and actuarial judgment.
 Other period(s) based on 2018/19 plus a 4% trend.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Stroger-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - JOHN H. STROGER, JR. HOSPITAL

Exhibit MM-Stroger-11

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$216,281,357	\$0	\$216,281,357	\$216,281,357	\$0	\$0	1.00	\$0
1999/00	33,190,000	0	33,190,000	33,190,000	0	0	1.00	0
2000/01	10,411,000	0	10,411,000	10,411,000	0	0	1.00	0
2001/02	23,647,540	0	23,647,540	23,647,540	0	0	1.00	0
2002/03	4,268,500	0	4,268,500	4,268,500	0	0	1.00	0
2003/04	8,377,500	0	8,377,500	8,377,500	0	0	1.00	0
2004/05	19,606,850	20,000,000	39,606,850	41,610,000	2,003,150	22,003,150	1.00	22,003,150
2005/06	22,575,000	1,000,000	23,575,000	23,680,000	105,000	1,105,000	1.00	1,105,000
2006/07	4,750,000	100,000	4,850,000	4,860,000	10,000	110,000	1.00	110,000
2007/08	7,002,000	0	7,002,000	7,002,000	0	0	0.99	0
2008/09	7,905,000	0	7,905,000	7,905,000	0	0	0.98	0
2009/10	9,092,500	0	9,092,500	9,092,500	0	0	0.97	0
2010/11	10,715,000	0	10,715,000	10,715,000	0	0	0.96	0
2011/12	35,468,999	1,050,000	36,518,999	37,040,000	521,001	1,571,001	0.95	1,500,034
2012/13	19,080,000	44,400,000	63,480,000	65,000,000	1,520,000	45,920,000	0.94	43,329,085
2013/14	1,250,000	1,450,000	2,700,000	7,500,000	4,800,000	6,250,000	0.94	5,904,166
2014/15	25,000	13,050,000	13,075,000	15,000,000	1,925,000	14,975,000	0.93	13,954,564
2015/16	90,000	4,575,000	4,665,000	10,000,000	5,335,000	9,910,000	0.91	9,051,081
2016/17	0	1,300,500	1,300,500	11,500,000	10,199,500	11,500,000	0.89	10,238,536
2017/18	0	1,350,000	1,350,000	12,500,000	11,150,000	12,500,000	0.87	10,822,702
Total	\$433,736,246	\$88,275,500	\$522,011,746	\$559,580,397	\$37,568,651	\$125,844,151		\$118,018,318

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit MM-Stroger-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Stroger-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - JOHN H. STROGER, JR. HOSPITAL

Exhibit MM-Stroger-12

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	100.0%	252.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	168.0	100.0%	180.0	100.0%	100.0%	22,003,150	7,334,383	14,668,767	1.00	14,668,767
2005/06	156.0	100.0%	168.0	100.0%	100.0%	1,105,000	1,105,000	0	1.00	0
2006/07	144.0	100.0%	156.0	100.0%	100.0%	110,000	110,000	0	1.00	0
2007/08	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2009/10	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2010/11	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2011/12	84.0	67.9%	96.0	80.2%	38.1%	1,571,001	599,046	971,955	0.96	935,022
2012/13	72.0	56.6%	84.0	67.9%	26.1%	45,920,000	11,982,343	33,937,657	0.95	32,404,588
2013/14	60.0	28.3%	72.0	56.6%	39.5%	6,250,000	2,467,506	3,782,494	0.94	3,569,077
2014/15	48.0	10.9%	60.0	28.3%	19.5%	14,975,000	2,927,092	12,047,908	0.94	11,381,257
2015/16	36.0	2.2%	48.0	10.9%	8.9%	9,910,000	882,301	9,027,699	0.93	8,412,528
2016/17	24.0	0.0%	36.0	2.2%	2.2%	11,500,000	248,350	11,251,650	0.91	10,276,447
2017/18	12.0	0.0%	24.0	0.0%	0.0%	12,500,000	1,134	12,498,866	0.89	11,127,834
2018/19	0.0	0.0%	12.0	0.0%	0.0%	16,840,000	1,528	16,838,472	0.87	14,579,021
Total						\$142,684,151	\$27,658,683	\$115,025,468		\$107,354,541

Payments for 2004/05 assume large payments will be paid out over three years (2018/19 through 2020/21).

(3) and (5) are from Exhibit MM-Stroger-2.

(7) to 2017/18 is from Exhibit MM-Stroger-11. The amount for 2018/19 is from Exhibit MM-Stroger-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Stroger-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - JOHN H. STROGER, JR. HOSPITAL

Exhibit MM-Stroger-13

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	100.0%	264.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	180.0	100.0%	192.0	100.0%	100.0%	14,668,767	7,334,384	7,334,383	1.00	7,334,383
2005/06	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2010/11	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2011/12	96.0	80.2%	108.0	89.8%	48.5%	971,955	471,249	500,706	0.97	483,612
2012/13	84.0	67.9%	96.0	80.2%	38.1%	33,937,657	12,940,930	20,996,727	0.96	20,198,871
2013/14	72.0	56.6%	84.0	67.9%	26.1%	3,782,494	987,002	2,795,492	0.95	2,669,211
2014/15	60.0	28.3%	72.0	56.6%	39.5%	12,047,908	4,756,525	7,291,383	0.94	6,879,986
2015/16	48.0	10.9%	60.0	28.3%	19.5%	9,027,699	1,764,602	7,263,097	0.94	6,861,205
2016/17	36.0	2.2%	48.0	10.9%	8.9%	11,251,650	1,001,750	10,249,900	0.93	9,551,445
2017/18	24.0	0.0%	36.0	2.2%	2.2%	12,498,866	269,922	12,228,944	0.91	11,169,037
2018/19	12.0	0.0%	24.0	0.0%	0.0%	16,838,472	1,528	16,836,944	0.89	14,990,057
2019/20	0.0	0.0%	12.0	0.0%	0.0%	17,520,000	1,589	17,518,411	0.87	15,167,723
Total						\$132,545,468	\$29,529,481	\$103,015,987		\$95,305,530

Payments for 2004/05 assume large payments will be paid out over three years (2018/19 through 2020/21).

(3) and (5) are from Exhibit MM-Stroger-2.

(7) to 2018/19 is from Exhibit MM-Stroger-12, (9). The amount for 2019/20 is from Exhibit MM-Stroger-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Stroger-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - JOHN H. STROGER, JR. HOSPITAL

Exhibit MM-Stroger-14

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	100.0%	276.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	252.0	100.0%	264.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	192.0	100.0%	204.0	100.0%	100.0%	7,334,383	7,334,383	0	1.00	0
2005/06	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2011/12	108.0	89.8%	120.0	94.3%	43.9%	500,706	219,917	280,789	0.98	274,291
2012/13	96.0	80.2%	108.0	89.8%	48.5%	20,996,727	10,180,198	10,816,529	0.97	10,447,256
2013/14	84.0	67.9%	96.0	80.2%	38.1%	2,795,492	1,065,962	1,729,530	0.96	1,663,809
2014/15	72.0	56.6%	84.0	67.9%	26.1%	7,291,383	1,902,610	5,388,773	0.95	5,145,345
2015/16	60.0	28.3%	72.0	56.6%	39.5%	7,263,097	2,867,477	4,395,620	0.94	4,147,609
2016/17	48.0	10.9%	60.0	28.3%	19.5%	10,249,900	2,003,499	8,246,401	0.94	7,790,100
2017/18	36.0	2.2%	48.0	10.9%	8.9%	12,228,944	1,088,760	11,140,184	0.93	10,381,062
2018/19	24.0	0.0%	36.0	2.2%	2.2%	16,836,944	363,605	16,473,339	0.91	15,045,562
2019/20	12.0	0.0%	24.0	0.0%	0.0%	17,518,411	1,589	17,516,822	0.89	15,595,358
2020/21	0.0	0.0%	12.0	0.0%	0.0%	18,220,000	1,653	18,218,347	0.87	15,773,739
Total						\$121,235,987	\$27,029,653	\$94,206,334		\$86,264,131

Payments for 2004/05 assume large payments will be paid out over three years (2018/19 through 2020/21).

(3) and (5) are from Exhibit MM-Stroger-2.

(7) to 2019/20 is from Exhibit MM-Stroger-13, (9). The amount for 2020/21 is from Exhibit MM-Stroger-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Stroger-2.

List of Large Claims
 Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
94000155	08/23/72	to 1998/99	Unlimited	\$2,514,239	\$0	\$2,514,239
97009089	05/09/76	to 1998/99	Unlimited	5,000,000	0	5,000,000
94000244	08/04/79	to 1998/99	Unlimited	3,000,000	0	3,000,000
94000027	02/18/84	to 1998/99	Unlimited	3,000,000	0	3,000,000
94000325	10/31/85	to 1998/99	Unlimited	9,750,000	0	9,750,000
94000164	08/17/86	to 1998/99	Unlimited	6,750,000	0	6,750,000
94000082	09/10/86	to 1998/99	Unlimited	1,656,477	0	1,656,477
94000312	01/27/87	to 1998/99	Unlimited	1,000,000	0	1,000,000
94000192	03/06/88	to 1998/99	Unlimited	5,250,000	0	5,250,000
97005676	01/21/90	to 1998/99	Unlimited	6,500,000	0	6,500,000
94000032	01/31/90	to 1998/99	Unlimited	1,450,000	0	1,450,000
94000221	04/12/90	to 1998/99	Unlimited	3,000,000	0	3,000,000
94000123	09/05/90	to 1998/99	Unlimited	1,750,000	0	1,750,000
94000045	12/27/90	to 1998/99	Unlimited	1,875,000	0	1,875,000
94000081	05/05/91	to 1998/99	Unlimited	3,600,000	0	3,600,000
97001530	01/01/93	to 1998/99	Unlimited	6,000,000	0	6,000,000
94000196	05/19/93	to 1998/99	Unlimited	7,400,000	0	7,400,000
94000168	05/25/93	to 1998/99	Unlimited	1,500,000	0	1,500,000
94000200	06/19/93	to 1998/99	Unlimited	3,600,000	0	3,600,000
94000215	06/23/93	to 1998/99	Unlimited	1,850,000	0	1,850,000
94000166	06/30/93	to 1998/99	Unlimited	1,500,000	0	1,500,000
94000047	07/18/93	to 1998/99	Unlimited	15,000,000	0	15,000,000
94000203	08/21/93	to 1998/99	Unlimited	2,000,000	0	2,000,000
94000217	09/15/93	to 1998/99	Unlimited	2,000,000	0	2,000,000
94000197	09/24/93	to 1998/99	Unlimited	5,000,000	0	5,000,000
94000216	10/16/93	to 1998/99	Unlimited	2,500,000	0	2,500,000
94000210	12/28/93	to 1998/99	Unlimited	1,500,000	0	1,500,000
94000193	02/09/94	to 1998/99	Unlimited	2,000,000	0	2,000,000
94000252	06/22/94	to 1998/99	Unlimited	2,000,000	0	2,000,000
94000275	10/08/94	to 1998/99	Unlimited	1,000,000	0	1,000,000
94000278	01/26/95	to 1998/99	Unlimited	2,800,000	0	2,800,000
94000306	07/19/95	to 1998/99	Unlimited	3,000,000	0	3,000,000
94000333	07/27/95	to 1998/99	Unlimited	3,000,000	0	3,000,000
94000290	08/03/95	to 1998/99	Unlimited	1,350,000	0	1,350,000
94000291	08/16/95	to 1998/99	Unlimited	3,500,000	0	3,500,000
97003948	01/01/96	to 1998/99	Unlimited	5,200,000	0	5,200,000
94000311	01/16/96	to 1998/99	Unlimited	1,000,000	0	1,000,000
94000319	03/05/96	to 1998/99	Unlimited	2,430,979	0	2,430,979
97001646	06/26/96	to 1998/99	Unlimited	1,750,000	0	1,750,000
97004522	11/25/96	to 1998/99	Unlimited	1,500,000	0	1,500,000
97002438	10/21/97	to 1998/99	Unlimited	6,750,000	0	6,750,000
97002235	11/23/97	to 1998/99	Unlimited	1,100,000	0	1,100,000
97002578	12/12/97	to 1998/99	Unlimited	3,500,000	0	3,500,000
97002232	04/09/98	to 1998/99	Unlimited	19,250,000	0	19,250,000
97004204	08/28/98	to 1998/99	Unlimited	1,500,000	0	1,500,000
97002721	10/18/98	to 1998/99	Unlimited	1,500,000	0	1,500,000
97009808	05/04/99	to 1998/99	Unlimited	5,500,000	0	5,500,000
97002733	05/05/99	to 1998/99	Unlimited	2,000,000	0	2,000,000
97003168	10/19/99	to 1998/99	Unlimited	3,000,000	0	3,000,000
97003099	12/08/99	1999/00	Unlimited	4,000,000	0	4,000,000
97003142	01/03/00	1999/00	Unlimited	12,000,000	0	12,000,000
97003171	01/05/00	1999/00	Unlimited	1,250,000	0	1,250,000
97003311	05/31/00	1999/00	Unlimited	10,000,000	0	10,000,000
97003790	10/17/00	1999/00	Unlimited	1,250,000	0	1,250,000
97003837	11/22/00	1999/00	Unlimited	2,100,000	0	2,100,000
97003451	03/06/01	2000/01	10,000,000	7,000,000	0	7,000,000
97003672	07/20/01	2000/01	10,000,000	1,100,000	0	1,100,000
97004134	09/09/02	2001/02	15,000,000	12,000,000	0	12,000,000
97004269	09/20/02	2001/02	15,000,000	9,000,000	0	9,000,000
97004515	11/29/02	2001/02	15,000,000	1,350,000	0	1,350,000
97004537	04/21/03	2002/03	20,000,000	1,200,000	0	1,200,000
97005041	07/21/03	2002/03	20,000,000	1,500,000	0	1,500,000
97004808	12/19/03	2003/04	20,000,000	3,750,000	0	3,750,000
97005973	01/05/04	2003/04	20,000,000	1,450,000	0	1,450,000
97005705	03/04/05	2004/05	20,000,000	4,500,000	0	4,500,000
97005615	04/22/05	2004/05	20,000,000	1,000,000	0	1,000,000
97006373	05/13/05	2004/05	20,000,000	2,000,000	0	2,000,000
97005709	08/02/05	2004/05	20,000,000	0	20,000,000	20,000,000
97005712	08/12/05	2004/05	20,000,000	9,800,000	0	9,800,000
200602921	01/01/06	2005/06	20,000,000	0	1,000,000	1,000,000
97009247	08/08/06	2005/06	20,000,000	12,000,000	0	12,000,000
97006800	09/15/06	2005/06	20,000,000	6,250,000	0	6,250,000
97006263	09/23/06	2005/06	20,000,000	1,200,000	0	1,200,000
97006482	10/21/06	2005/06	20,000,000	1,250,000	0	1,250,000
97007988	03/01/07	2006/07	20,000,000	1,750,000	0	1,750,000
97008116	10/03/07	2006/07	20,000,000	1,000,000	0	1,000,000
97007247	10/19/07	2006/07	20,000,000	1,700,000	0	1,700,000
97007071	01/18/08	2007/08	20,000,000	2,400,000	0	2,400,000
97007276	05/30/08	2007/08	20,000,000	2,050,000	0	2,050,000
97007510	10/11/08	2007/08	20,000,000	2,500,000	0	2,500,000
97008908	01/10/09	2008/09	20,000,000	3,000,000	0	3,000,000
97008090	04/06/09	2008/09	20,000,000	2,250,000	0	2,250,000

List of Large Claims
 Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
97008088	06/21/09	2008/09	20,000,000	1,250,000	0	1,250,000
97009127	06/16/10	2009/10	40,000,000	1,337,500	0	1,337,500
97009609	06/21/10	2009/10	40,000,000	2,250,000	0	2,250,000
97008821	09/01/10	2009/10	40,000,000	1,700,000	0	1,700,000
97008751	10/05/10	2009/10	40,000,000	3,000,000	0	3,000,000
97009478	12/19/10	2010/11	40,000,000	2,400,000	0	2,400,000
97009939	03/20/11	2010/11	40,000,000	1,400,000	0	1,400,000
97009208	09/29/11	2010/11	40,000,000	4,500,000	0	4,500,000
97009296	12/02/11	2011/12	40,000,000	20,000,000	0	20,000,000
97009816	12/24/11	2011/12	40,000,000	1,300,000	0	1,300,000
97009427	02/05/12	2011/12	40,000,000	1,500,000	0	1,500,000
97009447	02/28/12	2011/12	40,000,000	3,000,000	0	3,000,000
97009531	05/07/12	2011/12	40,000,000	3,000,000	0	3,000,000
97009669	06/25/12	2011/12	40,000,000	5,000,000	0	5,000,000
97011081	12/26/12	2012/13	40,000,000	2,000,000	0	2,000,000
97010090	03/05/13	2012/13	30,000,000	0	1,000,000	1,000,000
97011195	04/11/13	2012/13	30,000,000	3,000,000	0	3,000,000
97011908	04/11/13	2012/13	30,000,000	0	1,000,000	1,000,000
97012020	05/09/13	2012/13	30,000,000	6,450,000	0	6,450,000
97011271	07/12/13	2012/13	30,000,000	0	30,000,000 *	30,000,000 *
97012456	09/05/13	2012/13	30,000,000	3,980,000	0	3,980,000
97012455	10/05/13	2012/13	30,000,000	0	5,000,000	5,000,000
97012538	11/15/13	2012/13	30,000,000	0	1,500,000	1,500,000
97010481	11/28/13	2012/13	30,000,000	0	5,000,000	5,000,000
201505603	01/02/15	2014/15	30,000,000	0	8,000,000	8,000,000
97012405	09/14/15	2014/15	25,000,000	0	2,500,000	2,500,000
97012520	11/04/15	2014/15	25,000,000	0	1,250,000	1,250,000
97012831	01/25/16	2015/16	25,000,000	0	1,500,000	1,500,000
201605669	07/23/16	2015/16	25,000,000	0	1,000,000	1,000,000

The claim(s) indicated by a "*" have been limited in development.

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	920	30	31	26	2	14	1,023		
0.01 - 5,000	8	0	0	1	1	0	10	10	2.5%
5,000 - 10,000	19	0	0	0	0	0	19	29	7.3%
10,000 - 25,000	12	0	1	1	4	0	18	47	11.9%
25,000 - 50,000	23	2	0	8	5	0	38	85	21.5%
50,000 - 100,000	32	3	1	6	2	11	55	140	35.4%
100,000 - 250,000	44	1	1	3	0	1	50	190	48.1%
250,000 - 500,000	42	1	2	0	0	0	45	235	59.5%
500,000 - 750,000	27	0	0	1	1	0	29	264	66.8%
750,000 - 1,000,000	26	2	0	1	0	0	29	293	74.2%
Over 1,000,000	98	0	3	1	0	0	102	395	100.0%
Total	1,251	39	39	48	15	26	1,418	395	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	19,940	0	0	5,000	500	0	25,440	25,440	0.0%
5,000 - 10,000	167,500	0	0	0	0	0	167,500	192,940	0.0%
10,000 - 25,000	246,200	0	25,000	20,000	100,000	0	391,200	584,140	0.1%
25,000 - 50,000	1,012,500	100,000	0	400,000	250,000	0	1,762,500	2,346,640	0.4%
50,000 - 100,000	2,759,349	300,000	100,000	590,000	200,000	1,100,000	5,049,349	7,395,989	1.4%
100,000 - 250,000	7,858,000	250,000	200,000	500,000	0	250,000	9,058,000	16,453,989	3.2%
250,000 - 500,000	16,778,563	400,000	1,000,000	0	0	0	18,178,563	34,632,552	6.6%
500,000 - 750,000	18,900,000	0	0	650,000	750,000	0	20,300,000	54,932,552	10.5%
750,000 - 1,000,000	23,435,000	1,650,000	0	1,000,000	0	0	26,085,000	81,017,552	15.5%
Over 1,000,000	427,744,194	0	11,750,000	1,500,000	0	0	440,994,194	522,011,746	100.0%
Total	\$498,921,246	\$2,700,000	\$13,075,000	\$4,665,000	\$1,300,500	\$1,350,000	\$522,011,746	\$522,011,746	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.

Calculation of Occupied Bed Equivalents

Occurrence Period (1)	Inpatients (2)	ER Visits (3)	Other Visits (4)	Other Visits (5)	Physicians (6)	Housestaff (7)	Occupied Bed Equivalents (8)
to 1998/99							
1999/00	363	141,013	485,066	141,276	358	490	2,039
2000/01	360	136,073	481,095	269,485	381	465	2,104
2001/02	388	141,693	502,382	189,599	414	444	2,173
2002/03	345	150,271	498,328	172,516	400	457	2,119
2003/04	353	148,568	520,088	174,789	401	463	2,141
2004/05	352	141,500	511,426	173,667	397	461	2,112
2005/06	338	135,358	512,883	152,169	378	460	2,037
2006/07	317	128,643	415,673	136,033	355	450	1,900
2007/08	314	127,998	392,825	128,266	389	433	1,942
2008/09	313	155,000	432,529	143,627	389	446	2,027
2009/10	313	155,000	127,500	64,000	389	460	1,884
2010/11	313	131,000	127,500	64,000	420	455	1,898
2011/12	313	131,000	127,500	64,000	420	455	1,898
2012/13	302	137,000	175,000	64,000	433	433	1,926
2013/14	302	137,000	175,000	64,000	433	433	1,926
2014/15	281	116,583	153,407	43,077	420	420	1,812
2015/16	281	123,158	258,721	52,714	420	421	1,871
2016/17	281	122,537	252,642	50,027	420	417	1,863
2017/18	281	115,511	274,154	47,549	420	418	1,858
2018/19	281	115,511	274,154	47,549	420	418	1,858

(2) through (7) were provided by the County.

The exposures in (2) through (7) are converted to occupied bed equivalents using the following exposure conversion factors, which were published in the Aon/ASHRM Hospital Professional Liability and Physician Liability Benchmark Analysis published in October 2017. The weight for Housestaff is based on actuarial judgement.

Exposure	Conversion Factor
Inpatients	1.000
ER Visits	0.200 per 100
Other Visits	0.040 per 100
Class 1 physician	2.100
Housestaff	0.800 (residents and interns)

From page 2 of HPL benchmark study (October 2017):
 2,750 loss rate per occupied bed
 5,710 loss rate per class 1 physician

Data Summary as of November 30, 2018
 Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	11	0	\$3,980,000	\$0	\$3,980,000
1999/00	Unlimited	None	228.0	308	0	0	0	0	0
2000/01	10,000,000	None	216.0	290	3	0	0	0	0
2001/02	15,000,000	None	204.0	285	2	0	100,000	0	100,000
2002/03	20,000,000	None	192.0	296	3	0	1,050,000	0	1,050,000
2003/04	20,000,000	None	180.0	332	6	0	20,375,000	0	20,375,000
2004/05	20,000,000	None	168.0	338	7	0	1,900,000	0	1,900,000
2005/06	20,000,000	None	156.0	329	11	0	620,000	0	620,000
2006/07	20,000,000	None	144.0	299	5	0	0	0	0
2007/08	20,000,000	None	132.0	245	4	0	0	0	0
2008/09	20,000,000	None	120.0	296	2	0	175,000	0	175,000
2009/10	40,000,000	None	108.0	200	2	0	0	0	0
2010/11	40,000,000	None	96.0	210	1	0	0	0	0
2011/12	40,000,000	None	84.0	151	1	0	0	0	0
2012/13	30,000,000	None	72.0	47	0	0	0	0	0
2013/14	30,000,000	None	60.0	47	0	0	0	0	0
2014/15	25,000,000	None	48.0	19	0	0	0	0	0
2015/16	25,000,000	None	36.0	4	0	0	0	0	0
2016/17	25,000,000	None	24.0	17	0	0	0	0	0
2017/18	25,000,000	None	12.0	19	0	0	0	0	0
Total					58		\$28,200,000	\$0	\$28,200,000

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/75	Unlimited
12/01/00	10,000,000
12/01/01	15,000,000
12/01/02	20,000,000
03/01/10	40,000,000
03/01/13	30,000,000
07/01/15	25,000,000

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	11	0	\$3,980,000	\$0	\$3,980,000
1999/00	Unlimited	None	228.0	308	0	0	0	0	0
2000/01	Unlimited	None	216.0	290	3	0	0	0	0
2001/02	Unlimited	None	204.0	285	2	0	100,000	0	100,000
2002/03	Unlimited	None	192.0	296	3	0	1,050,000	0	1,050,000
2003/04	Unlimited	None	180.0	332	6	0	20,375,000	0	20,375,000
2004/05	Unlimited	None	168.0	338	7	0	1,900,000	0	1,900,000
2005/06	Unlimited	None	156.0	329	11	0	620,000	0	620,000
2006/07	Unlimited	None	144.0	299	5	0	0	0	0
2007/08	Unlimited	None	132.0	245	4	0	0	0	0
2008/09	Unlimited	None	120.0	296	2	0	175,000	0	175,000
2009/10	Unlimited	None	108.0	200	2	0	0	0	0
2010/11	Unlimited	None	96.0	210	1	0	0	0	0
2011/12	Unlimited	None	84.0	151	1	0	0	0	0
2012/13	Unlimited	None	72.0	47	0	0	0	0	0
2013/14	Unlimited	None	60.0	47	0	0	0	0	0
2014/15	Unlimited	None	48.0	19	0	0	0	0	0
2015/16	Unlimited	None	36.0	4	0	0	0	0	0
2016/17	Unlimited	None	24.0	17	0	0	0	0	0
2017/18	Unlimited	None	12.0	19	0	0	0	0	0
Total					58		\$28,200,000	\$0	\$28,200,000

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
 Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	11	0	\$3,980,000	\$0	\$3,980,000
1999/00	Unlimited	None	228.0	308	0	0	0	0	0
2000/01	Unlimited	None	216.0	290	3	0	0	0	0
2001/02	Unlimited	None	204.0	285	2	0	100,000	0	100,000
2002/03	Unlimited	None	192.0	296	3	0	1,050,000	0	1,050,000
2003/04	Unlimited	None	180.0	332	6	0	20,375,000	0	20,375,000
2004/05	Unlimited	None	168.0	338	7	0	1,900,000	0	1,900,000
2005/06	Unlimited	None	156.0	329	11	0	620,000	0	620,000
2006/07	Unlimited	None	144.0	299	5	0	0	0	0
2007/08	Unlimited	None	132.0	245	4	0	0	0	0
2008/09	Unlimited	None	120.0	296	2	0	175,000	0	175,000
2009/10	Unlimited	None	108.0	200	2	0	0	0	0
2010/11	Unlimited	None	96.0	210	1	0	0	0	0
2011/12	Unlimited	None	84.0	151	1	0	0	0	0
2012/13	Unlimited	None	72.0	47	0	0	0	0	0
2013/14	Unlimited	None	60.0	47	0	0	0	0	0
2014/15	Unlimited	None	48.0	19	0	0	0	0	0
2015/16	Unlimited	None	36.0	4	0	0	0	0	0
2016/17	Unlimited	None	24.0	17	0	0	0	0	0
2017/18	Unlimited	None	12.0	19	0	0	0	0	0
Total					58		\$28,200,000	\$0	\$28,200,000

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	100.0%	100.0%	100.0%
336.0	100.0%	100.0%	100.0%
324.0	100.0%	100.0%	100.0%
312.0	100.0%	100.0%	100.0%
300.0	100.0%	100.0%	100.0%
288.0	100.0%	100.0%	100.0%
276.0	100.0%	100.0%	100.0%
264.0	100.0%	100.0%	100.0%
252.0	100.0%	100.0%	100.0%
240.0	100.0%	100.0%	100.0%
228.0	100.0%	100.0%	100.0%
216.0	100.0%	100.0%	100.0%
204.0	100.0%	100.0%	100.0%
192.0	100.0%	100.0%	100.0%
180.0	100.0%	100.0%	100.0%
168.0	100.0%	100.0%	100.0%
156.0	100.0%	100.0%	100.0%
144.0	100.0%	100.0%	100.0%
132.0	98.0%	100.0%	100.0%
120.0	94.3%	100.0%	100.0%
108.0	89.8%	99.0%	100.0%
96.0	80.2%	97.1%	100.0%
84.0	67.9%	95.2%	100.0%
72.0	56.6%	93.3%	100.0%
60.0	28.3%	88.9%	100.0%
48.0	10.9%	82.7%	99.0%
36.0	2.2%	73.5%	96.1%
24.0	0.0%	60.0%	87.4%
12.0	0.0%	37.5%	72.8%

(2) is from Exhibit MM-Oak Forest-2 (page 2).

(3) is from Exhibit MM-Oak Forest-2 (page 3).

(4) is from Exhibit MM-Oak Forest-2 (page 4).

COOK COUNTY, ILLINOIS
MEDICAL MALPRACTICE - OAK FOREST HEALTH CENTER

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

I. Historical Limited Paid Losses (\$000)

Claim Period	Months of Development:																					
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240		
to 1998/99																						
1999/00	0	12,065	12,065	17,115	17,650	23,830	27,830	37,830	37,935	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	
2000/01	0	0	156	551	1,046	4,466	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	
2001/02	0	0	30	9,351	12,349	16,054	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	
2002/03	10	12	1,260	3,248	4,468	4,468	4,988	4,988	4,988	4,988	4,988	4,988	4,988	4,988	4,988	4,988	4,988	4,988	4,988	4,988	4,988	
2003/04	0	0	0	8,781	16,656	18,246	19,496	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	
2004/05	0	90	107	5,775	16,655	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	
2005/06	0	1	516	528	6,778	9,228	9,908	11,533	11,603	23,603	24,028	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	
2006/07	0	16	16	26	2,016	2,016	4,766	4,766	4,766	4,766	4,766	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	
2007/08	0	127	127	3,677	6,027	8,427	8,427	8,427	8,427	8,427	8,427	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	
2008/09	0	0	2,445	3,155	3,155	4,405	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	
2009/10	0	0	0	2,318	7,653	10,438	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	
2010/11	0	0	0	2,850	4,878	5,168	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	
2011/12	0	20,100	20,825	24,390	26,195	34,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	
2012/13	0	850	850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2013/14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2014/15	0	25	30	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	
2015/16	90	2,590	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	
2016/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2017/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

II. Limited Paid Loss Development

Claim Period	Months of Development:																				
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1998/99																					
1999/00	1,000	1,000	1,419	1,031	1,350	1,168	1,359	1,003	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2000/01	1,150	1,150	3,532	1,898	4,212	1,068	1,000	1,000	2,487	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2001/02	1,150	1,150	3,117	1,321	1,300	1,561	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2002/03	1,150	1,150	1,002	2,572	1,982	1,089	1,020	1,066	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2003/04	1,150	1,150	53,971	2,886	1,123	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2004/05	1,150	1,150	1,023	12,837	1,361	1,074	1,164	1,006	2,034	1,018	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2005/06	1,150	1,150	1,621	77,245	1,000	2,364	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2006/07	1,150	1,150	1,000	28,953	1,398	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2008/09	1,150	1,150	1,290	1,000	1,396	1,170	1,582	1,006	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2010/11	1,150	1,150	1,171	1,712	1,059	1,073	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2011/12	1,150	1,150	1,074	1,309	1,058	1,087	1,960	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2012/13	1,150	1,150	2,741	2,399	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2013/14	1,150	1,150	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2014/15	1,150	1,150	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2015/16	1,150	1,150	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2016/17	1,150	1,150	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2017/18	1,150	1,150	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Average All
Wtd 3
Last 3
Last 5
x=hi,low

Previous	2,000	120,000	5,000	2,600	2,000	1,200	1,180	1,120	1,050	1,040	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Selected	2,000	120,000	5,000	2,600	2,000	1,200	1,180	1,120	1,050	1,040	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Cumulative	11022.717	5511.359	45.928	9.186	3.533	1.766	1.472	1.248	1.114	1.061	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Percent	0.0%	0.0%	2.2%	10.9%	28.3%	56.6%	67.9%	80.2%	89.8%	94.3%	98.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Amounts are limited (net of excess insurance).

Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
MEDICAL MALPRACTICE - OAK FOREST HEALTH CENTER
Historical Reported Claims and Reported Claim Development

I. Historical Reported Claims

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1/98/99																					
1999/00																					
2000/01																					
2001/02																					
2002/03																					
2003/04																					
2004/05																					
2005/06																					
2006/07																					
2007/08																					
2008/09																					
2009/10																					
2010/11																					
2011/12																					
2012/13																					
2013/14																					
2014/15																					
2015/16																					
2016/17																					
2017/18																					

II. Reported Claim Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1/98/99																					
1999/00																					
2000/01																					
2001/02																					
2002/03																					
2003/04																					
2004/05																					
2005/06																					
2006/07																					
2007/08																					
2008/09																					
2009/10																					
2010/11																					
2011/12																					
2012/13																					
2013/14																					
2014/15																					
2015/16																					
2016/17																					
2017/18																					
Average All	1.449	1.228	1.035	1.008	1.000	1.009	1.008	1.000	1.000	1.007	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Wtd 3																					
Last 3																					
Last 5																					
x-tiltlow																					
Previous	1.175	1.030	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.200	1.100	1.030	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	1.373	1.144	1.040	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Percent	72.8%	87.4%	96.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Data was provided by the County and is for Cermak, Stroger and Provident combined.

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$3,980,000	100.0%	\$3,980,000
1999/00	228.0	0	100.0%	0
2000/01	216.0	0	100.0%	0
2001/02	204.0	100,000	100.0%	100,000
2002/03	192.0	1,050,000	100.0%	1,050,000
2003/04	180.0	20,375,000	100.0%	20,375,000
2004/05	168.0	1,900,000	100.0%	1,900,000
2005/06	156.0	620,000	100.0%	620,000
2006/07	144.0	0	100.0%	0
2007/08	132.0	0	98.0%	0
2008/09	120.0	175,000	94.3%	185,640
2009/10	108.0	0	89.8%	0
2010/11	96.0	0	80.2%	0
2011/12	84.0	0	67.9%	0
2012/13	72.0	0	56.6%	0
2013/14	60.0	0	28.3%	0
2014/15	48.0	0	10.9%	0
2015/16	36.0	0	2.2%	0
2016/17	24.0	0	0.0%	0
2017/18	12.0	0	0.0%	0
Total		\$28,200,000		\$28,210,640

(3) is from Exhibit MM-Oak Forest-1.

(4) is from Exhibit MM-Oak Forest-2.

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$3,980,000	100.0%	\$3,980,000
1999/00	228.0	0	100.0%	0
2000/01	216.0	0	100.0%	0
2001/02	204.0	100,000	100.0%	100,000
2002/03	192.0	1,050,000	100.0%	1,050,000
2003/04	180.0	20,375,000	100.0%	20,375,000
2004/05	168.0	1,900,000	100.0%	1,900,000
2005/06	156.0	620,000	100.0%	620,000
2006/07	144.0	0	100.0%	0
2007/08	132.0	0	100.0%	0
2008/09	120.0	175,000	100.0%	175,000
2009/10	108.0	0	99.0%	0
2010/11	96.0	0	97.1%	0
2011/12	84.0	0	95.2%	0
2012/13	72.0	0	93.3%	0
2013/14	60.0	0	88.9%	0
2014/15	48.0	0	82.7%	0
2015/16	36.0	0	73.5%	0
2016/17	24.0	0	60.0%	0
2017/18	12.0	0	37.5%	0
Total		\$28,200,000		\$28,200,000

(3) is from Exhibit MM-Oak Forest-1.

(4) is from Exhibit MM-Oak Forest-2.

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	100.0%	100.0%	100.0%	\$3,980,000	\$0	\$3,980,000
1999/00	228.0	100.0%	100.0%	100.0%	0	0	0
2000/01	216.0	100.0%	100.0%	100.0%	0	0	0
2001/02	204.0	100.0%	100.0%	100.0%	100,000	0	100,000
2002/03	192.0	100.0%	100.0%	100.0%	1,050,000	0	1,050,000
2003/04	180.0	100.0%	100.0%	100.0%	20,375,000	0	20,375,000
2004/05	168.0	100.0%	100.0%	100.0%	1,900,000	0	1,900,000
2005/06	156.0	100.0%	100.0%	100.0%	620,000	0	620,000
2006/07	144.0	100.0%	100.0%	100.0%	0	0	0
2007/08	132.0	98.0%	100.0%	100.0%	0	0	0
2008/09	120.0	94.3%	100.0%	100.0%	175,000	0	175,000
2009/10	108.0	89.8%	99.0%	90.3%	0	0	0
2010/11	96.0	80.2%	97.1%	85.2%	0	0	0
2011/12	84.0	67.9%	95.2%	84.9%	0	0	0
2012/13	72.0	56.6%	93.3%	84.6%	0	0	0
2013/14	60.0	28.3%	88.9%	84.5%	0	0	0
2014/15	48.0	10.9%	82.7%	80.5%	0	0	0
2015/16	36.0	2.2%	73.5%	72.9%	0	0	0
2016/17	24.0	0.0%	60.0%	60.0%	0	0	0
2017/18	12.0	0.0%	37.5%	37.5%	0	0	0
Total					\$28,200,000	\$0	\$28,200,000

(3) and (4) are from Exhibit MM-Oak Forest-2.

(6) and (7) are from Exhibit MM-Oak Forest-1.

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$3,980,000	\$3,980,000	\$3,980,000	\$3,980,000
1999/00	0	0	0	0
2000/01	0	0	0	0
2001/02	100,000	100,000	100,000	100,000
2002/03	1,050,000	1,050,000	1,050,000	1,050,000
2003/04	20,375,000	20,375,000	20,375,000	20,375,000
2004/05	1,900,000	1,900,000	1,900,000	1,900,000
2005/06	620,000	620,000	620,000	620,000
2006/07	0	0	0	0
2007/08	0	0	0	0
2008/09	185,640	175,000	175,000	175,000
2009/10	0	0	0	0
2010/11	0	0	0	0
2011/12	0	0	0	0
2012/13	0	0	0	0
2013/14	0	0	0	0
2014/15	0	0	0	0
2015/16	0	0	0	0
2016/17	0	0	0	0
2017/18	0	0	0	0
Total	\$28,210,640	\$28,200,000	\$28,200,000	\$28,200,000

(2) is from Exhibit MM-Oak Forest-3.

(3) is from Exhibit MM-Oak Forest-4.

(4) is from Exhibit MM-Oak Forest-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)	Projected A-priori Loss Rate per Occupied Bed Equivalent (7)/(5) (8)
2008/09	\$175,000	296	\$590.31	1.495	\$882.54	\$334.44
2009/10	0	200	0.00	1.401	0.00	356.97
2010/11	0	210	0.00	1.335	0.00	374.48
2011/12	0	151	0.00	1.284	0.00	389.46
2012/13	0	47	0.00	1.248	0.00	400.55
2013/14	0	47	0.00	1.205	0.00	415.07
2014/15	0	19	0.00	1.163	0.00	429.87
2015/16	0	4	0.00	1.125	0.00	444.50
2016/17	0	17	0.00	1.082	0.00	462.28
2017/18	0	19	0.00	1.040	0.00	480.77

(7) Projected 2018/19 a-priori loss rate per Occupied Bed Equivalent \$500.00

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$0	28.3%	\$415.07	47	\$14,061	\$14,061
2014/15	0	10.9%	429.87	19	7,281	7,281
2015/16	0	2.2%	444.50	4	1,939	1,939
2016/17	0	0.0%	462.28	17	8,042	8,042
2017/18	0	0.0%	480.77	19	8,938	8,938

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$0	88.9%	\$415.07	47	\$2,186	\$2,186
2014/15	0	82.7%	429.87	19	1,417	1,417
2015/16	0	73.5%	444.50	4	526	526
2016/17	0	60.0%	462.28	17	3,219	3,219
2017/18	0	37.5%	480.77	19	5,588	5,588

Section I, (2) is from Exhibit MM-Oak Forest-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit MM-Oak Forest-10.

Section I, (5) is based on a 4% trend and adjusted for change in retention.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit MM-Oak Forest-1.

Sections II and III, (3) are from Exhibit MM-Oak Forest-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Occupied Bed Equivalents (6)	Frequency (per Occupied Bed Equivalent) (5)/(6) (7)
2008/09	120.0	2	100.0%	2	296	0.01
2009/10	108.0	2	100.0%	2	200	0.01
2010/11	96.0	1	100.0%	1	210	0.00
2011/12	84.0	1	100.0%	1	151	0.01
2012/13	72.0	0	100.0%	0	47	0.00
2013/14	60.0	0	100.0%	0	47	0.00
2014/15	48.0	0	99.0%	0	19	0.00
2015/16	36.0	0	96.1%	0	4	0.00
2016/17	24.0	0	87.4%	0	17	0.00
2017/18	12.0	0	72.8%	0	19	0.00

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$175,000	2	\$87,500	1.495	\$130,817	\$87,500	\$175,000
2009/10	0	2	0	1.401	0	93,396	186,792
2010/11	0	1	0	1.335	0	97,976	97,976
2011/12	0	1	0	1.284	0	101,895	101,895
2012/13	0	0	0	1.248	0	104,798	0
2013/14	0	0	0	1.205	0	108,597	0
2014/15	0	0	0	1.163	0	112,469	0
2015/16	0	0	0	1.125	0	116,295	0
2016/17	0	0	0	1.082	0	120,947	0
2017/18	0	0	0	1.040	0	125,785	0
					(7) Projected 2018/19 average claim severity	\$130,817	

Section I, (3) is from Exhibit MM-Oak Forest-1.

Section I, (4) is from Exhibit MM-Oak Forest-2.

Section I, (6) is from Exhibit MM-Oak Forest-10.

Section II, (2) is from Exhibit MM-Oak Forest-6.

Section II, (3) is from Section I, (5).

Section II, (5) is based on a 4% trend and adjusted for change in retention.

Section II, (7) is based on (6) and actuarial judgment.

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$3,980,000	\$3,980,000	\$3,980,000				\$3,980,000	\$3,980,000
1999/00	0	0	0					0
2000/01	0	0	0					0
2001/02	100,000	100,000	100,000				100,000	100,000
2002/03	1,050,000	1,050,000	1,050,000				1,050,000	1,050,000
2003/04	20,375,000	20,375,000	20,375,000				20,375,000	20,375,000
2004/05	1,900,000	1,900,000	1,900,000				1,900,000	1,900,000
2005/06	620,000	620,000	620,000				620,000	620,000
2006/07	0	0	0					0
2007/08	0	0	0					0
2008/09	185,640	175,000	175,000				175,000	175,000
2009/10	0	0	0					0
2010/11	0	0	0				580,000	0
2011/12	0	0	0				30,000	0
2012/13	0	0	0				30,000	0
2013/14	0	0	0	14,061	2,186		30,000	0
2014/15	0	0	0	7,281	1,417		30,000	15,000
2015/16	0	0	0	1,939	526		30,000	20,000
2016/17	0	0	0	8,042	3,219		30,000	25,000
2017/18	0	0	0	8,938	5,588		40,000	30,000
Total	\$28,210,640	\$28,200,000	\$28,200,000				\$29,000,000	\$28,290,000
2013/14 - 2017/18	0	0	0	40,261	12,935	0	160,000	90,000
to 2012/13	28,210,640	28,200,000	28,200,000				28,840,000	28,200,000
						Change		
						All years		-\$710,000
						2013/14 - 2017/18		-70,000
						to 2012/13		-640,000

(2) is from Exhibit MM-Oak Forest-3.

(3) is from Exhibit MM-Oak Forest-4.

(4) is from Exhibit MM-Oak Forest-5.

(5) and (6) are from Exhibit MM-Oak Forest-7.

(7) is from Exhibit MM-Oak Forest-8.

(8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)
2008/09	\$175,000	296	\$590.31	1.495	\$882.54
2009/10	0	200	0.00	1.401	0.00
2010/11	0	210	0.00	1.335	0.00
2011/12	0	151	0.00	1.284	0.00
2012/13	0	47	0.00	1.248	0.00
2013/14	0	47	0.00	1.205	0.00
2014/15	15,000	19	789.21	1.163	917.95
2015/16	20,000	4	4,485.11	1.125	5,045.14
2016/17	25,000	17	1,436.88	1.082	1,554.13
2017/18	30,000	19	1,613.48	1.040	1,678.01
Total	\$265,000	1,012	\$261.97		\$1,007.78

Claim Period (1)	Projected Limited Loss Rate per Occupied Bed Equivalent (7)	Projected Occupied Bed Equivalents (8)	Projected Ultimate Limited Losses (7)X(8) (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per Occupied Bed Equivalent (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11) (12)
2018/19	\$882.54	19	\$16,000	0.84	\$743.10	\$14,000
2019/20	917.84	19	17,000	0.84	772.82	14,000
2020/21	954.55	19	18,000	0.84	803.73	15,000

(2) is from Exhibit MM-Oak Forest-9.

(3) was provided by the County.

(5) is based on a 4% trend and adjusted for change in retention.

(7) 2018/19 is based on (6) and actuarial judgment.
 Other period(s) based on 2018/19 plus a 4% trend.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Oak Forest-2.

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$3,980,000	\$0	\$3,980,000	\$3,980,000	\$0	\$0	1.00	\$0
1999/00	0	0	0	0	0	0	1.00	0
2000/01	0	0	0	0	0	0	1.00	0
2001/02	100,000	0	100,000	100,000	0	0	1.00	0
2002/03	1,050,000	0	1,050,000	1,050,000	0	0	1.00	0
2003/04	20,375,000	0	20,375,000	20,375,000	0	0	1.00	0
2004/05	1,900,000	0	1,900,000	1,900,000	0	0	1.00	0
2005/06	620,000	0	620,000	620,000	0	0	1.00	0
2006/07	0	0	0	0	0	0	1.00	0
2007/08	0	0	0	0	0	0	0.99	0
2008/09	175,000	0	175,000	175,000	0	0	0.98	0
2009/10	0	0	0	0	0	0	0.97	0
2010/11	0	0	0	0	0	0	0.96	0
2011/12	0	0	0	0	0	0	0.95	0
2012/13	0	0	0	0	0	0	0.94	0
2013/14	0	0	0	0	0	0	0.94	0
2014/15	0	0	0	15,000	15,000	15,000	0.93	13,978
2015/16	0	0	0	20,000	20,000	20,000	0.91	18,267
2016/17	0	0	0	25,000	25,000	25,000	0.89	22,258
2017/18	0	0	0	30,000	30,000	30,000	0.87	25,974
Total	\$28,200,000	\$0	\$28,200,000	\$28,290,000	\$90,000	\$90,000		\$80,477

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit MM-Oak Forest-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Oak Forest-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - OAK FOREST HEALTH CENTER

Exhibit MM-Oak Forest-12

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	100.0%	252.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2009/10	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2010/11	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2011/12	84.0	67.9%	96.0	80.2%	38.1%	0	0	0	0.96	0
2012/13	72.0	56.6%	84.0	67.9%	26.1%	0	0	0	0.95	0
2013/14	60.0	28.3%	72.0	56.6%	39.5%	0	0	0	0.94	0
2014/15	48.0	10.9%	60.0	28.3%	19.5%	15,000	2,932	12,068	0.94	11,400
2015/16	36.0	2.2%	48.0	10.9%	8.9%	20,000	1,781	18,219	0.93	16,978
2016/17	24.0	0.0%	36.0	2.2%	2.2%	25,000	540	24,460	0.91	22,340
2017/18	12.0	0.0%	24.0	0.0%	0.0%	30,000	3	29,997	0.89	26,707
2018/19	0.0	0.0%	12.0	0.0%	0.0%	16,000	1	15,999	0.87	13,852
Total						\$106,000	\$5,257	\$100,743		\$91,277

(3) and (5) are from Exhibit MM-Oak Forest-2.

(7) to 2017/18 is from Exhibit MM-Oak Forest-11. The amount for 2018/19 is from Exhibit MM-Oak Forest-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Oak Forest-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - OAK FOREST HEALTH CENTER

Exhibit MM-Oak Forest-13

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	100.0%	264.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2010/11	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2011/12	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2012/13	84.0	67.9%	96.0	80.2%	38.1%	0	0	0	0.96	0
2013/14	72.0	56.6%	84.0	67.9%	26.1%	0	0	0	0.95	0
2014/15	60.0	28.3%	72.0	56.6%	39.5%	12,068	4,764	7,304	0.94	6,892
2015/16	48.0	10.9%	60.0	28.3%	19.5%	18,219	3,561	14,658	0.94	13,847
2016/17	36.0	2.2%	48.0	10.9%	8.9%	24,460	2,178	22,282	0.93	20,764
2017/18	24.0	0.0%	36.0	2.2%	2.2%	29,997	648	29,349	0.91	26,805
2018/19	12.0	0.0%	24.0	0.0%	0.0%	15,999	1	15,998	0.89	14,243
2019/20	0.0	0.0%	12.0	0.0%	0.0%	17,000	2	16,998	0.87	14,717
Total						\$117,743	\$11,154	\$106,589		\$97,268

(3) and (5) are from Exhibit MM-Oak Forest-2.

