

**CITY OF OAKLAND
COUNCIL AGENDA REPORT**

FILED
OFFICE OF THE CITY CLERK
OAKLAND

2005 JAN 13 PM 8:17

TO: Office of the City Administrator
ATTN: Deborah Edgerly
FROM: Finance & Management Agency
DATE: January 25, 2005

RE: RESOLUTION AUTHORIZING THE BUDGETARY APPROPRIATION OF MONIES FROM THE SELF-INSURANCE GENERAL LIABILITY FUND (FUND 1100) TO DEPARTMENTS FOR FY 2005-06 AND 2006-07 ALLOCATION OF GENERAL LIABILITY COSTS BASED ON IMPLEMENTATION OF THE "PHOENIX MODEL" OF RISK MANAGEMENT COST ALLOCATION

SUMMARY

On January 6, 2004, City Council directed staff to implement a Risk Management Cost Allocation Program to allocate monies from the Self Insured General Liability Fund (Fund 1100) to the Oakland Police Department, Oakland Fire Department, Public Works Agency and Office of Parks and Recreation. The monies appropriated to the departments would then be used for payment of General Liability payouts during the course of the budgetary year in question. This program was modeled after the Risk Management Cost Allocation Program utilized by the City of Phoenix, Arizona, hereinafter referred to as "the Phoenix model".

This report transmits the findings of the Risk Management consulting firm, ArmTech, used to analyze historic loss information for the purpose of establishing the cost allocation amounts for fiscal year 2005-06 and estimate the amounts for 2006-07. The data analyzed by ArmTech was provided by the City Attorney's Office. The consultant's report is attached hereto for Council's review. The findings in the ArmTech report should be used by the Budget Office in establishing the fund amounts within each department.

FISCAL IMPACTS

The total General Liability payout is projected to be \$10,612,110 for Fiscal Year 2005-06 and \$11,287,215 for Fiscal Year 2006-07. The following amounts should be allocated to each department:

Department	Allocated Percent of Projected Loss	2005-06 Projected Loss / Proposed Budget	2006-07 Projected Loss / Proposed Budget
Fire Department	8.05%	\$854,655	\$909,025
Parks and Recreation	2.39%	\$253,452	\$269,575
Police Services Agency	31.45%	\$3,337,556	\$3,549,880
Public Works Agency	42.07%	\$4,464,887	\$4,748,928
Other Departments	16.03%	\$1,701,560	\$1,809,807
Total	100.00%	\$10,612,110	\$11,287,215

Item # _____
Finance & Management Committee
January 25, 2005

These figures are based on five years of claim and exposure data assuming a loss cap of \$50,000 placed on each claim. The loss cap will cause any claim payout amounts over \$50,000 to be paid from the “Other Departments” fund. This cap will assist in neutralizing the loss impact caused by large, aberrant cases, while still holding departments accountable, in part, for their loss activity.

The recommended funding amounts represent an increase from the FY 2004-05 Midcycle Adopted Budget for the Self-Insurance Liability Fund of \$3,425,397 for FY 2005-06 and \$4,100,502 for FY 2006-07. The table below compares the Midcycle appropriations to the FY 2005-07 proposed funding amounts. An explanation for these increases is provided in the Recommendations and Rationale portion of this report.

Department	2004-05 Midcycle Adopted Budget	2005-06 Projected Loss / Proposed Budget	2006-07 Projected Loss / Proposed Budget
Fire Department	\$114,444	\$854,655	\$909,025
Parks and Recreation	\$53,770	\$253,452	\$269,575
Police Services Agency	\$1,431,299	\$3,337,556	\$3,549,880
Public Works Agency	\$969,546	\$4,464,887	\$4,748,928
Other Departments	\$4,617,654	\$1,701,560	\$1,809,807
Total	\$7,186,713	\$10,612,110	\$11,287,215

The above changes, while increasing the baseline budget, will not impact the estimated shortfall figures for the General Purpose Fund, as reported to the City Council at the November 29, 2004 retreat. Moreover, the 10-year repayment schedule for the Self-Insurance Liability Fund (also presented at the November 29th retreat), if approved by the Council as part of the FY 2005-07 budget adoption, will eliminate the negative fund balance. Currently, the negative fund balance for the Self-Insurance Liability stands at over \$22 million.

If compared to the actual prior year spending (as opposed to the budgeted amounts), the recommended funding amounts represent significantly lower increases. Compared to the FY 2002-03 actual spending, the FY 2005-06 amount represents an increase of \$1,479,870 while the FY 2006-07 amount reflects an increase of \$2,154,975. Compared to the FY 2003-04 spending, the increases are \$2,059,956 for FY 2005-06 and \$2,735,061 for FY 2006-07. The table on the following page provides the details by department.

Department	2002-03 Actual Spending	2003-04 Actual Spending	2005-06 Projected Loss/ Proposed Budget	2006-07 Projected Loss/Proposed Budget
Fire Department	\$46,498	\$81,935	\$854,655	\$909,025
Parks and Recreation	\$142,656	\$325,266	\$253,452	\$269,575
Police Services Agency	\$3,881,142	\$2,364,130	\$3,337,556	\$3,549,880
Public Works Agency	\$951,632	\$2,277,941	\$4,464,887	\$4,748,928
Other Departments	\$4,110,312	\$3,502,882	\$1,701,560	\$1,809,807
Total	\$9,132,240	\$8,552,154	\$10,612,110	\$11,287,215

The figures have been adjusted to reflect the reorganization of the Office of Parks and Recreation and the Public Works Agency that occurred this year. However, they do not take into account the funds already set aside for the Sewer Liability Losses used by the Public Works Agency. The Sewer Liability Fund (3100) budgeted \$275,000 in FY 2004-05 for payment of Sewer Liability Claims.

Note that the figures reported for FY 2006-07 will be modified based on next year's report findings. As such, mid-cycle adjustments may be necessary.

BACKGROUND

On January 6, 2004, City Council directed staff to implement a Risk Management Cost Allocation Program (RMCAP) to allocate monies from the Self Insured General Liability Fund (Fund 1100) to the Oakland Police Department, Oakland Fire Department, Public Works Agency and Office of Parks and Recreation. The monies allocated to the departments would then be used for payment of General Liability payouts during the course of the budgetary year in question. This program was modeled after the Risk Management Cost Allocation Program utilized by the City of Phoenix, Arizona, hereinafter referred to as "the Phoenix model".

Other components of the City Council directive regarding the RMCAP include:

- 1) Create a system of rewards and/or recognition for employees in each division whose job performance contributed to loss prevention in the previous year;
- 2) Fund the development of a loss prevention program in the Public Works Agency and Oakland Police Department, developed in conjunction with the City Attorney's Office and Risk Management, to target 15% loss reduction;
- 3) Continue regular reporting on losses and loss prevention to the Finance and Management Committee;
- 4) Require departments to return to Council if they exceed their budget allocation and need additional funding for liability payouts; and,
- 5) Allow departments to retain a percentage of their unspent liability budget allocation and the Finance Committee should establish guidelines for use of those retained funds.

This report meets the requirements of the Phoenix model reporting structure and provides loss reporting information as required by component 3 of the above directives. An accompanying agenda report produced by the Public Works Agency will address components 1 and 2 above. The Oakland Police Department presented their Loss Prevention report to City Council in October, 2004.

KEY ISSUES AND IMPACTS

There are two primary goals of the Risk Management Cost Allocation Plan (RMCAP):

1. To allocate and budget funds sufficient to cover the City's risk funding needs; and,
2. To charge loss funds in an equitable way that rewards departments with better-than-expected loss experience and provides incentives for all departments to improve risk management practices.

Based on actuarial analysis, the recommended funding levels reported in the Fiscal Impacts section of this report should be used as the target fund usage for the payment of departmental general liability losses.

The attached actuarial report also provides loss reporting data in exhibits LI-19 through LI-21.

- Exhibit LI-19 identifies department specific information related to the frequency and severity of claims over the past 5 years.
- Exhibit LI-20 reports the total paid losses by department over the past 5 years.
- Exhibit LI-21 reports the top loss causes by department relevant to highest frequency and highest average payout over the past 5 years.

A supplemental actuarial report is also attached for the purpose of apportioning the expected losses between the Parks Services Division of the Office of Parks and Recreation and that of the Recreation Services Division. As a result of the reorganization of OPR and PWA, the Parks Services portion was added to the Public Works Agency's projected loss funds for each Fiscal Year reported.

Beginning in July 2004, the Risk Management Division has worked closely with the Oakland Police Department (OPD) and Public Works Agency (PWA) to facilitate their loss prevention efforts.

For example, Risk Management has funded a number of equipment purchases for OPD to improve Officer Safety. Risk Management was instrumental in discontinuing the use and purchase of defective Police Body Armor constructed with Xylon – a material that has been found ineffective in the stopping of bullets and projectiles, thereby increasing the risk of injury and/or death to our police personnel. Risk Management has also funded the replacement of traditional duty gear belts with ergonomically-engineered duty gear belts, thereby reducing the risk of back injury and presumed workers' compensation claims among sworn officers. Risk Management continues to collaborate with OPD on a number of other loss reduction initiatives designed specifically to address general liability and workers' compensation loss exposures.

Item # _____

Risk Management has worked closely with PWA in the reinstatement of the departmental Safety Committee. Staffed by supervisory and management level personnel, one of its objectives is to implement and administer a loss reduction incentive program. Funded by Risk Management, this incentive program is designed to recognize employees who have made contributions to the reduction and/or prevention of loss on a daily basis. PWA will provide greater detail of this program in their corresponding report. Additionally, Risk Management has made available to PWA the services of a professional safety consultant with the sole purpose of providing dedicated safety services to PWA. This consultant currently works two days per week with PWA, conducting inspections, accident investigations, trainings, program development and other safety related services. Risk Management also conducted an Employee Health Fair specifically for PWA personnel. This health fair provided opportunity to personnel to have a number of health and wellness screenings conducted at no cost to the employee. The intent of this annual event is to increase health awareness among the employee population and give them confidential access to medical professional resources that may not be available through their personal health insurance. Risk Management continues to actively participate in the development and growth of PWA's internal risk management program.

SUSTAINABLE OPPORTUNITIES

None.

DISABILITY AND SENIOR CITIZEN ACCESS

None.

RECOMMENDATION(S) AND RATIONALE

Staff recommends that the City Council approve and adopt the attached resolution authorizing the budgetary appropriation of monies from the Self Insurance General Liability Fund (FUND 1100) to departments for the FY 2005-06 and FY 2006-07 allocation of general liability costs based on the implementation of the "PHOENIX MODEL" of Risk Management Cost Allocation. Table 1, below, reports the amounts recommended by ArmTech necessary to cover the projected payouts for FYs 2005-06 and 2006-07. This estimate is based on data provided by the City Attorney's Office. This information is also reflected in Exhibits LI-27 and LI-28 of the December 16, 2004 Actuarial Study (Attachment B).

Table 1: Recommended Self- Insured Funding by Department

<u>Department</u>	<u>Allocated Percent of Projected Loss</u>	<u>2005-06 Projected Loss Fund</u>	<u>2006-07 Projected Loss Fund</u>
Fire Department	8.05%	\$854,655	\$909,025
Parks and Recreation	2.39%	\$253,452	\$269,575
Police Services Agency	31.45%	\$3,337,556	\$3,549,880
Public Works Agency	42.07%	\$4,464,887	\$4,748,928
Other Departments	16.03%	\$1,701,560	\$1,809,807
Total	100.00%	\$10,612,110	\$11,287,215

The Actual Expenditures in the Self-Insured Fund (Fund 1100) have exceeded the Baseline Budget since at least FY1999-2000. To avoid additional deficit spending in this Fund, the actuary consultant recommends allocating the amounts reported in Table 1. These amounts vary significantly from the FY 2005-06 and FY 2006-07 Baseline Budget amounts.

Table 2 reflects, that based on the actuarial estimates, the baseline budget amounts for departmental Self-Insured Loss funding is underfunded by 32%. This amount has not been significantly modified since FY 1999-2000 and does not take into account the current loss activity and impact inflation may have on General Liability payouts. This estimate is also reflective of the City Attorney’s Office reserving practice for open cases.

Table 2: FY 2005-06 and FY 2006-07 Baseline Budget

Department	Allocated Percent of Projected Loss	2005-06 Baseline	2006-07 Baseline
Fire Department	1.6%	\$114,444	\$114,444
Parks and Recreation	0.7%	\$53,770	\$53,770
Police Services Agency	19.9%	\$1,431,299	\$1,431,299
Public Works Agency	13.5%	\$ 969,546	\$ 969,546
Other Departments	64.3%	\$4,617,654	\$4,617,654
Total:	100.0%	\$7,186,713	\$7,186,713

Table 3 reports the difference between the baseline budget and the recommended amounts. Ultimately it represents an overall allocation increase of 32.3% in order to meet the actuarial estimates for projected payouts in the upcoming fiscal years.

