



MEMORANDUM

TO: HONORABLE MAYOR &
CITY COUNCIL

FROM: Ian Appleyard
Director, HRM

SUBJECT: Fiscal Year 2020-21 Workers'
Compensation Annual Report

DATE: March 4, 2022

City Administrator
Approval

Date
Mar 4, 2022

INFORMATION

EXECUTIVE SUMMARY

The Fiscal Year (FY) 2020-21 Workers' Compensation Program Annual Report (**Attachment A**) provides expenditure and program data related to Workers' Compensation benefits for City of Oakland employees. The report contains comparative metrics, historical data and selected program highlights. Like FY 2019-20, the ongoing Coronavirus disease (COVID-19) pandemic heavily influenced the program's performance and cost. Compared to the previous fiscal year, total workers' compensation expenses were up 7%, estimated outstanding losses were up 2.4% and excess insurance cost were up 22%.

BACKGROUND

The City of Oakland is self-insured for workers' compensation. The Human Resources Management Department (HRM) works with a contracted third-party administrator (TPA), JT2 Integrated Resources, to provide services to injured workers and manage the technical aspects of each claim. Through HRM, the TPA provides services to all City agencies and departments to ensure program compliance with mandated California Labor Code requirements.

Each year HRM provides statistical information to the City Council regarding administration of the Workers' Compensation Program. Those statistics are benchmarks by which the City can measure the performance and effectiveness of the City's Workers' Compensation Program. HRM also develops and implements program initiatives based on these statistics. Since the previous report, HRM commissioned an Actuarial Analysis and a Claims Management Performance Audit, to monitor and ensure continued effective administration of the program. The results of the analysis and audit are included as appendices at the end of the annual report.

ANALYSIS AND POLICY ALTERNATIVES

HRM administers the Workers' Compensation Program for the City of Oakland and provides program services and support to all City agencies and departments. The attached Workers' Compensation Report details the current program state. Select key statistics include:

- Total Gross Program Expenditure was \$20,094,020
Up 7% since 20-21

- Final Excess Workers' Compensation Premium was \$2,379,429
Up 22% since 20-21
This increase is largely attributed to higher overall City payroll, poor market conditions, and the City's large single-vehicle loss in FY 19/20.

- Total number of new claims was 762
Up 49% since 20-21
This increase is due to the ongoing COVID-19 pandemic which has resulted in a large number of low/no cost claims.

- Est. Outstanding Losses @ 50% Conf. was \$73,623,698
Up 2.4% since 20-21

Claims Management Performance Audit

The annual Workers' Compensation Claims Audit overall performance rating of the Third-Party Administrator was **98.08%**. This is an increase of 3.98% over the prior year's Audit. The overall claims handling of the TPA is "Exceeds Expectations" as measured by standards set forth in Public Risk Innovation, Solutions, and Management ("PRISM") Guidelines. Although the most recent scores continue a trend of excellent performance by the Third-Party Administrator, HRM Department will continue to closely monitor and assess third-party performance.

Loss Frequency and Severity

For the last two years, loss frequency has risen while overall severity has fallen. This is largely due to the COVID-19 pandemic which caused many low-cost claims. A 20/21 snapshot as well as a three-year average for select departments is presented on the following page:

A. *Table 1* summarizes claims and cost data for select departments.

	Claims	% of City Claims	Claims Cost	% of City Cost	Average Claim Cost
Police					
FY2020-21	239	37%	\$3,515,717	33.58%	\$14,710.11
3 Year Avg	192	34%	\$9,271,259	63.60%	\$48,287.81
Fire					
FY2020-21	248	39%	\$5,871,118	56.08%	\$23,673.86
3 Year Avg	203	36%	\$4,147,729	28.45%	\$20,465.77
Public Works					
FY2020-21	102	16%	\$833,184	7.96%	\$8,168.47
3 Year Avg	98	17%	\$732,026	5.02%	\$7,444.34
Parks, Recreation, and Youth Development					
FY2020-21	5	1%	\$6,809	0.07%	\$1,361.71
3 Year Avg	14	2%	\$47,610	0.33%	\$3,483.69
All other Departments					
FY2020-21	50	8%	\$243,180	2.32%	\$4,863.60
3 Year Avg	62	11%	\$379,150	2.60%	\$6,082.62

Ongoing Practices

- Monthly disability review meetings with department representatives to discuss active claims and identify cases for investigation and/or transitional duty assignments.
- Telephonic injury reporting to triage Workers' Compensation claims reporting.
- Participation in Medical Provider Network (MPN) through WellComp, a MPN sponsored by PRISM.
- Ongoing examination of City's disability programs
- Continuing education

New Initiatives

- Oakland Police Officer Association - Alternative Dispute Resolution Carve-Out
 - Approved by the Department of Industrial Relations (DIR) on December 9, 2019
 - Program Audit currently underway
- Maintain recent shift in settlement philosophy
 - Intended to address future liabilities
 - Working closely with Finance to balance annual cost vs. outstanding loss
- Fundamental shift in workflow and processing due to ongoing COVID-19 Pandemic.
- Updated Legal provider panel

FISCAL IMPACT

This informational report provides data regarding the existing program as compared to previous years. No new costs are introduced within this report but will be appropriately addressed in the City's next budget cycle.

B. Table 2 summarizes key categories of Workers' Compensation expenditures

	FY2019-20	FY2020-21	Change
Number of Claims Received	511	762	+49%
Total Expenditures	\$18,770,316	\$20,094,020	+7%
Total Future Liability	\$61,535,240	\$63,659,389	+3.5%
Settlements (Permanent Disability)	\$7,383,869	\$3,945,591	-47%
Temporary Disability	\$5,057,331	\$6,710,465	+33%
Allocated (Other Claim Costs)	\$1,899,805	\$1,453,259	-24%
Medical	\$5,511,582	\$5,683,670	+3%
Operational Expenses	\$16,151,283	\$17,476,831	+8%
Administrative Expenses	\$2,619,034	\$2,617,189	0%

The primary expenditures incurred in Workers' Compensation are medical, permanent and temporary disability, and allocated (other claim costs) payments. While Settlements were the largest expense in FY19-20, that was unusual. In FY20-21 Disability payments accounted for the largest expense as expected. Temporary disability payments are impacted by Labor Code 4850 payments, which allow sworn employees to receive up to a full year of salary, tax-free, upon a doctor's order to stay off work. City Policies include similar payments for non-sworn employees, but generally for only 60 days.

Additional discussion regarding the expenditures listed above and control factors are included in the attached report.

Estimated Future Liability/First Year Total Incurred by Department:

Table 3 below shows the estimated future liability incurred by each department for claims filed in the fiscal year referenced. This allows the City to review for fiscal trends by department and assists in planning loss prevention and cost-containment strategies for the future. **Attachment A** provides additional actuarial analysis. The significant jump in estimated Police loss during the 2018-19 fiscal year is due to a single-injury vehicle accident. While most this loss will be covered by excess insurance reimbursements, the loss still appears in Oakland's loss history and reporting.

Table 3: Estimated Future Liability by Dept – Total Incurred

<u>Estimated Future Liability by Dept</u>			
Department	FY2018-19	FY2019-20	FY2020-21
City Administrator	\$4,299	\$6,808	\$28,529
Police	\$18,198,506	\$1,592,154	\$2,134,758
Fire	\$2,006,761	\$2,041,466	\$3,394,267
Public Works	\$401,313	\$494,107	\$571,823
City Attorney	\$0	\$0	\$0
Parks, Recreation & Youth Development	\$19,395	\$49,892	\$4,025
Library	\$5,078	\$7,671	\$4,810
Human Services	\$94,022	\$121,939	\$9,000
Finance	\$25,149	\$0	\$0
Information Technology	\$0	\$0	\$0
Housing & Community Development	\$11,680	\$6,633	\$0
Mayor	\$0	\$0	\$11,550
Planning & Building	\$81,863	\$5,065	\$27,299
Economic & Workforce Development	\$0	\$0	\$0
Transportation	\$151,188	\$40,115	\$79,025
Totals	\$20,999,253	\$4,365,850	\$6,265,087

The estimated future liabilities of claims are measured for the life of the claim which may last many years. Workers' Compensation regulations require that the employer be held responsible for all medical expenditures related to a work-related injury or illness. Employers are also responsible for a period of lost wages (indemnity) and for compensating the injured employee should their injury have a permanent impact on their ability to work (indemnity/permanent disability). Staff estimate the future liabilities actuarially for each claim to anticipate the financial burden placed on the City in the years to come. As noted above, the City suffered a high-exposure Police loss in FY 18-19. This loss will continue to have a large effect on the City's estimated future loss for several years.

PUBLIC OUTREACH / INTEREST

There are no public outreach opportunities associated with this report beyond publication on the City's website.

COORDINATION

Development of this report was coordinated with internal staff in HRM, City Attorney's Office, and City Administrator's Office.

SUSTAINABLE OPPORTUNITIES

***Economic:** There are no economic opportunities associated with this report.*

***Environmental:** There are no environmental opportunities associated with this report.*

***Race & Equity:** There are no social equity opportunities associated with this report.*

Respectfully submitted,



IAN APPLEYARD
Director/Human Resources Management
Department

Prepared by:
Andrew S. Lathrop, Risk Manager

For questions regarding this report, please contact ANDREW LATHROP, RISK MANAGER, at (510) 238-7165.

Attachment (1):

A: FY 2020-21 Workers' Compensation Annual Report

CITY OF OAKLAND

WORKERS' COMPENSATION ANNUAL REPORT FY 2020-21



Human Resources Management, Risk Division
150 Frank H. Ogawa Plaza, Suite 3332, Oakland, CA 94612
Phone: 510-238-7660

Oakland's Workers' Compensation program falls under the City's Human Resources Management Department. The program resides in the Risk Division, is managed by the Risk Manager, and is administered by a contracted third party.

This report summarizes Oakland's Workers' Compensation Program for Fiscal Year 2020-21. It presents key program metrics along with comparisons between departments and previous years.



CITY OF OAKLAND

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Prior Claims (January 1, 1953—Jun 30, 2020):	980
New Claims during 20-21:	762
Claims closed during 20-21:	732
Total Open Claims as of June 30, 2021:	1010
Total Expenses for 20-21	\$20,094,020
Est. Outstanding Losses @ 50% Conf. as of June 30, 2020 (AON)	\$73,623,698
Est. Outstanding Losses (PDV)	\$63,659,389
2020/21 Final EWC Premium	\$2,379,429
TPA Annual Performance Audit (JT2)	98.08%



The total cost of the Workers' Compensation Program for Fiscal Year 2020-21:

Settlements: Permanent Disability:	\$3,945,591	Medical WC Disability Medical First Aid Only Claims	\$5,681,408 \$2,261
		Total Medical:	\$5,683,670
Temporary Disability Non-4850 Temporary Disability MOU Benefit (non-sworn)	\$729,747 \$107,864	Operational Expenses Sub-total Contributions—Excess Ins.	\$17,792,985 (316,153)
Total Non-4850 Pay	\$837,610	Total Operational Expenses:	\$17,476,831
4850 Oakland Police Dept. Oakland Fire Dept. Total 4850 Pay	\$2,491,992 \$3,380,864 \$5,872,855		
Subtotal—Temp. Disability	\$6,710,465		
Total Disability Payments:	\$10,656,056		
Other Claim Cost Rehabilitation Investigation Expenses Legal ADR (OPOA) Utilization Review Return to Work Services Injury Report Line 10% Penalties	\$91,887 \$36,646 \$761,187 \$82,461 \$256,334 \$163,140 \$55,562 \$6.042	Administration Expenses TPA Contract Bill Review Misc. Fees	\$2,024,174 \$590,310 \$2,706
Other Claim Cost Total:	\$1,453,259	Total Administration Expenses:	\$2,617,189

Total Operational Expenses + Admin Expense = **\$20,094,020**

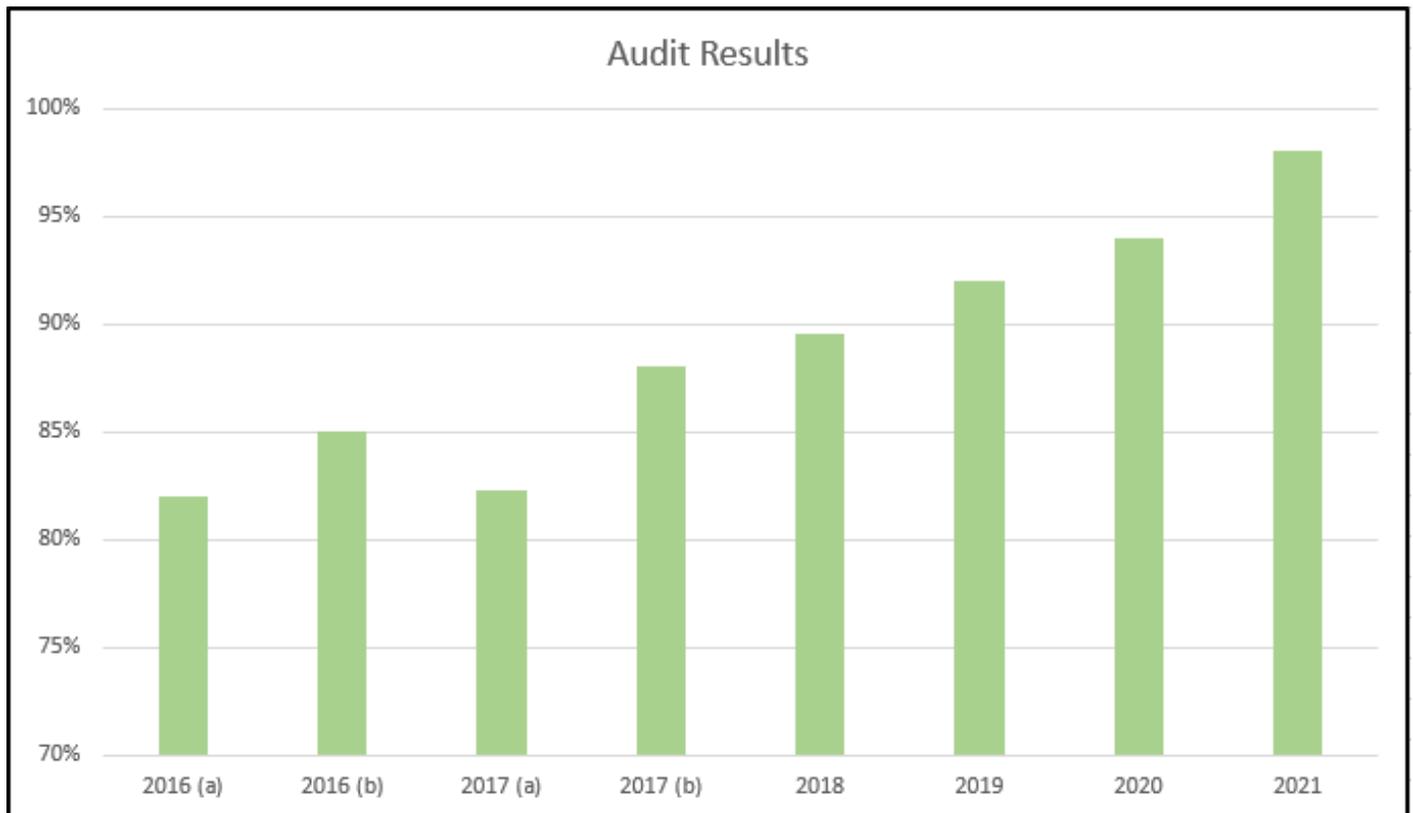


The purpose of a Third Party Administrator (TPA) is to manage the City’s workers’ compensation program by complying with the requirements of the California Division of Industrial Relations (DIR) and Division of Workers’ Compensation (DWC).

The success of the City’s Self-Insured Workers’ Compensation program relies heavily on a successful partnership with the City’s TPA. Since 2001, the City has partnered with JT2 Integrated Resources. JT2’s performance has been measured by regular audit, against a performance standard established by PRISM.

The City has instituted a number of different analytical tools to assess the performance of the TPA, including annual Claims Audits, annual Actuarial Reviews, quarterly Financial Reviews, quarterly Fraud Status Updates, and intermittent miscellaneous reviews, such as Fraud Program review and Contract Compliance Assessments. In the past year, the City commissioned a number of these tools, including Actuarial Assessment, Fraud Assessment, and a Claims Audit. The results of these assessment efforts are found in Appendices C - E. The overall score for claims audits over time follows below.

Exhibit 5-A



Performance Strengths

Outstanding results in were achieved in the categories of adjuster caseload, ongoing employee contact, payments on correct claims, initial employee contact, initial employer contact, initial reserves for probable value, initial reserves timely, medical bills paid timely, penalties coded correctly, apportionment ruled in/out, apportionment pursued, proactive return to work, member noticed of permanent work restrictions, TD/4850 reserves separate, PD exposure includes life pension, future medical reserve consistent with OSIP, settlement valuation, Medicare’s interest protected, EIA settlement authority, member settlement authority, litigation management, complaint/lien filed timely, member involved in complaint/lien, timely initial excess reporting, timely excess reimbursement requests and timely closing excess report.

Performance Improvement Recommendations

The standards for ongoing excess reporting should be reviewed with the team. We recommend setting the excess reporting diary at least two weeks prior to the report due date to allow for any unplanned absences or distractions.

There were three subcategories where only one downgraded file produced a low score. We consider these to be outliers and not adverse trends. The categories impacted were medical only conversion, identify and notice the third party timely and periodic contact with the third party.

Overview

Exhibit 6-A

Category	Points Available	Points	Score	%
Claim Handling - Administrative	1574	1546	Exceeds Expectations	98.22%
Caseload	1	1	Exceeds Expectations	100.00%
Case Review and Documentation	1319	1295	Exceeds Expectations	98.18%
Communication	12	12	Exceeds Expectations	100.00%
Fiscal Handling	47	43	Exceeds Expectations	91.49%
Claim Creation	95	95	Exceeds Expectations	100.00%
Reserves	100	100	Exceeds Expectations	100.00%
Claims Handling - Technical	665	650	Exceeds Expectations	97.74%
Payments	130	130	Exceeds Expectations	100.00%
Apportionment	38	38	Exceeds Expectations	100.00%
Disability Management	22	22	Exceeds Expectations	100.00%
Reserving	349	345	Exceeds Expectations	98.85%
Resolution of Claim	54	49	Exceeds Expectations	90.74%
Settlement Authority	3	3	Exceeds Expectations	100.00%
Litigated Cases	42	42	Exceeds Expectations	100.00%
Subrogation	5	3	Unsatisfactory	60.00%
Excess Coverage	22	18	Meets Expectations	81.82%
Overall Score	2239	2196	Exceeds Expectations	98.08%

In addition to the Claims Management Audits, other data is collected to monitor claims administration performance. Two examples are Closing Ratio and Fraud Investigation.

Closing Ratio: The ratio of claims closed over claims opened during a specific period of time. A Closing Ratio value of greater than one is desirable because it indicates that more claims are being closed than opened, reducing the City’s total number of open claims.

Claims Productivity Ratio by Fiscal Year			Exhibit 7-A
Fiscal Year	# Claims Closed	# Claims Opened	Closing Ratio
FY15-16	717	593	121%
FY16-17	634	569	111%
FY17-18	636	515	123%
FY18-19	796	552	144%
FY19-20	700	511	137%
FY20-21	732	762	96%*

*Beginning in FY 20-21 the # of opened claims includes claims that were reopened or reclassified.

Fraud Investigations have 3 parts:

1. Surveillance (observation of individual without contact with the subject).
2. Field Investigations (progression of surveillance, and taking statements from the subject & others).
3. Fraud Referral (the case meets the standard for fraud set by the District Attorney).

Fraud Investigation Activity

Exhibit 7-B

Indemnity Claims Filed FY2019-20	Surveillance	Field Investigation	Fraud Referral (FD-1) Submission	Background Checks	Denied Claims
440	32	3	0	2	77

An Agreed Medical Examination (AME) is a tool approved by the State of California as a method of seeking third opinion resolutions on disputed medical cases. This typically occurs when an employee’s treating physician and the employer’s physician disagree on the severity of injury and degree of disability caused by the injury. When such disagreement exists, either party (employee or employer) has the option to invoke an AME. However, both parties must agree to the need for the exam. Additionally, the State of California requires that the injured worker have legal representation to qualify for an AME. If the employee does not have legal counsel, the City cannot require the employee to participate in the AME process.

The physician selection process is managed by the State of California. When a request for an QME is received, the State provides a “panel list” of physicians to the parties from which to select. The State of California establishes the panel. Typically it takes several months for an Examination appointment due to the number of State-wide Workers’ Compensation cases that are in dispute.

The City of Oakland relies heavily on AMEs to bring resolution to Workers’ Compensation cases. The exhibit below illustrates the number of AME and Qualified Medical Examination processes utilized for the current Fiscal Year and for the four previous Fiscal Years. In addition, this exhibit reflects the number of cases settled on the basis of the opinion of the employee’s Primary Treating Physician (PTP).

Medical Legal Statistics by Fiscal Year					Exhibit 8-A
Fiscal Year	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
Number of Claims Settled	163	182	89	162	129
Agreed Medical Examiner	130	121	37	79	70
PTP (Primary Treating Physician)	15	24	12	25	26
Panel QME (Employee Unrepresented by Attorney)	0	0	0	0	2
QME (Employee Represented by Attorney)	18	37	39	54	31
Other	0	0	1	5	0



Ongoing

- Monthly disability review meetings with department representatives to discuss active claims and identify cases for investigation and/or transitional duty assignments.
- Telephonic injury reporting to triage Workers' Compensation claims reporting.
- Participation in Medical Provider Network (MPN) through WellComp, a MPN sponsored by PRIMS (formally CSAC-EIA).
- Ongoing examination of City's disability programs
- Continuing education

New Initiatives

- Oakland Police Officer Association - Alternative Dispute Resolution Carve-Out
 - Approved by the DIR on December 9, 2019
 - Program Audit currently underway
- Maintain recent shift in settlement philosophy
 - Intended to address future liabilities
 - Working closely with Finance to balance annual cost vs. outstanding loss
- Fundamental shift in workflow and processing due to ongoing COVID-19 Pandemic.
- Updated Legal provider panel



As a form of Risk Transfer, the City purchases Excess Workers' Compensation (EWC) coverage through PRISM. The EWC Program provides bodily injury coverage for employees if they are injured on the job. Coverage includes reimbursement for payments above the City's Self Insured Retention of \$750,000. Covered expenses include compensation for loss of earnings at statutory rates, medical benefits, and some allocated expenses.

The EWC Program provides the following special coverage features:

- Volunteers included (subject to resolution by employer prior to injury)
- Defense costs included within SIR and limit
- No terrorism exclusion
- Other states coverage (while in course and scope)
- EIA staff will coordinate a claims audit every 2 years
- 182 Members covering \$31B in total payroll.

2020/21 Final EWC Premium: \$2,379,429

EWC Insurance Retention Review

Each year the City reviews it's EWC coverage and other possible placements before renewing with PRISM. As in previous years, PRISM continues to be the City's most cost efficient partner.

The City's position continues to be difficult due to a large loss early in the 18-19 fiscal year. This loss will continue to effect the City's program for the foreseeable future.



As a Self-Insured employer, the City is required to submit a Self-Insured Annual Report (SIA) to the State of California each year. The SIA serves two purposes. First, it enables the State to determine the annual Workers' Compensation Assessments to employers. Second, it provides the City comparison information for year to year program performance. The table below shows the City's performance for the past five fiscal years and the following pages compare City's Workers' Compensation experience against itself.

COO Self-Insured Annual Report to State of California						Exhibit 11-A
Fiscal Year	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	
Indemnity Claims Rec'd	289	233	191	218	351	
Medical Only Claims Rec'd	211	191	242	222	218	
Total # of Claims Rec'd	500	424	433	440	569	
Total Benefits Paid (Disability & Medical Expenses Only)	\$16,000,632	\$14,697,608	\$18,300,670	\$17,952,696	\$16,399,725	
Total Future Liability	\$50,316,257	\$48,486,464	\$65,332,189	\$55,020,690	\$54,083,071	
# of Employee (FTE)	5062	5283	5031	4701	5062	
Total Reported Payroll	\$360,410,946	\$375,381,194	\$400,535,932	\$419,087,238	\$436,153,371	
Total # Claims/100 FTE	9.88	8.03	8.63	9.36	11.24	
Total Benefits Paid/100 FTE	\$316,093	\$278,206	\$363,758	\$381,891	\$323,977	
Total # Claims per \$1M Payroll	1.39	1.13	1.08	1.05	1.30	
Total Benefits Paid per \$1M Payroll	\$44,396	\$39,154	\$45,690	\$42,838	\$37,601	
Average Cost per Claim	\$32,001	\$34,664	\$37,856	\$40,801	\$28,822*	

*Average cost per claim was driven down due to a high occurrence of low-cost COVID-19 claims.

Exhibit 12-A

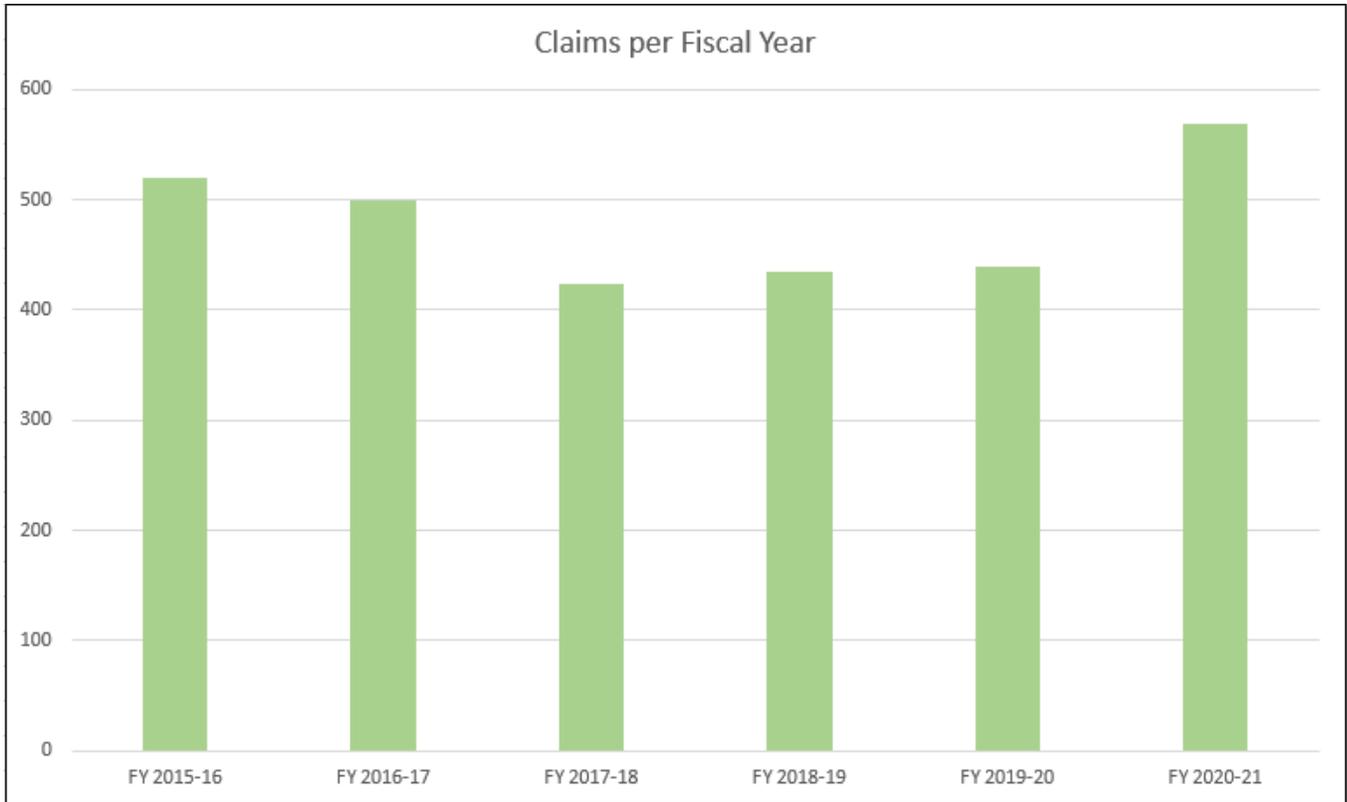
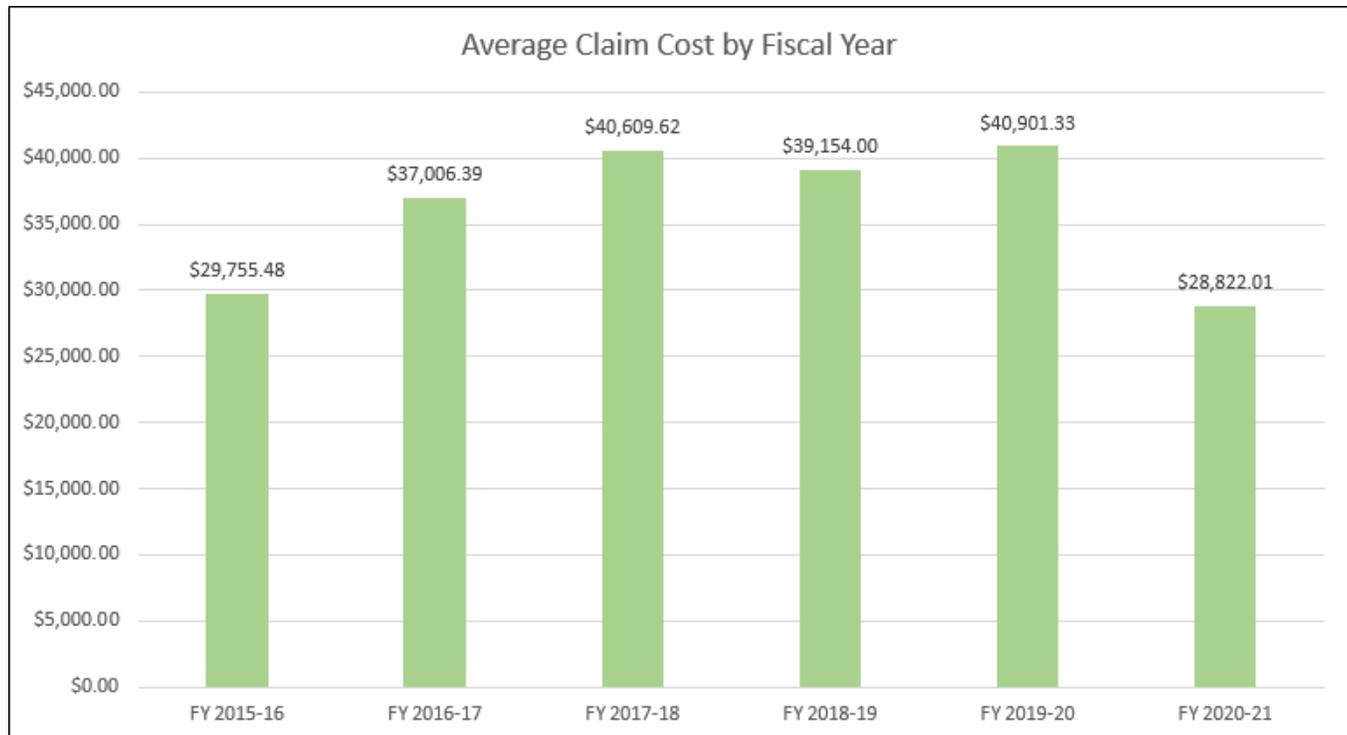


Exhibit 12-B



An above average number of claims were reported in 2021 due to the COVID-19 pandemic. Because most COVID-19 claims have low to no cost, cost per claim were significantly lower than the previous fiscal year. According to WCIRB, the average statewide cost per claim was \$58,964 for 2021.