(7) to 2018/19 is from Exhibit MM-Oak Forest-12, (9). The amount for 2019/20 is from Exhibit MM-Oak Forest-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Oak Forest-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - OAK FOREST HEALTH CENTER

Exhibit MM-Oak Forest-14

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	100.0%	276.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	252.0	100.0%	264.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2011/12	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2012/13	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2013/14	84.0	67.9%	96.0	80.2%	38.1%	0	0	0	0.96	0
2014/15	72.0	56.6%	84.0	67.9%	26.1%	7,304	1,906	5,398	0.95	5,154
2015/16	60.0	28.3%	72.0	56.6%	39.5%	14,658	5,787	8,871	0.94	8,370
2016/17	48.0	10.9%	60.0	28.3%	19.5%	22,282	4,355	17,927	0.94	16,935
2017/18	36.0	2.2%	48.0	10.9%	8.9%	29,349	2,613	26,736	0.93	24,914
2018/19	24.0	0.0%	36.0	2.2%	2.2%	15,998	345	15,653	0.91	14,296
2019/20	12.0	0.0%	24.0	0.0%	0.0%	16,998	2	16,996	0.89	15,132
2020/21	0.0	0.0%	12.0	0.0%	0.0%	18,000	2	17,998	0.87	15,583
Total						\$124,589	\$15,010	\$109,579		\$100,384

(3) and (5) are from Exhibit MM-Oak Forest-2.

(7) to 2019/20 is from Exhibit MM-Oak Forest-13, (9). The amount for 2020/21 is from Exhibit MM-Oak Forest-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Oak Forest-2.

List of Large Claims
Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
94000125	09/15/87	to 1998/99	Unlimited	\$2,500,000	\$0	\$2,500,000
94000234	12/15/93	to 1998/99	Unlimited	1,200,000	0	1,200,000
97005031	05/19/04	2003/04	20,000,000	20,000,000	0	20,000,000
97006028	11/03/05	2004/05	20,000,000	1,000,000	0	1,000,000

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	41	0	0	0	0	0	41		
0.01 - 5,000	2	0	0	0	0	0	2	2	11.8%
5,000 - 10,000	0	0	0	0	0	0	0	2	11.8%
10,000 - 25,000	2	0	0	0	0	0	2	4	23.5%
25,000 - 50,000	0	0	0	0	0	0	0	4	23.5%
50,000 - 100,000	2	0	0	0	0	0	2	6	35.3%
100,000 - 250,000	2	0	0	0	0	0	2	8	47.1%
250,000 - 500,000	2	0	0	0	0	0	2	10	58.8%
500,000 - 750,000	2	0	0	0	0	0	2	12	70.6%
750,000 - 1,000,000	2	0	0	0	0	0	2	14	82.4%
Over 1,000,000	3	0	0	0	0	0	3	17	100.0%
Total	58	0	0	0	0	0	58	17	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	5,000	0	0	0	0	0	5,000	5,000	0.0%
5,000 - 10,000	0	0	0	0	0	0	0	5,000	0.0%
10,000 - 25,000	45,000	0	0	0	0	0	45,000	50,000	0.2%
25,000 - 50,000	0	0	0	0	0	0	0	50,000	0.2%
50,000 - 100,000	175,000	0	0	0	0	0	175,000	225,000	0.8%
100,000 - 250,000	425,000	0	0	0	0	0	425,000	650,000	2.3%
250,000 - 500,000	600,000	0	0	0	0	0	600,000	1,250,000	4.4%
500,000 - 750,000	1,350,000	0	0	0	0	0	1,350,000	2,600,000	9.2%
750,000 - 1,000,000	1,900,000	0	0	0	0	0	1,900,000	4,500,000	16.0%
Over 1,000,000	23,700,000	0	0	0	0	0	23,700,000	28,200,000	100.0%
Total	\$28,200,000	\$0	\$0	\$0	\$0	\$0	\$28,200,000	\$28,200,000	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.

Calculation of Occupied Bed Equivalents

Occurrence Period (1)	Inpatients (2)	ER Visits (3)	Other Visits (4)	Other Visits (5)	Other Visits (6)	Physicians (7)	Occupied Bed Equivalents (8)
to 1998/99							
1999/00	106	12,612	91,090			67	308
2000/01	78	14,340	91,232			70	290
2001/02	61	20,542	84,449			71	285
2002/03	67	23,156	88,763			70	296
2003/04	67	25,006	92,054			85	332
2004/05	67	31,162	85,787			83	338
2005/06	56	30,249	90,702			84	329
2006/07	39	29,012	75,083			82	299
2007/08	42	28,768	59,543			58	245
2008/09	46	27,785	72,464			79	296
2009/10	46	27,785	64,819			34	200
2010/11	46	33,000	64,819			34	210
2011/12	46	16,500	0			34	151
2012/13	0	0	0			23	47
2013/14	0	0	0			23	47
2014/15	0	0	0		47,516	0	19
2015/16	0	0	0	0	11,148	0	4
2016/17	0	0	0	0	43,497	0	17
2017/18	0	0	0	0	33,621	2	19
2018/19	0	0	0	0	33,621	2	19

(2) through (7) were provided by the County.

The exposures in (2) through (7) are converted to occupied bed equivalents using the following exposure conversion factors, which were published in the Aon/ASHRM Hospital Professional Liability and Physician Liability Benchmark Analysis published in October 2017. The weight for Housestaff is based on actuarial judgement.

Exposure	Conversion Factor
Inpatients	1.000
ER Visits	0.200 per 100
Other Visits	0.040 per 100
Class 1 physician	2.100
Housestaff	0.800 (residents and interns)

From page 2 of HPL benchmark study (October 2017):
2,750 loss rate per occupied bed
5,710 loss rate per class 1 physician

Data Summary as of November 30, 2018
Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	45	0	\$10,535,000	\$0	\$10,535,000
1999/00	Unlimited	None	228.0	290	5	0	2,485,000	0	2,485,000
2000/01	10,000,000	None	216.0	288	9	0	345,000	0	345,000
2001/02	15,000,000	None	204.0	338	12	0	200,000	0	200,000
2002/03	20,000,000	None	192.0	347	14	0	1,025,000	0	1,025,000
2003/04	20,000,000	None	180.0	342	14	0	7,860,000	0	7,860,000
2004/05	20,000,000	None	168.0	344	13	0	90,000	0	90,000
2005/06	20,000,000	None	156.0	336	9	0	425,000	0	425,000
2006/07	20,000,000	None	144.0	325	3	0	0	0	0
2007/08	20,000,000	None	132.0	334	3	0	300,000	0	300,000
2008/09	20,000,000	None	120.0	437	3	0	300,000	0	300,000
2009/10	40,000,000	None	108.0	319	5	0	800,000	0	800,000
2010/11	40,000,000	None	96.0	319	1	0	0	0	0
2011/12	40,000,000	None	84.0	309	4	0	1,815,000	0	1,815,000
2012/13	30,000,000	None	72.0	211	4	1	1,175,000	1,500,000	2,675,000
2013/14	30,000,000	None	60.0	211	3	0	425,000	0	425,000
2014/15	25,000,000	None	48.0	185	1	0	0	0	0
2015/16	25,000,000	None	36.0	190	3	2	2,500,000	1,200,000	3,700,000
2016/17	25,000,000	None	24.0	193	3	3	0	75,000	75,000
2017/18	25,000,000	None	12.0	174	2	1	0	100,000	100,000
Total					156	7	\$30,280,000	\$2,875,000	\$33,155,000

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/75	Unlimited
12/01/00	10,000,000
12/01/01	15,000,000
12/01/02	20,000,000
03/01/10	40,000,000
03/01/13	30,000,000
07/01/15	25,000,000

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
 Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	45	0	\$10,535,000	\$0	\$10,535,000
1999/00	Unlimited	None	228.0	290	5	0	2,485,000	0	2,485,000
2000/01	Unlimited	None	216.0	288	9	0	345,000	0	345,000
2001/02	Unlimited	None	204.0	338	12	0	200,000	0	200,000
2002/03	Unlimited	None	192.0	347	14	0	1,025,000	0	1,025,000
2003/04	Unlimited	None	180.0	342	14	0	7,860,000	0	7,860,000
2004/05	Unlimited	None	168.0	344	13	0	90,000	0	90,000
2005/06	Unlimited	None	156.0	336	9	0	425,000	0	425,000
2006/07	Unlimited	None	144.0	325	3	0	0	0	0
2007/08	Unlimited	None	132.0	334	3	0	300,000	0	300,000
2008/09	Unlimited	None	120.0	437	3	0	300,000	0	300,000
2009/10	Unlimited	None	108.0	319	5	0	800,000	0	800,000
2010/11	Unlimited	None	96.0	319	1	0	0	0	0
2011/12	Unlimited	None	84.0	309	4	0	1,815,000	0	1,815,000
2012/13	Unlimited	None	72.0	211	4	1	1,175,000	1,500,000	2,675,000
2013/14	Unlimited	None	60.0	211	3	0	425,000	0	425,000
2014/15	Unlimited	None	48.0	185	1	0	0	0	0
2015/16	Unlimited	None	36.0	190	3	2	2,500,000	1,200,000	3,700,000
2016/17	Unlimited	None	24.0	193	3	3	0	75,000	75,000
2017/18	Unlimited	None	12.0	174	2	1	0	100,000	100,000
Total					156	7	\$30,280,000	\$2,875,000	\$33,155,000

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	45	0	\$10,535,000	\$0	\$10,535,000
1999/00	Unlimited	None	228.0	290	5	0	2,485,000	0	2,485,000
2000/01	Unlimited	None	216.0	288	9	0	345,000	0	345,000
2001/02	Unlimited	None	204.0	338	12	0	200,000	0	200,000
2002/03	Unlimited	None	192.0	347	14	0	1,025,000	0	1,025,000
2003/04	Unlimited	None	180.0	342	14	0	7,860,000	0	7,860,000
2004/05	Unlimited	None	168.0	344	13	0	90,000	0	90,000
2005/06	Unlimited	None	156.0	336	9	0	425,000	0	425,000
2006/07	Unlimited	None	144.0	325	3	0	0	0	0
2007/08	Unlimited	None	132.0	334	3	0	300,000	0	300,000
2008/09	Unlimited	None	120.0	437	3	0	300,000	0	300,000
2009/10	Unlimited	None	108.0	319	5	0	800,000	0	800,000
2010/11	Unlimited	None	96.0	319	1	0	0	0	0
2011/12	Unlimited	None	84.0	309	4	0	1,815,000	0	1,815,000
2012/13	Unlimited	None	72.0	211	4	1	1,175,000	1,500,000	2,675,000
2013/14	Unlimited	None	60.0	211	3	0	425,000	0	425,000
2014/15	Unlimited	None	48.0	185	1	0	0	0	0
2015/16	Unlimited	None	36.0	190	3	2	2,500,000	1,200,000	3,700,000
2016/17	Unlimited	None	24.0	193	3	3	0	75,000	75,000
2017/18	Unlimited	None	12.0	174	2	1	0	100,000	100,000
Total					156	7	\$30,280,000	\$2,875,000	\$33,155,000

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	100.0%	100.0%	100.0%
336.0	100.0%	100.0%	100.0%
324.0	100.0%	100.0%	100.0%
312.0	100.0%	100.0%	100.0%
300.0	100.0%	100.0%	100.0%
288.0	100.0%	100.0%	100.0%
276.0	100.0%	100.0%	100.0%
264.0	100.0%	100.0%	100.0%
252.0	100.0%	100.0%	100.0%
240.0	100.0%	100.0%	100.0%
228.0	100.0%	100.0%	100.0%
216.0	100.0%	100.0%	100.0%
204.0	100.0%	100.0%	100.0%
192.0	100.0%	100.0%	100.0%
180.0	100.0%	100.0%	100.0%
168.0	100.0%	100.0%	100.0%
156.0	100.0%	100.0%	100.0%
144.0	100.0%	100.0%	100.0%
132.0	98.0%	100.0%	100.0%
120.0	94.3%	100.0%	100.0%
108.0	89.8%	99.0%	100.0%
96.0	80.2%	97.1%	100.0%
84.0	67.9%	95.2%	100.0%
72.0	56.6%	93.3%	100.0%
60.0	28.3%	88.9%	100.0%
48.0	10.9%	82.7%	99.0%
36.0	2.2%	73.5%	96.1%
24.0	0.0%	60.0%	87.4%
12.0	0.0%	37.5%	72.8%

(2) is from Exhibit MM-Provident-2 (page 2).

(3) is from Exhibit MM-Provident-2 (page 3).

(4) is from Exhibit MM-Provident-2 (page 4).

COOK COUNTY, ILLINOIS
MEDICAL MALPRACTICE - PROVIDENT HOSPITAL

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

Claim Period	Months of Development:																				
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00	0	12,065	12,065	17,115	17,650	23,830	27,830	37,830	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935
2000/01	0	0	156	551	1,046	4,466	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706
2001/02	0	0	30	9,351	12,349	16,054	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061
2002/03	10	12	1,260	3,248	4,468	4,468	4,468	4,988	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316
2003/04	0	0	0	8,781	16,656	18,246	19,496	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646
2004/05	0	90	107	5,775	16,655	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715
2005/06	0	1	516	528	6,778	9,228	9,908	9,908	11,533	11,603	23,603	24,028	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
2006/07	0	16	16	26	2,016	2,016	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766
2007/08	0	127	127	3,677	6,027	8,277	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427
2008/09	0	0	2,445	3,155	3,155	4,405	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155
2009/10	0	0	0	2,318	7,653	10,438	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203
2010/11	0	0	0	2,850	4,878	5,168	5,468	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718
2011/12	0	20,100	0	850	20,825	24,390	26,195	34,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294
2012/13	0	850	0	0	2,330	5,690	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255	20,255
2013/14	0	0	0	0	825	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675
2014/15	0	25	30	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2015/16	90	2,590	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540	4,540
2016/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

II. Limited Paid Loss Development

Claim Period	Months of Development:																				
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1998/99																					
1999/00	1,000	1,000	1,419	1,031	1,350	1,168	1,359	1,003	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2000/01	1,000	1,000	3,532	1,898	4,212	1,068	1,000	1,000	2,487	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2001/02	1,150	108,585	311,700	1,321	1,300	1,561	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2002/03	1,000	1,000	1,002	2,572	1,982	1,089	1,020	1,066	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2003/04	1,000	1,000	1,000	1,897	1,089	1,069	1,008	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2004/05	1,189	1,000	53,971	2,886	1,123	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2005/06	1,000	1,000	1,000	12,837	1,361	1,074	1,164	1,006	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2006/07	1,000	1,000	1,621	77,245	1,000	2,364	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2007/08	1,000	1,000	28,953	1,639	1,398	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2008/09	1,000	1,000	1,290	1,000	1,396	1,170	1,582	1,006	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2009/10	1,000	1,000	3,302	3,302	1,364	1,073	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2010/11	1,036	1,000	1,171	1,712	1,059	1,087	1,960	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2011/12	1,000	1,000	2,741	2,399	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2012/13	1,000	1,000	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2013/14	1,000	1,000	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2014/15	1,000	1,000	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2015/16	1,000	1,000	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2016/17	1,000	1,000	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2017/18	1,000	1,000	1,933	2,030	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Average	Months of Development:																							
	All	Wtd 3	Last 3	Last 5	x-hi,low	Previous	Selected	Cumulative	Percent	2004-216	216-228	228-240	240-Ult											
All	14,964	115,074	34,196	7,656	1,641	1,214	1,174	1,007	1,256	1,002	1,000	1,000	0,998	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Wtd 3	29,056	1,748	3,651	1,215	1,629	1,081	1,378	1,002	694	1,011	0,999	1,000	1,000	0,995	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Last 3				1,834	1,997	1,073	1,514	1,002	0,995	1,005	1,000	1,000	1,000	0,997	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Last 5				2,047	1,356	1,073	1,194	1,002	1,018	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
x-hi,low																								
Previous	2,000	120,000	5,000	2,600	2,000	1,200	1,180	1,120	1,050	1,040	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Selected	2,000	120,000	5,000	2,600	2,000	1,200	1,180	1,120	1,050	1,040	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Cumulative	11022,717	5511,359	45,928	9,186	3,533	1,766	1,472	1,248	1,114	1,061	1,020	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Percent	0.0%	0.0%	2.2%	10.9%	28.3%	56.6%	67.9%	80.2%	89.8%	94.3%	98.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Amounts are limited (net of excess insurance).
Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
MEDICAL MALPRACTICE - PROVIDENT HOSPITAL

Historical Limited Reported Incurred Losses (\$000) and Limited Reported Incurred Loss Development

Claim Period	Months of Development:																				
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1/98/99																					
1999/00	15,495	25,810	35,720	44,185	46,475	46,930	40,630	46,630	46,225	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925	37,925
2000/01	8,668	7,778	8,093	8,911	8,706	15,706	15,706	15,706	14,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706	11,706
2001/02	53,740	25,655	29,808	24,761	25,134	31,305	25,861	26,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061
2002/03	26,711	16,022	5,770	8,413	8,248	6,788	5,668	5,336	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316
2003/04	28,331	39,505	26,840	38,771	29,756	28,646	20,246	20,446	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646
2004/05	9,450	27,041	20,842	24,110	21,345	19,465	18,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715
2005/06	14,276	35,957	22,631	24,828	17,228	16,759	13,858	15,603	25,603	25,603	24,028	24,250	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
2006/07	11,046	13,126	8,721	5,787	4,726	5,496	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766	4,766
2007/08	24,827	12,544	17,152	18,477	12,927	12,227	10,927	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427	8,427
2008/09	5,235	6,890	9,775	10,255	9,555	10,005	8,255	8,405	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205	8,205
2009/10	5,095	8,253	15,550	16,368	13,503	12,388	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203
2010/11	770	3,900	8,530	11,105	11,183	9,968	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718
2011/12	23,923	34,253	39,927	39,455	39,045	37,644	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344	38,344
2012/13	6,925	12,000	29,150	39,255	61,465	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155	66,155
2013/14	1,560	7,155	6,400	5,575	3,125																
2014/15	7,000	8,225	16,108	16,108																	
2015/16	5,190	8,620	11,315																		
2016/17	450	2,376																			
2017/18	1,450																				

Claim Period	Months of Development:																				
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1/98/99																					
1999/00	1,666	1,384	1,236	1,052	1,010	0,866	1,148	0,891	0,820	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2000/01	0,897	1,041	1,101	0,977	2,436	0,741	1,008	0,836	0,796	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2001/02	0,760	1,162	0,831	1,015	1,246	0,826	1,008	0,862	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2002/03	0,600	0,360	1,458	0,980	0,823	0,838	0,938	0,896	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2003/04	1,394	0,679	1,445	0,767	0,963	0,707	0,995	0,975	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2004/05	2,861	0,771	1,157	0,885	0,912	0,961	1,053	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2005/06	2,519	0,629	1,097	0,694	0,973	0,827	1,126	1,641	1,000	1,000	1,000	1,000	1,337	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2006/07	1,188	0,664	0,664	0,817	1,195	0,973	0,867	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2007/08	0,505	1,367	1,077	0,700	0,946	0,884	0,771	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2008/09	1,316	1,419	1,049	0,932	1,047	0,825	1,018	0,976	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2009/10	1,620	1,884	1,053	0,825	1,017	0,904	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2010/11	5,065	2,187	1,302	1,007	0,954	0,934	1,075	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2011/12	1,733	2,429	1,347	1,566	1,076	1,019															
2012/13	4,557	0,894	0,871	0,561																	
2013/14	1,175	1,049	1,867																		
2014/15	1,661	1,313																			
2015/16	5,279																				
2016/17																					
2017/18																					

Claim Period	Months of Development:																				
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
Average	2,014	1,200	1,159	0,918	1,104	0,870	1,000	1,043	0,960	0,995	1,001	1,077	1,052	1,000	0,988	1,000	1,000	1,000	1,000	1,000	1,000
All	1,521	1,098	1,379	1,230	1,035	0,980	1,031	0,983	0,984	0,982	1,005	1,169	1,175	1,000	0,985	1,000	1,000	1,000	1,000	1,000	1,000
Wtd 3	2,705	1,085	1,361	1,039	0,986	0,952	1,031	0,992	0,985	0,986	1,003	1,179	1,165	1,000	0,997	1,000	1,000	1,000	1,000	1,000	1,000
Last 3	2,860	1,176	1,212	0,941	0,989	0,911	0,962	1,000	1,000	1,000	1,000	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
x-Hilow																					
Previous	1,600	1,250	1,100	1,075	1,050	1,020	1,020	1,020	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Selected	1,600	1,225	1,125	1,075	1,050	1,020	1,020	1,020	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Cumulative	2,668	1,667	1,361	1,210	1,072	1,072	1,051	1,030	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Percent	37.5%	60.0%	73.5%	82.7%	88.9%	93.3%	95.2%	97.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Amounts are limited (net of excess insurance).
Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
MEDICAL MALPRACTICE - PROVIDENT HOSPITAL

Historical Ratio of Limited Paid Losses and Limited Reported Incurred Losses

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00	0.0%	48.7%	33.8%	38.8%	38.0%	50.8%	68.5%	81.1%	82.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2000/01	0.0%	0.0%	1.9%	6.2%	12.0%	20.8%	30.0%	30.0%	32.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2001/02	0.0%	0.0%	0.1%	37.6%	49.1%	51.3%	86.9%	86.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2002/03	0.0%	0.1%	21.8%	15.0%	39.4%	66.1%	85.9%	93.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2003/04	0.0%	0.0%	0.0%	22.6%	56.0%	63.7%	96.3%	97.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2004/05	0.0%	0.3%	0.5%	24.0%	78.1%	96.1%	100.0%	94.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2005/06	0.0%	0.0%	2.3%	0.5%	39.3%	55.1%	71.5%	73.9%	45.3%	92.2%	100.0%	100.0%	99.0%	66.3%	49.6%	66.3%	96.0%	96.0%	96.0%	96.0%	96.0%
2006/07	0.0%	0.1%	0.2%	0.5%	42.7%	35.7%	86.7%	100.0%	100.0%	100.0%	100.0%	100.0%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%	97.9%
2007/08	0.0%	1.0%	0.7%	19.9%	46.6%	68.9%	77.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2008/09	0.0%	0.0%	25.0%	30.8%	33.0%	33.0%	62.4%	97.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2009/10	0.0%	0.0%	0.0%	14.2%	56.7%	84.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2010/11	0.0%	0.0%	0.0%	25.7%	43.6%	48.4%	54.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2011/12	0.0%	58.7%	52.2%	61.8%	67.1%	91.1%	97.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2012/13	0.0%	7.1%	2.9%	5.9%	9.1%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%	30.6%
2013/14	0.0%	0.0%	0.0%	14.8%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%	53.6%
2014/15	0.0%	0.0%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
2015/16	1.7%	30.0%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%
2016/17	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2017/18	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Average																					
All	0.1%	8.0%	10.7%	20.0%	44.3%	57.6%	79.0%	88.7%	86.8%	99.2%	99.8%	99.6%	94.6%	91.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Last 3	0.6%	10.1%	13.5%	7.0%	43.3%	56.7%	84.0%	99.0%	100.0%	100.0%	99.3%	99.0%	87.4%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Last 5	0.0%	2.5%	14.5%	15.5%	51.3%	58.9%	76.9%	100.0%	100.0%	100.0%	100.0%	99.7%	98.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
x-high																					
Implicit	0.0%	0.0%	3.0%	13.2%	31.9%	60.7%	71.4%	82.6%	90.7%	94.3%	98.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$10,535,000	100.0%	\$10,535,000
1999/00	228.0	2,485,000	100.0%	2,485,000
2000/01	216.0	345,000	100.0%	345,000
2001/02	204.0	200,000	100.0%	200,000
2002/03	192.0	1,025,000	100.0%	1,025,000
2003/04	180.0	7,860,000	100.0%	7,860,000
2004/05	168.0	90,000	100.0%	90,000
2005/06	156.0	425,000	100.0%	425,000
2006/07	144.0	0	100.0%	0
2007/08	132.0	300,000	98.0%	306,000
2008/09	120.0	300,000	94.3%	318,240
2009/10	108.0	800,000	89.8%	891,072
2010/11	96.0	0	80.2%	0
2011/12	84.0	1,815,000	67.9%	2,671,772
2012/13	72.0	1,175,000	56.6%	2,075,592
2013/14	60.0	425,000	28.3%	1,501,492
2014/15	48.0	0	10.9%	0
2015/16	36.0	2,500,000	2.2%	2,500,000 *
2016/17	24.0	0	0.0%	0
2017/18	12.0	0	0.0%	0
Total		\$30,280,000		\$33,229,168

* - Indicates large claim(s) limited to retention. For details, see Exhibit MM-Provident-15.

(3) is from Exhibit MM-Provident-1.

(4) is from Exhibit MM-Provident-2.

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$10,535,000	100.0%	\$10,535,000
1999/00	228.0	2,485,000	100.0%	2,485,000
2000/01	216.0	345,000	100.0%	345,000
2001/02	204.0	200,000	100.0%	200,000
2002/03	192.0	1,025,000	100.0%	1,025,000
2003/04	180.0	7,860,000	100.0%	7,860,000
2004/05	168.0	90,000	100.0%	90,000
2005/06	156.0	425,000	100.0%	425,000
2006/07	144.0	0	100.0%	0
2007/08	132.0	300,000	100.0%	300,000
2008/09	120.0	300,000	100.0%	300,000
2009/10	108.0	800,000	99.0%	808,000
2010/11	96.0	0	97.1%	0
2011/12	84.0	1,815,000	95.2%	1,907,209
2012/13	72.0	2,675,000	93.3%	2,867,119
2013/14	60.0	425,000	88.9%	478,300
2014/15	48.0	0	82.7%	0
2015/16	36.0	3,700,000	73.5%	4,133,253 *
2016/17	24.0	75,000	60.0%	125,046
2017/18	12.0	100,000	37.5%	266,765
Total		\$33,155,000		\$34,150,691

* - Indicates large claim(s) limited to retention. For details, see Exhibit MM-Provident-15.

(3) is from Exhibit MM-Provident-1.

(4) is from Exhibit MM-Provident-2.

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	100.0%	100.0%	100.0%	\$10,535,000	\$0	\$10,535,000
1999/00	228.0	100.0%	100.0%	100.0%	2,485,000	0	2,485,000
2000/01	216.0	100.0%	100.0%	100.0%	345,000	0	345,000
2001/02	204.0	100.0%	100.0%	100.0%	200,000	0	200,000
2002/03	192.0	100.0%	100.0%	100.0%	1,025,000	0	1,025,000
2003/04	180.0	100.0%	100.0%	100.0%	7,860,000	0	7,860,000
2004/05	168.0	100.0%	100.0%	100.0%	90,000	0	90,000
2005/06	156.0	100.0%	100.0%	100.0%	425,000	0	425,000
2006/07	144.0	100.0%	100.0%	100.0%	0	0	0
2007/08	132.0	98.0%	100.0%	100.0%	300,000	0	300,000
2008/09	120.0	94.3%	100.0%	100.0%	300,000	0	300,000
2009/10	108.0	89.8%	99.0%	90.3%	800,000	0	800,000
2010/11	96.0	80.2%	97.1%	85.2%	0	0	0
2011/12	84.0	67.9%	95.2%	84.9%	1,815,000	0	1,815,000
2012/13	72.0	56.6%	93.3%	84.6%	1,175,000	1,500,000	2,948,956
2013/14	60.0	28.3%	88.9%	84.5%	425,000	0	425,000
2014/15	48.0	10.9%	82.7%	80.5%	0	0	0
2015/16	36.0	2.2%	73.5%	72.9%	2,500,000	1,200,000	4,146,484
2016/17	24.0	0.0%	60.0%	60.0%	0	75,000	125,061
2017/18	12.0	0.0%	37.5%	37.5%	0	100,000	266,805
Total					\$30,280,000	\$2,875,000	\$34,092,306

(3) and (4) are from Exhibit MM-Provident-2.

(6) and (7) are from Exhibit MM-Provident-1.

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$10,535,000	\$10,535,000	\$10,535,000	\$10,535,000
1999/00	2,485,000	2,485,000	2,485,000	2,485,000
2000/01	345,000	345,000	345,000	345,000
2001/02	200,000	200,000	200,000	200,000
2002/03	1,025,000	1,025,000	1,025,000	1,025,000
2003/04	7,860,000	7,860,000	7,860,000	7,860,000
2004/05	90,000	90,000	90,000	90,000
2005/06	425,000	425,000	425,000	425,000
2006/07	0	0	0	0
2007/08	306,000	300,000	300,000	300,000
2008/09	318,240	300,000	300,000	300,000
2009/10	891,072	808,000	800,000	800,000
2010/11	0	0	0	0
2011/12	2,671,772	1,907,209	1,815,000	1,815,000
2012/13	2,075,592	2,867,119	2,948,956	2,924,405
2013/14	1,501,492	478,300	425,000	425,000
2014/15	0	0	0	0
2015/16	2,500,000	4,133,253	4,146,484	3,820,000
2016/17	0	125,046	125,061	100,043
2017/18	0	266,765	266,805	213,428
Total	\$33,229,168	\$34,150,691	\$34,092,306	\$33,662,875

(2) is from Exhibit MM-Provident-3.

(3) is from Exhibit MM-Provident-4.

(4) is from Exhibit MM-Provident-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)	Projected A-priori Loss Rate per Occupied Bed Equivalent (7)/(5) (8)
2008/09	\$300,000	437	\$686.39	1.495	\$1,026.19	\$3,763.31
2009/10	800,000	319	2,507.21	1.401	3,511.77	4,016.89
2010/11	0	319	0.00	1.335	0.00	4,213.88
2011/12	1,815,000	309	5,872.28	1.284	7,539.05	4,382.43
2012/13	2,924,405	211	13,872.28	1.248	17,316.36	4,507.30
2013/14	425,000	211	2,016.04	1.205	2,428.54	4,670.67
2014/15	0	185	0.00	1.163	0.00	4,837.22
2015/16	3,820,000	190	20,094.14	1.125	22,603.17	5,001.78
2016/17	100,043	193	518.87	1.082	561.21	5,201.85
2017/18	213,428	174	1,227.84	1.040	1,276.96	5,409.93

(7) Projected 2018/19 a-priori loss rate per Occupied Bed Equivalent \$5,626.32

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$425,000	28.3%	\$4,670.67	211	\$705,922	\$1,130,922
2014/15	0	10.9%	4,837.22	185	795,404	795,404
2015/16	2,500,000	2.2%	5,001.78	190	930,161	3,430,161
2016/17	0	0.0%	5,201.85	193	1,002,788	1,002,788
2017/18	0	0.0%	5,409.93	174	940,285	940,285

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$425,000	88.9%	\$4,670.67	211	\$109,722	\$534,722
2014/15	0	82.7%	4,837.22	185	154,798	154,798
2015/16	3,700,000	73.5%	5,001.78	190	252,236	3,952,236
2016/17	75,000	60.0%	5,201.85	193	401,409	476,409
2017/18	100,000	37.5%	5,409.93	174	587,861	687,861

Section I, (2) is from Exhibit MM-Provident-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit MM-Provident-10.

Section I, (5) is based on a 4% trend and adjusted for change in retention.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit MM-Provident-1.

Sections II and III, (3) are from Exhibit MM-Provident-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Occupied Bed Equivalents (6)	Frequency (per Occupied Bed Equivalent) (5)/(6) (7)
2008/09	120.0	3	100.0%	3	437	0.01
2009/10	108.0	5	100.0%	5	319	0.02
2010/11	96.0	1	100.0%	1	319	0.00
2011/12	84.0	4	100.0%	4	309	0.01
2012/13	72.0	4	100.0%	4	211	0.02
2013/14	60.0	3	100.0%	3	211	0.01
2014/15	48.0	1	99.0%	1	185	0.01
2015/16	36.0	3	96.1%	3	190	0.02
2016/17	24.0	3	87.4%	3	193	0.02
2017/18	12.0	2	72.8%	3	174	0.02

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$300,000	3	\$100,000	1.495	\$149,505	\$239,578	\$718,733
2009/10	800,000	5	160,000	1.401	224,107	255,721	1,278,606
2010/11	0	1	0	1.335	0	268,262	268,262
2011/12	1,815,000	4	453,750	1.284	582,541	278,992	1,115,968
2012/13	2,924,405	4	731,101	1.248	912,612	286,941	1,147,764
2013/14	425,000	3	141,667	1.205	170,653	297,342	892,026
2014/15	0	1	0	1.163	0	307,945	307,945
2015/16	3,820,000	3	1,273,333	1.125	1,432,327	318,421	955,262
2016/17	100,043	3	33,348	1.082	36,069	331,158	993,473
2017/18	213,428	3	71,143	1.040	73,988	344,404	1,033,212
					(7) Projected 2018/19 average claim severity	\$358,180	

Section I, (3) is from Exhibit MM-Provident-1.

Section I, (4) is from Exhibit MM-Provident-2.

Section I, (6) is from Exhibit MM-Provident-10.

Section II, (2) is from Exhibit MM-Provident-6.

Section II, (3) is from Section I, (5).

Section II, (5) is based on a 4% trend and adjusted for change in retention.

Section II, (7) is based on (6) and actuarial judgment.

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$10,535,000	\$10,535,000	\$10,535,000				\$10,535,000	\$10,535,000
1999/00	2,485,000	2,485,000	2,485,000				2,485,000	2,485,000
2000/01	345,000	345,000	345,000				345,000	345,000
2001/02	200,000	200,000	200,000				200,000	200,000
2002/03	1,025,000	1,025,000	1,025,000				1,025,000	1,025,000
2003/04	7,860,000	7,860,000	7,860,000				7,860,000	7,860,000
2004/05	90,000	90,000	90,000				90,000	90,000
2005/06	425,000	425,000	425,000				425,000	425,000
2006/07	0	0	0					0
2007/08	306,000	300,000	300,000				300,000	300,000
2008/09	318,240	300,000	300,000				300,000	300,000
2009/10	891,072	808,000	800,000				800,000	800,000
2010/11	0	0	0					0
2011/12	2,671,772	1,907,209	1,815,000				2,250,000	1,900,000
2012/13	2,075,592	2,867,119	2,948,956				3,500,000	2,900,000
2013/14	1,501,492	478,300	425,000	1,130,922	534,722	892,026	650,000	500,000
2014/15	0	0	0	795,404	154,798	307,945	500,000	300,000
2015/16	2,500,000	4,133,253	4,146,484	3,430,161	3,952,236	955,262	4,100,000	4,100,000
2016/17	0	125,046	125,061	1,002,788	476,409	993,473	1,000,000	900,000
2017/18	0	266,765	266,805	940,285	687,861	1,033,212	1,350,000	1,000,000
Total	\$33,229,168	\$34,150,691	\$34,092,306				\$37,715,000	\$35,965,000
2013/14 - 2017/18	4,001,492	5,003,363	4,963,350	7,299,561	5,806,026	4,181,917	7,600,000	6,800,000
to 2012/13	29,227,676	29,147,328	29,128,956				30,115,000	29,165,000
						Change		
						All years		-\$1,750,000
						2013/14 - 2017/18		-800,000
						to 2012/13		-950,000

(2) is from Exhibit MM-Provident-3.

(3) is from Exhibit MM-Provident-4.

(4) is from Exhibit MM-Provident-5.

(5) and (6) are from Exhibit MM-Provident-7.

(7) is from Exhibit MM-Provident-8.

(8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)
2008/09	\$300,000	437	\$686.39	1.495	\$1,026.19
2009/10	800,000	319	2,507.21	1.401	3,511.77
2010/11	0	319	0.00	1.335	0.00
2011/12	1,900,000	309	6,147.29	1.284	7,892.11
2012/13	2,900,000	211	13,756.52	1.248	17,171.85
2013/14	500,000	211	2,371.81	1.205	2,857.10
2014/15	300,000	185	1,625.82	1.163	1,891.04
2015/16	4,100,000	190	21,567.01	1.125	24,259.95
2016/17	900,000	193	4,667.80	1.082	5,048.70
2017/18	1,000,000	174	5,752.97	1.040	5,983.09
Total	\$12,700,000	2,547	\$4,985.90		\$6,964.18

Claim Period (1)	Projected Limited Loss Rate per Occupied Bed Equivalent (7)	Projected Occupied Bed Equivalents (8)	Projected Ultimate Limited Losses (7)X(8) (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per Occupied Bed Equivalent (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11) (12)
2018/19	\$6,964.18	174	\$1,210,000	0.84	\$5,863.85	\$1,020,000
2019/20	7,242.75	174	1,260,000	0.84	6,098.40	1,060,000
2020/21	7,532.46	174	1,310,000	0.84	6,342.34	1,100,000

(2) is from Exhibit MM-Provident-9.

(3) was provided by the County.

(5) is based on a 4% trend and adjusted for change in retention.

(7) 2018/19 is based on (6) and actuarial judgment.
Other period(s) based on 2018/19 plus a 4% trend.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Provident-2.

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Reported Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$10,535,000	\$0	\$10,535,000	\$10,535,000	\$0	\$0	1.00	\$0
1999/00	2,485,000	0	2,485,000	2,485,000	0	0	1.00	0
2000/01	345,000	0	345,000	345,000	0	0	1.00	0
2001/02	200,000	0	200,000	200,000	0	0	1.00	0
2002/03	1,025,000	0	1,025,000	1,025,000	0	0	1.00	0
2003/04	7,860,000	0	7,860,000	7,860,000	0	0	1.00	0
2004/05	90,000	0	90,000	90,000	0	0	1.00	0
2005/06	425,000	0	425,000	425,000	0	0	1.00	0
2006/07	0	0	0	0	0	0	1.00	0
2007/08	300,000	0	300,000	300,000	0	0	0.99	0
2008/09	300,000	0	300,000	300,000	0	0	0.98	0
2009/10	800,000	0	800,000	800,000	0	0	0.97	0
2010/11	0	0	0	0	0	0	0.96	0
2011/12	1,815,000	0	1,815,000	1,900,000	85,000	85,000	0.95	81,160
2012/13	1,175,000	1,500,000	2,675,000	2,900,000	225,000	1,725,000	0.94	1,627,671
2013/14	425,000	0	425,000	500,000	75,000	75,000	0.94	70,850
2014/15	0	0	0	300,000	300,000	300,000	0.93	279,557
2015/16	2,500,000	1,200,000	3,700,000	4,100,000	400,000	1,600,000	0.91	1,461,325
2016/17	0	75,000	75,000	900,000	825,000	900,000	0.89	801,277
2017/18	0	100,000	100,000	1,000,000	900,000	1,000,000	0.87	865,816
Total	\$30,280,000	\$2,875,000	\$33,155,000	\$35,965,000	\$2,810,000	\$5,685,000		\$5,187,656

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit MM-Provident-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Provident-2.

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	100.0%	252.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2009/10	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2010/11	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2011/12	84.0	67.9%	96.0	80.2%	38.1%	85,000	32,412	52,588	0.96	50,590
2012/13	72.0	56.6%	84.0	67.9%	26.1%	1,725,000	450,121	1,274,879	0.95	1,217,289
2013/14	60.0	28.3%	72.0	56.6%	39.5%	75,000	29,610	45,390	0.94	42,829
2014/15	48.0	10.9%	60.0	28.3%	19.5%	300,000	58,640	241,360	0.94	228,005
2015/16	36.0	2.2%	48.0	10.9%	8.9%	1,600,000	142,450	1,457,550	0.93	1,358,229
2016/17	24.0	0.0%	36.0	2.2%	2.2%	900,000	19,436	880,564	0.91	804,244
2017/18	12.0	0.0%	24.0	0.0%	0.0%	1,000,000	91	999,909	0.89	890,226
2018/19	0.0	0.0%	12.0	0.0%	0.0%	1,210,000	110	1,209,890	0.87	1,047,542
Total						\$6,895,000	\$732,870	\$6,162,130		\$5,638,954

(3) and (5) are from Exhibit MM-Provident-2.

(7) to 2017/18 is from Exhibit MM-Provident-11. The amount for 2018/19 is from Exhibit MM-Provident-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Provident-2.

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	100.0%	264.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2010/11	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2011/12	96.0	80.2%	108.0	89.8%	48.5%	52,588	25,497	27,091	0.97	26,166
2012/13	84.0	67.9%	96.0	80.2%	38.1%	1,274,879	486,130	788,749	0.96	758,777
2013/14	72.0	56.6%	84.0	67.9%	26.1%	45,390	11,844	33,546	0.95	32,031
2014/15	60.0	28.3%	72.0	56.6%	39.5%	241,360	95,289	146,071	0.94	137,829
2015/16	48.0	10.9%	60.0	28.3%	19.5%	1,457,550	284,900	1,172,650	0.94	1,107,763
2016/17	36.0	2.2%	48.0	10.9%	8.9%	880,564	78,398	802,166	0.93	747,504
2017/18	24.0	0.0%	36.0	2.2%	2.2%	999,909	21,594	978,315	0.91	893,522
2018/19	12.0	0.0%	24.0	0.0%	0.0%	1,209,890	110	1,209,780	0.89	1,077,076
2019/20	0.0	0.0%	12.0	0.0%	0.0%	1,260,000	114	1,259,886	0.87	1,090,830
Total						\$7,422,130	\$1,003,876	\$6,418,254		\$5,871,498

(3) and (5) are from Exhibit MM-Provident-2.

(7) to 2018/19 is from Exhibit MM-Provident-12, (9). The amount for 2019/20 is from Exhibit MM-Provident-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Provident-2.

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	100.0%	276.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	252.0	100.0%	264.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2011/12	108.0	89.8%	120.0	94.3%	43.9%	27,091	11,899	15,192	0.98	14,840
2012/13	96.0	80.2%	108.0	89.8%	48.5%	788,749	382,423	406,326	0.97	392,454
2013/14	84.0	67.9%	96.0	80.2%	38.1%	33,546	12,792	20,754	0.96	19,965
2014/15	72.0	56.6%	84.0	67.9%	26.1%	146,071	38,116	107,955	0.95	103,078
2015/16	60.0	28.3%	72.0	56.6%	39.5%	1,172,650	462,963	709,687	0.94	669,645
2016/17	48.0	10.9%	60.0	28.3%	19.5%	802,166	156,796	645,370	0.94	609,660
2017/18	36.0	2.2%	48.0	10.9%	8.9%	978,315	87,101	891,214	0.93	830,484
2018/19	24.0	0.0%	36.0	2.2%	2.2%	1,209,780	26,126	1,183,654	0.91	1,081,064
2019/20	12.0	0.0%	24.0	0.0%	0.0%	1,259,886	114	1,259,772	0.89	1,121,584
2020/21	0.0	0.0%	12.0	0.0%	0.0%	1,310,000	119	1,309,881	0.87	1,134,116
Total						\$7,728,254	\$1,178,449	\$6,549,805		\$5,976,890

(3) and (5) are from Exhibit MM-Provident-2.

(7) to 2019/20 is from Exhibit MM-Provident-13, (9). The amount for 2020/21 is from Exhibit MM-Provident-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Provident-2.

List of Large Claims
 Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
97002199	06/02/97	to 1998/99	Unlimited	\$2,500,000	\$0	\$2,500,000
97002200	09/18/97	to 1998/99	Unlimited	1,000,000	0	1,000,000
97002205	12/18/97	to 1998/99	Unlimited	1,000,000	0	1,000,000
97002437	01/25/98	to 1998/99	Unlimited	1,000,000	0	1,000,000
97002440	04/17/99	to 1998/99	Unlimited	1,250,000	0	1,250,000
97003552	08/08/00	1999/00	Unlimited	1,500,000	0	1,500,000
97006011	02/20/04	2003/04	20,000,000	1,500,000	0	1,500,000
97005673	05/18/04	2003/04	20,000,000	2,500,000	0	2,500,000
97005708	07/02/04	2003/04	20,000,000	2,850,000	0	2,850,000
97009704	03/27/12	2011/12	40,000,000	1,450,000	0	1,450,000
97010465	11/05/13	2012/13	30,000,000	0	1,500,000	1,500,000
97012730	12/30/15	2015/16	2,500,000	2,500,000 *	0	2,500,000 *

The claim(s) indicated by a "*" have been limited in development.

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	98	2	1	0	0	1	102		
0.01 - 5,000	2	0	0	0	0	0	2	2	3.7%
5,000 - 10,000	1	0	0	0	0	0	1	3	5.6%
10,000 - 25,000	3	0	0	0	3	0	6	9	16.7%
25,000 - 50,000	3	0	0	0	0	0	3	12	22.2%
50,000 - 100,000	5	0	0	0	0	1	6	18	33.3%
100,000 - 250,000	5	0	0	0	0	0	5	23	42.6%
250,000 - 500,000	9	1	0	1	0	0	11	34	63.0%
500,000 - 750,000	2	0	0	1	0	0	3	37	68.5%
750,000 - 1,000,000	8	0	0	0	0	0	8	45	83.3%
Over 1,000,000	8	0	0	1	0	0	9	54	100.0%
Total	144	3	1	3	3	2	156	54	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
0.01 - 5,000	6,000	0	0	0	0	0	6,000	6,000	0.0%
5,000 - 10,000	10,000	0	0	0	0	0	10,000	16,000	0.0%
10,000 - 25,000	64,000	0	0	0	75,000	0	139,000	155,000	0.5%
25,000 - 50,000	140,000	0	0	0	0	0	140,000	295,000	0.9%
50,000 - 100,000	395,000	0	0	0	0	100,000	495,000	790,000	2.4%
100,000 - 250,000	880,000	0	0	0	0	0	880,000	1,670,000	5.0%
250,000 - 500,000	3,215,000	425,000	0	500,000	0	0	4,140,000	5,810,000	17.5%
500,000 - 750,000	1,450,000	0	0	700,000	0	0	2,150,000	7,960,000	24.0%
750,000 - 1,000,000	7,645,000	0	0	0	0	0	7,645,000	15,605,000	47.1%
Over 1,000,000	15,050,000	0	0	2,500,000	0	0	17,550,000	33,155,000	100.0%
Total	\$28,855,000	\$425,000	\$0	\$3,700,000	\$75,000	\$100,000	\$33,155,000	\$33,155,000	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.

Calculation of Occupied Bed Equivalents

Occurrence Period (1)	Inpatients (2)	ER Visits (3)	Other Visits (4)	Other Visits (5)	Other Visits (6)	Physicians (7)	Occupied Bed Equivalents (8)
to 1998/99							
1999/00	71	57,449	59,353	1,304	644	38	290
2000/01	71	53,876	59,623	1,646	852	40	288
2001/02	75	52,325	62,898	1,652	950	63	338
2002/03	80	50,888	64,367	2,233	702	66	347
2003/04	78	51,988	50,698	2,371	450	66	342
2004/05	72	50,678	46,053	2,012	925	72	344
2005/06	76	47,949	45,248	1,853	656	69	336
2006/07	60	43,563	36,774	2,053	705	77	325
2007/08	57	40,370	42,204	1,885	604	85	334
2008/09	53	39,647	44,955	1,627	605	136	437
2009/10	45	40,000	49,663	1,505	605	83	319
2010/11	45	40,000	49,663	1,505	605	83	319
2011/12	45	35,000	49,663	1,505	605	83	309
2012/13	25	38,450	49,663	1,505	605	42	211
2013/14	25	38,450	49,663	1,505	605	42	211
2014/15	25	22,650	49,663	1,505	605	45	185
2015/16	25	22,260	49,663	1,505	605	48	190
2016/17	25	29,965	49,663	1,505	605	42	193
2017/18	25	29,155	49,663	1,505	605	33	174
2018/19	25	29,155	49,663	1,505	605	33	174

(2) through (7) were provided by the County.

The exposures in (2) through (7) are converted to occupied bed equivalents using the following exposure conversion factors, which were published in the Aon/ASHRM Hospital Professional Liability and Physician Liability Benchmark Analysis published in October 2017. The weight for Housestaff is based on actuarial judgement.