Table 3: Change in Baseline as a Result of Report Findings		
Department	2005-06 Baseline Change	2006-07 Baseline Change
Fire Department	\$740,211	\$794,581
Parks and Recreation	\$199,682	\$215,805
Police Services Agency	\$1,906,257	\$2,118,581
Public Works Agency	\$3,495,341	\$3,779,382
Other Departments	(\$2,916,094)	(\$2,807,847)
Total:	\$3,425,397	\$4,100,502

It must be noted that the above changes, while increasing the baseline budget, will not impact the estimated shortfall figures for the General Purpose Fund, as reported to the City Council at the November 29, 2004 retreat. Moreover, the 10-year repayment schedule for the Self-Insurance Liability Fund (also presented at the November 29th retreat), if approved by the Council as part of the FY 2005-07 budget adoption, will eliminate the negative balance in this fund by the end of the 10-year period. Currently, the negative fund balance for the Self-Insurance Liability stands at over \$22 million.

ACTION REQUESTED OF THE CITY COUNCIL

Staff requests that the City Council approve and adopt the attached resolution authorizing the budgetary appropriation of monies from the Self Insurance General Liability Fund (FUND 1100) to departments for the FY 2005-06 and FY 2006-07 allocation of general liability costs based on the implementation of the "PHOENIX MODEL" of Risk Management Cost Allocation. The specific amounts to be allocated are represented in the table below:

<u>Department</u>	<u>Allocated Percent of Projected Loss</u>	<u>2005-06 Projected Loss Fund</u>	<u>2006-07 Projected Loss Fund</u>
Fire Department	8.05%	\$854,655	\$909,025
Parks and Recreation	2.39%	\$253,452	\$269,575
Police Services Agency	31.45%	\$3,337,556	\$3,549,880
Public Works Agency	42.07%	\$4,464,887	\$4,748,928
Other Departments	16.03%	\$1,701,560	\$1,809,807
Total	100.00%	\$10,612,110	\$11,287,215

Respectfully submitted,



William Noland

Director, Finance & Management Agency

Report prepared by:

Deborah Cornwell

Safety & Insurance Manager

Attachments (2)

APPROVED AND FORWARDED TO THE
FINANCE AND MANAGEMENT COMMITTEE:


OFFICE OF THE CITY ADMINISTRATOR



ATTACHMENT A

**City of Oakland,
California**

**Actuarial Study of the
Self-Insured Liability Program
as of June 30, 2004**

November 30, 2004



November 30, 2004

904-006

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

Attn: Ms. Deb Cornwell
Insurance Manager

**Actuarial Study of the
Self-Insured Liability Program
as of June 30, 2004**

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,

ARM TECH

By Mujtaba Datto
Mujtaba Datto, ACAS, MAAA
Consulting Actuary

MD:pem

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Table of Contents

I.	Background	1
II.	Objectives	2
III.	Conclusions	3

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 liability (combined general and automobile liability) until November 11, 1998. Effective November 11, 1998, the City purchased excess insurance with a self-insured retention (SIR) of \$2 million and a \$25 million aggregate.

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, 2004.

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 2004/05 and 2005/06.

The projected ultimate losses are the accrual value of losses with accident dates during 2004/05 and 2005/06, regardless of report or payment date. The amounts are limited to the self-insured retention.

3. **Project Losses Paid.** Project losses paid during the 2004/05 through 2006/07 years.

The projected losses paid are the claim disbursements during 2004/05 through 2006/07, regardless of accident or report date. The amounts are limited to the self-insured retention.

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

5. **Analysis by Department and Cause of Loss.** Analyze frequency (number of claims per exposure), severity (average cost per claim), and loss rate (cost per exposure) by City department. Review frequency and severity by cause of loss.

6. **Recommend Funding.** Recommend funding by City department for 2005/06 and 2006/07.

The recommend funding is based on expected loss payments in 2005/06 and 2006/07. The funding is allocated by City department based on each department's exposure to loss and actual loss experience.

III. Conclusions

We have reached the following conclusions:

1. Estimate Outstanding Losses

We estimate outstanding losses as of June 30, 2004 to be as shown in Table III-1.

Table III-1
Estimated Outstanding Losses
June 30, 2004

(A)	Estimated outstanding losses	\$36,305,087
(B)	Present value of estimated outstanding losses	33,953,983

Note: (A) and (B) are from Exhibit LI-12.

The present value of the estimated outstanding losses is the estimated outstanding losses discounted to reflect future investment earnings. It is based on a 3.0% interest rate.

All costs other than losses are additional.

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.

2. Project Ultimate Losses

We project ultimate losses for 2004/05 and 2005/06 to be as shown in Tables III-2A and III-2B.

Table III-2A
Projected Ultimate Losses
2004/05

	Item (1)	Amount (2)	Rate per \$100 of Payroll (3)
(A)	Projected ultimate losses	\$12,358,047	\$3.48
(B)	Present value of projected ultimate losses	11,233,464	3.16

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

Table III-2B
Projected Ultimate Losses
2005/06

	Item (1)	Amount (2)	Rate per \$100 of Payroll (3)
(A)	Projected ultimate losses	\$13,139,756	\$3.55
(B)	Present value of projected ultimate losses	11,944,038	3.23

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

The present value of the projected ultimate losses is based on a 3.0% interest rate.

All costs other than losses are additional.

3. Project Losses Paid

We project losses paid during 2004/05 through 2006/07 to be as shown in Table III-3.

Table III-3
Projected Losses Paid
2004/05 through 2006/07

Item (1)	2004/05 (2)	2005/06 (3)	2006/07 (4)
(A) Projected losses paid	\$10,018,606	\$10,612,110	\$11,287,215

Note: (2) is from Exhibit LI-13.
(3) is from Exhibit LI-14.
(4) is from Exhibit LI-15.

All costs other than losses are additional.

4. Affirm GASB Statement No. 10

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

5. Analysis by Department and Cause of Loss

The frequency, severity, and loss rate by City department is summarized in Table III-5A. Further analysis by department by year is provided in Exhibit LI-19.

**Table III-5A
Analysis by Department
1999/00 through 2003/04**

Department (1)	Number of Claims per \$1 Million of Payroll (2)	Average Cost per Claim (3)	Rate per \$100 of Payroll (4)
(A) Fire Department	0.47	\$5,614	\$0.26
(B) Parks and Recreation	8.40	2,128	1.79
(C) Police Services Agency	3.50	10,549	3.69
(D) Public Works	10.47	7,097	7.43
(E) Other	1.76	4,732	0.83
(F) Total	3.51	\$7,239	\$2.54

Note: (A) through (F) are from Exhibit LI-19.

Exhibit LI-20 shows the cumulative payments as of June 30, 2004 by department for the latest five claim periods from 1999/00 to 2003/04. Table III-5B shows the five year summary.

**Table III-5B
Payments by Department
1999/00 through 2003/04 as of June 30, 2004**

Department (1)	Total Paid (2)
(A) Fire Department	\$255,513
(B) Parks and Recreation	917,217
(C) Police Services Agency	8,695,908
(D) Public Works	5,129,830
(E) Other	2,106,599
(F) Total	\$17,105,067

Note: (A) through (F) are from Exhibit LI-20.

Exhibit LI-21 shows the top three categories of loss by frequency and average payment. This is shown by department and represents the combined loss experience from 1999/00 through 2003/04 valued as of June 30, 2004.

6. Recommend Funding

The City requested that ARM Tech develop a cost allocation plan that is similar to that employed by the City of Phoenix. Based on discussions with staff of the City of Phoenix, we learned that they allocate their costs by department based on five years of claim and exposure data (number of employees). Each claim was capped at \$50,000. The allocation is provided in Exhibits LI-22 through LI-28.

We recommend funding by City department for 2005/06 and 2006/07 to be as shown in Table III-6.

**Table III-6
Recommended Funding by Department
2005/06 and 2006/07**

Department (1)	Projected Loss Funds 2005/06 (2)	Projected Loss Funds 2006/07 (3)
(A) Fire Department	\$854,629	\$908,998
(B) Parks and Recreation	309,535	329,227
(C) Police Services Agency	3,337,456	3,549,773
(D) Public Works	4,408,981	4,689,464
(E) Other	1,701,509	1,809,753
(F) Total	\$10,612,110	\$11,287,215

Note: (2) is from Exhibit LI-27.
(3) is from Exhibit LI-28.

We have shown the funding needs based on expected payments in 2005/06 and 2006/07. Other costs including excess insurance, claims adjusting, and other administrative expenses are not included.

There are two primary goals of the cost allocation plan (the Plan):

1. To allocate and budget funds sufficient to cover the City's risk funding needs.
2. To charge loss funds in an equitable way that rewards departments with better-than-expected loss experience and provides incentives for all departments to improve risk management practices.

The Plan accomplishes this by looking at five years of exposures (i.e., payroll) in Exhibit LI-22 and five years of incurred losses in Exhibit LI-23. One would expect a department with 5% of exposures to have 5% of losses. Relative loss rates are calculated in Exhibits 3 and 4 to demonstrate department departure from this expectation.

Next, the Plan compares each department's experience to the overall City average. Experience modification factors (Xmods) are calculated in Exhibit LI-26 to measure department departure from the average.

In Exhibit LI-27, each department's Xmod is applied to its current exposure to generate a "weighted exposure," share of weighted exposure to be applied to the City's project funding needs for 2005/06. A similar calculation is performed in Exhibit LI-28 for 2006/07.

The exhibits are described in greater detail below.

1. **LI-22** shows **Payroll** for the five-year period 1999/00 through 2003/04 and calculates each department's percent of payroll.
2. **LI-23** calculates **Capped Losses** based on incurred losses and number of claims over \$50,000 for 1999/00 through 2003/04. Losses are capped to minimize the impact of a single large loss.

If losses were not capped, a single large loss could greatly increase a department's share of costs. Capping is designed to stabilize costs from year to year. We believe a \$50,000 cap provides a good balance between stability and responsiveness to a department's own losses.

3. **LI-24** calculates **Relative Loss Rates** for each of the five years from 1999/00 through 2003/04. The percent of capped losses divided by the percent of payroll is the relative loss rate.

A relative loss rate greater than 1.000 means the department has proportionally more capped losses than payroll. This indicates relatively poor loss experience. A relative loss rate less than 1.000 indicates relatively good experience.

4. **LI-25** calculates an **Average Relative Loss Rate** for years 1999/00 through 2003/04. A five-year average provides stability and mitigates the effects of one bad year a department may have experienced.
5. **LI-26** calculates an **Experience Modification** factor (Xmod) for each department. This is a measure of whether a department's loss experience is better or worse than the City's average.

The “Weight” column shows the weight given to each department’s own loss experience. If little weight is given to a department’s own loss experience:

- Its experience modification will be close to 1.000, regardless of how good or bad its loss experience.
- Its share of total costs will be close to its share of payroll, regardless of how good or bad its loss experience.

If a lot of weight is given to a department’s own loss experience, its experience modification factor will be able to move away from 1.000.

For most organizations, smaller departments do not want costs to fluctuate much from year to year, and individual loss experience is not a good predictor of long-term trends. For this reason, little weight is given to the loss experience of smaller departments. The opposite is true for large departments.

The minimum weight is 10%. A minimum weight was assigned, so even a small department would be given some credit for its own loss experience. The largest department is assigned a weight of 75%.

8. **LI-27** calculates each department’s recommended funding (“**Projected Loss Funds**”) for 2005/06. A department’s final loss funds is obtained by:
 - a. Calculating each department’s “experience weighted exposure” for the year in which costs are to be allocated. Experience weighted exposure is payroll for the year multiplied by the Xmod calculated in Exhibit LI-26.
 - b. Calculating each department’s percent of experience weighted exposure.
 - c. Multiplying the total funding needs by each department’s percentage of experience weighted exposure.
9. **LI-28** calculates each department’s recommended funding (“**Projected Loss Funds**”) for 2006/07, in a manner consistent with that used in Exhibit LJ-27.

The following points are of importance.

1. **Equity.** The proposed rating plan is an equitable way to determine each department’s loss funds. It recognizes each department’s exposure to loss and actual loss experience.

2. **Experience period.** We have used five years of loss experience. This is long enough to smooth the results of a single year (good or bad).
3. **Loss caps.** We believe loss caps of \$50,000 are most appropriate for the City. A \$50,000 cap captures the majority of individual claims without an undue penalty for the severity of individual claims.

We tested the cap at \$100,000, and the results are not significantly different. Table 1 below shows the Xmods at the \$50,000 cap and the alternative \$100,000 cap.

**Table I-1
Experience Modification Factors**

Program (1)	\$50,000 Cap (2)	\$100,000 Cap (3)
(A) Fire Department	0.447	0.442
(B) Parks and Recreation	1.085	1.028
(C) Public Services Agency	1.111	1.134
(D) Public Works	2.009	1.958
(E) Other	0.529	0.550

Appendix A
Conditions and Limitations

Conditions and Limitations

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

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

- **Statutory and Judicial Changes.** Legislatures and judiciaries may change statutes that govern indemnification. This includes benefit levels for workers compensation, immunities and limitations for liability, and other similar issues. Unless otherwise stated, we assumed no statutory changes subsequent to the date this study was prepared.
- **Supplemental Data.** In addition to the data provided by the organization, we supplemented our analysis with data from similar organizations and insurance industry statistics, as we deemed appropriate.
- **Usage.** This study has been prepared for the usage of the organization shown on the transmittal page. It was not prepared for and may not be appropriate for use by other organizations. Other organizations should obtain written permission from ARM Tech prior to use of this study.