Exhibit 13-A

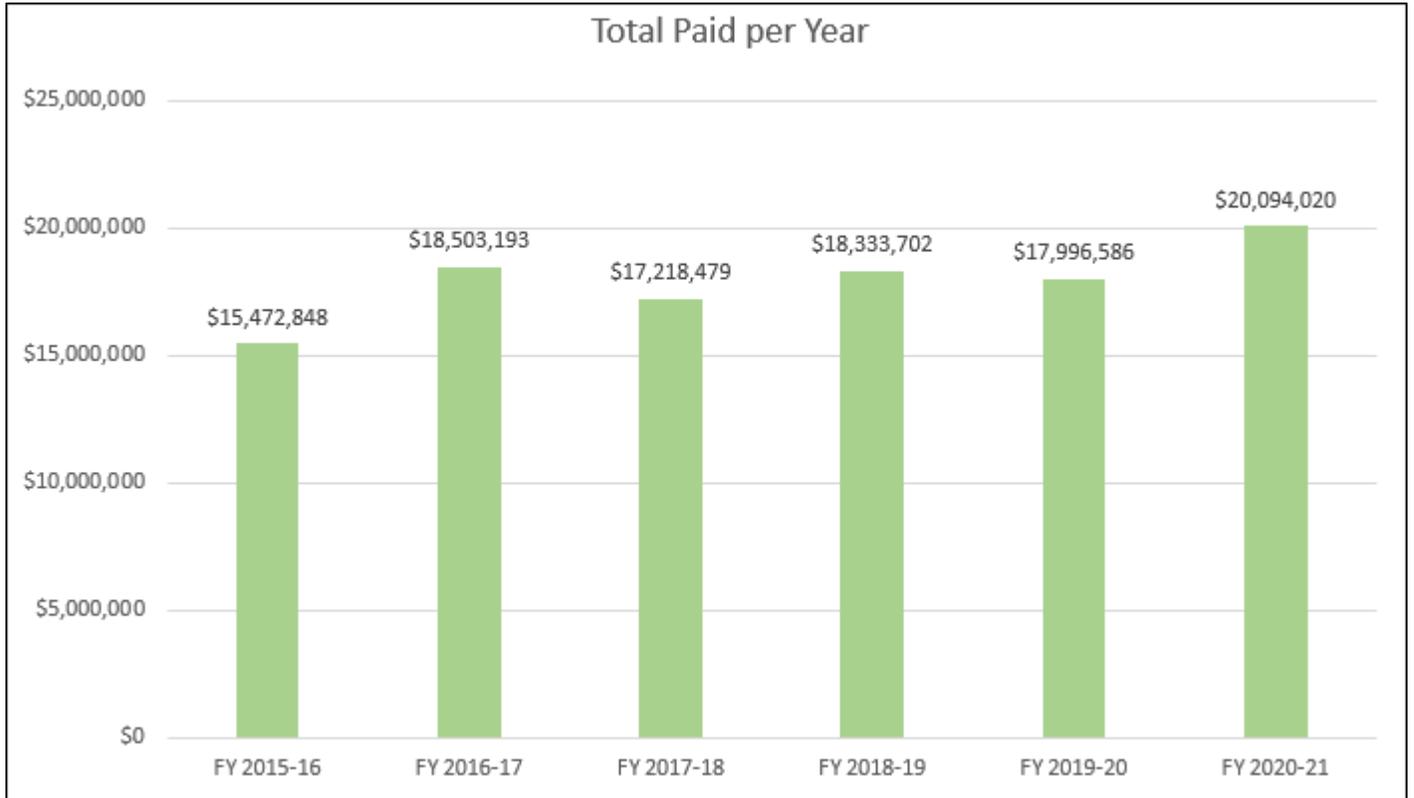


Exhibit 13-B

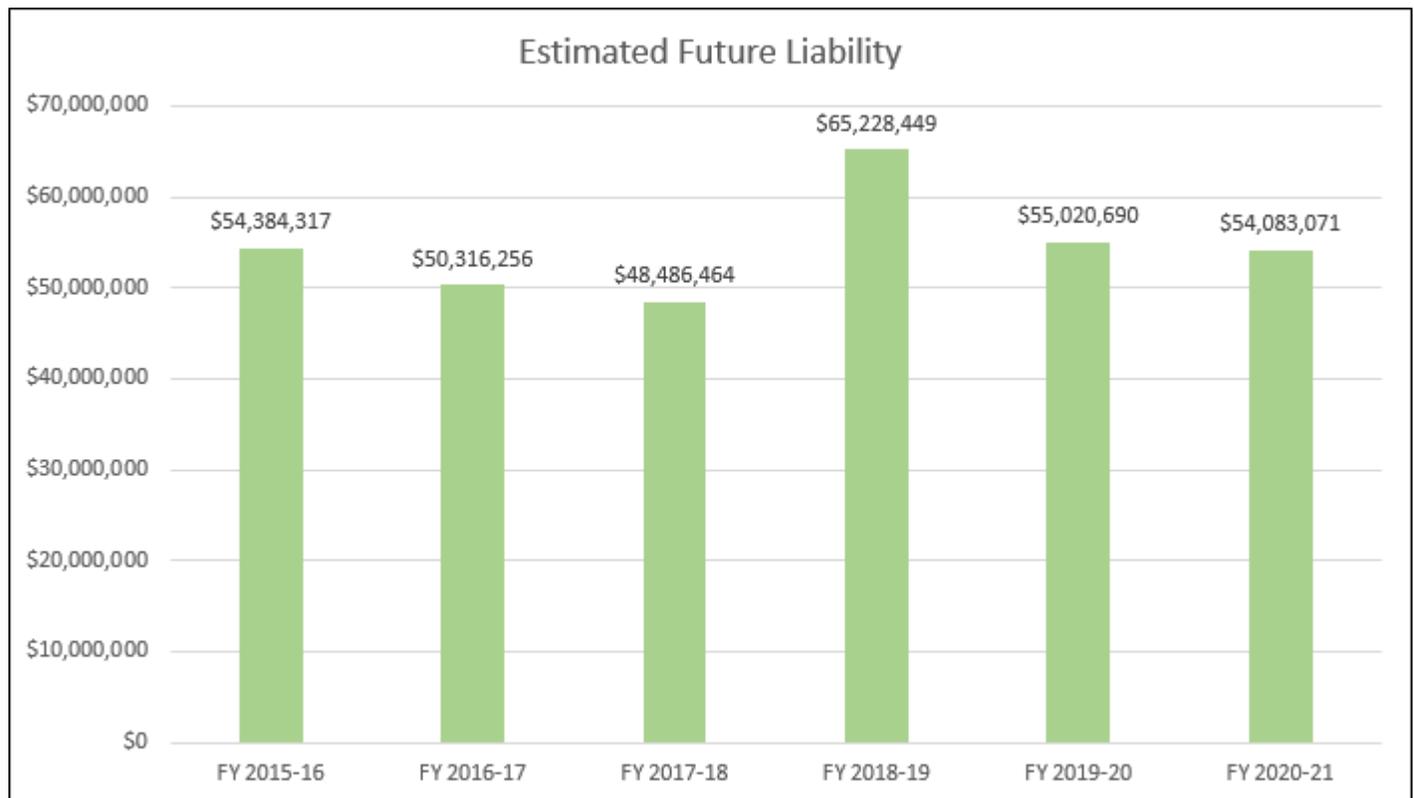


Exhibit 14-A

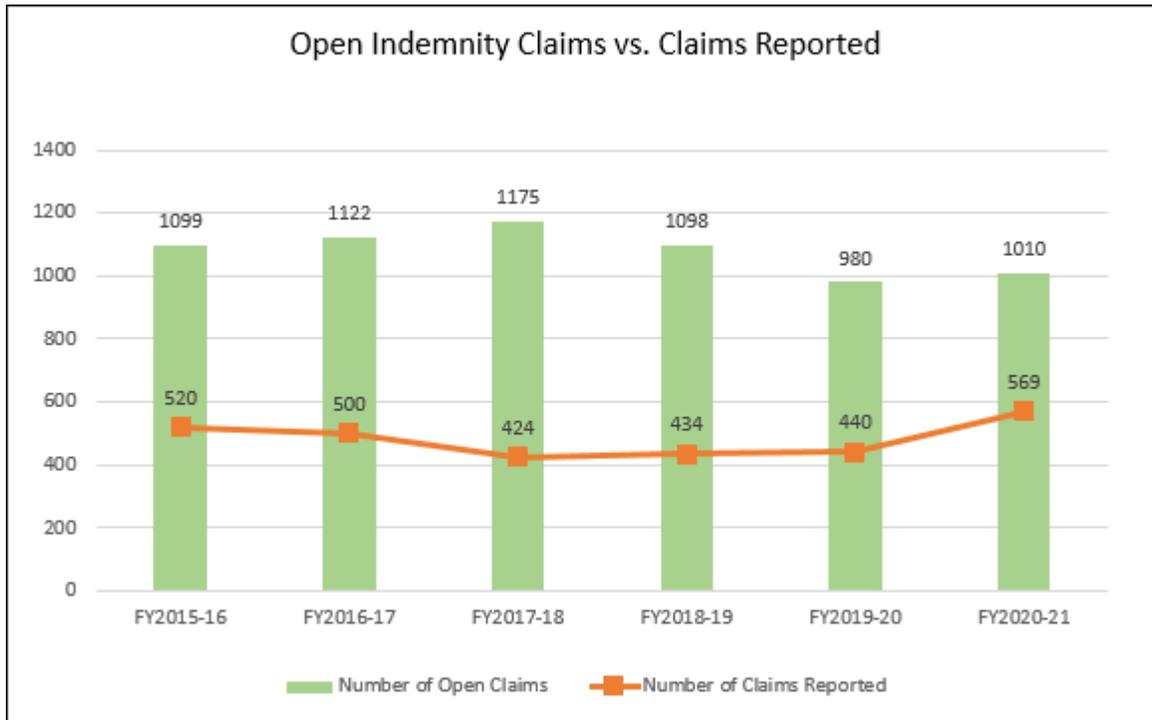
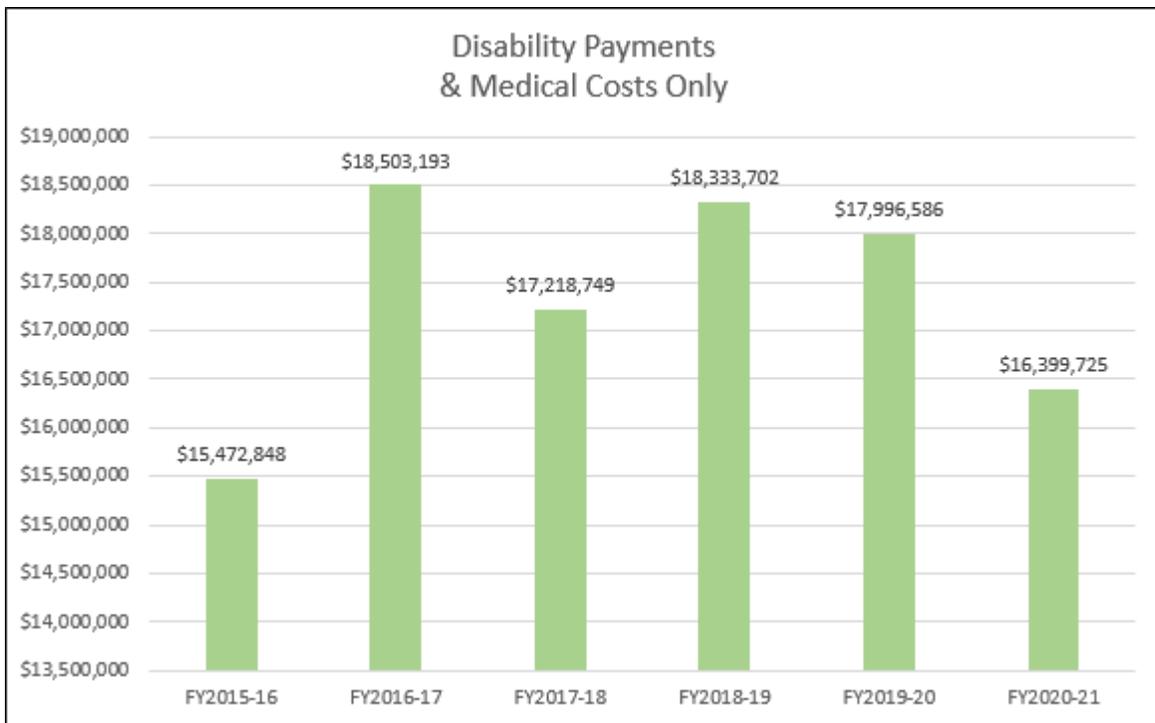


Exhibit 14-B



Total disability and medical costs are lower than the prior year. This trend positively impacts the City’s program, especially when considering the annual medical inflation of approximately -.9% for all employers statewide according to the WCIRB 2021 report.

Exhibit 15-A

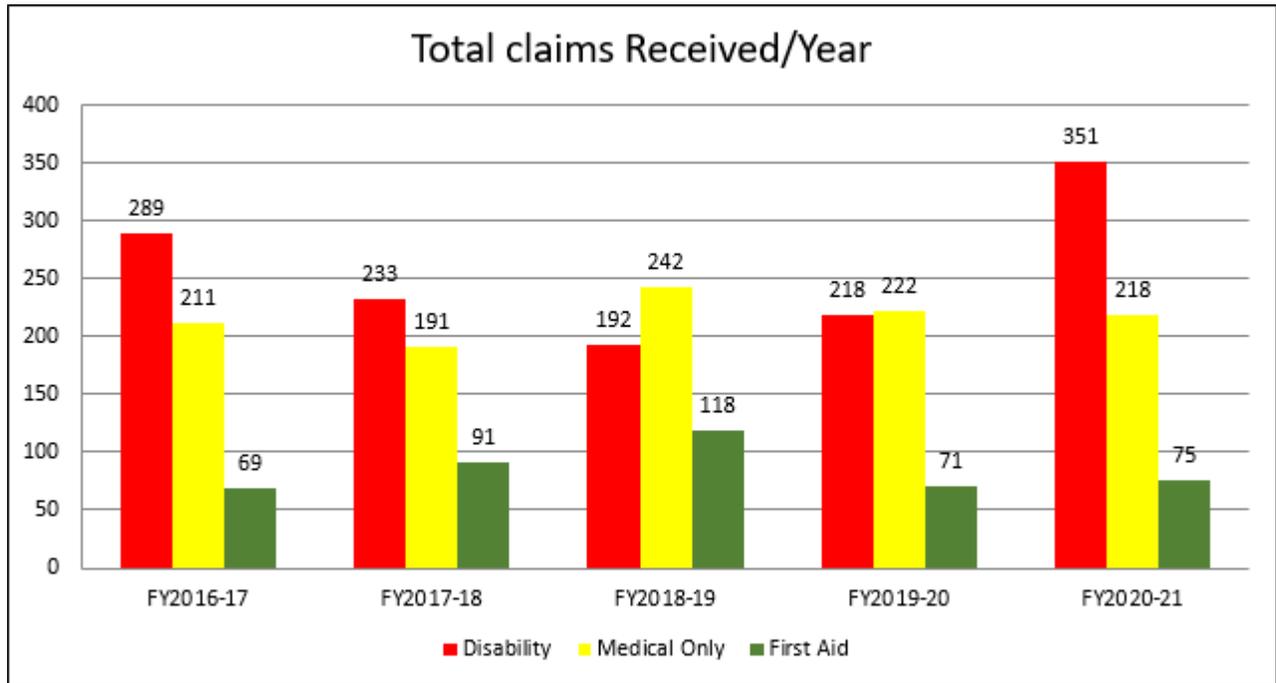


Exhibit 15-B

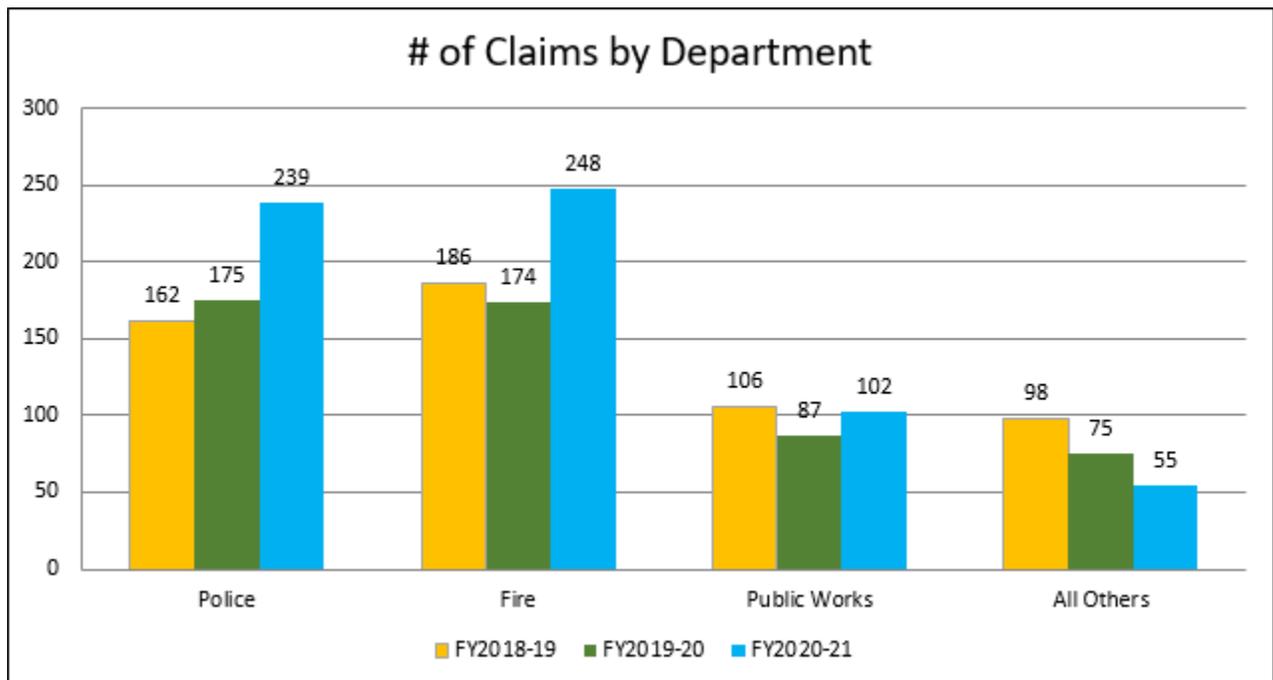


Exhibit 16-A

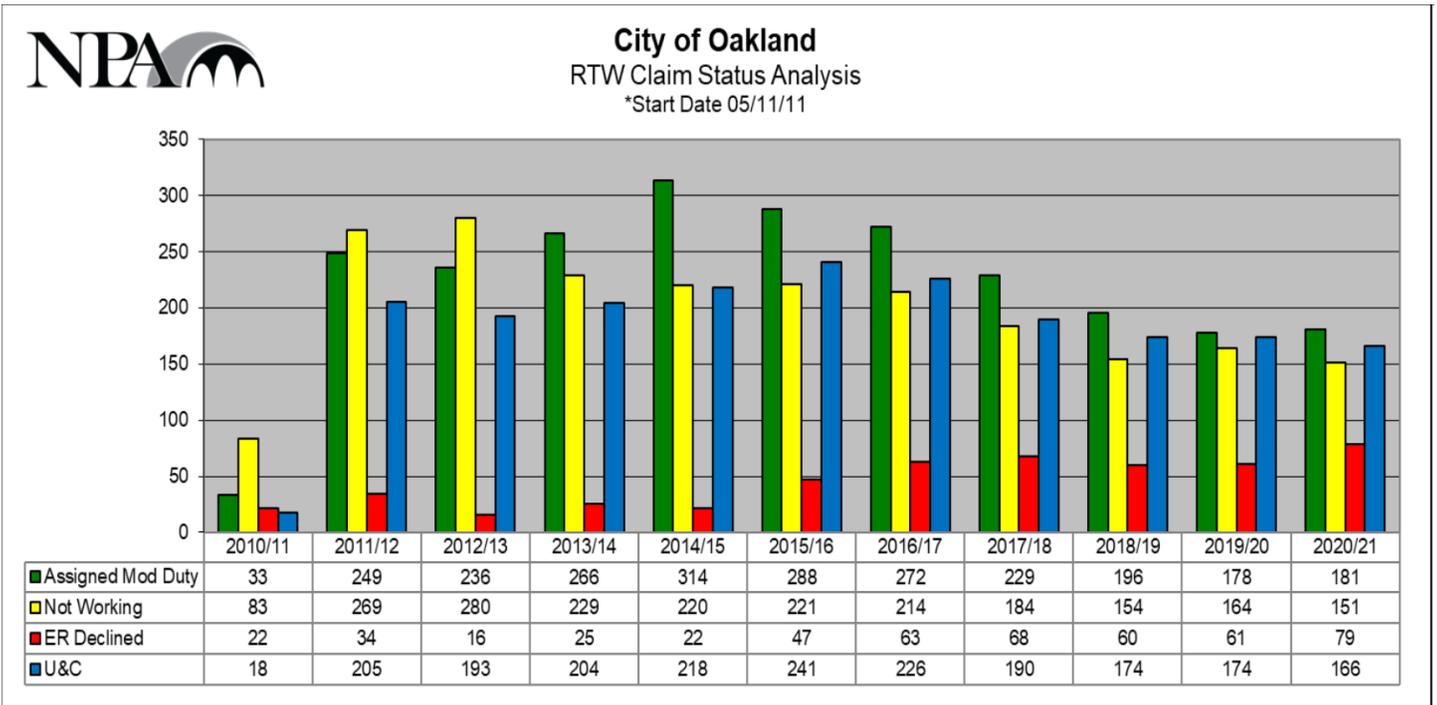
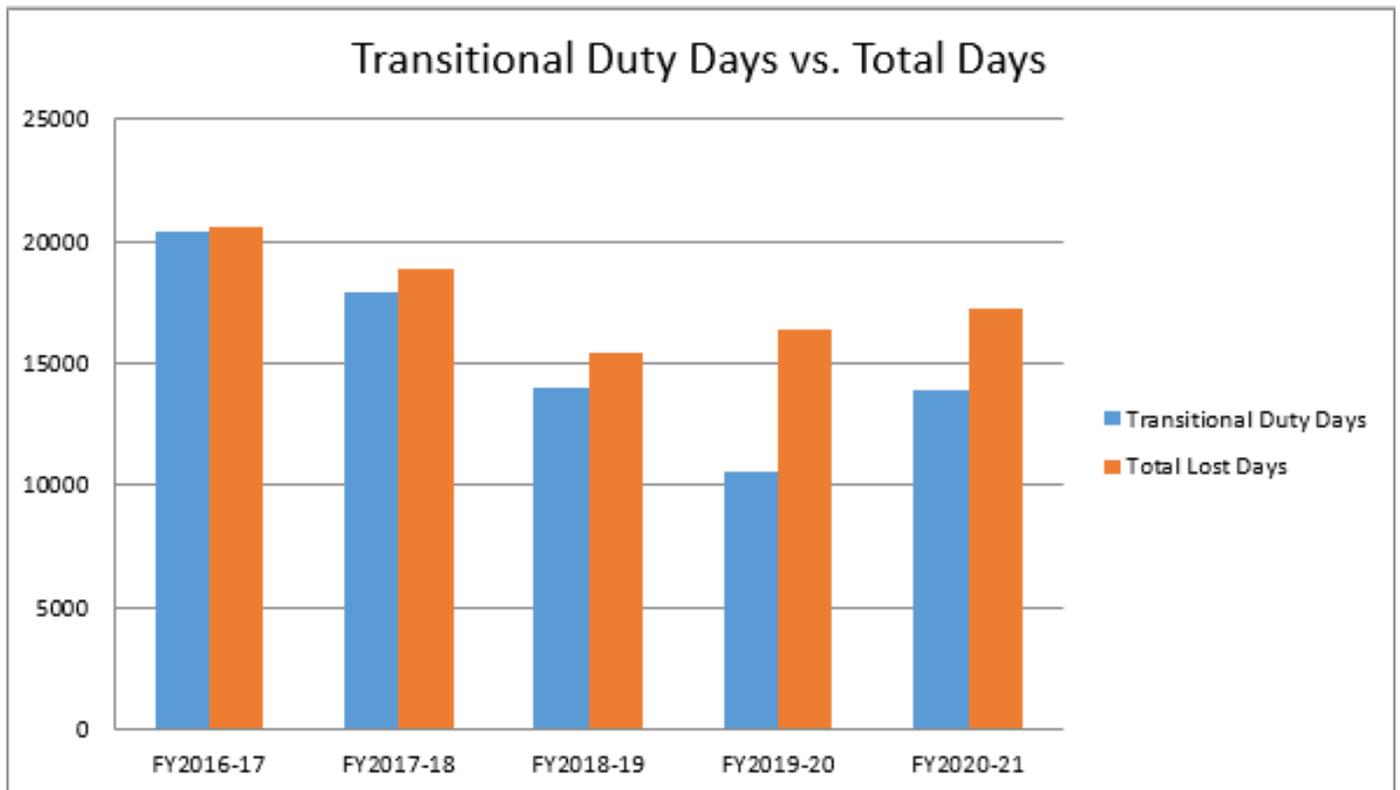


Exhibit 16-B



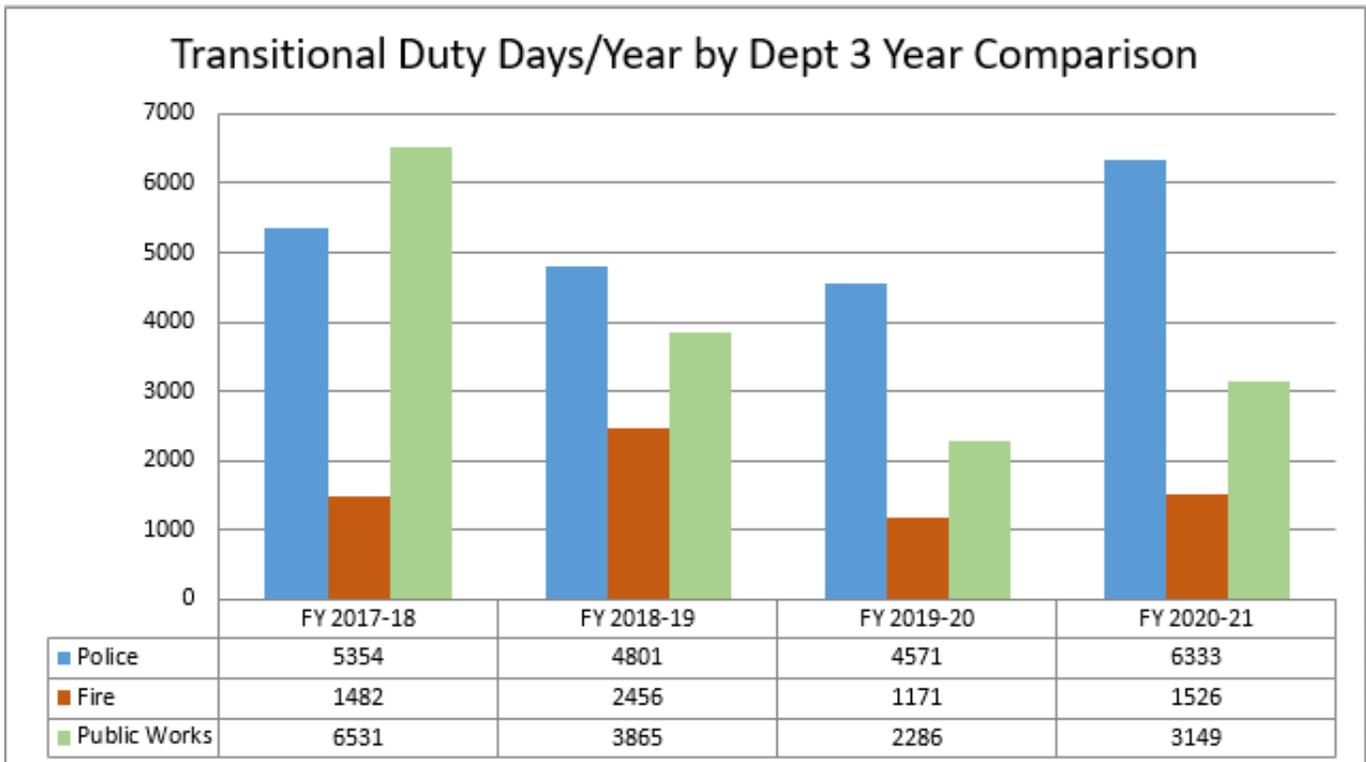
The number of Transitional Duty (TD) increased somewhat from the previous fiscal year. We believe that this is a positive trend as stakeholders adjusted to the COVID-19 pandemic.

Factors to consider:

- Medical Providers releasing more employees to Modified Duty than the previous year.
- Entities learning to operate more efficiently during the COVID-19 pandemic.
- Both the City and third party administration adjusting to remote work.

Overall, the City's ability to provide modified duty remains fairly consistent with a 74% placement rate in FY19/20 and a 79% placement rate in FY 20/21.

Exhibit 17-A



PROGRAM EXPENDITURES

ANNUAL REPORT FISCAL YEAR 2020-21

The primary expenditures in Oakland's WC Program are Indemnity Payments (Permanent Disability payments), Temporary Disability payments, and Medical Expenditures. Appendix A defines these terms and Appendix B provides a detailed breakdown of program expenditures over the past 5 years. The following graphs show five-year histories for each primary expenditure type.