Exposure	Conversion Factor
Inpatients	1.000
ER Visits	0.200 per 100
Other Visits	0.040 per 100
Class 1 physician	2.100
Housestaff	0.800 (residents and interns)

From page 2 of HPL benchmark study (October 2017):
2,750 loss rate per occupied bed
5,710 loss rate per class 1 physician



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE

Data Summary as of November 30, 2018
 Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	115	0	\$44,383,067	\$0	\$44,383,067
1999/00	Unlimited	None	228.0	Not Provided	0	0	0	0	0
2000/01	10,000,000	None	216.0	Not Provided	3	0	0	0	0
2001/02	15,000,000	None	204.0	Not Provided	6	0	750,000	0	750,000
2002/03	20,000,000	None	192.0	Not Provided	8	0	800,000	0	800,000
2003/04	20,000,000	None	180.0	Not Provided	3	0	0	0	0
2004/05	20,000,000	None	168.0	Not Provided	4	0	0	0	0
2005/06	20,000,000	None	156.0	Not Provided	3	0	0	0	0
2006/07	20,000,000	None	144.0	Not Provided	0	0	0	0	0
2007/08	20,000,000	None	132.0	Not Provided	0	0	0	0	0
2008/09	20,000,000	None	120.0	Not Provided	0	0	0	0	0
2009/10	40,000,000	None	108.0	409	0	0	0	0	0
2010/11	40,000,000	None	96.0	409	2	0	0	0	0
2011/12	40,000,000	None	84.0	409	0	0	0	0	0
2012/13	30,000,000	None	72.0	370	1	0	0	0	0
2013/14	30,000,000	None	60.0	370	0	0	0	0	0
2014/15	25,000,000	None	48.0	229	2	1	0	50,000	50,000
2015/16	25,000,000	None	36.0	226	0	0	0	0	0
2016/17	25,000,000	None	24.0	231	0	0	0	0	0
2017/18	25,000,000	None	12.0	290	0	0	0	0	0
Total					147	1	\$45,933,067	\$50,000	\$45,983,067

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/75	Unlimited
12/01/00	10,000,000
12/01/01	15,000,000
12/01/02	20,000,000
03/01/10	40,000,000
03/01/13	30,000,000
07/01/15	25,000,000

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	115	0	\$44,383,067	\$0	\$44,383,067
1999/00	Unlimited	None	228.0	Not Provided	0	0	0	0	0
2000/01	Unlimited	None	216.0	Not Provided	3	0	0	0	0
2001/02	Unlimited	None	204.0	Not Provided	6	0	750,000	0	750,000
2002/03	Unlimited	None	192.0	Not Provided	8	0	800,000	0	800,000
2003/04	Unlimited	None	180.0	Not Provided	3	0	0	0	0
2004/05	Unlimited	None	168.0	Not Provided	4	0	0	0	0
2005/06	Unlimited	None	156.0	Not Provided	3	0	0	0	0
2006/07	Unlimited	None	144.0	Not Provided	0	0	0	0	0
2007/08	Unlimited	None	132.0	Not Provided	0	0	0	0	0
2008/09	Unlimited	None	120.0	Not Provided	0	0	0	0	0
2009/10	Unlimited	None	108.0	409	0	0	0	0	0
2010/11	Unlimited	None	96.0	409	2	0	0	0	0
2011/12	Unlimited	None	84.0	409	0	0	0	0	0
2012/13	Unlimited	None	72.0	370	1	0	0	0	0
2013/14	Unlimited	None	60.0	370	0	0	0	0	0
2014/15	Unlimited	None	48.0	229	2	1	0	50,000	50,000
2015/16	Unlimited	None	36.0	226	0	0	0	0	0
2016/17	Unlimited	None	24.0	231	0	0	0	0	0
2017/18	Unlimited	None	12.0	290	0	0	0	0	0
Total					147	1	\$45,933,067	\$50,000	\$45,983,067

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE

Data Summary as of November 30, 2018
 Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Occupied Bed Equivalents (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	115	0	\$44,383,067	\$0	\$44,383,067
1999/00	Unlimited	None	228.0	Not Provided	0	0	0	0	0
2000/01	Unlimited	None	216.0	Not Provided	3	0	0	0	0
2001/02	Unlimited	None	204.0	Not Provided	6	0	750,000	0	750,000
2002/03	Unlimited	None	192.0	Not Provided	8	0	800,000	0	800,000
2003/04	Unlimited	None	180.0	Not Provided	3	0	0	0	0
2004/05	Unlimited	None	168.0	Not Provided	4	0	0	0	0
2005/06	Unlimited	None	156.0	Not Provided	3	0	0	0	0
2006/07	Unlimited	None	144.0	Not Provided	0	0	0	0	0
2007/08	Unlimited	None	132.0	Not Provided	0	0	0	0	0
2008/09	Unlimited	None	120.0	Not Provided	0	0	0	0	0
2009/10	Unlimited	None	108.0	409	0	0	0	0	0
2010/11	Unlimited	None	96.0	409	2	0	0	0	0
2011/12	Unlimited	None	84.0	409	0	0	0	0	0
2012/13	Unlimited	None	72.0	370	1	0	0	0	0
2013/14	Unlimited	None	60.0	370	0	0	0	0	0
2014/15	Unlimited	None	48.0	229	2	1	0	50,000	50,000
2015/16	Unlimited	None	36.0	226	0	0	0	0	0
2016/17	Unlimited	None	24.0	231	0	0	0	0	0
2017/18	Unlimited	None	12.0	290	0	0	0	0	0
Total					147	1	\$45,933,067	\$50,000	\$45,983,067

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	100.0%	100.0%	100.0%
336.0	100.0%	100.0%	100.0%
324.0	100.0%	100.0%	100.0%
312.0	100.0%	100.0%	100.0%
300.0	100.0%	100.0%	100.0%
288.0	100.0%	100.0%	100.0%
276.0	100.0%	100.0%	100.0%
264.0	100.0%	100.0%	100.0%
252.0	100.0%	100.0%	100.0%
240.0	100.0%	100.0%	100.0%
228.0	100.0%	100.0%	100.0%
216.0	100.0%	100.0%	100.0%
204.0	100.0%	100.0%	100.0%
192.0	100.0%	100.0%	100.0%
180.0	100.0%	100.0%	100.0%
168.0	100.0%	100.0%	100.0%
156.0	100.0%	100.0%	100.0%
144.0	100.0%	100.0%	100.0%
132.0	98.0%	100.0%	100.0%
120.0	94.3%	100.0%	100.0%
108.0	89.8%	99.0%	100.0%
96.0	80.2%	97.1%	100.0%
84.0	67.9%	95.2%	100.0%
72.0	56.6%	93.3%	100.0%
60.0	28.3%	88.9%	100.0%
48.0	10.9%	82.7%	99.0%
36.0	2.2%	73.5%	96.1%
24.0	0.0%	60.0%	87.4%
12.0	0.0%	37.5%	72.8%

(2) is from Exhibit MM-Unspecified-2 (page 2).

(3) is from Exhibit MM-Unspecified-2 (page 3).

(4) is from Exhibit MM-Unspecified-2 (page 4).

COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

I. Historical Limited Paid Losses (\$000)

Claim Period	Months of Development:																				
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00	0	12,065	12,065	17,115	17,650	23,830	27,830	37,830	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935	37,935
2000/01	0	0	156	551	1,046	4,466	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706	4,706
2001/02	0	0	30	933	12,349	16,054	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061	25,061
2002/03	10	12	1,260	3,248	4,468	4,468	4,468	4,988	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316	5,316
2003/04	0	0	0	8,781	16,656	18,246	19,496	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646	19,646
2004/05	0	90	107	5,775	16,665	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715	18,715
2005/06	0	0	1	528	6,778	9,228	9,908	9,908	11,533	23,603	24,028	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
2006/07	0	16	16	26	2,016	2,016	4,766	4,766	4,766	4,766	4,766	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753
2007/08	0	127	127	3,677	6,027	8,277	8,427	8,427	8,427	8,427	8,427	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302	8,302
2008/09	0	0	2,445	3,155	3,155	4,405	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155	5,155
2009/10	0	0	0	2,318	7,653	10,438	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203	11,203
2010/11	0	0	0	2,850	4,878	5,168	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468	5,468
2011/12	0	20,100	20,825	24,390	26,195	34,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294	37,294
2012/13	0	850	850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013/14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014/15	0	25	30	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2015/16	90	2,590	4,540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

II. Limited Paid Loss Development

Claim Period	Months of Development:																				
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1998/99																					
1999/00	1,000	1,000	1,419	1,031	1,350	1,168	1,359	1,003	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2000/01	0	0	3,532	1,898	4,212	1,068	1,000	1,000	2,487	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2001/02	1,150	108,585	311,700	1,321	1,300	1,561	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2002/03	0	0	1,002	2,572	1,982	1,089	1,020	1,066	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2003/04	0	0	53,971	1,897	1,365	1,069	1,008	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2004/05	0	1,189	2,886	2,886	1,123	1,000	1,000	1,000	1,053	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2005/06	0	1032,000	1,023	12,837	1,361	1,074	1,164	1,006	2,034	1,018	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2006/07	0	1,000	1,621	77,245	1,000	2,364	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2007/08	0	1,000	28,953	1,639	1,398	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2008/09	0	1,000	1,290	1,000	1,396	1,170	1,582	1,006	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2009/10	0	1,000	3,302	3,302	1,364	1,073	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2010/11	0	1,036	1,171	1,712	1,059	1,087	1,960	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2011/12	0	1,000	2,741	2,399	3,623	1,087	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2012/13	0	1,000	1,933	2,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013/14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014/15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015/16	28,778	1,753	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Amounts are limited (net of excess insurance).
 Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE
Historical Reported Claims and Reported Claim Development

I. Historical Reported Claims	Historical Reported Claims and Reported Claim Development																					
	Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																						
1999/00																						
2000/01																						
2001/02																						
2002/03																						
2003/04																						
2004/05																						
2005/06																						
2006/07																						
2007/08																						
2008/09																						
2009/10																						
2010/11																						
2011/12																						
2012/13																						
2013/14																						
2014/15																						
2015/16																						
2016/17																						
2017/18																						

II. Reported Claim Development

II. Reported Claim Development	Reported Claim Development																					
	Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1998/99																						
1999/00																						
2000/01																						
2001/02																						
2002/03																						
2003/04																						
2004/05																						
2005/06																						
2006/07																						
2007/08																						
2008/09																						
2009/10																						
2010/11																						
2011/12																						
2012/13																						
2013/14																						
2014/15																						
2015/16																						
2016/17																						
2017/18																						
Average All	1,449	1,228	1,035	1,008	1,000	1,000	1,009	1,008	1,000	1,000	1,007	1,005	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Wtd 3																						
Last 3																						
Last 5																						
x-tiltlow																						
Previous	1,175	1,030	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Selected	1,200	1,100	1,030	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Cumulative	1,373	1,144	1,040	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Percent	72.8%	87.4%	96.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Data was provided by the County and is for Cermak, Stroger and Provident combined.

COOK COUNTY, ILLINOIS
MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE
Historical Ratio of Limited Paid Losses and Limited Reported Incurred Losses

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00	0.0%	48.7%	33.8%	38.8%	38.0%	50.8%	68.5%	81.1%	82.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2000/01	0.0%	0.0%	1.9%	6.2%	12.0%	20.8%	30.0%	30.0%	32.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2001/02	0.0%	0.0%	0.1%	37.6%	49.1%	51.3%	86.9%	86.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2002/03	0.0%	0.1%	21.6%	15.0%	39.4%	66.1%	85.9%	93.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2003/04	0.0%	0.0%	0.0%	22.6%	56.0%	63.7%	96.3%	97.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2004/05	0.0%	0.3%	0.5%	24.0%	78.1%	96.1%	100.0%	94.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2005/06	0.0%	0.0%	2.3%	0.5%	39.3%	55.1%	71.5%	73.9%	45.3%	92.2%	100.0%	100.0%	66.3%	49.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2006/07	0.0%	0.1%	0.2%	0.5%	42.7%	35.7%	86.7%	100.0%	100.0%	100.0%	100.0%	97.9%	96.0%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2007/08	0.0%	1.0%	0.7%	19.9%	46.6%	68.9%	77.1%	100.0%	100.0%	100.0%	100.0%	97.9%	99.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2008/09	0.0%	0.0%	25.0%	30.8%	33.0%	44.0%	62.4%	97.0%	100.0%	100.0%	100.0%	100.0%	99.6%	91.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2009/10	0.0%	0.0%	0.0%	14.2%	56.7%	84.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.6%	91.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2010/11	0.0%	0.0%	0.0%	14.2%	56.7%	84.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.6%	91.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2011/12	0.0%	0.0%	0.0%	25.7%	43.6%	48.4%	54.9%	100.0%	100.0%	100.0%	100.0%	100.0%	99.3%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2012/13	0.0%	58.7%	52.2%	61.8%	67.1%	91.1%	97.3%	100.0%	100.0%	100.0%	100.0%	100.0%	99.7%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2013/14	0.0%	7.1%	2.9%	5.9%	9.1%	30.6%	30.6%	100.0%	100.0%	100.0%	100.0%	100.0%	98.7%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2014/15	0.0%	0.0%	14.8%	0.4%	53.6%	30.6%	30.6%	100.0%	100.0%	100.0%	100.0%	100.0%	98.7%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2015/16	0.0%	0.3%	0.3%	0.4%	53.6%	30.6%	30.6%	100.0%	100.0%	100.0%	100.0%	100.0%	98.7%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2016/17	1.7%	30.0%	40.1%	0.0%	53.6%	30.6%	30.6%	100.0%	100.0%	100.0%	100.0%	100.0%	98.7%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2017/18	0.0%	0.0%	0.0%	0.0%	53.6%	30.6%	30.6%	100.0%	100.0%	100.0%	100.0%	100.0%	98.7%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average																					
All	0.1%	8.0%	10.7%	20.0%	44.3%	57.6%	79.0%	88.7%	86.8%	99.2%	99.8%	99.6%	94.6%	91.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Last 3	0.6%	10.1%	13.5%	7.0%	43.3%	56.7%	84.0%	99.0%	100.0%	100.0%	99.3%	99.0%	87.4%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Last 5	0.0%	2.5%	14.5%	15.5%	51.3%	58.9%	76.9%	100.0%	100.0%	100.0%	100.0%	99.7%	98.7%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
x-high																					
Implicit	0.0%	0.0%	3.0%	13.2%	31.9%	60.7%	71.4%	82.6%	90.7%	94.3%	98.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE

Exhibit MM-Unspecified-3

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$44,383,067	100.0%	\$44,383,067
1999/00	228.0	0	100.0%	0
2000/01	216.0	0	100.0%	0
2001/02	204.0	750,000	100.0%	750,000
2002/03	192.0	800,000	100.0%	800,000
2003/04	180.0	0	100.0%	0
2004/05	168.0	0	100.0%	0
2005/06	156.0	0	100.0%	0
2006/07	144.0	0	100.0%	0
2007/08	132.0	0	98.0%	0
2008/09	120.0	0	94.3%	0
2009/10	108.0	0	89.8%	0
2010/11	96.0	0	80.2%	0
2011/12	84.0	0	67.9%	0
2012/13	72.0	0	56.6%	0
2013/14	60.0	0	28.3%	0
2014/15	48.0	0	10.9%	0
2015/16	36.0	0	2.2%	0
2016/17	24.0	0	0.0%	0
2017/18	12.0	0	0.0%	0
Total		\$45,933,067		\$45,933,067

(3) is from Exhibit MM-Unspecified-1.

(4) is from Exhibit MM-Unspecified-2.

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$44,383,067	100.0%	\$44,383,067
1999/00	228.0	0	100.0%	0
2000/01	216.0	0	100.0%	0
2001/02	204.0	750,000	100.0%	750,000
2002/03	192.0	800,000	100.0%	800,000
2003/04	180.0	0	100.0%	0
2004/05	168.0	0	100.0%	0
2005/06	156.0	0	100.0%	0
2006/07	144.0	0	100.0%	0
2007/08	132.0	0	100.0%	0
2008/09	120.0	0	100.0%	0
2009/10	108.0	0	99.0%	0
2010/11	96.0	0	97.1%	0
2011/12	84.0	0	95.2%	0
2012/13	72.0	0	93.3%	0
2013/14	60.0	0	88.9%	0
2014/15	48.0	50,000	82.7%	60,491
2015/16	36.0	0	73.5%	0
2016/17	24.0	0	60.0%	0
2017/18	12.0	0	37.5%	0
Total		\$45,983,067		\$45,993,558

(3) is from Exhibit MM-Unspecified-1.

(4) is from Exhibit MM-Unspecified-2.

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	100.0%	100.0%	100.0%	\$44,383,067	\$0	\$44,383,067
1999/00	228.0	100.0%	100.0%	100.0%	0	0	0
2000/01	216.0	100.0%	100.0%	100.0%	0	0	0
2001/02	204.0	100.0%	100.0%	100.0%	750,000	0	750,000
2002/03	192.0	100.0%	100.0%	100.0%	800,000	0	800,000
2003/04	180.0	100.0%	100.0%	100.0%	0	0	0
2004/05	168.0	100.0%	100.0%	100.0%	0	0	0
2005/06	156.0	100.0%	100.0%	100.0%	0	0	0
2006/07	144.0	100.0%	100.0%	100.0%	0	0	0
2007/08	132.0	98.0%	100.0%	100.0%	0	0	0
2008/09	120.0	94.3%	100.0%	100.0%	0	0	0
2009/10	108.0	89.8%	99.0%	90.3%	0	0	0
2010/11	96.0	80.2%	97.1%	85.2%	0	0	0
2011/12	84.0	67.9%	95.2%	84.9%	0	0	0
2012/13	72.0	56.6%	93.3%	84.6%	0	0	0
2013/14	60.0	28.3%	88.9%	84.5%	0	0	0
2014/15	48.0	10.9%	82.7%	80.5%	0	50,000	62,082
2015/16	36.0	2.2%	73.5%	72.9%	0	0	0
2016/17	24.0	0.0%	60.0%	60.0%	0	0	0
2017/18	12.0	0.0%	37.5%	37.5%	0	0	0
Total					\$45,933,067	\$50,000	\$45,995,149

(3) and (4) are from Exhibit MM-Unspecified-2.

(6) and (7) are from Exhibit MM-Unspecified-1.

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$44,383,067	\$44,383,067	\$44,383,067	\$44,383,067
1999/00	0	0	0	0
2000/01	0	0	0	0
2001/02	750,000	750,000	750,000	750,000
2002/03	800,000	800,000	800,000	800,000
2003/04	0	0	0	0
2004/05	0	0	0	0
2005/06	0	0	0	0
2006/07	0	0	0	0
2007/08	0	0	0	0
2008/09	0	0	0	0
2009/10	0	0	0	0
2010/11	0	0	0	0
2011/12	0	0	0	0
2012/13	0	0	0	0
2013/14	0	0	0	0
2014/15	0	60,491	62,082	55,237
2015/16	0	0	0	0
2016/17	0	0	0	0
2017/18	0	0	0	0
Total	\$45,933,067	\$45,993,558	\$45,995,149	\$45,988,304

(2) is from Exhibit MM-Unspecified-3.

(3) is from Exhibit MM-Unspecified-4.

(4) is from Exhibit MM-Unspecified-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)	Projected A-priori Loss Rate per Occupied Bed Equivalent (7)/(5) (8)
2008/09	\$0	409	\$0.00	1.495	\$0.00	\$18.77
2009/10	0	409	0.00	1.401	0.00	20.04
2010/11	0	409	0.00	1.335	0.00	21.02
2011/12	0	409	0.00	1.284	0.00	21.86
2012/13	0	370	0.00	1.248	0.00	22.48
2013/14	0	370	0.00	1.205	0.00	23.30
2014/15	55,237	229	241.31	1.163	280.67	24.13
2015/16	0	226	0.00	1.125	0.00	24.95
2016/17	0	231	0.00	1.082	0.00	25.95
2017/18	0	290	0.00	1.040	0.00	26.99

(7) Projected 2018/19 a-priori loss rate per Occupied Bed Equivalent \$28.07

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$0	28.3%	\$23.30	370	\$6,177	\$6,177
2014/15	0	10.9%	24.13	229	4,922	4,922
2015/16	0	2.2%	24.95	226	5,525	5,525
2016/17	0	0.0%	25.95	231	6,001	6,001
2017/18	0	0.0%	26.99	290	7,832	7,832

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per Occupied Bed Equivalent (4)	Occupied Bed Equivalents (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$0	88.9%	\$23.30	370	\$960	\$960
2014/15	50,000	82.7%	24.13	229	958	50,958
2015/16	0	73.5%	24.95	226	1,498	1,498
2016/17	0	60.0%	25.95	231	2,402	2,402
2017/18	0	37.5%	26.99	290	4,896	4,896

Section I, (2) is from Exhibit MM-Unspecified-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit MM-Unspecified-10.

Section I, (5) is based on a 4% trend and adjusted for change in retention.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit MM-Unspecified-1.

Sections II and III, (3) are from Exhibit MM-Unspecified-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Occupied Bed Equivalents (6)	Frequency (per Occupied Bed Equivalent) (5)/(6) (7)
2008/09	120.0	0	100.0%	0	409	0.00
2009/10	108.0	0	100.0%	0	409	0.00
2010/11	96.0	2	100.0%	2	409	0.00
2011/12	84.0	0	100.0%	0	409	0.00
2012/13	72.0	1	100.0%	1	370	0.00
2013/14	60.0	0	100.0%	0	370	0.00
2014/15	48.0	2	99.0%	2	229	0.01
2015/16	36.0	0	96.1%	0	226	0.00
2016/17	24.0	0	87.4%	0	231	0.00
2017/18	12.0	0	72.8%	0	290	0.00

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$0	0	\$0	1.495	\$0	\$2,149	\$0
2009/10	0	0	0	1.401	0	2,293	0
2010/11	0	2	0	1.335	0	2,406	4,812
2011/12	0	0	0	1.284	0	2,502	0
2012/13	0	1	0	1.248	0	2,573	2,573
2013/14	0	0	0	1.205	0	2,667	0
2014/15	55,237	2	27,619	1.163	32,124	2,762	5,524
2015/16	0	0	0	1.125	0	2,856	0
2016/17	0	0	0	1.082	0	2,970	0
2017/18	0	0	0	1.040	0	3,089	0

(7) Projected 2018/19 average claim severity \$3,212

Section I, (3) is from Exhibit MM-Unspecified-1.

Section I, (4) is from Exhibit MM-Unspecified-2.

Section I, (6) is from Exhibit MM-Unspecified-10.

Section II, (2) is from Exhibit MM-Unspecified-6.

Section II, (3) is from Section I, (5).

Section II, (5) is based on a 4% trend and adjusted for change in retention.

Section II, (7) is based on (6) and actuarial judgment.

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$44,383,067	\$44,383,067	\$44,383,067				\$44,383,067	\$44,383,067
1999/00	0	0	0					0
2000/01	0	0	0					0
2001/02	750,000	750,000	750,000				750,000	750,000
2002/03	800,000	800,000	800,000				800,000	800,000
2003/04	0	0	0					0
2004/05	0	0	0					0
2005/06	0	0	0					0
2006/07	0	0	0					0
2007/08	0	0	0					0
2008/09	0	0	0					0
2009/10	0	0	0					0
2010/11	0	0	0					0
2011/12	0	0	0					0
2012/13	0	0	0					0
2013/14	0	0	0	6,177	960			0
2014/15	0	60,491	62,082	4,922	50,958	5,524	100,000	100,000
2015/16	0	0	0	5,525	1,498		50,000	10,000
2016/17	0	0	0	6,001	2,402		50,000	15,000
2017/18	0	0	0	7,832	4,896		20,000	20,000
Total	\$45,933,067	\$45,993,558	\$45,995,149				\$46,153,067	\$46,078,067
2013/14 - 2017/18	0	60,491	62,082	30,457	60,715	5,524	220,000	145,000
to 2012/13	45,933,067	45,933,067	45,933,067				45,933,067	45,933,067
						Change		
						All years		-\$75,000
						2013/14 - 2017/18		-75,000
						to 2012/13		0

(2) is from Exhibit MM-Unspecified-3.

(3) is from Exhibit MM-Unspecified-4.

(4) is from Exhibit MM-Unspecified-5.

(5) and (6) are from Exhibit MM-Unspecified-7.

(7) is from Exhibit MM-Unspecified-8.

(8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Occupied Bed Equivalents (3)	Limited Loss Rate per Occupied Bed Equivalent (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Occupied Bed Equivalent (4)X(5) (6)
2008/09	\$0	409	\$0.00	1.495	\$0.00
2009/10	0	409	0.00	1.401	0.00
2010/11	0	409	0.00	1.335	0.00
2011/12	0	409	0.00	1.284	0.00
2012/13	0	370	0.00	1.248	0.00
2013/14	0	370	0.00	1.205	0.00
2014/15	100,000	229	436.85	1.163	508.12
2015/16	10,000	226	44.18	1.125	49.69
2016/17	15,000	231	64.85	1.082	70.15
2017/18	20,000	290	68.91	1.040	71.67
Total	\$145,000	3,353	\$43.24		\$69.96

Claim Period (1)	Projected Limited Loss Rate per Occupied Bed Equivalent (7)	Projected Occupied Bed Equivalents (8)	Projected Ultimate Limited Losses (7)X(8) (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per Occupied Bed Equivalent (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11) (12)
2018/19	\$69.96	290	\$20,000	0.84	\$58.91	\$20,000
2019/20	72.76	290	20,000	0.84	61.26	20,000
2020/21	75.67	290	20,000	0.84	63.72	20,000

(2) is from Exhibit MM-Unspecified-9.

(3) 2009/10, 2010/11, 2011/12, 2012/13, 2013/14, 2014/15, 2015/16, 2016/17 and 2017/18 were provided by the County. Other periods assume a 0% trend.

(5) is based on a 4% trend and adjusted for change in retention.

(7) 2018/19 is based on (6) and actuarial judgment.
 Other period(s) based on 2018/19 plus a 4% trend.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Unspecified-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE

Exhibit MM-Unspecified-11

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$44,383,067	\$0	\$44,383,067	\$44,383,067	\$0	\$0	1.00	\$0
1999/00	0	0	0	0	0	0	1.00	0
2000/01	0	0	0	0	0	0	1.00	0
2001/02	750,000	0	750,000	750,000	0	0	1.00	0
2002/03	800,000	0	800,000	800,000	0	0	1.00	0
2003/04	0	0	0	0	0	0	1.00	0
2004/05	0	0	0	0	0	0	1.00	0
2005/06	0	0	0	0	0	0	1.00	0
2006/07	0	0	0	0	0	0	1.00	0
2007/08	0	0	0	0	0	0	0.99	0
2008/09	0	0	0	0	0	0	0.98	0
2009/10	0	0	0	0	0	0	0.97	0
2010/11	0	0	0	0	0	0	0.96	0
2011/12	0	0	0	0	0	0	0.95	0
2012/13	0	0	0	0	0	0	0.94	0
2013/14	0	0	0	0	0	0	0.94	0
2014/15	0	50,000	50,000	100,000	50,000	100,000	0.93	93,186
2015/16	0	0	0	10,000	10,000	10,000	0.91	9,133
2016/17	0	0	0	15,000	15,000	15,000	0.89	13,355
2017/18	0	0	0	20,000	20,000	20,000	0.87	17,316
Total	\$45,933,067	\$50,000	\$45,983,067	\$46,078,067	\$95,000	\$145,000		\$132,990

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit MM-Unspecified-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Unspecified-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE

Exhibit MM-Unspecified-12

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	100.0%	252.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2009/10	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2010/11	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2011/12	84.0	67.9%	96.0	80.2%	38.1%	0	0	0	0.96	0
2012/13	72.0	56.6%	84.0	67.9%	26.1%	0	0	0	0.95	0
2013/14	60.0	28.3%	72.0	56.6%	39.5%	0	0	0	0.94	0
2014/15	48.0	10.9%	60.0	28.3%	19.5%	100,000	19,547	80,453	0.94	76,001
2015/16	36.0	2.2%	48.0	10.9%	8.9%	10,000	890	9,110	0.93	8,489
2016/17	24.0	0.0%	36.0	2.2%	2.2%	15,000	324	14,676	0.91	13,404
2017/18	12.0	0.0%	24.0	0.0%	0.0%	20,000	2	19,998	0.89	17,804
2018/19	0.0	0.0%	12.0	0.0%	0.0%	20,000	2	19,998	0.87	17,315
Total						\$165,000	\$20,765	\$144,235		\$133,013

(3) and (5) are from Exhibit MM-Unspecified-2.

(7) to 2017/18 is from Exhibit MM-Unspecified-11. The amount for 2018/19 is from Exhibit MM-Unspecified-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Unspecified-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE

Exhibit MM-Unspecified-13

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	100.0%	264.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2010/11	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2011/12	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2012/13	84.0	67.9%	96.0	80.2%	38.1%	0	0	0	0.96	0
2013/14	72.0	56.6%	84.0	67.9%	26.1%	0	0	0	0.95	0
2014/15	60.0	28.3%	72.0	56.6%	39.5%	80,453	31,763	48,690	0.94	45,943
2015/16	48.0	10.9%	60.0	28.3%	19.5%	9,110	1,781	7,329	0.94	6,923
2016/17	36.0	2.2%	48.0	10.9%	8.9%	14,676	1,307	13,369	0.93	12,458
2017/18	24.0	0.0%	36.0	2.2%	2.2%	19,998	432	19,566	0.91	17,870
2018/19	12.0	0.0%	24.0	0.0%	0.0%	19,998	2	19,996	0.89	17,803
2019/20	0.0	0.0%	12.0	0.0%	0.0%	20,000	2	19,998	0.87	17,315
Total						\$164,235	\$35,287	\$128,948		\$118,312

(3) and (5) are from Exhibit MM-Unspecified-2.

(7) to 2018/19 is from Exhibit MM-Unspecified-12, (9). The amount for 2019/20 is from Exhibit MM-Unspecified-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Unspecified-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE

Exhibit MM-Unspecified-14

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	100.0%	276.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	252.0	100.0%	264.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	132.0	98.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	120.0	94.3%	132.0	98.0%	65.8%	0	0	0	0.99	0
2011/12	108.0	89.8%	120.0	94.3%	43.9%	0	0	0	0.98	0
2012/13	96.0	80.2%	108.0	89.8%	48.5%	0	0	0	0.97	0
2013/14	84.0	67.9%	96.0	80.2%	38.1%	0	0	0	0.96	0
2014/15	72.0	56.6%	84.0	67.9%	26.1%	48,690	12,705	35,985	0.95	34,359
2015/16	60.0	28.3%	72.0	56.6%	39.5%	7,329	2,893	4,436	0.94	4,186
2016/17	48.0	10.9%	60.0	28.3%	19.5%	13,369	2,613	10,756	0.94	10,161
2017/18	36.0	2.2%	48.0	10.9%	8.9%	19,566	1,742	17,824	0.93	16,609
2018/19	24.0	0.0%	36.0	2.2%	2.2%	19,996	432	19,564	0.91	17,868
2019/20	12.0	0.0%	24.0	0.0%	0.0%	19,998	2	19,996	0.89	17,803
2020/21	0.0	0.0%	12.0	0.0%	0.0%	20,000	2	19,998	0.87	17,315
Total						\$148,948	\$20,389	\$128,559		\$118,301

(3) and (5) are from Exhibit MM-Unspecified-2.

(7) to 2019/20 is from Exhibit MM-Unspecified-13, (9). The amount for 2020/21 is from Exhibit MM-Unspecified-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit MM-Unspecified-2.



COOK COUNTY, ILLINOIS
 MEDICAL MALPRACTICE - UNSPECIFIED HOSPITAL / AMBULATORY CARE

Exhibit MM-Unspecified-15

List of Large Claims
 Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
94000157	05/15/78	to 1998/99	Unlimited	\$2,575,459	\$0	\$2,575,459
94000147	12/12/81	to 1998/99	Unlimited	5,000,000	0	5,000,000
94000146	09/01/87	to 1998/99	Unlimited	1,155,901	0	1,155,901
94000156	01/13/88	to 1998/99	Unlimited	4,000,000	0	4,000,000
94000042	04/22/88	to 1998/99	Unlimited	1,500,000	0	1,500,000
94000145	01/14/89	to 1998/99	Unlimited	2,750,000	0	2,750,000
94000096	02/01/90	to 1998/99	Unlimited	2,500,000	0	2,500,000
94000080	08/29/90	to 1998/99	Unlimited	6,500,000	0	6,500,000
94000026	03/25/91	to 1998/99	Unlimited	3,500,000	0	3,500,000
97002717	09/01/98	to 1998/99	Unlimited	8,500,000	0	8,500,000

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	98	0	1	0	0	0	99		
0.01 - 5,000	2	0	0	0	0	0	2	2	4.2%
5,000 - 10,000	3	0	0	0	0	0	3	5	10.4%
10,000 - 25,000	4	0	0	0	0	0	4	9	18.8%
25,000 - 50,000	1	0	1	0	0	0	2	11	22.9%
50,000 - 100,000	7	0	0	0	0	0	7	18	37.5%
100,000 - 250,000	10	0	0	0	0	0	10	28	58.3%
250,000 - 500,000	6	0	0	0	0	0	6	34	70.8%
500,000 - 750,000	3	0	0	0	0	0	3	37	77.1%
750,000 - 1,000,000	1	0	0	0	0	0	1	38	79.2%
Over 1,000,000	10	0	0	0	0	0	10	48	100.0%
Total	145	0	2	0	0	0	147	48	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
0.01 - 5,000	6,500	0	0	0	0	0	6,500	6,500	0.0%
5,000 - 10,000	25,207	0	0	0	0	0	25,207	31,707	0.1%
10,000 - 25,000	82,000	0	0	0	0	0	82,000	113,707	0.2%
25,000 - 50,000	35,000	0	50,000	0	0	0	85,000	198,707	0.4%
50,000 - 100,000	548,000	0	0	0	0	0	548,000	746,707	1.6%
100,000 - 250,000	1,975,000	0	0	0	0	0	1,975,000	2,721,707	5.9%
250,000 - 500,000	2,305,000	0	0	0	0	0	2,305,000	5,026,707	10.9%
500,000 - 750,000	2,175,000	0	0	0	0	0	2,175,000	7,201,707	15.7%
750,000 - 1,000,000	800,000	0	0	0	0	0	800,000	8,001,707	17.4%
Over 1,000,000	37,981,360	0	0	0	0	0	37,981,360	45,983,067	100.0%
Total	\$45,933,067	\$0	\$50,000	\$0	\$0	\$0	\$45,983,067	\$45,983,067	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.

Calculation of Occupied Bed Equivalents

Occurrence Period (1)	Inpatients (2)	ER Visits (3)	Other Visits (4)	Other Visits (5)	Other Visits (6)	Physicians (7)	Occupied Bed Equivalents (8)
to 1998/99							
1999/00							0
2000/01							0
2001/02							0
2002/03							0
2003/04							0
2004/05							0
2005/06							0
2006/07							0
2007/08							0
2008/09							0
2009/10			750,000			52	409
2010/11			750,000			52	409
2011/12			750,000			52	409
2012/13			620,000			58	370
2013/14			620,000			58	370
2014/15			411,102			31	229
2015/16			399,120			32	226
2016/17			334,779			46	231
2017/18	0	0	474,293	0	0	48	290
2018/19	0	0	474,293	0	0	48	290

(2) through (7) were provided by the County.

The exposures in (2) through (7) are converted to occupied bed equivalents using the following exposure conversion factors, which were published in the Aon/ASHRM Hospital Professional Liability and Physician Liability Benchmark Analysis published in October 2017. The weight for Housestaff is based on actuarial judgement.

Exposure	Conversion Factor
Inpatients	1.000
ER Visits	0.200 per 100
Other Visits	0.040 per 100
Class 1 physician	2.100
Housestaff	0.800 (residents and interns)

From page 2 of HPL benchmark study (October 2017):
2,750 loss rate per occupied bed
5,710 loss rate per class 1 physician



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-1 (page 1)

Data Summary as of November 30, 2018
Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	15,168	11	\$70,702,129	\$894,260	\$71,596,389
1999/00	Unlimited	None	228.0	Not Provided	1,134	2	6,191,378	12,581	6,203,959
2000/01	9,500,000	None	216.0	719,952	1,183	3	8,294,050	474,632	8,768,682
2001/02	9,500,000	None	204.0	752,457	1,161	1	8,288,783	691,687	8,980,470
2002/03	9,500,000	None	192.0	779,098	1,223	2	8,218,813	398,874	8,617,686
2003/04	Unlimited	None	180.0	810,182	1,218	4	8,097,759	402,655	8,500,415
2004/05	Unlimited	None	168.0	832,363	1,318	5	8,366,591	523,214	8,889,805
2005/06	Unlimited	None	156.0	826,479	1,159	7	8,784,776	85,243	8,870,019
2006/07	Unlimited	None	144.0	859,906	903	6	11,415,843	429,711	11,845,554
2007/08	Unlimited	None	132.0	914,260	777	10	16,681,573	768,834	17,450,407
2008/09	Unlimited	None	120.0	942,707	767	12	13,435,588	572,783	14,008,371
2009/10	Unlimited	None	108.0	998,250	862	32	12,224,238	1,194,178	13,418,416
2010/11	Unlimited	None	96.0	928,082	789	18	10,098,432	1,228,296	11,326,728
2011/12	Unlimited	None	84.0	899,082	783	37	11,880,952	1,242,301	13,123,252
2012/13	Unlimited	None	72.0	949,338	720	46	9,213,115	1,938,174	11,151,289
2013/14	Unlimited	None	60.0	988,081	760	63	10,442,792	2,028,914	12,471,707
2014/15	Unlimited	None	48.0	998,567	777	90	12,030,444	3,962,237	15,992,681
2015/16	Unlimited	None	36.0	1,053,931	1,107	206	14,781,683	6,806,745	21,588,428
2016/17	Unlimited	None	24.0	1,075,248	1,234	258	11,572,163	8,025,515	19,597,678
2017/18	Unlimited	None	12.0	1,006,546	1,069	569	5,333,338	11,185,260	16,518,598
Total					34,112	1,382	\$266,054,440	\$42,866,095	\$308,920,534

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/77	Unlimited
12/01/00	9,500,000
12/01/03	Unlimited

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-1 (page 2)

Data Summary as of November 30, 2018
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	15,168	11	\$70,702,129	\$894,260	\$71,596,389
1999/00	Unlimited	None	228.0	Not Provided	1,134	2	6,191,378	12,581	6,203,959
2000/01	Unlimited	None	216.0	719,952	1,183	3	8,294,050	474,632	8,768,682
2001/02	Unlimited	None	204.0	752,457	1,161	1	8,288,783	691,687	8,980,470
2002/03	Unlimited	None	192.0	779,098	1,223	2	8,218,813	398,874	8,617,686
2003/04	Unlimited	None	180.0	810,182	1,218	4	8,097,759	402,655	8,500,415
2004/05	Unlimited	None	168.0	832,363	1,318	5	8,366,591	523,214	8,889,805
2005/06	Unlimited	None	156.0	826,479	1,159	7	8,784,776	85,243	8,870,019
2006/07	Unlimited	None	144.0	859,906	903	6	11,415,843	429,711	11,845,554
2007/08	Unlimited	None	132.0	914,260	777	10	16,681,573	768,834	17,450,407
2008/09	Unlimited	None	120.0	942,707	767	12	13,435,588	572,783	14,008,371
2009/10	Unlimited	None	108.0	998,250	862	32	12,224,238	1,194,178	13,418,416
2010/11	Unlimited	None	96.0	928,082	789	18	10,098,432	1,228,296	11,326,728
2011/12	Unlimited	None	84.0	899,082	783	37	11,880,952	1,242,301	13,123,252
2012/13	Unlimited	None	72.0	949,338	720	46	9,213,115	1,938,174	11,151,289
2013/14	Unlimited	None	60.0	988,081	760	63	10,442,792	2,028,914	12,471,707
2014/15	Unlimited	None	48.0	998,567	777	90	12,030,444	3,962,237	15,992,681
2015/16	Unlimited	None	36.0	1,053,931	1,107	206	14,781,683	6,806,745	21,588,428
2016/17	Unlimited	None	24.0	1,075,248	1,234	258	11,572,163	8,025,515	19,597,678
2017/18	Unlimited	None	12.0	1,006,546	1,069	569	5,333,338	11,185,260	16,518,598
Total					34,112	1,382	\$266,054,440	\$42,866,095	\$308,920,534

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-1 (page 3)

Data Summary as of November 30, 2018
Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	15,168	11	\$71,137,638	\$894,260	\$72,031,898
1999/00	Unlimited	None	228.0	Not Provided	1,134	2	6,217,770	12,581	6,230,351
2000/01	Unlimited	None	216.0	719,952	1,183	3	8,299,577	474,632	8,774,209
2001/02	Unlimited	None	204.0	752,457	1,161	1	8,370,884	691,687	9,062,571
2002/03	Unlimited	None	192.0	779,098	1,223	2	8,247,766	398,874	8,646,640
2003/04	Unlimited	None	180.0	810,182	1,218	4	8,191,888	402,655	8,594,544
2004/05	Unlimited	None	168.0	832,363	1,318	5	8,471,012	523,214	8,994,226
2005/06	Unlimited	None	156.0	826,479	1,159	7	8,802,787	85,243	8,888,030
2006/07	Unlimited	None	144.0	859,906	903	6	11,459,917	429,711	11,889,628
2007/08	Unlimited	None	132.0	914,260	777	10	16,699,341	768,834	17,468,176
2008/09	Unlimited	None	120.0	942,707	767	12	13,437,510	572,783	14,010,293
2009/10	Unlimited	None	108.0	998,250	862	32	12,224,815	1,194,178	13,418,993
2010/11	Unlimited	None	96.0	928,082	789	18	10,099,289	1,228,296	11,327,585
2011/12	Unlimited	None	84.0	899,082	783	37	12,023,519	1,242,301	13,265,819
2012/13	Unlimited	None	72.0	949,338	720	46	9,220,273	1,938,174	11,158,446
2013/14	Unlimited	None	60.0	988,081	760	63	10,454,826	2,028,914	12,483,740
2014/15	Unlimited	None	48.0	998,567	777	90	12,083,430	3,962,237	16,045,667
2015/16	Unlimited	None	36.0	1,053,931	1,107	206	14,827,378	6,806,745	21,634,122
2016/17	Unlimited	None	24.0	1,075,248	1,234	258	11,598,055	8,025,515	19,623,569
2017/18	Unlimited	None	12.0	1,006,546	1,069	569	5,345,491	11,185,260	16,530,751
Total					34,112	1,382	\$267,213,165	\$42,866,095	\$310,079,260

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	99.9%	100.0%	100.0%
336.0	99.9%	100.0%	100.0%
324.0	99.9%	100.0%	100.0%
312.0	99.8%	100.0%	100.0%
300.0	99.8%	100.0%	100.0%
288.0	99.6%	100.0%	100.0%
276.0	99.5%	100.0%	100.0%
264.0	99.3%	100.0%	100.0%
252.0	99.0%	100.0%	100.0%
240.0	98.5%	99.9%	100.0%
228.0	98.3%	99.8%	100.0%
216.0	98.1%	99.7%	100.0%
204.0	97.8%	99.6%	100.0%
192.0	97.5%	99.5%	100.0%
180.0	97.3%	99.4%	100.0%
168.0	96.9%	99.2%	100.0%
156.0	96.4%	99.0%	100.0%
144.0	95.9%	98.7%	100.0%
132.0	95.2%	98.4%	100.0%
120.0	94.1%	97.9%	100.0%
108.0	92.3%	97.4%	100.0%
96.0	88.9%	96.0%	100.0%
84.0	84.7%	93.9%	99.9%
72.0	77.0%	91.2%	99.8%
60.0	69.3%	85.6%	99.7%
48.0	60.0%	79.3%	99.6%
36.0	49.0%	70.0%	99.2%
24.0	33.4%	56.9%	98.8%
12.0	14.9%	32.5%	95.9%

(2) is from Exhibit WC-Gov-Indem-2 (page 2).

(3) is from Exhibit WC-Gov-Indem-2 (page 3).

(4) is from Exhibit WC-Gov-Indem-2 (page 4).

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00							4,987	5,135	5,388	5,682	5,729	\$63,361	\$64,599	\$65,127	\$65,686	\$66,043	\$66,270	\$66,847	\$67,249	\$71,138	
2000/01					5,012	5,029	5,236	5,724	6,228	6,545	6,751	5,823	5,876	5,904	5,929	5,936	6,216	6,216	6,216	6,216	
2001/02					5,562	5,948	6,145	6,866	7,018	7,218	7,373	9,950	7,025	7,102	7,335	7,965	8,247	8,300	8,300	8,300	
2002/03					5,205	6,500	6,768	6,991	7,316	7,534	7,582	7,426	7,595	7,682	8,163	8,338	8,371	8,371	8,371	8,371	
2003/04					5,913	6,186	6,855	7,022	7,164	7,288	7,332	7,405	7,800	8,034	8,152	8,248	8,371	8,371	8,371	8,371	
2004/05	1,453	2,828	3,755	4,985	5,913	6,186	6,855	7,022	7,164	7,288	7,332	7,405	7,800	8,034	8,152	8,248	8,371	8,371	8,371	8,371	
2005/06	1,811	3,799	4,351	6,140	6,770	7,111	7,396	7,536	7,952	8,103	8,503	8,065	8,352	8,471	8,592	8,683	8,803	8,803	8,803	8,803	
2006/07	1,544	3,529	5,627	6,820	7,908	8,615	9,131	9,583	9,724	11,075	11,225	11,460	11,460	11,460	11,460	11,460	11,460	11,460	11,460	11,460	
2007/08	1,829	4,111	5,863	7,314	8,708	9,995	11,196	12,384	13,060	13,438	13,438	13,438	13,438	13,438	13,438	13,438	13,438	13,438	13,438	13,438	
2008/09	2,059	4,695	6,392	7,658	8,638	9,724	11,196	12,384	13,060	13,438	13,438	13,438	13,438	13,438	13,438	13,438	13,438	13,438	13,438	13,438	
2009/10	2,183	4,158	5,415	6,687	7,719	9,220	11,256	11,807	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	
2010/11	1,861	3,935	5,416	6,687	7,719	9,220	11,256	11,807	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	12,225	
2011/12	1,527	3,443	5,292	7,744	9,913	11,006	12,024	12,024	12,024	12,024	12,024	12,024	12,024	12,024	12,024	12,024	12,024	12,024	12,024	12,024	
2012/13	2,329	4,358	7,831	9,470	10,455	10,455	10,455	10,455	10,455	10,455	10,455	10,455	10,455	10,455	10,455	10,455	10,455	10,455	10,455	10,455	
2013/14	2,265	7,515	10,310	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	12,083	
2014/15	4,540	10,919	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	14,827	
2015/16	4,906	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	11,598	
2016/17	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	
2017/18	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	5,345	

II. Limited Paid Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult
to 1998/99																				
1999/00																				
2000/01																				
2001/02					1,079	1,053	1,081	1,088	1,051	1,032	1,016	1,020	1,008	1,009	1,005	1,003	1,009	1,006	1,000	1,058
2002/03					1,069	1,136	1,117	1,022	1,029	1,021	1,027	1,011	1,005	1,042	1,076	1,035	1,006	1,000	1,000	1,000
2003/04					1,113	1,069	1,033	1,046	1,030	1,006	1,004	1,009	1,003	1,005	1,005	1,004	1,006	1,006	1,006	1,004
2004/05			1,160	1,195	1,249	1,065	1,044	1,024	1,021	1,012	1,010	1,084	1,036	1,014	1,004	1,003	1,005	1,003	1,003	1,058
2005/06	1,913	1,565	1,411	1,103	1,050	1,040	1,019	1,055	1,019	1,034	1,012	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2006/07	2,098	1,481	1,212	1,160	1,089	1,060	1,049	1,015	1,139	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2007/08	2,287	1,525	1,214	1,142	1,133	1,161	1,059	1,528	1,036	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2008/09	2,248	1,426	1,248	1,190	1,148	1,120	1,106	1,055	1,029	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2009/10	2,280	1,361	1,198	1,154	1,101	1,156	1,049	1,035	1,035	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2010/11	1,905	1,302	1,237	1,153	1,195	1,056	1,037	1,035	1,035	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2011/12	2,114	1,478	1,231	1,385	1,110	1,092	1,037	1,035	1,035	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2012/13	2,254	1,537	1,463	1,110	1,073	1,092	1,037	1,035	1,035	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2013/14	1,871	1,797	1,209	1,104	1,073	1,092	1,037	1,035	1,035	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2014/15	3,318	1,372	1,172	1,104	1,073	1,092	1,037	1,035	1,035	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2015/16	2,405	1,358	1,172	1,104	1,073	1,092	1,037	1,035	1,035	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2016/17	2,364	1,358	1,172	1,104	1,073	1,092	1,037	1,035	1,035	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021
2017/18	2,364	1,358	1,172	1,104	1,073	1,092	1,037	1,035	1,035	1,014	1,021	1,014	1,014	1,021	1,021	1,021	1,021	1,021	1,021	1,021

Average All
Wtd 3
Last 3
Last 5
x-Hi,low

The County changed data systems during 2016, resulting in a shift between indemnity and medical. The amounts in the 2016 diagonal are not consistent with prior diagonals.

Amounts are limited (net of excess insurance) and gross of recoveries.

Data was provided by the County.