Appendix B
Glossary of Actuarial Terms

Glossary of Actuarial Terms

Actuarial Methods (Most Common)

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

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

The following describes each method:

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

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

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

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

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

Actuary

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

Allocated Loss Adjustment Expenses

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

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

American Academy of Actuaries

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

Benefits

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

Casualty Actuarial Society

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

Claim

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

Claims Made

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

Composite Rate

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

Confidence Level

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

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

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

Coverage

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

Credibility

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

Dates

There are at least three milestone dates in a claim. They are the date of injury or accident, the date of report and the date of closure. It is best if each of these dates is recorded. Some organizations may also keep the date a claim becomes a lawsuit, as opposed to a demand. ARM Tech 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. ARM Tech suggests collecting exposure data with the following characteristics:

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

Generally Accepted Accounting Principles (GAAP)

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

Incurred But Not Reported

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

IBNER are the actuary's estimate of the inadequacy of case reserves. Most claims settle at amounts close to what is set by the claims administrator. Some claims close favorably and some emerge as more expensive. On balance, case reserves tend to be too low (especially for recent years). IBNER is the actuary's estimate of the amount total case reserves will rise upon closure.

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

Insurance Services Office (ISO)

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

Investment Income

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

Limited

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

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

Loss Development

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

Manual Rates

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

National Council on Compensation Insurance (NCCI)

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

Net

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

Occurrence

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

Pool

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

Premium

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

Present Value

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

Probability

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

Projected Losses Paid

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

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

Projected Ultimate Losses

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

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

Rate

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

Retrospective Rating

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

Salvage

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

Schedule Rating

The application of debits or credits within established ranges for various characteristics of a risk according to an established schedule of items. Under liability and automobile insurance, the schedule rating plan allows credits and debits for various good or bad features of a particular commercial risk. An example in automobile schedule rating would be allowing credits for driver training classes or fleet maintenance programs.

Self-Insurance Retention (SIR)

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

Society of Actuaries (SOA)

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

Standard Premium

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

State Fund

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

Statutory Accounting Principles (SAP)

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

Unallocated Loss Adjustment Expenses

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

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

Exhibits

The attached exhibits detail our analysis.

CITY OF OAKLAND
LIABILITY

Exhibit LL-1

Data Summary as of June 30, 2004

Claim Period (1)	Specific Self-Insured Retention (2)	Aggregate Retention (3)	Months of Development 6/30/04 (4)	Payroll (000) (5)	Reported Claims 6/30/04 (6)	Open Claims 6/30/04 (7)	Limited Paid Losses 6/30/04 (8)	Limited Case Reserves 6/30/04 (9)	Limited Reported Incurred Losses 6/30/04 (10)
1989/90	Unlimited	None	180.0	Not Provided	2	2	5629,876	\$1,573,437	\$2,203,313
1990/91	Unlimited	None	168.0	Not Provided	0	0	0	0	0
1991/92	Unlimited	None	156.0	Not Provided	0	0	0	0	0
1992/93	Unlimited	None	144.0	Not Provided	0	0	0	0	0
1993/94	Unlimited	None	132.0	Not Provided	0	0	0	0	0
1994/95	Unlimited	None	120.0	Not Provided	1	1	1,886	33,114	35,000
1995/96	Unlimited	None	108.0	Not Provided	3	3	484,155	3,411,817	2,995,972
1996/97	Unlimited	None	96.0	Not Provided	0	0	0	0	0
1997/99	Unlimited	None	84.0	Not Provided	3	3	534,805	284,419	819,224
1998/99	2,000,000	None	72.0	Not Provided	11	11	40,183	271,899	312,072
1999/00	2,000,000	None	60.0	256,973	1,304	27	7,169,138	806,696	7,975,824
2000/01	2,000,000	None	48.0	270,627	1,227	40	5,764,525	1,520,852	7,285,377
2001/02	2,000,000	None	36.0	293,519	982	74	2,464,254	5,563,978	8,028,232
2002/03	2,000,000	None	24.0	305,541	969	113	1,352,638	5,500,597	6,853,235
2003/04	2,000,000	None	12.0	397,406	551	197	354,511	4,002,131	4,356,642
Total					5,063	471	\$18,795,972	\$22,958,918	\$41,764,890

Claim periods 1998/99 and prior only include information on open claims

(8), (9) and (10) are net of specific self insured retention

Data was provided by the City.

ARM TECH

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)	Months of Development (5)	Percent Losses Paid (6)	Percent Losses Reported (7)	Percent Claims Reported (8)
360.0	100.0%	100.0%	100.0%	354.0	100.0%	100.0%	100.0%
348.0	100.0%	100.0%	100.0%	342.0	100.0%	100.0%	100.0%
336.0	100.0%	100.0%	100.0%	330.0	100.0%	100.0%	100.0%
324.0	100.0%	100.0%	100.0%	318.0	100.0%	100.0%	100.0%
312.0	100.0%	100.0%	100.0%	306.0	100.0%	100.0%	100.0%
300.0	100.0%	100.0%	100.0%	294.0	100.0%	100.0%	100.0%
288.0	100.0%	100.0%	100.0%	282.0	100.0%	100.0%	100.0%
276.0	100.0%	100.0%	100.0%	270.0	100.0%	100.0%	100.0%
264.0	100.0%	100.0%	100.0%	258.0	100.0%	100.0%	100.0%
252.0	100.0%	100.0%	100.0%	246.0	100.0%	100.0%	100.0%
240.0	100.0%	100.0%	100.0%	234.0	100.0%	100.0%	100.0%
228.0	100.0%	100.0%	100.0%	222.0	99.9%	100.0%	100.0%
216.0	99.9%	100.0%	100.0%	210.0	99.9%	100.0%	100.0%
204.0	99.9%	100.0%	100.0%	198.0	99.9%	100.0%	100.0%
192.0	99.9%	100.0%	100.0%	186.0	99.8%	100.0%	100.0%
180.0	99.8%	100.0%	100.0%	174.0	99.8%	100.0%	100.0%
168.0	99.7%	100.0%	100.0%	162.0	99.7%	100.0%	100.0%
156.0	99.6%	100.0%	100.0%	150.0	99.6%	100.0%	100.0%
144.0	99.5%	100.0%	100.0%	138.0	99.4%	100.0%	100.0%
132.0	99.3%	100.0%	100.0%	126.0	99.1%	100.0%	100.0%
120.0	99.0%	99.9%	100.0%	114.0	98.7%	99.7%	100.0%
108.0	98.5%	99.5%	100.0%	102.0	97.6%	99.0%	100.0%
96.0	96.6%	98.5%	100.0%	90.0	95.2%	97.8%	100.0%
84.0	93.8%	97.1%	100.0%	78.0	91.8%	96.7%	100.0%
72.0	89.8%	96.2%	100.0%	66.0	86.1%	95.3%	100.0%
60.0	82.4%	94.3%	100.0%	54.0	76.7%	91.0%	99.9%
48.0	69.8%	87.6%	99.8%	42.0	60.8%	81.1%	96.6%
36.0	51.7%	74.6%	99.3%	30.0	40.6%	65.4%	98.4%
24.0	29.5%	56.1%	97.4%	18.0	19.9%	43.4%	84.8%
12.0	10.2%	30.6%	72.2%	6.0	5.1%	15.3%	36.1%

(2), (3) and (4) are based on other similar programs with which we are familiar

(6), (7) and (8) are interpolated, based on (2), (3) and (4), respectively

CITY OF OAKLAND
LIABILITY

Exhibit 11.2

Developed Limited Paid Losses

Claim Period (1)	Months of Development 6/30/04 (2)	Limited Paid Losses 6/30/04 (3)	Percent Losses Paid (4)	Developed Limited Paid Losses (3)-(4) (5)
1989/90	180.0	\$625,876	90.6%	\$630,990
1990/91	168.0	0	99.7%	0
1991/02	150.0	0	99.6%	0
1992/93	144.0	0	99.5%	0
1993/94	132.0	0	99.3%	0
1994/95	120.0	1,866	99.0%	1,906
1995/96	108.0	464,155	98.5%	491,528
1996/97	96.0	0	98.6%	0
1997/98	84.0	534,805	93.8%	570,154
1998/99	72.0	40,183	89.8%	44,748
1999/00	60.0	7,169,138	82.4%	8,273,226 *
2000/01	48.0	5,764,525	69.8%	7,393,302 *
2001/02	36.0	2,464,254	51.7%	4,766,449
2002/03	24.0	1,352,638	29.5%	4,585,214
2003/04	12.0	354,511	10.2%	3,475,602

* - Indicates large claim(s) limited to retention. For details, see Exhibit LI-18

(3) is from Exhibit LI-1

(4) is from Exhibit LI-2.

CITY OF OAKLAND
LIABILITY

Exhibit LI-4

Developed Limited Reported Incurred Losses

Claim Period (1)	Months of Development 6/30/04 (2)	Limited Reported Incurred Losses 6/30/04 (3)	Percent Losses Reported (4)	Developed Limited Reported Incurred Losses (3)/(4) [*] (5)
1989/90	180.0	\$2,203,313	100.0%	\$2,203,313
1990/91	165.0	0	100.0%	0
1991/92	150.0	0	100.0%	0
1992/93	144.0	0	100.0%	0
1993/94	132.0	0	100.0%	0
1994/95	120.0	35,000	99.9%	35,020
1995/96	108.0	3,890,572	98.8%	3,915,560
1996/97	96.0	0	98.5%	0
1997/98	84.0	819,224	97.1%	843,691
1998/99	72.0	312,072	98.2%	324,399
1999/00	60.0	7,975,824	94.3%	8,337,030 *
2000/01	48.0	7,285,377	87.6%	8,000,535 *
2001/02	36.0	6,028,232	74.6%	10,761,705 *
2002/03	24.0	6,853,235	56.1%	11,924,317 *
2003/04	12.0	4,356,642	30.6%	9,701,446 *

* - Indicates large claim(s) limited to retention. For details, see Exhibit LI-1B

(3) is from Exhibit LI-1

(4) is from Exhibit LI-2

CITY OF OAKLAND
LIABILITY

Exhibit L-5

Developed Limited Case Reserves

Claim Period (1)	Months of Development 6/30/04 (2)	Percent Losses Paid (3)	Percent Losses Reported (4)	Percent Losses Reserved 6/30/04 (14)-(3) (100.0%-(3)) (5)	Limited Paid Losses 6/30/04 (6)	Limited Case Reserves 6/30/04 (7)	Developed Limited Case Reserves (6)+(7)+(5) (8)
1989/90	180.0	99.8%	100.0%	100.0%	\$629,870	\$1,573,437	\$2,203,364
1990/91	169.0	99.7%	100.0%	100.0%	0	0	0
1991/92	156.0	99.6%	100.0%	99.9%	0	0	0
1992/93	144.0	99.5%	100.0%	99.7%	0	0	0
1993/94	132.0	99.3%	100.0%	98.5%	0	0	0
1994/95	120.0	99.0%	99.9%	92.9%	1,880	35,114	37,547
1995/96	108.0	98.5%	99.5%	60.7%	464,155	3,411,817	5,601,581
1996/97	96.0	96.5%	98.5%	55.9%	0	0	0
1997/98	84.0	93.8%	97.1%	53.2%	534,805	284,419	1,069,169
1998/99	72.0	89.8%	96.2%	62.7%	40,182	271,888	473,565
1999/00	60.0	82.4%	94.3%	67.6%	7,169,138	806,680	8,362,219
2000/01	48.0	69.8%	87.6%	58.9%	5,764,525	1,520,852	8,344,840
2001/02	36.0	51.7%	74.6%	47.4%	2,464,254	1,563,978	14,037,699 *
2002/03	24.0	29.5%	56.1%	37.7%	1,352,636	5,500,597	14,665,143 *
2003/04	12.0	10.2%	30.6%	22.7%	354,511	4,002,151	11,168,429 *

* - Indicates large claim(s) limited to retention. For details, see Exhibit LI-18

(3) and (4) are from Exhibit LI-2

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

CITY OF OAKLAND
INSURANCE

Exhibit LI-6

Preliminary Projected Ultimate Limited Losses to 2003/04

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)
1989/90	\$650,990	\$1,269,315	\$2,202,364	\$2,369,657
1990/91	0	0	0	0
1991/92	0	0	0	0
1992/93	0	0	0	0
1993/94	0	0	0	0
1994/95	1,900	55,028	37,847	38,711
1995/96	497,528	2,515,561	5,661,861	4,237,334
1996/97	0	0	0	0
1997/98	570,154	843,611	1,055,166	847,698
1998/99	44,748	324,969	479,505	339,269
1999/00	8,273,228	9,337,035	6,352,719	6,325,441
2000/01	7,993,302	8,693,035	8,344,846	7,994,854
2001/02	4,768,444	10,761,105	14,037,699	9,945,927
2002/03	4,585,214	11,524,217	14,863,143	10,544,884
2003/04	3,475,602	9,701,446	11,168,425	8,275,768

