

# **Water and Power Employees' Retirement Plan of the City of Los Angeles**

**Review of the Disability Fund  
as of July 1, 2007**



1801 Century Park East, Suite 500  
Los Angeles, CA 90067

November 28, 2007

Board of Administration  
Water and Power Employees' Retirement Plan of the City of Los Angeles  
111 North Hope Street, Room 357  
Los Angeles, CA 90012

**Re: July 1, 2007 Review of Disability Fund**

Dear Members of the Board:

We are pleased to submit our review of the Disability Fund as of July 1, 2007. This review is based on financial statements and employee data furnished by the Retirement Office. We would like to take this opportunity to express our appreciation for the courtesy and cooperation accorded to us by the Retirement Office during the course of our work.

We look forward to reviewing this report with you at your next meeting and to answering any questions you may have.

Respectfully submitted,



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Principal and Consulting Actuary  
Western Region Retirement Practice Leader

KP:jtm  
Enclosure

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# Section 1 — Review Summary

## Significant Issues

### *In General*

- The Temporary Disability Benefits and Permanent Total Disability Benefits are included in this review. The funding for the Temporary Disability Benefit includes both the entire Temporary Disability Benefit plus the Extended Temporary Disability Benefit. The Supplemental Industrial Disability Benefit is financed by the Department on a cash, pay-as-you-go basis. All disability benefits are summarized in Section 3 of this report.
- The total assets for the disability benefits has decreased from \$37.0 million on June 30, 2006 to \$35.5 million on June 30, 2007. Member contributions amounted to about \$400,000 for both the 2005-2006 and 2006-2007 fiscal years. Department contributions amounted to about \$5.1 million for the 2005-2006 fiscal year and about \$8.4 million for the 2006-2007 fiscal year.
- Reserve information is provided by the Retirement Office. The total reserve for the disability benefits has decreased from \$36.7 million on June 30, 2006 to \$34.9 million on June 30, 2007. Total required Claim Reserves are \$13.6 million leaving a General Reserve of \$21.3 million.
- The annual interest rate assumption for this valuation remains at 5%, as adopted by the Board following the July 1, 2002 valuation.
- Overall, the Fund is financially sound. Discussed in more detail below, the Total Reserve and General Reserve for the Temporary and Extended Temporary Disability Benefits are both negative. Also, the General Reserve for the Permanent and Total Disability Benefit is greater than its target. Given this situation, the Board may want to review the allocation of reserves between the Temporary and Extended Temporary Disability Benefits and Permanent Total Disability Benefits to achieve the target General Reserve for the Temporary and Extended Temporary Disability Benefits by the end of fiscal 2008.

### *Temporary and Extended Temporary Disability Benefits*

- The total reserve for the Temporary and Extended Temporary Disability Benefits has decreased from negative \$810,067 on June 30, 2006 to negative \$3.1 million on June 30, 2007. Total required Claim Reserves are \$1.3 million leaving a net General Reserve of negative \$4.4 million. The decline in reserves is the result of contributions to the Temporary and Extended Temporary Disability Benefit Fund being less than the incurred claims and expenses.

## Section 1 — Review Summary

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- The recommended Department contribution rate for the Temporary and Extended Temporary Disability Benefit Fund was \$1.55 per \$100 as of June 30, 2006. As of June 30, 2007, funding the incurred claims and expenses required a Department contribution of \$1.58 per \$100 of compensation. If the Department's objective is to maintain a contribution level sufficient to fund annual incurred claims and expenses, then this is the recommended contribution. See Section 2.C for details.
- This target level for the General Reserve is 20% of the Claim Reserve, to be achieved by the end of fiscal 2008. The Department contribution needed to achieve this goal is approximately \$2.18 per \$100 of compensation. See Section 2.D for details.

### ***Permanent Total Disability Benefits***

- The total reserve for the Permanent Total Disability Benefits has increased from \$37.6 million on June 30, 2006 to \$38.0 million on June 30, 2007. Total required Claim Reserves are \$12.3 million leaving a General Reserve of \$25.7 million. See Table 2G for details.
- The recommended Department contribution rate for the Permanent Total Disability Fund remains at \$0 per \$100 of compensation. See Table 2G for details.