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Historical Limited Reported Incurred Losses (\$000) and Limited Reported Incurred Loss Development

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
to 1998/99																				
1999/00							7,497	7,747	7,751	6,080	6,080	\$72,513	\$72,078	\$79,054	\$75,577	\$67,619	\$67,550	\$68,225	\$68,529	\$72,032
2000/01					6,778	6,995	7,354	7,557	6,564	6,859	6,859	9,075	6,099	6,099	6,125	6,125	6,241	6,226	6,230	
2001/02					8,233	7,267	7,901	7,230	7,363	6,820	6,820	7,075	7,085	7,883	8,035	8,574	8,762	8,774		
2002/03					7,596	9,454	7,060	7,424	7,353	7,689	7,689	7,726	8,150	7,853	8,098	9,063	9,063			
2003/04					8,160	6,898	7,363	7,353	7,823	7,596	7,634	8,262	8,071	8,504	8,514	8,647				
2004/05			5,944	7,149	6,717	6,876	6,829	7,199	7,449	7,005	8,045	8,502	8,831	8,777	8,595					
2005/06			5,112	7,350	7,473	7,347	7,562	7,682	8,354	8,374	8,795	8,609	8,649	8,994						
2006/07			3,898	6,477	6,611	6,733	7,983	8,940	10,647	10,794	11,739	11,968	11,890							
2007/08			3,366	5,060	6,631	6,733	8,663	11,257	13,048	16,602	16,997	17,468								
2008/09			3,421	6,040	6,393	7,861	9,131	12,857	13,735	13,907	14,010									
2009/10			3,954	5,346	7,962	9,128	9,585	10,509	11,018	11,328										
2010/11			3,335	4,763	5,658	9,128	11,691	12,770	13,071	13,266										
2011/12			2,894	5,892	9,845	11,328	12,770	13,071	13,266											
2012/13			2,850	7,583	8,606	11,328	12,220	12,484												
2013/14			5,469	11,396	8,444	11,564	12,220	12,484												
2014/15			9,516	14,181	16,046															
2015/16			14,585	19,675																
2016/17			16,531																	
2017/18																				

II. Limited Reported Incurred Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-UIT
to 1998/99																				
1999/00							1.033	1.001	0.764	1.000	0.999	0.994	1.097	0.956	0.895	0.999	1.010	1.004	1.051	
2000/01					1.061	1.087	0.915	0.889	1.045	0.994	1.035	1.004	1.000	1.004	1.000	1.019	0.898	1.001		
2001/02					1.072	1.043	0.747	0.767	0.985	1.051	1.003	1.133	1.113	1.026	1.060	1.022	1.001			
2002/03					1.101	1.087	1.062	0.988	1.036	1.005	1.082	0.977	1.054	1.001	0.996	1.000				
2003/04			1.062	1.074	0.845	1.024	0.999	1.064	1.000	1.083	1.003	1.039	0.984	0.979	1.016					
2004/05			1.191	1.092	0.869	1.024	1.008	1.035	1.034	1.044	1.070	1.005	1.040							
2005/06			1.438	0.953	1.067	0.983	1.029	1.016	1.087	1.002	1.050	1.006								
2006/07			1.662	1.021	1.155	1.061	1.119	1.014	1.088	1.019	0.993									
2007/08			1.503	1.310	1.015	1.186	1.110	1.064	1.119	1.024	1.028									
2008/09			1.766	1.058	1.230	1.162	1.408	1.015	1.087	1.019										
2009/10			1.352	1.315	1.133	1.468	1.091	1.053	1.013											
2010/11			1.428	1.188	1.613	1.428	1.050	1.048	1.012											
2011/12			2.036	1.671	1.151	1.127	1.024	1.015	1.007											
2012/13			2.661	1.135	1.160	1.062	1.048	1.015												
2013/14			1.462	1.369	1.057	1.022														
2014/15			2.072	1.244	1.132															
2015/16			2.068	1.100																
2016/17			1.345																	
2017/18																				
Average All	1.741	1.253	1.146	1.104	1.071	1.036	1.027	1.047	1.002	1.031	1.024	1.020	1.042	1.001	0.983	1.010	1.003	1.003	1.051	
Wtd 3	1.713	1.199	1.113	1.069	1.054	1.032	1.028	1.135	1.035	1.030	1.018	1.016	1.028	1.007	1.023	1.013	1.008	1.003		
Last 3	1.828	1.238	1.116	1.070	1.058	1.028	1.028	1.148	1.040	1.032	1.023	1.016	1.029	1.007	1.024	1.014	1.003	1.003		
Last 5	1.867	1.250	1.147	1.080	1.060	1.033	1.040	1.038	1.022	1.041	1.026	1.016	1.031	1.010	1.004	1.004	1.001	1.001		
x-Hi,low																				
Similar	1.418	1.113	1.049	1.020	1.009	1.002	1.001	1.001	1.002	1.001	1.000	1.001	1.001	1.000	1.001	1.001	1.000	1.001	1.012	1.001
Previous	1.750	1.230	1.133	1.085	1.067	1.030	1.020	1.013	1.004	1.004	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001
Selected	1.750	1.230	1.133	1.080	1.065	1.030	1.022	1.015	1.005	1.005	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001
Cumulative	3.076	1.758	1.429	1.261	1.168	1.087	1.065	1.042	1.026	1.021	1.016	1.013	1.010	1.008	1.006	1.005	1.004	1.003	1.002	1.001
Percent	32.5%	56.9%	70.0%	79.3%	85.6%	91.2%	93.9%	96.0%	97.4%	97.9%	98.4%	98.7%	99.0%	99.2%	99.4%	99.5%	99.6%	99.7%	99.8%	99.9%

The County changed data systems during 2016, resulting in a shift between indemnity and medical. The amounts in the 2016 diagonal are not consistent with prior diagonals.

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Data was provided by the County.

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Historical Reported Claims and Reported Claim Development

I. Historical Reported Claims	Months of Development:																					
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240		
to 1998/99																						
1999/00																						
2000/01																						
2001/02																						
2002/03																						
2003/04																						
2004/05																						
2005/06																						
2006/07																						
2007/08																						
2008/09																						
2009/10																						
2010/11																						
2011/12																						
2012/13																						
2013/14																						
2014/15																						
2015/16																						
2016/17																						
2017/18																						

II. Reported Claim Development

II. Reported Claim Development	Months of Development:																					
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult		
to 1998/99																						
1999/00																						
2000/01																						
2001/02																						
2002/03																						
2003/04																						
2004/05																						
2005/06																						
2006/07																						
2007/08																						
2008/09																						
2009/10																						
2010/11																						
2011/12																						
2012/13																						
2013/14																						
2014/15																						
2015/16																						
2016/17																						
2017/18																						
Average All	1.028	1.013	1.004	1.002	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Wtd 3	1.040	1.004	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Last 3	1.036	1.004	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Last 5 x-tiltlow	1.024	1.004	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Similar	1.131	1.019	1.010	1.007	1.007	1.005	1.005	1.006	1.006	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Previous	1.025	1.004	1.004	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.030	1.004	1.004	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative	1.042	1.012	1.008	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Percent	95.9%	98.8%	98.2%	99.6%	99.7%	99.8%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Data was provided by the County.

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Historical Ratio of Limited Paid Losses and Limited Reported Incurred Losses

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1/99/09																					
1999/00																					
2000/01																					
2001/02																					
2002/03																					
2003/04																					
2004/05																					
2005/06																					
2006/07																					
2007/08																					
2008/09																					
2009/10																					
2010/11																					
2011/12																					
2012/13																					
2013/14																					
2014/15																					
2015/16																					
2016/17																					
2017/18																					
Average																					
All	47.7%	62.9%	72.0%	77.3%	81.8%	83.9%	87.0%	88.9%	92.0%	95.9%	94.8%	93.9%	94.0%	91.0%	92.8%	95.0%	96.0%	97.5%	99.0%	98.8%	
Last 3	37.9%	60.2%	69.7%	76.8%	80.8%	84.9%	88.1%	89.4%	93.6%	95.7%	95.4%	96.1%	95.4%	93.9%	93.9%	93.4%	95.4%	97.5%	99.0%	98.8%	
Last 5	38.4%	55.4%	65.9%	75.4%	79.7%	81.5%	87.1%	89.4%	93.4%	96.0%	94.0%	94.1%	94.1%	91.9%	94.4%	95.1%	95.4%	97.5%	99.0%	98.8%	
x-high																					
Implicit	45.7%	58.8%	70.0%	75.7%	81.0%	84.4%	90.1%	92.6%	94.7%	96.1%	96.8%	97.2%	97.3%	97.6%	97.8%	98.0%	98.2%	98.4%	98.5%	98.6%	



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-3

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$70,702,129	98.5%	\$71,762,661
1999/00	228.0	6,191,378	98.3%	6,296,817
2000/01	216.0	8,294,050	98.1%	8,452,168
2001/02	204.0	8,288,783	97.8%	8,472,141
2002/03	192.0	8,218,813	97.5%	8,425,825
2003/04	180.0	8,097,759	97.3%	8,326,628
2004/05	168.0	8,366,591	96.9%	8,637,469
2005/06	156.0	8,784,776	96.4%	9,114,540
2006/07	144.0	11,415,843	95.9%	11,903,594
2007/08	132.0	16,681,573	95.2%	17,516,067
2008/09	120.0	13,435,588	94.1%	14,276,994
2009/10	108.0	12,224,238	92.3%	13,249,578
2010/11	96.0	10,098,432	88.9%	11,361,393
2011/12	84.0	11,880,952	84.7%	14,035,185
2012/13	72.0	9,213,115	77.0%	11,971,984
2013/14	60.0	10,442,792	69.3%	15,062,576
2014/15	48.0	12,030,444	60.0%	20,042,238
2015/16	36.0	14,781,683	49.0%	30,166,474
2016/17	24.0	11,572,163	33.4%	34,598,147
2017/18	12.0	5,333,338	14.9%	35,877,313
Total		\$266,054,440		\$359,549,793

(3) is from Exhibit WC-Gov-Indem-1.

(4) is from Exhibit WC-Gov-Indem-2.



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-4

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$71,596,389	99.9%	\$71,667,986
1999/00	228.0	6,203,959	99.8%	6,216,373
2000/01	216.0	8,768,682	99.7%	8,795,014
2001/02	204.0	8,980,470	99.6%	9,016,446
2002/03	192.0	8,617,686	99.5%	8,660,861
2003/04	180.0	8,500,415	99.4%	8,551,545
2004/05	168.0	8,889,805	99.2%	8,961,164
2005/06	156.0	8,870,019	99.0%	8,959,101
2006/07	144.0	11,845,554	98.7%	12,000,414
2007/08	132.0	17,450,407	98.4%	17,731,576
2008/09	120.0	14,008,371	97.9%	14,305,251
2009/10	108.0	13,418,416	97.4%	13,771,307
2010/11	96.0	11,326,728	96.0%	11,798,978
2011/12	84.0	13,123,252	93.9%	13,971,155
2012/13	72.0	11,151,289	91.2%	12,227,935
2013/14	60.0	12,471,707	85.6%	14,564,767
2014/15	48.0	15,992,681	79.3%	20,170,780
2015/16	36.0	21,588,428	70.0%	30,849,799
2016/17	24.0	19,597,678	56.9%	34,446,179
2017/18	12.0	16,518,598	32.5%	50,809,822
Total		\$308,920,534		\$377,476,455

(3) is from Exhibit WC-Gov-Indem-1.

(4) is from Exhibit WC-Gov-Indem-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-5

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	98.5%	99.9%	93.2%	\$70,702,129	\$894,260	\$71,661,223
1999/00	228.0	98.3%	99.8%	88.1%	6,191,378	12,581	6,205,663
2000/01	216.0	98.1%	99.7%	84.0%	8,294,050	474,632	8,859,117
2001/02	204.0	97.8%	99.6%	81.6%	8,288,783	691,687	9,136,814
2002/03	192.0	97.5%	99.5%	79.7%	8,218,813	398,874	8,719,219
2003/04	180.0	97.3%	99.4%	78.2%	8,097,759	402,655	8,612,354
2004/05	168.0	96.9%	99.2%	74.6%	8,366,591	523,214	9,067,874
2005/06	156.0	96.4%	99.0%	72.5%	8,784,776	85,243	8,902,324
2006/07	144.0	95.9%	98.7%	68.5%	11,415,843	429,711	12,043,100
2007/08	132.0	95.2%	98.4%	66.7%	16,681,573	768,834	17,833,969
2008/09	120.0	94.1%	97.9%	64.8%	13,435,588	572,783	14,319,704
2009/10	108.0	92.3%	97.4%	66.9%	12,224,238	1,194,178	14,009,605
2010/11	96.0	88.9%	96.0%	64.0%	10,098,432	1,228,296	12,017,812
2011/12	84.0	84.7%	93.9%	60.5%	11,880,952	1,242,301	13,935,707
2012/13	72.0	77.0%	91.2%	61.8%	9,213,115	1,938,174	12,349,728
2013/14	60.0	69.3%	85.6%	53.1%	10,442,792	2,028,914	14,260,488
2014/15	48.0	60.0%	79.3%	48.2%	12,030,444	3,962,237	20,253,757
2015/16	36.0	49.0%	70.0%	41.1%	14,781,683	6,806,745	31,328,947
2016/17	24.0	33.4%	56.9%	35.2%	11,572,163	8,025,515	34,352,729
2017/18	12.0	14.9%	32.5%	20.7%	5,333,338	11,185,260	59,300,100
Total					\$266,054,440	\$42,866,095	\$387,170,235

(3) and (4) are from Exhibit WC-Gov-Indem-2.

(6) and (7) are from Exhibit WC-Gov-Indem-1.



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-6

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$71,762,661	\$71,667,986	\$71,661,223	\$71,685,815
1999/00	6,296,817	6,216,373	6,205,663	6,205,663
2000/01	8,452,168	8,795,014	8,859,117	8,859,117
2001/02	8,472,141	9,016,446	9,136,814	9,136,814
2002/03	8,425,825	8,660,861	8,719,219	8,719,219
2003/04	8,326,628	8,551,545	8,612,354	8,612,354
2004/05	8,637,469	8,961,164	9,067,874	9,067,874
2005/06	9,114,540	8,959,101	8,902,324	8,902,324
2006/07	11,903,594	12,000,414	12,043,100	12,043,100
2007/08	17,516,067	17,731,576	17,833,969	17,833,969
2008/09	14,276,994	14,305,251	14,319,704	14,319,704
2009/10	13,249,578	13,771,307	14,009,605	14,009,605
2010/11	11,361,393	11,798,978	12,017,812	11,974,045
2011/12	14,035,185	13,971,155	13,935,707	13,946,342
2012/13	11,971,984	12,227,935	12,349,728	12,301,011
2013/14	15,062,576	14,564,767	14,260,488	14,462,408
2014/15	20,042,238	20,170,780	20,253,757	20,191,116
2015/16	30,166,474	30,849,799	31,328,947	30,856,879
2016/17	34,598,147	34,446,179	34,352,729	34,457,883
2017/18	35,877,313	50,809,822	59,300,100	43,343,567
Total	\$359,549,793	\$377,476,455	\$387,170,235	\$370,928,811

(2) is from Exhibit WC-Gov-Indem-3.

(3) is from Exhibit WC-Gov-Indem-4.

(4) is from Exhibit WC-Gov-Indem-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Payroll (000) (3)	Limited Loss Rate per \$100 of Payroll (2)/(3)/10 (4)	Loss Rate Trend (2018/19 = 1,000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)X(5) (6)	Projected A-priori Loss Rate per \$100 of Payroll (7)/(5) (8)
2008/09	\$14,319,704	\$942,707	\$1.52	1.157	\$1.76	\$1.86
2009/10	14,009,605	998,250	1.40	1.133	1.59	1.90
2010/11	11,974,045	928,082	1.29	1.124	1.45	1.91
2011/12	13,946,342	899,082	1.55	1.128	1.75	1.91
2012/13	12,301,011	949,338	1.30	1.110	1.44	1.94
2013/14	14,462,408	988,081	1.46	1.092	1.60	1.97
2014/15	20,191,116	998,567	2.02	1.072	2.17	2.01
2015/16	30,856,879	1,053,931	2.93	1.049	3.07	2.05
2016/17	34,457,883	1,075,248	3.20	1.031	3.30	2.09
2017/18	43,343,567	1,006,546	4.31	1.015	4.37	2.12
				Prior Selected	\$1.92	
					\$2.15	

(7) Projected 2018/19 a-priori loss rate per \$100 of Payroll

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per \$100 of Payroll (4)	Payroll (000) (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5)X10 (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$10,442,792	69.3%	\$1.97	\$988,081	\$5,969,382	\$16,412,175
2014/15	12,030,444	60.0%	2.01	998,567	8,008,529	20,038,972
2015/16	14,781,683	49.0%	2.05	1,053,931	11,011,306	25,792,989
2016/17	11,572,163	33.4%	2.09	1,075,248	14,925,501	26,497,665
2017/18	5,333,338	14.9%	2.12	1,006,546	18,151,470	23,484,808

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per \$100 of Payroll (4)	Payroll (000) (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5)X10 (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$12,471,707	85.6%	\$1.97	\$988,081	\$2,796,954	\$15,268,661
2014/15	15,992,681	79.3%	2.01	998,567	4,149,781	20,142,462
2015/16	21,588,428	70.0%	2.05	1,053,931	6,481,787	28,070,214
2016/17	19,597,678	56.9%	2.09	1,075,248	9,667,299	29,264,977
2017/18	16,518,598	32.5%	2.12	1,006,546	14,389,360	30,907,957

Section I, (2) is from Exhibit WC-Gov-Indem-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit WC-Gov-Indem-10.

Section I, (5) is from Exhibit WC-Gov-Indem-15.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit WC-Gov-Indem-1.

Sections II and III, (3) are from Exhibit WC-Gov-Indem-2.

Sections II and III, (4) are from Section I, (8).



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-8

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Payroll (000) (6)	Frequency (per \$1M of Payroll) (5)/(6)X1,000 (7)
2008/09	120.0	767	100.0%	767	\$942,707	0.81
2009/10	108.0	862	100.0%	862	998,250	0.86
2010/11	96.0	789	100.0%	789	928,082	0.85
2011/12	84.0	783	99.9%	784	899,082	0.87
2012/13	72.0	720	99.8%	721	949,338	0.76
2013/14	60.0	760	99.7%	762	988,081	0.77
2014/15	48.0	777	99.6%	780	998,567	0.78
2015/16	36.0	1,107	99.2%	1,116	1,053,931	1.06
2016/17	24.0	1,234	98.8%	1,249	1,075,248	1.16
2017/18	12.0	1,069	95.9%	1,114	1,006,546	1.11

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$14,319,704	767	\$18,670	1.555	\$29,038	\$17,681	\$13,561,112
2009/10	14,009,605	862	16,252	1.479	24,032	18,598	16,031,468
2010/11	11,974,045	789	15,176	1.423	21,599	19,322	15,245,113
2011/12	13,946,342	784	17,789	1.387	24,672	19,827	15,544,732
2012/13	12,301,011	721	17,061	1.325	22,606	20,755	14,964,157
2013/14	14,462,408	762	18,980	1.265	24,016	21,733	16,560,658
2014/15	20,191,116	780	25,886	1.206	31,222	22,800	17,784,108
2015/16	30,856,879	1,116	27,650	1.147	31,709	23,980	26,761,257
2016/17	34,457,883	1,249	27,588	1.094	30,171	25,146	31,407,778
2017/18	43,343,567	1,114	38,908	1.045	40,676	26,304	29,303,171
				Prior Selected	\$ 26,667		
	(7) Projected 2018/19 average claim severity				\$ 27,500		

Section I, (3) is from Exhibit WC-Gov-Indem-1.

Section I, (4) is from Exhibit WC-Gov-Indem-2.

Section I, (6) is from Exhibit WC-Gov-Indem-10.

Section II, (2) is from Exhibit WC-Gov-Indem-6.

Section II, (3) is from Section I, (5).

Section II, (5) is from Exhibit WC-Gov-Indem-15.

Section II, (7) is based on (6) and actuarial judgment.

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$71,762,661	\$71,667,986	\$71,661,223				\$72,039,975	\$71,686,000
1999/00	6,296,817	6,216,373	6,205,663				6,229,000	6,206,000
2000/01	8,452,168	8,795,014	8,859,117				8,902,000	8,859,000
2001/02	8,472,141	9,016,446	9,136,814				9,293,000	9,137,000
2002/03	8,425,825	8,660,861	8,719,219				8,623,000	8,719,000
2003/04	8,326,628	8,551,545	8,612,354				9,133,000	8,612,000
2004/05	8,637,469	8,961,164	9,067,874				8,809,000	9,068,000
2005/06	9,114,540	8,959,101	8,902,324				8,927,000	8,902,000
2006/07	11,903,594	12,000,414	12,043,100				12,464,000	12,043,000
2007/08	17,516,067	17,731,576	17,833,969				17,356,000	17,834,000
2008/09	14,276,994	14,305,251	14,319,704				14,389,000	14,320,000
2009/10	13,249,578	13,771,307	14,009,605				14,025,000	14,010,000
2010/11	11,361,393	11,798,978	12,017,812				11,773,000	11,974,000
2011/12	14,035,185	13,971,155	13,935,707				14,279,000	13,946,000
2012/13	11,971,984	12,227,935	12,349,728				12,344,000	12,301,000
2013/14	15,062,576	14,564,767	14,260,488	16,412,175	15,268,661	16,560,658	15,354,000	14,462,000
2014/15	20,042,238	20,170,780	20,253,757	20,038,972	20,142,462	17,784,108	20,248,000	20,191,000
2015/16	30,166,474	30,849,799	31,328,947	25,792,989	28,070,214	26,761,257	26,444,000	27,000,000
2016/17	34,598,147	34,446,179	34,352,729	26,497,665	29,264,977	31,407,778	28,000,000	29,250,000
2017/18	35,877,313	50,809,822	59,300,100	23,484,808	30,907,957	29,303,171	24,739,000	29,500,000
Total	\$359,549,793	\$377,476,455	\$387,170,235				\$343,370,975	\$348,020,000
2013/14 - 2017/18	135,746,748	150,841,348	159,496,021	112,226,608	123,654,271	121,816,972	114,785,000	120,403,000
to 2012/13	223,803,045	226,635,107	227,674,214				228,585,975	227,617,000
						Change		
						All years		\$4,649,025
						2013/14 - 2017/18		5,618,000
						to 2012/13		-968,975

(2) is from Exhibit WC-Gov-Indem-3.
(3) is from Exhibit WC-Gov-Indem-4.
(4) is from Exhibit WC-Gov-Indem-5.
(5) and (6) are from Exhibit WC-Gov-Indem-7.
(7) is from Exhibit WC-Gov-Indem-8.
(8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Payroll (000) (3)	Limited Loss Rate per \$100 of Payroll (2)/(3)/10 (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)X(5) (6)
2008/09	\$14,320,000	\$942,707	\$1.52	1.157	\$1.76
2009/10	14,010,000	998,250	1.40	1.133	1.59
2010/11	11,974,000	928,082	1.29	1.124	1.45
2011/12	13,946,000	899,082	1.55	1.128	1.75
2012/13	12,301,000	949,338	1.30	1.110	1.44
2013/14	14,462,000	988,081	1.46	1.092	1.60
2014/15	20,191,000	998,567	2.02	1.072	2.17
2015/16	27,000,000	1,053,931	2.56	1.049	2.69
2016/17	29,250,000	1,075,248	2.72	1.031	2.80
2017/18	29,500,000	1,006,546	2.93	1.015	2.97
Total	\$186,954,000	\$9,839,832	\$1.90		\$2.02

Claim Period (1)	Projected Limited Loss Rate per \$100 of Payroll (7)	Projected Payroll (000) (8)	Projected Ultimate Limited Losses (7)X(8)X10 (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per \$100 of Payroll (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11)X10 (12)
2018/19	\$2.66	\$1,038,161	\$27,601,000	0.89	\$2.38	\$24,699,000
2019/20	2.70	1,038,161	28,015,000	0.89	2.41	25,069,000
2020/21	2.74	1,038,161	28,435,000	0.89	2.45	25,445,000

(2) is from Exhibit WC-Gov-Indem-9.

(3) was provided by the County.

(5) is from Exhibit WC-Gov-Indem-15.

(7) 2018/19 is based on (6) and actuarial judgment.
Other period(s) based on 2018/19 plus the trend in Exhibit WC-Gov-Indem-15.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Indem-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-11

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$70,702,129	\$894,260	\$71,596,389	\$71,686,000	\$89,611	\$983,871	0.93	\$912,944
1999/00	6,191,378	12,581	6,203,959	6,206,000	2,041	14,622	0.91	13,338
2000/01	8,294,050	474,632	8,768,682	8,859,000	90,318	564,950	0.90	507,040
2001/02	8,288,783	691,687	8,980,470	9,137,000	156,530	848,217	0.89	753,359
2002/03	8,218,813	398,874	8,617,686	8,719,000	101,314	500,188	0.88	439,318
2003/04	8,097,759	402,655	8,500,415	8,612,000	111,585	514,240	0.87	446,435
2004/05	8,366,591	523,214	8,889,805	9,068,000	178,195	701,409	0.86	604,462
2005/06	8,784,776	85,243	8,870,019	8,902,000	31,981	117,224	0.86	100,554
2006/07	11,415,843	429,711	11,845,554	12,043,000	197,446	627,157	0.85	534,316
2007/08	16,681,573	768,834	17,450,407	17,834,000	383,593	1,152,427	0.85	980,225
2008/09	13,435,588	572,783	14,008,371	14,320,000	311,629	884,412	0.86	758,497
2009/10	12,224,238	1,194,178	13,418,416	14,010,000	591,584	1,785,762	0.87	1,554,143
2010/11	10,098,432	1,228,296	11,326,728	11,974,000	647,272	1,875,568	0.89	1,667,046
2011/12	11,880,952	1,242,301	13,123,252	13,946,000	822,748	2,065,049	0.90	1,854,297
2012/13	9,213,115	1,938,174	11,151,289	12,301,000	1,149,711	3,087,885	0.91	2,812,870
2013/14	10,442,792	2,028,914	12,471,707	14,462,000	1,990,293	4,019,207	0.91	3,660,698
2014/15	12,030,444	3,962,237	15,992,681	20,191,000	4,198,319	8,160,556	0.91	7,418,798
2015/16	14,781,683	6,806,745	21,588,428	27,000,000	5,411,572	12,218,317	0.91	11,071,602
2016/17	11,572,163	8,025,515	19,597,678	29,250,000	9,652,322	17,677,837	0.91	16,011,385
2017/18	5,333,338	11,185,260	16,518,598	29,500,000	12,981,402	24,166,662	0.90	21,841,755
Total	\$266,054,440	\$42,866,095	\$308,920,534	\$348,020,000	\$39,099,466	\$81,965,560		\$73,943,082

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit WC-Gov-Indem-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Indem-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-12

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	98.5%	252.0	99.0%	25.0% *	\$983,871	\$245,968	\$737,903	0.93	\$685,148
1999/00	228.0	98.3%	240.0	98.5%	11.7% *	14,622	1,717	12,905	0.93	11,975
2000/01	216.0	98.1%	228.0	98.3%	10.5% *	564,950	59,269	505,681	0.91	461,288
2001/02	204.0	97.8%	216.0	98.1%	13.6% *	848,217	115,032	733,185	0.90	658,030
2002/03	192.0	97.5%	204.0	97.8%	11.9% *	500,188	59,575	440,613	0.89	391,338
2003/04	180.0	97.3%	192.0	97.5%	10.6% *	514,240	54,584	459,656	0.88	403,718
2004/05	168.0	96.9%	180.0	97.3%	12.4% *	701,409	86,657	614,752	0.87	533,694
2005/06	156.0	96.4%	168.0	96.9%	13.3% *	117,224	15,614	101,610	0.86	87,566
2006/07	144.0	95.9%	156.0	96.4%	11.7% *	627,157	73,393	553,764	0.86	475,013
2007/08	132.0	95.2%	144.0	95.9%	14.0% *	1,152,427	161,260	991,167	0.85	844,440
2008/09	120.0	94.1%	132.0	95.2%	19.2% *	884,412	169,468	714,944	0.85	608,113
2009/10	108.0	92.3%	120.0	94.1%	23.8% *	1,785,762	425,801	1,359,961	0.86	1,166,342
2010/11	96.0	88.9%	108.0	92.3%	25.0% *	1,875,568	468,892	1,406,676	0.87	1,224,226
2011/12	84.0	84.7%	96.0	88.9%	25.0% *	2,065,049	516,262	1,548,787	0.89	1,376,596
2012/13	72.0	77.0%	84.0	84.7%	25.0% *	3,087,885	771,971	2,315,914	0.90	2,079,559
2013/14	60.0	69.3%	72.0	77.0%	24.9% *	4,019,207	999,374	3,019,833	0.91	2,750,879
2014/15	48.0	60.0%	60.0	69.3%	23.3% *	8,160,556	1,899,343	6,261,213	0.91	5,702,719
2015/16	36.0	49.0%	48.0	60.0%	21.6% *	12,218,317	2,641,351	9,576,966	0.91	8,706,463
2016/17	24.0	33.4%	36.0	49.0%	23.4% *	17,677,837	4,131,221	13,546,616	0.91	12,275,237
2017/18	12.0	14.9%	24.0	33.4%	21.8% *	24,166,662	5,274,730	18,891,932	0.91	17,111,030
2018/19	0.0	0.0%	12.0	14.9%	14.9% *	27,601,000	4,103,024	23,497,976	0.90	21,237,398
Total						\$109,566,560	\$22,274,506	\$87,292,054		\$78,790,772

* - Limited to a maximum of 25% per actuarial judgment.

(3) and (5) are from Exhibit WC-Gov-Indem-2.

(7) to 2017/18 is from Exhibit WC-Gov-Indem-11. The amount for 2018/19 is from Exhibit WC-Gov-Indem-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Indem-2.

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	99.0%	264.0	99.3%	25.0% *	\$737,903	\$184,476	\$553,427	0.93	\$514,345
1999/00	240.0	98.5%	252.0	99.0%	25.0% *	12,905	3,226	9,679	0.93	8,987
2000/01	228.0	98.3%	240.0	98.5%	11.7% *	505,681	59,387	446,294	0.93	414,121
2001/02	216.0	98.1%	228.0	98.3%	10.5% *	733,185	76,918	656,267	0.91	598,654
2002/03	204.0	97.8%	216.0	98.1%	13.6% *	440,613	59,754	380,859	0.90	341,819
2003/04	192.0	97.5%	204.0	97.8%	11.9% *	459,656	54,748	404,908	0.89	359,626
2004/05	180.0	97.3%	192.0	97.5%	10.6% *	614,752	65,253	549,499	0.88	482,628
2005/06	168.0	96.9%	180.0	97.3%	12.4% *	101,610	12,554	89,056	0.87	77,314
2006/07	156.0	96.4%	168.0	96.9%	13.3% *	553,764	73,760	480,004	0.86	413,659
2007/08	144.0	95.9%	156.0	96.4%	11.7% *	991,167	115,992	875,175	0.86	750,716
2008/09	132.0	95.2%	144.0	95.9%	14.0% *	714,944	100,042	614,902	0.85	523,875
2009/10	120.0	94.1%	132.0	95.2%	19.2% *	1,359,961	260,591	1,099,370	0.85	935,097
2010/11	108.0	92.3%	120.0	94.1%	23.8% *	1,406,676	335,411	1,071,265	0.86	918,748
2011/12	96.0	88.9%	108.0	92.3%	25.0% *	1,548,787	387,197	1,161,590	0.87	1,010,928
2012/13	84.0	84.7%	96.0	88.9%	25.0% *	2,315,914	578,979	1,736,935	0.89	1,543,826
2013/14	72.0	77.0%	84.0	84.7%	25.0% *	3,019,833	754,958	2,264,875	0.90	2,033,729
2014/15	60.0	69.3%	72.0	77.0%	24.9% *	6,261,213	1,556,848	4,704,365	0.91	4,285,382
2015/16	48.0	60.0%	60.0	69.3%	23.3% *	9,576,966	2,229,007	7,347,959	0.91	6,692,528
2016/17	36.0	49.0%	48.0	60.0%	21.6% *	13,546,616	2,928,503	10,618,113	0.91	9,652,974
2017/18	24.0	33.4%	36.0	49.0%	23.4% *	18,891,932	4,414,949	14,476,983	0.91	13,118,287
2018/19	12.0	14.9%	24.0	33.4%	21.8% *	23,497,976	5,128,779	18,369,197	0.91	16,637,572
2019/20	0.0	0.0%	12.0	14.9%	14.9% *	28,015,000	4,164,567	23,850,433	0.90	21,555,948
Total						\$115,307,054	\$23,545,899	\$91,761,155		\$82,870,763

* - Limited to a maximum of 25% per actuarial judgment.

(3) and (5) are from Exhibit WC-Gov-Indem-2.

(7) to 2018/19 is from Exhibit WC-Gov-Indem-12, (9). The amount for 2019/20 is from Exhibit WC-Gov-Indem-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Indem-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-14

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	99.3%	276.0	99.5%	25.0% *	\$553,427	\$138,357	\$415,070	0.93	\$386,293
1999/00	252.0	99.0%	264.0	99.3%	25.0% *	9,679	2,420	7,259	0.93	6,746
2000/01	240.0	98.5%	252.0	99.0%	25.0% *	446,294	111,574	334,720	0.93	310,790
2001/02	228.0	98.3%	240.0	98.5%	11.7% *	656,267	77,072	579,195	0.93	537,441
2002/03	216.0	98.1%	228.0	98.3%	10.5% *	380,859	39,956	340,903	0.91	310,975
2003/04	204.0	97.8%	216.0	98.1%	13.6% *	404,908	54,912	349,996	0.90	314,120
2004/05	192.0	97.5%	204.0	97.8%	11.9% *	549,499	65,449	484,050	0.89	429,917
2005/06	180.0	97.3%	192.0	97.5%	10.6% *	89,056	9,453	79,603	0.88	69,916
2006/07	168.0	96.9%	180.0	97.3%	12.4% *	480,004	59,303	420,701	0.87	365,230
2007/08	156.0	96.4%	168.0	96.9%	13.3% *	875,175	116,572	758,603	0.86	653,751
2008/09	144.0	95.9%	156.0	96.4%	11.7% *	614,902	71,959	542,943	0.86	465,731
2009/10	132.0	95.2%	144.0	95.9%	14.0% *	1,099,370	153,835	945,535	0.85	805,563
2010/11	120.0	94.1%	132.0	95.2%	19.2% *	1,071,265	205,272	865,993	0.85	736,592
2011/12	108.0	92.3%	120.0	94.1%	23.8% *	1,161,590	276,972	884,618	0.86	758,674
2012/13	96.0	88.9%	108.0	92.3%	25.0% *	1,736,935	434,234	1,302,701	0.87	1,133,737
2013/14	84.0	84.7%	96.0	88.9%	25.0% *	2,264,875	566,219	1,698,656	0.89	1,509,803
2014/15	72.0	77.0%	84.0	84.7%	25.0% *	4,704,365	1,176,091	3,528,274	0.90	3,168,190
2015/16	60.0	69.3%	72.0	77.0%	24.9% *	7,347,959	1,827,067	5,520,892	0.91	5,029,187
2016/17	48.0	60.0%	60.0	69.3%	23.3% *	10,618,113	2,471,331	8,146,782	0.91	7,420,097
2017/18	36.0	49.0%	48.0	60.0%	21.6% *	14,476,983	3,129,629	11,347,354	0.91	10,315,930
2018/19	24.0	33.4%	36.0	49.0%	23.4% *	18,369,197	4,292,788	14,076,409	0.91	12,755,308
2019/20	12.0	14.9%	24.0	33.4%	21.8% *	23,850,433	5,205,708	18,644,725	0.91	16,887,126
2020/21	0.0	0.0%	12.0	14.9%	14.9% *	28,435,000	4,227,002	24,207,998	0.90	21,879,114
Total						\$120,196,155	\$24,713,175	\$95,482,980		\$86,250,231

* - Limited to a maximum of 25% per actuarial judgment.

(3) and (5) are from Exhibit WC-Gov-Indem-2.

(7) to 2019/20 is from Exhibit WC-Gov-Indem-13. (9). The amount for 2020/21 is from Exhibit WC-Gov-Indem-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Indem-2.

Loss Rate and Severity Trend

I. Benefit Level Changes

Effective Date (1)	Benefit Level Change (2)	Cumulative Benefit Level Change (3)
01/15/09	1.002	1.002
07/01/09	1.001	1.003
07/15/09	1.002	1.005
01/15/10	1.004	1.009
07/01/10	1.001	1.009
07/15/10	1.002	1.012
06/28/11	0.989	1.001
07/01/11	1.001	1.002
09/01/11	0.983	0.984
01/15/13	1.001	0.985
07/15/13	1.001	0.986
01/15/14	1.001	0.987
01/15/15	1.002	0.989
07/01/15	1.002	0.991
07/15/15	1.002	0.993
01/15/16	1.002	0.995
07/01/16	1.002	0.997
07/15/16	1.002	0.999

II. Loss Rate and Severity Trend

Claim Period (1)	Benefit Trend (2018/19 = 1.000) (2)	Residual Trend (2018/19 = 1.000) (3)	Retention Index (2018/19 = 1.000) (4)	Loss Rate Trend (2018/19 = 1.000) (2)X(3)X(4) (5)	Wage Trend (2018/19 = 1.000) (6)	Severity Trend (2018/19 = 1.000) (5)X(6) (7)
2008/09	0.997	1.161	1.000	1.157	1.344	1.555
2009/10	0.991	1.143	1.000	1.133	1.305	1.479
2010/11	0.997	1.126	1.000	1.124	1.267	1.423
2011/12	1.016	1.110	1.000	1.128	1.230	1.387
2012/13	1.015	1.093	1.000	1.110	1.194	1.325
2013/14	1.013	1.077	1.000	1.092	1.159	1.265
2014/15	1.010	1.061	1.000	1.072	1.126	1.206
2015/16	1.004	1.046	1.000	1.049	1.093	1.147
2016/17	1.001	1.030	1.000	1.031	1.061	1.094
2017/18	1.000	1.015	1.000	1.015	1.030	1.045
2018/19	1.000	1.000	1.000	1.000	1.000	1.000
2019/20	1.000	0.985	1.000	0.985	0.971	0.957

Section I, (2) and (3) reflect data published by the NCCI.

Section II, (2) is based on Section I, (2).

Section II, (3) is based on 1.5% trend per actuarial judgment.

Section II, (4) is based on industry statistics and actuarial judgment.

Section II, (6) is based on 3% trend.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (INDEMNITY)

Exhibit WC-Gov-Indem-16

List of Large Claims
Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
20020274	01/24/02	2001/02	\$9,500,000	\$413,698	\$691,687	\$1,105,385
20071070	08/01/07	2006/07	Unlimited	1,531,623	0	1,531,623
20090036	07/01/08	2007/08	Unlimited	2,777,098	0	2,777,098
20090386	07/01/08	2007/08	Unlimited	1,193,808	0	1,193,808
20081090	08/01/08	2007/08	Unlimited	1,219,594	0	1,219,594

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	16,423	38	57	24	72	20	16,634		
0.01 - 5,000	7,930	502	495	717	830	667	11,141	11,141	63.7%
5,000 - 10,000	1,336	30	23	43	30	42	1,504	12,645	72.3%
10,000 - 25,000	1,564	70	53	87	62	75	1,911	14,556	83.3%
25,000 - 50,000	907	45	51	94	88	149	1,334	15,890	90.9%
50,000 - 100,000	563	44	50	75	100	106	938	16,828	96.3%
100,000 - 250,000	302	25	40	63	49	7	486	17,314	99.1%
250,000 - 500,000	105	6	7	2	3	3	126	17,440	99.8%
500,000 - 750,000	24	0	1	2	0	0	27	17,467	99.9%
750,000 - 1,000,000	6	0	0	0	0	0	6	17,473	100.0%
Over 1,000,000	5	0	0	0	0	0	5	17,478	100.0%
Total	29,165	760	777	1,107	1,234	1,069	34,112	17,478	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	7,227,269	244,195	205,546	283,805	352,558	410,060	8,723,434	8,723,434	2.8%
5,000 - 10,000	9,839,979	213,066	172,780	318,230	212,566	311,148	11,067,770	19,791,205	6.4%
10,000 - 25,000	25,418,644	1,164,312	924,487	1,541,527	1,051,486	1,337,856	31,438,311	51,229,516	16.6%
25,000 - 50,000	31,900,121	1,601,853	1,941,513	3,272,826	3,308,198	5,601,796	47,626,307	98,855,823	32.0%
50,000 - 100,000	38,812,237	3,022,835	3,551,649	5,411,417	7,353,196	7,100,949	65,252,283	164,108,106	53.1%
100,000 - 250,000	47,053,070	4,169,251	6,412,171	8,945,834	6,420,047	779,010	73,779,382	237,887,488	77.0%
250,000 - 500,000	35,802,558	2,056,195	2,177,908	599,788	899,627	977,778	42,513,855	280,401,343	90.8%
500,000 - 750,000	13,836,478	0	606,626	1,215,000	0	0	15,658,104	296,059,447	95.8%
750,000 - 1,000,000	5,035,639	0	0	0	0	0	5,035,639	301,095,086	97.5%
Over 1,000,000	7,827,508	0	0	0	0	0	7,827,508	308,922,594	100.0%
Total	\$222,753,504	\$12,471,707	\$15,992,681	\$21,588,428	\$19,597,678	\$16,518,598	\$308,922,594	\$308,922,594	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-1 (page 1)

Data Summary as of November 30, 2018
Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	15,168	11	\$24,734,249	\$210,260	\$24,944,508
1999/00	Unlimited	None	228.0	Not Provided	1,134	2	2,589,753	1,275	2,591,028
2000/01	9,500,000	None	216.0	719,952	1,183	3	4,443,437	18,476	4,461,913
2001/02	9,500,000	None	204.0	752,457	1,161	1	4,016,315	24,098	4,040,413
2002/03	9,500,000	None	192.0	779,098	1,223	2	4,100,912	29,671	4,130,583
2003/04	Unlimited	None	180.0	810,182	1,218	4	3,691,595	116,002	3,807,597
2004/05	Unlimited	None	168.0	832,363	1,318	5	11,641,772	23,885	11,665,657
2005/06	Unlimited	None	156.0	826,479	1,159	7	3,983,449	14,648	3,998,097
2006/07	Unlimited	None	144.0	859,906	903	6	4,655,833	95,200	4,751,033
2007/08	Unlimited	None	132.0	914,260	777	10	6,060,417	220,886	6,281,303
2008/09	Unlimited	None	120.0	942,707	767	12	6,397,462	175,720	6,573,182
2009/10	Unlimited	None	108.0	998,250	862	32	6,238,371	281,275	6,519,645
2010/11	Unlimited	None	96.0	928,082	789	18	4,650,918	518,471	5,169,389
2011/12	Unlimited	None	84.0	899,082	783	37	4,386,465	382,031	4,768,496
2012/13	Unlimited	None	72.0	949,338	720	46	3,939,281	622,000	4,561,281
2013/14	Unlimited	None	60.0	988,081	760	63	4,433,693	1,108,045	5,541,738
2014/15	Unlimited	None	48.0	998,567	777	90	4,589,879	1,716,442	6,306,321
2015/16	Unlimited	None	36.0	1,053,931	1,107	206	7,345,871	3,186,750	10,532,621
2016/17	Unlimited	None	24.0	1,075,248	1,234	258	5,858,091	4,777,056	10,635,147
2017/18	Unlimited	None	12.0	1,006,546	1,069	569	2,286,033	7,586,749	9,872,782
Total					34,112	1,382	\$120,043,794	\$21,108,941	\$141,152,735

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/77	Unlimited
12/01/00	9,500,000
12/01/03	Unlimited

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Data Summary as of November 30, 2018
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	15,168	11	\$24,734,249	\$210,260	\$24,944,508
1999/00	Unlimited	None	228.0	Not Provided	1,134	2	2,589,753	1,275	2,591,028
2000/01	Unlimited	None	216.0	719,952	1,183	3	4,443,437	18,476	4,461,913
2001/02	Unlimited	None	204.0	752,457	1,161	1	4,016,315	24,098	4,040,413
2002/03	Unlimited	None	192.0	779,098	1,223	2	4,100,912	29,671	4,130,583
2003/04	Unlimited	None	180.0	810,182	1,218	4	3,691,595	116,002	3,807,597
2004/05	Unlimited	None	168.0	832,363	1,318	5	11,641,772	23,885	11,665,657
2005/06	Unlimited	None	156.0	826,479	1,159	7	3,983,449	14,648	3,998,097
2006/07	Unlimited	None	144.0	859,906	903	6	4,655,833	95,200	4,751,033
2007/08	Unlimited	None	132.0	914,260	777	10	6,060,417	220,886	6,281,303
2008/09	Unlimited	None	120.0	942,707	767	12	6,397,462	175,720	6,573,182
2009/10	Unlimited	None	108.0	998,250	862	32	6,238,371	281,275	6,519,645
2010/11	Unlimited	None	96.0	928,082	789	18	4,650,918	518,471	5,169,389
2011/12	Unlimited	None	84.0	899,082	783	37	4,386,465	382,031	4,768,496
2012/13	Unlimited	None	72.0	949,338	720	46	3,939,281	622,000	4,561,281
2013/14	Unlimited	None	60.0	988,081	760	63	4,433,693	1,108,045	5,541,738
2014/15	Unlimited	None	48.0	998,567	777	90	4,589,879	1,716,442	6,306,321
2015/16	Unlimited	None	36.0	1,053,931	1,107	206	7,345,871	3,186,750	10,532,621
2016/17	Unlimited	None	24.0	1,075,248	1,234	258	5,858,091	4,777,056	10,635,147
2017/18	Unlimited	None	12.0	1,006,546	1,069	569	2,286,033	7,586,749	9,872,782
Total					34,112	1,382	\$120,043,794	\$21,108,941	\$141,152,735

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Data Summary as of November 30, 2018
Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Payroll (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	15,168	11	\$25,108,896	\$210,260	\$25,319,156
1999/00	Unlimited	None	228.0	Not Provided	1,134	2	2,605,405	1,275	2,606,680
2000/01	Unlimited	None	216.0	719,952	1,183	3	4,456,959	18,476	4,475,435
2001/02	Unlimited	None	204.0	752,457	1,161	1	4,108,700	24,098	4,132,798
2002/03	Unlimited	None	192.0	779,098	1,223	2	4,119,835	29,671	4,149,506
2003/04	Unlimited	None	180.0	810,182	1,218	4	3,783,479	116,002	3,899,482
2004/05	Unlimited	None	168.0	832,363	1,318	5	11,679,387	23,885	11,703,272
2005/06	Unlimited	None	156.0	826,479	1,159	7	3,985,297	14,648	3,999,945
2006/07	Unlimited	None	144.0	859,906	903	6	4,701,820	95,200	4,797,020
2007/08	Unlimited	None	132.0	914,260	777	10	6,065,312	220,886	6,286,198
2008/09	Unlimited	None	120.0	942,707	767	12	6,399,062	175,720	6,574,781
2009/10	Unlimited	None	108.0	998,250	862	32	6,238,568	281,275	6,519,843
2010/11	Unlimited	None	96.0	928,082	789	18	4,651,359	518,471	5,169,831
2011/12	Unlimited	None	84.0	899,082	783	37	4,453,931	382,031	4,835,962
2012/13	Unlimited	None	72.0	949,338	720	46	3,944,692	622,000	4,566,692
2013/14	Unlimited	None	60.0	988,081	760	63	4,442,030	1,108,045	5,550,075
2014/15	Unlimited	None	48.0	998,567	777	90	4,622,013	1,716,442	6,338,455
2015/16	Unlimited	None	36.0	1,053,931	1,107	206	7,365,712	3,186,750	10,552,462
2016/17	Unlimited	None	24.0	1,075,248	1,234	258	5,871,923	4,777,056	10,648,979
2017/18	Unlimited	None	12.0	1,006,546	1,069	569	2,295,991	7,586,749	9,882,740
Total					34,112	1,382	\$120,900,373	\$21,108,941	\$142,009,314

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	99.9%	100.0%	100.0%
348.0	99.9%	100.0%	100.0%
336.0	99.8%	100.0%	100.0%
324.0	99.8%	100.0%	100.0%
312.0	99.7%	100.0%	100.0%
300.0	99.6%	100.0%	100.0%
288.0	99.4%	100.0%	100.0%
276.0	99.1%	100.0%	100.0%
264.0	98.7%	100.0%	100.0%
252.0	98.2%	100.0%	100.0%
240.0	97.4%	100.0%	100.0%
228.0	97.4%	100.0%	100.0%
216.0	97.4%	100.0%	100.0%
204.0	97.3%	100.0%	100.0%
192.0	97.2%	99.9%	100.0%
180.0	97.1%	99.8%	100.0%
168.0	97.0%	99.7%	100.0%
156.0	96.8%	99.6%	100.0%
144.0	96.5%	99.5%	100.0%
132.0	96.2%	99.4%	100.0%
120.0	95.7%	99.2%	100.0%
108.0	95.0%	99.0%	100.0%
96.0	93.7%	98.7%	100.0%
84.0	91.8%	98.4%	99.9%
72.0	89.2%	97.4%	99.8%
60.0	85.7%	96.0%	99.7%
48.0	80.1%	94.1%	99.6%
36.0	71.5%	89.6%	99.2%
24.0	57.2%	80.0%	98.8%
12.0	22.0%	53.4%	95.9%

(2) is from Exhibit WC-Gov-Med-2 (page 2).

(3) is from Exhibit WC-Gov-Med-2 (page 3).

(4) is from Exhibit WC-Gov-Med-2 (page 4).