(2) is from Exhibit LI-2

(3) is from Exhibit LI-4

(4) is from Exhibit LI-5

(5) is based on (2) to (4), weighted as follows:

Subject to a minimum of Exhibit LI-1, (10) and minimum 10% of case reserves as IRAP, unless all claims are closed

Claim Period	Developed Limited Paid Losses	Developed Limited Reported Incurred Losses	Developed Limited Case Reserves
to 1989/90	30.0%	40.0%	30.0%
1990/91	30.0%	40.0%	30.0%
1991/92	30.0%	40.0%	30.0%
1992/93	30.0%	40.0%	30.0%
1993/94	30.0%	40.0%	30.0%
1994/95	30.0%	40.0%	30.0%
1995/96	30.0%	40.0%	30.0%
1996/97	30.0%	40.0%	30.0%
1997/98	30.0%	40.0%	30.0%
1998/99	30.0%	40.0%	30.0%
1999/00	30.0%	40.0%	30.0%
2000/01	30.0%	40.0%	30.0%
2001/02	30.0%	40.0%	30.0%
2002/03	30.0%	40.0%	30.0%
2003/04	30.0%	40.0%	30.0%

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)*100 (4)	Loss Rate Trend (2004/05 = 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)	
1999/00	\$8,325,447	\$256,975	3.24	1.104	\$3.58	\$3.02	
2000/01	7,934,659	273,627	2.90	1.082	3.14	3.06	
2001/02	5,945,927	293,519	3.38	1.061	3.63	3.14	
2002/03	10,544,834	305,541	3.45	1.040	3.59	3.20	
2003/04	8,272,786	307,406	2.69	1.020	2.75	3.26	
(7) Projected 2004/05 a-priori loss rate per \$100 of Payroll						\$3.32	

II. Bornhuetter - Ferguson Analysis based on Limited Paid Losses

Claim Period (1)	Limited Paid Losses 6/30/04 (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)
1999/00	\$7,165,138	82.4%	\$3.02	\$256,973	\$1,383,512	\$8,533,050
2000/01	5,764,525	69.8%	3.06	273,627	2,541,663	8,306,388
2001/02	2,464,254	51.7%	3.14	293,519	4,446,053	6,912,308
2002/03	1,352,636	29.5%	3.20	305,541	6,895,578	8,246,217
2003/04	354,511	10.2%	3.26	307,406	9,011,045	9,365,560

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

Claim Period (1)	Limited Reported Incurred Losses 6/30/04 (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)
1999/00	\$7,975,824	94.3%	\$3.02	\$256,973	\$441,722	\$8,417,546
2000/01	7,265,377	87.6%	3.06	273,627	1,043,679	8,329,056
2001/02	8,028,232	74.6%	3.14	293,519	2,335,142	10,367,374
2002/03	6,853,235	56.1%	3.20	305,541	4,252,567	11,145,832
2003/04	4,356,642	30.6%	3.26	307,406	6,963,995	11,320,638

Section I, (2) is from Exhibit LI-6

Section I, (3), Section II, (5) and Section III (5) were provided by the City

Section I, (5) is based on a 2% trend.

Section I, (7) is based on Section I, (6) and the following weights

Claim Period	Weight
1999/00	20.0%
2000/01	20.0%
2001/02	20.0%
2002/03	20.0%
2003/04	20.0%

Sections II and III, (2) are from Exhibit LI-1

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

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

CITY OF OAKLAND
LIABILITY

Exhibit LI-6

Frequency Times Severity Analysis

I. Projected Ultimate Claims

Claim Period (1)	Months of Development 6/30/04 (2)	Reported Claims 6/30/04 (3)	Percent Claims Reported (4)	Projected Ultimate Claims (3)/(4) (5)
1999/00	60.0	1,304	100.0%	1,304
2000/01	48.0	1,227	99.8%	1,229
2001/02	36.0	969	99.3%	985
2002/03	24.0	969	97.4%	995
2003/04	12.0	561	72.2%	777

II. Frequency Times Severity

Claim Period (1)	Preliminary Projected Ultimate Limited Losses (2)	Projected Ultimate Claims (3)	Average Severity (2)/(3) (4)	Severity Trend (2004/05 = 1.000) (5)	Trended Average Claim Severity (4)X(5) (6)	De-Trended Projected 2004/05 Average Claim Severity (7)/(5) (8)	Frequency Times Severity (3)X(6) (9)
1999/00	\$9,325,447	1,304	\$8,365	1.250	\$5,172	\$7,904	\$10,305,994
2000/01	7,934,859	1,228	6,456	1.216	7,866	6,304	10,205,722
2001/02	9,945,927	969	10,057	1.160	11,662	8,724	8,626,306
2002/03	10,544,634	995	10,595	1.104	11,697	9,162	9,119,892
2003/04	8,273,768	777	10,648	1.051	11,187	9,630	7,482,127

(7) Projected 2004/05 average claim severity

\$10,117

Section I, (3) is from Exhibit LI-1

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

Section II, (2) is from Exhibit LI-6

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

Section II, (5) is based on a 5.1% trend

Section II, (7) is based on (6) and the following weights:

Claim Period	Weight
1999/00	20.0%
2000/01	20.0%
2001/02	20.0%
2002/03	20.0%
2003/04	20.0%

CITY OF OAKLAND
LIABILITY

Exhibit LI-6

Projected Ultimate Limited Losses to 2003/04

Claim Period (1)	Developed Limited Paid Losses (2)	Developed Limited Reported Incurred Losses (3)	Developed Limited Case Reserves (4)	B-F Paid Method Ultimate Losses (5)	B-F Reported Method Ultimate Losses (6)	Frequency Times Severity (7)	Projected Ultimate Limited Losses (8)
1989/90	\$630,990	\$2,203,313	\$2,203,364				\$2,360,657
1990/91	0	0	0				0
1991/92	0	0	0				0
1992/93	0	0	0				0
1993/94	0	0	0				0
1994/95	1,905	35,020	37,547				38,311
1995/96	491,526	3,910,950	5,601,861				4,257,154
1996/97	0	0	0				0
1997/98	570,154	843,691	1,059,169				847,661
1998/99	44,748	324,399	473,505				335,261
1999/00	8,273,225	6,337,035	8,362,219	6,533,050	8,417,545	10,300,994	8,320,447
2000/01	7,393,302	6,033,535	6,344,646	8,306,388	8,329,050	10,205,722	7,934,855
2001/02	4,766,449	10,761,705	14,037,699	6,912,308	10,367,374	8,626,306	9,945,527
2002/03	4,585,214	11,924,317	14,655,143	8,240,217	11,145,832	9,115,892	11,646,424
2003/04	3,475,602	9,701,446	11,168,429	9,355,560	11,320,636	7,482,127	9,425,355

(2) is from Exhibit LI-3

(3) is from Exhibit LI-4

(4) is from Exhibit LI-5

(5) and (6) are from Exhibit LI-7

(7) is from Exhibit LI-6

(8) is based on (2) to (7), weighted as follows

Subject to a minimum of Exhibit LI-1, (10) and minimum 10% of case reserves as IBNR, unless all claims are closed

Claim Period	Developed Limited Paid Losses	Developed Limited Reported Incurred Losses	Developed Limited Case Reserves	B-F Paid Method Ultimate Losses	B-F Reported Method Ultimate Losses	Frequency Times Severity
to 1989/90	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1990/91	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1991/92	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1992/93	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1993/94	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1994/95	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1995/96	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1996/97	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1997/98	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1998/99	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
1999/00	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
2000/01	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
2001/02	30.0%	40.0%	30.0%	0.0%	0.0%	0.0%
2002/03	10.0%	35.0%	35.0%	5.0%	5.0%	10.0%
2003/04	10.0%	30.0%	30.0%	10.0%	10.0%	10.0%

CITY OF OAKLAND
LIABILITY

Exhibit LI-10

Projected Ultimate Limited Losses for 2004/05 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 (2004/05 = 1.000) (5)	Trended Limited Loss Rate per \$100 of Payroll (4)*(5) (6)
1999/00	\$8,325,447	\$256,973	3.24	1.134	\$3.56
2000/01	7,934,859	273,627	2.90	1.052	3.14
2001/02	9,945,927	293,515	3.39	1.061	3.59
2002/03	11,646,424	305,541	3.81	1.040	3.97
2003/04	9,425,355	307,406	3.07	1.020	3.13
Total	\$47,278,012	\$1,437,065	\$3.25		\$3.48

Claim Period (1)	Projected Limited Loss Rate per \$100 of Payroll (7)	Projected Payroll (000) (8)	Projected Ultimate Limited Losses (7)*(8)*10 (9)	Present Value Factor (10)	Present Value of Projected Limited Loss Rate per \$100 of Payroll (7)*(10) (11)	Present Value of Projected Ultimate Limited Losses (8)*(11)*10 (12)
2004/05	3.48	\$355,014	\$12,358,047	0.91	\$3.16	\$11,233,464
2005/06	3.55	370,069	13,139,756	0.91	3.23	11,944,038
2006/07	3.62	381,171	13,804,627	0.91	3.29	12,548,406
2007/08	3.69	392,606	14,503,141	0.91	3.36	13,183,355
2008/09	3.77	404,384	15,237,003	0.91	3.43	13,853,432

(2) is from Exhibit LI-9

(3) was provided by the City

(5) is based on a 2% trend

(7) for 2004/05 is based on (6) and the following weights:

Claim Period	Weight
1999/00	20.0%
2000/01	20.0%
2001/02	20.0%
2002/03	20.0%
2003/04	20.0%

(7) for 2005/06 and subsequent are based on 2004/05 plus a 2% trend

(8) to 2005/06 was provided by the City. Other claim periods are based on a 3% trend.

(10) is based on a 3% interest rate and the payout pattern in Exhibit LI-7.

CITY OF OAKLAND
LIABILITY

Exhibit LI-11

Estimated Outstanding Losses as of June 30, 2004

Claim Period (1)	Limited Paid Losses 6/30/04 (2)	Limited Case Reserves 6/30/04 (3)	Limited Reported Incurred Losses 6/30/04 (4)	Projected Ultimate Limited Losses (5)	Estimated Outstanding Losses 6/30/04 (6)	Estimated IBNR 6/30/04 (7)
1989/90	\$629,876	\$1,573,437	\$2,203,313	\$2,360,657	\$1,730,763	\$157,343
1990/91	0	0	0	0	0	0
1991/92	0	0	0	0	0	0
1992/93	0	0	0	0	0	0
1993/94	0	0	0	0	0	0
1994/95	1,896	35,114	35,000	38,311	36,425	3,311
1995/96	484,155	3,411,817	3,895,972	4,237,154	3,752,999	341,182
1996/97	0	0	0	0	0	0
1997/98	534,800	284,419	819,224	847,660	312,861	28,442
1998/99	40,189	271,886	312,072	339,268	289,077	27,189
1999/00	7,165,138	806,686	7,975,824	8,325,447	1,156,305	349,628
2000/01	5,764,525	1,520,802	7,285,327	7,934,859	2,170,354	645,480
2001/02	2,464,254	5,563,976	8,028,232	9,945,927	7,451,672	1,917,654
2002/03	1,352,638	5,500,597	6,853,235	11,646,424	10,293,786	4,793,189
2003/04	354,511	4,002,131	4,356,642	8,425,355	9,070,644	5,068,713
Total	\$18,795,972	\$22,968,976	\$41,764,893	\$55,101,060	\$36,335,687	\$13,336,168

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

(5) is from Exhibit LI-9

CITY OF OAKLAND
LIABILITY

Exhibit LI-12

Present Value of Estimated Outstanding Losses as of June 30, 2004

Claim Period (1)	Estimated Outstanding Losses 6/30/04 (2)	Present Value Factor (3)	Present Value of Estimated Outstanding Losses 6/30/04 (2)x(3) (4)	Anticipated Future Investment Income (2)-4: (5)
1989/90	\$1,730,780	0.92	\$1,599,241	\$-31,539
1990/91	0	0.92	0	0
1991/92	0	0.92	0	0
1992/93	0	0.92	0	0
1993/94	0	0.92	0	0
1994/95	36,425	0.92	33,620	2,805
1995/96	2,750,999	0.92	2,464,018	286,981
1996/97	0	0.95	0	0
1997/98	312,801	0.95	296,905	15,896
1998/99	299,077	0.95	282,927	16,150
1999/00	1,156,329	0.95	1,095,025	61,284
2000/01	2,170,324	0.98	2,055,306	115,028
2001/02	7,481,672	0.94	7,062,698	418,974
2002/03	10,293,785	0.94	9,655,571	638,214
2003/04	9,070,844	0.95	8,409,672	662,172
Total	\$36,305,087		\$33,953,985	\$2,351,104