# Section 2 — Disability Fund

## A. Introduction and Consolidated Financial Information

In this section, we give a general description of the method used to fund the various disability benefits of the Department of Water and Power. Under the funding method used, the total annual contribution to the Disability Fund equals the present value of all future payments for those expected to become disabled during the year, with a further adjustment for any interest credited to the reserves. The present value referred to is for disabilities that “accrue” in a given year and is called the “incurred claims” for the year.

Under this funding method no reserves are expected to accumulate to help cover future claims beyond those incurred during the forthcoming year.

The incurred claims for a year normally are estimated as the paid claims for the year plus the increase in Claim Reserves from one fiscal year-end to another. The Claim Reserve as of any year-end is the present value of all future disability payments on all claims that remains “open” (i.e., still disabled).

Amounts of paid claims, open claims (number and amount), and the General Reserves are provided by the Retirement Office, and accepted by Buck Consultants without audit.

The total annual contribution to the Disability Fund is levied as a dollar rate per \$100 of covered compensation. There are separate rates for Temporary Disability and Permanent Total Disability; these rates in turn are split between employees and the Department of Water and Power. Currently, employees pay \$1.00 each biweekly payroll period for both Temporary and Permanent Disability benefits. In subsequent pages we present tables that show the actual annual rate of incurred claims and expenses per \$100 of covered payroll.

The Net General Reserve is maintained primarily to provide funds in the event of substantial adverse experience. It is the balance of funds available over Claim Reserves. Given the fluctuations in annual claims, it is unlikely that the Net General Reserve will be exactly at recommended levels at any given time. Rather, the recommended level should be regarded as a long-term goal for the Net General Reserve.

Following the July 1, 2002 valuation, a resolution was adopted to lower the annual interest rate assumption to 5%. That 5% interest rate assumption is continued in this valuation.

In the following sections, we discuss Temporary and Extended Disability Benefits and Permanent Total Disability Benefits.

## Section 2 — Disability Fund

### CHART 1

#### Statement Of Changes In Plan Net Assets For The Years Ended June 30 (Unaudited)

	Year Ended June 30, 2007	Year Ended June 30, 2006
<b>ADDITIONS</b>		
Department of Water & Power contributions towards:		
Temporary disability benefits	\$ 7,122,491	\$ 4,043,308
Supplemental disability benefits	831,698	607,639
Administrative expenses	440,824	457,218
Total department contributions	<u>8,395,013</u>	<u>5,108,165</u>
Contributions from members for:		
Temporary disability benefits	200,811	199,445
Permanent total disability benefits	199,223	197,458
Total members' contributions	<u>400,034</u>	<u>396,903</u>
Net appreciation (decline) in fair value of investments	352,501	(1,843,292)
Investment income	1,664,049	1,708,578
Less: investment expense	<u>(46,501)</u>	<u>(17,098)</u>
Net investment income and market appreciation	<u>1,970,049</u>	<u>(151,812)</u>
Total additions	<u>10,765,096</u>	<u>5,353,256</u>
<b>DEDUCTIONS</b>		
Benefits provided for:		
Temporary disability	9,201,313	8,577,782
Extended temporary disability	301,675	320,038
Permanent total disability	1,493,732	1,416,598
Supplemental disability	829,409	605,622
Total benefits provided	<u>11,826,129</u>	<u>10,920,040</u>
Administrative expense	<u>431,212</u>	<u>450,721</u>
Total deductions	<u>12,257,341</u>	<u>11,370,761</u>
Net increase (decrease)	<u>(1,492,245)</u>	<u>(6,017,505)</u>
Net assets - beginning of year	<u>37,017,645</u>	<u>43,035,150</u>
Net assets - end of year	<u>\$35,525,400</u>	<u>\$37,017,645</u>

## Section 2 — Disability Fund

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### CHART 2

#### Statement of Plan Net Assets as of June 30 (Unaudited)

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	Year Ended June 30, 2007	Year Ended June 30, 2006
<b>ASSETS</b>		
Cash	\$ 248,832	\$ 229,688
Receivables		
Accrued investment income	145,872	151,557
Department of Water & Power	1,378,736	573,979
Others	222,218	830,648
Contingent benefit advance	3,310,339	3,310,339
Total receivables	5,057,165	4,866,523
Investments, at fair value		
Fixed income (amortized cost \$29,550,892.37 in 2007 and \$31,856,031.99 in 2006)	28,781,288	30,668,609
Short-term investments (cost approximates market)	1,601,558	1,444,825
Total investments	30,382,846	32,113,434
Total assets	35,688,843	37,209,645
<b>LIABILITIES</b>		
Accounts payable	(163,443)	(192,000)
Total liabilities	(163,443)	(192,000)
Net assets	\$35,525,400	\$37,017,645