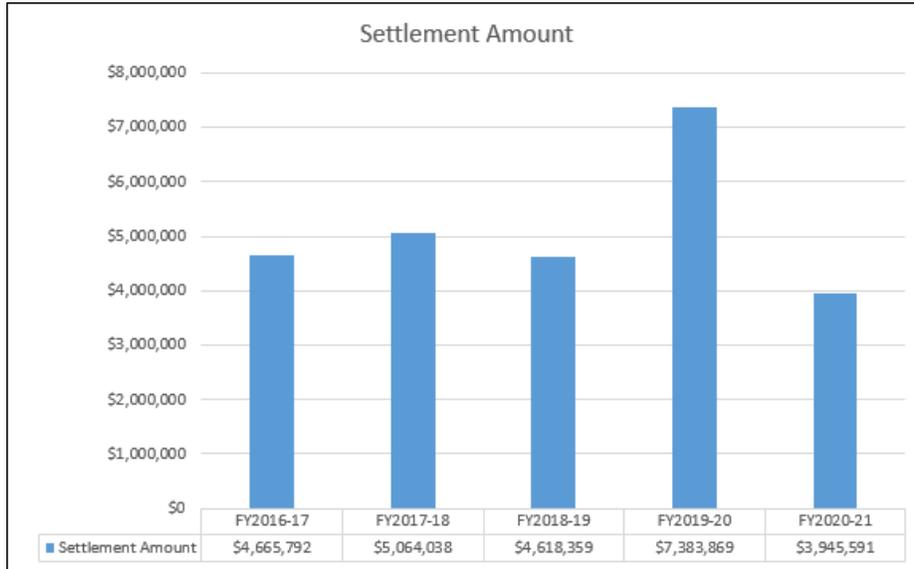


Exhibit 18-A

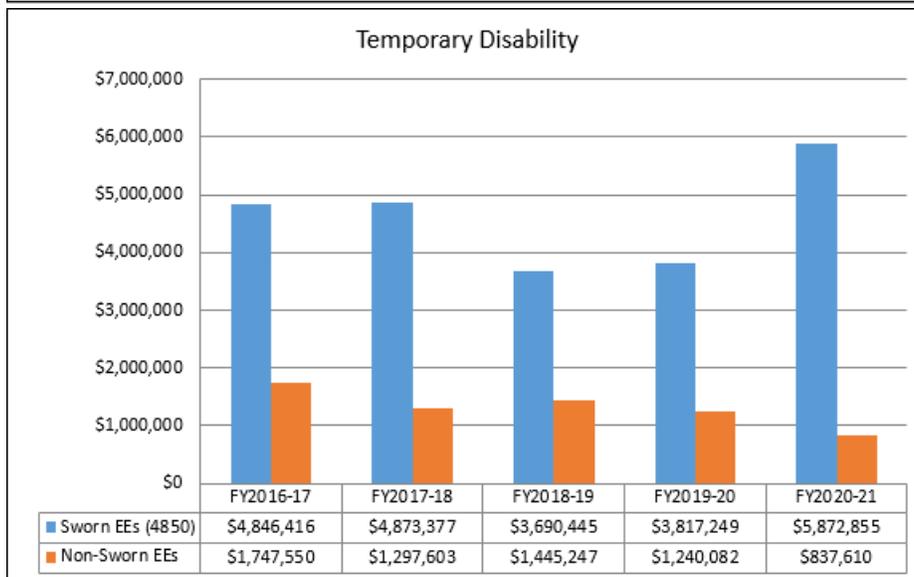


Exhibit 18-B

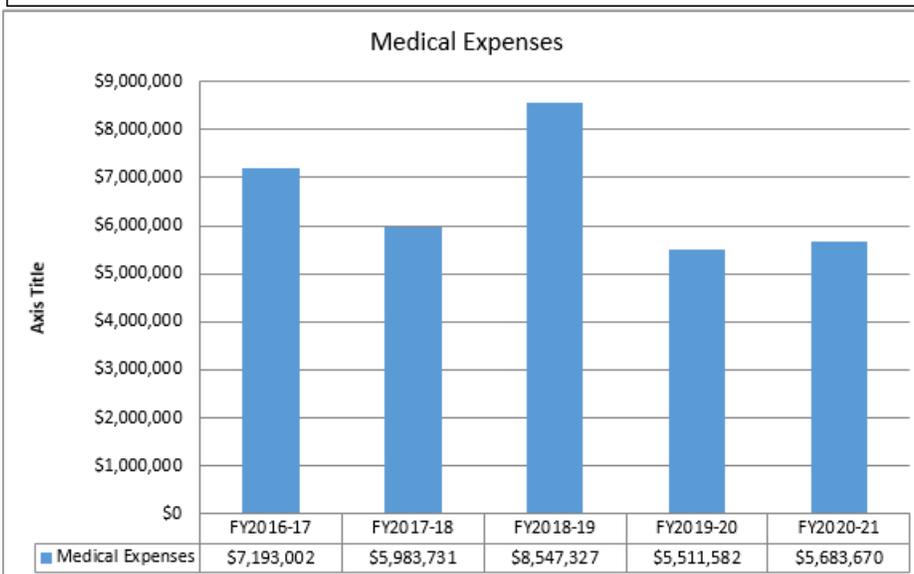


Exhibit 18-C

Exhibit 19-A

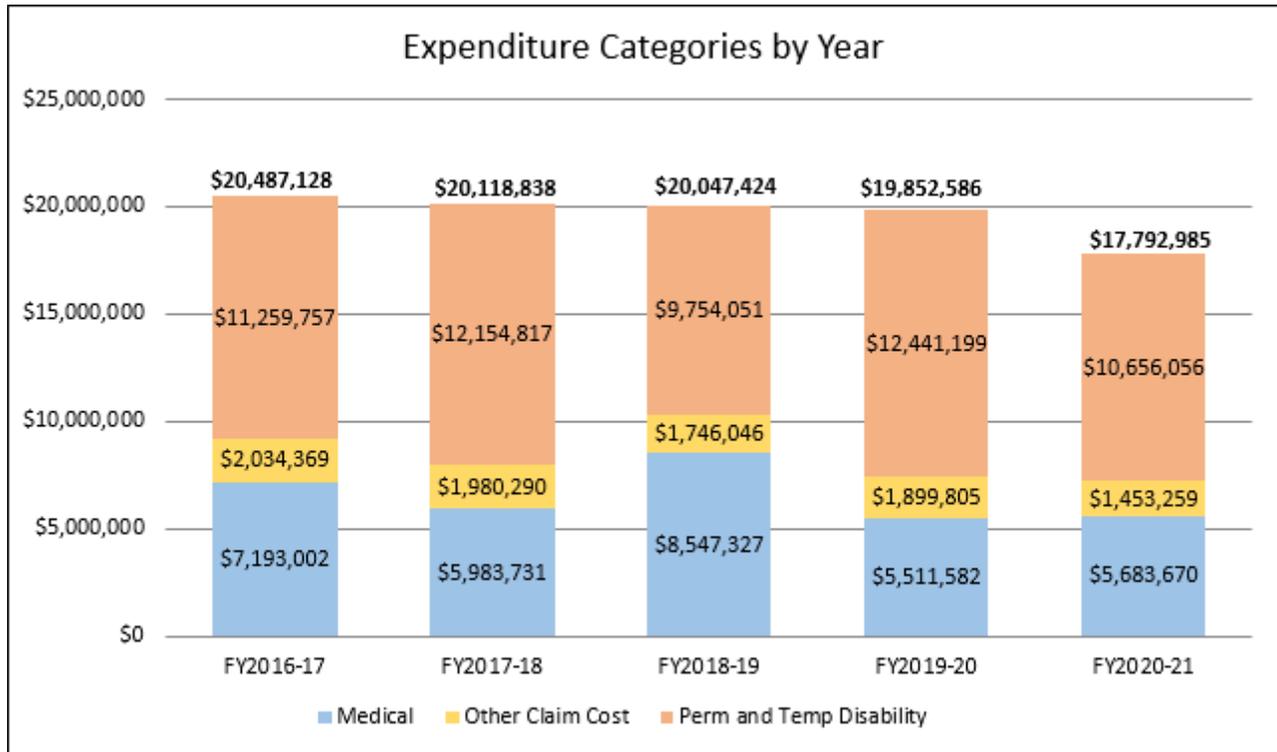


Exhibit 19-B

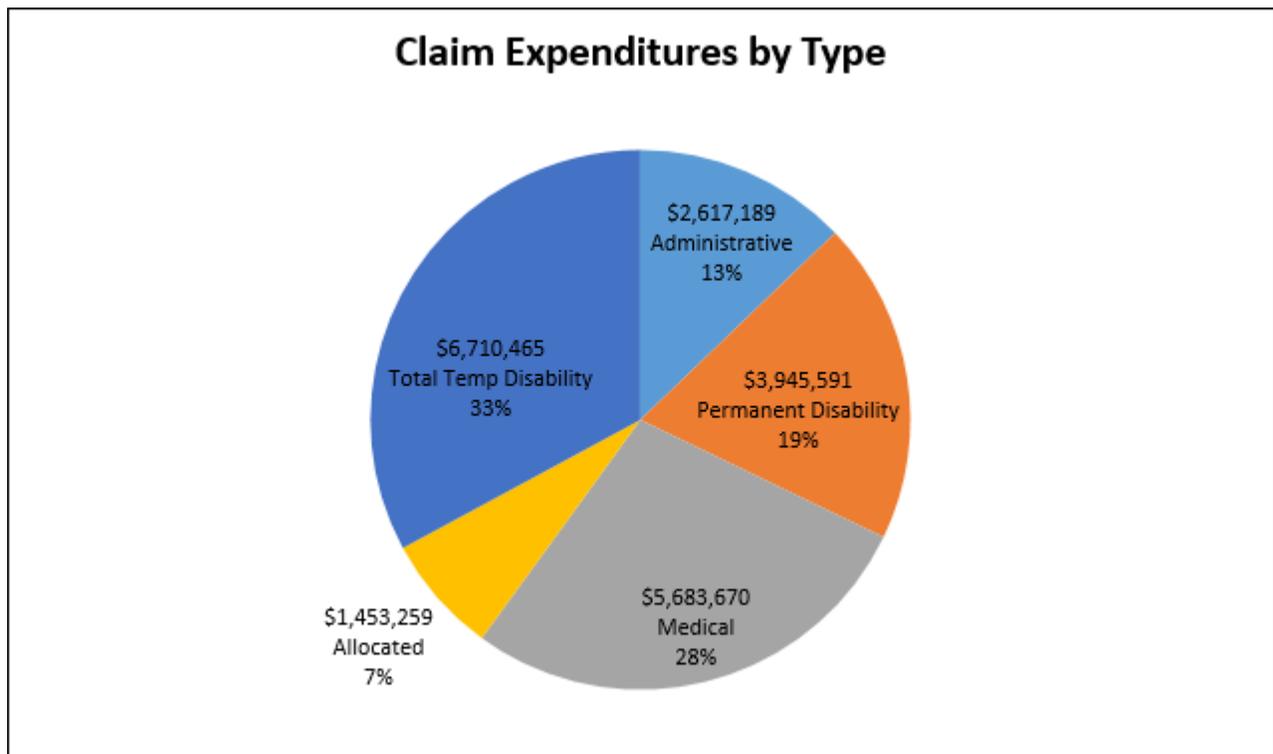


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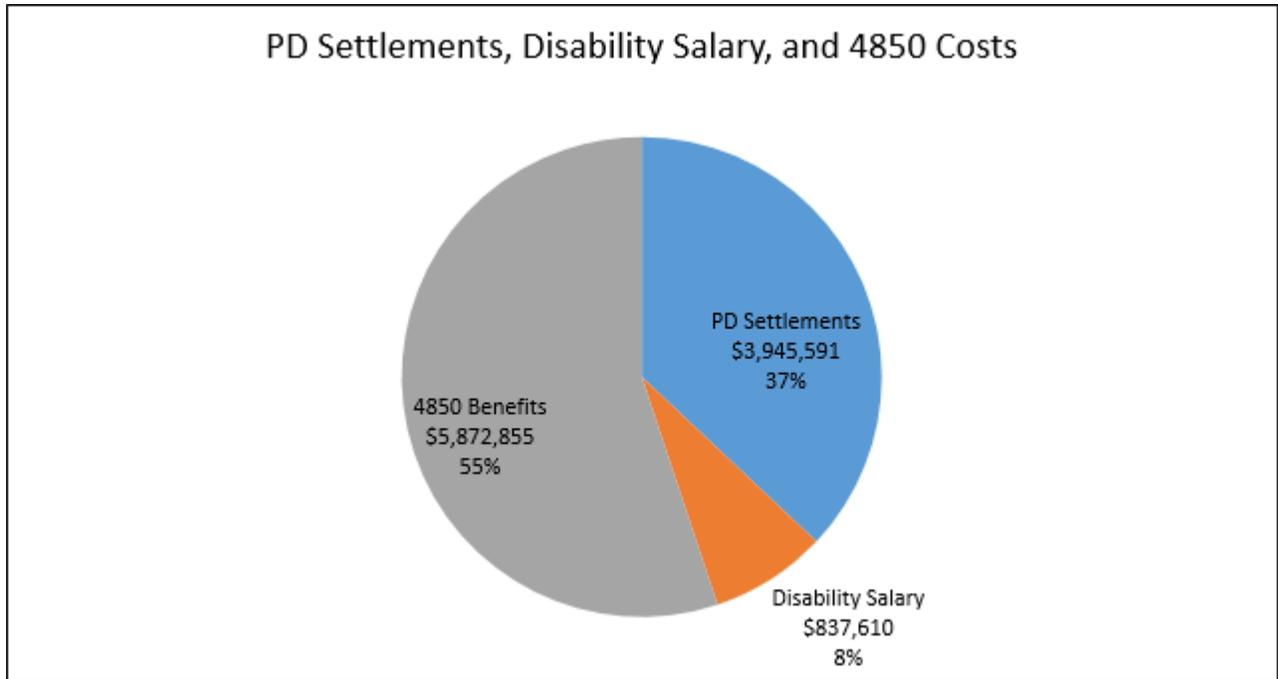
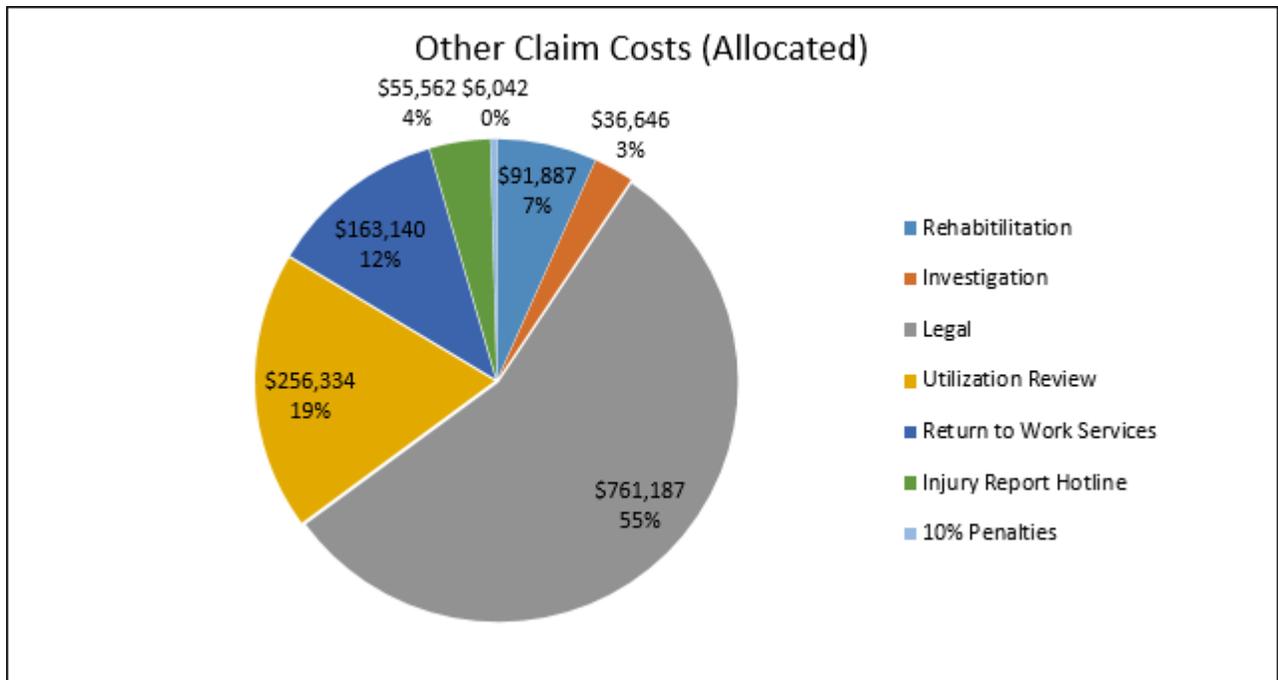


Exhibit 20-B



CLAIMS BY DEPARTMENT

ANNUAL REPORT FISCAL YEAR 2020-21

Exhibit 21-A

Frequency	Number of Claims by Dept. FY2018-19 through FY2020-21											
	FY2018-19				FY2019-20				FY2020-21			
Department	First Aid	Med Only	Disability	All	First Aid	Med Only	Disability	All	First Aid	Med Only	Disability	All
City Administration	2	3	0	5	3	5	3	11	1	3	1	5
Police	25	86	51	162	23	68	84	175	10	78	151	239
Fire	54	58	74	186	23	65	86	174	46	52	150	248
Public Works	12	52	42	106	9	50	28	87	13	51	38	102
City Attorney	0	0	0	0	0	0	1	1	0	1	0	1
Unknown	0	0	0	0	0	0	0	0	0	0	1	1
Parks & Recreation	11	10	2	23	7	3	3	13	1	4	0	5
Library	3	5	1	9	5	6	1	12	1	6	1	8
Office of The Mayor	0	0	0	0	0	0	0	0	0	1	1	2
Human Services	4	5	8	17	0	8	7	15	0	3	0	3
Financial Mgmt	0	4	2	6	1	1	1	3	0	2	1	3
Dept. Of Info & Tech	1	0	0	1	0	0	0	0	0	1	0	1
Housing & Comm Dev.	0	0	1	1	0	1	0	1	0	0	0	0
Planning & Bldg	1	7	4	12	0	2	0	2	0	2	1	3
Economic & Workforce Development	0	0	0	0	0	1	0	1	0	0	0	0
Department of Transportation	5	12	7	24	0	12	4	16	3	14	6	23
Totals	118	242	192	552	71	222	218	511	75	218	351	644

Exhibit 21-B

Severity	Estimated Future Liability by Dept		
Department	FY2018-19	FY2019-20	FY2020-21
City Administration	\$4,299	\$6,808	\$28,529
Police	\$18,198,506	\$1,592,154	\$2,134,758
Fire	\$2,006,761	\$2,041,466	\$3,394,267
Public Works	\$401,313	\$494,107	\$571,823
City Attorney	\$0	\$0	\$0
Unknown	\$0	\$0	\$0
Parks & Recreation	\$19,395	\$49,892	\$4,025
Library	\$5,078	\$7,671	\$4,810
Human Services	\$94,022	\$121,939	\$9,000
Financial Mgmt	\$25,149	\$0	\$0
Dept. Of Info & Tech	\$0	\$0	\$0
Housing & Comm Dev.	\$11,680	\$6,633	\$0
Office of the Mayor	\$0	\$0	\$11,550
Planning & Bldg	\$81,863	\$5,065	\$27,299
Economic & Workforce Development	\$0	\$0	\$0
Department of Transportation	\$151,188	\$40,115	\$79,025
Totals	\$20,999,253	\$4,365,850	\$6,265,087

Exhibit 22-A

	PD Claims	% of City Claims	PD Claims Cost	% of City Cost	Average Incurred Claim Cost
FY2020-21	239	37%	\$3,515,717	33.58%	\$14,710.11
3 Year Avg	192	34%	\$9,271,259	63.60%	\$48,287.81

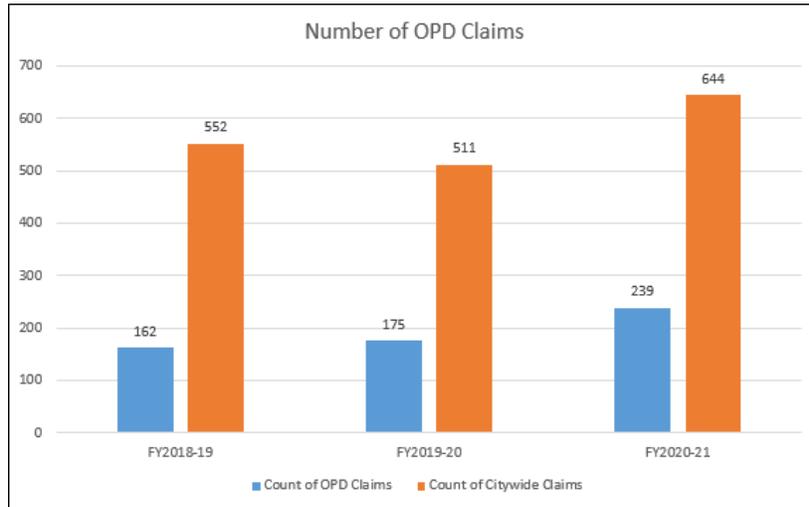


Exhibit 22-B

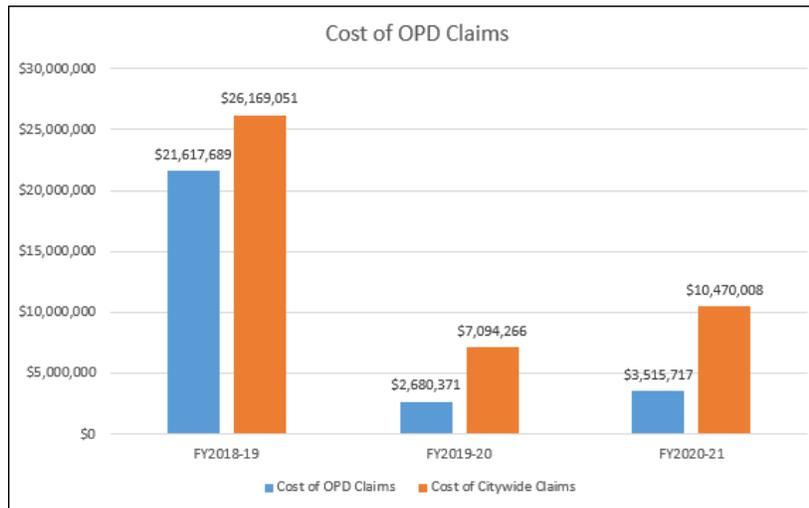


Exhibit 22-C

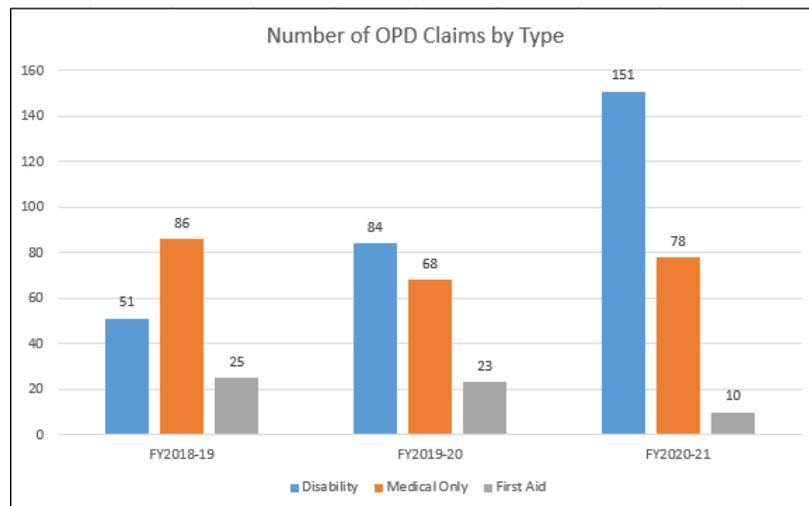


Exhibit 22-D

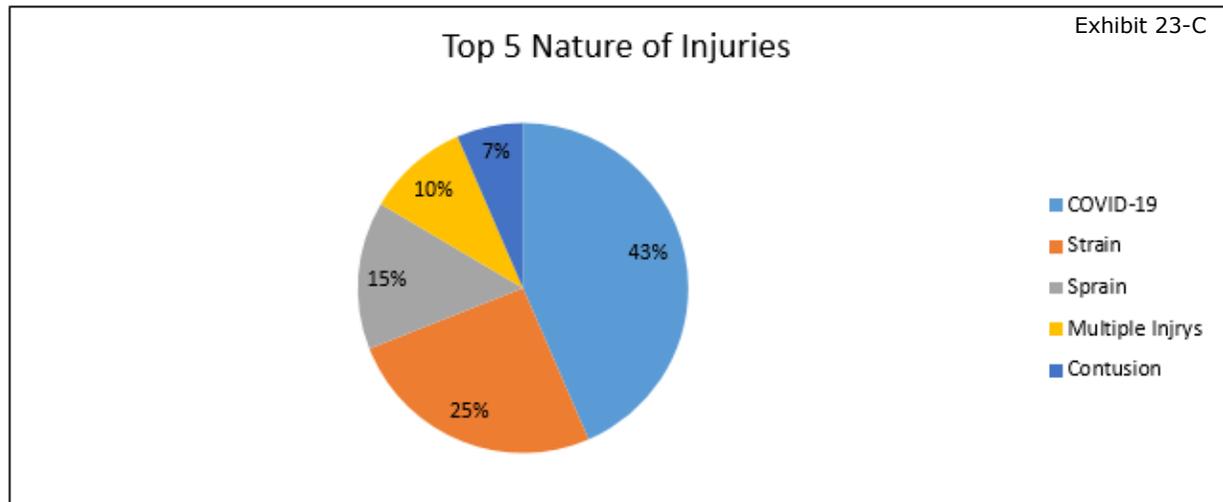
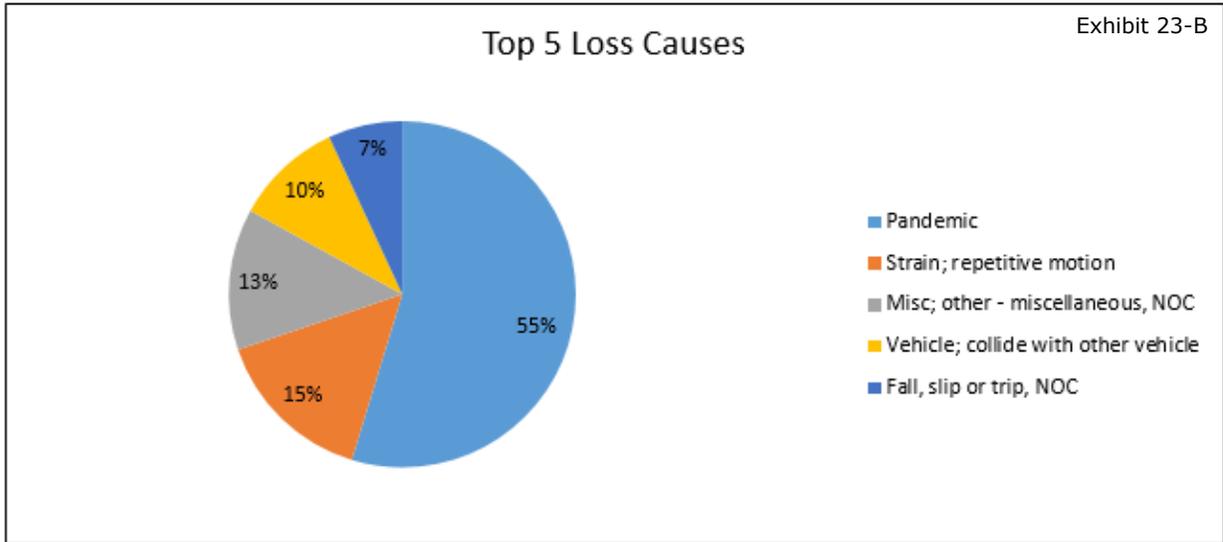
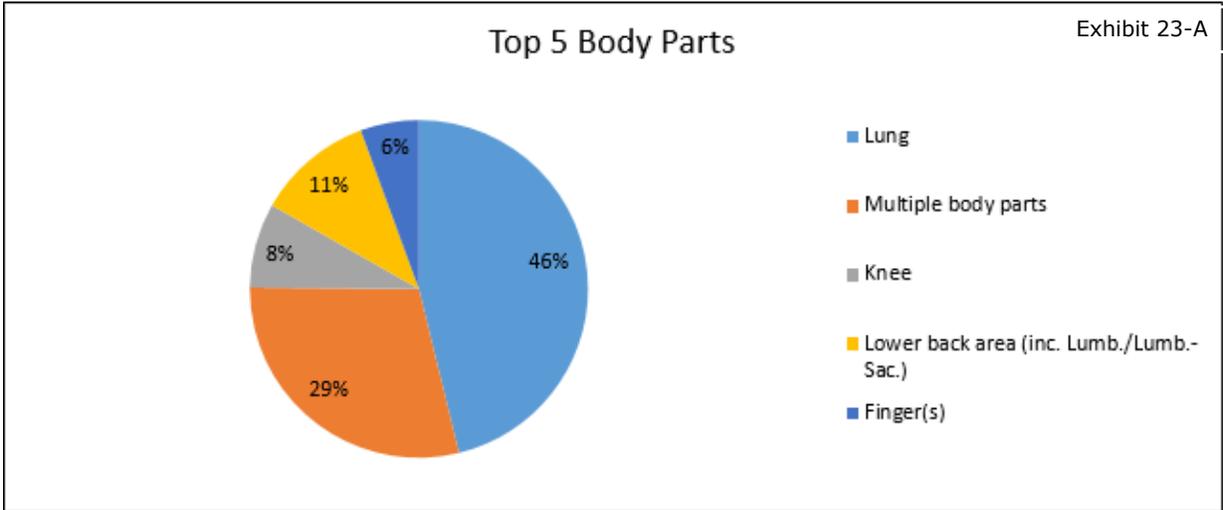


Exhibit 24-A

	FD Claims	% of City Claims	FD Claims Cost	% of City Cost	Average Incurred Claim Cost
FY2020-21	248	39%	\$5,871,118	56.08%	\$23,673.86
3 Year Avg	203	36%	\$4,147,729	28.45%	\$20,465.77

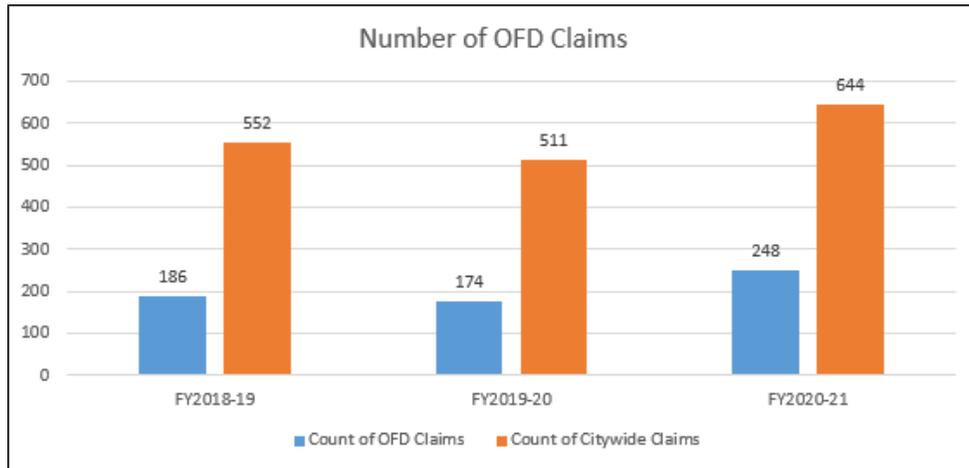


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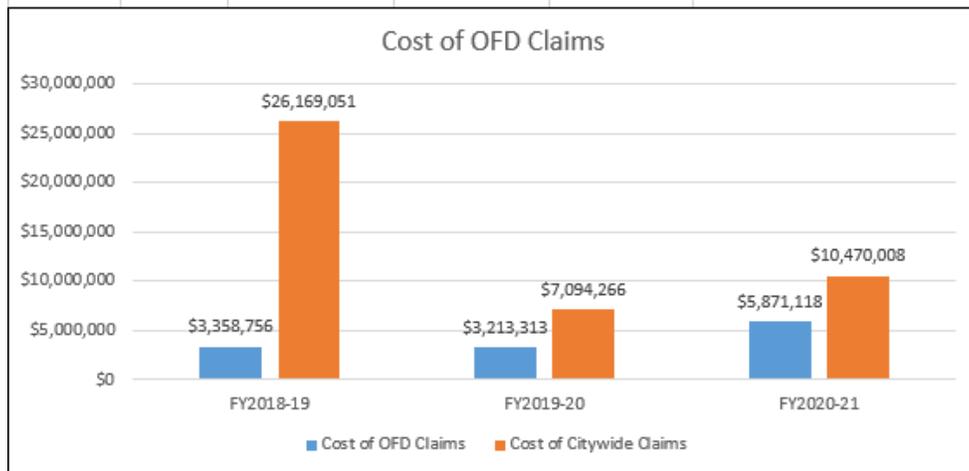