(2) is from Exhibit LI-11

(3) is based on a 3% interest rate and the payout pattern in Exhibit LI-2

CITY OF OAKLAND
LIABILITY

Exhibit LL-13

Forwarded Losses Paid July 1, 2004 to June 30, 2005

Claim Period (1)	Months of Development 6/30/04 (2)	Percent Losses Paid (3)	Months of Development 6/30/05 (4)	Percent Losses Paid (5)	Percent Outstanding Losses 7/1/04 to 6/30/05 ((5)-(3)) (6)	Estimated Outstanding Losses 6/30/04 (7)	Projected Losses Paid (6)(7) (8)	Estimated Outstanding Losses 6/30/05 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses (9)(10) (11)
1993/90	160.0	99.8%	192.0	99.9%	25.0%	\$1,730,790	\$432,695	\$1,298,095	0.93	\$1,200,729
1992/91	168.0	99.7%	190.0	99.8%	25.0%	0	0	0	0.97	0
1991/92	156.0	99.6%	168.0	99.7%	25.0%	0	0	0	0.67	0
1992/93	144.0	99.5%	156.0	99.6%	25.0%	0	0	0	0.92	0
1993/94	132.0	99.3%	144.0	99.5%	25.0%	0	0	0	0.92	0
1994/95	120.0	99.0%	132.0	99.3%	25.0%	36,426	9,106	27,319	0.92	25,215
1995/96	108.0	98.5%	120.0	99.0%	25.0%	3,752,999	938,260	2,814,739	0.92	2,598,413
1996/97	96.0	96.6%	108.0	98.0%	25.0%	0	0	0	0.92	0
1997/98	84.0	93.8%	96.0	96.6%	25.0%	312,861	78,216	234,646	0.95	221,975
1998/99	72.0	89.8%	84.0	93.8%	25.0%	299,077	74,769	224,308	0.95	212,868
1999/00	60.0	83.4%	72.0	89.8%	25.0%	1,156,309	289,077	867,232	0.95	823,401
2000/01	48.0	69.8%	60.0	83.4%	25.0%	2,170,334	542,584	1,627,750	0.96	1,541,470
2001/02	36.0	41.7%	48.0	69.8%	25.0%	1,481,672	1,870,418	5,611,254	0.96	5,313,858
2002/03	24.0	29.5%	36.0	51.7%	25.0%	10,293,786	2,573,447	7,720,339	0.94	7,298,900
2003/04	12.0	10.2%	24.0	29.5%	21.5%	9,070,844	1,919,524	7,121,321	0.94	6,679,798
2004/05	0.0	0.0%	12.0	10.2%	10.2%	12,358,047	1,290,521	11,067,526	0.93	10,297,407
Total						\$48,963,134	\$10,018,606	\$38,944,528		\$36,190,143

* Limited to a maximum of 25% per actual judgment (3) and (5) are from Exhibit LL-2

(7) to 2003/04 is from Exhibit LL-11 The amount for 2004/05 is from Exhibit LL-10 (10) is based on 0.3% interest rate and the payout pattern in Exhibit LL-2

CITY OF OAKLAND
LIABILITY

Exhibit LI-14

Projected Losses Paid July 1, 2005 to June 30, 2006

Claim Period (1)	Months of Development 6/30/05 (2)	Percent Losses Paid (3)	Months of Development 6/30/05 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 7/1/05 to 6/30/06 ((5)-(3))/(100.0%-(3)) (6)	Estimated Outstanding Losses 6/30/05 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/06 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/06 (9)X(10) (11)
1989/90	192 0	99.9%	204 0	99.9%	25.0% *	\$1,298,085	\$324,521	\$973,564	0.93	\$901,520
1990/91	180 0	99.8%	192 0	99.9%	25.0% *	0	0	0	0.93	0
1991/92	168 0	99.7%	180 0	99.8%	25.0% *	0	0	0	0.92	0
1992/93	156 0	99.6%	168 0	99.7%	25.0% *	0	0	0	0.92	0
1993/94	144 0	99.5%	156 0	99.6%	25.0% *	0	0	0	0.92	0
1994/95	132 0	99.3%	144 0	99.5%	25.0% *	27,319	6,830	20,489	0.92	18,911
1995/96	120 0	99.0%	132 0	99.3%	25.0% *	2,814,749	703,687	2,111,062	0.92	1,948,510
1996/97	108 0	98.5%	120 0	99.0%	25.0% *	0	0	0	0.92	0
1997/98	96 0	96.6%	108 0	98.5%	25.0% *	234,646	58,662	175,984	0.92	162,433
1998/99	84 0	93.8%	96 0	96.6%	25.0% *	224,308	56,077	168,231	0.95	159,147
1999/00	72 0	89.8%	84 0	93.8%	25.0% *	867,232	216,808	650,424	0.95	617,252
2000/01	60 0	82.4%	72 0	89.8%	25.0% *	1,627,750	406,938	1,220,812	0.95	1,154,888
2001/02	48 0	69.8%	60 0	82.4%	25.0% *	5,611,264	1,402,814	4,208,440	0.95	3,985,393
2002/03	36 0	51.7%	48 0	69.8%	25.0% *	7,720,339	1,930,085	5,790,254	0.95	5,489,374
2003/04	24 0	29.5%	36 0	51.7%	25.0% *	7,121,320	1,780,330	5,340,990	0.94	5,041,895
2004/05	12 0	10.2%	24 0	29.5%	21.5% *	11,097,526	2,385,103	8,712,423	0.94	8,172,253
2005/06	0 0	0.0%	12 0	10.2%	10.2% *	13,139,756	1,340,255	11,799,501	0.93	10,979,137
Total						\$51,784,284	\$10,542,110	\$41,172,174		\$38,563,710

* - Limited to a maximum of 25% per actuarial judgment

(3) and (5) are from Exhibit LI-2

(7) to 2004/05 is from Exhibit LI-13, (8) The amount for 2005/06 is from Exhibit LI-10

(10) is based on a 3% interest rate and the payout pattern in Exhibit LI-2

ARM TECH

CITY OF OAKLAND
LIABILITY

Exhibit LI-15

Projected Losses Paid July 1, 2006 to June 30, 2007

Claim Period (1)	Months of Development 6/30/05 (2)	Percent Losses Paid (3)	Months of Development 6/30/07 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 7/1/06 to 6/30/07 ((5)-(3)) (100.0%-(3)) (6)	Estimated Outstanding Losses 6/30/06 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/07 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/07 (9)X(10) (11)
1989/90	204.0	99.9%	216.0	99.9%	25.0% *	\$973,564	\$243,391	\$730,173	0.93	\$676,140
1990/91	182.0	99.9%	204.0	99.9%	25.0% *	0	0	0	0.93	0
1991/92	180.0	99.8%	192.0	99.9%	25.0% *	0	0	0	0.93	0
1992/93	168.0	99.7%	180.0	99.8%	25.0% *	0	0	0	0.92	0
1993/94	156.0	99.6%	168.0	99.7%	25.0% *	0	0	0	0.92	0
1994/95	144.0	99.5%	156.0	99.6%	25.0% *	20,489	5,122	15,367	0.92	14,184
1995/96	132.0	99.3%	144.0	99.5%	25.0% *	2,111,062	527,766	1,583,296	0.92	1,451,392
1996/97	120.0	99.0%	132.0	99.3%	25.0% *	0	0	0	0.92	0
1997/98	108.0	98.5%	120.0	99.0%	25.0% *	175,984	43,996	131,988	0.92	121,825
1998/99	96.0	96.6%	108.0	98.5%	25.0% *	168,231	42,058	126,173	0.92	116,458
1999/00	84.0	93.8%	96.0	96.6%	25.0% *	650,424	162,606	487,818	0.95	461,476
2000/01	72.0	89.8%	84.0	93.8%	25.0% *	1,220,812	305,203	915,609	0.95	866,913
2001/02	60.0	82.4%	72.0	89.8%	25.0% *	4,208,440	1,052,110	3,156,330	0.95	2,985,888
2002/03	48.0	69.8%	60.0	82.4%	25.0% *	5,790,254	1,447,564	4,342,690	0.95	4,112,527
2003/04	36.0	51.7%	48.0	69.8%	25.0% *	5,340,990	1,335,248	4,005,742	0.95	3,793,438
2004/05	24.0	29.5%	36.0	51.7%	25.0% *	8,712,423	2,178,106	6,534,317	0.94	5,168,395
2005/06	12.0	10.2%	24.0	29.5%	21.5% *	11,799,501	2,535,973	9,263,528	0.94	8,689,189
2006/07	0.0	0.0%	12.0	10.2%	10.2% *	13,804,627	1,408,072	12,396,555	0.93	11,491,606
Total						\$54,976,801	\$11,287,215	\$43,689,586		\$40,961,421

* - Limited to a maximum of 25% per actuarial judgment

(3) and (5) are from Exhibit LI-2

(7) to 2005/06 is from Exhibit LI-14; (9) - The amount for 2006/07 is from Exhibit LI-10

(10) is based on a 3% interest rate and the payout pattern in Exhibit LI-7

A R M T F C H

CITY OF OAKLAND
LIABILITY

Exhibit LI-16

Projected Losses Paid July 1, 2007 to June 30, 2008

Claim Period (1)	Months of Development 6/30/07 (2)	Percent Losses Paid (3)	Months of Development 6/30/08 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 7/1/07 to 6/30/08 ((5)-(3))/ (100.0%-(3)) (6)	Estimated Outstanding Losses 6/30/07 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/08 (7)-(6) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/08 (9)X(10) (11)
1989/90	216.0	99.9%	228.0	100.0%	25.0% *	\$730,173	\$482,543	\$547,630	0.93	\$508,201
1990/91	204.0	99.9%	216.0	99.9%	25.0% *	0	0	0	0.93	0
1991/92	192.0	99.9%	204.0	99.9%	25.0% *	0	0	0	0.93	0
1992/93	180.0	99.8%	192.0	99.9%	25.0% *	0	0	0	0.93	0
1993/94	168.0	99.7%	180.0	99.8%	25.0% *	0	0	0	0.92	0
1994/95	156.0	99.6%	168.0	99.7%	25.0% *	15,367	3,842	11,525	0.92	10,649
1995/96	144.0	99.5%	156.0	99.6%	25.0% *	1,583,296	395,824	1,187,472	0.92	1,095,037
1996/97	132.0	99.3%	144.0	99.5%	25.0% *	0	0	0	0.92	0
1997/98	120.0	99.0%	132.0	99.3%	25.0% *	131,988	32,997	98,991	0.92	91,369
1998/99	108.0	98.5%	120.0	99.0%	25.0% *	126,173	31,543	94,630	0.92	87,343
1999/00	96.0	96.6%	108.0	99.5%	25.0% *	487,818	121,955	365,863	0.92	337,692
2000/01	84.0	93.8%	96.0	96.6%	25.0% *	915,609	228,902	686,707	0.95	649,625
2001/02	72.0	89.8%	84.0	93.8%	25.0% *	3,156,330	789,093	2,367,237	0.95	2,245,517
2002/03	60.0	82.4%	72.0	89.8%	25.0% *	4,342,690	1,085,673	3,257,017	0.95	3,081,138
2003/04	48.0	69.8%	60.0	82.4%	25.0% *	4,005,742	1,001,436	3,004,306	0.95	2,845,078
2004/05	36.0	51.7%	48.0	69.8%	25.0% *	6,534,317	1,633,579	4,900,738	0.94	4,640,999
2005/06	24.0	29.5%	36.0	51.7%	25.0% *	9,263,528	2,315,862	6,947,666	0.94	6,558,578
2006/07	12.0	10.2%	24.0	29.5%	21.5% *	12,396,555	2,664,293	9,732,262	0.94	9,128,852
2007/08	0.0	0.0%	12.0	10.2%	10.2% *	14,503,141	1,479,320	13,023,821	0.93	12,073,092
Total						\$58,192,727	\$11,996,672	\$46,225,855		\$43,355,170

* - Limited to a maximum of 25% per actuarial judgment

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

(7) to 2005/07 is from Exhibit LI-15, (9) The amount for 2007/08 is from Exhibit LI-10