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## Section 2 — Disability Fund

### B. Temporary and Extended Temporary Disability Benefits

The Temporary Disability Benefits referred to in this section normally commence on the fifteenth day of disability and terminate at the end of the twelfth month of disability. The monthly benefit is 40% to 85% of compensation, depending on the length of service and disability.

Below is a summary of the cost of the Temporary Disability Benefits from inception of the plan to June 30, 2007.

#### CHART 3

#### Rates of Contribution Per \$100 of Compensation for Temporary and Extended Temporary Disability Benefits

As of June 30	Rates Per \$100 of Compensation		
	By Member	By Department	Total
1938 - 1939	\$ .36	\$ .24	\$ .60
1940 - 1942	.47	.31	.78
1942 - 1947	.39	.26	.65
1947 - 1953	.59	.39	.98
1953 - 1956	.47	.31	.78
1957 - 1958	.36	.24	.60
1959 - 1973	.27	.18	.45
1974 - 1975	.39	.26	.65
1975 - 1980	.45	.30	.75
1980 - 1985	*	*	.75
1985 - 1987	*	*	.75
1987 - 1992	*	*	.61
1993	*	*	.45
1994	*	*	.35
1995	*	*	.35
1996	*	*	.30
1997	*	*	.25
1998	*	*	.25
1999	*	*	.35
2000	*	*	.35
2001 - 2004	*	*	.68
2005 - 2007	*	*	.74

\* From January 1980 to January 1984, employees paid \$1 per month and the Department paid the balance of the total rate. As of January 1984, the employee amount was increased to \$1 per biweekly payroll period.

## Section 2 — Disability Fund

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For Temporary and Extended Temporary Disability, the Claim Reserve is calculated as the sum of:

- 1 The open Claim Reserve, which is the number of open claims times the reserve factor specified in Section III D (2) of the Plan, and
- 2 The pending Claim Reserve, which is 1/26 of the benefits paid during the preceding fiscal year.

Incurred claims at an annual rate per \$100 of covered payroll are calculated as described in Section 2.A. and Section 3, Exhibit I. Since 1980, the goal for the General Reserve has been to maintain it at approximately 20% of the Claim Reserve (\$1,252,204 as of June 30, 2007). Thus, the “target” is equal to \$250,405 (20% x \$1,252,204), as opposed to the actual General Reserve of -\$4,328,285 as of June 30, 2007. The current policy is to fund so as to reach this goal by a fixed date of June 30, 2008 (i.e., 10 years from June 30, 1998).

The Temporary Disability Experience Table indicates that the average cost for the last five years per \$100 of covered payroll is \$1.29 net of interest on the General Reserve. This average cost includes the entire Temporary Disability and Extended Temporary Disability Benefits. Based on reserves as of June 30, 2007, the expected interest credit for the next year is -\$0.04 per \$100 (assuming a 5% investment return). Thus, the net average rate per \$100 of covered payroll is about \$1.33.

The General Reserve continues to decrease due to contribution rates being lower than the increased claim rates.

As noted above, the total contribution rate needed to pay expected claims is \$1.29 per \$100 of covered payroll. In order to increase the Net General Reserve to the target level in the next year, a total contribution of approximately \$2.18 per \$100 of covered payroll is required. This is an increase over the current rate, which is \$1.55.

Pursuant to Section III D (2) of the Plan, the Temporary Disability Claim Reserve at the end of each year is determined by multiplying the number of open claims at the end of the year by a reserve factor of \$4,200 for 2006 and \$4,368 for 2007. This is an increase from \$4,000 for 2005. The current reserve factor was provided by the Retirement office, and accepted by Buck Consultants without audit.