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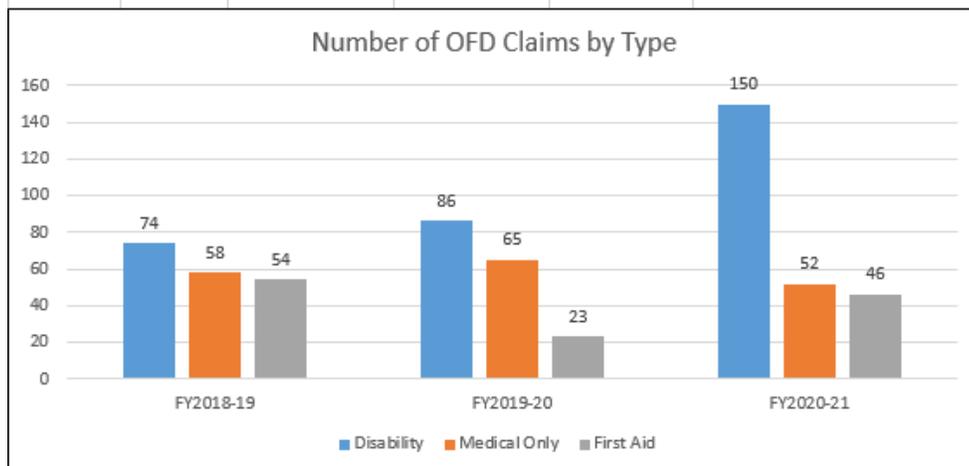


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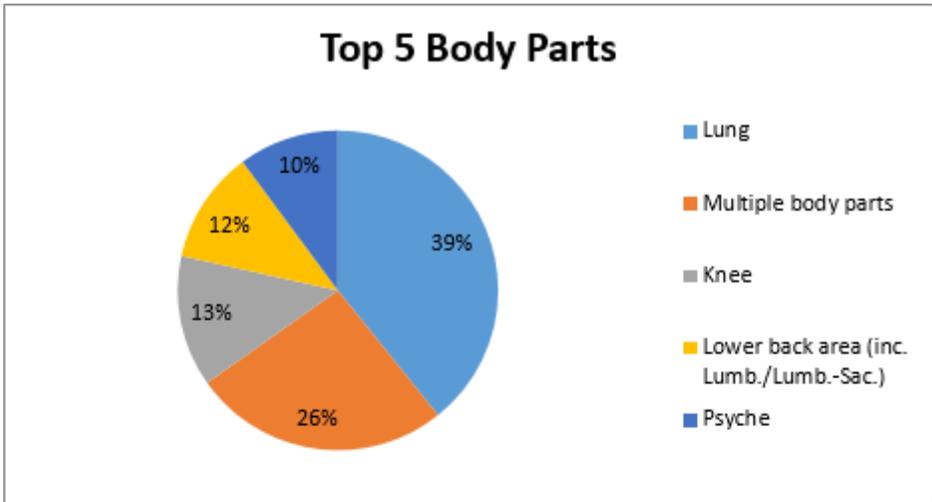


Exhibit 25-A

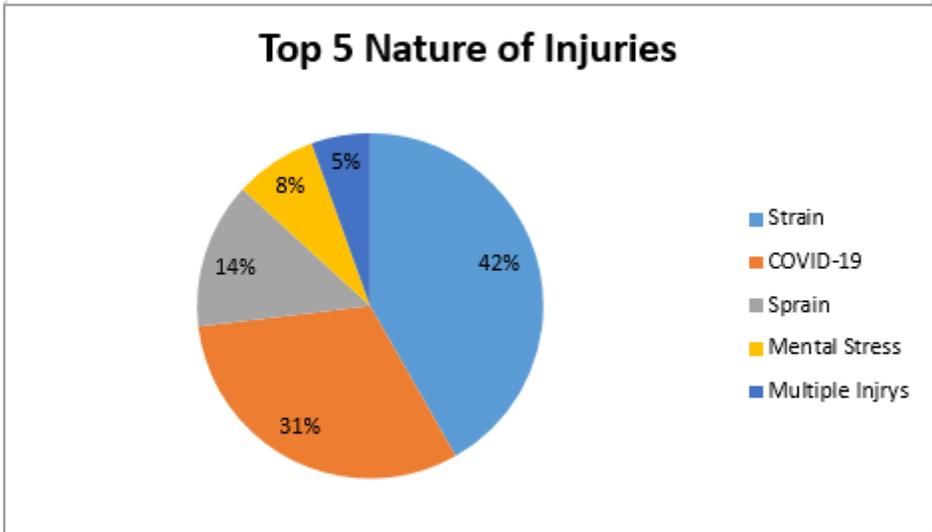


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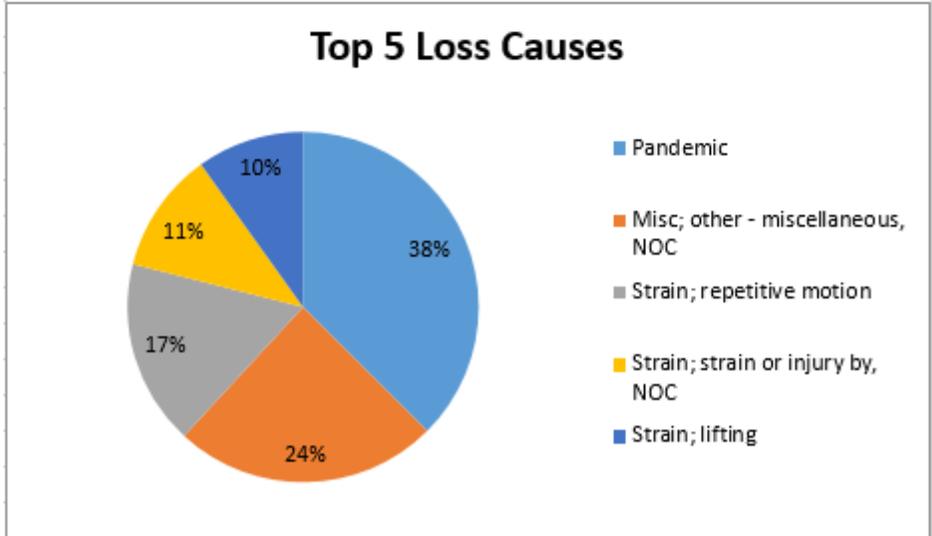


Exhibit 25-C

Exhibit 26-A

	OPW Claims	% of City Claims	OPW Claims Cost	% of City Cost	Average Incurred Claim Cost
FY2020-21	102	16%	\$833,184	7.96%	\$8,168.47
3 Year Avg	98	17%	\$732,026	5.02%	\$7,444.34

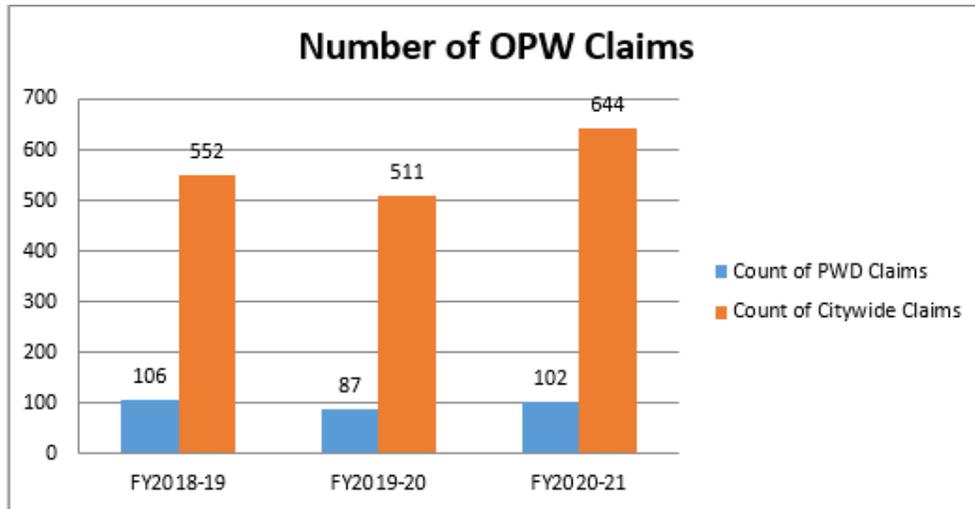


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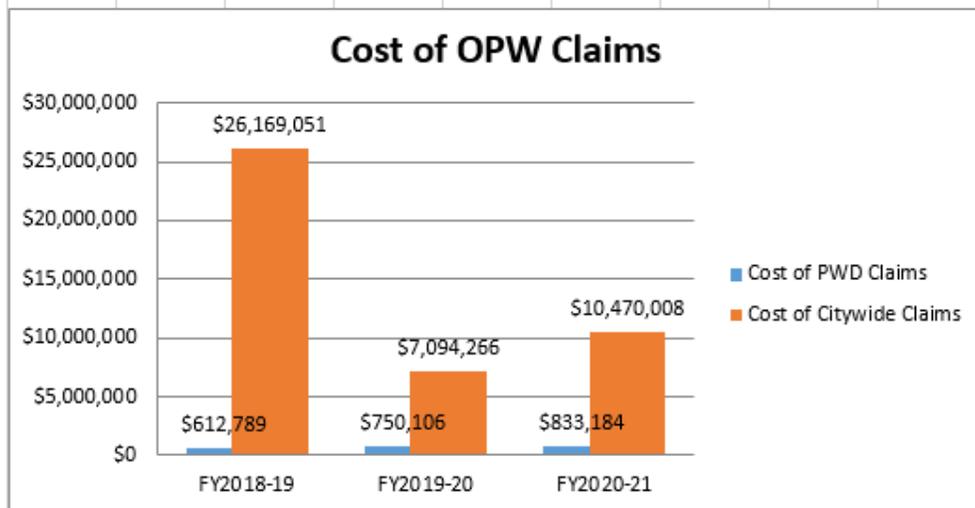


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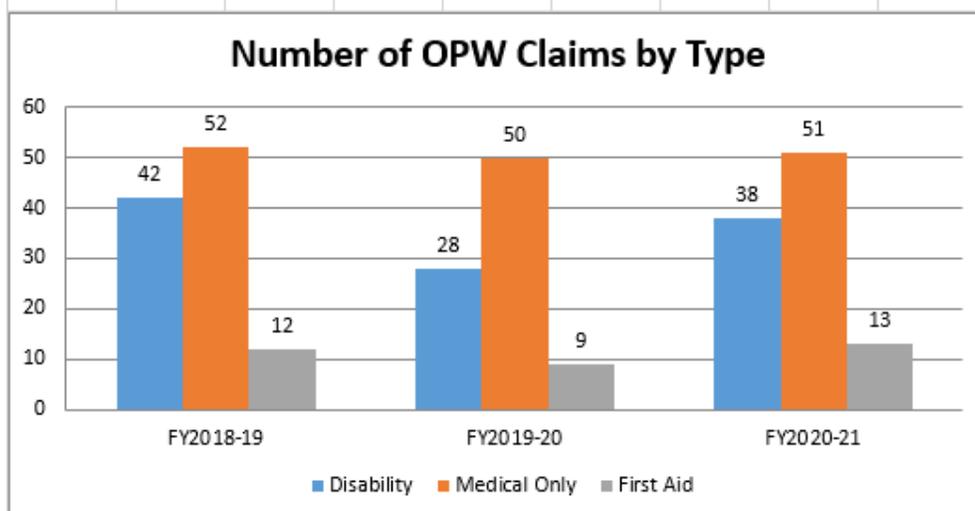


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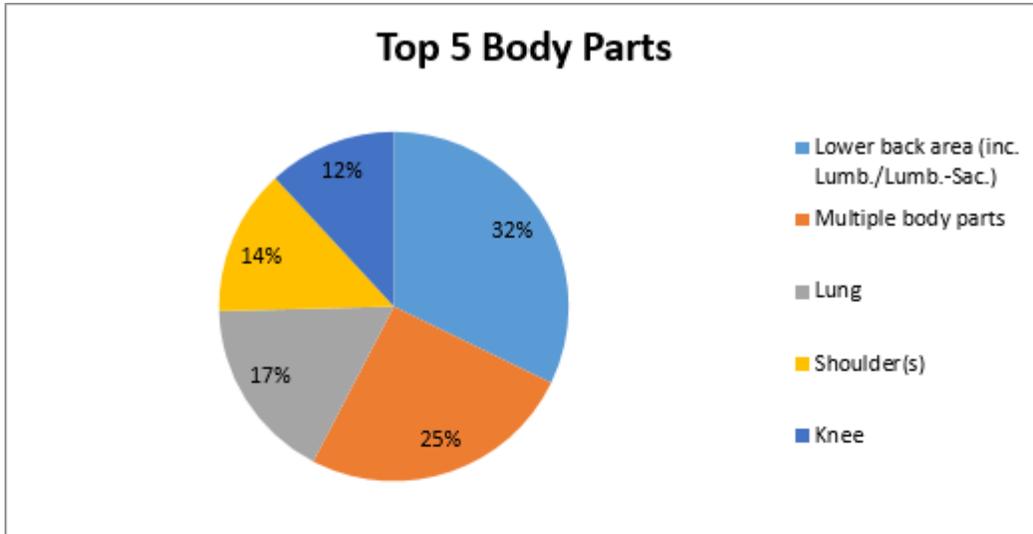


Exhibit 27-A

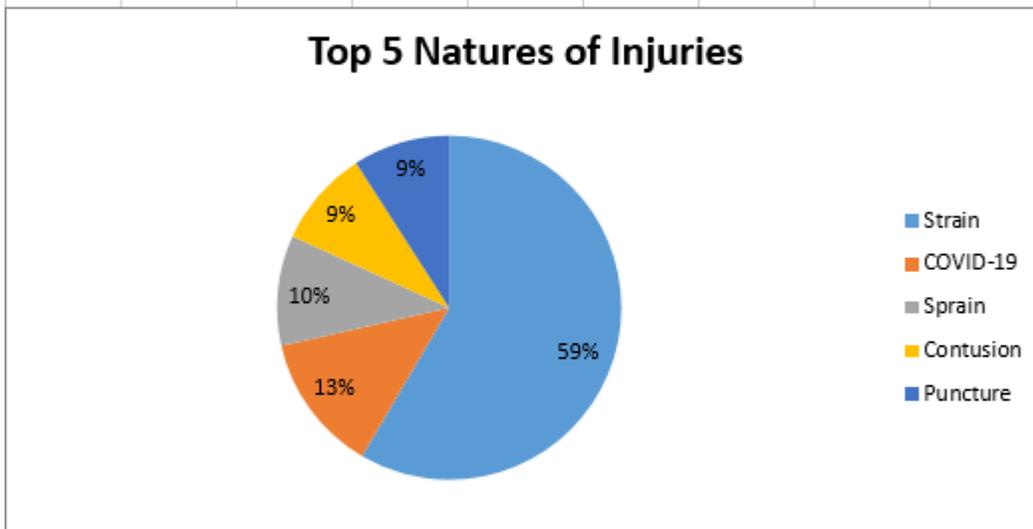


Exhibit 27-B

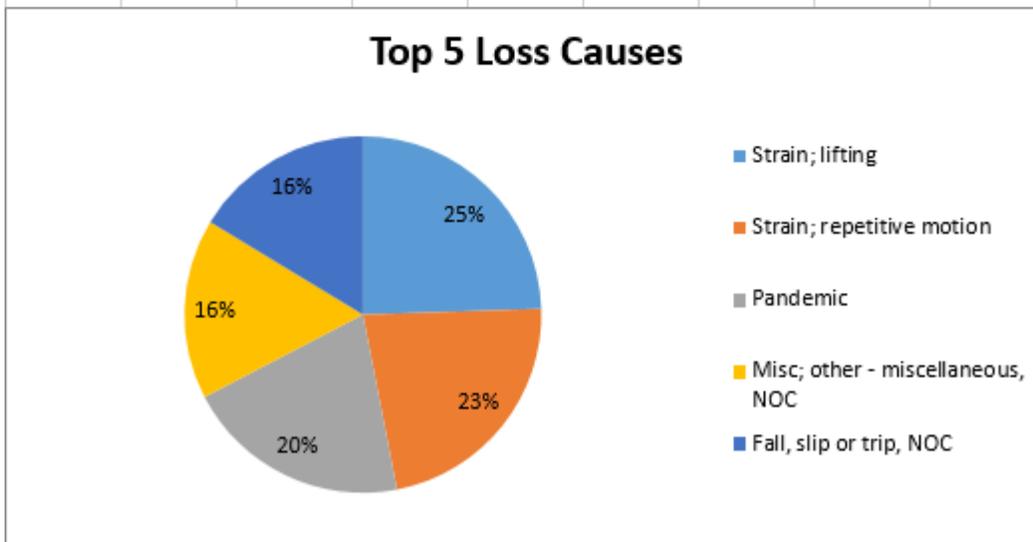


Exhibit 27-C

Exhibit 28-A

	Parks Claims	% of City Claims	Parks Claims Cost	% of City Cost	Average Incurred Claim Cost
FY2020-21	5	1%	\$6,809	0.07%	\$1,361.71
3 Year Avg	14	2%	\$47,610	0.33%	\$3,483.69

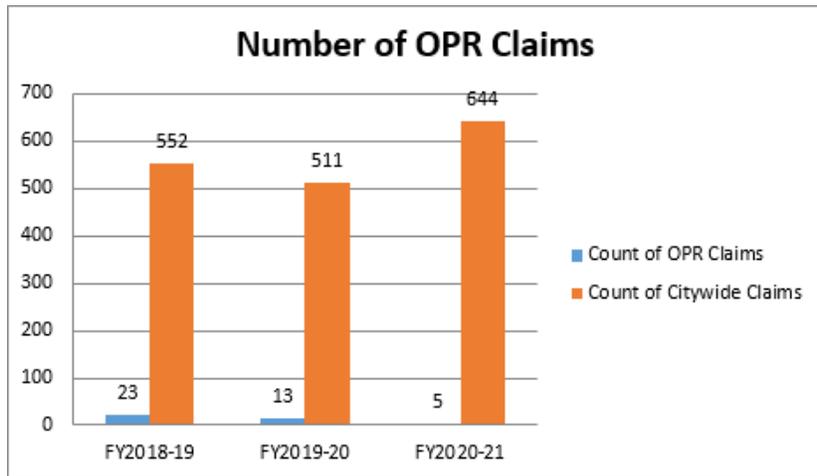


Exhibit 28-B

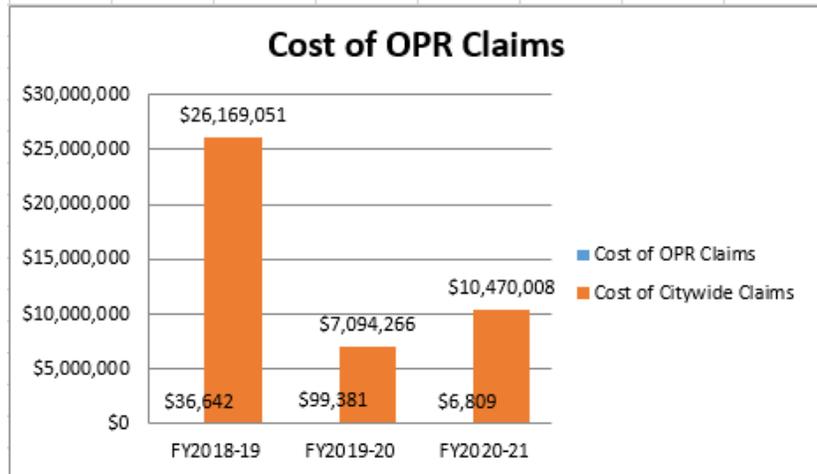


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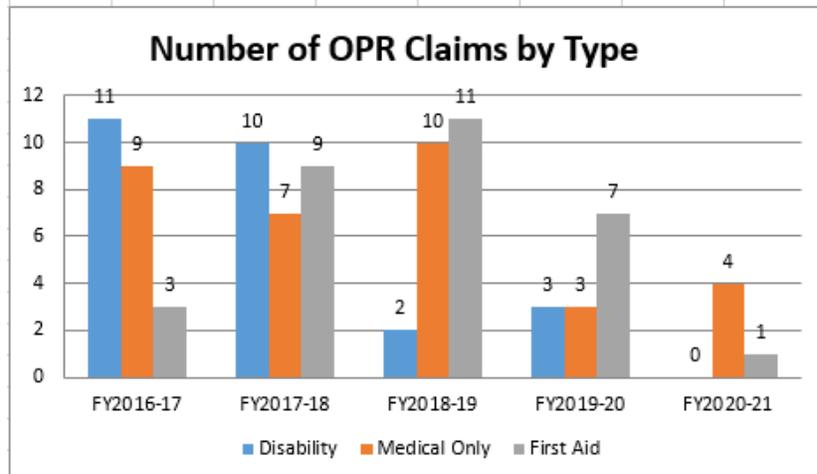


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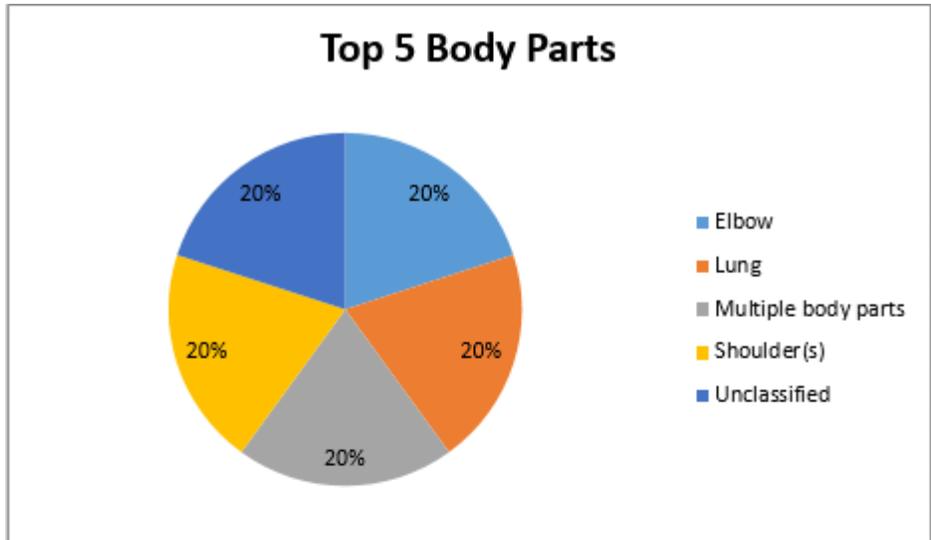


Exhibit 29-A

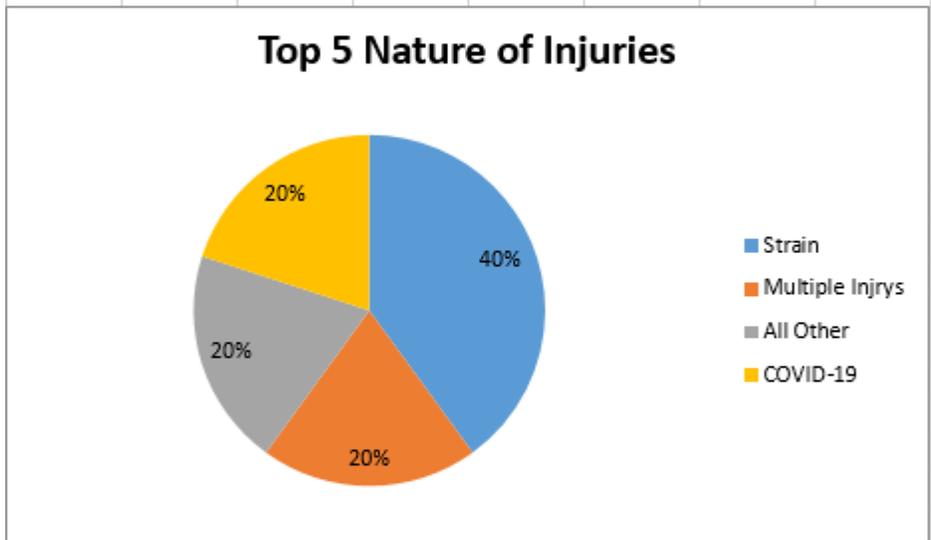


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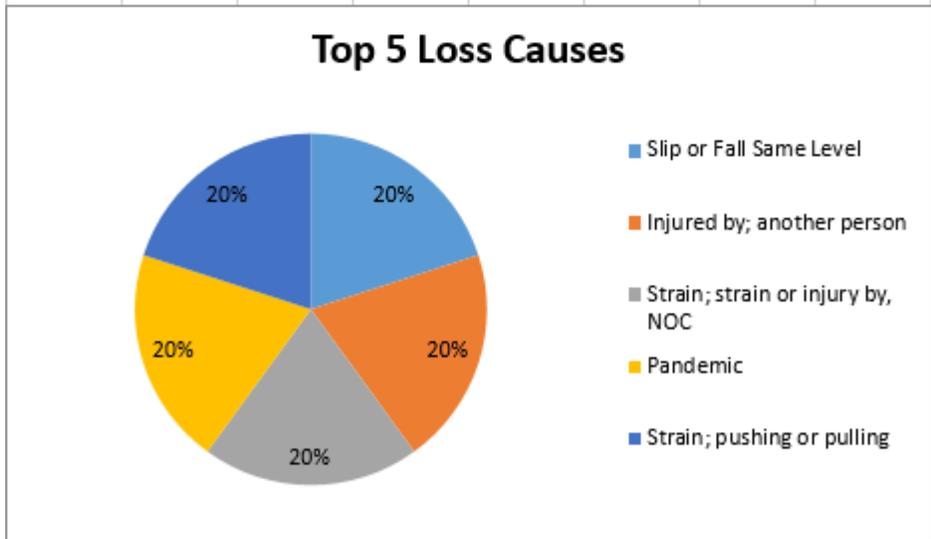


Exhibit 29-C

Exhibit 30-A

	Other Claims	% of City Claims	Other Claims Cost	% of City Cost	Average Incurred Claim Cost
FY2020-21	50	8%	\$243,180	2.32%	\$4,863.60
3 Year Avg	62	11%	\$379,150	2.60%	\$6,082.62

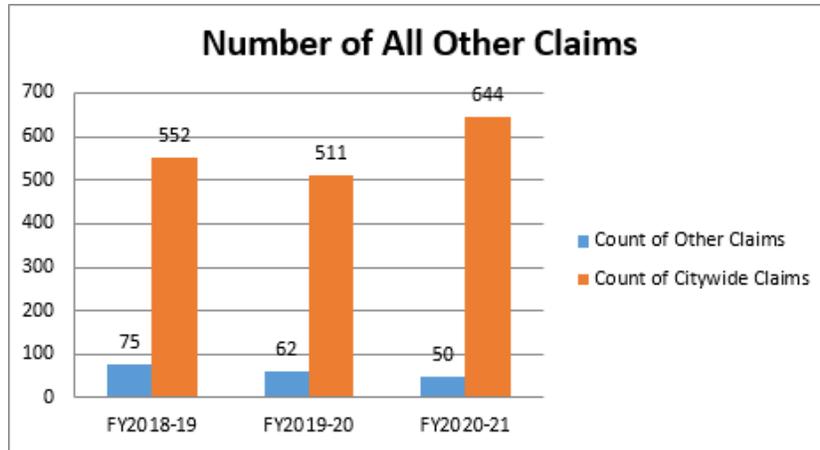


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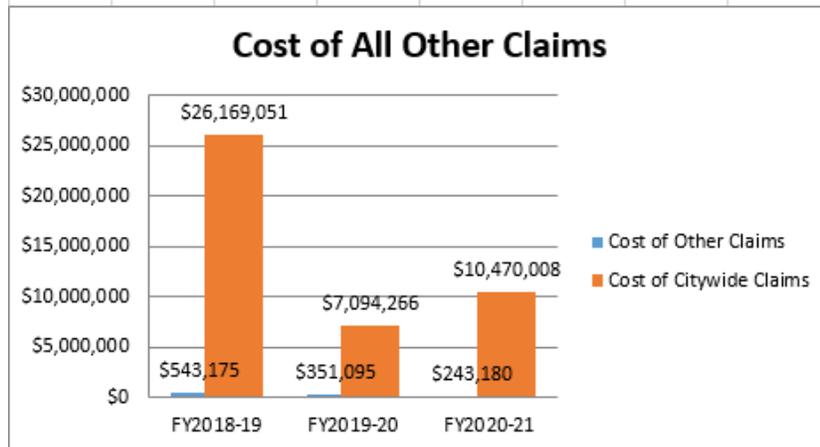


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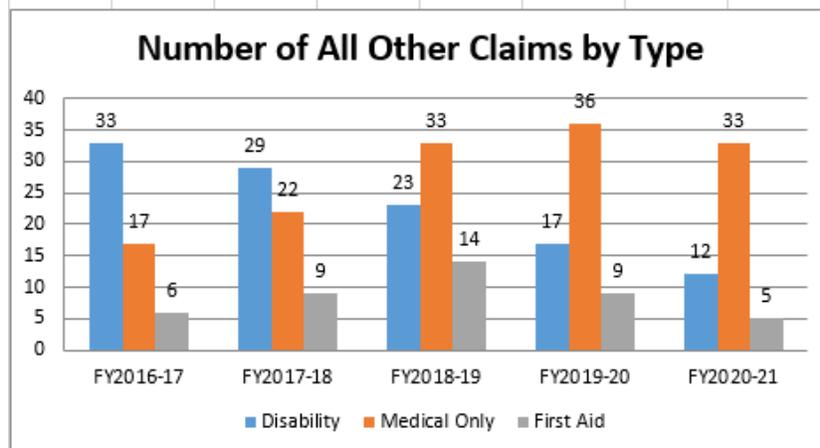


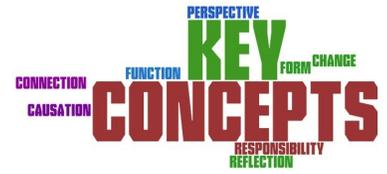
Exhibit 30-D

SCHEDULE OF EXHIBITS

Appendix A	Key Terms
Appendix B	Workers' Compensation Expenditure Report (FY 2017-18 through FY 2020-21)
Appendix C	Workers' Compensation Claims Audit, Final Reports <i>December 2021</i>
Appendix D	Actuarial Review of the Self-Insured Workers' Compensation Program <i>AON Risk Solutions, June 30, 2021</i>

Appendix A

Key Terms



Permanent Disability Settlements:

Settlements paid when an injury results in a permanent disability.