(10) is based on a 3% interest rate and the payout pattern in Exhibit LI-2

CITY OF OAKLAND
LIABILITY

Exhibit LI-17

Projected Losses Paid July 1, 2008 to June 30, 2009

Claim Period (1)	Months of Development 6/30/08 (2)	Percent Losses Paid (3)	Months of Development 6/30/09 (4)	Percent Losses Paid (5)	Percent Outstanding Losses Paid 7/1/08 to 6/30/09 ((5)-(3))/(100.0%-(3)) (6)	Estimated Outstanding Losses 6/30/08 (7)	Projected Losses Paid (6)X(7) (8)	Estimated Outstanding Losses 6/30/09 (7)-(8) (9)	Present Value Factor (10)	Present Value of Estimated Outstanding Losses 6/30/09 (9)X(10) (11)
1989/90	228.0	100.0%	240.0	100.0%	25.0% *	\$547,630	\$136,908	\$410,722	1.00	\$410,722
1990/91	216.0	99.9%	228.0	100.0%	25.0% *	0	0	0	0.93	0
1991/92	204.0	99.9%	216.0	99.9%	25.0% *	0	0	0	0.93	0
1992/93	192.0	99.9%	204.0	99.9%	25.0% *	0	0	0	0.93	0
1993/94	180.0	99.8%	192.0	99.9%	25.0% *	0	0	0	0.93	0
1994/95	168.0	99.7%	180.0	99.8%	25.0% *	11,525	2,881	8,644	0.92	7,987
1995/96	156.0	99.6%	168.0	99.7%	25.0% *	1,187,472	296,868	890,604	0.92	822,918
1996/97	144.0	99.5%	156.0	99.6%	25.0% *	0	0	0	0.92	0
1997/99	132.0	99.3%	144.0	99.5%	25.0% *	98,991	24,748	74,243	0.92	68,526
1998/99	120.0	99.0%	132.0	99.3%	25.0% *	94,630	23,658	70,972	0.92	65,507
1999/00	108.0	98.6%	120.0	99.0%	25.0% *	365,863	91,466	274,397	0.92	257,269
2000/01	96.0	95.6%	108.0	98.5%	25.0% *	686,707	171,677	515,030	0.92	475,373
2001/02	84.0	93.8%	96.0	96.6%	25.0% *	2,367,247	591,812	1,775,435	0.95	1,678,562
2002/03	72.0	89.8%	84.0	93.8%	25.0% *	3,257,017	814,254	2,442,763	0.95	2,318,182
2003/04	60.0	82.4%	72.0	89.8%	25.0% *	3,004,306	751,077	2,253,229	0.95	2,131,555
2004/05	48.0	69.8%	60.0	82.4%	25.0% *	4,900,738	1,225,185	3,675,553	0.95	3,480,749
2005/06	36.0	51.7%	48.0	69.8%	25.0% *	6,947,646	1,736,912	5,210,734	0.95	4,934,555
2006/07	24.0	29.5%	36.0	51.7%	25.0% *	9,732,262	2,433,066	7,299,196	0.94	6,890,441
2007/08	12.0	10.2%	24.0	29.5%	21.5% *	13,023,821	2,799,106	10,224,715	0.94	9,590,783
2008/09	0.0	0.0%	12.0	10.2%	10.2% *	15,237,000	1,554,174	13,682,826	0.93	12,683,989
Total						\$61,462,855	\$12,653,792	\$48,809,063		\$45,814,118

* - Limited to a maximum of 25% per actuarial judgment

(3) and (5) are from Exhibit LI-2

(7) to 2007/08 is from Exhibit LI-16, (9) The amount for 2008/09 is from Exhibit LI-10

(10) is based on a 3% interest rate and the payout pattern in Exhibit LI-2

ARM TECH

This Exhibit is omitted at the request of the City Attorney's Office.

Claims with over \$1,000,000 reported incurred are listed.

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

(1) through (7) were provided by the City

CITY OF OAKLAND
LIABILITY

Exhibit 11-19

Number of Claims, per \$1 Million of Payroll, Average Cost per Claim, and Loss Rate by Department

Department (1)	1999/00 (2)	2000-01 (3)	2001/02 (4)	2002/03 (5)	2003/04 (6)	1999/00 to 2003/04 (7)
I Payroll						
Fire Department	\$52,478,639	\$54,545,220	\$58,673,419	\$60,180,191	\$69,453,316	\$265,330,788
Parks and Recreation	14,512,441	16,250,373	15,514,580	15,787,210	16,261,890	78,326,411
Police Services Agency	86,900,520	91,830,702	101,241,846	104,383,851	104,008,524	488,371,909
Public Works	31,491,881	32,360,458	34,096,186	37,591,169	38,367,768	173,897,462
Other	71,599,914	75,654,129	83,993,018	87,598,135	89,314,027	411,139,227
Total	\$256,973,402	\$273,626,844	\$293,519,049	\$305,540,566	\$307,406,834	\$1,437,065,796
II Number of Reported Claims as of June 30, 2004						
Fire Department	22	32	31	23	25	133
Parks and Recreation	201	148	129	115	64	658
Police Services Agency	470	397	345	304	191	1,708
Public Works	402	423	350	415	224	1,820
Other	208	227	120	112	57	724
Total	1,304	1,227	982	969	561	5,043
III Reported Incurred Losses as of June 30, 2004						
Fire Department	\$22,080	\$47,021	\$266,529	\$215,248	\$73,804	\$746,688
Parks and Recreation	270,063	240,662	436,672	307,670	145,144	1,400,211
Police Services Agency	5,960,722	4,952,086	2,670,634	3,476,492	958,048	18,517,953
Public Works	2,623,167	1,442,951	3,573,494	1,913,527	3,363,846	12,916,995
Other	588,382	602,657	1,058,902	840,297	335,796	3,426,035
Total	\$9,464,414	\$7,285,377	\$8,028,232	\$6,853,235	\$4,876,642	\$36,567,900
IV Number of Claims per \$1 Million of Payroll [Section II / (Section I / \$1,000,000)]						
Fire Department	0.42	0.59	0.53	0.38	0.42	0.47
Parks and Recreation	13.92	9.11	8.31	7.28	3.94	8.40
Police Services Agency	5.41	4.32	3.42	2.91	1.84	3.56
Public Works	12.77	13.07	10.44	11.04	5.84	10.47
Other	2.51	2.85	1.43	1.28	0.64	1.78
Total	5.07	4.48	3.35	3.17	1.82	3.51
V Average Cost per Claim (Section III / Section II)						
Fire Department	\$1,004	\$1,469	\$9,307	\$13,706	\$2,952	\$5,614
Parks and Recreation	1,337	1,625	3,385	2,675	2,265	2,125
Police Services Agency	12,682	12,474	7,719	11,436	5,016	10,549
Public Works	6,525	3,411	10,038	4,611	15,017	7,057
Other	2,829	2,650	8,824	7,503	5,891	4,732
Total	\$7,258	\$5,938	\$8,175	\$7,072	\$8,693	\$7,236
VI Loss Rate per \$100 of Payroll [Section III / (Section I / \$100)]						
Fire Department	\$0.04	\$0.09	\$0.49	\$0.52	\$0.12	\$0.26
Parks and Recreation	1.86	1.48	2.81	1.95	0.89	1.79
Police Services Agency	6.80	5.39	2.64	3.33	0.92	3.69
Public Works	8.33	4.46	10.48	5.09	8.77	7.43
Other	0.82	0.77	1.26	0.96	0.38	0.80
Total	\$3.68	\$2.65	\$2.74	\$2.24	\$1.50	\$2.54

I, II, and III were provided by the City.

Claim counts and loss amounts are on a reported basis. They have not been developed to ultimate values.

CITY OF OAKLAND
LIABILITY

Exhibit 1.12

Paid Losses by Department as of June 30, 2004

Claim Period (1)	Fire Department (2)	Parks and Recreation (3)	Police Services Agency (4)	Public Works (5)	Other (6)	Limited Paid Losses 6/30/04 (7)
1999/00	\$22,080	\$264,850	\$4,014,365	\$2,554,528	\$313,310	\$7,169,138
2000/01	55,920	186,687	3,313,724	1,186,864	1,021,330	5,764,525
2001/02	54,828	339,877	903,981	880,317	285,252	2,464,254
2002/03	35,678	95,333	386,298	440,920	390,408	1,352,636
2003/04	87,007	20,470	77,540	67,201	96,294	354,511
Total	\$255,513	\$917,217	\$6,695,905	\$5,129,830	\$2,106,594	\$17,105,087

(2) through (6) are net of the City's specific self insured retention of \$2 million

Data was provided by the City

CITY OF OAKLAND
LIABILITY

Exhibit 1.1-2.1

Analysis by Cause of Loss
Claim Period: 1999/00 through: 2003/04 as of June 30, 2004

I. Fire Department

a. Top Three Loss Categories (Frequency)

Cause	Count	Total Paid
City Vehicle Against Another Vehicle	68	\$146,671
Misc	18	7,702
Fire Dept. Fire Response Related Drugs	17	8,475

b. Top Three Average Payment Categories

Cause	Count	Total Paid	Average Payment
City Vehicle	2	\$11,950	\$5,965
Personnel/Labor A.D.A.	2	11,099	5,549
Personnel/Labor	4	18,122	4,781

II. Parks and Recreation

a. Top Three Loss Categories (Frequency)

Cause	Count	Total Paid
Dangerous Condition OPR - Trees	417	\$335,032
Dangerous Cond : Sidewalks Tnp & Falls	42	1,534
City Vehicle Against Another Vehicle	37	310,366

b. Top Three Average Payment Categories

Cause	Count	Total Paid	Average Payment
Personnel/Labor	8	\$67,722	\$8,465
City Vehicle Against Another Vehicle	37	310,366	8,388
Dangerous Condition Streets	2	13,255	6,628

III. Police Services Agency

a. Top Three Loss Categories (Frequency)

Cause	Count	Total Paid
City Vehicle Against Another Vehicle	336	\$2,908,571
Police Force - Civil Rights	279	3,827,203
Police-Non/Vehicle Related Property Loss	202	24,497

b. Top Three Average Payment Categories

Cause	Count	Total Paid	Average Payment
Police Force - Wrongful Death	19	\$452,765	\$23,830
Personnel/Labor Grievance- Suspension	5	71,523	14,305
Police Force - Civil Rights	279	3,827,203	13,718

IV. Public Works

a. Top Three Loss Categories (Frequency)

Cause	Count	Total Paid
Dangerous Condition Streets	488	\$218,640
Dangerous Cond : Sidewalks Tnp & Falls	348	1,202,112
Dangerous Condition Sewers & Floods	278	1,068,141

b. Top Three Average Payment Categories

Cause	Count	Total Paid	Average Payment
Dangerous Conditions Inverse Condemnat	27	\$547,165	\$20,265
Personnel/Labor	4	53,546	13,387
Dangerous Condition Storm Drain	63	608,853	9,664

V. Other

a. Top Three Loss Categories (Frequency)

Cause	Count	Total Paid
Misc	240	\$2,959
Code Enforcement	76	5,815
City Govt.. Other	52	161,145

b. Top Three Average Payment Categories

Cause	Count	Total Paid	Average Payment
Personnel/Labor Sexual Harrassment	4	\$310,906	\$77,727
City Govt. Municipal Code	1	73,911	73,911
Personnel/Labor Severance Package	1	62,313	62,313

Data was provided by the City

CITY OF OAKLAND
LIABILITY

Exhibit LI-22

Historical Payroll and Percent Payroll

Dept Code (1)	Department (2)	1999/00 Payroll (3)	1999/00 Percent Payroll (3)/Total(3) (4)	2000/01 Payroll (5)	2000/01 Percent Payroll (5)/Total(5) (6)	2001/02 Payroll (7)	2001/02 Percent Payroll (7)/Total(7) (8)	2002/03 Payroll (9)	2002/03 Percent Payroll (9)/Total(9) (10)	2003/04 Payroll (11)	2003/04 Percent Payroll (11)/Total(11) (12)	1999/00 to 2003/04 Payroll (3)+(5)+(7)+(9)+(11) (13)	1999/00 to 2003/04 Percent Payroll (13)/Total(13) (14)
QP200	Fire Department	\$52,478,639	20.42%	\$54,545,223	19.93%	\$58,673,419	19.99%	\$60,180,191	19.70%	\$59,453,316	19.34%	\$285,330,788	19.86%
DP5000	Parks and Recreation	14,512,441	5.65%	16,250,373	5.94%	15,514,580	5.29%	15,787,216	5.17%	16,261,800	5.29%	78,326,411	5.45%
DP1000	Police Services Agency	86,900,525	33.82%	91,836,762	33.56%	101,241,846	34.49%	104,383,851	34.16%	104,008,924	33.83%	488,371,909	33.98%
DP300	Public Works	31,481,881	12.25%	32,360,458	11.83%	34,096,186	11.62%	37,591,169	12.30%	39,367,788	12.48%	173,897,462	12.10%
Misc	Other	71,599,914	27.86%	78,634,129	28.74%	83,993,016	28.02%	87,598,139	28.67%	89,314,027	29.05%	411,139,227	28.61%
Total		\$256,973,403	100.00%	\$273,626,944	100.00%	\$293,519,049	100.00%	\$305,540,566	100.00%	\$307,405,874	100.00%	\$1,437,065,206	100.00%

(3), (5), (7), (9) and (11) were provided by the City

ARM TECH

CITY OF OAKLAND
LIABILITY

Exhibit LI-23

Calculation of Percent of Reported Incurred Losses Limited to \$50,000 per Occurrence