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)
Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

I. Historical Limited Paid Losses (\$000)

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00																					
2000/01																					
2001/02					4,276	4,107	4,366	2,868	2,873	2,875	2,870	\$28,149	\$28,172	\$28,233	\$28,322	\$28,328	\$28,347	\$28,229	\$28,122	\$25,109	
2002/03				3,962	4,078	4,349	4,428	4,597	4,609	4,628	4,665	2,879	2,879	2,873	2,880	2,886	2,886	2,605	2,605	4,457	
2003/04				3,503	3,746	3,978	4,303	4,479	4,568	4,533	4,537	4,538	4,684	4,762	4,836	4,481	4,481	4,463	4,457		
2004/05			3,311	3,522	3,746	3,978	4,303	4,479	4,568	4,533	4,537	4,538	4,684	4,762	4,836	4,481	4,481	4,463	4,457		
2005/06	1,556	5,701	7,315	8,522	9,779	10,801	12,081	12,098	12,107	12,140	12,167	11,670	11,677	11,679	3,753	3,783					
2006/07	1,769	3,288	3,886	3,990	4,074	4,060	4,158	4,166	4,298	4,314	3,984	3,985	3,985	3,985	4,119	4,119	4,109				
2007/08	1,529	4,502	4,388	4,717	5,071	5,140	5,263	5,287	5,327	4,689	4,701	4,702	4,702	4,702	4,702	4,702					
2008/09	1,517	3,587	4,561	5,257	5,476	5,631	5,659	5,659	5,659	5,659	5,659	5,659	5,659	5,659	5,659	5,659					
2009/10	1,420	3,831	4,162	4,507	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771					
2010/11	1,363	3,204	4,162	4,507	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771					
2011/12	985	3,192	4,280	4,798	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771					
2012/13	1,044	3,263	4,045	4,589	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771	4,771					
2013/14	1,530	4,276	4,077	4,381	4,442	4,442	4,442	4,442	4,442	4,442	4,442	4,442	4,442	4,442	4,442	4,442					
2014/15	1,801	3,400	4,207	4,622																	
2015/16	2,195	6,335	7,366																		
2016/17	2,613	5,872																			
2017/18	2,296																				

II. Limited Paid Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-UIT
to 1998/99																				
1999/00																				
2000/01																				
2001/02					1,017	1,063	1,007	1,002	1,001	1,001	1,000	1,001	1,002	1,003	1,000	1,001	0,996	0,996	0,893	
2002/03				1,032	1,055	1,030	1,025	1,011	1,004	1,009	1,003	1,001	1,017	1,026	0,911	1,000	1,001	1,000		
2003/04				1,069	1,062	1,014	1,005	1,012	1,005	1,004	1,000	1,000	1,000	0,904	1,000	1,000	1,000	1,002		
2004/05	1,058	1,165	1,147	1,105	1,105	1,119	1,001	1,001	1,001	1,003	1,002	1,000	1,000	1,008	1,008	1,001	1,000	1,000		
2005/06	2,113	1,182	1,027	0,996	1,024	1,024	1,002	1,032	1,004	1,004	1,002	1,000	1,000	1,000	1,000	1,000	1,000	1,000		
2006/07	2,103	1,166	1,075	1,014	1,014	1,047	1,005	1,008	1,008	1,002	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000		
2007/08	2,945	1,245	1,235	1,248	1,126	1,024	1,005	1,008	1,008	1,002	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000		
2008/09	2,364	1,272	1,153	1,042	1,070	1,090	1,000	1,008	1,008	1,002	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000		
2009/10	2,698	1,309	1,123	1,078	1,074	1,090	1,000	1,008	1,008	1,002	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000		
2010/11	2,317	1,299	1,083	1,059	1,028	1,021	1,018	1,006	1,006	1,002	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000		
2011/12	3,242	1,341	1,121	1,078	1,019	1,036														
2012/13	3,126	1,240	1,087	1,078	1,019															
2013/14	2,795	0,954	1,075	1,014																
2014/15	1,887	1,237	1,099																	
2015/16	2,886	1,163																		
2016/17	2,247																			
Average All	2,560	1,224	1,092	1,061	1,042	1,036	1,008	0,972	0,992	0,996	0,996	0,988	0,989	0,991	0,983	0,976	0,999	0,998	0,893	
Wtd 3	2,361	1,117	1,021	0,978	0,992	0,991	0,990	0,913	0,975	0,985	0,976	0,980	0,978	0,968	0,967	0,976	0,997	0,998		
Last 5	2,340	1,116	1,020	0,988	0,995	1,000	0,993	0,869	0,971	0,976	0,987	0,967	0,968	0,971	0,970	0,966	0,999			
Last 5 x-til low	2,643	1,213	1,085	1,050	1,039	1,035	1,011	1,006	1,005	1,004	1,000	1,000	1,000	1,003	1,000	1,000	1,000	1,000	1,000	
Similar	2,323	1,319	1,165	1,097	1,057	1,036	1,022	1,014	1,010	1,008	1,005	1,005	1,003	1,003	1,002	1,002	1,002	1,002	1,002	1,027
Previous	2,800	1,270	1,125	1,073	1,043	1,027	1,020	1,014	1,008	1,005	1,003	1,003	1,002	1,001	1,001	1,001	1,001	1,000	1,000	
Selected	2,600	1,250	1,120	1,070	1,040	1,030	1,020	1,014	1,008	1,005	1,003	1,003	1,002	1,001	1,001	1,001	1,001	1,000	1,000	1,027
Cumulative	4,544	1,748	1,398	1,248	1,167	1,122	1,089	1,068	1,053	1,045	1,039	1,036	1,033	1,031	1,030	1,029	1,028	1,027	1,027	1,027
Percent	22.0%	57.2%	71.5%	80.1%	85.7%	89.2%	91.8%	93.7%	95.0%	95.7%	96.2%	96.5%	96.8%	97.0%	97.1%	97.2%	97.3%	97.4%	97.4%	97.4%

The County changed data systems during 2016, resulting in a shift between indemnity and medical. The amounts in the 2016 diagonal are not consistent with prior diagonals.

Amounts are limited (net of excess insurance) and gross of recoveries.

Data was provided by the County.

COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Historical Limited Reported Incurred Losses (\$000) and Limited Reported Incurred Loss Development

Claim Period	12	24	36	48	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-UIT
to 1998/99																				
1999/00					6,009	6,126	5,384	5,401	5,386	2,954	2,954	\$0,714	\$0,179	\$29,199	\$28,590	\$28,593	\$28,526	\$28,408	\$28,231	\$25,319
2000/01					5,810	5,960	6,320	6,432	4,762	4,769	4,755	2,944	2,944	2,944	2,945	2,951	2,607	2,607	2,607	
2001/02					5,699	6,088	5,941	4,783	4,931	4,638	4,642	4,763	4,827	4,872	4,872	4,553	4,479	4,479	4,475	
2002/03					5,699	4,179	4,710	4,581	4,529	4,530	4,547	4,547	4,546	4,547	4,134	4,133	4,133	4,133		
2003/04					10,549	11,302	12,173	12,186	12,187	12,166	12,189	11,693	11,693	11,698	11,703	11,703	11,703	11,703		
2004/05	8,064		5,366		10,932	4,069	4,172	4,180	4,357	4,402	4,055	4,002	4,000	4,000	4,000	4,000	4,000			
2005/06	5,751		6,271		5,213	5,235	5,337	5,353	5,469	4,796	4,821	4,797	4,797	4,797	4,797	4,797	4,797			
2006/07	3,884	6,094	4,949		7,132	8,868	9,869	10,291	10,662	6,216	6,265	6,286	6,286	6,286	6,286	6,286	6,286			
2007/08	4,148	5,959	6,910		5,619	5,666	6,344	6,344	6,344	6,344	6,344	6,344	6,344	6,344	6,344	6,344	6,344			
2008/09	3,195	4,643	4,930		5,619	5,666	6,344	6,344	6,344	6,344	6,344	6,344	6,344	6,344	6,344	6,344	6,344			
2009/10	3,195	4,218	5,924		5,924	5,924	5,924	5,924	5,924	5,924	5,924	5,924	5,924	5,924	5,924	5,924	5,924			
2010/11	2,330	3,673	4,360		4,739	5,288	5,288	5,288	5,288	5,288	5,288	5,288	5,288	5,288	5,288	5,288	5,288			
2011/12	2,234	3,794	4,744		4,728	4,728	4,728	4,728	4,728	4,728	4,728	4,728	4,728	4,728	4,728	4,728	4,728			
2012/13	2,791	4,957	5,613		4,510	4,510	4,510	4,510	4,510	4,510	4,510	4,510	4,510	4,510	4,510	4,510	4,510			
2013/14	4,820	7,621	5,891		5,891	5,891	5,891	5,891	5,891	5,891	5,891	5,891	5,891	5,891	5,891	5,891	5,891			
2014/15	8,228	6,243	6,556		6,338	6,338	6,338	6,338	6,338	6,338	6,338	6,338	6,338	6,338	6,338	6,338	6,338			
2015/16	11,180				5,550	5,550	5,550	5,550	5,550	5,550	5,550	5,550	5,550	5,550	5,550	5,550	5,550			
2016/17	10,950	10,649																		
2017/18	9,883																			

II. Limited Reported Incurred Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-UIT
to 1998/99																				
1999/00					0.995	1.032	1.003	0.997	0.546	1.000	0.997	0.953	0.966	0.979	1.000	0.998	0.996	0.994	0.897	
2000/01					1.048	0.993	0.905	0.744	0.997	0.997	1.002	1.013	1.000	1.000	1.002	0.984	1.000	1.000		
2001/02					0.995	0.774	0.973	0.989	1.000	1.000	0.982	0.997	1.000	1.000	0.908	0.984	0.999	1.000		
2002/03					1.005	1.004	0.989	0.989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2003/04					1.022	1.077	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2004/05	1.178		1.151		0.965	1.071	1.001	1.000	0.998	1.002	1.010	0.999	1.000	1.000	1.000	1.000	1.000			
2005/06	1.463	1.090	0.967		0.989	1.025	1.002	1.002	1.000	1.000	0.995	0.999	1.000	1.000	1.000	1.000	1.000			
2006/07	1.554	0.820	1.045		1.004	1.043	1.036	1.036	1.008	1.003	1.008	1.008	1.008	1.008	1.008	1.008	1.008			
2007/08	1.437	1.160	1.032		1.132	1.143	1.143	1.143	1.098	1.098	1.098	1.098	1.098	1.098	1.098	1.098	1.098			
2008/09	1.453	1.062	1.140		1.079	1.143	1.143	1.143	1.098	1.098	1.098	1.098	1.098	1.098	1.098	1.098	1.098			
2009/10	1.319	1.255	1.120		1.134	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942			
2010/11	1.577	1.187	1.116		1.077	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983			
2011/12	1.698	1.250	1.232		1.048	0.966	0.966	0.966	0.966	0.966	0.966	0.966	0.966	0.966	0.966	0.966	0.966			
2012/13	1.776	1.132	0.803		0.941															
2013/14	1.592	0.768	1.001																	
2014/15	0.759	1.050	0.967																	
2015/16	1.366	0.944																		
2016/17	0.973																			
2017/18																				

Average All
Wtd 3
Last 3
Last 5
x-Hi,low

1.414	1.075	1.024	1.021	1.002	1.010	0.981	0.946	0.934	0.994	0.994	0.995	0.985	0.984	0.989	0.982	0.966	0.998	0.997	0.897	
1.026	0.917	0.927	0.927	0.963	0.995	0.979	0.911	0.855	0.981	0.981	0.873	0.975	0.979	0.973	0.965	0.964	0.997	0.997	1.000	1.000
1.032	0.921	0.924	0.936	0.965	1.004	0.980	0.857	0.852	0.977	0.977	0.980	0.961	0.970	0.976	0.968	0.956	0.998	0.997	1.000	1.000
1.310	1.042	1.018	1.020	1.021	1.038	0.989	1.003	0.952	1.003	1.003	0.994	0.989	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000
1.418	1.113	1.049	1.020	1.009	1.002	1.001	1.001	1.002	1.002	1.001	1.000	1.001	1.001	1.000	1.001	1.001	1.000	1.001	1.012	1.000
1.530	1.150	1.070	1.025	1.017	1.010	1.003	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000
1.500	1.120	1.050	1.020	1.015	1.010	1.003	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000
1.874	1.250	1.116	1.063	1.042	1.026	1.016	1.013	1.010	1.010	1.008	1.006	1.005	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000
53.4%	80.0%	89.6%	94.1%	96.0%	97.4%	98.4%	98.7%	99.0%	99.0%	99.2%	99.4%	99.5%	99.6%	99.7%	99.8%	99.9%	100.0%	100.0%	100.0%	100.0%

The County changed data systems during 2016, resulting in a shift between indemnity and medical. The amounts in the 2016 diagonal are not consistent with prior diagonals.

Amounts are limited (net of excess insurance) and gross of recoveries.

Data was provided by the County.

COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)
 Historical Reported Claims and Reported Claim Development

I. Historical Reported Claims	Historical Reported Claims and Reported Claim Development																						
	Claim Period	12	24	Months of Development:				60	72	84	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult
				36	48	60	72	84	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult		
to 1998/99																							
1999/00																							
2000/01																							
2001/02																							
2002/03																							
2003/04																							
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2007/08																							
2008/09																							
2009/10																							
2010/11																							
2011/12																							
2012/13																							
2013/14																							
2014/15																							
2015/16																							
2016/17																							
2017/18																							

II. Reported Claim Development	Reported Claim Development																						
	Claim Period	12-24	24-36	Months of Development:				60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult
				36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult		
to 1998/99																							
1999/00																							
2000/01																							
2001/02																							
2002/03																							
2003/04																							
2004/05																							
2005/06																							
2006/07																							
2007/08																							
2008/09																							
2009/10																							
2010/11																							
2011/12																							
2012/13																							
2013/14																							
2014/15																							
2015/16																							
2016/17																							
2017/18																							

Average	Average																								
	All	Wtd 3	Last 3	Last 5	x-Follow	Similar	Previous	Selected	Cumulative	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
All	1,028	1,013	1,019	1,010	1,007	1,007	1,005	1,001	1,006	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	
Wtd 3	1,040	1,004	1,004	1,005	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Last 3	1,036	1,004	1,004	1,005	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Last 5	1,024	1,004	1,004	1,005	1,001	1,000	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
x-Follow																									
Similar	1,131	1,019	1,019	1,010	1,007	1,007	1,005	1,001	1,006	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001	
Previous	1,025	1,004	1,004	1,004	1,001	1,001	1,001	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Selected	1,030	1,004	1,004	1,004	1,001	1,001	1,001	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Cumulative	1,042	1,012	1,008	1,008	1,004	1,003	1,002	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Percent	95.9%	98.8%	98.8%	98.2%	99.6%	99.7%	99.8%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Data was provided by the County.

COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)
 Historical Ratio of Limited Paid Losses and Limited Reported Incurred Losses

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
to 1998/99																				
1999/00																				
2000/01							62.0%	53.1%	53.4%	97.3%	97.5%	91.6%	93.4%	96.7%	99.1%	99.1%	99.4%	99.4%	99.6%	99.2%
2001/02					71.2%	72.7%	74.5%	70.9%	64.4%	97.0%	96.1%	97.8%	97.8%	97.8%	97.8%	97.8%	99.9%	100.0%	100.0%	
2002/03					70.2%	70.7%	84.1%	84.9%	53.0%	97.7%	97.7%	96.2%	97.0%	97.7%	97.4%	97.8%	99.4%	99.4%	99.6%	
2003/04					65.7%	95.2%	96.1%	97.8%	93.5%	100.0%	100.0%	95.5%	99.9%	99.9%	99.4%	99.4%	99.4%	99.4%	99.6%	
2004/05			61.7%	68.3%	92.7%	95.6%	99.2%	97.6%	97.6%	99.0%	99.7%	95.6%	100.0%	99.6%	99.3%	99.3%	99.4%	99.4%	99.6%	
2005/06	35.6%	70.7%	77.0%	78.0%	95.6%	99.8%	99.7%	99.3%	98.3%	98.0%	98.8%	98.6%	99.8%	99.8%	99.3%	99.3%	99.4%	99.4%	99.6%	
2006/07	46.1%	62.3%	88.7%	91.2%	97.3%	98.2%	98.6%	98.8%	97.4%	98.0%	97.5%	98.0%	99.6%	99.8%	97.0%	97.0%	97.3%	97.3%	97.4%	
2007/08	36.9%	75.5%	81.1%	97.0%	97.3%	98.5%	98.9%	97.7%	95.6%	95.8%	96.5%	96.5%	98.9%	98.9%	98.3%	98.3%	98.3%	98.3%	98.3%	
2008/09	47.5%	77.2%	92.5%	93.6%	96.6%	98.2%	98.3%	91.3%	92.5%	97.3%	97.3%	97.3%	98.9%	98.9%	98.3%	98.3%	98.3%	98.3%	98.3%	
2009/10	44.4%	90.8%	94.8%	95.1%	95.7%	90.7%	90.7%	91.7%	92.5%	97.3%	97.3%	97.3%	98.9%	98.9%	98.3%	98.3%	98.3%	98.3%	98.3%	
2010/11	59.4%	87.2%	95.5%	95.1%	90.2%	92.9%	88.0%	90.0%	95.7%	97.3%	97.3%	97.3%	98.9%	98.9%	98.3%	98.3%	98.3%	98.3%	98.3%	
2011/12	44.1%	84.1%	90.2%	82.1%	87.3%	88.2%	88.0%	90.0%	95.7%	97.3%	97.3%	97.3%	98.9%	98.9%	98.3%	98.3%	98.3%	98.3%	98.3%	
2012/13	37.4%	65.8%	72.1%	79.6%	81.9%	86.4%	92.1%	90.0%	95.7%	97.3%	97.3%	97.3%	98.9%	98.9%	98.3%	98.3%	98.3%	98.3%	98.3%	
2013/14	31.7%	55.7%	69.2%	74.3%	80.0%															
2014/15	21.9%	54.5%	64.2%	72.9%																
2015/16	26.8%	56.7%	68.8%																	
2016/17	23.9%	55.1%																		
2017/18	23.2%																			
Average																				
All	37.1%	68.7%	78.4%	83.4%	86.3%	88.6%	88.1%	90.3%	92.6%	98.0%	98.2%	97.8%	98.1%	98.4%	98.3%	98.7%	99.5%	99.6%	99.8%	99.2%
Last 3	24.6%	55.4%	67.7%	75.6%	83.1%	89.2%	90.2%	91.1%	94.6%	97.0%	97.4%	99.1%	99.0%	99.0%	98.6%	98.8%	99.6%	99.6%	99.6%	99.2%
Last 5	24.6%	55.8%	70.4%	78.6%	86.5%	90.6%	91.4%	93.7%	96.2%	97.8%	98.2%	99.1%	99.8%	99.0%	98.2%	98.7%	99.6%	99.6%	99.6%	99.2%
x-high																				
Implicit	41.3%	71.5%	79.6%	85.1%	89.3%	91.5%	93.3%	94.9%	95.9%	96.5%	96.8%	97.0%	97.2%	97.3%	97.3%	97.3%	97.3%	97.4%	97.4%	97.4%



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-3

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$24,734,249	97.4%	\$25,402,073
1999/00	228.0	2,589,753	97.4%	2,659,677
2000/01	216.0	4,443,437	97.4%	4,563,410
2001/02	204.0	4,016,315	97.3%	4,128,880
2002/03	192.0	4,100,912	97.2%	4,220,064
2003/04	180.0	3,691,595	97.1%	3,802,653
2004/05	168.0	11,641,772	97.0%	12,003,996
2005/06	156.0	3,983,449	96.8%	4,115,605
2006/07	144.0	4,655,833	96.5%	4,824,728
2007/08	132.0	6,060,417	96.2%	6,299,105
2008/09	120.0	6,397,462	95.7%	6,682,671
2009/10	108.0	6,238,371	95.0%	6,568,619
2010/11	96.0	4,650,918	93.7%	4,965,689
2011/12	84.0	4,386,465	91.8%	4,777,006
2012/13	72.0	3,939,281	89.2%	4,418,707
2013/14	60.0	4,433,693	85.7%	5,172,223
2014/15	48.0	4,589,879	80.1%	5,729,234
2015/16	36.0	7,345,871	71.5%	10,269,675
2016/17	24.0	5,858,091	57.2%	10,237,161
2017/18	12.0	2,286,033	22.0%	10,386,740
Total		\$120,043,794		\$141,227,919

(3) is from Exhibit WC-Gov-Med-1.

(4) is from Exhibit WC-Gov-Med-2.



COOK COUNTY, ILLINOIS
 WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-4

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$24,944,508	100.0%	\$24,944,508
1999/00	228.0	2,591,028	100.0%	2,591,028
2000/01	216.0	4,461,913	100.0%	4,461,913
2001/02	204.0	4,040,413	100.0%	4,040,413
2002/03	192.0	4,130,583	99.9%	4,134,714
2003/04	180.0	3,807,597	99.8%	3,815,216
2004/05	168.0	11,665,657	99.7%	11,700,689
2005/06	156.0	3,998,097	99.6%	4,014,114
2006/07	144.0	4,751,033	99.5%	4,774,836
2007/08	132.0	6,281,303	99.4%	6,319,085
2008/09	120.0	6,573,182	99.2%	6,625,945
2009/10	108.0	6,519,645	99.0%	6,585,123
2010/11	96.0	5,169,389	98.7%	5,236,970
2011/12	84.0	4,768,496	98.4%	4,845,329
2012/13	72.0	4,561,281	97.4%	4,681,122
2013/14	60.0	5,541,738	96.0%	5,772,649
2014/15	48.0	6,306,321	94.1%	6,700,473
2015/16	36.0	10,532,621	89.6%	11,750,466
2016/17	24.0	10,635,147	80.0%	13,288,629
2017/18	12.0	9,872,782	53.4%	18,504,079
Total		\$141,152,735		\$154,787,301

(3) is from Exhibit WC-Gov-Med-1.

(4) is from Exhibit WC-Gov-Med-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-5

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	97.4%	100.0%	100.0%	\$24,734,249	\$210,260	\$24,944,508
1999/00	228.0	97.4%	100.0%	100.0%	2,589,753	1,275	2,591,028
2000/01	216.0	97.4%	100.0%	100.0%	4,443,437	18,476	4,461,913
2001/02	204.0	97.3%	100.0%	100.0%	4,016,315	24,098	4,040,413
2002/03	192.0	97.2%	99.9%	96.5%	4,100,912	29,671	4,131,671
2003/04	180.0	97.1%	99.8%	93.2%	3,691,595	116,002	3,816,111
2004/05	168.0	97.0%	99.7%	90.1%	11,641,772	23,885	11,668,288
2005/06	156.0	96.8%	99.6%	87.6%	3,983,449	14,648	4,000,176
2006/07	144.0	96.5%	99.5%	85.8%	4,655,833	95,200	4,766,841
2007/08	132.0	96.2%	99.4%	84.2%	6,060,417	220,886	6,322,687
2008/09	120.0	95.7%	99.2%	81.3%	6,397,462	175,720	6,613,488
2009/10	108.0	95.0%	99.0%	80.2%	6,238,371	281,275	6,588,987
2010/11	96.0	93.7%	98.7%	79.6%	4,650,918	518,471	5,301,917
2011/12	84.0	91.8%	98.4%	80.6%	4,386,465	382,031	4,860,425
2012/13	72.0	89.2%	97.4%	76.4%	3,939,281	622,000	4,753,370
2013/14	60.0	85.7%	96.0%	72.0%	4,433,693	1,108,045	5,972,949
2014/15	48.0	80.1%	94.1%	70.4%	4,589,879	1,716,442	7,027,307
2015/16	36.0	71.5%	89.6%	63.6%	7,345,871	3,186,750	12,356,775
2016/17	24.0	57.2%	80.0%	53.3%	5,858,091	4,777,056	14,817,361
2017/18	12.0	22.0%	53.4%	40.2%	2,286,033	7,586,749	21,162,664
Total					\$120,043,794	\$21,108,941	\$160,198,880

(3) and (4) are from Exhibit WC-Gov-Med-2.

(6) and (7) are from Exhibit WC-Gov-Med-1.

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$25,402,073	\$24,944,508	\$24,944,508	\$24,965,534
1999/00	2,659,677	2,591,028	2,591,028	2,591,156
2000/01	4,563,410	4,461,913	4,461,913	4,463,760
2001/02	4,128,880	4,040,413	4,040,413	4,042,823
2002/03	4,220,064	4,134,714	4,131,671	4,133,550
2003/04	3,802,653	3,815,216	3,816,111	3,819,197
2004/05	12,003,996	11,700,689	11,668,288	11,668,288
2005/06	4,115,605	4,014,114	4,000,176	4,000,176
2006/07	4,824,728	4,774,836	4,766,841	4,766,841
2007/08	6,299,105	6,319,085	6,322,687	6,322,687
2008/09	6,682,671	6,625,945	6,613,488	6,613,488
2009/10	6,568,619	6,585,123	6,588,987	6,588,987
2010/11	4,965,689	5,236,970	5,301,917	5,288,928
2011/12	4,777,006	4,845,329	4,860,425	4,855,896
2012/13	4,418,707	4,681,122	4,753,370	4,724,471
2013/14	5,172,223	5,772,649	5,972,949	5,812,757
2014/15	5,729,234	6,700,473	7,027,307	6,636,959
2015/16	10,269,675	11,750,466	12,356,775	11,636,201
2016/17	10,237,161	13,288,629	14,817,361	12,984,082
2017/18	10,386,740	18,504,079	21,162,664	17,958,204
Total	\$141,227,919	\$154,787,301	\$160,198,880	\$153,873,983

(2) is from Exhibit WC-Gov-Med-3.

(3) is from Exhibit WC-Gov-Med-4.

(4) is from Exhibit WC-Gov-Med-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Payroll (000) (3)	Limited Loss Rate per \$100 of Payroll (2)/(3)/10 (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)X(5) (6)	Projected A-priori Loss Rate per \$100 of Payroll (7)/(5) (8)
2008/09	\$6,613,488	\$942,707	\$0.70	1.335	\$0.94	\$0.67
2009/10	6,588,987	998,250	0.66	1.288	0.85	0.70
2010/11	5,288,928	928,082	0.57	1.269	0.72	0.71
2011/12	4,855,896	899,082	0.54	1.358	0.73	0.66
2012/13	4,724,471	949,338	0.50	1.301	0.65	0.69
2013/14	5,812,757	988,081	0.59	1.241	0.73	0.73
2014/15	6,636,959	998,567	0.66	1.181	0.79	0.76
2015/16	11,636,201	1,053,931	1.10	1.132	1.25	0.80
2016/17	12,984,082	1,075,248	1.21	1.082	1.31	0.83
2017/18	17,958,204	1,006,546	1.78	1.040	1.86	0.87
				Prior Selected	\$ 0.88	\$0.90

(7) Projected 2018/19 a-priori loss rate per \$100 of Payroll

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per \$100 of Payroll (4)	Payroll (000) (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5)X10 (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$4,433,693	85.7%	\$0.73	\$988,081	\$1,023,404	\$5,457,097
2014/15	4,589,879	80.1%	0.76	998,567	1,512,815	6,102,693
2015/16	7,345,871	71.5%	0.80	1,053,931	2,385,824	9,731,695
2016/17	5,858,091	57.2%	0.83	1,075,248	3,825,316	9,683,407
2017/18	2,286,033	22.0%	0.87	1,006,546	6,793,390	9,079,423

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per \$100 of Payroll (4)	Payroll (000) (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5)X10 (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$5,541,738	96.0%	\$0.73	\$988,081	\$286,699	\$5,828,437
2014/15	6,306,321	94.1%	0.76	998,567	447,487	6,753,808
2015/16	10,532,621	89.6%	0.80	1,053,931	868,528	11,401,149
2016/17	10,635,147	80.0%	0.83	1,075,248	1,785,669	12,420,816
2017/18	9,872,782	53.4%	0.87	1,006,546	4,063,044	13,935,825

Section I, (2) is from Exhibit WC-Gov-Med-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit WC-Gov-Med-10.

Section I, (5) is from Exhibit WC-Gov-Med-15.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit WC-Gov-Med-1.

Sections II and III, (3) are from Exhibit WC-Gov-Med-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Payroll (000) (6)	Frequency (per \$1M of Payroll) (5)/(6)X1,000 (7)
2008/09	120.0	767	100.0%	767	\$942,707	0.81
2009/10	108.0	862	100.0%	862	998,250	0.86
2010/11	96.0	789	100.0%	789	928,082	0.85
2011/12	84.0	783	99.9%	784	899,082	0.87
2012/13	72.0	720	99.8%	721	949,338	0.76
2013/14	60.0	760	99.7%	762	988,081	0.77
2014/15	48.0	777	99.6%	780	998,567	0.78
2015/16	36.0	1,107	99.2%	1,116	1,053,931	1.06
2016/17	24.0	1,234	98.8%	1,249	1,075,248	1.16
2017/18	12.0	1,069	95.9%	1,114	1,006,546	1.11

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$6,613,488	767	\$8,623	1.795	\$15,474	\$6,868	\$5,267,772
2009/10	6,588,987	862	7,644	1.680	12,844	7,335	6,322,898
2010/11	5,288,928	789	6,703	1.608	10,777	7,666	6,048,624
2011/12	4,855,896	784	6,194	1.670	10,343	7,381	5,786,615
2012/13	4,724,471	721	6,553	1.553	10,178	7,935	5,721,235
2013/14	5,812,757	762	7,628	1.438	10,972	8,569	6,529,452
2014/15	6,636,959	780	8,509	1.330	11,314	9,269	7,229,962
2015/16	11,636,201	1,116	10,427	1.237	12,896	9,965	11,120,689
2016/17	12,984,082	1,249	10,396	1.148	11,935	10,736	13,408,765
2017/18	17,958,204	1,114	16,120	1.071	17,268	11,506	12,817,448
				Prior Selected	12305		
	(7) Projected 2018/19 average claim severity				\$12,325		

Section I, (3) is from Exhibit WC-Gov-Med-1.

Section I, (4) is from Exhibit WC-Gov-Med-2.

Section I, (6) is from Exhibit WC-Gov-Med-10.

Section II, (2) is from Exhibit WC-Gov-Med-6.

Section II, (3) is from Section I, (5).

Section II, (5) is from Exhibit WC-Gov-Med-15.

Section II, (7) is based on (6) and actuarial judgment.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-9

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$25,402,073	\$24,944,508	\$24,944,508				\$25,313,347	\$24,966,000
1999/00	2,659,677	2,591,028	2,591,028				2,607,000	2,591,156
2000/01	4,563,410	4,461,913	4,461,913				4,482,000	4,464,000
2001/02	4,128,880	4,040,413	4,040,413				4,135,208	4,043,000
2002/03	4,220,064	4,134,714	4,131,671				4,153,000	4,134,000
2003/04	3,802,653	3,815,216	3,816,111				3,857,000	3,819,197
2004/05	12,003,996	11,700,689	11,668,288				11,701,000	11,668,046
2005/06	4,115,605	4,014,114	4,000,176				4,005,000	4,000,000
2006/07	4,824,728	4,774,836	4,766,841				4,843,000	4,767,000
2007/08	6,299,105	6,319,085	6,322,687				6,325,000	6,323,000
2008/09	6,682,671	6,625,945	6,613,488				6,893,000	6,613,000
2009/10	6,568,619	6,585,123	6,588,987				6,894,000	6,589,000
2010/11	4,965,689	5,236,970	5,301,917				5,324,000	5,289,000
2011/12	4,777,006	4,845,329	4,860,425				5,032,000	4,856,000
2012/13	4,418,707	4,681,122	4,753,370				4,965,000	4,724,000
2013/14	5,172,223	5,772,649	5,972,949	5,457,097	5,828,437	6,529,452	6,269,000	5,813,000
2014/15	5,729,234	6,700,473	7,027,307	6,102,693	6,753,808	7,229,962	7,449,000	7,000,000
2015/16	10,269,675	11,750,466	12,356,775	9,731,695	11,401,149	11,120,689	13,250,000	12,000,000
2016/17	10,237,161	13,288,629	14,817,361	9,683,407	12,420,816	13,408,765	16,000,000	13,000,000
2017/18	10,386,740	18,504,079	21,162,664	9,079,423	13,935,825	12,817,448	8,726,000	14,000,000
Total	\$141,227,919	\$154,787,301	\$160,198,880				\$152,223,556	\$150,659,399
2013/14 - 2017/18	41,795,034	56,016,296	61,337,057	40,054,315	50,340,036	51,106,317	51,694,000	51,813,000
to 2012/13	99,432,885	98,771,004	98,861,823				100,529,556	98,846,399
						Change		
						All years		-\$1,564,157
						2013/14 - 2017/18		119,000
						to 2012/13		-1,683,157

(2) is from Exhibit WC-Gov-Med-3.

(3) is from Exhibit WC-Gov-Med-4.

(4) is from Exhibit WC-Gov-Med-5.

(5) and (6) are from Exhibit WC-Gov-Med-7.

(7) is from Exhibit WC-Gov-Med-8.

(8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Payroll (000) (3)	Limited Loss Rate per \$100 of Payroll (2)/(3)/10 (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)X(5) (6)
2008/09	\$6,613,000	\$942,707	\$0.70	1.335	\$0.94
2009/10	6,589,000	998,250	0.66	1.288	0.85
2010/11	5,289,000	928,082	0.57	1.269	0.72
2011/12	4,856,000	899,082	0.54	1.358	0.73
2012/13	4,724,000	949,338	0.50	1.301	0.65
2013/14	5,813,000	988,081	0.59	1.241	0.73
2014/15	7,000,000	998,567	0.70	1.181	0.83
2015/16	12,000,000	1,053,931	1.14	1.132	1.29
2016/17	13,000,000	1,075,248	1.21	1.082	1.31
2017/18	14,000,000	1,006,546	1.39	1.040	1.45
Total	\$79,884,000	\$9,839,832	\$0.81		\$0.95

Claim Period (1)	Projected Limited Loss Rate per \$100 of Payroll (7)	Projected Payroll (000) (8)	Projected Ultimate Limited Losses (7)X(8)X10 (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per \$100 of Payroll (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11)X10 (12)
2018/19	0.90	\$1,038,161	\$9,343,000	0.92	\$0.83	\$8,631,000
2019/20	0.93	1,038,161	9,652,000	0.92	0.86	8,916,000
2020/21	0.97	1,038,161	10,038,000	0.92	0.89	9,273,000

(2) is from Exhibit WC-Gov-Med-9.

(3) was provided by the County.

(5) is from Exhibit WC-Gov-Med-15.

(7) 2018/19 is based on an average of the limited paid and limited reported incurred B-F and development methods using 12 months of experience. Other period(s) based on 2018/19 plus the trend in Exhibit WC-Gov-Med-15.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Med-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-11

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$24,734,249	\$210,260	\$24,944,508	\$24,966,000	\$21,492	\$231,752	0.93	\$215,045
1999/00	2,589,753	1,275	2,591,028	2,591,156	128	1,403	0.90	1,266
2000/01	4,443,437	18,476	4,461,913	4,464,000	2,087	20,563	0.88	18,045
2001/02	4,016,315	24,098	4,040,413	4,043,000	2,587	26,685	0.86	22,899
2002/03	4,100,912	29,671	4,130,583	4,134,000	3,417	33,088	0.84	27,785
2003/04	3,691,595	116,002	3,807,597	3,819,197	11,600	127,602	0.82	104,921
2004/05	11,641,772	23,885	11,665,657	11,668,046	2,389	26,274	0.81	21,167
2005/06	3,983,449	14,648	3,998,097	4,000,000	1,903	16,551	0.80	13,169
2006/07	4,655,833	95,200	4,751,033	4,767,000	15,967	111,167	0.79	87,970
2007/08	6,060,417	220,886	6,281,303	6,323,000	41,697	262,583	0.79	206,403
2008/09	6,397,462	175,720	6,573,182	6,613,000	39,818	215,538	0.79	170,121
2009/10	6,238,371	281,275	6,519,645	6,589,000	69,355	350,630	0.80	280,712
2010/11	4,650,918	518,471	5,169,389	5,289,000	119,611	638,082	0.82	524,185
2011/12	4,386,465	382,031	4,768,496	4,856,000	87,504	469,535	0.84	394,858
2012/13	3,939,281	622,000	4,561,281	4,724,000	162,719	784,719	0.86	674,313
2013/14	4,433,693	1,108,045	5,541,738	5,813,000	271,262	1,379,307	0.87	1,202,471
2014/15	4,589,879	1,716,442	6,306,321	7,000,000	693,679	2,410,121	0.89	2,137,326
2015/16	7,345,871	3,186,750	10,532,621	12,000,000	1,467,379	4,654,129	0.90	4,187,377
2016/17	5,858,091	4,777,056	10,635,147	13,000,000	2,364,853	7,141,909	0.91	6,514,406
2017/18	2,286,033	7,586,749	9,872,782	14,000,000	4,127,218	11,713,967	0.93	10,914,894
Total	\$120,043,794	\$21,108,941	\$141,152,735	\$150,659,399	\$9,506,665	\$30,615,605		\$27,719,333

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit WC-Gov-Med-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Med-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-12

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	97.4%	252.0	98.2%	30.0%	\$231,752	\$69,526	\$162,226	0.93	\$150,628
1999/00	228.0	97.4%	240.0	97.4%	100.0%	1,403	1,403	0	0.93	0
2000/01	216.0	97.4%	228.0	97.4%	100.0%	20,563	20,563	0	0.90	0
2001/02	204.0	97.3%	216.0	97.4%	3.6%	26,685	952	25,733	0.88	22,582
2002/03	192.0	97.2%	204.0	97.3%	3.4%	33,088	1,139	31,949	0.86	27,416
2003/04	180.0	97.1%	192.0	97.2%	3.3%	127,602	4,242	123,360	0.84	103,589
2004/05	168.0	97.0%	180.0	97.1%	3.2%	26,274	844	25,430	0.82	20,910
2005/06	156.0	96.8%	168.0	97.0%	6.0%	16,551	998	15,553	0.81	12,530
2006/07	144.0	96.5%	156.0	96.8%	8.3%	111,167	9,193	101,974	0.80	81,137
2007/08	132.0	96.2%	144.0	96.5%	7.6%	262,583	20,001	242,582	0.79	191,963
2008/09	120.0	95.7%	132.0	96.2%	11.2%	215,538	24,173	191,365	0.79	150,423
2009/10	108.0	95.0%	120.0	95.7%	15.1%	350,630	52,987	297,643	0.79	234,925
2010/11	96.0	93.7%	108.0	95.0%	20.7%	638,082	131,992	506,090	0.80	405,173
2011/12	84.0	91.8%	96.0	93.7%	22.5%	469,535	105,474	364,061	0.82	299,077
2012/13	72.0	89.2%	84.0	91.8%	24.6%	784,719	193,433	591,286	0.84	497,245
2013/14	60.0	85.7%	72.0	89.2%	24.0%	1,379,307	331,221	1,048,086	0.86	900,626
2014/15	48.0	80.1%	60.0	85.7%	28.2%	2,410,121	679,640	1,730,481	0.87	1,508,622
2015/16	36.0	71.5%	48.0	80.1%	30.1%	4,654,129	1,403,184	3,250,945	0.89	2,882,979
2016/17	24.0	57.2%	36.0	71.5%	33.4%	7,141,909	2,388,518	4,753,391	0.90	4,276,684
2017/18	12.0	22.0%	24.0	57.2%	45.2%	11,713,967	5,289,121	6,424,846	0.91	5,860,346
2018/19	0.0	0.0%	12.0	22.0%	22.0%	9,343,000	2,056,315	7,286,685	0.93	6,789,621
Total						\$39,958,605	\$12,784,919	\$27,173,686		\$24,416,476

(3) and (5) are from Exhibit WC-Gov-Med-2.

(7) to 2017/18 is from Exhibit WC-Gov-Med-11. The amount for 2018/19 is from Exhibit WC-Gov-Med-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Med-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-13

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	98.2%	264.0	98.7%	30.0%	\$162,226	\$48,668	\$113,558	0.93	\$105,539
1999/00	240.0	97.4%	252.0	98.2%	30.0%	0	0	0	0.93	0
2000/01	228.0	97.4%	240.0	97.4%	100.0%	0	0	0	0.93	0
2001/02	216.0	97.4%	228.0	97.4%	100.0%	25,733	25,733	0	0.90	0
2002/03	204.0	97.3%	216.0	97.4%	3.6%	31,949	1,140	30,809	0.88	27,036
2003/04	192.0	97.2%	204.0	97.3%	3.4%	123,360	4,246	119,114	0.86	102,215
2004/05	180.0	97.1%	192.0	97.2%	3.3%	25,430	845	24,585	0.84	20,645
2005/06	168.0	97.0%	180.0	97.1%	3.2%	15,553	500	15,053	0.82	12,377
2006/07	156.0	96.8%	168.0	97.0%	6.0%	101,974	6,147	95,827	0.81	77,200
2007/08	144.0	96.5%	156.0	96.8%	8.3%	242,582	20,061	222,521	0.80	177,052
2008/09	132.0	96.2%	144.0	96.5%	7.6%	191,365	14,577	176,788	0.79	139,898
2009/10	120.0	95.7%	132.0	96.2%	11.2%	297,643	33,382	264,261	0.79	207,722
2010/11	108.0	95.0%	120.0	95.7%	15.1%	506,090	76,480	429,610	0.79	339,085
2011/12	96.0	93.7%	108.0	95.0%	20.7%	364,061	75,309	288,752	0.80	231,173
2012/13	84.0	91.8%	96.0	93.7%	22.5%	591,286	132,824	458,462	0.82	376,627
2013/14	72.0	89.2%	84.0	91.8%	24.6%	1,048,086	258,353	789,733	0.84	664,130
2014/15	60.0	85.7%	72.0	89.2%	24.0%	1,730,481	415,551	1,314,930	0.86	1,129,926
2015/16	48.0	80.1%	60.0	85.7%	28.2%	3,250,945	916,747	2,334,198	0.87	2,034,939
2016/17	36.0	71.5%	48.0	80.1%	30.1%	4,753,391	1,433,111	3,320,280	0.89	2,944,466
2017/18	24.0	57.2%	36.0	71.5%	33.4%	6,424,846	2,148,706	4,276,140	0.90	3,847,296
2018/19	12.0	22.0%	24.0	57.2%	45.2%	7,286,685	3,290,103	3,996,582	0.91	3,645,434
2019/20	0.0	0.0%	12.0	22.0%	22.0%	9,652,000	2,124,323	7,527,677	0.93	7,014,174
Total						\$36,825,686	\$11,026,806	\$25,798,880		\$23,096,934

(3) and (5) are from Exhibit WC-Gov-Med-2.

(7) to 2018/19 is from Exhibit WC-Gov-Med-12, (9). The amount for 2019/20 is from Exhibit WC-Gov-Med-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Med-2.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-14

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	98.7%	276.0	99.1%	30.0%	\$113,558	\$34,067	\$79,491	0.93	\$73,980
1999/00	252.0	98.2%	264.0	98.7%	30.0%	0	0	0	0.93	0
2000/01	240.0	97.4%	252.0	98.2%	30.0%	0	0	0	0.93	0
2001/02	228.0	97.4%	240.0	97.4%	100.0%	0	0	0	0.93	0
2002/03	216.0	97.4%	228.0	97.4%	100.0%	30,809	30,809	0	0.90	0
2003/04	204.0	97.3%	216.0	97.4%	3.6%	119,114	4,250	114,864	0.88	100,798
2004/05	192.0	97.2%	204.0	97.3%	3.4%	24,585	846	23,739	0.86	20,371
2005/06	180.0	97.1%	192.0	97.2%	3.3%	15,053	500	14,553	0.84	12,221
2006/07	168.0	97.0%	180.0	97.1%	3.2%	95,827	3,080	92,747	0.82	76,261
2007/08	156.0	96.8%	168.0	97.0%	6.0%	222,521	13,414	209,107	0.81	168,460
2008/09	144.0	96.5%	156.0	96.8%	8.3%	176,788	14,620	162,168	0.80	129,031
2009/10	132.0	96.2%	144.0	96.5%	7.6%	264,261	20,129	244,132	0.79	193,189
2010/11	120.0	95.7%	132.0	96.2%	11.2%	429,610	48,182	381,428	0.79	299,822
2011/12	108.0	95.0%	120.0	95.7%	15.1%	288,752	43,636	245,116	0.79	193,466
2012/13	96.0	93.7%	108.0	95.0%	20.7%	458,462	94,836	363,626	0.80	291,117
2013/14	84.0	91.8%	96.0	93.7%	22.5%	789,733	177,402	612,331	0.82	503,031
2014/15	72.0	89.2%	84.0	91.8%	24.6%	1,314,930	324,130	990,800	0.84	833,219
2015/16	60.0	85.7%	72.0	89.2%	24.0%	2,334,198	560,525	1,773,673	0.86	1,524,127
2016/17	48.0	80.1%	60.0	85.7%	28.2%	3,320,280	936,299	2,383,981	0.87	2,078,340
2017/18	36.0	71.5%	48.0	80.1%	30.1%	4,276,140	1,289,223	2,986,917	0.89	2,648,836
2018/19	24.0	57.2%	36.0	71.5%	33.4%	3,996,582	1,336,604	2,659,978	0.90	2,393,215
2019/20	12.0	22.0%	24.0	57.2%	45.2%	7,527,677	3,398,917	4,128,760	0.91	3,765,999
2020/21	0.0	0.0%	12.0	22.0%	22.0%	10,038,000	2,209,278	7,828,722	0.93	7,294,683
Total						\$35,836,880	\$10,540,747	\$25,296,133		\$22,600,166

(3) and (5) are from Exhibit WC-Gov-Med-2.

(7) to 2019/20 is from Exhibit WC-Gov-Med-13, (9). The amount for 2020/21 is from Exhibit WC-Gov-Med-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit WC-Gov-Med-2.

Loss Rate and Severity Trend

I. Benefit Level Changes

Effective Date (1)	Benefit Level Change (2)	Cumulative Benefit Level Change (3)
01/01/09	1.029	1.029
02/01/09	1.048	1.078
01/01/10	0.992	1.070
01/01/11	1.015	1.086
09/01/11	0.853	0.926
01/01/12	1.015	0.940
11/20/12	0.994	0.934
01/01/13	1.009	0.943
01/01/14	1.008	0.950
01/01/15	1.010	0.960
01/01/16	1.003	0.963
01/01/17	1.006	0.969

II. Loss Rate and Severity Trend

Claim Period (1)	Benefit Trend (2018/19 = 1.000) (2)	Residual Trend (2018/19 = 1.000) (3)	Retention Index (2018/19 = 1.000) (4)	Loss Rate Trend (2018/19 = 1.000) (2)X(3)X(4) (5)	Wage Trend (2018/19 = 1.000) (6)	Severity Trend (2018/19 = 1.000) (5)X(6) (7)
2008/09	0.902	1.480	1.000	1.335	1.344	1.795
2009/10	0.905	1.423	1.000	1.288	1.305	1.680
2010/11	0.927	1.369	1.000	1.269	1.267	1.608
2011/12	1.032	1.316	1.000	1.358	1.230	1.670
2012/13	1.028	1.265	1.000	1.301	1.194	1.553
2013/14	1.020	1.217	1.000	1.241	1.159	1.438
2014/15	1.010	1.170	1.000	1.181	1.126	1.330
2015/16	1.006	1.125	1.000	1.132	1.093	1.237
2016/17	1.001	1.082	1.000	1.082	1.061	1.148
2017/18	1.000	1.040	1.000	1.040	1.030	1.071
2018/19	1.000	1.000	1.000	1.000	1.000	1.000
2019/20	1.000	0.962	1.000	0.962	0.971	0.934

Section I, (2) and (3) reflect data published by the NCCI.

Section II, (2) is based on Section I, (2).

Section II, (3) is based on 4% trend per actuarial judgment.

Section II, (4) is based on industry statistics and actuarial judgment.

Section II, (6) is based on 3% trend.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-16

List of Large Claims
Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
20050352	02/05/05	2004/05	Unlimited	\$6,171,677	\$0	\$6,171,677
20061775	02/05/05	2004/05	Unlimited	1,471,257	0	1,471,257

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.