Temporary Disability:

Non-Sworn Salary Supplement: City payments at the employee's full rate of pay made in the first 60-90 days when injured workers are unable to perform work of any kind.

Temporary Disability: State-mandated payments made when injured workers are unable to perform work of any kind.

Sworn Salary Supplement/4850: State-mandated payments at the employee's full rate of pay for up to one-year when an injured worker is unable to perform work of any kind.

**Allocated:
(Other Claim Costs)**

- Rehabilitation
- Investigation Expenses
- Legal
- Utilization Review
- Return to Work Services
- 24 hour Injury Report Line
- 10% Penalties

Medical:

All medical expenses related to treatment of the injury, including diagnostics, physical therapy, durable medical equipment, prescriptions and surgery, and in/out hospital patient care.

Administrative:

This includes costs associated with administration of the Workers' Compensation Program.

Appendix B

Workers' Compensation Expenditures Report (Fiscal Years 17/18—20/21)

Expenditures By Year	FY2017-18	FY2018-19	FY2019-20	FY2020-21	% Change
Permanent Disability Settlements	\$5,064,038	\$4,618,359	\$7,383,869	\$3,945,591	-47%
Temporary Disability Non-4850					
Temporary Disability	\$1,114,210	\$1,185,648	\$1,037,327	\$729,747	-30%
MOU Benefit-Non-Sworn	\$183,393	\$259,599	\$202,755	\$107,864	-47%
Subtotal Non-4850 Pay	\$1,297,603	\$1,445,247	\$1,240,082	\$837,610	-32%
4850					
Sworn-OPD-4850 Pay	\$2,124,296	\$1,914,332	\$1,423,617	\$2,491,992	75%
Sworn-OFD-4850 Pay	\$2,749,082	\$1,776,113	\$2,393,632	\$3,380,864	41%
Subtotal 4850 Pay	\$4,873,377	\$3,690,445	\$3,817,249	\$5,872,855	54%
Subtotal-Temp. Disability	\$6,170,980	\$5,135,692	\$5,057,331	\$6,710,465	33%
Total Disability Payments	\$11,235,018	\$9,754,051	\$12,441,199	\$10,656,056	-14%
Allocated: (Other Claim Costs)					
Rehabilitation	\$209,710	\$74,557	\$162,524	\$91,887	-43%
Investigation Expenses	\$77,675	\$71,594	\$64,594	\$36,646	-43%
Legal	\$977,556	\$934,164	\$1,059,131	\$761,187	-28%
ADR (OPOA)	\$0	\$0	\$32,183	\$82,461	156%
Utilization Review	\$523,046	\$438,406	\$324,391	\$256,334	-21%
Return to Work Services	\$144,368	\$182,051	\$174,077	\$163,140	-6%
24hrs injury Report Line	\$36,442	\$40,489	\$78,755	\$55,562	-29%
10% Penalties (JT2 & Non JT2)	\$9,693	\$4,784	\$4,150	\$6,042	46%
Total - Allocated	\$1,978,490	\$1,746,046	\$1,899,805	\$1,453,259	-24%
Medical					
WC Disability Medical	\$5,966,600	\$8,525,914	\$5,505,193	\$5,681,408	3%
First Aid Only Claims	\$17,131	\$21,413	\$6,389	\$2,261	-65%
Total Medical:	\$5,983,731	\$8,547,327	\$5,511,582	\$5,683,670	3%
Operational Expenses	\$19,197,239	\$20,047,424	\$19,852,586	\$17,792,985	-10%
Contributions Excess Ins.	-\$753,069	-\$2,025,832	-\$3,701,303	-\$316,153	-91%
Total Operational Expenses	\$18,444,170	\$18,021,592	\$16,151,282	\$17,476,831	8%
Admin. Expenses					
TPA Contract	\$1,747,238	\$1,839,550	\$2,024,173	\$2,024,174	0%
Bill Review Expense	\$513,000	\$540,103	\$594,310	\$590,310	-1%
Misc. Admin. Fee	\$1,800	\$0	\$552	\$2,706	391%
Total- Admin. Expenses	\$2,262,038	\$2,379,653	\$2,619,034	\$2,617,189	0%
Total Workers' Compensation Expense	\$20,706,208	\$20,401,425	\$18,770,316	\$20,094,020	7%

Appendix C
Claims Audit Report
December 2021

DECEMBER 2021
PRISM EIA AUDIT REPORT

CITY OF OAKLAND
Third Party Administrator – JT2



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Addendum I – POA, SR and Excess Detail Results

Addendum II – Audit Cross Reference List

Addendum III – Audit Worksheets

EXECUTIVE SUMMARY

This section will serve as an overview of the audit findings with recommendations for moving forward. The overall claims handling of the TPA is **Exceeds Expectations** as measured in accordance with the standards set forth in the Guidelines.

Performance Strengths

Outstanding results were achieved in the categories of adjuster caseload, ongoing employee contact, payments on correct claims, initial employee contact, initial employer contact, initial reserves for probable value, initial reserves timely, medical bills paid timely, penalties coded correctly, apportionment ruled in/out, apportionment pursued, proactive return to work, member noticed of permanent work restrictions, TD/4850 reserves separate, PD exposure includes life pension, future medical reserve consistent with OSIP, settlement valuation, Medicare's interest protected, EIA settlement authority, member settlement authority, litigation management, complaint/lien filed timely, member involved in complaint/lien, timely initial excess reporting, timely excess reimbursement requests and timely closing excess report.

Performance Improvement Recommendations

The standards for ongoing excess reporting should be reviewed with the team. We recommend setting the excess reporting diary at least two weeks prior to the report due date to allow for any unplanned absences or distractions.

There were three subcategories where only one downgraded file produced a low score. We consider these to be outliers and not adverse trends. The categories impacted were medical only conversion, identify and notice the third party timely and periodic contact with the third party.

Audit Demographics

The audit criterion was formed by using the PRISM Claims Administration standards. The file audits for City of Oakland specifically focused on claims handling activity from 10/01/20 through the date of the audit. JT2 provided a list of the open inventory covered by the PRISM program and a random selection of the files was pulled to gather 138 files from the open inventory. The file selection consisted of a mix of indemnity claims, future medical files and medical only claims. File documents, notes, payments, letters and reserves are maintained in electronic form. The files were accessed remotely. Each worksheet was provided to Carmen Angeles and Angela Sorrentino for review and comment. They engaged with the auditors and submitted all questions, feedback or disputes prior to the conclusion of the audit.

AUDIT TEAM

Angela Mudge

Owner, President & CEO

Over 30 years of workers' compensation claims experience

IEA Certificate, Self-Insured Certificate & WCCP Designation

Prior positions held - adjuster, supervisor, claims manager and vice president

Anne Ruiz

Chief Operating Officer

Over 25 years of workers' compensation claims experience

Associate in Claims Designation, Self-Insured Certificate & WCCA Designation

Prior positions held - adjuster, supervisor, claims services liaison and central services manager

Sherri' Ventimiglia

Senior Collaborator

Over 30 years of workers' compensation claims experience

Self-Insured Certificate & WCCP Designation

Prior positions held – adjuster, claims analyst, supervisor, manager, director of claims and assistant vice president of claims.

Sasha Ulysse

Collaborator

Over 7 years of workers' compensation claims experience

Bachelor of Arts in consumer affairs

IEA Certificate, Self-Insured Certificate

Prior positions held – adjuster

Irene Poole

Collaborator

Over 15 years of workers' compensation claims experience

IEA Certificate, Self-Insured Certificate

Prior positions held – adjuster

AUDIT SCORESHEETS

Overview

Category	Points Available	Points	Score	%
Claim Handling - Administrative	1574	1546	Exceeds Expectations	98.22%
Caseload	1	1	Exceeds Expectations	100.00%
Case Review and Documentation	1319	1295	Exceeds Expectations	98.18%
Communication	12	12	Exceeds Expectations	100.00%
Fiscal Handling	47	43	Exceeds Expectations	91.49%
Claim Creation	95	95	Exceeds Expectations	100.00%
Reserves	100	100	Exceeds Expectations	100.00%
Claims Handling - Technical	665	650	Exceeds Expectations	97.74%
Payments	130	130	Exceeds Expectations	100.00%
Apportionment	38	38	Exceeds Expectations	100.00%
Disability Management	22	22	Exceeds Expectations	100.00%
Reserving	349	345	Exceeds Expectations	98.85%
Resolution of Claim	54	49	Exceeds Expectations	90.74%
Settlement Authority	3	3	Exceeds Expectations	100.00%
Litigated Cases	42	42	Exceeds Expectations	100.00%
Subrogation	5	3	Unsatisfactory	60.00%
Excess Coverage	22	18	Meets Expectations	81.82%
Overall Score	2239	2196	Exceeds Expectations	98.08%

Detail

	Category	Points Available	Points	Score	%	Prior Score	Variance
Claim Handling - Administrative							
Caseload							
	Adjuster Caseload	1	1	Exceeds Expectations	100.00%	100.00%	0.00%
Case Review and Documentation							
	Examiner Reviews - Timing	829	824	Exceeds Expectations	99.40%	91.53%	7.86%
	Examiner Reviews - Quality Plan of Action	138	135	Exceeds Expectations	97.83%	94.57%	3.25%
	Supervisor Reviews	348	333	Exceeds Expectations	95.69%	85.49%	10.20%
	Medical Only Conversion	4	3	Below Expectations	75.00%	80.00%	-5.00%
Communication							
	Ongoing Employee Contact	12	12	Exceeds Expectations	100.00%	62.50%	37.50%
Fiscal Handling							
	Payments on Correct Claims	9	9	Exceeds Expectations	100.00%	100.00%	0.00%
	File Balancing	38	34	Meets Expectations	89.47%	88.24%	1.24%
Claim Creation							
	Three Point Contact - Initial Employee Contact	45	45	Exceeds Expectations	100.00%	94.74%	5.26%
	Three Point Contact - Initial Employer Contact	50	50	Exceeds Expectations	100.00%	91.30%	8.70%
Reserves							
	Initial Reserves for Probable Value	50	50	Exceeds Expectations	100.00%	100.00%	0.00%
	Initial Reserves Timely	50	50	Exceeds Expectations	100.00%	100.00%	0.00%
Score for Claim Handling - Administrative		1574	1546		98.22%		

Category	Points Available	Points	Score	%	Prior Score	Variance
Claim Handling - Technical						
Payments						
Medical Bills Paid Timely	129	129	Exceeds Expectations	100.00%	100.00%	0.00%
Penalties Coded Correctly	1	1	Exceeds Expectations	100.00%	100.00%	0.00%
Apportionment						
Apportionment Ruled In/Out	19	19	Exceeds Expectations	100.00%	66.67%	33.33%
Apportionment Pursued Appropriately	19	19	Exceeds Expectations	100.00%	100.00%	0.00%
Disability Management						
Proactive RTW	18	18	Exceeds Expectations	100.00%	100.00%	0.00%
Member Noticed of Perm. Restrictions	4	4	Exceeds Expectations	100.00%	100.00%	0.00%
Reserving						
Reserves Adjusted Timely	138	135	Exceeds Expectations	97.83%	94.17%	3.66%
TD & 4850 Reserves Separate	36	36	Exceeds Expectations	100.00%	100.00%	0.00%
PD Exposure Includes Life Pension	3	3	Exceeds Expectations	100.00%	100.00%	0.00%
FM Reserve Consistent with OSIP	35	35	Exceeds Expectations	100.00%	96.67%	3.33%
Allocated Reserves Accurate	137	136	Exceeds Expectations	99.27%	96.85%	2.42%
Resolution of Claim						
Resolution Pursued Timely	32	27	Meets Expectations	84.38%	78.95%	5.43%
Settlement Valuation	21	21	Exceeds Expectations	100.00%	100.00%	0.00%
Medicare's Interests Protected	1	1	Exceeds Expectations	100.00%	100.00%	0.00%
Settlement Authority						
EIA Settlement Authority Requested	2	2	Exceeds Expectations	100.00%	100.00%	0.00%
Member Settlement Authority Requested	1	1	Exceeds Expectations	100.00%	100.00%	0.00%
Litigated Cases						
Initiate Investigation Material to Potential Lit.	0	0	N/A	N/A	N/A	N/A
Litigation Management & Defense Attorney on Panel	42	42	Exceeds Expectations	100.00%	100.00%	0.00%
Subrogation						
Identify and Notice 3rd Party Timely	1	0	Unsatisfactory	0.00%	N/A	N/A
Periodic Contact with 3rd Party	1	0	Unsatisfactory	0.00%	100.00%	-100.00%
Complaint or Lien Filed Timely	2	2	Exceeds Expectations	100.00%	N/A	N/A
Member Involved in Complaint vs. Lien	1	1	Exceeds Expectations	100.00%	N/A	N/A
Subrogation Pursued for Maximum Recovery	0	0	N/A	N/A	100.00%	N/A
Approval to Accept, Waive, or Settle	0	0	N/A	N/A	100.00%	N/A
Excess Coverage						
Timely Initial Excess Reporting	4	4	Exceeds Expectations	100.00%	100.00%	0.00%
Timely Subsequent Excess Reporting	14	10	Below Expectations	71.43%	100.00%	-28.57%
Timely Excess Reimbursement Requests	3	3	Exceeds Expectations	100.00%	100.00%	0.00%
Closing Excess Report Sent	1	1	Exceeds Expectations	100.00%	N/A	N/A
Score for Claim Handling - Technical	665	650		97.74%		

AUDIT EXCEPTION DETAILS

Claim Handling – Administrative Caseload

Adjuster Caseload

Opportunities 1 | Achieved 1

The City of Oakland has eight dedicated adjusters with caseloads within the standard. The weighted values listed below include adjustment for the 2:1 ratio for future medical and medical only claims.

Adjuster	City of Oakland			Other Accounts			Total	Weighted Value
	Indemnity	Med Only	Future Med	Indemnity	Med Only	Future Med		
Caryl Calizo	2	0	229	0	0	0	231	117
Anne Hermocillo	0	29	0	0	0	0	29	15
Darren Arce	107	2	15	0	0	0	124	116
Daniel Christensen	4	0	150	0	0	0	154	79
Jerry Hom	109	19	9	0	0	0	137	123
Jacqueline Stingily	104	20	15	0	0	0	139	122
Mary Denham	119	0	7	0	0	0	126	123
Pearlie James	88	4	25	0	0	0	117	103
Total	533	74	450	0	0	0	1057	795

Case Review & Documentation

Examiner Reviews - Timing

Opportunities 829 | Achieved 824

Please see Addendum I for a detailed summary of opportunities and plan of actions meeting the criteria for this standard.

Examiner Reviews - Quality Plan of Action

Opportunities 138 | Achieved 135

1. P-4472 The POAs after the 08/26/21 receipt of the MMI report fail to outline appropriate action items to move the claim to resolution. The 11/10/21 POA indicates a SAR will be completed however the auditor could not locate this.
2. P-4484 The POA lacks a proactive plan and documentation of follow through actions to move this claim to final resolution.
3. P-4493 The POA does not outline any proactive efforts to drive claim towards resolution.

Supervisor Reviews

Opportunities 348 | Achieved 333

Please see Addendum I for a detailed summary of opportunities and supervisor reviews meeting the criteria for this standard.

Medical Only Conversion

Opportunities 4 | Achieved 3

1. P-4348 The claim was received 11/25/20 with a MO conversion review due on 02/23/21. The conversion review was untimely completed on 02/24/21.

Communication

Ongoing Employee Contact

Opportunities 12 | Achieved 12

All claims that met the criteria for this category also met the standard.

Fiscal Handling

Payments on Correct Claims

Opportunities 9 | Achieved 9

All claims that met the criteria for this category also met the standard.

File Balancing

Opportunities 38 | Achieved 34

1. P-4302 PD was paid 03/21/20-08/20/21. The file was timely balanced 04/26/20. The file was due for balancing around 10/23/20 (180 days), however the next file balancing was completed untimely 02/06/21. The file was timely balanced 08/13/21. PD ended 08/20/21 and it is not evident to the auditor that the file was balanced when PD ended.
2. P-4352 Direct TD benefits ended 10/21/21. File balancing at the termination of benefits was not evident.
3. P-4442 TD benefits were paid from 03/12/20 - 06/07/21. Wage Loss was paid from 06/06/21-03/26/21. There was no evidence of file balancing indicated at the time of termination of either benefit. File balancing completed 11/24/20 was untimely.
4. P-4449 4850 benefits ended 11/20/20. File balancing at termination of benefits was not evident.

Claim Creation

Three Point Contact – Initial Employee Contact

Opportunities 45 | Achieved 45

All claims that met the criteria for this category also met the standard.

Three Point Contact – Initial Employer Contact

Opportunities 50 | Achieved 50

All claims that met the criteria for this category also met the standard.

Reserves

Initial Reserves for Probable Value

Opportunities 50 | Achieved 50

All claims that met the criteria for this category also met the standard.

Initial Reserve Timely

Opportunities 50 | Achieved 50

All claims that met the criteria for this category also met the standard.

Claim Handling – Technical

Payments

Medical Bills Paid Timely

Opportunities 129 | Achieved 129

All claims that met the criteria for this category also met the standard.

Penalties Coded Correctly

Opportunities 1 | Achieved 1

The claim that met the criteria for this category also met the standard.

Apportionment

Ruled In/Out

Opportunities 19 | Achieved 19

All claims that met the criteria for this category also met the standard.

Pursued Appropriately

Opportunities 19 | Achieved 19

All claims that met the criteria for this category also met the standard.

Disability Management

Proactive Return to Work

Opportunities 18 | Achieved 18

All claims that met the criteria for this category also met the standard.

Member Noticed of Permanent Work Restrictions

Opportunities 4 | Achieved 4

All claims that met the criteria for this category also met the standard.

Reserving

Reserves Adjusted Timely & Accurately

Opportunities 138 | Achieved 135

1. P-4281 An MMI report was received 02/20/20. The reserves were untimely adjusted for the exposure 04/20/20.
2. P-4300 The defense attorney provided the QME supplemental report and analysis on 01/12/21. The reserves were adjusted late on 04/16/21.
3. P-4403 The 01/06/21 file note indicates that notice of representation was received. The file was untimely reopened on 03/29/21 thus the reserves were not timely reviewed for reopen/update.

TD & 4850 Reserved Separately

Opportunities 36 | Achieved 36

All claims that met the criteria for this category also met the standard.

PD Exposure Includes Life Pension Opportunities 3 | Achieved 3

All claims that met the criteria for this category also met the standard.

FM Reserves Consistent with OSIP Standards Opportunities 35 | Achieved 35

All claims that met the criteria for this category also met the standard.

Allocated Reserve Accurate Opportunities 137 | Achieved 136

1. P-4345 The reserves worksheet and notes only document expense reserves for litigation. The other expenses are currently reserved at \$115.00. Auditor recommends a conservative increase of \$4,385.00 based on the anticipated cost containment costs.

Reserve Detail

No recommended changes	137 claims
Increase recommended	1 claim
Decrease recommended	0 claims
Total estimated reserve variance	\$4,385

Resolution of Claim

Resolution Pursued Timely Opportunities 32 | Achieved 27

1. P-4273 An MMI report was received 07/08/21. An SAR was untimely submitted 08/09/21.
2. P-4281 An MMI report was received 02/20/20. An SAR was untimely submitted 04/20/20.
3. P-4335 The AME 03/23/21 report was received on 04/09/21 and the adjuster sent the additional records for AME to review and comment on 04/23/21. However, the SAR based upon the 03/23/21 report was untimely drafted on 07/14/21. Auditor was unable to locate an AME supplemental report.
4. P-4470 The MMI report was received 07/20/21. On 08/16/21 it was untimely referred for rating.
5. P-4472 The MMI report was received 08/26/21. It was untimely sent for a rating on 11/03/21. Auditor is unable to locate any timely activity to move the claim to resolution.

Settlement Valuation Opportunities 21 | Achieved 21

All claims that met the criteria for this category also met the standard.

Medicare's Interests Protected Opportunities 1 | Achieved 1

The claim that met the criteria for this category also met the standard.

Settlement Authority EIA Settlement Authority Requested Opportunities 2 | Achieved 2

Both claims that met the criteria for this category also met the standard.

Member Settlement Authority Requested

Opportunities 1 | Achieved 1

The claim that met the criteria for this category also met the standard.

Litigated Claims

Initiate Investigation Material to Potential Litigation

Opportunities 0 | Achieved N/A

There were no applicable claims for this category.

Proper Litigation Management and Defense Attorney on Panel

Opportunities 42 | Achieved 42

All claims that met the criteria for this category also met the standard.

Subrogation

Identify & Notice 3rd Party Timely

Opportunities 1 | Achieved 0

1. P-4257 Subrogation was recognized when the claim was reported 01/06/21. A request for the police report was untimely sent 02/09/21. The police report was received 02/16/21 and the adverse party was untimely placed on notice 04/29/21.

Periodic Contact with 3rd Party

Opportunities 1 | Achieved 0

1. P-4257 The adverse party was untimely placed on notice 04/29/21. There was no documentation of periodic follow up with the third party.

Complaint or Lien Filed Timely

Opportunities 2 | Achieved 2

Both claims that met the criteria for this category also met the standard.

Member Involved in Complaint vs. Lien

Opportunities 1 | Achieved 1

The claim that met the criteria for this category also met the standard.

Subrogation Pursued for Maximum Recovery

Opportunities 0 | Achieved N/A

There were no applicable claims for this category.

Approval to Accept, Waive or Settle 3rd Party Case

Opportunities 0 | Achieved N/A

There were no applicable claims for this category.

Excess Coverage

Timely Initial Excess Reporting

Opportunities 4 | Achieved 4

All claims that met the criteria for this category also met the standard.

Timely Subsequent Excess Reports

Opportunities 14 | Achieved 10

Please see Addendum I for a detailed summary of opportunities and excess reports meeting the criteria for this standard.

Timely Excess Reimbursement Requests

Opportunities 3 | Achieved 3

All claims that met the criteria for this category also met the standard.

Closing Excess Report Sent

Opportunities 1 | Achieved 1

The claim that met the criteria for this category also met the standard.

AUDITED BUT NOT SCORED RESULTS

Category	Points Available	Points	%	Prior %	Variance
Supervisor Caseload	1	1	100.00%	100.00%	0.00%
Respond to Written Inquiries	5	3	60.00%	98.48%	-38.48%
Ongoing Employer Communication/Reporting	1	1	100.00%	100.00%	0.00%
Initial Decision	49	46	93.88%	88.00%	5.88%
Final Decision	10	10	100.00%	100.00%	0.00%
AOE/COE Investigation	13	13	100.00%	100.00%	0.00%
Indexing	124	124	100.00%	100.00%	0.00%
Initial TD/PD Payment	37	37	100.00%	76.19%	23.81%
DWC Notice	54	53	98.15%	86.84%	11.31%
Subsequent TD/PD Payments	41	41	100.00%	100.00%	0.00%
Overpayments	1	1	100.00%	N/A	N/A
Undisputed Awards Paid Timely	12	12	100.00%	100.00%	0.00%
Copy of Award to Excess	2	2	100.00%	N/A	N/A
Medical Bills Objection Letters	2	2	100.00%	100.00%	0.00%
Employee Reimbursements Timely	5	5	100.00%	100.00%	0.00%
Advance Travel Timely	9	7	77.78%	95.65%	-17.87%
Self-Imposed Penalties Paid	1	1	100.00%	100.00%	0.00%
Penalty Reimbursement	1	1	100.00%	N/A	N/A
Proper Use of UR	100	100	100.00%	100.00%	0.00%
NCM Used Appropriately	0	0	N/A	100.00%	N/A
Proof of Member/EIA Authority	12	12	100.00%	90.00%	10.00%
Member Involved in Legal Activities Where Appropriate	0	0	N/A	100.00%	N/A

Appendix D
AON
Actuarial Review of the Self-Insured Workers'
Compensation Program
Period ending June 30, 2021

**City of Oakland,
California**

**Actuarial Study of the
Self-Insured Workers' Compensation Program
as of June 30, 2021**

October 22, 2021

October 22, 2021

City of Oakland
150 Frank H. Ogawa Plaza, Second Floor
Oakland, California 94612

Attn: Mr. Andrew Lathrop
Risk Manager

**Actuarial Study of the
Self-Insured Workers' Compensation Program
as of June 30, 2021**

This study has been completed for the City of Oakland, California, for the specific objectives listed in the study. It contains the analysis and conclusions of our work.

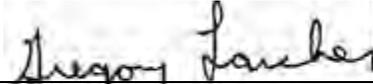
Each section and appendix of the study is an integral part of the whole. We recommend a review of the entire study prior to reliance upon this study.

No key personnel have a relationship with the City of Oakland, California, that may impair our objectivity.

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

Respectfully submitted,

Aon Risk Consultants, Inc.

By 
Gregory Larcher, FCAS, MAAA
Deputy Managing Director and Actuary


Brenda Craigmyle
Senior Actuarial Analyst

GL:bc

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II.	Objectives.....	3
III.	Conclusions.....	4

Appendices

A	Conditions and Limitations
B	Glossary of Actuarial Terms
C	Exhibits

I. Background

The City of Oakland (the City) was fully self-insured for workers' compensation until August 1, 2004. Effective August 2, 2004, the City began purchasing excess insurance.

The history of the City's self-insured retentions for workers' compensation is as shown in Table I-1.

Table I-1
Self-Insured Retentions
(Workers' Compensation)

Claim Period (1)	Self-Insured Retention (2)
To 8/1/04	Unlimited
8/2/04 to 6/30/08	\$1,000,000
7/1/08 and subsequent	750,000

Note: Above information provided by the City.

A self-insured retention of \$750,000 is assumed through 2022/23.

We have not reviewed the collectibility of the excess insurance. JT2 administers the workers' compensation program.

The fiscal period runs from July 1 through June 30.

Data

Loss data valued as of June 30, 2021 was provided to us by the City. The City also provided payroll for 2020/21. Payroll projections for 2021/22 and 2022/23 are based on a 1% 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 City or any other parties should be reported to us immediately, and if warranted, we will make appropriate amendments to the report.

Consistent with the prior study, we have combined several claims from 2009 into one occurrence that was identified by the City.

COVID-19

We reviewed the City's claim experience during March 2021 through June 2022 to ascertain any impact of COVID-19 on its claims relative to its exposure. We noted approximately 2,000 relatively small claims reported from March 2020 to January 2021. The City confirmed that these were testing claims that turned out to be negative for COVID-19.

Due to the limited data currently available regarding the impact of COVID-19 on claims, the projected losses for 2020/21 and 2021/22 are subject to more uncertainty than usual.

II. Objectives

The specific objectives of this study are:

1. **Estimate Outstanding Losses.** Estimate outstanding losses (including allocated loss adjustment expenses [ALAE]) as of June 30, 2021.

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. ALAE are the direct expenses for settling specific claims. The amounts are limited to the self-insured retention.

2. **Project Ultimate Losses.** Project ultimate losses (including ALAE) for 2021/22 and 2022/23.

The projected ultimate losses are the accrual value of losses with accident dates during 2021/22 and 2022/23, regardless of report or payment date. The amounts are limited to the self-insured retention.

3. **Project Losses Paid.** Project losses paid during the 2021/22 and 2022/23 years.

The projected losses paid are the claim disbursements during 2021/22 and 2022/23, regardless of accident or report date. The amounts are limited to the self-insured retention.

4. **Compare to Previous Actuarial Study.** Compare to the previous actuarial study valued as of June 30, 2020.

5. **Size of Loss Distribution Analysis.** Analyze the distribution of losses in various layers.

6. **Affirm GASB Statement No. 10.** Provide a statement affirming the conclusions of this report are consistent with Governmental Accounting Standards Board (GASB) Statement No. 10.

III. Conclusions

We have reached the following conclusions:

1. Estimate Outstanding Losses

We estimate outstanding losses as of June 30, 2021 to be as shown in Table III-1.

**Table III-1
Estimated Outstanding Losses
at Expected (50%) Confidence Level
June 30, 2021**

Item (1)	Amount (2)
(A) Estimated outstanding losses	\$73,623,698
(B) Present value of estimated outstanding losses	63,659,389

Note: (A) and (B) are from Exhibit WC-11.

The estimated outstanding losses increased by \$1.8 million from our prior estimate of \$71,873,265 as of June 30, 2020 to \$73,623,698 as of June 30, 2021. The decrease consists of:

- +\$22.8 million from the additional year (2020/21) of exposure,
- -\$17.6 million for claim payments made during 2020/21, and
- -\$3.5 million due to a decrease in projected ultimate losses for claim periods 2019/20 and prior. This decrease reflects lower than expected loss development, as discussed on pages 12 and 13.

The present value of the estimated outstanding losses is the amount of money, discounted for anticipated investment income, required to meet unpaid claims. It is calculated based on a 2.5% yield on investments, as previously provided by the City.

The estimated outstanding losses reflect the excess insurance maintained by the City.

GASB Statement No. 10 requires public entities to recognize the impact of all benefits paid for work-related injuries.

The implementation guide for GASB Statement No. 10 specifies that a liability for outstanding unallocated loss adjustment expenses (ULAE) needs to be established for governmental entities. ULAE are primarily composed of future claims administration for open claims. They are typically 5% to 10% of the estimated outstanding losses.

'4850' benefits are a full-salary (12 months) benefit for safety personnel. They are typically about 5% of the estimated outstanding losses.

2. Project Ultimate Losses

We project ultimate losses for 2021/22 and 2022/23 to be as shown in Tables III-2A and III-2B.

Table III-2A
Projected Ultimate Losses
2021/22

Item (1)	Projected Payroll (000) (2)	Loss Rate per \$100 of Payroll (3)	Projected Ultimate Losses (4)
(A) Full Value	\$406,341	\$5.06	\$20,555,000
(B) Present Value	406,341	4.48	18,215,000

Note: (A) and (B) are from Exhibit WC-10.

Table III-2B
Projected Ultimate Losses
2022/23

Item (1)	Projected Payroll (000) (2)	Loss Rate per \$100 of Payroll (3)	Projected Ultimate Losses (4)
(A) Full Value	\$410,405	\$5.11	\$20,968,000
(B) Present Value	410,405	4.53	18,581,000

Note: (A) and (B) are from Exhibit WC-10.

The projected ultimate losses have increased by 3% compared to the projection in the prior study. This is due to a 6% increase in estimated payroll and a 3% decrease in the projected loss rate.

Table III-2C
Comparison of Projected Ultimate Losses
2020/21 and 2021/22

Claim Period (1)	Projected Payroll (000) (2)	Loss Rate per \$100 of Payroll (3)	Projected Ultimate Losses (4)
(A) 2020/21 (prior study)	\$383,596	\$5.22	\$20,005,000
(B) 2021/22 (current study)	\$406,341	\$5.06	20,555,000
(C) Change (B) - (A)	\$22,745	(\$0.16)	\$550,000

The present value of the projected ultimate limited losses is the amount of money, discounted for anticipated investment income, required to meet claims. It is calculated based on a 2.5% yield on investments, as provided by the City.