Dept Code (1)	Department (2)	Reported Incurred Losses 6/30/04 (3)	Reported Incurred Losses Greater Than \$50,000 6/30/04 (4)	Number of Claims with Reported Incurred Losses Greater Than \$50,000 (5)	Reported Incurred Losses Capped at \$50,000 (3)-(4)+(5) X\$50,000 (6)	Percent Reported Incurred Losses Capped at \$50,000 (6)/Total(3) (7)
I. 1999/00						
DP200	Fire Department	\$22,090	\$0	0	\$22,090	0.71%
DP5000	Parks and Recreation	270,063	56,617	1	263,445	8.43%
DP1000	Police Services Agency	5,960,722	4,946,292	9	1,464,430	46.85%
DP300	Public Works	2,623,167	1,894,170	9	1,178,996	37.72%
Misc	Other	588,382	541,271	3	197,111	6.31%
Total		\$9,464,414	\$7,438,351	22	\$3,126,065	100.00%
II. 2000/01						
DP200	Fire Department	\$47,021	\$0	0	\$47,021	1.45%
DP5000	Parks and Recreation	240,662	55,000	1	235,662	7.27%
DP1000	Police Services Agency	4,952,086	4,126,805	14	1,525,286	47.03%
DP300	Public Works	1,442,951	776,443	7	1,016,508	31.35%
Misc	Other	602,657	434,249	5	418,408	12.90%
Total		\$7,285,377	\$5,392,497	27	\$3,242,886	100.00%
III. 2001/02						
DP200	Fire Department	\$288,529	\$208,000	1	\$130,528	3.91%
DP5000	Parks and Recreation	436,672	312,691	2	223,981	6.71%
DP1000	Police Services Agency	2,670,634	1,911,692	13	1,408,942	42.19%
DP300	Public Works	3,573,494	2,799,211	9	1,224,284	36.66%
Misc	Other	1,058,902	957,128	5	351,774	10.53%
Total		\$8,028,232	\$6,186,722	30	\$3,339,511	100.00%
IV. 2002/03						
DP200	Fire Department	\$315,248	\$293,044	3	\$172,204	5.02%
DP5000	Parks and Recreation	307,670	183,000	2	224,670	6.55%
DP1000	Police Services Agency	3,476,493	2,921,467	15	1,305,026	38.06%
DP300	Public Works	1,913,527	1,261,198	11	1,203,328	35.06%
Misc	Other	840,297	655,226	7	525,071	15.31%
Total		\$6,853,235	\$5,322,936	38	\$3,429,299	100.00%
V. 2003/04						
DP200	Fire Department	\$73,804	\$0	0	\$73,804	4.62%
DP5000	Parks and Recreation	145,144	50,125	1	145,019	9.08%
DP1000	Police Services Agency	958,048	718,039	5	490,009	30.68%
DP300	Public Works	3,363,849	3,006,300	8	757,549	47.43%
Misc	Other	335,795	305,000	2	130,795	8.19%
Total		\$4,876,642	\$4,079,464	16	\$1,597,178	100.00%

(3), (4) and (5) were provided by the City

CITY OF OAKLAND
LIABILITY

Exhibit LI-23

Calculation of Relative Loss Rate

Dept Code (1)	Department (2)	Percent Payroll (3)	Percent Reported Incurred Losses Capped at \$50,000 (4)	Relative Loss Rate (4)/(3) (5)
I 1999/00				
DP200	Fire Department	20.42%	0.71%	0.035
DP5000	Parks and Recreation	5.65%	8.43%	1.492
DP1000	Police Services Agency	33.82%	40.85%	1.385
DP300	Public Works	12.25%	37.72%	3.079
Misc	Other	27.86%	6.31%	0.226
Total		100.00%	100.00%	1.000
II 2000/01				
DP200	Fire Department	19.93%	1.45%	0.073
DP5000	Parks and Recreation	5.94%	7.27%	1.224
DP1000	Police Services Agency	33.66%	47.03%	1.401
DP300	Public Works	11.83%	31.35%	2.650
Misc	Other	28.74%	12.90%	0.449
Total		100.00%	100.00%	1.000
III 2001/02				
DP200	Fire Department	19.99%	3.91%	0.196
DP5000	Parks and Recreation	5.29%	6.71%	1.269
DP1000	Police Services Agency	34.49%	42.19%	1.223
DP300	Public Works	11.62%	36.66%	3.156
Misc	Other	28.62%	10.53%	0.368
Total		100.00%	100.00%	1.000
IV 2002/03				
DP200	Fire Department	19.70%	5.02%	0.256
DP5000	Parks and Recreation	5.17%	6.55%	1.268
DP1000	Police Services Agency	34.16%	38.06%	1.114
DP300	Public Works	12.30%	35.06%	2.850
Misc	Other	28.57%	15.31%	0.534
Total		100.00%	100.00%	1.000
V 2003/04				
DP200	Fire Department	19.34%	4.62%	0.239
DP5000	Parks and Recreation	5.29%	9.68%	1.716
DP1000	Police Services Agency	33.83%	30.63%	0.907
DP300	Public Works	12.48%	47.43%	3.850
Misc	Other	29.05%	8.19%	0.282
Total		100.00%	100.00%	1.000

(3) is from Exhibit LI-22

(4) is from Exhibit LI-23.

CITY OF OAKLAND
LIABILITY

Exhibit LI-25

Calculation of Average Relative Loss Rate

Dept Code (1)	Department (2)	1999/00 Relative Loss Rate (3)	2000/01 Relative Loss Rate (4)	2001/02 Relative Loss Rate (5)	2002/03 Relative Loss Rate (6)	2003/04 Relative Loss Rate (7)	Average 1999/00 to 2003/04 Relative Loss Rate Average [(3) to (7)] (8)
DP200	Fire Department	0.035	0.073	0.196	0.255	0.239	0.169
DP5000	Parks and Recreation	1.492	1.224	1.269	1.268	1.716	1.394
DP1000	Police Services Agency	1.395	1.401	1.223	1.114	0.907	1.200
DP300	Public Works	3.079	2.650	3.156	2.850	3.800	3.107
Misc.	Other	0.226	0.449	0.368	0.534	0.282	0.377
Total		1.000	1.000	1.000	1.000	1.000	1.000

(3) to (7) are from Exhibit LI-24.

CITY OF OAKLAND
LIABILITY

Exhibit LI-21

Calculation of Experience Modification Factors

Dept Code (1)	Department (2)	1999/00 to 2003/04 Percent Payroll (3)	Average 1999/00 to 2003/04 Relative Loss Rate (4)	Weight (3)/[(3)+ Max(3)] (5)	Experience Modification Factor [(4)X(5)]+ {1,000-(5)} (6)
DP200	Fire Department	19.85%	0.159	0.637	0.447
DP5000	Parks and Recreation	5.45%	1.394	0.325	1.055
DP1000	Police Services Agency	33.98%	1.206	0.753	1.111
DP300	Public Works	12.10%	3.107	0.516	2.000
Misc	Other	28.61%	0.372	0.716	0.525
Total		100.00%	1.000		1.000

(3) is from Exhibit LI-22.

(4) is from Exhibit LI-25

Weight is designed to give the largest member a weight of .750 and the rest proportionally smaller weights subject to a .100 minimum

(6) is subject to an off-balance factor

CITY OF OAKLAND
LIABILITY

Exhibit LI-27

Calculation of 2005/06 Projected Premium

Dept Code (1)	Department (2)	Projected 2005/06 Payroll (3)	2005/06 Experience Modification Factor (4)	Experience Rated Projected 2005/06 Payroll (3)X(4) (5)	2005/06 Percent Funding (5)/Total(5) (6)	2005/06 Projected Loss Funds (6)X Total(7) (7)
DP200	Fire Department	\$66,662,020	0.447	\$29,802,915	8.05%	\$854,629
DP5000	Parks and Recreation	9,947,913	1.085	10,794,222	2.92%	309,535
DP1000	Police Services Agency	104,764,691	1.111	116,384,883	31.45%	3,337,456
DP300	Public Works	76,535,645	2.008	153,751,446	41.55%	4,408,981
Misc	Other	112,138,788	0.829	59,235,586	16.03%	1,701,505
Total		\$370,069,053	1.000	\$279,069,053	100.00%	\$10,612,113

(3) was provided by the City

(4) is from Exhibit LI-26.

Total (7) is from Exhibit LI-14

CITY OF OAKLAND
LIABILITY

Exhibit LI-21

Calculation of 2006/07 Projected Premium

Dept Code (1)	Department (2)	Projected 2005/07 Payroll (3)	2006/07 Experience Modification Factor (4)	Experience Rated Projected 2006/07 Payroll (3)X(4) (5)	2006/07 Percent Funding (5)X(6) (6)	2006/07 Projected Loss Funds (5)X(7) (7)
DP200	Fire Department	\$68,661,880	0.447	\$30,683,002	8.05%	\$500,958
DP5000	Parks and Recreation	10,246,350	1.085	11,118,048	2.92%	329,227
DP1000	Police Services Agency	107,828,232	1.111	119,876,425	21.45%	2,545,773
DP300	Public Works	78,851,715	2.009	158,363,990	41.55%	4,685,464
Misc	Other	115,537,948	0.929	61,115,655	16.03%	1,809,753
Total		\$381,177,125	1.000	\$381,177,125	100.00%	\$1,287,215

(3) is based on payroll for 2005/06 plus a 3.0% trend

(4) is from Exhibit LI-26

Total (7) is from Exhibit LI-15.



ATTACHMENT B

December 16, 2004

904-006

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

Attn: Ms. Deb Cornwell
Insurance Manager

**Actuarial Study of the
Self-Insured Liability Program
as of June 30, 2004**

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

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

The City requested that ARM Tech develop a cost allocation plan that is similar to that employed by the City of Phoenix. The allocation was provided in Exhibits LI-22 through LI-28 of our actuarial study dated November 30, 2004.

After our actuarial study was finalized, we learned that the Office of Parks and Recreation (OPR) was reorganized effective July 1, 2004. As a result of the reorganization, the Parks Maintenance portion of OPR is now included in the Public Works department, while the Recreation portion remains in OPR.

Based on this new information, we have recalculated the experience modifiers by removing the loss and exposure data for Parks Maintenance from OPR, and adding the amounts to Public Works, in order to correctly reflect the new departmental makeup. The breakdown of OPR losses between the Parks portion and the Recreation portion was provided by the City. The split of OPR payroll between Parks and Recreation was not readily available at the time of our analysis. We have estimated Parks payroll to be 43% of the OPR total.

We recommend funding by City department for 2005/06 and 2006/07 to be as shown in Table 1.

Table 1
Recommended Funding by Department
2005/06 and 2006/07

Department (1)	Projected Loss Funds 2005/06 (2)	Projected Loss Funds 2006/07 (3)
(A) Fire Department	\$854,655	\$909,025
(B) Parks and Recreation	253,452	269,575
(C) Police Services Agency	3,337,556	3,549,880
(D) Public Works	4,464,887	4,748,928
(E) Other	1,701,560	1,809,807
(F) Total	\$10,612,110	\$11,287,215

Note: (2) is from Exhibit LI-27.
(3) is from Exhibit LI-28.

Our calculation is detailed in the attached exhibits. We will update the calculations if the payroll split between Parks and Recreation becomes available.

◇ ◇ ◇ ◇ ◇

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

Respectfully submitted,

ARM TECH

By Mujtaba Dattoo
Mujtaba Dattoo, ACAS, MAAA
Consulting Actuary

MD:js

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CITY OF OAKLAND
LIABILITY

Exhibit 11-22

Historical Payroll and Percent Payroll

Dept Code (1)	Department (2)	1999/00		2000/01		2001/02		2002/03		2003/04		1999/00 to 2003/04	1999/00 to 2003/04
		Payroll (3)	Percent Total(4)	Payroll (5)	Percent Total(6)	Payroll (7)	Percent Total(8)	Payroll (9)	Percent Total(10)	Payroll (11)	Percent Total(12)	Payroll (3)+(5)+(7) (13)	Percent Total(14)
DP200	Fire Department	\$52,478,639	29.42%	\$54,545,223	19.93%	\$56,673,419	19.99%	\$60,180,191	19.70%	\$59,453,316	19.34%	\$285,330,788	19.86%
DP5000	Parks and Recreation	8,287,193	3.22%	9,279,622	3.39%	8,859,455	3.02%	9,015,141	2.95%	9,286,147	3.02%	44,727,558	3.11%
DP1000	Police Services Agency	85,993,526	33.82%	91,836,762	33.56%	101,241,846	34.49%	104,383,851	34.16%	104,008,924	33.83%	488,371,909	33.98%
DP300	Public Works	37,707,130	14.67%	39,331,208	14.37%	40,751,311	13.88%	44,363,244	14.52%	45,343,421	14.76%	207,496,315	14.44%
Misc	Other	71,599,911	27.86%	78,634,129	28.74%	83,993,018	28.62%	87,598,138	28.67%	89,314,027	29.09%	411,139,227	28.61%
Total		\$256,973,403	100.00%	\$273,626,944	100.00%	\$293,519,649	100.00%	\$305,540,566	100.00%	\$307,405,834	100.00%	\$1,437,066,796	100.00%