COOK COUNTY, ILLINOIS
WORKERS' COMPENSATION - GENERAL GOVERNMENT (MEDICAL)

Exhibit WC-Gov-Med-17

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	16,465	385	419	515	640	360	18,784		
0.01 - 5,000	10,111	224	190	302	316	326	11,469	11,469	74.8%
5,000 - 10,000	935	41	41	74	68	120	1,279	12,748	83.2%
10,000 - 25,000	834	51	48	99	75	140	1,247	13,995	91.3%
25,000 - 50,000	429	33	46	57	74	101	740	14,735	96.1%
50,000 - 100,000	228	17	22	47	48	17	379	15,114	98.6%
100,000 - 250,000	139	8	10	12	13	3	185	15,299	99.8%
250,000 - 500,000	18	1	1	1	0	2	23	15,322	100.0%
500,000 - 750,000	4	0	0	0	0	0	4	15,326	100.0%
750,000 - 1,000,000	0	0	0	0	0	0	0	15,326	100.0%
Over 1,000,000	2	0	0	0	0	0	2	15,328	100.0%
Total	29,165	760	777	1,107	1,234	1,069	34,112	15,328	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	10,300,846	336,012	277,203	410,829	443,749	523,780	12,292,419	12,292,419	8.7%
5,000 - 10,000	6,598,472	278,362	285,638	578,666	531,691	956,464	9,229,292	21,521,711	15.2%
10,000 - 25,000	13,554,253	822,265	805,861	1,734,452	1,300,511	2,605,466	20,822,808	42,344,519	30.0%
25,000 - 50,000	14,949,144	1,185,535	1,569,403	2,077,810	2,855,058	3,724,770	26,361,721	68,706,240	48.7%
50,000 - 100,000	15,616,464	1,157,339	1,531,956	3,611,300	3,413,984	1,076,824	26,407,867	95,114,107	67.4%
100,000 - 250,000	21,425,278	1,354,112	1,585,730	1,834,681	2,090,153	425,500	28,715,455	123,829,562	87.7%
250,000 - 500,000	5,893,401	409,593	250,529	284,883	0	559,978	7,398,385	131,227,947	93.0%
500,000 - 750,000	2,309,067	0	0	0	0	0	2,309,067	133,537,014	94.6%
750,000 - 1,000,000	0	0	0	0	0	0	0	133,537,014	94.6%
Over 1,000,000	7,642,934	0	0	0	0	0	7,642,934	141,179,949	100.0%
Total	\$98,289,861	\$5,543,217	\$6,306,321	\$10,532,621	\$10,635,147	\$9,872,782	\$141,179,949	\$141,179,949	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Vehicles (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	786	0	\$3,007,140	\$0	\$3,007,140
1999/00	Unlimited	None	228.0	Not Provided	136	0	464,802	0	464,802
2000/01	9,500,000	None	216.0	Not Provided	132	0	9,770,711	0	9,770,711
2001/02	9,500,000	None	204.0	2,283	112	0	2,497,706	0	2,497,706
2002/03	9,500,000	None	192.0	2,283	74	0	213,389	0	213,389
2003/04	10,000,000	None	180.0	1,997	111	0	396,526	0	396,526
2004/05	10,000,000	None	168.0	1,997	91	0	2,828,107	0	2,828,107
2005/06	10,000,000	None	156.0	1,780	82	0	176,288	0	176,288
2006/07	10,000,000	None	144.0	Not Provided	92	0	623,841	0	623,841
2007/08	10,000,000	None	132.0	Not Provided	71	0	131,792	0	131,792
2008/09	10,000,000	None	120.0	Not Provided	60	0	173,974	0	173,974
2009/10	10,000,000	None	108.0	Not Provided	62	0	6,830,313	0	6,830,313
2010/11	10,000,000	None	96.0	2,071	88	1	808,599	10,000	818,599
2011/12	10,000,000	None	84.0	1,837	75	0	431,959	0	431,959
2012/13	15,000,000	None	72.0	1,892	58	0	281,949	0	281,949
2013/14	15,000,000	None	60.0	1,921	86	0	2,907,409	0	2,907,409
2014/15	15,000,000	None	48.0	2,022	62	0	214,713	0	214,713
2015/16	15,000,000	None	36.0	1,915	70	3	1,255,620	310,000	1,565,620
2016/17	15,000,000	None	24.0	1,773	53	7	295,472	219,000	514,472
2017/18	15,000,000	None	12.0	1,847	53	29	64,593	555,271	619,863
Total					2,354	40	\$33,374,903	\$1,094,271	\$34,469,174

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/90	Unlimited
12/01/00	9,500,000
12/01/03	10,000,000
03/01/13	15,000,000

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Vehicles (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	786	0	\$3,007,140	\$0	\$3,007,140
1999/00	Unlimited	None	228.0	Not Provided	136	0	464,802	0	464,802
2000/01	Unlimited	None	216.0	Not Provided	132	0	9,770,711	0	9,770,711
2001/02	Unlimited	None	204.0	2,283	112	0	2,497,706	0	2,497,706
2002/03	Unlimited	None	192.0	2,283	74	0	213,389	0	213,389
2003/04	Unlimited	None	180.0	1,997	111	0	396,526	0	396,526
2004/05	Unlimited	None	168.0	1,997	91	0	2,828,107	0	2,828,107
2005/06	Unlimited	None	156.0	1,780	82	0	176,288	0	176,288
2006/07	Unlimited	None	144.0	Not Provided	92	0	623,841	0	623,841
2007/08	Unlimited	None	132.0	Not Provided	71	0	131,792	0	131,792
2008/09	Unlimited	None	120.0	Not Provided	60	0	173,974	0	173,974
2009/10	Unlimited	None	108.0	Not Provided	62	0	6,830,313	0	6,830,313
2010/11	Unlimited	None	96.0	2,071	88	1	808,599	10,000	818,599
2011/12	Unlimited	None	84.0	1,837	75	0	431,959	0	431,959
2012/13	Unlimited	None	72.0	1,892	58	0	281,949	0	281,949
2013/14	Unlimited	None	60.0	1,921	86	0	2,907,409	0	2,907,409
2014/15	Unlimited	None	48.0	2,022	62	0	214,713	0	214,713
2015/16	Unlimited	None	36.0	1,915	70	3	1,255,620	310,000	1,565,620
2016/17	Unlimited	None	24.0	1,773	53	7	295,472	219,000	514,472
2017/18	Unlimited	None	12.0	1,847	53	29	64,593	555,271	619,863
Total					2,354	40	\$33,374,903	\$1,094,271	\$34,469,174

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Vehicles (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	786	0	\$3,007,140	\$0	\$3,007,140
1999/00	Unlimited	None	228.0	Not Provided	136	0	464,802	0	464,802
2000/01	Unlimited	None	216.0	Not Provided	132	0	9,770,711	0	9,770,711
2001/02	Unlimited	None	204.0	2,283	112	0	2,497,706	0	2,497,706
2002/03	Unlimited	None	192.0	2,283	74	0	213,389	0	213,389
2003/04	Unlimited	None	180.0	1,997	111	0	396,526	0	396,526
2004/05	Unlimited	None	168.0	1,997	91	0	2,828,107	0	2,828,107
2005/06	Unlimited	None	156.0	1,780	82	0	176,288	0	176,288
2006/07	Unlimited	None	144.0	Not Provided	92	0	623,841	0	623,841
2007/08	Unlimited	None	132.0	Not Provided	71	0	131,792	0	131,792
2008/09	Unlimited	None	120.0	Not Provided	60	0	173,974	0	173,974
2009/10	Unlimited	None	108.0	Not Provided	62	0	6,830,313	0	6,830,313
2010/11	Unlimited	None	96.0	2,071	88	1	808,599	10,000	818,599
2011/12	Unlimited	None	84.0	1,837	75	0	431,959	0	431,959
2012/13	Unlimited	None	72.0	1,892	58	0	281,949	0	281,949
2013/14	Unlimited	None	60.0	1,921	86	0	2,907,409	0	2,907,409
2014/15	Unlimited	None	48.0	2,022	62	0	214,713	0	214,713
2015/16	Unlimited	None	36.0	1,915	70	3	1,255,620	310,000	1,565,620
2016/17	Unlimited	None	24.0	1,773	53	7	295,472	219,500	514,472
2017/18	Unlimited	None	12.0	1,847	53	29	64,593	570,277	619,863
Total					2,354	40	\$33,374,903	\$1,109,777	\$34,469,174

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	100.0%	100.0%	100.0%
336.0	100.0%	100.0%	100.0%
324.0	100.0%	100.0%	100.0%
312.0	100.0%	100.0%	100.0%
300.0	100.0%	100.0%	100.0%
288.0	100.0%	100.0%	100.0%
276.0	100.0%	100.0%	100.0%
264.0	100.0%	100.0%	100.0%
252.0	100.0%	100.0%	100.0%
240.0	100.0%	100.0%	100.0%
228.0	100.0%	100.0%	100.0%
216.0	100.0%	100.0%	100.0%
204.0	100.0%	100.0%	100.0%
192.0	100.0%	100.0%	100.0%
180.0	100.0%	100.0%	100.0%
168.0	100.0%	100.0%	100.0%
156.0	100.0%	100.0%	100.0%
144.0	100.0%	100.0%	100.0%
132.0	100.0%	100.0%	100.0%
120.0	100.0%	100.0%	100.0%
108.0	100.0%	100.0%	100.0%
96.0	100.0%	100.0%	100.0%
84.0	99.0%	100.0%	100.0%
72.0	97.1%	100.0%	100.0%
60.0	92.4%	99.0%	100.0%
48.0	86.0%	96.1%	100.0%
36.0	63.7%	85.4%	100.0%
24.0	38.6%	65.7%	99.5%
12.0	13.1%	38.1%	97.1%

(2) is from Exhibit AL-2 (page 2).

(3) is from Exhibit AL-2 (page 3).

(4) is from Exhibit AL-2 (page 4).

COOK COUNTY, ILLINOIS
AUTOMOBILE LIABILITY

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

Claim Period	Months of Development:							Months of Development:							Months of Development:						
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99					\$4,011	\$4,489	\$4,574	\$4,599	\$4,601	\$4,602	\$4,602	\$4,602	\$4,602	\$4,602	\$4,604	\$4,604	\$4,604	\$4,604	\$4,695	\$3,007	
1999/00	57	137	196	221	408	559	559	559	559	559	559	559	559	559	559	559	559	559	465	465	
2000/01	38	192	253	266	266	6,021	6,021	6,021	6,021	6,021	6,021	6,021	6,021	6,021	9,771	9,771	9,771	9,771	9,771	9,771	
2001/02	32	143	161	217	857	857	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	
2002/03	23	76	125	178	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	
2003/04	50	141	246	256	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355	
2004/05	61	159	353	2,333	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	
2005/06	61	136	164	171	171	171	171	171	171	171	171	171	171	171	171	171	171	171	171	171	
2006/07	33	96	200	234	234	234	234	234	234	234	234	234	234	234	234	234	234	234	234	234	
2007/08	30	78	101	122	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	
2008/09	43	163	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	
2009/10	19	67	95	103	103	828	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	
2010/11	42	132	234	809	809	809	809	809	809	809	809	809	809	809	809	809	809	809	809	809	
2011/12	40	125	157	202	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	
2012/13	35	103	172	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	
2013/14	78	218	406	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	
2014/15	35	72	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	
2015/16	54	1,220	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	1,256	
2016/17	95	295																			
2017/18	65																				

II. Limited Paid Loss Development

Claim Period	Months of Development:			Months of Development:			Months of Development:			Months of Development:			Months of Development:			Months of Development:				
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult
to 1998/99					1,119	1,019	1,005	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1999/00	2,406	1,426	1,125	1,840	1,377	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2000/01	5,114	1,318	1,050	1,000	22,649	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2001/02	4,491	1,271	1,199	3,944	1,000	2,914	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2002/03	3,263	1,645	1,423	1,196	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2003/04	2,869	1,749	1,039	1,387	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2004/05	2,605	2,220	6,611	1,214	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2005/06	2,228	1,210	1,042	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2006/07	2,932	2,087	1,170	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2007/08	2,650	1,294	1,209	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2008/09	1,698	2,250	1,061	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2009/10	3,603	1,407	1,090	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2010/11	3,124	1,765	3,461	1,000	8,015	8,243	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2011/12	3,121	2,259	1,287	2,139	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2012/13	2,905	1,673	1,640	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2013/14	2,814	1,860	7,158	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2014/15	2,059	2,982	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2015/16	22,491	1,029	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2016/17	3,114																			
2017/18																				

Average All	4,079	1,673	2,035	1,381	2,947	1,656	1,138	1,000	1,003	0,998	1,073	1,000	1,004	1,000	1,000	1,000	0,944	1,010	1,000	1,000
Wtd 3	8,623	1,242	4,293	1,068	1,000	3,900	1,000	1,000	1,004	0,899	1,001	0,999	1,003	1,000	1,000	1,000	0,994	1,010	1,000	1,000
Last 3	9,521	1,957	3,266	1,380	1,000	3,414	1,000	0,998	1,009	0,895	1,010	0,999	1,010	1,000	1,000	1,000	0,944	1,010	1,000	1,000
Last 5 x-til low	2,944	1,597	2,129	1,000	1,000	1,003	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Similar Previous	2,200	1,450	1,255	1,125	1,050	1,023	1,011	1,006	1,002	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Selected Cumulative Percent	2,950	1,650	1,350	1,075	1,050	1,020	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	7,641	2,590	1,570	1,163	1,082	1,030	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	13.1%	38.6%	63.7%	86.0%	92.4%	97.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Amounts are limited (net of excess insurance).
Data was provided by the County.

COOK COUNTY, ILLINOIS
AUTOMOBILE LIABILITY

Historical Limited Reported Incurred Losses (\$000) and Limited Reported Incurred Loss Development

I. Historical Limited Reported Incurred Losses (\$000)

Claim Period	Months of Development:																			
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
to 1988/89					\$4,637	\$4,882	\$4,599	\$4,601	\$5,403	\$4,602	\$4,602	\$4,602	\$4,602	\$4,605	\$4,604	\$4,604	\$4,604	\$4,604	\$4,695	\$3,007
1989/90				416	607	559	559	559	559	559	559	559	559	559	559	559	559	559	485	
2000/01	278	312	2,873	3,025	9,780	26,021	14,021	9,771	9,771	9,771	9,771	9,771	9,771	9,771	9,771	9,771	9,771	9,771	9,771	9,771
2001/02	233	422	1,353	2,065	3,307	5,307	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498	2,498
2002/03	246	488	320	238	213	221	213	213	213	213	213	213	213	213	213	213	213	213	213	213
2003/04	163	361	359	571	505	405	455	385	385	385	385	385	385	385	385	385	385	385	385	385
2004/05	277	614	2,824	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,833	2,828	2,828	2,828	2,828	2,828	2,828	2,828
2005/06	204	250	207	171	171	171	171	171	171	171	171	171	171	171	171	171	171	171	171	171
2006/07	160	263	633	834	834	834	994	634	634	634	634	624	624	624	624	624	624	624	624	624
2007/08	91	155	131	122	130	128	128	128	128	128	132	132	132	132	132	132	132	132	132	132
2008/09	132	164	184	173	173	173	175	175	174	174	174	174	174	174	174	174	174	174	174	174
2009/10	618	381	2,725	6,473	6,973	6,848	6,828	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830	6,830
2010/11	229	380	514	809	809	809	809	819	819	819	819	819	819	819	819	819	819	819	819	819
2011/12	166	363	762	462	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432
2012/13	213	334	272	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282
2013/14	740	1,306	3,408	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907	2,907
2014/15	137	242	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215
2015/16	980	1,331	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566
2016/17	296	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514	514
2017/18	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620

II. Limited Reported Incurred Loss Development

Claim Period	Months of Development:																			
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult
to 1988/89					1,055	0,940	1,000	1,174	0,852	1,000	1,000	1,000	1,001	1,000	1,000	1,000	1,000	1,020	0,640	
1989/90	1,123	1,332	1,176	1,241	0,922	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2000/01	1,100	1,194	1,053	3,233	2,661	1,900	0,539	0,697	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2001/02	1,813	3,158	1,642	1,511	1,605	0,471	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2002/03	1,994	0,656	0,744	0,885	1,035	0,966	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2003/04	2,215	0,938	1,685	0,885	0,802	1,123	0,846	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2004/05	2,215	4,596	1,003	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2005/06	1,229	0,828	0,825	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2006/07	1,645	2,402	1,319	1,000	1,000	1,180	1,000	1,000	1,000	1,000	1,030	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2007/08	1,704	0,847	0,933	1,061	0,986	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2008/09	1,246	1,123	0,940	1,000	1,000	1,123	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2009/10	0,617	7,154	2,376	1,077	0,982	0,987	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2010/11	1,659	1,353	1,574	1,000	1,000	1,000	1,012	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2011/12	2,187	2,098	0,606	0,935	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2012/13	1,572	0,814	1,037	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2013/14	1,764	2,610	0,853	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2014/15	1,763	0,887	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2015/16	1,358	1,177	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2016/17	1,738	1,175	1,085	1,039	1,015	1,006	1,003	1,003	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2017/18	1,410	1,175	1,085	1,039	1,015	1,006	1,003	1,003	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Average All	1,607	1,951	1,173	1,189	1,137	0,978	0,926	0,989	0,989	0,988	1,003	1,000	1,004	1,000	1,000	1,000	0,944	1,010	1,000	1,000
Wtd 3	1,477	1,802	0,874	0,982	1,000	0,968	1,002	1,000	1,004	0,989	1,001	0,999	1,003	1,000	1,000	1,000	0,944	1,010	1,000	1,000
Last 3	1,620	1,556	0,963	0,978	1,000	0,989	1,004	0,988	1,009	0,985	1,010	0,989	1,010	1,000	1,000	1,000	0,944	1,010	1,000	1,000
Last 5 x-tiltlow	1,691	1,367	0,963	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Similar	1,410	1,175	1,085	1,039	1,015	1,006	1,003	1,003	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Previous	1,725	1,300	1,125	1,030	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Selected	1,725	1,300	1,125	1,030	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Cumulative	2,624	1,521	1,170	1,040	1,010	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Percent	36.1%	65.7%	85.4%	96.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Amounts are limited (net of excess insurance).

Data was provided by the County.

COOK COUNTY, ILLINOIS
AUTOMOBILE LIABILITY

Historical Reported Claims and Reported Claim Development

Claim Period	Months of Development:																				
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/99																					
1999/00	90	89	94	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
2000/01	112	94	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
2001/02	53	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2002/03	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81
2003/04	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
2004/05	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
2005/06	59	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
2006/07	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
2007/08	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
2008/09	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
2009/10	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
2010/11	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
2011/12	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
2012/13	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
2013/14	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
2014/15	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2015/16	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
2016/17	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
2017/18																					

II. Reported Claim Development

Claim Period	Months of Development:												240-Ult								
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156		156-168	168-180	180-192	192-204	204-216	216-228	228-240	
to 1998/99																					
1999/00	0.989	1.056	0.989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.462	1.000	1.000	1.000	
2000/01	0.639	1.000	0.989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2001/02	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2002/03	1.094	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2003/04	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2004/05	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2005/06	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2006/07	1.220	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2007/08	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2008/09	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2009/10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2010/11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2011/12	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2012/13	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2013/14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2014/15	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2015/16	1.190	1.014	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2016/17	1.152																				
2017/18																					
Average All	1.027	1.017	1.013	1.013	1.009	1.034	1.011	1.033	1.025	1.031	1.033	1.038	1.062	1.065	1.100	1.140	1.231	1.000	1.000	1.000	
Wtd 3	1.116	1.063	1.089	1.060	1.043	1.141	1.037	1.098	1.074	1.096	1.074	1.091	1.130	1.084	1.130	1.131	1.000	1.000	1.000	1.000	
Last 3	1.114	1.077	1.077	1.065	1.040	1.148	1.042	1.121	1.082	1.093	1.087	1.088	1.123	1.082	1.133	1.140	1.000	1.000	1.000	1.000	
Last 5 x-tiltlow	1.051	1.005	1.000	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Similar	1.077	1.009	1.004	1.002	1.002	1.002	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Previous	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Selected	1.025	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Cumulative Percent	97.1%	99.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Data was provided by the County.

COOK COUNTY, ILLINOIS
AUTOMOBILE LIABILITY

Historical Ratio of Limited Paid Losses and Limited Reported Incurred Losses

Claim Period	Months of Development:																					
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240		
to 1998/99																						
1999/00	20.6%	44.1%	47.2%	45.2%	86.5%	91.8%	99.5%	100.0%	85.2%	100.0%	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2000/01	1.7%	8.0%	8.6%	8.6%	66.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2001/02	13.6%	35.6%	13.6%	8.6%	2.7%	23.1%	23.1%	42.9%	61.6%	61.6%	61.6%	61.6%	61.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2002/03	9.5%	39.1%	39.1%	9.5%	25.9%	16.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2003/04	30.8%	38.0%	74.8%	74.8%	70.3%	96.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2004/05	22.0%	25.9%	72.7%	44.8%	100.0%	87.7%	78.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2005/06	29.9%	54.2%	79.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2006/07	20.4%	36.4%	31.6%	28.1%	28.1%	100.0%	23.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2007/08	32.5%	50.5%	77.1%	100.0%	94.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2008/09	44.2%	88.6%	88.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2009/10	3.0%	17.7%	3.5%	1.6%	1.5%	12.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2010/11	18.5%	34.9%	45.5%	100.0%	100.0%	100.0%	100.0%	98.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2011/12	24.1%	34.3%	20.6%	43.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2012/13	16.6%	30.7%	63.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2013/14	10.5%	16.7%	11.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2014/15	25.5%	29.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2015/16	5.5%	91.7%	80.2%																			
2016/17	32.0%	57.4%																				
2017/18	10.4%																					
Average																						
All	18.9%	36.9%	46.8%	65.0%	73.5%	77.0%	87.5%	95.5%	95.6%	96.5%	96.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Last 3	16.0%	59.6%	64.0%	100.0%	100.0%	100.0%	100.0%	99.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Last 5	15.5%	39.3%	54.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
x-high																						
Implicit	34.3%	58.7%	74.6%	89.5%	93.4%	97.1%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$3,007,140	100.0%	\$3,007,140
1999/00	228.0	464,802	100.0%	464,802
2000/01	216.0	9,770,711	100.0%	9,770,711
2001/02	204.0	2,497,706	100.0%	2,497,706
2002/03	192.0	213,389	100.0%	213,389
2003/04	180.0	396,526	100.0%	396,526
2004/05	168.0	2,828,107	100.0%	2,828,107
2005/06	156.0	176,288	100.0%	176,288
2006/07	144.0	623,841	100.0%	623,841
2007/08	132.0	131,792	100.0%	131,792
2008/09	120.0	173,974	100.0%	173,974
2009/10	108.0	6,830,313	100.0%	6,830,313
2010/11	96.0	808,599	100.0%	808,599
2011/12	84.0	431,959	99.0%	436,279
2012/13	72.0	281,949	97.1%	290,464
2013/14	60.0	2,907,409	92.4%	3,144,974
2014/15	48.0	214,713	86.0%	249,677
2015/16	36.0	1,255,620	63.7%	1,971,112
2016/17	24.0	295,472	38.6%	765,337
2017/18	12.0	64,593	13.1%	493,561
Total		\$33,374,903		\$35,274,592

(3) is from Exhibit AL-1.

(4) is from Exhibit AL-2.

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$3,007,140	100.0%	\$3,007,140
1999/00	228.0	464,802	100.0%	464,802
2000/01	216.0	9,770,711	100.0%	9,770,711
2001/02	204.0	2,497,706	100.0%	2,497,706
2002/03	192.0	213,389	100.0%	213,389
2003/04	180.0	396,526	100.0%	396,526
2004/05	168.0	2,828,107	100.0%	2,828,107
2005/06	156.0	176,288	100.0%	176,288
2006/07	144.0	623,841	100.0%	623,841
2007/08	132.0	131,792	100.0%	131,792
2008/09	120.0	173,974	100.0%	173,974
2009/10	108.0	6,830,313	100.0%	6,830,313
2010/11	96.0	818,599	100.0%	818,599
2011/12	84.0	431,959	100.0%	431,959
2012/13	72.0	281,949	100.0%	281,949
2013/14	60.0	2,907,409	99.0%	2,936,483
2014/15	48.0	214,713	96.1%	223,366
2015/16	36.0	1,565,620	85.4%	1,832,304
2016/17	24.0	514,472	65.7%	782,737
2017/18	12.0	619,863	38.1%	1,626,820
Total		\$34,469,174		\$36,048,807

(3) is from Exhibit AL-1.

(4) is from Exhibit AL-2.

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	100.0%	100.0%	100.0%	\$3,007,140	\$0	\$3,007,140
1999/00	228.0	100.0%	100.0%	100.0%	464,802	0	464,802
2000/01	216.0	100.0%	100.0%	100.0%	9,770,711	0	9,770,711
2001/02	204.0	100.0%	100.0%	100.0%	2,497,706	0	2,497,706
2002/03	192.0	100.0%	100.0%	100.0%	213,389	0	213,389
2003/04	180.0	100.0%	100.0%	100.0%	396,526	0	396,526
2004/05	168.0	100.0%	100.0%	100.0%	2,828,107	0	2,828,107
2005/06	156.0	100.0%	100.0%	100.0%	176,288	0	176,288
2006/07	144.0	100.0%	100.0%	100.0%	623,841	0	623,841
2007/08	132.0	100.0%	100.0%	100.0%	131,792	0	131,792
2008/09	120.0	100.0%	100.0%	100.0%	173,974	0	173,974
2009/10	108.0	100.0%	100.0%	100.0%	6,830,313	0	6,830,313
2010/11	96.0	100.0%	100.0%	100.0%	808,599	10,000	818,599
2011/12	84.0	99.0%	100.0%	100.0%	431,959	0	431,959
2012/13	72.0	97.1%	100.0%	100.0%	281,949	0	281,949
2013/14	60.0	92.4%	99.0%	86.9%	2,907,409	0	2,907,409
2014/15	48.0	86.0%	96.1%	72.3%	214,713	0	214,713
2015/16	36.0	63.7%	85.4%	59.9%	1,255,620	310,000	1,773,118
2016/17	24.0	38.6%	65.7%	44.2%	295,472	219,000	791,226
2017/18	12.0	13.1%	38.1%	28.8%	64,593	555,271	1,993,788
Total					\$33,374,903	\$1,094,271	\$36,327,351

(3) and (4) are from Exhibit AL-2.

(6) and (7) are from Exhibit AL-1.

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$3,007,140	\$3,007,140	\$3,007,140	\$3,007,140
1999/00	464,802	464,802	464,802	464,802
2000/01	9,770,711	9,770,711	9,770,711	9,770,711
2001/02	2,497,706	2,497,706	2,497,706	2,497,706
2002/03	213,389	213,389	213,389	213,389
2003/04	396,526	396,526	396,526	396,526
2004/05	2,828,107	2,828,107	2,828,107	2,828,107
2005/06	176,288	176,288	176,288	176,288
2006/07	623,841	623,841	623,841	623,841
2007/08	131,792	131,792	131,792	131,792
2008/09	173,974	173,974	173,974	173,974
2009/10	6,830,313	6,830,313	6,830,313	6,830,313
2010/11	808,599	818,599	818,599	819,599
2011/12	436,279	431,959	431,959	431,959
2012/13	290,464	281,949	281,949	281,949
2013/14	3,144,974	2,936,483	2,907,409	2,907,409
2014/15	249,677	223,366	214,713	214,713
2015/16	1,971,112	1,832,304	1,773,118	1,836,391
2016/17	765,337	782,737	791,226	782,653
2017/18	493,561	1,626,820	1,993,788	1,546,955
Total	\$35,274,592	\$36,048,807	\$36,327,351	\$35,936,218

(2) is from Exhibit AL-3.

(3) is from Exhibit AL-4.

(4) is from Exhibit AL-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Vehicles (3)	Limited Loss Rate per Vehicle (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Vehicle (4)X(5) (6)	Projected A-priori Loss Rate per Vehicle (7)/(5) (8)
2008/09	\$173,974	2,071	\$84.00	1.411	\$118.50	\$704.61
2009/10	6,830,313	2,071	3,298.07	1.363	4,494.94	729.27
2010/11	819,599	2,071	395.75	1.317	521.13	754.80
2011/12	431,959	1,837	235.14	1.272	299.17	781.22
2012/13	281,949	1,892	149.02	1.229	183.19	808.56
2013/14	2,907,409	1,921	1,513.49	1.188	1,797.55	836.86
2014/15	214,713	2,022	106.19	1.148	121.85	866.15
2015/16	1,836,391	1,915	958.95	1.109	1,063.21	896.46
2016/17	782,653	1,773	441.43	1.071	472.87	927.84
2017/18	1,546,955	1,847	837.55	1.035	866.86	960.31

(7) Projected 2018/19 a-priori loss rate per Vehicle \$993.93

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per Vehicle (4)	Vehicles (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$2,907,409	92.4%	\$836.86	1,921	\$121,435	\$3,028,844
2014/15	214,713	86.0%	866.15	2,022	245,251	459,964
2015/16	1,255,620	63.7%	896.46	1,915	623,154	1,878,774
2016/17	295,472	38.6%	927.84	1,773	1,009,957	1,305,428
2017/18	64,593	13.1%	960.31	1,847	1,541,577	1,606,169

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per Vehicle (4)	Vehicles (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$2,907,409	99.0%	\$836.86	1,921	\$15,917	\$2,923,326
2014/15	214,713	96.1%	866.15	2,022	67,845	282,559
2015/16	1,565,620	85.4%	896.46	1,915	249,862	1,815,482
2016/17	514,472	65.7%	927.84	1,773	563,808	1,078,279
2017/18	619,863	38.1%	960.31	1,847	1,097,872	1,717,736

Section I, (2) is from Exhibit AL-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit AL-10.

Section I, (5) is based on a 3.5% trend.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit AL-1.

Sections II and III, (3) are from Exhibit AL-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Vehicles (6)	Frequency (per Vehicle) (5)/(6) (7)
2008/09	120.0	60	100.0%	60	2,071	0.03
2009/10	108.0	62	100.0%	62	2,071	0.03
2010/11	96.0	88	100.0%	88	2,071	0.04
2011/12	84.0	75	100.0%	75	1,837	0.04
2012/13	72.0	58	100.0%	58	1,892	0.03
2013/14	60.0	86	100.0%	86	1,921	0.04
2014/15	48.0	62	100.0%	62	2,022	0.03
2015/16	36.0	70	100.0%	70	1,915	0.04
2016/17	24.0	53	99.5%	53	1,773	0.03
2017/18	12.0	53	97.1%	55	1,847	0.03

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$173,974	60	\$2,900	1.411	\$4,090	\$21,122	\$1,267,314
2009/10	6,830,313	62	110,166	1.363	150,145	21,861	1,355,392
2010/11	819,599	88	9,314	1.317	12,264	22,626	1,991,115
2011/12	431,959	75	5,759	1.272	7,328	23,418	1,756,367
2012/13	281,949	58	4,861	1.229	5,976	24,238	1,405,796
2013/14	2,907,409	86	33,807	1.188	40,152	25,086	2,157,413
2014/15	214,713	62	3,463	1.148	3,974	25,964	1,609,781
2015/16	1,836,391	70	26,234	1.109	29,086	26,873	1,881,107
2016/17	782,653	53	14,767	1.071	15,819	27,814	1,474,116
2017/18	1,546,955	55	28,126	1.035	29,111	28,787	1,583,284

(7) Projected 2018/19 average claim severity

\$29,795

Section I, (3) is from Exhibit AL-1.

Section I, (4) is from Exhibit AL-2.

Section I, (6) is from Exhibit AL-10.

Section II, (2) is from Exhibit AL-6.

Section II, (3) is from Section I, (5).

Section II, (5) is based on a 3.5% trend.

Section II, (7) is based on (6) and actuarial judgment.

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$3,007,140	\$3,007,140	\$3,007,140				\$3,007,140	\$3,007,140
1999/00	464,802	464,802	464,802				464,802	464,802
2000/01	9,770,711	9,770,711	9,770,711				9,770,711	9,770,711
2001/02	2,497,706	2,497,706	2,497,706				2,497,706	2,497,706
2002/03	213,389	213,389	213,389				213,389	213,389
2003/04	396,526	396,526	396,526				396,526	396,526
2004/05	2,828,107	2,828,107	2,828,107				2,828,107	2,828,107
2005/06	176,288	176,288	176,288				176,288	176,288
2006/07	623,841	623,841	623,841				623,841	623,841
2007/08	131,792	131,792	131,792				131,792	131,792
2008/09	173,974	173,974	173,974				173,974	173,974
2009/10	6,830,313	6,830,313	6,830,313				6,830,313	6,830,313
2010/11	808,599	818,599	818,599				808,599	820,000
2011/12	436,279	431,959	431,959				431,959	431,959
2012/13	290,464	281,949	281,949				281,949	281,949
2013/14	3,144,974	2,936,483	2,907,409	3,028,844	2,923,326	2,157,413	2,907,409	2,907,409
2014/15	249,677	223,366	214,713	459,964	282,559	1,609,781	214,713	214,713
2015/16	1,971,112	1,832,304	1,773,118	1,878,774	1,815,482	1,881,107	2,000,000	1,835,000
2016/17	765,337	782,737	791,226	1,305,428	1,078,279	1,474,116	1,350,000	950,000
2017/18	493,561	1,626,820	1,993,788	1,606,169	1,717,736	1,583,284	1,776,000	1,700,000
Total	\$35,274,592	\$36,048,807	\$36,327,351				\$36,885,219	\$36,255,619
2013/14 - 2017/18	6,624,661	7,401,710	7,680,255	8,279,180	7,817,382	8,705,701	8,248,122	7,607,122
to 2012/13	28,649,931	28,647,096	28,647,096				28,637,096	28,648,497
						Change		
						All years		-629,599
						2013/14 - 2017/18		-641,000
						to 2012/13		11,401

(2) is from Exhibit AL-3.

(3) is from Exhibit AL-4.

(4) is from Exhibit AL-5.

(5) and (6) are from Exhibit AL-7.

(7) is from Exhibit AL-8.

(8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Vehicles (3)	Limited Loss Rate per Vehicle (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per Vehicle (4)X(5) (6)
2008/09	\$173,974	2,071	\$84.00	1.411	\$118.50
2009/10	6,830,313	2,071	3,298.07	1.363	4,494.94
2010/11	820,000	2,071	395.94	1.317	521.38
2011/12	431,959	1,837	235.14	1.272	299.17
2012/13	281,949	1,892	149.02	1.229	183.19
2013/14	2,907,409	1,921	1,513.49	1.188	1,797.55
2014/15	214,713	2,022	106.19	1.148	121.85
2015/16	1,835,000	1,915	958.22	1.109	1,062.40
2016/17	950,000	1,773	535.82	1.071	573.98
2017/18	1,700,000	1,847	920.41	1.035	952.63
Total	\$16,145,318	19,420	\$831.38		\$1,012.56

Claim Period (1)	Projected Limited Loss Rate per Vehicle (7)	Projected Vehicles (8)	Projected Ultimate Limited Losses (7)X(8) (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per Vehicle (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11) (12)
2018/19	\$1,012.56	1,903	\$1,927,000	0.93	\$942.48	\$1,794,000
2019/20	1,048.00	1,903	1,994,000	0.93	975.46	1,856,000
2020/21	1,084.68	1,903	2,064,000	0.93	1,009.60	1,921,000

(2) is from Exhibit AL-9.

(3) 2010/11, 2011/12, 2012/13, 2013/14, 2014/15, 2015/16, 2016/17 and 2017/18 were provided by the County. Other periods assume a 0% trend.

(5) is based on a 3.5% trend.

(7) 2018/19 is based on (6) and actuarial judgment.
Other period(s) based on 2018/19 plus a 3% trend.

(8) to 2018/19 was provided by the County. Other claim periods are based on a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit AL-2.



COOK COUNTY, ILLINOIS
AUTOMOBILE LIABILITY

Exhibit AL-11

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$3,007,140	\$0	\$3,007,140	\$3,007,140	\$0	\$0	1.00	\$0
1999/00	464,802	0	464,802	464,802	0	0	1.00	0
2000/01	9,770,711	0	9,770,711	9,770,711	0	0	1.00	0
2001/02	2,497,706	0	2,497,706	2,497,706	0	0	1.00	0
2002/03	213,389	0	213,389	213,389	0	0	1.00	0
2003/04	396,526	0	396,526	396,526	0	0	1.00	0
2004/05	2,828,107	0	2,828,107	2,828,107	0	0	1.00	0
2005/06	176,288	0	176,288	176,288	0	0	1.00	0
2006/07	623,841	0	623,841	623,841	0	0	1.00	0
2007/08	131,792	0	131,792	131,792	0	0	1.00	0
2008/09	173,974	0	173,974	173,974	0	0	1.00	0
2009/10	6,830,313	0	6,830,313	6,830,313	0	0	1.00	0
2010/11	808,599	10,000	818,599	820,000	1,401	11,401	1.00	11,401
2011/12	431,959	0	431,959	431,959	0	0	0.99	0
2012/13	281,949	0	281,949	281,949	0	0	0.98	0
2013/14	2,907,409	0	2,907,409	2,907,409	0	0	0.97	0
2014/15	214,713	0	214,713	214,713	0	0	0.96	0
2015/16	1,255,620	310,000	1,565,620	1,835,000	269,380	579,380	0.97	560,508
2016/17	295,472	219,000	514,472	950,000	435,528	654,528	0.96	627,912
2017/18	64,593	555,271	619,863	1,700,000	1,080,137	1,635,408	0.95	1,551,278
Total	\$33,374,903	\$1,094,271	\$34,469,174	\$36,255,619	\$1,786,446	\$2,880,717		\$2,751,099

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit AL-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit AL-2.

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	100.0%	252.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	132.0	100.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	120.0	100.0%	132.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	108.0	100.0%	120.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	96.0	100.0%	108.0	100.0%	100.0%	11,401	11,401	0	1.00	0
2011/12	84.0	99.0%	96.0	100.0%	100.0%	0	0	0	1.00	0
2012/13	72.0	97.1%	84.0	99.0%	66.2%	0	0	0	0.99	0
2013/14	60.0	92.4%	72.0	97.1%	61.2%	0	0	0	0.98	0
2014/15	48.0	86.0%	60.0	92.4%	46.1%	0	0	0	0.97	0
2015/16	36.0	63.7%	48.0	86.0%	61.4%	579,380	355,865	223,515	0.96	215,505
2016/17	24.0	38.6%	36.0	63.7%	40.9%	654,528	267,537	386,991	0.97	374,386
2017/18	12.0	13.1%	24.0	38.6%	29.4%	1,635,408	480,194	1,155,214	0.96	1,108,238
2018/19	0.0	0.0%	12.0	13.1%	13.1%	1,927,000	252,187	1,674,813	0.95	1,588,656
Total						\$4,807,717	\$1,367,184	\$3,440,533		\$3,286,785

(3) and (5) are from Exhibit AL-2.

(7) to 2017/18 is from Exhibit AL-11. The amount for 2018/19 is from Exhibit AL-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit AL-2.

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	100.0%	264.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	132.0	100.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	120.0	100.0%	132.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	108.0	100.0%	120.0	100.0%	100.0%	0	0	0	1.00	0
2011/12	96.0	100.0%	108.0	100.0%	100.0%	0	0	0	1.00	0
2012/13	84.0	99.0%	96.0	100.0%	100.0%	0	0	0	1.00	0
2013/14	72.0	97.1%	84.0	99.0%	66.2%	0	0	0	0.99	0
2014/15	60.0	92.4%	72.0	97.1%	61.2%	0	0	0	0.98	0
2015/16	48.0	86.0%	60.0	92.4%	46.1%	223,515	102,946	120,569	0.97	117,211
2016/17	36.0	63.7%	48.0	86.0%	61.4%	386,991	237,696	149,295	0.96	143,945
2017/18	24.0	38.6%	36.0	63.7%	40.9%	1,155,214	472,191	683,023	0.97	660,775
2018/19	12.0	13.1%	24.0	38.6%	29.4%	1,674,813	491,765	1,183,048	0.96	1,134,940
2019/20	0.0	0.0%	12.0	13.1%	13.1%	1,994,000	260,955	1,733,045	0.95	1,643,892
Total						\$5,434,533	\$1,565,553	\$3,868,980		\$3,700,763

(3) and (5) are from Exhibit AL-2.

(7) to 2018/19 is from Exhibit AL-12, (9). The amount for 2019/20 is from Exhibit AL-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit AL-2.

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	100.0%	276.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	252.0	100.0%	264.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	132.0	100.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	120.0	100.0%	132.0	100.0%	100.0%	0	0	0	1.00	0
2011/12	108.0	100.0%	120.0	100.0%	100.0%	0	0	0	1.00	0
2012/13	96.0	100.0%	108.0	100.0%	100.0%	0	0	0	1.00	0
2013/14	84.0	99.0%	96.0	100.0%	100.0%	0	0	0	1.00	0
2014/15	72.0	97.1%	84.0	99.0%	66.2%	0	0	0	0.99	0
2015/16	60.0	92.4%	72.0	97.1%	61.2%	120,569	73,779	46,790	0.98	45,713
2016/17	48.0	86.0%	60.0	92.4%	46.1%	149,295	68,762	80,533	0.97	78,290
2017/18	36.0	63.7%	48.0	86.0%	61.4%	683,023	419,524	263,499	0.96	254,056
2018/19	24.0	38.6%	36.0	63.7%	40.9%	1,183,048	483,568	699,480	0.97	676,696
2019/20	12.0	13.1%	24.0	38.6%	29.4%	1,733,045	508,863	1,224,182	0.96	1,174,401
2020/21	0.0	0.0%	12.0	13.1%	13.1%	2,064,000	270,116	1,793,884	0.95	1,701,602
Total						\$5,932,980	\$1,824,612	\$4,108,368		\$3,930,758

(3) and (5) are from Exhibit AL-2.

(7) to 2019/20 is from Exhibit AL-13, (9). The amount for 2020/21 is from Exhibit AL-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit AL-2.

List of Large Claims
Reported Incurred Losses Greater Than \$250,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
97000014	12/17/93	to 1998/99	Unlimited	\$400,000	\$0	\$400,000
97000616	04/14/94	to 1998/99	Unlimited	306,007	0	306,007
97003422	05/28/01	2000/01	9,500,000	5,750,000	0	5,750,000
97003499	05/28/01	2000/01	9,500,000	3,750,000	0	3,750,000
97004328	08/07/02	2001/02	9,500,000	1,500,000	0	1,500,000
97004226	10/27/02	2001/02	9,500,000	587,543	0	587,543
97005965	03/21/05	2004/05	10,000,000	500,000	0	500,000
97005623	06/04/05	2004/05	10,000,000	1,809,197	0	1,809,197
97007383	10/09/07	2006/07	10,000,000	400,000	0	400,000
97008761	01/26/10	2009/10	10,000,000	725,000	0	725,000
97008566	08/15/10	2009/10	10,000,000	6,000,000	0	6,000,000
97008845	01/26/11	2010/11	10,000,000	575,000	0	575,000
97011269	12/06/13	2013/14	15,000,000	2,500,000	0	2,500,000
201600698	03/31/16	2015/16	15,000,000	0	250,000	250,000
201600427	06/10/16	2015/16	15,000,000	906,474	0	906,474

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	820	30	25	21	12	6	914		
0.01 - 5,000	957	43	31	31	24	35	1,121	1,121	77.8%
5,000 - 10,000	139	5	2	5	4	7	162	1,283	89.1%
10,000 - 25,000	60	4	1	8	4	0	77	1,360	94.4%
25,000 - 50,000	23	1	2	2	8	2	38	1,398	97.1%
50,000 - 100,000	13	2	1	1	1	1	19	1,417	98.4%
100,000 - 250,000	6	0	0	1	0	2	9	1,426	99.0%
250,000 - 500,000	4	0	0	0	0	0	4	1,430	99.3%
500,000 - 750,000	3	0	0	0	0	0	3	1,433	99.5%
750,000 - 1,000,000	0	0	0	1	0	0	1	1,434	99.6%
Over 1,000,000	5	1	0	0	0	0	6	1,440	100.0%
Total	2,030	86	62	70	53	53	2,354	1,440	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	1,511,785	83,619	54,114	54,416	48,539	46,168	1,798,640	1,798,640	5.2%
5,000 - 10,000	1,067,004	37,434	15,104	36,863	25,968	46,855	1,229,227	3,027,867	8.8%
10,000 - 25,000	1,028,791	76,073	11,700	137,293	71,725	0	1,325,582	4,353,449	12.6%
25,000 - 50,000	866,541	40,508	68,795	80,574	316,762	66,840	1,440,020	5,793,469	16.8%
50,000 - 100,000	1,008,786	169,776	65,000	100,000	51,478	60,000	1,455,040	7,248,510	21.0%
100,000 - 250,000	861,443	0	0	250,000	0	400,000	1,511,443	8,759,952	25.4%
250,000 - 500,000	1,606,007	0	0	0	0	0	1,606,007	10,365,959	30.1%
500,000 - 750,000	1,887,543	0	0	0	0	0	1,887,543	12,253,502	35.5%
750,000 - 1,000,000	0	0	0	906,474	0	0	906,474	13,159,976	38.2%
Over 1,000,000	18,809,197	2,500,000	0	0	0	0	21,309,197	34,469,174	100.0%
Total	\$28,647,096	\$2,907,409	\$214,713	\$1,565,620	\$514,472	\$619,863	\$34,469,174	\$34,469,174	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Revenue (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	728	0	\$4,055,111	\$0	\$4,055,111
1999/00	Unlimited	None	228.0	1,018,542	106	0	1,650,689	0	1,650,689
2000/01	9,500,000	None	216.0	1,068,809	135	0	677,872	0	677,872
2001/02	9,500,000	None	204.0	1,057,079	107	0	252,425	0	252,425
2002/03	9,500,000	None	192.0	1,086,728	74	0	419,113	0	419,113
2003/04	10,000,000	None	180.0	1,199,434	76	0	29,531	0	29,531
2004/05	10,000,000	None	168.0	1,189,789	104	0	221,976	0	221,976
2005/06	10,000,000	None	156.0	1,357,723	85	0	137,967	0	137,967
2006/07	10,000,000	None	144.0	1,243,144	82	0	97,830	0	97,830
2007/08	10,000,000	None	132.0	1,207,801	246	0	486,144	0	486,144
2008/09	10,000,000	None	120.0	1,303,812	204	0	153,328	0	153,328
2009/10	10,000,000	None	108.0	1,287,986	101	0	311,026	0	311,026
2010/11	10,000,000	None	96.0	1,293,078	121	0	138,548	0	138,548
2011/12	10,000,000	None	84.0	1,331,769	74	0	140,020	0	140,020
2012/13	15,000,000	None	72.0	1,285,791	119	0	356,365	0	356,365
2013/14	15,000,000	None	60.0	1,362,902	291	0	213,890	0	213,890
2014/15	15,000,000	None	48.0	1,509,150	104	0	353,121	0	353,121
2015/16	15,000,000	None	36.0	1,699,156	84	2	116,243	80,000	196,243
2016/17	15,000,000	None	24.0	1,753,287	103	9	20,807	165,000	185,807
2017/18	15,000,000	None	12.0	Not Provided	105	84	15,471	180,131	195,602
Total					3,049	95	\$9,847,476	\$425,131	\$10,272,607

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/90	Unlimited
12/01/00	9,500,000
12/01/03	10,000,000
03/01/13	15,000,000

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Revenue (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	728	0	\$4,055,111	\$0	\$4,055,111
1999/00	Unlimited	None	228.0	1,018,542	106	0	1,650,689	0	1,650,689
2000/01	Unlimited	None	216.0	1,068,809	135	0	677,872	0	677,872
2001/02	Unlimited	None	204.0	1,057,079	107	0	252,425	0	252,425
2002/03	Unlimited	None	192.0	1,086,728	74	0	419,113	0	419,113
2003/04	Unlimited	None	180.0	1,199,434	76	0	29,531	0	29,531
2004/05	Unlimited	None	168.0	1,189,789	104	0	221,976	0	221,976
2005/06	Unlimited	None	156.0	1,357,723	85	0	137,967	0	137,967
2006/07	Unlimited	None	144.0	1,243,144	82	0	97,830	0	97,830
2007/08	Unlimited	None	132.0	1,207,801	246	0	486,144	0	486,144
2008/09	Unlimited	None	120.0	1,303,812	204	0	153,328	0	153,328
2009/10	Unlimited	None	108.0	1,287,986	101	0	311,026	0	311,026
2010/11	Unlimited	None	96.0	1,293,078	121	0	138,548	0	138,548
2011/12	Unlimited	None	84.0	1,331,769	74	0	140,020	0	140,020
2012/13	Unlimited	None	72.0	1,285,791	119	0	356,365	0	356,365
2013/14	Unlimited	None	60.0	1,362,902	291	0	213,890	0	213,890
2014/15	Unlimited	None	48.0	1,509,150	104	0	353,121	0	353,121
2015/16	Unlimited	None	36.0	1,699,156	84	2	116,243	80,000	196,243
2016/17	Unlimited	None	24.0	1,753,287	103	9	20,807	165,000	185,807
2017/18	Unlimited	None	12.0	Not Provided	105	84	15,471	180,131	195,602
Total					3,049	95	\$9,847,476	\$425,131	\$10,272,607

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Revenue (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	728	0	\$4,055,111	\$0	\$4,055,111
1999/00	Unlimited	None	228.0	1,018,542	106	0	1,650,689	0	1,650,689
2000/01	Unlimited	None	216.0	1,068,809	135	0	677,872	0	677,872
2001/02	Unlimited	None	204.0	1,057,079	107	0	252,425	0	252,425
2002/03	Unlimited	None	192.0	1,086,728	74	0	419,113	0	419,113
2003/04	Unlimited	None	180.0	1,199,434	76	0	29,531	0	29,531
2004/05	Unlimited	None	168.0	1,189,789	104	0	221,976	0	221,976
2005/06	Unlimited	None	156.0	1,357,723	85	0	137,967	0	137,967
2006/07	Unlimited	None	144.0	1,243,144	82	0	97,830	0	97,830
2007/08	Unlimited	None	132.0	1,207,801	246	0	486,144	0	486,144
2008/09	Unlimited	None	120.0	1,303,812	204	0	153,328	0	153,328
2009/10	Unlimited	None	108.0	1,287,986	101	0	311,026	0	311,026
2010/11	Unlimited	None	96.0	1,293,078	121	0	138,548	0	138,548
2011/12	Unlimited	None	84.0	1,331,769	74	0	140,020	0	140,020
2012/13	Unlimited	None	72.0	1,285,791	119	0	356,365	0	356,365
2013/14	Unlimited	None	60.0	1,362,902	291	0	213,890	0	213,890
2014/15	Unlimited	None	48.0	1,509,150	104	0	353,121	0	353,121
2015/16	Unlimited	None	36.0	1,699,156	84	2	116,243	80,000	196,243
2016/17	Unlimited	None	24.0	1,753,287	103	9	20,807	165,000	185,807
2017/18	Unlimited	None	12.0	Not Provided	105	84	15,471	188,270	195,602
Total					3,049	95	\$9,847,476	\$433,270	\$10,272,607

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	100.0%	100.0%	100.0%
336.0	100.0%	100.0%	100.0%
324.0	100.0%	100.0%	100.0%
312.0	100.0%	100.0%	100.0%
300.0	100.0%	100.0%	100.0%
288.0	100.0%	100.0%	100.0%
276.0	100.0%	100.0%	100.0%
264.0	100.0%	100.0%	100.0%
252.0	100.0%	100.0%	100.0%
240.0	100.0%	100.0%	100.0%
228.0	100.0%	100.0%	100.0%
216.0	100.0%	100.0%	100.0%
204.0	100.0%	100.0%	100.0%
192.0	100.0%	100.0%	100.0%
180.0	100.0%	100.0%	100.0%
168.0	100.0%	100.0%	100.0%
156.0	100.0%	100.0%	100.0%
144.0	100.0%	100.0%	100.0%
132.0	100.0%	100.0%	100.0%
120.0	100.0%	100.0%	100.0%
108.0	100.0%	100.0%	100.0%
96.0	100.0%	100.0%	100.0%
84.0	100.0%	100.0%	100.0%
72.0	98.5%	100.0%	100.0%
60.0	94.3%	97.6%	100.0%
48.0	75.4%	92.9%	100.0%
36.0	49.5%	84.5%	100.0%
24.0	20.6%	60.3%	99.8%
12.0	5.4%	31.8%	95.0%

(2) is from Exhibit GL-2 (page 2).