All costs other than losses are additional.

3. Project Losses Paid

We project losses paid during 2021/22 and 2022/23 to be as shown in Table III-3.

**Table III-3
Projected Losses Paid
2021/22 and 2022/23**

Item (1)	2021/22 (2)	2022/23 (3)
(A) Projected losses paid	\$17,534,617	\$18,058,093

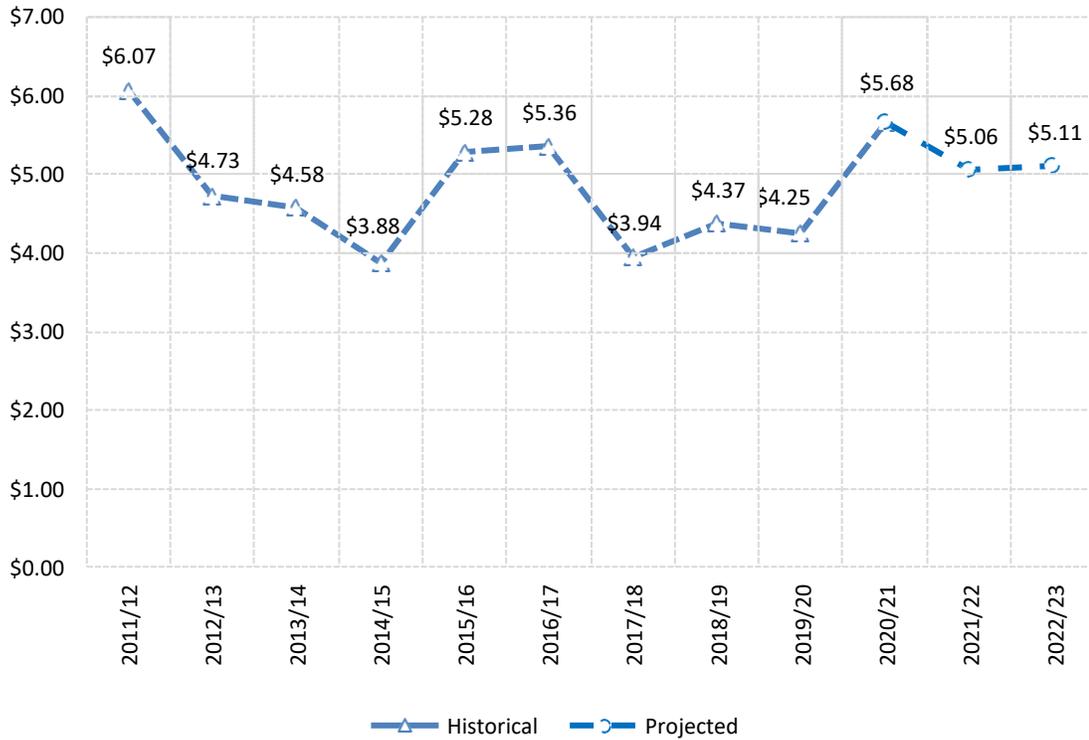
Note: (2) is from Exhibit WC-12.
(3) is from Exhibit WC-13.

All costs other than losses are additional.

Loss Experience Trends

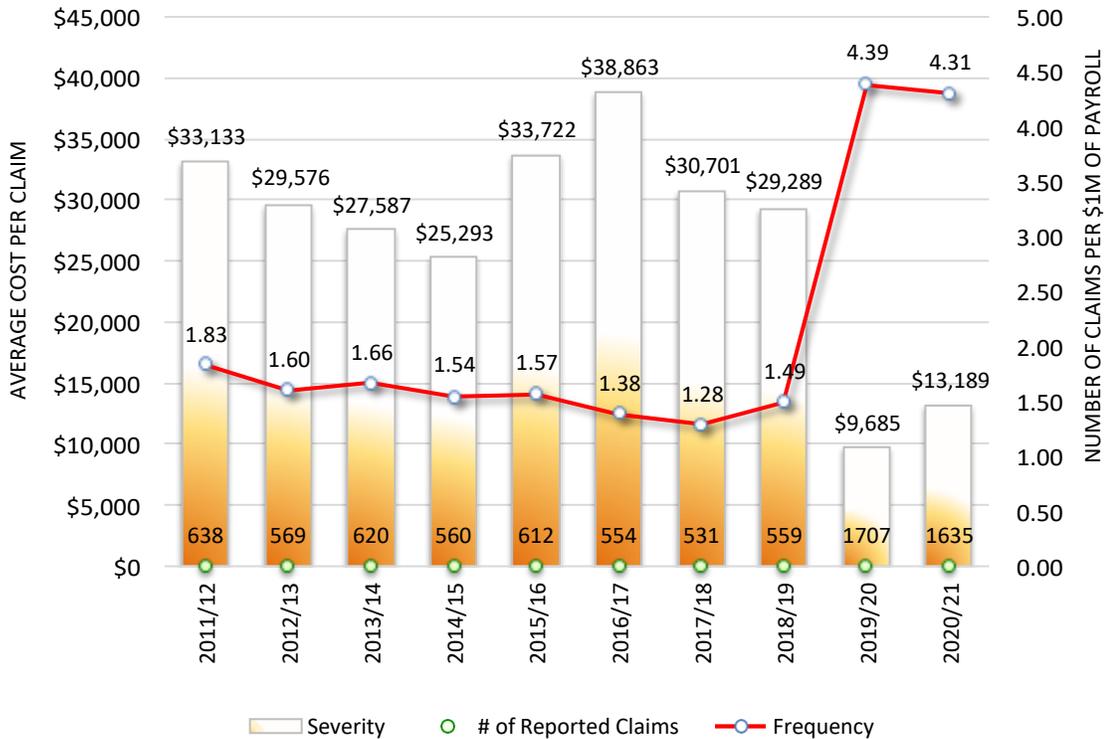
Graphs III-1 and III-2 show loss experience trends for workers' compensation as measured by loss rate per \$100 of payroll and frequency and severity, respectively.

Graph III-1
Loss Rate per \$100 of Payroll
(Workers' Compensation)



Note: Loss rates per \$100 of payroll are from Exhibit WC-10, columns (4) and (7).

**Graph III-2
Frequency and Severity
(Workers' Compensation)**

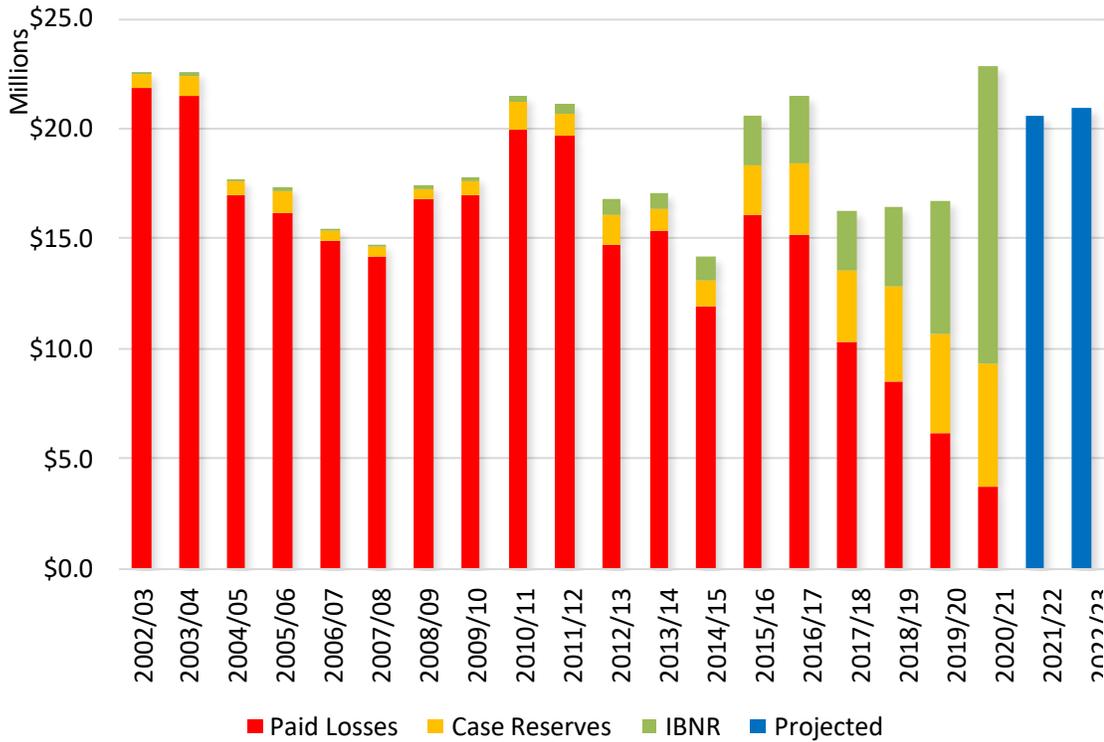


Note: Frequency amounts are from Exhibit WC-8, Section I, column (7).
Severity amounts are based on Exhibits WC-8 and WC-9.

The frequency for 2020/21 and 2021/22 is relatively high due to the reported number of COVID-19 claims. The incurred values of these claims are relatively low, resulting in a lower severity for these years.

Graph III-3 shows the composition of the projected ultimate limited losses for workers' compensation.

Graph III-3
Composition of Projected Ultimate Limited Losses
(Workers' Compensation)



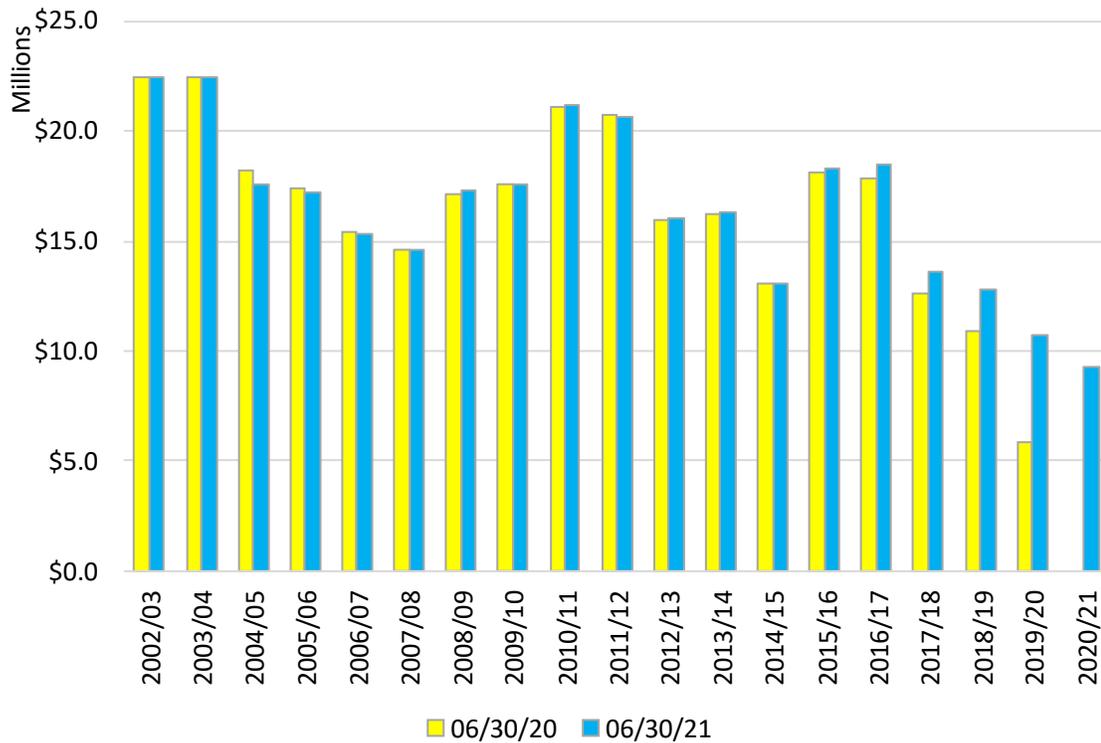
Note: Amounts through 2020/21 are from Exhibit WC-11.
Amounts for 2021/22 and 2022/23 are from Exhibit WC-10.

A list of large claims with limited reported incurred losses \$500,000 or greater as of June 30, 2021 is as shown in Exhibit WC-15.

4. Compare to Previous Actuarial Study

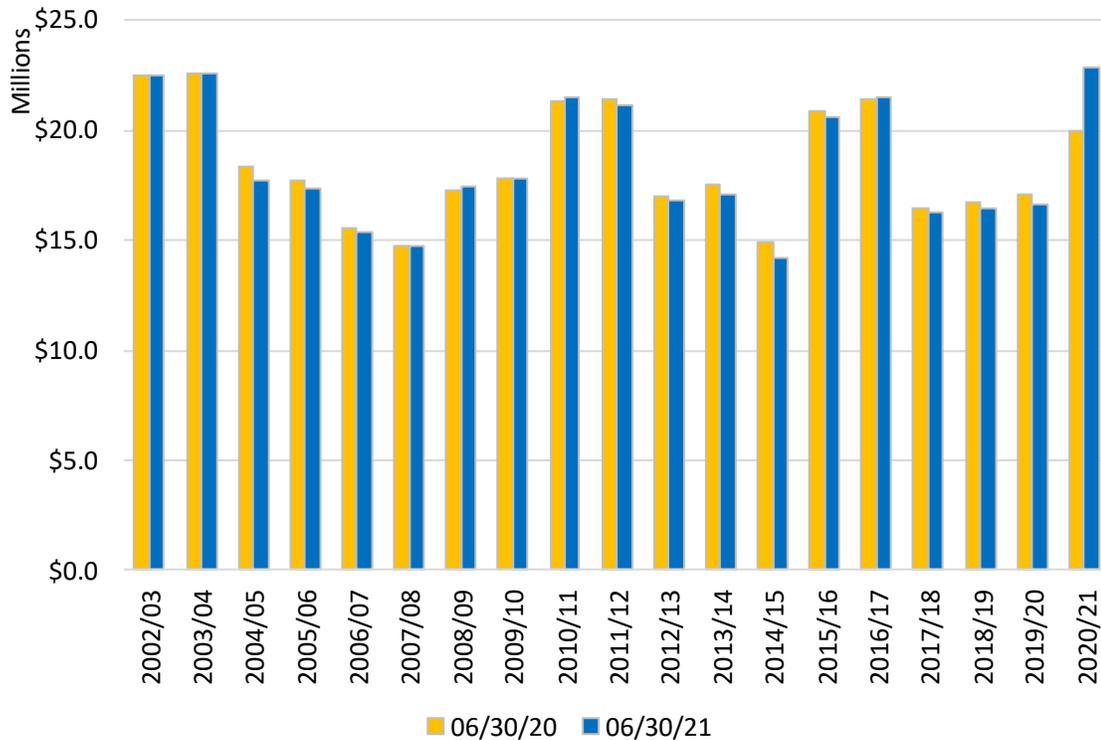
Graphs III-4 and III-5 are graphical comparisons of the reported incurred losses and projected ultimate losses, respectively, by fiscal year of occurrence of the workers' compensation program from the previous study (report dated September 28, 2021) to the current study.

Graph III-4
Comparison of Limited Reported Incurred Losses
as of June 30, 2020 and June 30, 2021



Note: Amounts as of June 30, 2020 are from the previous actuarial study.
Amounts as of June 30, 2021 are from Exhibit WC-1.

**Graph III-5
Comparison of Projected Ultimate Limited Losses
as of June 30, 2020 and June 30, 2021**



Note: Amounts as of June 30, 2020 are from the previous actuarial study.
Amounts as of June 30, 2021 are from Exhibits WC-9.

For all claims through 2019/20, the change in the projected ultimate limited losses from June 30, 2020 to June 30, 2021 was -0.6%.

We compare the projected ultimate limited losses by year as of June 30, 2020 and June 30, 2021 as shown in Table III-4A.

**Table III-4A
Comparison of Projected Ultimate Limited Losses
as of June 30, 2020 and June 30, 2021**

Claim Period (1)	Projected Ultimate Limited Losses as of 6/30/20 (2)	Projected Ultimate Limited Losses as of 6/30/21 (3)	Change (3) - (2) (4)	Percentage Change (4) / (2) (5)
to 2001/02	\$250,771,021	\$250,830,441	\$59,419	0.0%
2002/03	22,496,000	22,524,342	28,342	0.1%
2003/04	22,562,000	22,551,000	(11,000)	0.0%
2004/05	18,393,000	17,673,219	(719,781)	-3.9%
2005/06	17,692,000	17,341,000	(351,000)	-2.0%
2006/07	15,582,000	15,407,000	(175,000)	-1.1%
2007/08	14,783,000	14,742,000	(41,000)	-0.3%
2008/09	17,290,000	17,427,000	137,000	0.8%
2009/10	17,824,000	17,775,000	(49,000)	-0.3%
2010/11	21,349,000	21,526,000	177,000	0.8%
2011/12	21,396,000	21,139,000	(257,000)	-1.2%
2012/13	17,018,000	16,829,000	(189,000)	-1.1%
2013/14	17,512,000	17,104,000	(408,000)	-2.3%
2014/15	14,928,000	14,164,000	(764,000)	-5.1%
2015/16	20,871,000	20,638,000	(233,000)	-1.1%
2016/17	21,410,000	21,530,000	120,000	0.6%
2017/18	16,424,000	16,302,000	(122,000)	-0.7%
2018/19	16,768,000	16,431,000	(337,000)	-2.0%
2019/20	17,055,000	16,677,000	(378,000)	-2.2%
2020/21	20,005,000	22,844,000	2,839,000	14.2%
Total	\$602,129,021	\$601,455,002	(\$674,019)	-0.1%

Note: (2) is from the prior actuarial study.
(3) is from Exhibit WC-9 and Exhibit WC-10.

The City experienced generally lower than expected loss development for most years from 2011/12 through 2019/20, resulting in a decrease in the estimated ultimate losses for most of these years. The estimate for 2020/21 has increased from the prior projection, due to greater than expected paid and incurred loss development.

As part of our analysis, we compared how claims emerged during the past 12 months to the expected emergence during that period. The expected emergence is based on the projected ultimate losses, the reported paid and incurred losses, and the selected loss development factors from the prior actuarial study. The actual and expected emerged losses, as well as the difference between these amounts are shown in Table III-4B.

Table III-4B
Comparison of Actual and Expected Experience
June 30, 2020 to June 30, 2021

Claim Period (1)	Paid Losses in the Period			Incurred Losses in the Period		
	Paid Expected (2)	Paid Actual (3)	Difference (3) - (2) (4)	Incurred Expected (5)	Incurred Actual (6)	Difference (6) - (5) (7)
to 2001/02	\$265,830	\$902,444	\$636,614	\$115,140	\$136,338	\$21,198
2002/03	41,348	159,481	118,132	17,963	48,792	30,829
2003/04	64,271	226,616	162,345	28,005	34,995	6,990
2004/05	74,636	(47,361)	(121,997)	40,773	(623,155)	(663,928)
2005/06	83,234	75,345	(7,889)	60,748	(241,298)	(302,046)
2006/07	58,118	56,359	(1,759)	25,602	(119,319)	(144,921)
2007/08	53,398	91,976	38,579	29,550	4,470	(25,080)
2008/09	54,329	128,327	73,998	32,571	156,008	123,438
2009/10	73,812	85,829	12,016	47,240	13,596	(33,644)
2010/11	141,846	172,465	30,619	94,100	154,640	60,540
2011/12	192,368	157,989	(34,379)	148,939	(36,918)	(185,857)
2012/13	232,783	281,079	48,296	240,776	159,747	(81,030)
2013/14	281,540	432,445	150,906	215,646	69,612	(146,034)
2014/15	414,376	603,579	189,203	325,447	(42,924)	(368,371)
2015/16	855,667	583,144	(272,523)	428,432	211,056	(217,376)
2016/17	1,540,808	1,732,913	192,105	528,187	555,056	26,869
2017/18	1,945,404	1,968,338	22,934	1,039,076	941,625	(97,451)
2018/19	2,745,159	2,533,959	(211,200)	1,694,676	1,897,445	202,769
2019/20	3,660,204	3,702,646	42,442	4,813,853	4,828,522	14,669
2020/21	2,946,587	3,732,974	786,387	7,750,626	9,304,092	1,553,466
Total	\$15,725,719	\$17,580,547	\$1,854,828	\$17,677,350	\$17,452,379	(\$224,971)

Note: (2) and (5) are expected amounts from June 30, 2020 to June 30, 2021.
(3) and (6) are the actual experience from June 30, 2020 to June 30, 2021.

5. Size of Loss Distribution Analysis

Table III-5A shows the distribution of losses in various layers for workers' compensation.

Table III-5A
Size of Loss Distribution
(Workers' Compensation)

Claim Size (1)	Total Reported Claims (2)	Percent of Total (2)/Total(2) (3)	Cumulative Percent of Total (4)	Total Reported Incurred Losses (5)	Percent of Total (5)/Total(5) (6)	Cumulative Percent of Total (7)
(A) \$1 to \$5,000	30,254	78.4%	78.4%	\$25,179,026	4.2%	4.2%
(B) \$5,000 to \$10,000	2,001	5.2%	83.6%	14,033,749	2.3%	6.6%
(C) \$10,000 to \$25,000	1,995	5.2%	88.8%	32,446,051	5.4%	12.0%
(D) \$25,000 to \$50,000	1,436	3.7%	92.5%	51,574,278	8.6%	20.6%
(E) \$50,000 to \$100,000	1,271	3.3%	95.8%	90,839,476	15.2%	35.8%
(F) \$100,000 to \$250,000	1,256	3.3%	99.1%	196,985,269	32.9%	68.7%
(G) \$250,000 to \$500,000	295	0.8%	99.8%	95,628,616	16.0%	84.7%
(H) \$500,000 to \$750,000	42	0.1%	99.9%	26,005,345	4.3%	89.1%
(I) \$750,000 to \$1,000,000	14	0.0%	100.0%	11,817,754	2.0%	91.0%
(J) Over \$1,000,000	15	0.0%	100.0%	53,524,354	9.0%	100.0%
(K) Total (A) ... (J)	38,579	100%		\$598,033,918	100%	

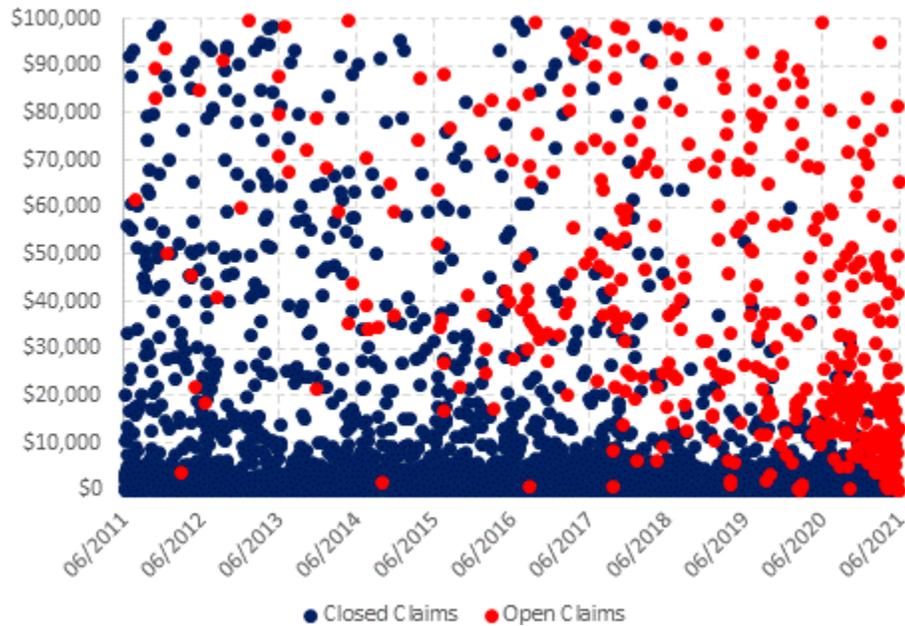
Note: See Exhibit WC-16. Claim counts exclude claims with incurred value of \$0.

For workers' compensation, about 84% of the non-zero claims reported are below \$10,000 and represent about 7% of the incurred amounts. The remaining 16% of the claims consume about 93% of the incurred amounts.

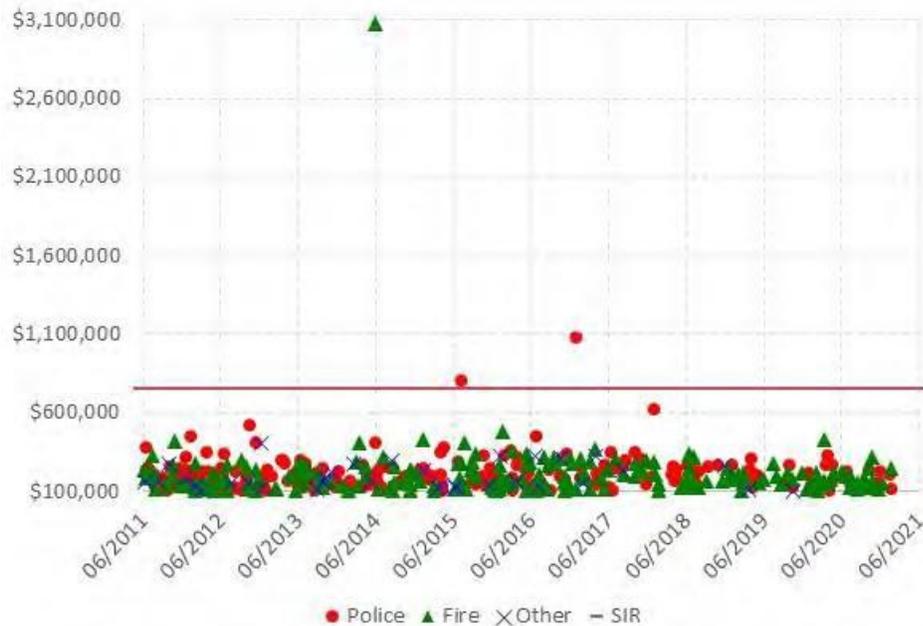
A size of loss distribution by year and loss layer as of June 30, 2021 is as shown in Exhibit WC-16.

The reported workers' compensation claim experience underlying our analysis is shown below in Graphs III-6 and III-7, with each point representing one claim. The amounts are gross of excess insurance.

**Graph III-6
Distribution of Workers' Compensation Losses
Incurred Less Than \$100,000**



**Graph III-7
Distribution of Workers' Compensation Losses
Incurred Greater Than \$100,000**



Note: A large claim with \$19.9 million incurred is not shown in the above graph.

6. Affirm GASB Statement No. 10

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

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 for clarification.

- **Data Quality** 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 data by the organization or any other parties should be reported to us immediately, and if warranted, we will make appropriate amendments to the report.
- **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.** Use of this report is limited to the organization for the specific purpose described in the Introduction section. Other uses are prohibited without an executed release with Aon.

Distribution by the organization is unrestricted. The report should only be distributed in its entirety including all supporting exhibits.

- **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 prior to use of this study.

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.** A case reserve is an estimate of the unpaid amount established by claims adjusters for which a particular claim will ultimately be settled or adjudicated. 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.

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 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 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 than 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.

Exhibits

The attached exhibits detail our analysis.

Data Summary as of June 30, 2021
Losses Limited to Self-Insured Retention

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 6/30/21 (4)	Payroll (000) (5)	Reported Claims 6/30/21 (6)	Open Claims 6/30/21 (7)	Limited Paid Losses 6/30/21 (8)	Limited Case Reserves 6/30/21 (9)	Limited Reported Incurred Losses 6/30/21 (10)
to 2001/02	See Note	None	240.0	Not Provided	26,921	120	\$246,865,922	\$3,604,108	\$250,470,030
2002/03	Unlimited	None	228.0	305,541	923	15	21,862,610	601,575	22,464,185
2003/04	Unlimited	None	216.0	307,406	773	16	21,485,767	956,218	22,441,985
2004/05	1,000,000	None	204.0	315,491	675	13	17,002,624	609,631	17,612,256
2005/06	1,000,000	None	192.0	326,085	748	15	16,177,399	997,703	17,175,102
2006/07	1,000,000	None	180.0	354,814	703	8	14,907,474	413,052	15,320,526
2007/08	1,000,000	None	168.0	370,278	704	12	14,143,341	482,443	14,625,783
2008/09	750,000	None	156.0	377,769	678	16	16,783,941	501,525	17,285,467
2009/10	750,000	None	144.0	338,407	646	18	17,024,492	560,716	17,585,208
2010/11	750,000	None	132.0	338,298	650	22	19,954,676	1,252,480	21,207,156
2011/12	750,000	None	120.0	348,514	638	27	19,683,571	990,553	20,674,124
2012/13	750,000	None	108.0	355,748	569	29	14,753,132	1,315,324	16,068,456
2013/14	750,000	None	96.0	373,451	620	30	15,337,080	972,613	16,309,693
2014/15	750,000	None	84.0	364,737	560	28	11,890,526	1,170,189	13,060,714
2015/16	750,000	None	72.0	390,571	612	57	16,040,471	2,268,370	18,308,841
2016/17	750,000	None	60.0	Not Provided	554	77	15,208,010	3,225,524	18,433,534
2017/18	750,000	None	48.0	413,589	531	87	10,335,644	3,230,178	13,565,822
2018/19	750,000	None	36.0	376,038	559	91	8,497,584	4,306,389	12,803,974
2019/20	750,000	None	24.0	392,360	1,707	113	6,144,066	4,536,788	10,680,854
2020/21	750,000	None	12.0	402,318	1,635	215	3,732,974	5,571,118	9,304,092
Total					41,406	1,009	\$527,831,302	\$37,566,499	\$565,397,801

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

Effective Date	Retention
01/00/00	Unlimited
08/02/04	1,000,000
07/01/08	750,000

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

Data was provided by the City.

Data Summary as of June 30, 2021
Net Unlimited Losses

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 6/30/21 (4)	Payroll (000) (5)	Reported Claims 6/30/21 (6)	Open Claims 6/30/21 (7)	Net Unlimited Paid Losses 6/30/21 (8)	Net Unlimited Case Reserves 6/30/21 (9)	Net Unlimited Reported Incurred Losses 6/30/21 (10)
to 2001/02	Unlimited	None	240.0	Not Provided	26,921	120	\$246,865,922	\$3,604,108	\$250,470,030
2002/03	Unlimited	None	228.0	305,541	923	15	21,862,610	601,575	22,464,185
2003/04	Unlimited	None	216.0	307,406	773	16	21,485,767	956,218	22,441,985
2004/05	Unlimited	None	204.0	315,491	675	13	17,002,624	3,046,771	20,049,396
2005/06	Unlimited	None	192.0	326,085	748	15	17,543,837	997,703	18,541,540
2006/07	Unlimited	None	180.0	354,814	703	8	14,907,474	413,052	15,320,526
2007/08	Unlimited	None	168.0	370,278	704	12	14,661,786	862,727	15,524,513
2008/09	Unlimited	None	156.0	377,769	678	16	19,770,807	531,282	20,302,089
2009/10	Unlimited	None	144.0	338,407	646	18	17,024,492	560,716	17,585,208
2010/11	Unlimited	None	132.0	338,298	650	22	20,240,545	1,297,054	21,537,600
2011/12	Unlimited	None	120.0	348,514	638	27	19,683,571	990,553	20,674,124
2012/13	Unlimited	None	108.0	355,748	569	29	14,753,132	1,315,324	16,068,456
2013/14	Unlimited	None	96.0	373,451	620	30	17,663,986	972,613	18,636,599
2014/15	Unlimited	None	84.0	364,737	560	28	11,890,526	1,170,189	13,060,714
2015/16	Unlimited	None	72.0	390,571	612	57	16,091,504	2,268,370	18,359,875
2016/17	Unlimited	None	60.0	Not Provided	554	77	16,721,218	4,784,742	21,505,960
2017/18	Unlimited	None	48.0	413,589	531	87	10,335,644	3,230,178	13,565,822
2018/19	Unlimited	None	36.0	376,038	559	91	11,282,487	20,657,865	31,940,352
2019/20	Unlimited	None	24.0	392,360	1,707	113	6,144,066	4,536,788	10,680,854
2020/21	Unlimited	None	12.0	402,318	1,635	215	3,732,974	5,571,118	9,304,092
Total					41,406	1,009	\$539,664,971	\$58,368,948	\$598,033,918

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

Data was provided by the City.