## Section 2 — Disability Fund

### C. Temporary Disability Experience Table

Year Ending June 30	Estimated Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred	Annual Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	Cumulative Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	General Reserve *
1939	\$ 9,705,000	\$ 33,138	\$ 44,138	\$.45	\$.45	\$ 14,090
1940	14,015,000	60,138	65,797	.47	.46	45,061
1941	13,350,000	73,867	78,867	.59	.51	70,323
1942	13,415,000	79,870	79,870	.60	.53	95,090
1943	12,645,000	87,933	87,933	.70	.56	89,351
1944	12,400,000	108,197	113,197	.91	.62	56,753
1945	12,396,000	98,138	104,138	.84	.65	33,189
1946	15,293,000	123,539	123,539	.81	.68	9,056
1947	20,027,000	156,483	165,483	.83	.70	(8,741)
1948	23,316,000	161,558	158,558	.68	.70	61,194
1949	27,386,000	157,975	155,975	.57	.68	173,506
1950	30,105,000	163,475	175,476	.58	.66	293,063
1951	30,130,000	180,286	177,286	.59	.65	411,057
1952	37,792,000	204,381	208,381	.55	.64	573,038
1953	40,678,000	228,354	262,354	.64	.64	757,895
1954	44,915,000	255,289	244,289	.54	.63	892,666
1955	50,632,000	241,898	215,898	.43	.60	1,102,717
1956	53,988,000	244,824	242,824	.45	.59	1,317,674
1957	56,225,000	268,883	280,883	.50	.58	1,419,437
1958	63,087,000	286,924	291,924	.46	.56	1,557,783
1959	65,930,000	368,644	414,644	.63	.57	1,578,671
1960	65,993,000	388,060	305,260	.46	.56	1,628,091
1961	68,055,000	381,033	380,833	.56	.56	1,611,264
1962	73,192,000	393,013	404,413	.55	.56	1,593,485
1963	78,546,000	500,671	512,371	.65	.57	1,491,219

\* Provided by the Retirement Office

## Section 2 — Disability Fund

### C. Temporary Disability Experience Table (continued)

Year Ending June 30	Estimated Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred	Annual Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	Cumulative Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	General Reserve*
1964	\$ 83,672,000	\$ 562,565	\$ 518,765	\$.62	\$.57	\$1,401,956
1965	87,976,000	536,280	543,480	.62	.58	1,304,304
1966	92,885,000	554,020	548,920	.59	.58	1,220,641
1967	98,253,000	566,985	580,185	.59	.58	1,127,344
1968	103,283,000	634,571	633,871	.61	.58	999,592
1969	111,396,000	704,242	703,542	.63	.58	833,701
1970	121,866,000	767,820	775,170	.64	.59	637,461
1971	131,730,000	889,228	897,478	.68	.59	354,292
1972	140,154,000	859,374	864,575	.62	.60	132,771
1973	143,834,000	1,011,796	1,034,196	.72	.61	(253,712)
1974	146,962,000	1,140,512	1,175,512	.80	.62	(483,644)
1975	156,628,000	1,190,786	1,206,236	.77	.63	(702,745)
1976	163,951,000	1,304,122	1,325,572	.81	.64	(852,027)
1977	165,258,000	1,300,411	1,312,161	.79	.65	(959,819)
1978	172,256,000	1,404,379	1,393,979	.81	.66	(1,103,713)
1979	177,648,000	1,378,601	1,410,042	.79	.67	(107,066)
1980	175,962,000	1,400,805	1,350,503	.77	.67	(132,312)
1981	202,902,000	1,496,480	1,514,388	.75	.68	64,895
1982	245,734,000	1,394,848	1,438,322	.59	.67	505,214
1983	274,644,000	1,687,704	1,678,899	.61	.67	957,656
1984	288,311,000	1,789,909	1,864,263	.65	.67	1,370,865
1985	310,359,000	1,975,135	1,977,432	.64	.66	1,875,475
1986	327,365,000	2,210,661	2,251,124	.69	.67	2,157,948
1987	360,065,000	1,969,935	2,005,236	.56	.66	2,728,701
1988	400,537,000	2,290,491	2,260,068	.56	.65	3,348,749