(3) is from Exhibit GL-2 (page 3).

(4) is from Exhibit GL-2 (page 4).

COOK COUNTY, ILLINOIS
GENERAL LIABILITY

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

Claim Period	Months of Development:																					
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240		
to 1998/09																						
1999/00	3	20	27	685	710	710	710	710	711	711	711	711	711	1,636	1,636	1,636	1,636	1,636	1,651	1,651	\$4,055	
2000/01	6	16	515	579	590	685	693	693	693	693	693	693	693	693	693	693	693	678	678			
2001/02	13	20	93	93	93	243	243	243	243	243	243	243	243	243	243	243	252	252				
2002/03	1	10	20	24	429	429	429	429	429	429	429	429	429	429	429	419	419					
2003/04	5	18	22	22	35	35	35	35	35	35	35	35	35	30	30							
2004/05	10	24	61	222	222	222	222	222	222	222	222	222	222	222	222							
2005/06	4	41	74	164	164	164	170	170	170	170	170	170	170	170	170							
2006/07	21	38	99	118	118	118	118	118	118	118	98	98	98									
2007/08	37	69	81	128	398	402	447	447	447	486	486											
2008/09	15	40	47	47	152	152	152	152	153	153												
2009/10	19	27	119	205	205	313	313	311	311													
2010/11	13	20	24	139	139	139	140	140														
2011/12	20	24	39	90	140	140																
2012/13	303	314	315	356	356	356																
2013/14	24	80	98	212	214																	
2014/15	9	27	338																			
2015/16	12	104	116																			
2016/17	3	21																				
2017/18	15																					

II. Limited Paid Loss Development

Claim Period	Months of Development:																				
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1998/09																					
1999/00	5,689	1,398	24,971	1,037	1,000	1,000	1,002	1,000	1,000	1,000	1,000	1,000	2,301	1,000	1,000	1,000	1,009	1,000	1,000	1,000	
2000/01	2,549	31,729	1,124	1,020	1,161	1,011	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2001/02	1,557	4,709	1,000	1,000	2,619	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2002/03	8,386	2,019	1,199	17,775	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2003/04	3,393	1,199	1,000	1,623	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2004/05	2,462	2,571	3,623	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2005/06	11,562	1,797	2,222	1,000	1,000	1,040	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2006/07	1,784	2,622	1,192	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2007/08	1,851	1,173	1,590	3,101	1,009	1,112	1,000	1,000	1,008	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2008/09	2,643	1,180	1,000	3,229	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2009/10	1,443	4,407	1,720	1,000	1,527	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2010/11	1,534	1,200	5,761	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2011/12	1,204	1,622	2,301	1,555	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2012/13	1,038	1,003	1,131	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2013/14	3,276	1,225	2,161	1,011	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2014/15	2,893	12,701	1,044																		
2015/16	8,979	1,119																			
2016/17	7,834																				
2017/18																					
Average	3,993	4,334	3,315	2,490	1,165	1,013	1,000	1,001	1,009	0,981	0,976	1,000	1,190	0,996	1,010	0,993	1,004	1,000	1,000	1,000	
All	6,459	2,624	1,226	1,079	1,000	1,000	0,997	1,001	1,055	0,974	0,934	0,999	0,982	0,986	1,007	0,994	1,000	1,000	1,000	1,000	
Wtd 3	6,569	5,015	1,445	1,189	1,000	1,000	0,998	1,003	1,029	0,943	0,937	0,999	0,947	0,983	1,013	0,993	1,000	1,000	1,000	1,000	
Last 3	4,666	1,322	1,864	1,004	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
x-Follow																					
Similar	2,650	1,730	1,425	1,245	1,130	1,080	1,060	1,038	1,030	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Previous	3,900	2,400	1,525	1,250	1,045	1,015	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Selected	3,800	2,400	1,525	1,250	1,045	1,015	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Cumulative	18,440	4,853	2,022	1,326	1,061	1,015	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Percent	5.4%	20.6%	48.5%	75.4%	94.3%	98.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Amounts are limited (net of excess insurance).

Data was provided by the County.

COOK COUNTY, ILLINOIS
GENERAL LIABILITY

Historical Limited Reported Incurred Losses (\$000) and Limited Reported Incurred Loss Development

I. Historical Limited Reported Incurred Losses (\$000)

Claim Period	Months of Development:																				
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/09																					
1999/00	564	1,506	1,830	2,261	982	955	715	2,211	711	711	711	2,211	2,711	1,636	1,636	1,636	1,636	1,636	1,651	\$4,055	
2000/01	817	3,586	680	734	725	693	693	2,193	2,193	1,693	693	693	693	693	693	693	693	678	678		
2001/02	320	2,70	1,108	1,613	761	443	303	303	303	243	243	243	243	243	243	243	252	252			
2002/03	125	1,626	12,779	12,979	439	429	429	429	429	429	429	429	429	429	429	419	419				
2003/04	641	327	337	982	55	35	35	35	35	35	35	35	35	30	30						
2004/05	488	751	411	267	222	222	222	222	222	222	222	222	222	222	222						
2005/06	200	527	421	214	184	176	170	170	170	170	170	138	138								
2006/07	412	421	317	133	133	118	118	118	118	118	98	98									
2007/08	197	638	530	453	453	512	447	447	447	486	486										
2008/09	169	127	70	47	152	152	152	152	153												
2009/10	117	211	332	310	305	313	313	311	311												
2010/11	68	219	59	139	139	139	139	139													
2011/12	205	253	396	395	170	140	140														
2012/13	383	410	384	356	356	356															
2013/14	135	223	258	242	214																
2014/15	84	411	364	353																	
2015/16	113	236	196																		
2016/17	71	186																			
2017/18	196																				

II. Limited Reported Incurred Loss Development

Claim Period	Months of Development:																				
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1998/09																					
1999/00	2,669	1,215	1,235	0,425	1,003	0,741	3,084	0,322	1,000	1,000	3,109	1,226	0,603	1,000	1,000	1,000	1,009	1,000	1,000	1,000	
2000/01	4,695	0,180	1,064	0,989	0,955	1,000	3,165	1,000	0,772	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2001/02	0,843	4,107	1,455	0,472	0,582	0,684	1,000	1,000	0,802	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2002/03	13,027	7,857	1,016	0,034	0,977	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2003/04	0,510	1,030	2,916	0,056	0,637	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2004/05	1,540	0,547	0,650	0,832	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2005/06	2,632	0,800	0,507	0,860	0,959	0,966	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2006/07	1,022	0,755	0,419	1,000	0,887	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2007/08	3,239	0,831	0,855	1,000	1,129	0,873	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2008/09	0,756	0,550	0,672	3,229	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2009/10	1,805	1,575	0,935	0,984	1,026	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2010/11	3,222	0,269	2,346	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2011/12	1,234	1,567	0,998	0,430	0,824	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2012/13	1,070	0,936	0,929	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2013/14	1,658	1,156	0,939	0,883																	
2014/15	4,905	0,886	0,969																		
2015/16	2,101	0,830																			
2016/17	2,627																				
2017/18																					
Average	2,753	1,476	1,119	0,880	0,927	0,943	1,354	0,939	0,966	0,916	1,240	1,032	0,907	0,996	1,010	0,993	1,004	1,000	1,000	1,000	
All	3,120	0,940	0,946	0,745	0,955	1,000	0,997	1,001	1,055	0,974	0,634	0,999	0,992	0,986	1,007	0,994	1,000	1,000	1,000	1,000	
Wtd 3	3,211	0,957	0,946	0,771	0,941	1,000	0,998	1,003	1,029	0,943	0,837	0,989	0,947	0,983	1,013	0,993	1,000	1,000	1,000	1,000	
Last 3	2,128	0,993	0,969	0,956	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
x-Hi/low																					
Similar	1,850	1,400	1,220	1,120	1,063	1,045	1,025	1,023	1,014	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Previous	1,875	1,400	1,100	1,050	1,025	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Selected	1,900	1,400	1,100	1,050	1,025	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Cumulative	3,149	1,657	1,184	1,076	1,025	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Percent	31.8%	60.3%	84.5%	92.9%	97.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Amounts are limited (net of excess insurance).

Data was provided by the County.

COOK COUNTY, ILLINOIS
GENERAL LIABILITY
Historical Ratio of Limited Paid Losses and Limited Reported Incurred Losses

Claim Period	Months of Development:																					
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240		
to 1998/99																						
1999/00	0.6%	1.3%	1.5%	30.3%	73.8%	73.8%	89.3%	92.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2000/01	0.8%	0.4%	74.6%	78.9%	81.4%	98.9%	100.0%	31.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2001/02	3.9%	7.3%	8.4%	5.7%	12.2%	54.8%	100.0%	80.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2002/03	1.0%	0.6%	0.2%	0.2%	97.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2003/04	0.8%	5.5%	6.4%	2.2%	63.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2004/05	2.0%	3.2%	14.9%	83.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2005/06	1.8%	7.8%	17.5%	76.6%	89.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2006/07	5.1%	9.0%	31.1%	88.7%	88.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2007/08	18.9%	10.8%	15.2%	28.3%	87.9%	78.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2008/09	9.0%	31.3%	67.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2009/10	16.1%	12.8%	35.9%	66.1%	67.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2010/11	19.2%	9.1%	40.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2011/12	9.8%	9.5%	9.9%	22.8%	82.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2012/13	79.1%	76.7%	82.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2013/14	18.1%	35.8%	38.0%	87.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2014/15	11.0%	6.5%	92.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
2015/16	10.3%	43.9%	59.2%																			
2016/17	3.8%	11.2%																				
2017/18	7.9%																					
Average																						
All	11.5%	15.7%	35.0%	60.7%	82.9%	92.8%	98.4%	87.0%	92.0%	94.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Last 3	7.3%	20.5%	63.3%	95.8%	94.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Last 5	9.7%	30.3%	59.8%	95.8%	94.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
x-high																						
Implicit	17.1%	34.2%	58.6%	81.2%	96.6%	98.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$4,055,111	100.0%	\$4,055,111
1999/00	228.0	1,650,689	100.0%	1,650,689
2000/01	216.0	677,872	100.0%	677,872
2001/02	204.0	252,425	100.0%	252,425
2002/03	192.0	419,113	100.0%	419,113
2003/04	180.0	29,531	100.0%	29,531
2004/05	168.0	221,976	100.0%	221,976
2005/06	156.0	137,967	100.0%	137,967
2006/07	144.0	97,830	100.0%	97,830
2007/08	132.0	486,144	100.0%	486,144
2008/09	120.0	153,328	100.0%	153,328
2009/10	108.0	311,026	100.0%	311,026
2010/11	96.0	138,548	100.0%	138,548
2011/12	84.0	140,020	100.0%	140,020
2012/13	72.0	356,365	98.5%	361,710
2013/14	60.0	213,890	94.3%	226,868
2014/15	48.0	353,121	75.4%	468,183
2015/16	36.0	116,243	49.5%	235,032
2016/17	24.0	20,807	20.6%	100,968
2017/18	12.0	15,471	5.4%	285,286
Total		\$9,847,476		\$10,449,626

(3) is from Exhibit GL-1.

(4) is from Exhibit GL-2.

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$4,055,111	100.0%	\$4,055,111
1999/00	228.0	1,650,689	100.0%	1,650,689
2000/01	216.0	677,872	100.0%	677,872
2001/02	204.0	252,425	100.0%	252,425
2002/03	192.0	419,113	100.0%	419,113
2003/04	180.0	29,531	100.0%	29,531
2004/05	168.0	221,976	100.0%	221,976
2005/06	156.0	137,967	100.0%	137,967
2006/07	144.0	97,830	100.0%	97,830
2007/08	132.0	486,144	100.0%	486,144
2008/09	120.0	153,328	100.0%	153,328
2009/10	108.0	311,026	100.0%	311,026
2010/11	96.0	138,548	100.0%	138,548
2011/12	84.0	140,020	100.0%	140,020
2012/13	72.0	356,365	100.0%	356,365
2013/14	60.0	213,890	97.6%	219,237
2014/15	48.0	353,121	92.9%	380,046
2015/16	36.0	196,243	84.5%	232,327
2016/17	24.0	185,807	60.3%	307,961
2017/18	12.0	195,602	31.8%	615,973
Total		\$10,272,607		\$10,883,489

(3) is from Exhibit GL-1.

(4) is from Exhibit GL-2.

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	100.0%	100.0%	100.0%	\$4,055,111	\$0	\$4,055,111
1999/00	228.0	100.0%	100.0%	100.0%	1,650,689	0	1,650,689
2000/01	216.0	100.0%	100.0%	100.0%	677,872	0	677,872
2001/02	204.0	100.0%	100.0%	100.0%	252,425	0	252,425
2002/03	192.0	100.0%	100.0%	100.0%	419,113	0	419,113
2003/04	180.0	100.0%	100.0%	100.0%	29,531	0	29,531
2004/05	168.0	100.0%	100.0%	100.0%	221,976	0	221,976
2005/06	156.0	100.0%	100.0%	100.0%	137,967	0	137,967
2006/07	144.0	100.0%	100.0%	100.0%	97,830	0	97,830
2007/08	132.0	100.0%	100.0%	100.0%	486,144	0	486,144
2008/09	120.0	100.0%	100.0%	100.0%	153,328	0	153,328
2009/10	108.0	100.0%	100.0%	100.0%	311,026	0	311,026
2010/11	96.0	100.0%	100.0%	100.0%	138,548	0	138,548
2011/12	84.0	100.0%	100.0%	100.0%	140,020	0	140,020
2012/13	72.0	98.5%	100.0%	100.0%	356,365	0	356,365
2013/14	60.0	94.3%	97.6%	57.4%	213,890	0	213,890
2014/15	48.0	75.4%	92.9%	71.2%	353,121	0	353,121
2015/16	36.0	49.5%	84.5%	69.3%	116,243	80,000	231,733
2016/17	24.0	20.6%	60.3%	50.0%	20,807	165,000	350,551
2017/18	12.0	5.4%	31.8%	27.8%	15,471	180,131	662,451
Total					\$9,847,476	\$425,131	\$10,939,691

(3) and (4) are from Exhibit GL-2.

(6) and (7) are from Exhibit GL-1.

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$4,055,111	\$4,055,111	\$4,055,111	\$4,055,111
1999/00	1,650,689	1,650,689	1,650,689	1,650,689
2000/01	677,872	677,872	677,872	677,872
2001/02	252,425	252,425	252,425	252,425
2002/03	419,113	419,113	419,113	419,113
2003/04	29,531	29,531	29,531	29,531
2004/05	221,976	221,976	221,976	221,976
2005/06	137,967	137,967	137,967	137,967
2006/07	97,830	97,830	97,830	97,830
2007/08	486,144	486,144	486,144	486,144
2008/09	153,328	153,328	153,328	153,328
2009/10	311,026	311,026	311,026	311,026
2010/11	138,548	138,548	138,548	138,548
2011/12	140,020	140,020	140,020	140,020
2012/13	361,710	356,365	356,365	356,365
2013/14	226,868	219,237	213,890	213,890
2014/15	468,183	380,046	353,121	353,121
2015/16	235,032	232,327	231,733	232,630
2016/17	100,968	307,961	350,551	283,598
2017/18	285,286	615,973	662,451	568,427
Total	\$10,449,626	\$10,883,489	\$10,939,691	\$10,779,611

(2) is from Exhibit GL-3.

(3) is from Exhibit GL-4.

(4) is from Exhibit GL-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Revenue (000) (3)	Limited Loss Rate per \$1,000 of Revenue (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$1,000 of Revenue (4)X(5) (6)	Projected A-priori Loss Rate per \$1,000 of Revenue (7)/(5) (8)
2008/09	\$153,328	\$1,303,812	\$0.12	1.480	\$0.17	\$0.15
2009/10	311,026	1,287,986	0.24	1.423	0.34	0.16
2010/11	138,548	1,293,078	0.11	1.369	0.15	0.17
2011/12	140,020	1,331,769	0.11	1.316	0.14	0.17
2012/13	356,365	1,285,791	0.28	1.265	0.35	0.18
2013/14	213,890	1,362,902	0.16	1.217	0.19	0.19
2014/15	353,121	1,509,150	0.23	1.170	0.27	0.20
2015/16	232,630	1,699,156	0.14	1.125	0.15	0.20
2016/17	283,598	1,753,287	0.16	1.082	0.17	0.21
2017/18	568,427	1,753,287	0.32	1.040	0.34	0.22

(7) Projected 2018/19 a-priori loss rate per \$1,000 of Revenue \$0.23

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per \$1,000 of Revenue (4)	Revenue (000) (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$213,890	94.3%	\$0.19	\$1,362,902	\$14,638	\$228,527
2014/15	353,121	75.4%	0.20	1,509,150	72,421	425,541
2015/16	116,243	49.5%	0.20	1,699,156	174,394	290,636
2016/17	20,807	20.6%	0.21	1,753,287	293,976	314,783
2017/18	15,471	5.4%	0.22	1,753,287	364,209	379,681

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per \$1,000 of Revenue (4)	Revenue (000) (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$213,890	97.6%	\$0.19	\$1,362,902	\$6,241	\$220,131
2014/15	353,121	92.9%	0.20	1,509,150	20,877	373,998
2015/16	196,243	84.5%	0.20	1,699,156	53,592	249,834
2016/17	185,807	60.3%	0.21	1,753,287	146,874	332,681
2017/18	195,602	31.8%	0.22	1,753,287	262,807	458,409

Section I, (2) is from Exhibit GL-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit GL-10.

Section I, (5) is based on a 4% trend.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit GL-1.

Sections II and III, (3) are from Exhibit GL-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Revenue (000) (6)	Frequency (per \$1M of Revenue) (5)/(6)X1,000 (7)
2008/09	120.0	204	100.0%	204	\$1,303,812	0.16
2009/10	108.0	101	100.0%	101	1,287,986	0.08
2010/11	96.0	121	100.0%	121	1,293,078	0.09
2011/12	84.0	74	100.0%	74	1,331,769	0.06
2012/13	72.0	119	100.0%	119	1,285,791	0.09
2013/14	60.0	291	100.0%	291	1,362,902	0.21
2014/15	48.0	104	100.0%	104	1,509,150	0.07
2015/16	36.0	84	100.0%	84	1,699,156	0.05
2016/17	24.0	103	99.8%	103	1,753,287	0.06
2017/18	12.0	105	95.0%	110	1,753,287	0.06

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$153,328	204	\$752	1.480	\$1,113	\$2,005	\$408,976
2009/10	311,026	101	3,079	1.423	4,383	2,085	210,582
2010/11	138,548	121	1,145	1.369	1,567	2,168	262,373
2011/12	140,020	74	1,892	1.316	2,490	2,255	166,878
2012/13	356,365	119	2,995	1.265	3,789	2,345	279,092
2013/14	213,890	291	735	1.217	894	2,439	709,785
2014/15	353,121	104	3,395	1.170	3,972	2,537	263,816
2015/16	232,630	84	2,769	1.125	3,115	2,638	221,605
2016/17	283,598	103	2,753	1.082	2,978	2,744	282,599
2017/18	568,427	110	5,168	1.040	5,374	2,853	313,877

(7) Projected 2018/19 average claim severity \$2,968

Section I, (3) is from Exhibit GL-1.

Section I, (4) is from Exhibit GL-2.

Section I, (6) is from Exhibit GL-10.

Section II, (2) is from Exhibit GL-6.

Section II, (3) is from Section I, (5).

Section II, (5) is based on a 4% trend.

Section II, (7) is based on (6) and actuarial judgment.

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$4,055,111	\$4,055,111	\$4,055,111				\$4,055,111	\$4,055,111
1999/00	1,650,689	1,650,689	1,650,689				1,650,689	1,650,689
2000/01	677,872	677,872	677,872				677,872	677,872
2001/02	252,425	252,425	252,425				252,425	252,425
2002/03	419,113	419,113	419,113				419,113	419,113
2003/04	29,531	29,531	29,531				29,531	29,531
2004/05	221,976	221,976	221,976				221,976	221,976
2005/06	137,967	137,967	137,967				137,967	137,967
2006/07	97,830	97,830	97,830				97,830	97,830
2007/08	486,144	486,144	486,144				486,144	486,144
2008/09	153,328	153,328	153,328				153,328	153,328
2009/10	311,026	311,026	311,026				311,026	311,026
2010/11	138,548	138,548	138,548				138,548	138,548
2011/12	140,020	140,020	140,020				140,020	140,020
2012/13	361,710	356,365	356,365				356,365	356,365
2013/14	226,868	219,237	213,890	228,527	220,131	709,785	280,000	213,890
2014/15	468,183	380,046	353,121	425,541	373,998	263,816	460,000	353,121
2015/16	235,032	232,327	231,733	290,636	249,834	221,605	400,000	275,000
2016/17	100,968	307,961	350,551	314,783	332,681	282,599	365,000	325,000
2017/18	285,286	615,973	662,451	379,681	458,409	313,877	470,000	470,000
Total	\$10,449,626	\$10,883,489	\$10,939,691				\$11,102,945	\$10,764,955
2013/14 - 2017/18	1,316,336	1,755,544	1,811,746	1,639,168	1,635,053	1,791,683	1,975,000	1,637,011
to 2012/13	9,133,290	9,127,945	9,127,945				9,127,945	9,127,945
						Change		
						All years		-\$337,989
						2013/14 - 2017/18		-337,989
						to 2012/13		0

(2) is from Exhibit GL-3.

(3) is from Exhibit GL-4.

(4) is from Exhibit GL-5.

(5) and (6) are from Exhibit GL-7.

(7) is from Exhibit GL-8.

(8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Revenue (000) (3)	Limited Loss Rate per \$1,000 of Revenue (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$1,000 of Revenue (4)X(5) (6)	Present Value of Projected Limited Losses (8)X(11) (12)
2008/09	\$153,328	\$1,303,812	\$0.12	1.480	\$0.17	
2009/10	311,026	1,287,986	0.24	1.423	0.34	
2010/11	138,548	1,293,078	0.11	1.369	0.15	
2011/12	140,020	1,331,769	0.11	1.316	0.14	
2012/13	356,365	1,285,791	0.28	1.265	0.35	
2013/14	213,890	1,362,902	0.16	1.217	0.19	
2014/15	353,121	1,509,150	0.23	1.170	0.27	
2015/16	275,000	1,699,156	0.16	1.125	0.18	
2016/17	325,000	1,753,287	0.19	1.082	0.20	
2017/18	470,000	1,753,287	0.27	1.040	0.28	
Total	\$2,736,298	\$14,580,218	\$0.19		\$0.23	

Claim Period (1)	Projected Limited Loss Rate per \$1,000 of Revenue (7)	Projected Revenue (000) (8)	Projected Ultimate Limited Losses (7)X(8) (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per \$1,000 of Revenue (7)X(10) (11)	Present Value of Projected Limited Losses (8)X(11) (12)
2018/19	\$0.23	\$1,753,287	\$400,000	0.92	\$0.21	\$367,000
2019/20	0.24	1,753,287	416,000	0.92	0.22	382,000
2020/21	0.25	1,753,287	432,000	0.92	0.23	397,000

(2) is from Exhibit GL-9.

(3) 2008/09, 2009/10, 2010/11, 2011/12, 2012/13, 2013/14, 2014/15, 2015/16 and 2016/17 were provided by the County. Other periods assume a 0% trend.

(5) is based on a 4% trend.

(7) 2018/19 is based on (6) and actuarial judgment.
Other period(s) based on 2018/19 plus a 4% trend.

(8) is based on (3) for 2017/18 and a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit GL-2.

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$4,055,111	\$0	\$4,055,111	\$4,055,111	\$0	\$0	1.00	\$0
1999/00	1,650,689	0	1,650,689	1,650,689	0	0	1.00	0
2000/01	677,872	0	677,872	677,872	0	0	1.00	0
2001/02	252,425	0	252,425	252,425	0	0	1.00	0
2002/03	419,113	0	419,113	419,113	0	0	1.00	0
2003/04	29,531	0	29,531	29,531	0	0	1.00	0
2004/05	221,976	0	221,976	221,976	0	0	1.00	0
2005/06	137,967	0	137,967	137,967	0	0	1.00	0
2006/07	97,830	0	97,830	97,830	0	0	1.00	0
2007/08	486,144	0	486,144	486,144	0	0	1.00	0
2008/09	153,328	0	153,328	153,328	0	0	1.00	0
2009/10	311,026	0	311,026	311,026	0	0	1.00	0
2010/11	138,548	0	138,548	138,548	0	0	1.00	0
2011/12	140,020	0	140,020	140,020	0	0	1.00	0
2012/13	356,365	0	356,365	356,365	0	0	0.99	0
2013/14	213,890	0	213,890	213,890	0	0	0.98	0
2014/15	353,121	0	353,121	353,121	0	0	0.98	0
2015/16	116,243	80,000	196,243	275,000	78,757	158,757	0.97	153,869
2016/17	20,807	165,000	185,807	325,000	139,193	304,193	0.96	291,533
2017/18	15,471	180,131	195,602	470,000	274,398	454,529	0.94	427,575
Total	\$9,847,476	\$425,131	\$10,272,607	\$10,764,955	\$492,348	\$917,479		\$872,977

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit GL-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit GL-2.

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	100.0%	252.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	132.0	100.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	120.0	100.0%	132.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	108.0	100.0%	120.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	96.0	100.0%	108.0	100.0%	100.0%	0	0	0	1.00	0
2011/12	84.0	100.0%	96.0	100.0%	100.0%	0	0	0	1.00	0
2012/13	72.0	98.5%	84.0	100.0%	100.0%	0	0	0	1.00	0
2013/14	60.0	94.3%	72.0	98.5%	74.2%	0	0	0	0.99	0
2014/15	48.0	75.4%	60.0	94.3%	76.7%	0	0	0	0.98	0
2015/16	36.0	49.5%	48.0	75.4%	51.4%	158,757	81,560	77,197	0.98	75,517
2016/17	24.0	20.6%	36.0	49.5%	36.3%	304,193	110,541	193,652	0.97	187,689
2017/18	12.0	5.4%	24.0	20.6%	16.1%	454,529	72,976	381,553	0.96	365,674
2018/19	0.0	0.0%	12.0	5.4%	5.4%	400,000	21,692	378,308	0.94	355,874
Total						\$1,317,479	\$286,769	\$1,030,710		\$984,754

(3) and (5) are from Exhibit GL-2.

(7) to 2017/18 is from Exhibit GL-11. The amount for 2018/19 is from Exhibit GL-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit GL-2.

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	100.0%	264.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	132.0	100.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	120.0	100.0%	132.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	108.0	100.0%	120.0	100.0%	100.0%	0	0	0	1.00	0
2011/12	96.0	100.0%	108.0	100.0%	100.0%	0	0	0	1.00	0
2012/13	84.0	100.0%	96.0	100.0%	100.0%	0	0	0	1.00	0
2013/14	72.0	98.5%	84.0	100.0%	100.0%	0	0	0	1.00	0
2014/15	60.0	94.3%	72.0	98.5%	74.2%	0	0	0	0.99	0
2015/16	48.0	75.4%	60.0	94.3%	76.7%	77,197	59,229	17,968	0.98	17,593
2016/17	36.0	49.5%	48.0	75.4%	51.4%	193,652	99,487	94,165	0.98	92,116
2017/18	24.0	20.6%	36.0	49.5%	36.3%	381,553	138,653	242,900	0.97	235,421
2018/19	12.0	5.4%	24.0	20.6%	16.1%	378,308	60,738	317,570	0.96	304,353
2019/20	0.0	0.0%	12.0	5.4%	5.4%	416,000	22,560	393,440	0.94	370,108
Total						\$1,446,710	\$380,667	\$1,066,043		\$1,019,591

(3) and (5) are from Exhibit GL-2.

(7) to 2018/19 is from Exhibit GL-12, (9). The amount for 2019/20 is from Exhibit GL-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit GL-2.

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	100.0%	276.0	100.0%	100.0%	\$0	\$0	\$0	1.00	\$0
1999/00	252.0	100.0%	264.0	100.0%	100.0%	0	0	0	1.00	0
2000/01	240.0	100.0%	252.0	100.0%	100.0%	0	0	0	1.00	0
2001/02	228.0	100.0%	240.0	100.0%	100.0%	0	0	0	1.00	0
2002/03	216.0	100.0%	228.0	100.0%	100.0%	0	0	0	1.00	0
2003/04	204.0	100.0%	216.0	100.0%	100.0%	0	0	0	1.00	0
2004/05	192.0	100.0%	204.0	100.0%	100.0%	0	0	0	1.00	0
2005/06	180.0	100.0%	192.0	100.0%	100.0%	0	0	0	1.00	0
2006/07	168.0	100.0%	180.0	100.0%	100.0%	0	0	0	1.00	0
2007/08	156.0	100.0%	168.0	100.0%	100.0%	0	0	0	1.00	0
2008/09	144.0	100.0%	156.0	100.0%	100.0%	0	0	0	1.00	0
2009/10	132.0	100.0%	144.0	100.0%	100.0%	0	0	0	1.00	0
2010/11	120.0	100.0%	132.0	100.0%	100.0%	0	0	0	1.00	0
2011/12	108.0	100.0%	120.0	100.0%	100.0%	0	0	0	1.00	0
2012/13	96.0	100.0%	108.0	100.0%	100.0%	0	0	0	1.00	0
2013/14	84.0	100.0%	96.0	100.0%	100.0%	0	0	0	1.00	0
2014/15	72.0	98.5%	84.0	100.0%	100.0%	0	0	0	1.00	0
2015/16	60.0	94.3%	72.0	98.5%	74.2%	17,968	13,326	4,642	0.99	4,578
2016/17	48.0	75.4%	60.0	94.3%	76.7%	94,165	72,247	21,918	0.98	21,461
2017/18	36.0	49.5%	48.0	75.4%	51.4%	242,900	124,788	118,112	0.98	115,542
2018/19	24.0	20.6%	36.0	49.5%	36.3%	317,570	115,402	202,168	0.97	195,943
2019/20	12.0	5.4%	24.0	20.6%	16.1%	393,440	63,168	330,272	0.96	316,527
2020/21	0.0	0.0%	12.0	5.4%	5.4%	432,000	23,428	408,572	0.94	384,343
Total						\$1,498,043	\$412,359	\$1,085,684		\$1,038,394

(3) and (5) are from Exhibit GL-2.

(7) to 2019/20 is from Exhibit GL-13, (9). The amount for 2020/21 is from Exhibit GL-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit GL-2.

List of Large Claims
Reported Incurred Losses Greater Than \$250,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
97000023	01/31/91	to 1998/99	Unlimited	\$749,721	\$0	\$749,721
97002477	09/30/98	to 1998/99	Unlimited	925,000	0	925,000
97003121	12/30/99	1999/00	Unlimited	650,000	0	650,000
97003515	06/09/00	1999/00	Unlimited	925,000	0	925,000
97003686	03/10/01	2000/01	9,500,000	465,000	0	465,000
97004402	03/26/03	2002/03	9,500,000	335,000	0	335,000
97010256	01/01/13	2012/13	10,000,000	300,000	0	300,000

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	1,509	124	73	57	77	10	1,850		
0.01 - 5,000	717	159	22	21	18	91	1,028	1,028	85.7%
5,000 - 10,000	51	2	2	1	5	1	62	1,090	90.9%
10,000 - 25,000	33	5	3	1	0	2	44	1,134	94.6%
25,000 - 50,000	20	0	2	4	3	0	29	1,163	97.0%
50,000 - 100,000	19	1	2	0	0	1	23	1,186	98.9%
100,000 - 250,000	6	0	0	0	0	0	6	1,192	99.4%
250,000 - 500,000	3	0	0	0	0	0	3	1,195	99.7%
500,000 - 750,000	2	0	0	0	0	0	2	1,197	99.8%
750,000 - 1,000,000	2	0	0	0	0	0	2	1,199	100.0%
Over 1,000,000	0	0	0	0	0	0	0	1,199	100.0%
Total	2,362	291	104	84	103	105	3,049	1,199	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	562,157	25,137	23,085	19,243	18,415	55,602	703,638	703,638	6.8%
5,000 - 10,000	414,792	15,254	20,000	10,000	47,392	10,000	517,439	1,221,077	11.9%
10,000 - 25,000	592,689	73,500	48,786	20,000	0	30,000	764,975	1,986,052	19.3%
25,000 - 50,000	844,086	0	90,000	147,000	120,000	0	1,201,086	3,187,138	31.0%
50,000 - 100,000	1,519,500	99,999	171,250	0	0	100,000	1,890,749	5,077,887	49.4%
100,000 - 250,000	845,000	0	0	0	0	0	845,000	5,922,887	57.7%
250,000 - 500,000	1,100,000	0	0	0	0	0	1,100,000	7,022,887	68.4%
500,000 - 750,000	1,399,721	0	0	0	0	0	1,399,721	8,422,607	82.0%
750,000 - 1,000,000	1,850,000	0	0	0	0	0	1,850,000	10,272,607	100.0%
Over 1,000,000	0	0	0	0	0	0	0	10,272,607	100.0%
Total	\$9,127,945	\$213,890	\$353,121	\$196,243	\$185,807	\$195,602	\$10,272,607	\$10,272,607	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Revenue (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Limited Paid Losses 11/30/18 (8)	Limited Case Reserves 11/30/18 (9)	Limited Reported Incurred Losses 11/30/18 (10)
to 1998/99	See Note	None	240.0	Not Provided	1,388	9	\$87,151,298	\$12,000,000	\$99,151,298
1999/00	Unlimited	None	228.0	1,018,542	126	0	2,720,812	0	2,720,812
2000/01	9,500,000	None	216.0	1,068,809	179	1	7,938,079	500,000	8,438,079
2001/02	9,500,000	None	204.0	1,057,079	163	0	12,153,693	0	12,153,693
2002/03	9,500,000	None	192.0	1,086,728	184	0	6,244,784	0	6,244,784
2003/04	10,000,000	None	180.0	1,199,434	179	0	68,325,652	0	68,325,652
2004/05	10,000,000	None	168.0	1,189,789	163	3	4,714,938	10,151,500	14,866,438
2005/06	10,000,000	None	156.0	1,357,723	231	3	6,622,295	1,051,000	7,673,295
2006/07	10,000,000	None	144.0	1,243,144	323	5	9,374,273	453,000	9,827,273
2007/08	10,000,000	None	132.0	1,207,801	269	1	13,584,661	30,000	13,614,661
2008/09	10,000,000	None	120.0	1,303,812	327	5	5,852,791	900,000	6,752,791
2009/10	10,000,000	None	108.0	1,287,986	325	3	7,337,368	201,000	7,538,368
2010/11	10,000,000	None	96.0	1,293,078	292	9	9,131,728	20,974,601	30,106,329
2011/12	10,000,000	None	84.0	1,331,769	421	10	5,888,373	3,177,000	9,065,373
2012/13	15,000,000	None	72.0	1,285,791	507	25	8,491,302	4,401,000	12,892,302
2013/14	15,000,000	None	60.0	1,362,902	672	35	9,513,631	11,135,500	20,649,131
2014/15	15,000,000	None	48.0	1,509,150	436	65	2,516,670	21,405,500	23,922,170
2015/16	15,000,000	None	36.0	1,699,156	384	131	1,575,542	17,499,500	19,075,042
2016/17	15,000,000	None	24.0	1,753,287	266	149	3,701,725	12,573,000	16,274,725
2017/18	15,000,000	None	12.0	Not Provided	94	80	4,287,850	3,071,000	7,358,850
Total					6,929	534	\$277,127,464	\$119,523,601	\$396,651,065

* The specific self-insured retention changes are as follows:

Effective Date	Retention
12/01/77	Unlimited
12/01/00	9,500,000
12/01/03	10,000,000
03/01/13	15,000,000

(8), (9) and (10) are net of the specific self-insured retention and other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Revenue (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Net Unlimited Paid Losses 11/30/18 (8)	Net Unlimited Case Reserves 11/30/18 (9)	Net Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	1,388	9	\$87,151,298	\$12,000,000	\$99,151,298
1999/00	Unlimited	None	228.0	1,018,542	126	0	2,720,812	0	2,720,812
2000/01	Unlimited	None	216.0	1,068,809	179	1	7,938,079	500,000	8,438,079
2001/02	Unlimited	None	204.0	1,057,079	163	0	12,153,693	0	12,153,693
2002/03	Unlimited	None	192.0	1,086,728	184	0	6,244,784	0	6,244,784
2003/04	Unlimited	None	180.0	1,199,434	179	0	68,325,652	0	68,325,652
2004/05	Unlimited	None	168.0	1,189,789	163	3	4,714,938	10,151,500	14,866,438
2005/06	Unlimited	None	156.0	1,357,723	231	3	6,622,295	1,051,000	7,673,295
2006/07	Unlimited	None	144.0	1,243,144	323	5	9,374,273	453,000	9,827,273
2007/08	Unlimited	None	132.0	1,207,801	269	1	13,584,661	30,000	13,614,661
2008/09	Unlimited	None	120.0	1,303,812	327	5	5,852,791	900,000	6,752,791
2009/10	Unlimited	None	108.0	1,287,986	325	3	7,337,368	201,000	7,538,368
2010/11	Unlimited	None	96.0	1,293,078	292	9	9,131,728	20,974,601	30,106,329
2011/12	Unlimited	None	84.0	1,331,769	421	10	5,888,373	3,177,000	9,065,373
2012/13	Unlimited	None	72.0	1,285,791	507	25	8,491,302	4,401,000	12,892,302
2013/14	Unlimited	None	60.0	1,362,902	672	35	9,513,631	11,135,500	20,649,131
2014/15	Unlimited	None	48.0	1,509,150	436	65	2,516,670	21,405,500	23,922,170
2015/16	Unlimited	None	36.0	1,699,156	384	131	1,575,542	17,499,500	19,075,042
2016/17	Unlimited	None	24.0	1,753,287	266	149	3,701,725	12,573,000	16,274,725
2017/18	Unlimited	None	12.0	Not Provided	94	80	4,287,850	3,071,000	7,358,850
Total					6,929	534	\$277,127,464	\$119,523,601	\$396,651,065

(8), (9) and (10) are gross of the specific self-insured retention and net of other recoveries.

Data was provided by the County.

Data Summary as of November 30, 2018
Gross Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 11/30/18 (4)	Revenue (000) (5)	Reported Claims 11/30/18 (6)	Open Claims 11/30/18 (7)	Gross Unlimited Paid Losses 11/30/18 (8)	Gross Unlimited Case Reserves 11/30/18 (9)	Gross Unlimited Reported Incurred Losses 11/30/18 (10)
to 1998/99	Unlimited	None	240.0	Not Provided	1,388	9	\$87,151,298	\$12,000,000	\$99,151,298
1999/00	Unlimited	None	228.0	1,018,542	126	0	2,720,812	0	2,720,812
2000/01	Unlimited	None	216.0	1,068,809	179	1	7,938,079	500,000	8,438,079
2001/02	Unlimited	None	204.0	1,057,079	163	0	12,153,693	0	12,153,693
2002/03	Unlimited	None	192.0	1,086,728	184	0	6,244,784	0	6,244,784
2003/04	Unlimited	None	180.0	1,199,434	179	0	68,325,652	0	68,325,652
2004/05	Unlimited	None	168.0	1,189,789	163	3	4,714,938	10,151,500	14,866,438
2005/06	Unlimited	None	156.0	1,357,723	231	3	6,622,295	1,051,000	7,673,295
2006/07	Unlimited	None	144.0	1,243,144	323	5	9,374,273	453,000	9,827,273
2007/08	Unlimited	None	132.0	1,207,801	269	1	13,584,661	30,000	13,614,661
2008/09	Unlimited	None	120.0	1,303,812	327	5	5,852,791	900,000	6,752,791
2009/10	Unlimited	None	108.0	1,287,986	325	3	7,337,368	201,000	7,538,368
2010/11	Unlimited	None	96.0	1,293,078	292	9	9,131,728	20,974,601	30,106,329
2011/12	Unlimited	None	84.0	1,331,769	421	10	5,888,373	3,727,000	9,065,373
2012/13	Unlimited	None	72.0	1,285,791	507	25	8,491,302	4,401,000	12,892,302
2013/14	Unlimited	None	60.0	1,362,902	672	35	9,513,631	11,239,500	20,649,131
2014/15	Unlimited	None	48.0	1,509,150	436	65	2,516,670	21,405,500	23,922,170
2015/16	Unlimited	None	36.0	1,699,156	384	131	1,575,542	17,499,500	19,075,042
2016/17	Unlimited	None	24.0	1,753,287	266	149	3,701,725	12,573,000	16,274,725
2017/18	Unlimited	None	12.0	Not Provided	94	80	4,287,850	3,071,000	7,358,850
Total					6,929	534	\$277,127,464	\$120,177,601	\$396,651,065

(8), (9) and (10) are gross of the specific self-insured retention and other recoveries.

Data was provided by the County.

Summary of Percent Losses Paid, Losses Reported and Claims Reported

Months of Development (1)	Percent Losses Paid (2)	Percent Losses Reported (3)	Percent Claims Reported (4)
360.0	100.0%	100.0%	100.0%
348.0	99.9%	100.0%	100.0%
336.0	99.9%	100.0%	100.0%
324.0	99.9%	100.0%	100.0%
312.0	99.8%	100.0%	100.0%
300.0	99.8%	100.0%	100.0%
288.0	99.6%	100.0%	100.0%
276.0	99.5%	100.0%	100.0%
264.0	99.3%	100.0%	100.0%
252.0	99.0%	99.9%	100.0%
240.0	98.5%	99.5%	100.0%
228.0	98.3%	99.4%	100.0%
216.0	98.0%	99.3%	100.0%
204.0	97.7%	99.2%	100.0%
192.0	97.4%	99.0%	100.0%
180.0	97.2%	98.8%	100.0%
168.0	96.7%	98.5%	100.0%
156.0	96.2%	98.2%	100.0%
144.0	95.7%	97.5%	100.0%
132.0	94.8%	96.9%	100.0%
120.0	92.9%	96.2%	100.0%
108.0	90.2%	95.2%	100.0%
96.0	84.3%	92.0%	100.0%
84.0	78.1%	88.9%	100.0%
72.0	62.4%	85.9%	99.0%
60.0	48.0%	79.5%	97.5%
48.0	30.0%	68.3%	95.6%
36.0	13.6%	58.6%	91.1%
24.0	2.9%	26.6%	66.5%
12.0	0.3%	10.5%	27.7%

(2) is from Exhibit OL-2 (page 2).

(3) is from Exhibit OL-2 (page 3).

(4) is from Exhibit OL-2 (page 4).

COOK COUNTY, ILLINOIS
OTHER LIABILITY

Historical Limited Paid Losses (\$000) and Limited Paid Loss Development

Claim Period	Months of Development:							Months of Development:							Months of Development:						
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/09																					
1999/00	127	267	282	919	1,175	1,606	1,610	2,135	2,413	2,413	2,413	2,713	2,713	2,713	2,713	2,713	2,713	2,713	2,713	2,713	2,713
2000/01	0	33	4,341	5,141	5,204	5,525	6,038	6,238	6,253	6,260	6,260	6,260	7,263	7,263	7,263	7,263	7,263	7,263	7,263	7,263	7,263
2001/02	3	45	591	1,625	3,312	6,371	8,999	8,999	9,004	11,759	12,391	12,391	12,616	12,616	12,616	12,616	12,616	12,616	12,616	12,616	12,616
2002/03	11	79	162	489	795	9,335	16,123	5,734	5,869	5,974	6,079	6,184	6,184	6,184	6,245	6,245	6,245	6,245	6,245	6,245	6,245
2003/04	22	69	389	1,694	8,745	9,335	16,123	61,060	65,563	65,563	65,563	65,563	65,563	65,563	65,563	65,563	65,563	65,563	65,563	65,563	65,563
2004/05	0	86	500	1,742	1,811	2,807	4,281	4,683	4,683	4,683	4,683	4,683	4,683	4,683	4,683	4,683	4,683	4,683	4,683	4,683	4,683
2005/06	14	168	1,304	2,627	2,692	2,733	3,193	3,193	3,193	3,193	3,193	3,193	3,193	3,193	3,193	3,193	3,193	3,193	3,193	3,193	3,193
2006/07	41	426	1,541	3,739	3,861	4,039	7,459	9,059	9,059	9,059	9,059	9,059	9,059	9,059	9,059	9,059	9,059	9,059	9,059	9,059	9,059
2007/08	17	192	637	976	5,549	5,664	6,099	6,791	7,940	8,022	13,585	5,853	5,853	5,853	5,853	5,853	5,853	5,853	5,853	5,853	5,853
2008/09	76	230	1,012	1,382	2,826	3,689	5,144	5,646	7,187	7,337	8,132	8,132	8,132	8,132	8,132	8,132	8,132	8,132	8,132	8,132	8,132
2009/10	4	237	991	1,904	2,818	3,438	6,958	7,187	7,337	7,337	7,337	7,337	7,337	7,337	7,337	7,337	7,337	7,337	7,337	7,337	7,337
2010/11	53	250	1,333	1,712	2,379	2,929	8,888	9,132	9,132	9,132	9,132	9,132	9,132	9,132	9,132	9,132	9,132	9,132	9,132	9,132	9,132
2011/12	100	1,229	1,990	2,596	3,605	5,694	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888
2012/13	31	246	1,161	2,488	4,235	8,491	8,491	8,491	8,491	8,491	8,491	8,491	8,491	8,491	8,491	8,491	8,491	8,491	8,491	8,491	8,491
2013/14	22	241	1,705	2,283	9,514																
2014/15	165	516	1,554	2,517																	
2015/16	204	659	1,576																		
2016/17	3,302																				
2017/18	4,288																				

II. Limited Paid Loss Development

Claim Period	Months of Development:			Months of Development:			Months of Development:			Months of Development:			Months of Development:			Months of Development:			Months of Development:		
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1998/09																					
1999/00	2,097	1,057	3,257	1,278	1,368	1,002	1,326	1,013	1,116	1,000	1,124	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2000/01		130,360	1,184	1,072	1,062	1,093	1,033	1,002	1,001	1,000	1,160	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2001/02	17,980	13,154	2,748	2,038	1,923	1,412	1,000	1,001	1,306	1,054	1,000	1,018	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2002/03	7,223	2,295	2,735	1,596	7,568	1,003	0,950	1,024	1,018	1,018	1,017	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2003/04	3,094	5,617	4,351	5,164	1,067	1,727	3,787	1,074	1,000	1,000	1,001	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2004/05		5,823	3,485	1,039	1,550	1,525	1,094	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2005/06	11,769	7,750	2,014	1,025	1,015	1,168	1,215	1,014	1,010	1,010	1,142	1,007	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2006/07	10,334	3,614	2,427	1,033	1,046	1,846	1,113	1,169	1,010	1,004	1,007	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2007/08	11,576	3,323	1,533	5,664	1,021	1,077	1,033	1,037	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2008/09	3,035	4,397	1,365	2,045	1,305	1,385	1,097	1,021	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2009/10	67,791	4,175	1,922	1,480	1,220	2,024	1,033	1,021	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2010/11	4,730	5,324	1,285	1,389	1,232	3,034	1,027	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
2011/12	12,286	1,620	1,304	1,389	1,579	1,034															
2012/13	8,075	4,712	2,144	1,702	2,005																
2013/14	10,827	7,068	4,858	1,149																	
2014/15	3,132	3,010	1,619																		
2015/16	3,230	2,390																			
2016/17	1,121																				
2017/18																					
Average																					
All	11,144	12,099	2,389	1,935	1,763	1,488	1,306	1,102	1,046	1,089	1,056	1,004	1,007	1,002	0,991	1,031	1,001	1,000	1,000	1,015	
Wtd 3	1,328	3,413	3,006	1,288	1,675	1,802	1,046	1,077	1,007	1,251	1,045	1,000	1,035	1,001	0,982	1,031	1,000	1,000	1,000	1,015	
Last 3	2,494	4,156	2,874	1,413	1,605	2,031	1,063	1,076	1,007	1,242	1,050	1,002	1,014	1,003	0,988	1,031	1,000	1,000	1,000	1,015	
Last 5	4,612	3,371	1,669	1,419	1,372	1,496	1,081	1,076	1,003	1,011	1,008	1,002	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,015	
x-Follow																					
Previous	11,000	5,000	2,200	1,640	1,275	1,250	1,080	1,070	1,030	1,015	1,010	1,005	1,005	1,005	1,003	1,003	1,003	1,003	1,003	1,015	
Selected	10,500	4,750	2,200	1,600	1,300	1,250	1,080	1,070	1,030	1,020	1,010	1,005	1,005	1,005	1,003	1,003	1,003	1,003	1,003	1,015	
Cumulative	365,495	34,809	7,328	3,331	2,082	1,601	1,281	1,186	1,109	1,076	1,055	1,045	1,040	1,034	1,029	1,026	1,023	1,020	1,017	1,015	
Percent	0.3%	2.9%	13.6%	30.0%	48.0%	62.4%	78.1%	84.3%	90.2%	92.9%	94.8%	95.7%	96.2%	96.7%	97.2%	97.4%	97.7%	98.0%	98.3%	98.5%	

Amounts are limited (net of excess insurance).