Data Summary as of June 30, 2021
Gross Unlimited Losses

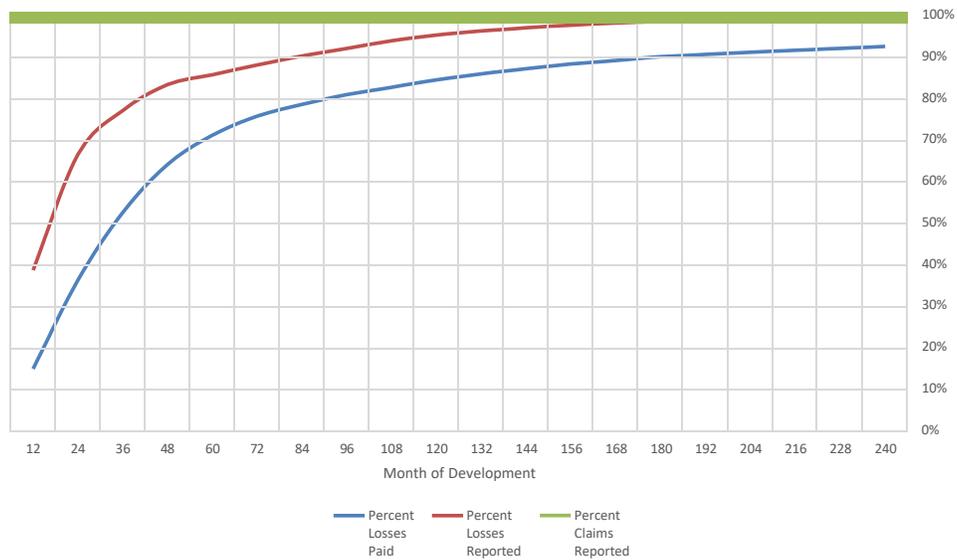
Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 6/30/21 (4)	Payroll (000) (5)	Reported Claims 6/30/21 (6)	Open Claims 6/30/21 (7)	Gross Unlimited Paid Losses 6/30/21 (8)	Gross Unlimited Case Reserves 6/30/21 (9)	Gross Unlimited Reported Incurred Losses 6/30/21 (10)
to 2001/02	Unlimited	None	240.0	Not Provided	26,921	120	\$247,451,217	\$3,604,108	\$251,055,326
2002/03	Unlimited	None	228.0	305,541	923	15	21,977,920	601,575	22,579,495
2003/04	Unlimited	None	216.0	307,406	773	16	22,061,057	956,218	23,017,276
2004/05	Unlimited	None	204.0	315,491	675	13	17,172,449	3,046,771	20,219,220
2005/06	Unlimited	None	192.0	326,085	748	15	17,647,668	997,703	18,645,371
2006/07	Unlimited	None	180.0	354,814	703	8	15,027,191	413,052	15,440,243
2007/08	Unlimited	None	168.0	370,278	704	12	14,844,919	862,727	15,707,646
2008/09	Unlimited	None	156.0	377,769	678	16	20,044,458	531,282	20,575,740
2009/10	Unlimited	None	144.0	338,407	646	18	17,310,384	560,716	17,871,101
2010/11	Unlimited	None	132.0	338,298	650	22	20,269,412	1,297,054	21,566,467
2011/12	Unlimited	None	120.0	348,514	638	27	19,797,274	990,553	20,787,827
2012/13	Unlimited	None	108.0	355,748	569	29	14,754,848	1,315,324	16,070,172
2013/14	Unlimited	None	96.0	373,451	620	30	17,671,886	972,613	18,644,499
2014/15	Unlimited	None	84.0	364,737	560	28	11,918,753	1,170,189	13,088,942
2015/16	Unlimited	None	72.0	390,571	612	57	16,159,293	2,268,370	18,427,663
2016/17	Unlimited	None	60.0	Not Provided	554	77	16,774,940	4,693,881	21,468,821
2017/18	Unlimited	None	48.0	413,589	531	87	10,368,360	3,230,178	13,598,539
2018/19	Unlimited	None	36.0	376,038	559	91	11,282,487	20,657,865	31,940,352
2019/20	Unlimited	None	24.0	392,360	1,707	113	6,145,322	4,536,788	10,682,110
2020/21	Unlimited	None	12.0	402,318	1,635	215	3,732,974	5,535,306	9,268,280
Total					41,406	1,009	\$542,412,814	\$58,242,274	\$600,655,088

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

Data was provided by the City.

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	99.8%	100.0%	100.0%
348.0	99.7%	100.0%	100.0%
336.0	99.5%	100.0%	100.0%
324.0	99.4%	100.0%	100.0%
312.0	99.1%	100.0%	100.0%
300.0	98.7%	100.0%	100.0%
288.0	98.1%	100.0%	100.0%
276.0	97.3%	100.0%	100.0%
264.0	96.2%	100.0%	100.0%
252.0	94.5%	99.9%	100.0%
240.0	92.2%	99.5%	100.0%
228.0	91.7%	99.3%	100.0%
216.0	91.3%	99.1%	100.0%
204.0	90.8%	98.9%	100.0%
192.0	90.3%	98.6%	100.0%
180.0	89.7%	98.2%	100.0%
168.0	88.8%	97.8%	100.0%
156.0	87.9%	97.3%	100.0%
144.0	86.8%	96.7%	100.0%
132.0	85.6%	95.9%	100.0%
120.0	84.2%	94.9%	100.0%
108.0	82.4%	93.5%	100.0%
96.0	80.6%	91.7%	100.0%
84.0	78.3%	89.9%	100.0%
72.0	75.5%	87.7%	100.0%
60.0	70.9%	85.4%	100.0%
48.0	63.8%	83.0%	100.0%
36.0	52.3%	76.9%	99.6%
24.0	36.1%	66.3%	99.1%
12.0	14.7%	38.4%	94.4%



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

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

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

CITY OF OAKLAND
WORKERS' COMPENSATION

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 2001/02																				
2002/03						16,745	17,702	18,322	18,692	19,444	19,819	20,358	20,586	20,776	21,141	21,332	21,608	21,703	21,863	
2003/04					15,966	16,776	17,253	18,274	18,603	19,046	19,578	19,834	20,116	20,222	20,566	20,980	21,259	21,486		
2004/05				11,109	12,288	13,255	14,081	14,562	15,529	15,627	15,961	16,191	16,539	16,702	16,886	17,050	17,003			
2005/06			9,239	10,733	11,925	12,719	13,209	13,887	14,276	15,170	15,448	15,742	15,878	15,985	16,102	16,177				
2006/07		7,705	10,428	12,123	12,969	13,467	13,788	14,031	14,145	14,375	14,459	14,544	14,660	14,851	14,907					
2007/08	3,274	6,798	9,061	10,643	11,516	12,147	12,662	13,281	13,573	13,800	13,968	14,017	14,051	14,143						
2008/09	3,500	8,732	11,787	13,716	14,403	14,960	15,523	15,776	15,958	16,538	16,609	16,656	16,784							
2009/10	3,877	9,024	12,032	13,699	15,065	15,655	16,040	16,538	16,640	16,829	16,939	17,024								
2010/11	4,975	10,288	13,545	16,083	17,050	18,197	18,956	19,410	19,608	19,782	19,955									
2011/12	2,977	10,326	14,196	16,388	17,323	18,141	18,804	19,258	19,526	19,684										
2012/13	2,401	6,100	8,993	10,823	12,447	13,342	13,752	14,472	14,753											
2013/14	2,368	6,551	9,474	11,631	13,379	14,335	14,905	15,337												
2014/15	2,240	5,593	8,020	9,489	10,535	11,287	11,891													
2015/16	2,798	7,556	11,276	13,858	15,457	16,040														
2016/17	3,866	8,139	11,111	13,475	15,208															
2017/18	2,557	5,631	8,367	10,336																
2018/19	2,966	5,964	8,498																	
2019/20	2,441	6,144																		
2020/21	3,733																			

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 2001/02																				
2002/03						1.057	1.035	1.020	1.040	1.019	1.027	1.011	1.009	1.018	1.009	1.013	1.004	1.007		
2003/04					1.051	1.028	1.059	1.018	1.024	1.028	1.013	1.014	1.005	1.017	1.020	1.013	1.011			
2004/05				1.106	1.079	1.062	1.034	1.066	1.006	1.021	1.014	1.021	1.010	1.011	1.010	0.997				
2005/06			1.162	1.111	1.067	1.039	1.051	1.028	1.063	1.018	1.019	1.009	1.007	1.007	1.005					
2006/07		1.353	1.163	1.070	1.038	1.024	1.018	1.008	1.016	1.006	1.008	1.013	1.004							
2007/08	2.077	1.333	1.175	1.082	1.055	1.042	1.049	1.022	1.017	1.012	1.004	1.002	1.007							
2008/09	2.495	1.350	1.164	1.050	1.039	1.038	1.016	1.012	1.036	1.004	1.003	1.008								
2009/10	2.327	1.333	1.139	1.100	1.039	1.025	1.031	1.006	1.011	1.007	1.005									
2010/11	2.068	1.317	1.187	1.060	1.067	1.042	1.024	1.010	1.009	1.009										
2011/12	3.469	1.375	1.154	1.057	1.047	1.037	1.024	1.014	1.008											
2012/13	2.541	1.474	1.203	1.150	1.072	1.031	1.052	1.019												
2013/14	2.767	1.446	1.228	1.150	1.071	1.040	1.029													
2014/15	2.497	1.434	1.183	1.110	1.071	1.053														
2015/16	2.700	1.492	1.229	1.115	1.038															
2016/17	2.105	1.365	1.213	1.129																
2017/18	2.202	1.486	1.235																	
2018/19	2.011	1.425																		
2019/20	2.517																			
2020/21																				
Average																				
All	2.444	1.399	1.187	1.099	1.056	1.040	1.035	1.020	1.023	1.014	1.011	1.011	1.008	1.011	1.011	1.008	1.008	1.007		
Wtd 3	2.227	1.418	1.225	1.119	1.058	1.041	1.034	1.014	1.009	1.007	1.004	1.006	1.009	1.008	1.012	1.009				
Last 3	2.243	1.425	1.226	1.118	1.060	1.041	1.035	1.015	1.009	1.007	1.004	1.006	1.009	1.007	1.012	1.008				
Last 5	2.275	1.448	1.223	1.131	1.063	1.039	1.028	1.012	1.012	1.007	1.005	1.008	1.008	1.012						
x-hi,low																				
Similar	2.642	1.473	1.224	1.122	1.074	1.053	1.041	1.030	1.026	1.022	1.019	1.016	1.013	1.011	1.010	1.009	1.008	1.007	1.091	
Previous	2.450	1.450	1.220	1.110	1.065	1.037	1.030	1.022	1.022	1.017	1.014	1.013	1.010	1.010	1.006	1.006	1.005	1.005	1.005	1.085
Selected	2.450	1.450	1.220	1.110	1.065	1.037	1.030	1.022	1.022	1.017	1.014	1.013	1.010	1.010	1.006	1.006	1.005	1.005	1.005	1.085
Cumulative	6.789	2.771	1.911	1.566	1.411	1.325	1.278	1.241	1.214	1.188	1.168	1.152	1.137	1.126	1.115	1.108	1.101	1.096	1.090	1.085
Percent	14.7%	36.1%	52.3%	63.8%	70.9%	75.5%	78.3%	80.6%	82.4%	84.2%	85.6%	86.8%	87.9%	88.8%	89.7%	90.3%	90.8%	91.3%	91.7%	92.2%

Amounts are limited (net of excess insurance).

Data was provided by the City.

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 2001/02																				
2002/03						19,806	19,717	20,191	20,328	20,637	20,663	21,445	21,641	21,999	22,125	22,270	22,290	22,415	22,464	
2003/04					18,973	18,991	19,153	19,790	20,472	20,531	21,219	21,397	21,566	21,443	21,748	22,124	22,407	22,442		
2004/05				14,940	14,940	16,266	16,963	17,540	18,362	18,405	18,550	18,705	18,629	18,256	18,311	18,235	17,612			
2005/06			13,636	13,940	14,760	15,366	15,996	16,186	16,806	17,020	17,344	17,151	17,710	17,384	17,416					
2006/07		12,182	13,503	14,335	14,489	14,947	14,660	14,772	14,904	15,252	15,052	14,935	15,089	15,440	15,321					
2007/08	8,126	10,793	12,889	14,266	14,228	14,126	14,723	15,079	15,246	15,205	15,344	14,748	14,621	14,626						
2008/09	7,312	13,225	16,845	17,497	17,101	17,372	17,328	18,010	18,072	17,486	17,307	17,129	17,285							
2009/10	8,727	15,621	17,474	17,349	17,587	17,768	18,240	18,186	18,165	17,812	17,572	17,585								
2010/11	11,395	17,821	18,656	20,235	20,504	21,515	21,356	21,318	21,464	21,053	21,207									
2011/12	9,353	17,335	19,494	21,503	22,167	21,392	21,233	20,891	20,711	20,674										
2012/13	5,495	10,353	13,970	17,381	16,461	17,021	16,484	15,909	16,068											
2013/14	5,431	11,242	16,389	16,585	16,874	16,715	16,240	16,310												
2014/15	6,785	11,750	12,680	13,471	13,698	13,104	13,061													
2015/16	10,563	14,766	16,876	17,788	18,098	18,309														
2016/17	8,774	14,167	16,343	17,878	18,434															
2017/18	6,025	10,385	12,624	13,566																
2018/19	6,368	10,907	12,804																	
2019/20	5,852	10,681																		
2020/21	9,304																			

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 2001/02																				
2002/03						0.996	1.024	1.007	1.015	1.001	1.038	1.009	1.017	1.006	1.007	1.001	1.006	1.002		
2003/04					1.001	1.009	1.033	1.034	1.003	1.034	1.008	1.008	0.994	1.014	1.017	1.013	1.002	1.002		
2004/05				1.000	1.089	1.043	1.034	1.047	1.002	1.008	1.008	0.996	0.980	1.003	0.996	0.966				
2005/06			1.022	1.059	1.041	1.041	1.012	1.038	1.013	1.019	0.989	1.033	0.982	1.002	0.986					
2006/07		1.108	1.062	1.011	1.032	0.981	1.008	1.009	1.023	0.987	0.992	1.010	1.023	0.992						
2007/08	1.328	1.194	1.107	0.997	0.993	1.042	1.024	1.011	0.997	1.009	0.961	0.991	1.000							
2008/09	1.809	1.274	1.039	0.977	1.016	0.997	1.039	1.003	0.968	0.990	0.990	1.009								
2009/10	1.790	1.119	0.993	1.014	1.010	1.027	0.997	0.999	0.981	0.987	1.001									
2010/11	1.564	1.047	1.085	1.013	1.049	0.993	0.998	1.007	0.981	1.007										
2011/12	1.853	1.125	1.103	1.031	0.965	0.993	0.984	0.991	0.998											
2012/13	1.884	1.349	1.244	0.947	1.034	0.968	0.965	1.010												
2013/14	2.070	1.458	1.012	1.017	0.991	0.972	1.004													
2014/15	1.732	1.079	1.062	1.017	0.957	0.997														
2015/16	1.398	1.143	1.054	1.017	1.012															
2016/17	1.615	1.154	1.094	1.031																
2017/18	1.724	1.216	1.075																	
2018/19	1.713	1.174																		
2019/20	1.825																			
2020/21																				
Average																				
All	1.716	1.188	1.073	1.010	1.015	1.004	1.010	1.014	0.998	1.005	0.998	1.008	0.999	1.003	1.001	0.993	1.004	1.002		
Wtd 3	1.752	1.178	1.074	1.022	0.989	0.977	0.984	1.002	0.987	0.995	0.985	1.004	1.001	0.999	1.001	0.995				
Last 3	1.754	1.181	1.074	1.022	0.986	0.979	0.984	1.003	0.987	0.995	0.984	1.004	1.002	0.999	1.000	0.993				
Last 5	1.684	1.157	1.064	1.017	0.989	0.986	0.993	1.003	0.986	0.995	0.990	1.005	0.992	1.004						
x-hi,low																				
Similar	1.554	1.182	1.080	1.046	1.029	1.019	1.013	1.011	1.011	1.007	1.006	1.005	1.003	1.002	1.001	1.001	1.001	1.000	1.022	
Previous	1.725	1.150	1.080	1.029	1.027	1.025	1.020	1.020	1.015	1.010	1.008	1.007	1.005	1.004	1.004	1.003	1.002	1.002	1.002	1.005
Selected	1.725	1.160	1.080	1.029	1.027	1.025	1.020	1.020	1.015	1.010	1.008	1.007	1.005	1.004	1.004	1.003	1.002	1.002	1.002	1.005
Cumulative	2.604	1.509	1.301	1.205	1.171	1.140	1.112	1.090	1.069	1.053	1.043	1.035	1.027	1.022	1.018	1.014	1.011	1.009	1.007	1.005
Percent	38.4%	66.3%	76.9%	83.0%	85.4%	87.7%	89.9%	91.7%	93.5%	94.9%	95.9%	96.7%	97.3%	97.8%	98.2%	98.6%	98.9%	99.1%	99.3%	99.5%

Amounts are limited (net of excess insurance).

Data was provided by the City.

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 2001/02																				
2002/03						918		919	918	919	922	919	922	922	922	923	923	923	923	923
2003/04					771	771	771	767	769	774	769	774	773	773	773	773	773	773	773	773
2004/05				670	672	674	671	671	674	672	675	675	675	675	675	675	675	675	675	675
2005/06			740	742	747	740	740	748	740	748	749	749	748	748	748	748	748	748	748	748
2006/07		696	701	703	700	700	703	700	703	703	703	703	703	703	703	703	703	703	703	703
2007/08	669	702	702	694	694	702	694	702	703	703	704	704	704	704	704	704	704	704	704	704
2008/09	637	674	672	673	677	674	678	678	678	678	678	678	678	678	678	678	678	678	678	678
2009/10	605	615	618	642	619	642	645	646	646	646	646	646	646	646	646	646	646	646	646	646
2010/11	576	615	645	625	649	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650
2011/12	548	629	593	636	636	637	637	637	637	638	638	638	638	638	638	638	638	638	638	638
2012/13	515	560	566	568	569	569	569	569	569	569	569	569	569	569	569	569	569	569	569	569
2013/14	587	618	620	621	621	621	621	621	621	621	621	621	621	621	621	621	621	621	621	621
2014/15	526	553	555	559	559	559	559	559	559	559	559	559	559	559	559	559	559	559	559	559
2015/16	571	607	610	611	611	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612
2016/17	525	543	545	548	554															
2017/18	496	522	527	531																
2018/19	537	556	559																	
2019/20	1,654	1,707																		
2020/21	1,635																			

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 2001/02																				
2002/03						1.001	1.001	0.998	1.001	1.003	0.997	1.003	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000
2003/04					1.000	1.000	0.995	1.003	1.007	0.994	1.007	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004/05				1.003	1.003	1.003	0.996	1.000	1.004	0.997	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005/06			1.003	1.007	0.991	1.000	1.011	0.989	1.011	1.001	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006/07		1.007	1.003	0.996	1.000	1.004	0.996	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
2007/08	1.049	1.000	0.989	1.000	1.012	0.989	1.012	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
2008/09	1.058	0.997	1.001	1.006	0.996	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	1.000
2009/10	1.017	1.005	1.039	0.964	1.037	1.000	1.005	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
2010/11	1.068	1.049	0.969	1.038	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011/12	1.148	0.943	1.073	1.000	1.002	1.000	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012/13	1.087	1.011	1.004	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013/14	1.053	1.003	1.002	1.000	1.000	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	1.000	1.000
2014/15	1.051	1.004	1.002	1.000	1.000	1.002	1.000													
2015/16	1.063	1.005	1.002	1.000	1.002															
2016/17	1.034	1.004	1.006	1.011																
2017/18	1.052	1.010	1.008																	
2018/19	1.035	1.005																		
2019/20	1.032																			
2020/21																				
Average																				
All	1.058	1.003	1.008	1.002	1.003	1.000	1.001	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Wtd 3	1.036	1.006	1.005	1.003	1.001	1.001	0.999	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
Last 3	1.040	1.006	1.005	1.004	1.001	1.001	0.999	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
Last 5	1.041	1.005	1.005	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
x-hi,low																				
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
Previous	1.055	1.005	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	1.000
Selected	1.050	1.005	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	1.000
Cumulative	1.059	1.009	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	1.000
Percent	94.4%	99.1%	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%	100.0%	100.0%	100.0%	100.0%

Data was provided by the City.

CITY OF OAKLAND
WORKERS' COMPENSATION

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 2001/02																					
2002/03						84.5%	89.8%	90.7%	92.0%	94.2%	95.9%	94.9%	95.1%	94.4%	95.5%	95.8%	96.9%	96.8%	97.3%		
2003/04					84.1%	88.3%	90.1%	92.3%	90.9%	92.8%	92.3%	92.7%	93.3%	94.3%	94.6%	94.8%	94.9%	95.7%			
2004/05				74.4%	82.2%	81.5%	83.0%	83.0%	84.6%	84.9%	86.0%	86.6%	88.8%	91.5%	92.2%	93.5%	96.5%				
2005/06			67.8%	77.0%	80.8%	82.8%	82.6%	85.8%	84.9%	89.1%	89.1%	91.8%	89.7%	92.0%	92.5%	94.2%					
2006/07		63.2%	77.2%	84.6%	89.5%	90.1%	94.1%	95.0%	94.9%	94.3%	96.1%	97.4%	97.2%	96.2%	97.3%						
2007/08	40.3%	63.0%	70.3%	74.6%	80.9%	86.0%	86.0%	88.1%	89.0%	90.8%	91.0%	95.0%	96.1%	96.7%							
2008/09	47.9%	66.0%	70.0%	78.4%	84.2%	86.1%	89.6%	87.6%	88.3%	94.6%	96.0%	97.2%	97.1%								
2009/10	44.4%	57.8%	68.9%	79.0%	85.7%	88.1%	87.9%	90.9%	91.6%	94.5%	96.4%	96.8%									
2010/11	43.7%	57.7%	72.6%	79.5%	83.2%	84.6%	88.8%	91.1%	91.4%	94.0%	94.1%										
2011/12	31.8%	59.6%	72.8%	76.2%	78.1%	84.8%	88.6%	92.2%	94.3%	95.2%											
2012/13	43.7%	58.9%	64.4%	62.3%	75.6%	78.4%	83.4%	91.0%	91.8%												
2013/14	43.6%	58.3%	57.8%	70.1%	79.3%	85.8%	91.8%	94.0%													
2014/15	33.0%	47.6%	63.3%	70.4%	76.9%	86.1%															
2015/16	26.5%	51.2%	66.8%	77.9%	85.4%	87.6%															
2016/17	44.1%	57.4%	68.0%	75.4%	82.5%																
2017/18	42.4%	54.2%	66.3%	76.2%																	
2018/19	46.6%	54.7%	66.4%																		
2019/20	41.7%	57.5%																			
2020/21	40.1%																				
Average																					
All	40.7%	57.7%	68.0%	75.4%	82.0%	85.3%	88.2%	90.1%	90.3%	92.4%	93.0%	94.1%	93.9%	94.2%	94.4%	94.6%	96.1%	96.3%	97.3%		
Last 3	42.8%	55.5%	66.9%	76.5%	81.6%	86.5%	88.7%	92.4%	92.5%	94.6%	95.5%	96.4%	96.8%	94.9%	94.0%	94.2%	96.1%				
Last 5	42.7%	55.5%	66.5%	74.0%	79.6%	85.6%	89.5%	91.4%	91.6%	94.3%	95.4%	96.4%	94.3%	94.1%	94.2%						
x-hi,low																					
Implicit	38.3%	54.5%	68.1%	76.9%	83.0%	86.0%	87.0%	87.9%	88.1%	88.7%	89.3%	89.8%	90.4%	90.8%	91.3%	91.5%	91.8%	92.1%	92.4%	92.6%	

Developed Limited Paid Losses

Claim Period (1)	Months of Development 6/30/21 (2)	Limited Paid Losses 6/30/21 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)/(4) (5)
to 2001/02	240.0	\$246,865,922	92.2%	\$267,849,525
2002/03	228.0	21,862,610	91.7%	23,839,536
2003/04	216.0	21,485,767	91.3%	23,545,760
2004/05	204.0	17,002,624	90.8%	18,725,951
2005/06	192.0	16,177,399	90.3%	17,816,021 *
2006/07	180.0	14,907,474	89.7%	16,616,056
2007/08	168.0	14,143,341	88.8%	15,796,228 *
2008/09	156.0	16,783,941	87.9%	18,957,165 *
2009/10	144.0	17,024,492	86.8%	19,608,765
2010/11	132.0	19,954,676	85.6%	23,179,574 *
2011/12	120.0	19,683,571	84.2%	23,379,697
2012/13	108.0	14,753,132	82.4%	17,908,949
2013/14	96.0	15,337,080	80.6%	18,846,940 *
2014/15	84.0	11,890,526	78.3%	15,194,103
2015/16	72.0	16,040,471	75.5%	21,011,594 *
2016/17	60.0	15,208,010	70.9%	20,845,358 *
2017/18	48.0	10,335,644	63.8%	16,190,598
2018/19	36.0	8,497,584	52.3%	15,556,468 *
2019/20	24.0	6,144,066	36.1%	17,025,858
2020/21	12.0	3,732,974	14.7%	25,343,946
Total		\$527,831,302		\$637,238,093

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

(3) is from Exhibit WC-1.

(4) is from Exhibit WC-2.

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 6/30/21 (2)	Limited Reported Incurred Losses 6/30/21 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) (5)
to 2001/02	240.0	\$250,470,030	99.5%	\$251,722,380
2002/03	228.0	22,464,185	99.3%	22,621,659
2003/04	216.0	22,441,985	99.1%	22,644,502
2004/05	204.0	17,612,256	98.9%	17,795,689 *
2005/06	192.0	17,175,102	98.6%	17,402,770 *
2006/07	180.0	15,320,526	98.2%	15,598,310
2007/08	168.0	14,625,783	97.8%	14,928,330 *
2008/09	156.0	17,285,467	97.3%	17,737,133 *
2009/10	144.0	17,585,208	96.7%	18,192,007
2010/11	132.0	21,207,156	95.9%	22,050,274 *
2011/12	120.0	20,674,124	94.9%	21,774,197
2012/13	108.0	16,068,456	93.5%	17,177,313
2013/14	96.0	16,309,693	91.7%	17,716,109 *
2014/15	84.0	13,060,714	89.9%	14,526,077
2015/16	72.0	18,308,841	87.7%	20,767,098 *
2016/17	60.0	18,433,534	85.4%	21,325,462 *
2017/18	48.0	13,565,822	83.0%	16,343,204
2018/19	36.0	12,803,974	76.9%	16,433,576 *
2019/20	24.0	10,680,854	66.3%	16,120,511
2020/21	12.0	9,304,092	38.4%	24,223,446
Total		\$565,397,801		\$607,100,048

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

(3) is from Exhibit WC-1.

(4) is from Exhibit WC-2.

Developed Limited Case Reserves

Claim Period (1)	Months of Development 6/30/21 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 6/30/21 [(4)-(3)]/ [100.0%-(3)] (5)	Limited Paid Losses 6/30/21 (6)	Limited Case Reserves 6/30/21 (7)	Developed Limited Case Reserves (6)+(7)/(5) (8)
to 2001/02	240.0	92.2%	99.5%	93.6%	\$246,865,922	\$3,604,108	\$250,714,433
2002/03	228.0	91.7%	99.3%	91.6%	21,862,610	601,575	22,519,311
2003/04	216.0	91.3%	99.1%	89.8%	21,485,767	956,218	22,550,861
2004/05	204.0	90.8%	98.9%	88.1%	17,002,624	609,631	17,668,407 *
2005/06	192.0	90.3%	98.6%	85.8%	16,177,399	997,703	17,340,818
2006/07	180.0	89.7%	98.2%	82.7%	14,907,474	413,052	15,407,047
2007/08	168.0	88.8%	97.8%	80.6%	14,143,341	482,443	14,742,237
2008/09	156.0	87.9%	97.3%	77.9%	16,783,941	501,525	17,427,454
2009/10	144.0	86.8%	96.7%	74.7%	17,024,492	560,716	17,775,207
2010/11	132.0	85.6%	95.9%	71.5%	19,954,676	1,252,480	21,526,091 *
2011/12	120.0	84.2%	94.9%	68.0%	19,683,571	990,553	21,139,354
2012/13	108.0	82.4%	93.5%	63.4%	14,753,132	1,315,324	16,828,872
2013/14	96.0	80.6%	91.7%	57.3%	15,337,080	972,613	17,035,707
2014/15	84.0	78.3%	89.9%	53.6%	11,890,526	1,170,189	14,073,580
2015/16	72.0	75.5%	87.7%	49.9%	16,040,471	2,268,370	20,582,184
2016/17	60.0	70.9%	85.4%	49.9%	15,208,010	3,225,524	21,666,440
2017/18	48.0	63.8%	83.0%	53.0%	10,335,644	3,230,178	16,290,406 *
2018/19	36.0	52.3%	76.9%	51.5%	8,497,584	4,306,389	16,866,543
2019/20	24.0	36.1%	66.3%	47.2%	6,144,066	4,536,788	15,755,098
2020/21	12.0	14.7%	38.4%	27.8%	3,732,974	5,571,118	23,794,185
Total					\$527,831,302	\$37,566,499	\$601,704,236

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

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

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

Preliminary Projected Ultimate Limited Losses to 2020/21

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 2001/02	\$267,849,525	\$251,722,380	\$250,714,433	\$250,830,441
2002/03	23,839,536	22,621,659	22,519,311	22,524,342
2003/04	23,545,760	22,644,502	22,550,861	22,550,861
2004/05	18,725,951	17,795,689	17,668,407	17,673,219
2005/06	17,816,021	17,402,770	17,340,818	17,340,818
2006/07	16,616,056	15,598,310	15,407,047	15,407,047
2007/08	15,796,228	14,928,330	14,742,237	14,742,237
2008/09	18,957,165	17,737,133	17,427,454	17,427,454
2009/10	19,608,765	18,192,007	17,775,207	17,775,207
2010/11	23,179,574	22,050,274	21,526,091	21,526,091
2011/12	23,379,697	21,774,197	21,139,354	21,139,354
2012/13	17,908,949	17,177,313	16,828,872	16,828,872
2013/14	18,846,940	17,716,109	17,035,707	17,103,747
2014/15	15,194,103	14,526,077	14,073,580	14,164,080
2015/16	21,011,594	20,767,098	20,582,184	20,637,658
2016/17	20,845,358	21,325,462	21,666,440	21,530,049
2017/18	16,190,598	16,343,204	16,290,406	16,301,545
2018/19	15,556,468	16,433,576	16,866,543	16,431,341
2019/20	17,025,858	16,120,511	15,755,098	16,155,415
2020/21	25,343,946	24,223,446	23,794,185	24,163,792
Total	\$637,238,093	\$607,100,048	\$601,704,236	\$602,253,570

(2) is from Exhibit WC-3.