\* Provided by Retirement Office

## Section 2 — Disability Fund

### C. Temporary Disability Experience Table (continued)

Year Ending June 30	Estimated Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred	Annual Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	Cumulative Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	General Reserve*
1989	\$394,086,000	\$2,261,337	\$2,248,205	\$.57	\$.64**	\$3,849,928
1990	411,248,000	2,171,299	2,160,636	.53	.62**	4,580,470
1991	402,648,000	2,233,586	2,194,051	.54	.59**	5,286,005
1992	475,252,000	2,354,177	2,375,545	.50	.59**	6,298,902
1993	464,000,000	2,348,727	2,373,719	.51	.58**	6,888,804
1994	470,000,000	2,516,640	2,567,498	.55	.57**	6,709,671
1995	450,713,000	2,964,258	2,933,789	.65	.57**	5,845,370
1996	441,956,000	2,225,030	2,076,306	.47	.54**	5,593,988
1997	472,678,000	2,019,565	2,016,440	.43	.53**	5,286,560
1998	417,262,000	2,416,341	2,473,601	.59	.53**	4,210,250
1999	355,148,948	1,858,677	2,016,329	.57	.53**	3,371,035
2000	369,509,233	4,682,621	4,809,494	1.30	1.30***	13,339,138****
2001	403,265,472	4,211,036	4,426,638	1.10	1.20***	11,141,509
2002	430,397,884	4,584,284	4,528,640	1.05	1.15***	9,999,795
2003	472,432,303	5,306,242	5,388,510	1.14	1.15***	8,353,541
2004	522,227,280	6,210,253	6,246,423	1.20	1.16***	5,966,023
2005	554,839,816	7,298,197	7,480,641	1.35	1.19***	2,715,895
2006	574,315,572	8,897,820	9,028,144	1.57	1.24***	(2,009,091)
2007	604,514,525	9,502,988	9,556,168	1.58	1.29***	(4,328,288)

\* Provided by the Retirement Office

\*\* Average of ten most recent rates prior to the addition of the entire Temporary and Extended Temporary Disability Benefit.

\*\*\* Average of rates after addition of the entire Temporary and Extended Temporary Disability Benefit.

\*\*\*\* In 2000, \$11 million was transferred from the Permanent Total Disability Fund. Starting in 2000, the entire Temporary and Extended Temporary Disability Benefit became payable from this Fund.

Note: Starting in 1987, expenses are not included.

## Section 2 — Disability Fund

### D. Temporary and Extended Temporary Disability Benefits Reserve

The funding policy stated in the previous actuarial report is to have a General Reserve equal to 20% of the Claim Reserve by the end of fiscal year 2008. In recent years, Department contributions have been less than the incurred claims and expenses, resulting in a negative Total Reserve and General Reserve beginning at the end of fiscal 2006. To achieve the aforementioned goal, a Department contribution of approximately \$2.18 per \$100 of covered compensation would be needed for the entire 2007-2008 fiscal year.

	Total Reserves								
	2006 *			2007 *			2008 (estimated)		
	Total Reserve (A)	Claim Reserve (B)	Net General Reserve (C): (A) + (B)	Total Reserve (D)	Claim Reserve (E)	Net General Reserve (F): (D) + (E)	Total Reserve (G)	Claim Reserve (H)	Net General Reserve (I): (G) + (H)
Reserve, BOY	\$3,784,595	\$(1,068,700)	\$2,715,895	\$(810,067)	\$(1,199,024)	\$(2,009,091)	\$(3,076,081)	\$(1,252,204)	\$(4,328,285)
Contributions Made	4,242,753			7,323,305			14,625,000 **		
Sub Total	8,027,348			6,513,238			11,548,919		
Benefits Paid	(8,897,820)			(9,502,988)			(9,978,137)		
Balance Forward	(870,472)			(2,989,750)			1,570,782		
Interest on Mean Balance	60,405			(86,331)			0		
Reserve, EOY	\$(810,067)	\$(1,199,024)	\$(2,009,091)	\$(3,076,081)	\$(1,252,204)	\$(4,328,285)	\$1,570,782	\$(1,310,489)	\$(262,098)

\* Provided by Retirement Office

\*\* Assumes \$670 million in covered payroll

	Claim Reserves								
	2006 *			2007 *			2008 (estimated)		
	Number (A)	Average Amount (B)	Claim Reserve (C): (A) x (B)	Number (D)	Average Amount (E)	Claim Reserve (F): (D) x (E)	Number (G)	Average Amount (H) **	Claim Reserve (I): (G) x (H)
Open Claims, EOY	204	\$4,200	\$856,800	203	\$4,368	\$886,704	204	\$4,543	\$926,715
Pending Claims ***			342,224			365,500			383,775
Temporary Disability Claim Reserve			\$1,199,024			\$1,252,204			\$1,310,489

\* Provided by Retirement Office.