Data was provided by the County.

COOK COUNTY, ILLINOIS
OTHER LIABILITY

Historical Limited Reported Incurred Losses (\$'000) and Limited Reported Incurred Loss Development

I. Historical Limited Reported Incurred Losses (\$'000)

Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1998/09																					
1999/00	4,529	6,421	8,034	6,922	5,610	6,056	6,810	5,235	5,163	5,413	3,163	2,713	2,713	2,713	2,713	2,713	2,713	2,713	2,713	2,713	2,713
2000/01	3,684	3,812	9,452	12,066	8,560	8,697	8,743	8,143	6,623	6,360	7,260	7,268	7,264	7,263	7,263	7,363	7,363	7,363	7,363	7,363	7,363
2001/02	1,519	2,478	3,950	6,066	9,367	19,611	19,527	14,124	13,454	11,889	12,491	12,741	15,726	12,626	12,626	12,626	12,626	12,626	12,626	12,626	12,626
2002/03	1,043	2,641	4,744	5,223	11,305	8,930	7,654	6,254	6,284	6,184	6,184	6,184	6,184	6,184	6,184	6,245	6,245	6,245	6,245	6,245	6,245
2003/04	2,287	5,765	18,120	40,102	43,979	64,408	62,263	68,738	66,003	65,614	65,614	66,113	65,618	68,333	68,333	68,333	68,333	68,333	68,333	68,333	68,333
2004/05	2,102	4,813	11,214	8,406	8,236	7,377	8,101	12,858	19,843	20,433	15,733	15,733	17,270	14,866	14,866	14,866	14,866	14,866	14,866	14,866	14,866
2005/06	3,747	7,296	5,992	4,427	3,663	3,521	7,393	5,843	6,329	6,228	6,338	6,812	7,673	7,673	7,673	7,673	7,673	7,673	7,673	7,673	7,673
2006/07	1,767	4,668	4,439	6,087	7,935	9,400	8,815	11,745	9,447	10,024	9,827	9,827	9,827	9,827	9,827	9,827	9,827	9,827	9,827	9,827	9,827
2007/08	1,928	3,878	8,916	10,754	14,495	13,775	12,474	10,619	12,995	13,627	13,615	13,615	13,615	13,615	13,615	13,615	13,615	13,615	13,615	13,615	13,615
2008/09	1,931	2,115	3,581	4,335	4,391	5,435	5,397	6,006	7,303	6,753	6,753	6,753	6,753	6,753	6,753	6,753	6,753	6,753	6,753	6,753	6,753
2009/10	972	3,567	6,505	4,332	8,101	19,458	7,589	7,903	7,538	7,538	7,538	7,538	7,538	7,538	7,538	7,538	7,538	7,538	7,538	7,538	7,538
2010/11	471	2,406	4,757	5,083	19,422	14,285	20,727	30,106	30,106	30,106	30,106	30,106	30,106	30,106	30,106	30,106	30,106	30,106	30,106	30,106	30,106
2011/12	4,276	6,052	15,539	7,584	6,747	8,478	9,065	9,065	9,065	9,065	9,065	9,065	9,065	9,065	9,065	9,065	9,065	9,065	9,065	9,065	9,065
2012/13	1,364	3,956	17,420	11,910	13,338	12,892	12,892	12,892	12,892	12,892	12,892	12,892	12,892	12,892	12,892	12,892	12,892	12,892	12,892	12,892	12,892
2013/14	4,235	13,094	13,326	12,117	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649	20,649
2014/15	753	3,635	24,266	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922	23,922
2015/16	1,148	4,038	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075	19,075
2016/17	9,908	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275	16,275
2017/18	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359	7,359

II. Limited Reported Incurred Loss Development

Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1998/09																					
1999/00	1,418	1,251	0,862	0,810	1,080	1,124	0,769	0,886	1,048	0,584	0,858	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2000/01	1,035	2,480	1,270	0,686	1,040	1,065	0,931	0,813	0,960	1,142	1,001	0,989	1,000	1,014	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2001/02	1,631	1,586	1,549	1,636	1,970	0,985	0,731	0,885	0,885	1,051	1,020	1,234	0,803	1,000	0,963	0,999	1,050	1,050	1,050	1,050	1,050
2002/03	2,725	1,670	1,101	2,165	0,790	0,857	0,817	1,005	0,984	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2003/04	2,520	3,143	2,213	1,097	1,465	0,867	1,104	0,954	1,006	0,994	1,008	0,983	1,041	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2004/05	2,289	2,330	0,750	0,980	0,896	1,088	1,587	1,543	1,030	0,770	1,000	1,098	0,861	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2005/06	1,947	0,821	0,739	0,832	0,956	2,100	0,790	1,083	0,984	1,018	1,075	1,126	0,861	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
2006/07	2,642	0,951	1,371	1,304	1,185	0,938	1,332	0,801	1,049	0,999	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980
2007/08	2,012	2,299	1,206	1,348	0,950	0,906	0,851	1,224	1,049	0,999	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980
2008/09	1,096	1,693	1,211	1,013	1,238	0,983	1,113	1,216	0,925	0,999	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980
2009/10	3,671	1,824	0,666	1,870	2,402	0,390	1,113	1,216	0,925	0,999	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980	0,980
2010/11	5,103	1,977	1,071	3,813	0,736	1,451	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453
2011/12	2,901	2,568	0,487	0,892	1,257	1,069	1,069	1,069	1,069	1,069	1,069	1,069	1,069	1,069	1,069	1,069	1,069	1,069	1,069	1,069	1,069
2012/13	3,092	1,018	0,909	1,704	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967	0,967
2013/14	4,830	6,676	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986	0,986
2014/15	3,517	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724
2015/16	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643
2016/17	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643
2017/18	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643	1,643
Average	2,527	2,436	1,067	1,419	1,209	1,068	1,043	1,048	0,988	0,958	0,983	1,064	0,951	1,005	0,981	1,030	1,026	1,000	1,112	1,112	1,112
All	2,028	2,729	0,872	1,289	0,903	0,885	1,306	1,135	1,004	1,023	1,009	1,021	1,003	1,001	0,982	1,030	1,030	1,000	1,000	1,000	1,000
Wtd 3	3,330	4,139	0,860	1,289	0,986	0,970	1,202	1,131	0,993	1,026	1,018	1,072	0,967	1,003	0,988	1,030	1,030	1,000	1,000	1,000	1,000
Last 3	3,170	3,699	0,860	1,565	1,154	0,969	1,162	1,084	1,006	1,004	1,003	1,075	0,954	1,003	0,988	1,030	1,030	1,000	1,000	1,000	1,000
x-Follow																					
Previous	2,500	2,000	1,165	1,165	1,080	1,035	1,035	1,035	1,013	1,007	1,007	1,007	1,003	1,003	1,002	1,002	1,001	1,001	1,001	1,001	1,000
Selected	2,525	2,200	1,165	1,165	1,080	1,035	1,035	1,035	1,010	1,007	1,007	1,007	1,003	1,003	1,002	1,002	1,001	1,001	1,001		

COOK COUNTY, ILLINOIS
OTHER LIABILITY

Historical Reported Claims and Reported Claim Development

I. Historical Reported Claims	Historical Reported Claims and Reported Claim Development																					
	Claim Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	
to 1/98/99																						
1999/00																						
2000/01																						
2001/02																						
2002/03																						
2003/04																						
2004/05																						
2005/06																						
2006/07																						
2007/08																						
2008/09																						
2009/10																						
2010/11																						
2011/12																						
2012/13																						
2013/14																						
2014/15																						
2015/16																						
2016/17																						
2017/18																						

II. Reported Claim Development

II. Reported Claim Development	Historical Reported Claims and Reported Claim Development																					
	Claim Period	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228	228-240	240-Ult	
to 1/98/99																						
1999/00																						
2000/01																						
2001/02																						
2002/03																						
2003/04																						
2004/05																						
2005/06																						
2006/07																						
2007/08																						
2008/09																						
2009/10																						
2010/11																						
2011/12																						
2012/13																						
2013/14																						
2014/15																						
2015/16																						
2016/17																						
2017/18																						
Average																						
All	2.475	1.200	1.368	1.054	1.026	1.015	1.008	1.008	1.005	1.003	1.000	1.002	1.008	1.009	1.000	1.000	1.000	1.003	1.005	1.005	1.000	1.000
Wtd 3																						
Last 3																						
Last 5																						
x-tiltlow																						
Previous																						
Selected	2.400	1.200	1.370	1.050	1.020	1.015	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	3.610	1.504	1.098	1.046	1.025	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Percent	27.7%	66.5%	91.1%	95.6%	97.5%	99.0%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Data was provided by the County.

Developed Limited Paid Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Paid Losses 11/30/18 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 1998/99	240.0	\$87,151,298	98.5%	\$88,458,568
1999/00	228.0	2,720,812	98.3%	2,767,148
2000/01	216.0	7,938,079	98.0%	8,097,484
2001/02	204.0	12,153,693	97.7%	12,434,946
2002/03	192.0	6,244,784	97.4%	6,408,465
2003/04	180.0	68,325,652	97.2%	70,033,975 *
2004/05	168.0	4,714,938	96.7%	4,877,300
2005/06	156.0	6,622,295	96.2%	6,884,590
2006/07	144.0	9,374,273	95.7%	9,794,297
2007/08	132.0	13,584,661	94.8%	14,335,269
2008/09	120.0	5,852,791	92.9%	6,299,706
2009/10	108.0	7,337,368	90.2%	8,134,573
2010/11	96.0	9,131,728	84.3%	10,832,562
2011/12	84.0	5,888,373	78.1%	7,543,924
2012/13	72.0	8,491,302	62.4%	13,598,353
2013/14	60.0	9,513,631	48.0%	19,806,222
2014/15	48.0	2,516,670	30.0%	8,383,040
2015/16	36.0	1,575,542	13.6%	11,545,903
2016/17	24.0	3,701,725	2.9%	30,724,090 *
2017/18	12.0	4,287,850	0.3%	19,477,308 *
Total		\$277,127,464		\$360,437,723

* - Indicates large claim(s) limited to retention. For details, see Exhibit OL-15.

(3) is from Exhibit OL-1.

(4) is from Exhibit OL-2.

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 11/30/18 (2)	Limited Reported Incurred Losses 11/30/18 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 1998/99	240.0	\$99,151,298	99.5%	\$99,647,055
1999/00	228.0	2,720,812	99.4%	2,737,151
2000/01	216.0	8,438,079	99.3%	8,497,238
2001/02	204.0	12,153,693	99.2%	12,251,142
2002/03	192.0	6,244,784	99.0%	6,307,445
2003/04	180.0	68,325,652	98.8%	69,028,717 *
2004/05	168.0	14,866,438	98.5%	14,939,873 *
2005/06	156.0	7,673,295	98.2%	7,812,454
2006/07	144.0	9,827,273	97.5%	10,075,534
2007/08	132.0	13,614,661	96.9%	14,056,312
2008/09	120.0	6,752,791	96.2%	7,020,650
2009/10	108.0	7,538,368	95.2%	7,915,762
2010/11	96.0	30,106,329	92.0%	30,962,009 *
2011/12	84.0	9,065,373	88.9%	10,197,219
2012/13	72.0	12,892,302	85.9%	15,009,524
2013/14	60.0	20,649,131	79.5%	25,963,424
2014/15	48.0	23,922,170	68.3%	28,069,428 *
2015/16	36.0	19,075,042	58.6%	29,019,377 *
2016/17	24.0	16,274,725	26.6%	47,329,260 *
2017/18	12.0	7,358,850	10.5%	44,228,387 *
Total		\$396,651,065		\$491,067,961

* - Indicates large claim(s) limited to retention. For details, see Exhibit OL-15.

(3) is from Exhibit OL-1.

(4) is from Exhibit OL-2.

Developed Limited Case Reserves

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 11/30/18 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 11/30/18 (6)	Limited Case Reserves 11/30/18 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 1998/99	240.0	98.5%	99.5%	66.3%	\$87,151,298	\$12,000,000	\$105,241,298
1999/00	228.0	98.3%	99.4%	64.4%	2,720,812	0	2,720,812
2000/01	216.0	98.0%	99.3%	64.6%	7,938,079	500,000	8,711,673
2001/02	204.0	97.7%	99.2%	64.8%	12,153,693	0	12,153,693
2002/03	192.0	97.4%	99.0%	61.1%	6,244,784	0	6,244,784
2003/04	180.0	97.2%	98.8%	58.1%	68,325,652	0	68,325,652
2004/05	168.0	96.7%	98.5%	55.3%	4,714,938	10,151,500	14,988,683 *
2005/06	156.0	96.2%	98.2%	53.2%	6,622,295	1,051,000	8,596,124
2006/07	144.0	95.7%	97.5%	42.5%	9,374,273	453,000	10,439,069
2007/08	132.0	94.8%	96.9%	40.0%	13,584,661	30,000	13,659,674
2008/09	120.0	92.9%	96.2%	46.2%	5,852,791	900,000	7,800,021
2009/10	108.0	90.2%	95.2%	51.4%	7,337,368	201,000	7,728,786
2010/11	96.0	84.3%	92.0%	49.1%	9,131,728	20,974,601	30,856,761 *
2011/12	84.0	78.1%	88.9%	49.4%	5,888,373	3,177,000	12,316,667
2012/13	72.0	62.4%	85.9%	62.4%	8,491,302	4,401,000	15,539,571
2013/14	60.0	48.0%	79.5%	60.6%	9,513,631	11,135,500	27,885,310
2014/15	48.0	30.0%	68.3%	54.7%	2,516,670	21,405,500	29,236,710 *
2015/16	36.0	13.6%	58.6%	52.1%	1,575,542	17,499,500	30,587,018 *
2016/17	24.0	2.9%	26.6%	24.5%	3,701,725	12,573,000	39,655,125 *
2017/18	12.0	0.3%	10.5%	10.3%	4,287,850	3,071,000	34,093,520
Total					\$277,127,464	\$119,523,601	\$486,780,951

* - Indicates large claim(s) limited to retention. For details, see Exhibit OL-15.

(3) and (4) are from Exhibit OL-2.

(6) and (7) are from Exhibit OL-1.

Preliminary Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	Preliminary Projected Ultimate Limited Losses (5)
to 1998/99	\$88,458,568	\$99,647,055	\$105,241,298	\$105,241,298
1999/00	2,767,148	2,737,151	2,720,812	2,720,812
2000/01	8,097,484	8,497,238	8,711,673	8,711,673
2001/02	12,434,946	12,251,142	12,153,693	12,153,693
2002/03	6,408,465	6,307,445	6,244,784	6,244,784
2003/04	70,033,975	69,028,717	68,325,652	68,325,652
2004/05	4,877,300	14,939,873	14,988,683	15,881,588
2005/06	6,884,590	7,812,454	8,596,124	8,596,124
2006/07	9,794,297	10,075,534	10,439,069	10,439,069
2007/08	14,335,269	14,056,312	13,659,674	13,659,674
2008/09	6,299,706	7,020,650	7,800,021	7,800,021
2009/10	8,134,573	7,915,762	7,728,786	7,728,786
2010/11	10,832,562	30,962,009	30,856,761	32,203,789
2011/12	7,543,924	10,197,219	12,316,667	11,892,777
2012/13	13,598,353	15,009,524	15,539,571	15,380,557
2013/14	19,806,222	25,963,424	27,885,310	27,116,556
2014/15	8,383,040	28,069,428	29,236,710	26,684,430
2015/16	11,545,903	29,019,377	30,587,018	26,151,738
2016/17	30,724,090	47,329,260	39,655,125	40,938,572
2017/18	19,477,308	44,228,387	34,093,520	35,224,224
Total	\$360,437,723	\$491,067,961	\$486,780,951	\$483,095,818

(2) is from Exhibit OL-3.

(3) is from Exhibit OL-4.

(4) is from Exhibit OL-5.

(5) is based on (2) to (4) and actuarial judgment.

Bornhuetter - Ferguson Analysis

I. A-priori Loss Rate

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Revenue (000) (3)	Limited Loss Rate per \$1,000 of Revenue (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$1,000 of Revenue (4)X(5) (6)	Projected A-priori Loss Rate per \$1,000 of Revenue (7)/(5) (8)
2008/09	\$7,800,021	\$1,303,812	\$5.98	1.480	\$8.86	13.51
2009/10	7,728,786	1,287,986	6.00	1.423	8.54	14.05
2010/11	32,203,789	1,293,078	24.90	1.369	34.08	14.61
2011/12	11,892,777	1,331,769	8.93	1.316	11.75	15.20
2012/13	15,380,557	1,285,791	11.96	1.265	15.14	15.81
2013/14	27,116,556	1,362,902	19.90	1.217	24.21	16.44
2014/15	26,684,430	1,509,150	17.68	1.170	20.69	17.10
2015/16	26,151,738	1,699,156	15.39	1.125	17.31	17.78
2016/17	40,938,572	1,753,287	23.35	1.082	25.25	18.49
2017/18	35,224,224	1,753,287	20.09	1.040	20.89	19.23

(7) Projected 2018/19 a-priori loss rate per \$1,000 of Revenue

Selected \$ 20.00

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Percent Losses Paid (3)	Projected A-priori Loss Rate per \$1,000 of Revenue (4)	Revenue (000) (5)	B-F Unpaid Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Paid Losses (2)+(6) (7)
2013/14	\$9,513,631	48.0%	\$16.44	\$1,362,902	\$11,642,628	\$21,156,258
2014/15	2,516,670	30.0%	17.10	1,509,150	18,054,979	20,571,648
2015/16	1,575,542	13.6%	17.78	1,699,156	26,088,329	27,663,871
2016/17	3,701,725	2.9%	18.49	1,753,287	31,488,869	35,190,594
2017/18	4,287,850	0.3%	19.23	1,753,287	33,624,804	37,912,654

III. Bornhuetter - Ferguson Analysis Based on Limited Reported Incurred Losses

Claim Period (1)	Limited Reported Incurred Losses 11/30/18 (2)	Percent Losses Reported (3)	Projected A-priori Loss Rate per \$1,000 of Revenue (4)	Revenue (000) (5)	B-F Unreported Losses [100.0%-(3)] X(4)X(5) (6)	B-F Ultimate Limited Reported Losses (2)+(6) (7)
2013/14	\$20,649,131	79.5%	\$16.44	\$1,362,902	\$4,585,762	\$25,234,892
2014/15	23,922,170	68.3%	17.10	1,509,150	8,187,166	32,109,335
2015/16	19,075,042	58.6%	17.78	1,699,156	12,507,695	31,582,737
2016/17	16,274,725	26.6%	18.49	1,753,287	23,784,862	40,059,587
2017/18	7,358,850	10.5%	19.23	1,753,287	30,160,303	37,519,153

Section I, (2) is from Exhibit OL-6.

Section I, (3), Section II, (5) and Section III, (5) are from Exhibit OL-10.

Section I, (5) is based on a 4% trend.

Section I, (7) is based on Section I, (6) and actuarial judgment.

Sections II and III, (2) are from Exhibit OL-1.

Sections II and III, (3) are from Exhibit OL-2.

Sections II and III, (4) are from Section I, (8).

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 11/30/18 (2)	Reported Claims 11/30/18 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Revenue (000) (6)	Frequency (per \$1M of Revenue) (5)/(6)X1,000 (7)
2008/09	120.0	327	100.0%	327	\$1,303,812	0.25
2009/10	108.0	325	100.0%	325	1,287,986	0.25
2010/11	96.0	292	100.0%	292	1,293,078	0.23
2011/12	84.0	421	100.0%	421	1,331,769	0.32
2012/13	72.0	507	99.0%	512	1,285,791	0.40
2013/14	60.0	672	97.5%	689	1,362,902	0.51
2014/15	48.0	436	95.6%	456	1,509,150	0.30
2015/16	36.0	384	91.1%	422	1,699,156	0.25
2016/17	24.0	266	66.5%	400	1,753,287	0.23
2017/18	12.0	94	27.7%	339	1,753,287	0.19

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2018/19 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2018/19 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2008/09	\$7,800,021	327	\$23,853	1.480	\$35,309	\$47,295	\$15,465,570
2009/10	7,728,786	325	23,781	1.423	33,848	49,187	15,985,818
2010/11	32,203,789	292	110,287	1.369	150,935	51,155	14,937,149
2011/12	11,892,777	421	28,249	1.316	37,174	53,201	22,397,538
2012/13	15,380,557	512	30,040	1.265	38,010	55,329	28,328,364
2013/14	27,116,556	689	39,356	1.217	47,883	57,542	39,646,431
2014/15	26,684,430	456	58,518	1.170	68,458	59,844	27,288,713
2015/16	26,151,738	422	61,971	1.125	69,709	62,237	26,264,189
2016/17	40,938,572	400	102,346	1.082	110,698	64,727	25,890,765
2017/18	35,224,224	339	103,906	1.040	108,063	67,316	22,820,120

(7) Projected 2018/19 average claim severity

\$70,009

Section I, (3) is from Exhibit OL-1.

Section I, (4) is from Exhibit OL-2.

Section I, (6) is from Exhibit OL-10.

Section II, (2) is from Exhibit OL-6.

Section II, (3) is from Section I, (5).

Section II, (5) is based on a 4% trend.

Section II, (7) is based on (6) and actuarial judgment.

Projected Ultimate Limited Losses to 2017/18

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Ultimate Limited Paid Losses (5)	B-F Ultimate Limited Reported Losses (6)	Frequency Times Severity (7)	Prior Projected Ultimate Limited Losses (8)	Projected Ultimate Limited Losses (9)
to 1998/99	\$88,458,568	\$99,647,055	\$105,241,298				\$89,351,724	\$100,400,000
1999/00	2,767,148	2,737,151	2,720,812				2,720,812	2,720,812
2000/01	8,097,484	8,497,238	8,711,673				8,053,000	8,712,000
2001/02	12,434,946	12,251,142	12,153,693				12,166,000	12,153,693
2002/03	6,408,465	6,307,445	6,244,784				6,244,784	6,244,784
2003/04	70,033,975	69,028,717	68,325,652				68,336,000	68,325,652
2004/05	4,877,300	14,939,873	14,988,683				18,578,000	15,882,000
2005/06	6,884,590	7,812,454	8,596,124				6,975,000	8,500,000
2006/07	9,794,297	10,075,534	10,439,069				10,500,000	10,250,000
2007/08	14,335,269	14,056,312	13,659,674				14,500,000	13,750,000
2008/09	6,299,706	7,020,650	7,800,021				8,000,000	7,800,000
2009/10	8,134,573	7,915,762	7,728,786				8,642,000	7,850,000
2010/11	10,832,562	30,962,009	30,856,761				23,500,000	34,600,000
2011/12	7,543,924	10,197,219	12,316,667				10,055,000	11,893,000
2012/13	13,598,353	15,009,524	15,539,571				16,000,000	15,381,000
2013/14	19,806,222	25,963,424	27,885,310	21,156,258	25,234,892	39,646,431	16,250,000	25,000,000
2014/15	8,383,040	28,069,428	29,236,710	20,571,648	32,109,335	27,288,713	30,000,000	29,000,000
2015/16	11,545,903	29,019,377	30,587,018	27,663,871	31,582,737	26,264,189	15,000,000	26,250,000
2016/17	30,724,090	47,329,260	39,655,125	35,190,594	40,059,587	25,890,765	26,500,000	27,000,000
2017/18	19,477,308	44,228,387	34,093,520	37,912,654	37,519,153	22,820,120	24,871,000	27,000,000
Total	\$360,437,723	\$491,067,961	\$486,780,951				\$416,243,321	\$458,712,942
2013/14 - 2017/18	89,936,562	174,609,876	161,457,682	142,495,025	166,505,704	141,910,218	112,621,000	134,250,000
to 2012/13	270,501,160	316,458,085	325,323,269				303,622,321	324,462,942
						Change		
						All years		\$42,469,621
						2013/14 - 2017/18		21,629,000
						to 2012/13		20,840,621

(2) is from Exhibit OL-3.

(3) is from Exhibit OL-4.

(4) is from Exhibit OL-5.

(5) and (6) are from Exhibit OL-7.

(7) is from Exhibit OL-8.

(8) is based on (2) to (7) and actuarial judgment.

Projected Ultimate Limited Losses for 2018/19 and Subsequent

Claim Period (1)	Projected Ultimate Limited Losses (2)	Revenue (000) (3)	Limited Loss Rate per \$1,000 of Revenue (2)/(3) (4)	Loss Rate Trend (2018/19 = 1.000) (5)	Trended Limited Loss Rate per \$1,000 of Revenue (4)X(5) (6)
2008/09	\$7,800,000	\$1,303,812	\$5.98	1.480	\$8.86
2009/10	7,850,000	1,287,986	6.09	1.423	8.67
2010/11	34,600,000	1,293,078	26.76	1.369	36.62
2011/12	11,893,000	1,331,769	8.93	1.316	11.75
2012/13	15,381,000	1,285,791	11.96	1.265	15.14
2013/14	25,000,000	1,362,902	18.34	1.217	22.32
2014/15	29,000,000	1,509,150	19.22	1.170	22.48
2015/16	26,250,000	1,699,156	15.45	1.125	17.38
2016/17	27,000,000	1,753,287	15.40	1.082	16.66
2017/18	27,000,000	1,753,287	15.40	1.040	16.02
Total	\$211,774,000	\$14,580,218	\$14.52		\$17.59

Claim Period (1)	Projected Limited Loss Rate per \$1,000 of Revenue (7)	Projected Revenue (000) (8)	Projected Ultimate Limited Losses (7)X(8) (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per \$1,000 of Revenue (7)X(10) (11)	Present Value of Projected Ultimate Limited Losses (8)X(11) (12)
2018/19	\$17.59	\$1,753,287	\$30,838,000	0.85	\$15.02	\$26,340,000
2019/20	18.29	1,753,287	32,071,000	0.85	15.62	27,394,000
2020/21	19.02	1,753,287	33,354,000	0.85	16.25	28,490,000

(2) is from Exhibit OL-9.

(3) 2008/09, 2009/10, 2010/11, 2011/12, 2012/13, 2013/14, 2014/15, 2015/16 and 2016/17 were provided by the County. Other periods assume a 0% trend.

(5) is based on a 4% trend.

(7) 2018/19 is based on (6) and actuarial judgment.
Other period(s) based on 2018/19 plus a 4% trend.

(8) is based on (3) for 2017/18 and a 0% trend.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit OL-2.

Estimated Outstanding Losses as of November 30, 2018

Claim Period (1)	Limited Paid Losses 11/30/18 (2)	Limited Case Reserves 11/30/18 (3)	Limited Reported Incurred Losses 11/30/18 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 11/30/18 (5)-(4) (6)	Estimated Outstanding Losses 11/30/18 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 11/30/18 (7)X(8) (9)
to 1998/99	\$87,151,298	\$12,000,000	\$99,151,298	\$100,400,000	\$1,248,702	\$13,248,702	0.93	\$12,293,602
1999/00	2,720,812	0	2,720,812	2,720,812	0	0	0.91	0
2000/01	7,938,079	500,000	8,438,079	8,712,000	273,921	773,921	0.90	698,000
2001/02	12,153,693	0	12,153,693	12,153,693	0	0	0.89	0
2002/03	6,244,784	0	6,244,784	6,244,784	0	0	0.88	0
2003/04	68,325,652	0	68,325,652	68,325,652	0	0	0.87	0
2004/05	4,714,938	10,151,500	14,866,438	15,882,000	1,015,562	11,167,062	0.87	9,670,013
2005/06	6,622,295	1,051,000	7,673,295	8,500,000	826,706	1,877,706	0.86	1,615,374
2006/07	9,374,273	453,000	9,827,273	10,250,000	422,727	875,727	0.85	747,259
2007/08	13,584,661	30,000	13,614,661	13,750,000	135,339	165,339	0.86	141,879
2008/09	5,852,791	900,000	6,752,791	7,800,000	1,047,209	1,947,209	0.87	1,702,277
2009/10	7,337,368	201,000	7,538,368	7,850,000	311,632	512,632	0.89	455,065
2010/11	9,131,728	20,974,601	30,106,329	34,600,000	4,493,671	25,468,272	0.91	23,162,141
2011/12	5,888,373	3,177,000	9,065,373	11,893,000	2,827,627	6,004,627	0.91	5,484,419
2012/13	8,491,302	4,401,000	12,892,302	15,381,000	2,488,698	6,889,698	0.93	6,400,037
2013/14	9,513,631	11,135,500	20,649,131	25,000,000	4,350,869	15,486,369	0.93	14,345,300
2014/15	2,516,670	21,405,500	23,922,170	29,000,000	5,077,831	26,483,331	0.92	24,438,436
2015/16	1,575,542	17,499,500	19,075,042	26,250,000	7,174,958	24,674,458	0.91	22,557,873
2016/17	3,701,725	12,573,000	16,274,725	27,000,000	10,725,275	23,298,275	0.90	20,964,429
2017/18	4,287,850	3,071,000	7,358,850	27,000,000	19,641,150	22,712,150	0.88	19,940,322
Total	\$277,127,464	\$119,523,601	\$396,651,065	\$458,712,942	\$62,061,877	\$181,585,478		\$164,616,426

(2), (3) and (4) are net of specific self-insured retention and aggregate retention.

(5) is from Exhibit OL-9.

(8) is based on a 2.83% interest rate and the payout pattern in Exhibit OL-2.

Projected Losses Paid December 1, 2018 to November 30, 2019

Claim Period (1)	Months of Development 11/30/18 (2)	Percent Losses Paid (3)	Months of Development 11/30/19 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/18 to 11/30/19 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/18 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/19 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/19 (9)X(10) (11)
to 1998/99	240.0	98.5%	252.0	99.0%	10.0% *	\$13,248,702	\$1,324,870	\$11,923,832	0.93	\$11,071,353
1999/00	228.0	98.3%	240.0	98.5%	10.0% *	0	0	0	0.93	0
2000/01	216.0	98.0%	228.0	98.3%	10.0% *	773,921	77,392	696,529	0.91	635,381
2001/02	204.0	97.7%	216.0	98.0%	10.0% *	0	0	0	0.90	0
2002/03	192.0	97.4%	204.0	97.7%	10.0% *	0	0	0	0.89	0
2003/04	180.0	97.2%	192.0	97.4%	10.0% *	0	0	0	0.88	0
2004/05	168.0	96.7%	180.0	97.2%	10.0% *	11,167,062	1,116,706	10,050,356	0.87	8,738,294
2005/06	156.0	96.2%	168.0	96.7%	10.0% *	1,877,706	187,771	1,689,935	0.87	1,463,383
2006/07	144.0	95.7%	156.0	96.2%	10.0% *	875,727	87,573	788,154	0.86	678,042
2007/08	132.0	94.8%	144.0	95.7%	10.0% *	165,339	16,534	148,805	0.85	126,976
2008/09	120.0	92.9%	132.0	94.8%	10.0% *	1,947,209	194,721	1,752,488	0.86	1,503,827
2009/10	108.0	90.2%	120.0	92.9%	10.0% *	512,632	51,263	461,369	0.87	403,335
2010/11	96.0	84.3%	108.0	90.2%	10.0% *	25,468,272	24,119,827	1,348,445	0.89	1,197,019
2011/12	84.0	78.1%	96.0	84.3%	10.0% *	6,004,627	600,463	5,404,164	0.91	4,914,821
2012/13	72.0	62.4%	84.0	78.1%	10.0% *	6,889,698	688,970	6,200,728	0.91	5,663,531
2013/14	60.0	48.0%	72.0	62.4%	10.0% *	15,486,369	1,548,637	13,937,732	0.93	12,947,156
2014/15	48.0	30.0%	60.0	48.0%	10.0% *	26,483,331	2,648,333	23,834,998	0.93	22,078,784
2015/16	36.0	13.6%	48.0	30.0%	10.0% *	24,674,458	2,467,446	22,207,012	0.92	20,492,310
2016/17	24.0	2.9%	36.0	13.6%	10.0% *	23,298,275	2,329,828	20,968,447	0.91	19,169,765
2017/18	12.0	0.3%	24.0	2.9%	2.6% *	22,712,150	591,958	22,120,192	0.90	19,904,358
2018/19	0.0	0.0%	12.0	0.3%	0.3% *	30,838,000	84,373	30,753,627	0.88	27,000,405
Total						\$212,423,478	\$38,136,665	\$174,286,813		\$157,988,740

Payments for 2010/11 reflect settlement amounts provided by the County.

* - Limited to a maximum of 10% per actuarial judgment.

(3) and (5) are from Exhibit OL-2.

(7) to 2017/18 is from Exhibit OL-11. The amount for 2018/19 is from Exhibit OL-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit OL-2.

Projected Losses Paid December 1, 2019 to November 30, 2020

Claim Period (1)	Months of Development 11/30/19 (2)	Percent Losses Paid (3)	Months of Development 11/30/20 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/19 to 11/30/20 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/19 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/20 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/20 (9)X(10) (11)
to 1998/99	252.0	99.0%	264.0	99.3%	10.0% *	\$11,923,832	\$1,192,383	\$10,731,449	0.93	\$9,973,619
1999/00	240.0	98.5%	252.0	99.0%	10.0% *	0	0	0	0.93	0
2000/01	228.0	98.3%	240.0	98.5%	10.0% *	696,529	69,653	626,876	0.93	581,684
2001/02	216.0	98.0%	228.0	98.3%	10.0% *	0	0	0	0.91	0
2002/03	204.0	97.7%	216.0	98.0%	10.0% *	0	0	0	0.90	0
2003/04	192.0	97.4%	204.0	97.7%	10.0% *	0	0	0	0.89	0
2004/05	180.0	97.2%	192.0	97.4%	10.0% *	10,050,356	1,005,036	9,045,320	0.88	7,963,170
2005/06	168.0	96.7%	180.0	97.2%	10.0% *	1,689,935	168,994	1,520,941	0.87	1,322,384
2006/07	156.0	96.2%	168.0	96.7%	10.0% *	788,154	78,815	709,339	0.87	614,245
2007/08	144.0	95.7%	156.0	96.2%	10.0% *	148,805	14,881	133,924	0.86	115,214
2008/09	132.0	94.8%	144.0	95.7%	10.0% *	1,752,488	175,249	1,577,239	0.85	1,345,860
2009/10	120.0	92.9%	132.0	94.8%	10.0% *	461,369	46,137	415,232	0.86	356,315
2010/11	108.0	90.2%	120.0	92.9%	10.0% *	1,348,445	134,845	1,213,600	0.87	1,060,946
2011/12	96.0	84.3%	108.0	90.2%	10.0% *	5,404,164	540,416	4,863,748	0.89	4,317,564
2012/13	84.0	78.1%	96.0	84.3%	10.0% *	6,200,728	620,073	5,580,655	0.91	5,075,331
2013/14	72.0	62.4%	84.0	78.1%	10.0% *	13,937,732	1,393,773	12,543,959	0.91	11,457,220
2014/15	60.0	48.0%	72.0	62.4%	10.0% *	23,834,998	2,383,500	21,451,498	0.93	19,926,907
2015/16	48.0	30.0%	60.0	48.0%	10.0% *	22,207,012	2,220,701	19,986,311	0.93	18,513,677
2016/17	36.0	13.6%	48.0	30.0%	10.0% *	20,968,447	2,096,845	18,871,602	0.92	17,414,442
2017/18	24.0	2.9%	36.0	13.6%	10.0% *	22,120,192	2,212,019	19,908,173	0.91	18,200,442
2018/19	12.0	0.3%	24.0	2.9%	2.6% *	30,753,627	801,547	29,952,080	0.90	26,951,706
2019/20	0.0	0.0%	12.0	0.3%	0.3% *	32,071,000	87,747	31,983,253	0.88	28,079,965
Total						\$206,357,813	\$15,242,614	\$191,115,199		\$173,270,691

* - Limited to a maximum of 10% per actuarial judgment.

(3) and (5) are from Exhibit OL-2.

(7) to 2018/19 is from Exhibit OL-12, (9). The amount for 2019/20 is from Exhibit OL-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit OL-2.

Projected Losses Paid December 1, 2020 to November 30, 2021

Claim Period (1)	Months of Development 11/30/20 (2)	Percent Losses Paid (3)	Months of Development 11/30/21 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 12/1/20 to 11/30/21 [(5)-(3)]/[100.0%-(3)] (6)	Estimated Outstanding Losses 11/30/20 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 11/30/21 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 11/30/21 (9)X(10) (11)
to 1998/99	264.0	99.3%	276.0	99.5%	10.0% *	\$10,731,449	\$1,073,145	\$9,658,304	0.93	\$8,988,687
1999/00	252.0	99.0%	264.0	99.3%	10.0% *	0	0	0	0.93	0
2000/01	240.0	98.5%	252.0	99.0%	10.0% *	626,876	62,688	564,188	0.93	523,852
2001/02	228.0	98.3%	240.0	98.5%	10.0% *	0	0	0	0.93	0
2002/03	216.0	98.0%	228.0	98.3%	10.0% *	0	0	0	0.91	0
2003/04	204.0	97.7%	216.0	98.0%	10.0% *	0	0	0	0.90	0
2004/05	192.0	97.4%	204.0	97.7%	10.0% *	9,045,320	904,532	8,140,788	0.89	7,255,223
2005/06	180.0	97.2%	192.0	97.4%	10.0% *	1,520,941	152,094	1,368,847	0.88	1,205,083
2006/07	168.0	96.7%	180.0	97.2%	10.0% *	709,339	70,934	638,405	0.87	555,062
2007/08	156.0	96.2%	168.0	96.7%	10.0% *	133,924	13,392	120,532	0.87	104,374
2008/09	144.0	95.7%	156.0	96.2%	10.0% *	1,577,239	157,724	1,419,515	0.86	1,221,197
2009/10	132.0	94.8%	144.0	95.7%	10.0% *	415,232	41,523	373,709	0.85	318,886
2010/11	120.0	92.9%	132.0	94.8%	10.0% *	1,213,600	121,360	1,092,240	0.86	937,262
2011/12	108.0	90.2%	120.0	92.9%	10.0% *	4,863,748	486,375	4,377,373	0.87	3,826,759
2012/13	96.0	84.3%	108.0	90.2%	10.0% *	5,580,655	558,066	5,022,589	0.89	4,458,568
2013/14	84.0	78.1%	96.0	84.3%	10.0% *	12,543,959	1,254,396	11,289,563	0.91	10,267,302
2014/15	72.0	62.4%	84.0	78.1%	10.0% *	21,451,498	2,145,150	19,306,348	0.91	17,633,753
2015/16	60.0	48.0%	72.0	62.4%	10.0% *	19,986,311	1,998,631	17,987,680	0.93	16,709,268
2016/17	48.0	30.0%	60.0	48.0%	10.0% *	18,871,602	1,887,160	16,984,442	0.93	15,732,992
2017/18	36.0	13.6%	48.0	30.0%	10.0% *	19,908,173	1,990,817	17,917,356	0.92	16,533,878
2018/19	24.0	2.9%	36.0	13.6%	10.0% *	29,952,080	2,995,208	26,956,872	0.91	24,644,501
2019/20	12.0	0.3%	24.0	2.9%	2.6% *	31,983,253	833,595	31,149,658	0.90	28,029,320
2020/21	0.0	0.0%	12.0	0.3%	0.3% *	33,354,000	91,257	33,262,743	0.88	29,203,304
Total						\$224,469,199	\$16,838,047	\$207,631,152		\$188,149,271

* - Limited to a maximum of 10% per actuarial judgment.

(3) and (5) are from Exhibit OL-2.

(7) to 2019/20 is from Exhibit OL-13, (9). The amount for 2020/21 is from Exhibit OL-10.

(10) is based on a 2.83% interest rate and the payout pattern in Exhibit OL-2.

List of Large Claims
Reported Incurred Losses Greater Than \$1,000,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 11/30/18 (5)	Unlimited Case Reserves 11/30/18 (6)	Unlimited Reported Incurred Losses 11/30/18 (7)
97001740	05/12/78	to 1998/99	Unlimited	\$37,869,997	\$0	\$37,869,997
97001561	05/13/78	to 1998/99	Unlimited	4,000,000	0	4,000,000
97002759	01/01/89	to 1998/99	Unlimited	1,898,909	0	1,898,909
199004477	08/22/90	to 1998/99	Unlimited	0	1,000,000	1,000,000
97002994	02/01/92	to 1998/99	Unlimited	1,250,000	0	1,250,000
201704089	06/09/93	to 1998/99	Unlimited	0	1,000,000	1,000,000
199304086	06/28/93	to 1998/99	Unlimited	0	1,000,000	1,000,000
97003314	01/01/94	to 1998/99	Unlimited	6,760,000	0	6,760,000
199404022	04/01/94	to 1998/99	Unlimited	0	3,000,000	3,000,000
97001793	04/17/95	to 1998/99	Unlimited	6,882,500	0	6,882,500
97002254	09/19/95	to 1998/99	Unlimited	2,000,000	0	2,000,000
199604694	04/01/96	to 1998/99	Unlimited	0	1,000,000	1,000,000
199804152	01/01/98	to 1998/99	Unlimited	0	1,000,000	1,000,000
199804150	01/01/98	to 1998/99	Unlimited	0	1,000,000	1,000,000
199804154	01/01/98	to 1998/99	Unlimited	0	1,000,000	1,000,000
199804197	04/05/98	to 1998/99	Unlimited	0	2,000,000	2,000,000
97003820	01/01/01	2000/01	9,500,000	4,006,000	0	4,006,000
97006027	03/11/01	2000/01	9,500,000	1,003,000	0	1,003,000
97004984	02/12/02	2001/02	9,500,000	3,368,046	0	3,368,046
97004059	07/09/02	2001/02	9,500,000	1,500,000	0	1,500,000
97004588	07/10/02	2001/02	9,500,000	4,500,000	0	4,500,000
97005544	01/01/03	2002/03	9,500,000	4,750,411	0	4,750,411
97005940	01/01/04	2003/04	10,000,000	4,377,358	0	4,377,358
97005996	01/13/04	2003/04	10,000,000	45,359,001 *	0	45,359,001 *
97005976	02/05/04	2003/04	10,000,000	4,590,875	0	4,590,875
97005005	04/29/04	2003/04	10,000,000	5,291,386	0	5,291,386
97006364	08/28/04	2003/04	10,000,000	6,425,872	0	6,425,872
97006619	07/12/05	2004/05	10,000,000	1,286,194	0	1,286,194
97006656	08/03/05	2004/05	10,000,000	0	10,000,000 *	10,000,000 *
97007512	01/01/06	2005/06	10,000,000	2,400,000	0	2,400,000
201601545	02/21/06	2005/06	10,000,000	0	1,000,000	1,000,000
97007544	01/01/07	2006/07	10,000,000	2,600,000	0	2,600,000
97006870	09/01/07	2006/07	10,000,000	1,600,000	0	1,600,000
97007633	01/20/08	2007/08	10,000,000	5,563,000	0	5,563,000
97007489	08/29/08	2007/08	10,000,000	4,100,000	0	4,100,000
97009513	04/27/10	2009/10	10,000,000	3,214,250	0	3,214,250
97011202	11/16/11	2010/11	6,750,000 *	0	6,750,000 *	6,750,000 *
97009834	11/16/11	2010/11	6,750,000 *	0	6,750,000 *	6,750,000 *
97009812	11/16/11	2010/11	6,750,000 *	0	6,750,000 *	6,750,000 *
97009813	11/16/11	2010/11	10,000,000	5,625,000	0	5,625,000
201203771	01/01/12	2011/12	10,000,000	0	2,000,000	2,000,000
97010532	04/03/12	2011/12	10,000,000	550,000	925,000	1,475,000
97010892	09/01/13	2012/13	15,000,000	3,750,000	0	3,750,000
97011594	09/19/13	2012/13	15,000,000	0	1,500,000	1,500,000
201404102	01/18/14	2013/14	15,000,000	0	3,000,000	3,000,000
97012836	01/20/14	2013/14	15,000,000	0	2,000,000	2,000,000
201404988	01/23/14	2013/14	15,000,000	0	1,000,000	1,000,000
97012505	10/12/14	2013/14	15,000,000	4,750,000	0	4,750,000
201500939	06/22/15	2014/15	15,000,000	0	2,500,000	2,500,000
201503551	11/14/15	2014/15	15,000,000	0	15,000,000 *	15,000,000 *
201606065	01/01/16	2015/16	15,000,000	0	2,500,000	2,500,000
201605245	07/25/16	2015/16	15,000,000	0	3,000,000	3,000,000
201805246	08/06/16	2015/16	5,000,000 *	0	5,000,000 *	5,000,000 *
201603690	09/19/16	2015/16	15,000,000	0	1,000,000	1,000,000
201704868	01/01/17	2016/17	5,000,000 *	0	5,000,000 *	5,000,000 *
201703028	05/02/17	2016/17	15,000,000	3,250,000 *	0	3,250,000
201704186	11/20/17	2016/17	15,000,000	0	3,500,000	3,500,000
201705968	12/01/17	2017/18	15,000,000	4,275,600 *	0	4,275,600 *
201705649	12/04/17	2017/18	15,000,000	0	1,500,000	1,500,000

* - for open claims with incurred greater than \$5 million, the developed amount is capped at reported incurred.

The claim(s) indicated by a "*" have been limited in development.

Amounts are gross of excess insurance and net of other recoveries.

(1) through (7) were provided by the County.

Size of Loss Distribution

I. Reported Claim Count

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	2,716	338	166	94	53	6	3,373		
0.01 - 5,000	1,028	199	141	146	98	27	1,639	1,639	46.1%
5,000 - 10,000	455	52	43	58	46	28	682	2,321	65.3%
10,000 - 25,000	312	29	34	44	33	21	473	2,794	78.6%
25,000 - 50,000	195	18	20	17	13	7	270	3,064	86.2%
50,000 - 100,000	157	13	22	11	13	1	217	3,281	92.3%
100,000 - 250,000	90	8	3	5	5	1	112	3,393	95.4%
250,000 - 500,000	57	7	4	1	2	1	72	3,465	97.4%
500,000 - 750,000	18	4	1	4	0	0	27	3,492	98.2%
750,000 - 1,000,000	13	1	0	1	0	0	15	3,507	98.6%
Over 1,000,000	36	3	2	3	3	2	49	3,556	100.0%
Total	5,077	672	436	384	266	94	6,929	3,556	

II. Total Reported Incurred Losses

Claim Size (1)	Prior (2)	2013/14 (3)	2014/15 (4)	2015/16 (5)	2016/17 (6)	2017/18 (7)	Total (2)...(7) (8)	Non-Zero Claim Cumulative Total (9)	Non-Zero Claim Cumulative % of Total (10)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	2,235,352	379,638	272,944	304,490	228,700	77,250	3,498,374	3,498,374	0.9%
5,000 - 10,000	3,846,980	422,198	382,799	525,800	416,599	271,000	5,865,376	9,363,750	2.4%
10,000 - 25,000	5,501,391	508,281	586,387	796,624	605,000	385,000	8,382,682	17,746,433	4.5%
25,000 - 50,000	7,474,783	691,500	798,200	719,352	545,000	300,000	10,528,835	28,275,267	7.1%
50,000 - 100,000	12,328,988	1,004,000	1,806,840	848,776	1,154,426	100,000	17,243,030	45,518,297	11.5%
100,000 - 250,000	16,686,889	1,264,264	625,000	1,080,000	975,000	150,000	20,781,153	66,299,450	16.7%
250,000 - 500,000	21,202,817	2,925,250	1,200,000	450,000	600,000	300,000	26,678,067	92,977,517	23.4%
500,000 - 750,000	11,495,618	2,704,000	750,000	2,850,000	0	0	17,799,618	110,777,135	27.9%
750,000 - 1,000,000	12,401,529	1,000,000	0	1,000,000	0	0	14,401,529	125,178,664	31.6%
Over 1,000,000	216,196,801	9,750,000	17,500,000	10,500,000	11,750,000	5,775,600	271,472,401	396,651,065	100.0%
Total	\$309,371,149	\$20,649,131	\$23,922,170	\$19,075,042	\$16,274,725	\$7,358,850	\$396,651,065	\$396,651,065	

Amounts are gross of excess insurance and net of other recoveries.

Data was provided by the County.