(3) is from Exhibit WC-4.

(4) is from Exhibit WC-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 (2021/22 = 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)
2011/12	\$21,139,354	\$348,514	\$6.07	1.064	\$6.45	\$4.77
2012/13	16,828,872	355,748	4.73	1.071	5.07	4.74
2013/14	17,103,747	373,451	4.58	1.072	4.91	4.74
2014/15	14,164,080	364,737	3.88	1.055	4.10	4.82
2015/16	20,637,658	390,571	5.28	1.043	5.51	4.87
2016/17	21,530,049	401,986	5.36	1.036	5.55	4.90
2017/18	16,301,545	413,589	3.94	1.031	4.06	4.93
2018/19	16,431,341	376,038	4.37	1.022	4.47	4.97
2019/20	16,155,415	392,360	4.12	1.011	4.16	5.03
2020/21	24,163,792	402,318	6.01	1.000	6.01	5.08
(7) Projected 2021/22 a-priori loss rate per \$100 of Payroll					\$5.08	

II. Bornhuetter - Ferguson Analysis Based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 6/30/21 (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)
2016/17	\$15,208,010	70.9%	\$4.90	\$401,986	\$5,744,663	\$20,952,673
2017/18	10,335,644	63.8%	4.93	413,589	7,366,429	17,702,073
2018/19	8,497,584	52.3%	4.97	376,038	8,908,896	17,406,480
2019/20	6,144,066	36.1%	5.03	392,360	12,602,269	18,746,334
2020/21	3,732,974	14.7%	5.08	402,318	17,425,679	21,158,653

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

Claim Period (1)	Limited Reported Incurred Losses 6/30/21 (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)
2016/17	\$18,433,534	85.4%	\$4.90	\$401,986	\$2,875,615	\$21,309,149
2017/18	13,565,822	83.0%	4.93	413,589	3,461,743	17,027,566
2018/19	12,803,974	76.9%	4.97	376,038	4,324,673	17,128,646
2019/20	10,680,854	66.3%	5.03	392,360	6,653,498	17,334,352
2020/21	9,304,092	38.4%	5.08	402,318	12,586,464	21,890,556

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

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

Section I, (5) is from Exhibit WC-14 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 WC-1.

Sections II and III, (3) are from Exhibit WC-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 6/30/21 (2)	Reported Claims 6/30/21 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)	Payroll (000) (6)	Frequency (per \$1M of Payroll) (5)/(6)X1,000 (7)
2011/12	120.0	638	100.0%	638	\$348,514	1.83
2012/13	108.0	569	100.0%	569	355,748	1.60
2013/14	96.0	620	100.0%	620	373,451	1.66
2014/15	84.0	560	100.0%	560	364,737	1.54
2015/16	72.0	612	100.0%	612	390,571	1.57
2016/17	60.0	554	100.0%	554	401,986	1.38
2017/18	48.0	531	100.0%	531	413,589	1.28
2018/19	36.0	559	99.6%	561	376,038	1.49
2019/20	24.0	1,707	99.1%	1,722	392,360	4.39
2020/21	12.0	1,635	94.4%	1,732	402,318	4.31

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2021/22 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2021/22 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(8) (9)
2011/12	\$21,139,354	638	\$33,134	1.430	\$47,381	\$23,747	\$15,150,591
2012/13	16,828,872	569	29,576	1.398	41,334	24,299	13,825,917
2013/14	17,103,747	620	27,587	1.358	37,472	25,000	15,499,871
2014/15	14,164,080	560	25,293	1.297	32,812	26,176	14,658,705
2015/16	20,637,658	612	33,722	1.245	41,989	27,272	16,690,474
2016/17	21,530,049	554	38,863	1.201	46,660	28,284	15,669,168
2017/18	16,301,545	531	30,700	1.161	35,631	29,258	15,536,011
2018/19	16,431,341	561	29,289	1.117	32,711	30,406	17,057,913
2019/20	16,155,415	1,722	9,382	1.072	10,059	31,671	54,537,807
2020/21	24,163,792	1,732	13,951	1.030	14,368	32,972	57,108,039

(7) Projected 2021/22 average claim severity

\$33,958

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

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

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

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

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

Section II, (5) is from Exhibit WC-14 and adjusted for change in retention.

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

Projected Ultimate Limited Losses to 2020/21

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)	Projected Ultimate Limited Losses (8)
to 2001/02	\$267,849,525	\$251,722,380	\$250,714,433				\$250,830,441
2002/03	23,839,536	22,621,659	22,519,311				22,524,342
2003/04	23,545,760	22,644,502	22,550,861				22,551,000
2004/05	18,725,951	17,795,689	17,668,407				17,673,219
2005/06	17,816,021	17,402,770	17,340,818				17,341,000
2006/07	16,616,056	15,598,310	15,407,047				15,407,000
2007/08	15,796,228	14,928,330	14,742,237				14,742,000
2008/09	18,957,165	17,737,133	17,427,454				17,427,000
2009/10	19,608,765	18,192,007	17,775,207				17,775,000
2010/11	23,179,574	22,050,274	21,526,091				21,526,000
2011/12	23,379,697	21,774,197	21,139,354				21,139,000
2012/13	17,908,949	17,177,313	16,828,872				16,829,000
2013/14	18,846,940	17,716,109	17,035,707				17,104,000
2014/15	15,194,103	14,526,077	14,073,580				14,164,000
2015/16	21,011,594	20,767,098	20,582,184				20,638,000
2016/17	20,845,358	21,325,462	21,666,440	20,952,673	21,309,149	15,669,168	21,530,000
2017/18	16,190,598	16,343,204	16,290,406	17,702,073	17,027,566	15,536,011	16,302,000
2018/19	15,556,468	16,433,576	16,866,543	17,406,480	17,128,646	17,057,913	16,431,000
2019/20	17,025,858	16,120,511	15,755,098	18,746,334	17,334,352	54,537,807	16,677,000
2020/21	25,343,946	24,223,446	23,794,185	21,158,653	21,890,556	57,108,039	22,844,000

(2) is from Exhibit WC-3.

(3) is from Exhibit WC-4.

(4) is from Exhibit WC-5.

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

(7) is from Exhibit WC-8.

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

Projected Ultimate Limited Losses for 2021/22 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 (2021/22 = 1.000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)X(5) (6)
2011/12	\$21,139,000	\$348,514	\$6.07	1.064	\$6.45
2012/13	16,829,000	355,748	4.73	1.071	5.07
2013/14	17,104,000	373,451	4.58	1.072	4.91
2014/15	14,164,000	364,737	3.88	1.055	4.10
2015/16	20,638,000	390,571	5.28	1.043	5.51
2016/17	21,530,000	401,986	5.36	1.036	5.55
2017/18	16,302,000	413,589	3.94	1.031	4.06
2018/19	16,431,000	376,038	4.37	1.022	4.47
2019/20	16,677,000	392,360	4.25	1.011	4.30
2020/21	22,844,000	402,318	5.68	1.000	5.68
Total	\$183,658,000	\$3,819,312	\$4.81		\$5.01

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)
2021/22	\$5.06	\$406,341	\$20,555,000	0.89	\$4.48	\$18,215,000
2022/23	5.11	410,405	20,968,000	0.89	4.53	18,581,000

(2) is from Exhibit WC-9.

(3) 2011/12, 2012/13, 2013/14, 2014/15, 2015/16, 2017/18, 2018/19, 2019/20 and 2020/21 were provided by the City. Other periods assume a 1% trend.

(5) is from Exhibit WC-14 and adjusted for change in retention.

(7) 2021/22 is based on (6) and actuarial judgment.
Other period(s) based on 2021/22 plus the trend in Exhibit WC-14.

(8) is based on (3) for 2020/21 and a 1% trend.

(10) is based on a 2.5% interest rate and the payout pattern in Exhibit WC-2.

Estimated Outstanding Losses as of June 30, 2021

Claim Period (1)	Limited Paid Losses 6/30/21 (2)	Limited Case Reserves 6/30/21 (3)	Limited Reported Incurred Losses 6/30/21 (4)	Projected Ultimate Limited Losses (5)	Estimated IBNR 6/30/21 (5)-(4) (6)	Estimated Outstanding Losses 6/30/21 (3)+(6) (7)	Present Value Factor (8)	Present Value of Estimated Outstanding Losses 6/30/21 (7)X(8) (9)
to 2001/02	\$246,865,922	\$3,604,108	\$250,470,030	\$250,830,441	\$360,411	\$3,964,519	0.94	\$3,709,671
2002/03	21,862,610	601,575	22,464,185	22,524,342	60,158	661,733	0.92	606,831
2003/04	21,485,767	956,218	22,441,985	22,551,000	109,015	1,065,233	0.90	958,198
2004/05	17,002,624	609,631	17,612,256	17,673,219	60,963	670,594	0.88	592,144
2005/06	16,177,399	997,703	17,175,102	17,341,000	165,898	1,163,601	0.87	1,010,580
2006/07	14,907,474	413,052	15,320,526	15,407,000	86,474	499,526	0.85	426,926
2007/08	14,143,341	482,443	14,625,783	14,742,000	116,217	598,660	0.85	506,499
2008/09	16,783,941	501,525	17,285,467	17,427,000	141,533	643,058	0.84	538,410
2009/10	17,024,492	560,716	17,585,208	17,775,000	189,792	750,508	0.83	624,032
2010/11	19,954,676	1,252,480	21,207,156	21,526,000	318,844	1,571,324	0.83	1,297,783
2011/12	19,683,571	990,553	20,674,124	21,139,000	464,876	1,455,429	0.82	1,196,720
2012/13	14,753,132	1,315,324	16,068,456	16,829,000	760,544	2,075,868	0.82	1,704,855
2013/14	15,337,080	972,613	16,309,693	17,104,000	794,307	1,766,920	0.82	1,445,859
2014/15	11,890,526	1,170,189	13,060,714	14,164,000	1,103,286	2,273,475	0.82	1,861,488
2015/16	16,040,471	2,268,370	18,308,841	20,638,000	2,329,159	4,597,529	0.82	3,771,421
2016/17	15,208,010	3,225,524	18,433,534	21,530,000	3,096,466	6,321,990	0.83	5,246,812
2017/18	10,335,644	3,230,178	13,565,822	16,302,000	2,736,178	5,966,356	0.84	5,037,159
2018/19	8,497,584	4,306,389	12,803,974	16,431,000	3,627,026	7,933,415	0.86	6,848,787
2019/20	6,144,066	4,536,788	10,680,854	16,677,000	5,996,146	10,532,934	0.88	9,260,521
2020/21	3,732,974	5,571,118	9,304,092	22,844,000	13,539,908	19,111,026	0.89	17,014,693
Total	\$527,831,302	\$37,566,499	\$565,397,801	\$601,455,002	\$36,057,201	\$73,623,698		\$63,659,389

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

(5) is from Exhibit WC-9.

(8) is based on a 2.5% interest rate and the payout pattern in Exhibit WC-2.

Projected Losses Paid July 1, 2021 to June 30, 2022

Claim Period (1)	Months of Development 6/30/21 (2)	Percent Losses Paid (3)	Months of Development 6/30/22 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 7/1/21 to 6/30/22 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 6/30/21 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/22 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/22 (9)X(10) (11)
to 2001/02	240.0	92.2%	252.0	94.5%	30.0%	\$3,964,515	\$1,189,356	\$2,775,160	0.94	\$2,598,280
2002/03	228.0	91.7%	240.0	92.2%	5.5%	661,733	36,590	625,143	0.94	584,950
2003/04	216.0	91.3%	228.0	91.7%	5.2%	1,065,233	55,552	1,009,681	0.94	925,910
2004/05	204.0	90.8%	216.0	91.3%	4.9%	670,594	33,081	637,513	0.90	573,450
2005/06	192.0	90.3%	204.0	90.8%	5.6%	1,163,601	64,666	1,098,935	0.88	970,370
2006/07	180.0	89.7%	192.0	90.3%	5.2%	499,526	26,150	473,376	0.87	411,120
2007/08	168.0	88.8%	180.0	89.7%	8.0%	598,660	47,604	551,056	0.87	470,960
2008/09	156.0	87.9%	168.0	88.8%	7.3%	643,056	46,933	596,123	0.87	504,350
2009/10	144.0	86.8%	156.0	87.9%	8.6%	750,506	64,274	686,232	0.84	574,560
2010/11	132.0	85.6%	144.0	86.8%	8.3%	1,571,324	131,004	1,440,320	0.84	1,197,590
2011/12	120.0	84.2%	132.0	85.6%	9.1%	1,455,425	131,764	1,323,661	0.84	1,093,230
2012/13	108.0	82.4%	120.0	84.2%	10.3%	2,075,866	213,496	1,862,370	0.84	1,531,320
2013/14	96.0	80.6%	108.0	82.4%	9.1%	1,766,920	161,554	1,605,366	0.84	1,318,440
2014/15	84.0	78.3%	96.0	80.6%	10.8%	2,273,476	245,487	2,027,989	0.84	1,659,480
2015/16	72.0	75.5%	84.0	78.3%	11.4%	4,597,525	523,230	4,074,295	0.84	3,335,970
2016/17	60.0	70.9%	72.0	75.5%	15.8%	6,321,990	999,233	5,322,757	0.84	4,366,330
2017/18	48.0	63.8%	60.0	70.9%	19.4%	5,966,356	1,158,553	4,807,803	0.84	3,990,140
2018/19	36.0	52.3%	48.0	63.8%	24.1%	7,933,416	1,915,631	6,017,785	0.84	5,080,570
2019/20	24.0	36.1%	36.0	52.3%	25.4%	10,532,934	2,676,192	7,856,742	0.84	6,782,590
2020/21	12.0	14.7%	24.0	36.1%	25.0%	19,111,026	4,786,661	14,324,365	0.84	12,593,930
2021/22	0.0	0.0%	12.0	14.7%	14.7%	20,555,000	3,027,596	17,527,404	0.84	15,604,780
Total						\$94,178,696	\$17,534,611	\$76,644,085		\$66,168,411

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

(7) to 2020/21 is from Exhibit WC-11. The amount for 2021/22 is from Exhibit WC-10.

(10) is based on a 2.5% interest rate and the payout pattern in Exhibit WC-2.

Projected Losses Paid July 1, 2022 to June 30, 2023

Claim Period (1)	Months of Development 6/30/22 (2)	Percent Losses Paid (3)	Months of Development 6/30/23 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 7/1/22 to 6/30/23 [(5)-(3)]/ [100.0%-(3)] (6)	Estimated Outstanding Losses 6/30/22 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/23 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/23 (9)X(10) (11)
to 2001/02	252.0	94.5%	264.0	96.2%	30.0%	\$2,775,163	\$832,545	\$1,942,618	0.94	\$1,820,341
2002/03	240.0	92.2%	252.0	94.5%	30.0%	625,143	187,543	437,600	0.94	409,705
2003/04	228.0	91.7%	240.0	92.2%	5.5%	1,009,681	55,830	953,851	0.94	892,531
2004/05	216.0	91.3%	228.0	91.7%	5.2%	637,513	33,246	604,267	0.94	554,133
2005/06	204.0	90.8%	216.0	91.3%	4.9%	1,098,935	54,211	1,044,724	0.90	939,750
2006/07	192.0	90.3%	204.0	90.8%	5.6%	473,376	26,307	447,069	0.88	394,761
2007/08	180.0	89.7%	192.0	90.3%	5.2%	551,056	28,848	522,208	0.87	453,534
2008/09	168.0	88.8%	180.0	89.7%	8.0%	596,125	47,402	548,723	0.87	468,973
2009/10	156.0	87.9%	168.0	88.8%	7.3%	686,234	50,084	636,150	0.87	538,211
2010/11	144.0	86.8%	156.0	87.9%	8.6%	1,440,320	123,350	1,316,970	0.84	1,102,651
2011/12	132.0	85.6%	144.0	86.8%	8.3%	1,323,665	110,356	1,213,309	0.84	1,008,841
2012/13	120.0	84.2%	132.0	85.6%	9.1%	1,862,370	168,606	1,693,764	0.84	1,398,901
2013/14	108.0	82.4%	120.0	84.2%	10.3%	1,605,366	165,105	1,440,261	0.84	1,184,241
2014/15	96.0	80.6%	108.0	82.4%	9.1%	2,027,988	185,424	1,842,564	0.84	1,513,241
2015/16	84.0	78.3%	96.0	80.6%	10.8%	4,074,295	439,937	3,634,358	0.84	2,973,971
2016/17	72.0	75.5%	84.0	78.3%	11.4%	5,322,757	605,766	4,716,991	0.84	3,862,201
2017/18	60.0	70.9%	72.0	75.5%	15.8%	4,807,803	759,905	4,047,898	0.84	3,320,551
2018/19	48.0	63.8%	60.0	70.9%	19.4%	6,017,775	1,168,531	4,849,244	0.84	4,024,531
2019/20	36.0	52.3%	48.0	63.8%	24.1%	7,856,742	1,897,123	5,959,619	0.84	5,031,471
2020/21	24.0	36.1%	36.0	52.3%	25.4%	14,324,365	3,639,513	10,684,852	0.84	9,224,051
2021/22	12.0	14.7%	24.0	36.1%	25.0%	17,527,402	4,390,017	13,137,385	0.84	11,550,341
2022/23	0.0	0.0%	12.0	14.7%	14.7%	20,968,000	3,088,430	17,879,570	0.84	15,918,311
Total						\$97,612,081	\$18,058,091	\$79,553,990		\$68,585,311

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

(7) to 2021/22 is from Exhibit WC-12, (9). The amount for 2022/23 is from Exhibit WC-10.

(10) is based on a 2.5% interest rate and the payout pattern in Exhibit WC-2.

Loss Rate and Severity Trend

I. Benefit Level Changes

Effective Date (1)	Benefit Level Change (2)	Cumulative Benefit Level Change (3)
01/01/12	0.982	0.982
01/01/13	0.967	0.950
01/01/14	1.012	0.961
01/01/15	1.001	0.962
01/01/16	1.002	0.964
01/01/17	0.992	0.956
01/01/18	0.997	0.953
01/01/19	1.001	0.954
01/01/20	1.002	0.955

II. Loss Rate and Severity Trend

Claim Period (1)	Benefit Trend (2021/22 = 1.000) (2)	Residual Trend (2021/22 = 1.000) (3)	Retention Index (2021/22 = 1.000) (4)	Loss Rate Trend (2021/22 = 1.000) (2)X(3)X(4) (5)	Wage Trend (2021/22 = 1.000) (6)	Severity Trend (2021/22 = 1.000) (5)X(6) (7)
2011/12	0.973	1.105	0.990	1.064	1.344	1.430
2012/13	0.989	1.094	0.990	1.071	1.305	1.396
2013/14	1.000	1.083	0.990	1.072	1.267	1.356
2014/15	0.994	1.072	0.990	1.055	1.230	1.297
2015/16	0.992	1.062	0.990	1.043	1.194	1.246
2016/17	0.995	1.051	0.990	1.036	1.159	1.201
2017/18	1.001	1.041	0.990	1.031	1.126	1.161
2018/19	1.002	1.030	0.990	1.022	1.093	1.117
2019/20	1.001	1.020	0.990	1.011	1.061	1.072
2020/21	1.000	1.010	0.990	1.000	1.030	1.030
2021/22	1.000	1.000	1.000	1.000	1.000	1.000
2022/23	1.000	0.990	1.000	0.990	0.971	0.961
2023/24	1.000	0.980	1.000	0.980	0.943	0.924

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% trend per actuarial judgment.

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

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

List of Large Claims
Reported Incurred Losses Greater Than \$500,000

Claim Number (1)	Date of Loss (2)	Claim Period (3)	Specific Self-Insured Retention (4)	Unlimited Paid Losses 6/30/21 (5)	Unlimited Case Reserves 6/30/21 (6)	Unlimited Reported Incurred Losses 6/30/21 (7)
0000190143	12/27/72	to 2001/02	Unlimited	\$722,941	\$0	\$722,941
0000190774	01/19/74	to 2001/02	Unlimited	613,638	0	613,638
0000190326	08/01/74	to 2001/02	Unlimited	771,240	0	771,240
0000190147	07/04/75	to 2001/02	Unlimited	5,103,900	138,842	5,242,742
0000190244	10/03/75	to 2001/02	Unlimited	542,435	0	542,435
0000191607	03/11/77	to 2001/02	Unlimited	2,904,822	0	2,904,822
0000190910	12/05/77	to 2001/02	Unlimited	913,798	0	913,798
0000190513	10/19/78	to 2001/02	Unlimited	925,345	0	925,345
0001305216	04/11/83	to 2001/02	Unlimited	800,100	0	800,100
0001305673	10/28/83	to 2001/02	Unlimited	738,852	265,278	1,004,131
0001305402	01/03/84	to 2001/02	Unlimited	583,002	0	583,002
0001305712	01/26/84	to 2001/02	Unlimited	567,073	0	567,073
0008600690	07/16/86	to 2001/02	Unlimited	560,893	0	560,893
0087580347	02/24/87	to 2001/02	Unlimited	676,052	37,241	713,292
0088580060	10/17/87	to 2001/02	Unlimited	667,461	39,202	706,663
0088580879	07/01/88	to 2001/02	Unlimited	628,550	0	628,550
0088580941	10/06/88	to 2001/02	Unlimited	612,393	0	612,393
0090000792	08/23/90	to 2001/02	Unlimited	546,583	59,063	605,646
0091000967	10/20/91	to 2001/02	Unlimited	615,883	0	615,883
0091001095	10/20/91	to 2001/02	Unlimited	655,140	97,013	752,152
0094630112	08/01/94	to 2001/02	Unlimited	1,409,190	0	1,409,190
0095630121	01/11/95	to 2001/02	Unlimited	598,376	76,621	674,997
0096630131	08/15/95	to 2001/02	Unlimited	781,438	180,442	961,880
0096630617	03/01/96	to 2001/02	Unlimited	541,404	0	541,404
0097630604	07/10/97	to 2001/02	Unlimited	486,180	41,731	527,912
0058620066	01/25/98	to 2001/02	Unlimited	465,093	47,019	512,112
0058620470	06/11/98	to 2001/02	Unlimited	685,025	0	685,025
0059620316	03/26/99	to 2001/02	Unlimited	506,947	0	506,947
0059620442	05/04/99	to 2001/02	Unlimited	684,027	138,849	822,875
0056200017	01/03/00	to 2001/02	Unlimited	668,121	28,933	697,054
0056210086	01/24/01	to 2001/02	Unlimited	531,819	0	531,819
0056210681	07/19/01	to 2001/02	Unlimited	555,676	0	555,676
0108004322	08/23/01	to 2001/02	Unlimited	915,476	0	915,476
0109002741	09/21/01	to 2001/02	Unlimited	731,455	0	731,455
0204001439	04/06/02	to 2001/02	Unlimited	843,423	56,377	899,800
0208004522	08/03/02	2002/03	Unlimited	1,606,513	91,721	1,698,234
0208003005	08/11/02	2002/03	Unlimited	752,443	0	752,443
0209003498	09/27/02	2002/03	Unlimited	629,105	95,668	724,774
0210003933	10/03/02	2002/03	Unlimited	661,112	7,224	668,337
0211004343	11/23/02	2002/03	Unlimited	1,054,028	170,699	1,224,727
0308004286	08/16/03	2003/04	Unlimited	490,458	93,572	584,030
0312004058	12/27/03	2003/04	Unlimited	664,902	161,038	825,940
0401000424	01/13/04	2003/04	Unlimited	584,135	0	584,135
0403000853	03/15/04	2003/04	Unlimited	436,377	106,955	543,331
0405001211	05/14/04	2003/04	Unlimited	521,151	227,990	749,141
0509002575	12/03/04	2004/05	1,000,000	807,367	2,629,773 *	3,437,140 *
0506001414	06/23/05	2004/05	1,000,000	881,096	0	881,096
0507002799	07/01/05	2005/06	1,000,000	665,427	0	665,427
0509001885	09/28/05	2005/06	1,000,000	308,462	413,671	722,133
0601000103	01/21/06	2005/06	1,000,000	2,366,438 *	0	2,366,438 *
0602003173	02/28/06	2005/06	1,000,000	506,378	0	506,378
0608001735	08/14/06	2006/07	1,000,000	450,487	213,110	663,597
0701000110	01/20/07	2006/07	1,000,000	504,355	0	504,355
0706001687	06/18/07	2006/07	1,000,000	601,632	113,300	714,933
0708001974	08/17/07	2007/08	1,000,000	1,518,446 *	380,284	1,898,730 *
0708002337	08/27/07	2007/08	1,000,000	708,184	0	708,184
0802000349	02/22/08	2007/08	1,000,000	423,228	184,540	607,768
0903000603	03/21/09	2008/09	750,000	3,736,866 *	29,756	3,766,622 *
0906002809	06/12/09	2008/09	750,000	680,452 *	0	680,452
1003000505	03/19/10	2009/10	750,000	634,989	0	634,989
1008001619	08/06/10	2010/11	750,000	1,035,869 *	0	1,035,869 *
1008001950	08/31/10	2010/11	750,000	584,008	0	584,008
100900068	09/23/10	2010/11	750,000	296,287	498,288 *	794,575 *
110400180	04/22/11	2010/11	750,000	425,554	158,903	584,457
121100167	11/14/12	2012/13	750,000	518,743	0	518,743
140600108	06/24/14	2013/14	750,000	3,076,906 *	0	3,076,906 *
150800000	08/03/15	2015/16	750,000	801,034 *	0	801,034 *
170100012	01/08/17	2016/17	750,000	1,938,365 *	1,559,218	3,497,583 *
170100056	01/24/17	2016/17	750,000	1,074,843 *	0	1,074,843 *
180100077	01/26/18	2017/18	750,000	315,035	304,327 *	619,362
180800033	08/13/18	2018/19	750,000	3,534,902 *	16,351,476	19,886,378 *

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 City.

CITY OF OAKLAND
WORKERS' COMPENSATION

Size of Loss Distribution

I. Reported Claim Count

Layer (1)	Prior (2)	2011/12 (3)	2012/13 (4)	2013/14 (5)	2014/15 (6)	2015/16 (7)	2016/17 (8)	2017/18 (9)	2018/19 (10)	2019/20 (11)	2020/21 (12)	Total (2)...(12) (13)	Non-Zero Claim Cumulative Total (14)	Non-Zero Claim Cumulative % of Total (15)
0	2,613	37	13	29	11	20	8	11	19	19	47	2,827		
0.01 - 5,000	24,296	387	368	428	400	394	362	345	400	1,529	1,345	30,254	30,254	78.4%
5,000 - 10,000	1,631	25	30	30	37	38	34	39	25	32	80	2,001	32,255	83.6%
10,000 - 25,000	1,627	32	36	21	23	42	31	30	29	43	81	1,995	34,250	88.8%
25,000 - 50,000	1,176	32	25	19	22	30	28	28	16	21	39	1,436	35,686	92.5%
50,000 - 100,000	972	41	42	33	17	23	30	41	23	29	20	1,271	36,957	95.8%
100,000 - 250,000	859	72	43	47	40	42	40	26	37	28	22	1,256	38,213	99.1%
250,000 - 500,000	183	12	11	12	10	22	19	10	9	6	1	295	38,508	99.8%
500,000 - 750,000	40	0	1	0	0	0	0	1	0	0	0	42	38,550	99.9%
750,000 - 1,000,000	13	0	0	0	0	1	0	0	0	0	0	14	38,564	100.0%
Over 1,000,000	11	0	0	1	0	0	2	0	1	0	0	15	38,579	100.0%
Total	33,421	638	569	620	560	612	554	531	559	1,707	1,635	41,406	38,579	

II. Total Reported Incurred Losses

Layer (1)	Prior (2)	2011/12 (3)	2012/13 (4)	2013/14 (5)	2014/15 (6)	2015/16 (7)	2016/17 (8)	2017/18 (9)	2018/19 (10)	2019/20 (11)	2020/21 (12)	Total (2)...(12) (13)	Non-Zero Claim Cumulative Total (14)	Non-Zero Claim Cumulative % of Total (15)
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
0.01 - 5,000	20,283,441	440,791	407,476	474,270	533,836	519,054	542,278	472,287	454,079	500,280	551,234	25,179,026	25,179,026	4.2%
5,000 - 10,000	11,503,654	168,421	210,841	203,591	266,015	252,953	223,475	273,169	164,948	219,085	547,595	14,033,749	39,212,774	6.6%
10,000 - 25,000	26,455,125	553,862	538,078	380,523	346,198	665,419	481,219	516,130	487,094	676,038	1,346,366	32,446,051	71,658,826	12.0%
25,000 - 50,000	42,147,157	1,180,606	900,866	690,581	734,023	1,043,749	1,019,188	1,049,052	580,913	749,100	1,479,044	51,574,278	123,233,104	20.6%
50,000 - 100,000	68,899,341	2,892,920	3,263,217	2,296,851	1,252,147	1,608,221	2,440,796	2,977,397	1,706,745	2,135,617	1,366,224	90,839,476	214,072,580	35.8%
100,000 - 250,000	132,187,721	11,480,070	6,657,568	7,977,063	6,833,121	6,561,115	6,270,180	4,647,731	6,116,549	4,558,520	3,695,630	196,985,269	411,057,849	68.7%
250,000 - 500,000	60,888,026	3,957,455	3,571,667	3,536,814	3,095,373	6,908,329	5,956,398	3,010,693	2,543,646	1,842,213	318,000	95,628,616	506,686,465	84.7%
500,000 - 750,000	24,867,240	0	518,743	0	0	0	0	619,362	0	0	0	26,005,345	532,691,810	89.1%
750,000 - 1,000,000	11,016,720	0	0	0	0	801,034	0	0	0	0	0	11,817,754	544,509,564	91.0%
Over 1,000,000	25,988,644	0	0	3,076,906	0	0	4,572,426	0	19,886,378	0	0	53,524,354	598,033,918	100.0%
Total	\$424,237,070	\$20,674,124	\$16,068,456	\$18,636,599	\$13,060,714	\$18,359,875	\$21,505,960	\$13,565,822	\$31,940,352	\$10,680,854	\$9,304,092	\$598,033,918	\$598,033,918	

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

Data was provided by the City.