\*\* 5% increase over previous year.

\*\*\* Two weeks of benefit payments.

## Section 2 — Disability Fund

### E. Permanent Total Disability Benefits

Permanent Total Disability Benefits may commence as early as the thirteenth month of disability or as late as the twenty-fifth month, depending on the member's condition and Extended Temporary Disability Coverage. The monthly benefit is an amount equal to 40% of the member's compensation. Cost-of-living benefits, with a 3% maximum increase per year (similar to those provided to service retirees), were adopted as of April 1, 1970.

The exhibit below summarizes the cost of Permanent Total Disability Benefits from inception of the Plan to June 30, 2007.

#### CHART 4

#### Rates of Contribution Per \$100 of Compensation for Permanent Total Disability Benefits

As of June 30	Rates Per \$100 of Compensation		
	By Member	By Department	Total
1938 – 1942	\$ .62	\$ .41	\$ 1.03
1942 – 1947	.52	.34	.86
1947 – 1953	.62	.41	1.03
1953 – 1956	.52	.34	.86
1956 – 1959	.36	.24	.60
1959 – 1969	.21	.14	.35
1969 – 1973	.12	.08	.20
1973 – 1975	.24	.16	.40
1975 – 1980	.36	.24	.60
1980 – 1981	*	*	.60
1981 – 1987	*	*	.55
1987 – 1992	*	*	.25
1992 – 1998	*	*	.05
1998 – 2007	*	.00	*

\* From January 1980 to January 1984, employees paid \$1 per month and the Department paid the balance of the total rate. As of January 1984, the employee amount was increased to \$1 per biweekly payroll period.

## Section 2 — Disability Fund

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For the Permanent Total Disability Benefit, the Claim Reserve is calculated as the sum of:

- 1 The open (or reported) Claim Reserve, which is the present value of future disability benefits for open claims, and
- 2 The pending Claim Reserve, which is the contributions made during the fiscal year.

The rate of interest used by the Department in the present value calculation is 5%. Beginning in 1983, the present value calculation also reflects 3% cost-of-living increases. The incurred claims and the annual experience rate per \$100 of covered payroll were calculated as described in Section 2.A. and Section 3, Exhibit III. The current goal for the General Reserve is that it be maintained at approximately 20% of the Claim Reserve.

For several years the Permanent Total Disability Experience Table has shown a downward trend in the annual cost per \$100 of covered payroll. In 1983 the claim cost returned to earlier levels, but this was artificially high due to the change in reflecting cost-of-living increases. It appears that a somewhat stable cumulative rate of claim costs has been achieved, although year-by-year costs are fluctuating.

As of June 30, 2007 the General Reserve for Permanent Total Disability is \$25,697,532. This is much larger than the amount needed to meet the 2007 goal for the reserve, which is \$2,454,936. Thus, we recommend that the Department contribution be zero cents per \$100 of covered compensation so that the Net General Reserve can be reduced to its target level.

## Section 2 — Disability Fund

### F. Permanent Total Disability Experience Table

Year Ending June 30	Estimated Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred*	Annual Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll*	Cumulative Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	General Reserve **
1939	\$ 9,742,000	\$58,699	\$87,711	\$.90	\$.90	\$ 13,604
1940	13,989,000	85,014	103,588	.74	.81	56,344
1941	13,266,000	89,721	74,936	.56	.72	122,383
1942	13,306,000	109,058	91,896	.69	.71	175,539
1943	12,574,000	120,837	74,067	.59	.69	219,667
1944	12,319,000	58,699	83,340	.68	.69	252,063
1945	12,309,000	85,014	146,059	1.19	.76	218,072
1946	15,152,000	89,721	241,219	1.59	.88	111,847
1947	19,836,000	109,058	270,398	1.36	.96	18,764
1948	23,235,000	120,837	175,320	.75	.93	80,980
1949	27,275,000	136,224	133,200	.49	.86	233,675
1950	29,974,000	138,210	96,082	.32	.78	458,989
1951	29,990,000	135,367	144,943	.48	.74	632,438
1952	37,565,000	134,551	11,043	.03	.64	1,044,175
1953	40,464,000	156,803	403,365	1.00	.76	1,055,235
1954	44,971,000	184,131	166,033	.37	.64	1,316,150
1955	49,389,000	192,397	234,939	.48	.62	1,547,758
1956	50,836,000	179,587	14,956	.03	.56	2,021,772
1957	52,720,000	180,814	249,641	.47	.55	2,157,769
1958	58,829,000	152,089	33,695	.06	.50	2,560,220
1959	61,495,000	146,785	381,672	.62	.51	2,615,720
1960	64,964,000	187,826	367,442	.57	.52	2,572,558
1961	67,012,000	216,655	509,906	.76	.54	2,394,036
1962	71,708,000	230,601	205,588	.29	.52	2,526,768
1963	77,236,000	227,517	327,404	.42	.51	2,560,680