ARM TECH

(3), (5), (7), (9) and (11) were provided by the City. Parks and Recreation was adjusted to reflect the movement of Parks Maintenance to Public Works

CITY OF OAKLAND
LIABILITY

Exhibit L1-23

Calculation of Percent of Reported Incurred Losses Limited to \$50,000 per Occurrence

Dept Code (1)	Department (2)	Reported Incurred Losses 6/30/04 (3)	Reported Incurred Losses Greater Than \$50,000 6/30/04 (4)	Number of Claims with Reported Incurred Losses Greater Than \$50,000 6/30/04 (5)	Reported Incurred Losses Capped at \$50,000 (3)-(4)+(5) (6)	Percent Reported Incurred Losses Capped at \$50,000 (6)/Total(3) (7)
I. 1999/00						
DP200	Fire Department	\$22,080	\$0	0	\$22,080	0.71%
DP5000	Parks and Recreation	103,496	56,617	1	96,881	2.10%
DP1000	Police Services Agency	5,960,722	4,946,292	8	1,464,430	46.85%
DP300	Public Works	2,789,731	1,894,170	6	1,345,561	48.04%
Misc	Other	666,362	541,271	3	197,111	6.31%
Total		\$9,464,414	\$7,438,351	22	\$3,126,063	100.00%
II. 2000/01						
DP200	Fire Department	\$47,021	\$0	0	\$47,021	1.45%
DP5000	Parks and Recreation	82,312	0	0	82,312	2.54%
DP1000	Police Services Agency	4,952,080	4,120,805	14	1,526,280	47.03%
DP300	Public Works	1,601,301	831,443	8	1,169,858	36.07%
Misc	Other	602,657	434,249	5	418,408	12.90%
Total		\$7,285,371	\$5,392,467	27	\$3,242,880	100.00%
III. 2001/02						
DP200	Fire Department	\$288,529	\$208,000	1	\$130,529	3.91%
DP5000	Parks and Recreation	123,820	108,000	1	65,820	1.97%
DP1000	Police Services Agency	2,670,634	1,911,692	13	1,408,942	42.19%
DP300	Public Works	3,885,346	3,003,902	10	1,382,445	41.43%
Misc	Other	1,058,902	957,128	5	351,774	10.53%
Total		\$8,029,232	\$6,188,722	30	\$3,339,511	100.00%
IV. 2002/03						
DP200	Fire Department	\$315,248	\$293,044	3	\$172,204	5.02%
DP5000	Parks and Recreation	132,000	128,000	1	54,000	1.57%
DP1000	Police Services Agency	3,476,493	2,921,467	15	1,305,026	38.06%
DP300	Public Works	2,089,196	1,316,198	12	1,372,998	40.04%
Misc	Other	840,297	665,226	7	525,071	15.31%
Total		\$6,653,235	\$5,323,936	38	\$3,429,299	100.00%
V. 2003/04						
DP200	Fire Department	\$73,804	\$0	0	\$73,804	4.62%
DP5000	Parks and Recreation	15,929	0	0	15,929	1.00%
DP1000	Police Services Agency	956,048	718,029	5	490,009	30.68%
DP300	Public Works	3,493,065	3,066,425	9	886,640	55.51%
Misc	Other	335,796	305,000	2	130,796	8.19%
Total		\$4,876,642	\$4,079,464	16	\$1,597,178	100.00%

(3), (4) and (5) were provided by the City. Parks Maintenance is included in Public Works.

CITY OF OAKLAND
LIABILITY

Exhibit L-24

Calculation of Relative Loss Rate

Dept Code	Department	Percent Payroll	Capped at \$50,000	Percent	Relative
				Reported Incurred Losses	Loss Rate
(1)	(2)	(3)	(4)	(5)	(6)
II 2000/02					
DP200	Fire Department	20.42%	0.71%	0.035	0.035
DP3000	Parks and Recreation	3.22%	3.10%	0.961	0.961
DP1000	Police Services Agency	33.82%	46.85%	1.385	1.385
DP300	Public Works	14.67%	44.04%	2.933	2.933
Misc	Other	27.86%	0.31%	0.226	0.226
Total		100.00%	100.00%	1.000	1.000
III 2001/02					
DP200	Fire Department	19.93%	1.45%	0.772	0.772
DP5000	Parks and Recreation	3.39%	2.54%	0.748	0.748
DP1000	Police Services Agency	32.56%	47.03%	1.401	1.401
DP300	Public Works	14.37%	36.07%	2.510	2.510
Misc	Other	26.74%	12.90%	0.449	0.449
Total		100.01%	100.00%	1.000	1.000
IV 2002/03					
DP200	Fire Department	19.99%	3.91%	0.190	0.190
DP5000	Parks and Recreation	3.02%	1.97%	0.633	0.633
DP1000	Police Services Agency	34.49%	42.19%	1.223	1.223
DP300	Public Works	13.88%	41.40%	2.982	2.982
Misc	Other	28.62%	10.53%	0.368	0.368
Total		100.00%	100.00%	1.000	1.000
V 2003/04					
DP200	Fire Department	19.70%	5.02%	0.255	0.255
DP5000	Parks and Recreation	2.95%	1.57%	0.534	0.534
DP1000	Police Services Agency	34.16%	38.06%	1.114	1.114
DP300	Public Works	14.52%	40.04%	2.757	2.757
Misc	Other	28.67%	15.31%	0.534	0.534
Total		100.00%	100.00%	1.000	1.000
VI 2003/04					
DP200	Fire Department	16.34%	4.62%	0.235	0.235
DP5000	Parks and Recreation	3.02%	1.00%	0.329	0.329
DP1000	Police Services Agency	32.83%	30.68%	0.907	0.907
DP300	Public Works	14.75%	55.51%	3.765	3.765
Misc	Other	29.05%	8.14%	0.282	0.282
Total		100.00%	100.00%	1.000	1.000

(3) is from Exhibit L-22

(4) is from Exhibit L-23

CITY OF OAKLAND
LIABILITY

Exhibit LI-25

Calculator of Average Relative Loss Rate

Dept Code (1)	Department (2)	1999/00 Relative Loss Rate (3)	2000/01 Relative Loss Rate (4)	2001/02 Relative Loss Rate (5)	2002/03 Relative Loss Rate (6)	2003/04 Relative Loss Rate (7)	Average 1999/00 to 2003/04 Relative Loss Rate Average [(3)+(7)] (8)
DP200	Fire Department	0.035	0.073	0.190	0.255	0.236	0.156
DP500	Parks and Recreation	0.961	0.748	0.653	0.534	0.330	0.645
DP100	Police Services Agency	1.385	1.401	1.223	1.114	0.907	1.200
DP300	Public Works	2.933	2.510	2.982	2.757	3.763	2.989
Misc	Other	0.226	0.449	0.368	0.534	0.291	0.271
Total		1.000	1.000	1.000	1.000	1.000	1.000

(3) to (7) are from Exhibit LI-24

CITY OF OAKLAND
LIABILITY

Exhibit 11-26

Calculation of Experience Modification Factors

Dept Code (1)	Department (2)	1999:00 to	Average	Weight (3)/(3)+ Max(3)	Experience Modification Factor [(4)/(5)]+ (1.000-(5))
		2003/04 Percent Payroll (3)	1999:00 to 2003/04 Relative Loss Rate (4)		
DP200	Fire Department	19.86%	0.159	0.037	0.447
DP5000	Parks and Recreation	3.11%	0.645	0.216	0.888
DP1000	Police Services Agency	32.98%	1.200	0.750	1.111
DP300	Public Works	14.44%	2.989	0.560	2.054
Misc	Other	28.61%	0.377	0.710	0.529
Total		100.00%	1.000		1.000

(3) is from Exhibit L1-22

(4) is from Exhibit L1-25

Weight is designed to give the largest merrier a weight of .750 and the rest proportionally smaller weights subject to a .100 minimum

(5) is subject to an off-balance factor

CITY OF OAKLAND
LIABILITY

Exhibit LI-27

Calculation of 2005/06 Projected Premium

Dept Code (1)	Department (2)	Projected 2005/06 Payroll (3)	2005/06 Experience Modification Factor (4)	Experience Rated Projected 2005/06 Payroll (3)X(4) (5)	2005/06 Percent Funding (5)/Total(5) (6)	2005/06 Projected Loss Funds (6)XTotal(5) (7)
DP200	Fire Department	\$66,882,020	0.447	\$29,803,898	8.05%	\$854,655
DP5000	Parks and Recreation	9,947,613	0.888	8,838,453	2.39%	253,452
DP1000	Police Services Agency	104,784,699	1.171	116,399,373	31.45%	3,337,556
DP300	Public Works	76,535,645	2.034	155,701,052	42.07%	4,464,887
Misc	Other	112,136,785	0.529	59,337,367	16.02%	1,701,560
Total		\$370,069,953	1.000	\$370,069,953	100.00%	\$10,612,110

(3) was provided by the City

(4) is from Exhibit LI-26

Total (7) is from Exhibit LI-14

CITY OF OAKLAND
LIABILITY

Exhibit LI-26

Calculation of 2006/07 Projected Premium.

Dept Code (1)	Department (2)	Projected 2006/07 Payrol. (3)	2006/07 Experience Modification Factor (4)	Experience Rated Projected 2006/07 Payrol. (3)x(4) ^a (5)	2006/07 Percent Funding (5)/Total(5) (6)	2006/07 Projected Loss Funds (6)x Total(7) (7)
DP200	Fire Department	\$68,661,880	0.447	\$30,697,923	8.05%	\$909,025
DP5000	Parks and Recreation	10,240,350	0.688	9,103,607	2.39%	269,675
DP1000	Police Services Agency	107,926,292	1.111	119,880,024	31.45%	3,549,880
DP300	Public Works	78,831,715	2.034	160,372,063	42.07%	4,748,920
Misc	Other	115,502,948	0.520	61,117,458	16.03%	1,809,807
Total		\$381,171,125	1.000	\$381,171,125	100.00%	\$17,287,215

(3) is based on payroll for 2005/06 plus a 3.0% trend

(4) is from Exhibit LI-26

Total (7) is from Exhibit LI-15

OAKLAND CITY COUNCIL

A. Gordon

RESOLUTION NO. _____ C. M. S.

INTRODUCED BY COUNCILMEMBER _____

FILED
OFFICE OF THE CITY CLERK
OAKLAND

2005 JAN 13 PM 8:18

RESOLUTION AUTHORIZING THE BUDGETARY APPROPRIATION OF MONIES FROM THE SELF-INSURANCE GENERAL LIABILITY FUND (FUND 1100) TO DEPARTMENTS FOR FY 2005/06 AND 2006/07 ALLOCATION OF GENERAL LIABILITY COSTS BASED ON IMPLEMENTATION OF THE "PHOENIX MODEL" OF RISK MANAGEMENT COST ALLOCATION

WHEREAS, in 2004, the City Council adopted the Risk Management Cost Allocation Program (RMCAP) to monitor the liability claim and litigation payouts incurred by certain City agencies/departments; and

WHEREAS, the RMCAP is modeled after a program currently utilized by the City of Phoenix, Arizona; and

WHEREAS, the RMCAP budgeted appropriations for claims/litigation payouts in those agencies/departments based upon historical performance and future projections; and

WHEREAS, the Current Expenditure Baseline Budget for Fiscal Years 2005-07 reflects funding allocations established in FY 1999-2000, without significant modification; and

WHEREAS, the Current Expenditure Baseline Budget for Fiscal Years 2005-07 underfunds the projected loss in the amounts reflected below:

<u>Department</u>	<u>2005/06 Baseline</u>	<u>2006/07 Baseline</u>
Fire	\$114,444	\$114,444
Parks and Recreation	\$53,770	\$53,770
Police Services	\$1,431,299	\$1,431,299
Public Works	\$969,546	\$969,546
Other Departments	\$4,617,654	\$4,617,654
Total:	\$7,186,713	\$7,186,713

WHEREAS, actuarial analysis of claims/litigation payout performance for the past 5 fiscal years has recommended budgetary appropriations for the upcoming budget cycle as listed below:

<u>Department</u>	<u>2005/06 Projected Loss Fund</u>	<u>2006/07 Projected Loss Fund</u>
Fire Department	\$854,655	\$909,025
Parks and Recreation	\$253,452	\$269,575
Police Services Agency	\$3,337,556	\$3,549,880
Public Works Agency	\$4,464,887	\$4,748,928
Other Departments	\$1,701,560	\$1,809,807
Total	\$10,612,110	\$11,287,215

Now therefore, be it

RESOLVED: That funds be allocated from the self-insurance fund, non-departmental account to establish the actuarially recommended budget appropriations for claims/litigation payments for the departments/agencies and in the amounts listed above, for Fiscal Years 2005/06 and 2006/07.

IN COUNCIL, OAKLAND, CALIFORNIA, _____, 20__

PASSED BY THE FOLLOWING VOTE:

AYES- BROOKS, BRUNNER, CHANG, NADEL, QUAN, REID, WAN AND PRESIDENT DE LA FUENTE

NOES-

ABSENT-