\* Reflects credit of interest earnings on Claim Reserves but not on the General Reserve.

\*\* Provided by Retirement Office.

\*\*\* This rate is artificially high due to the introduction of cost-of-living increases in the Claim Reserve Calculation.

\*\*\*\* Average of rates for last 20 years.

Note: Starting in 1987, expenses are not included.

## Section 2 — Disability Fund

### F. Permanent Total Disability Experience Table (continued)

Year Ending June 30	Estimated Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred*	Annual Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll*	Cumulative Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	General Reserve**
1964	\$ 82,455,000	\$ 240,242	\$ 319,583	\$ .39	\$ .50	\$ 2,624,717
1965	86,833,000	248,687	291,596	.34	.48	2,736,710
1966	91,488,000	277,855	395,424	.43	.48	2,763,324
1967	96,225,000	286,761	202,661	.21	.46	3,009,729
1968	101,556,000	298,893	401,943	.40	.46	3,079,294
1969	109,554,000	334,656	731,158	.67	.47	2,840,069
1970	120,246,000	374,358	729,926	.61	.48	2,446,761
1971	130,096,000	376,744	245,854	.19	.46	2,561,379
1972	138,857,000	446,816	1,012,405	.73	.48	1,902,860
1973	143,308,000	502,274	930,350	.65	.49	1,283,193
1974	146,886,000	582,628	1,244,725	.85	.52	651,223
1975	156,760,000	682,830	1,483,906	.95	.54	(214,183)
1976	164,183,000	761,200	1,332,986	.81	.56	(644,432)
1977	165,224,000	867,586	1,629,326	.99	.59	(1,348,628)
1978	171,767,000	920,799	1,042,386	.61	.59	(1,432,449)
1979	176,576,000	907,163	972,121	.55	.59	1,348,852
1980	177,340,000	912,703	837,008	.47	.58	1,887,689
1981	202,994,000	1,006,200	369,334	.18	.55	2,750,719
1982	245,580,000	946,778	29,798	.01	.51	4,404,597
1983	274,629,000	978,647	1,755,073	.64***	.52	4,534,031
1984	288,289,000	1,000,319	725,141	.21	.50	5,879,532
1985	310,360,000	1,006,631	591,410	.19	.48	7,623,235
1986	321,523,000	974,376	569,547	.18	.46	9,284,884
1987	360,072,000	901,033	121,268	.03	.45	11,090,748
1988	401,029,000	946,468	840,245	.21	.44	13,253,261

\* Reflects credit of interest earnings on Claim Reserves but not on the General Reserve.

\*\* Provided by Retirement Office.

\*\*\* This rate is artificially high due to the introduction of cost-of-living increases in the Claim Reserve Calculation.

\*\*\*\* Average of rates for last 20 years.

Note: Starting in 1987, expenses are not included

## Section 2 — Disability Fund

### F. Permanent Total Disability Experience Table (continued)

Year Ending June 30	Estimated Covered Payroll	Claims and Expenses Paid	Claims and Expenses Incurred*	Annual Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	Cumulative Rate of Incurred Claims and Expenses Per \$100 of Covered Payroll	General Reserve**
1989	\$394,084,000	\$1,024,870	\$1,563,694	\$ .40	\$.47****	\$13,929,718
1990	411,248,000	1,038,907	594,815	.14	.45****	15,723,997
1991	405,132,000	1,046,404	739,845	.18	.45****	18,108,405
1992	472,984,000	1,054,203	989,998	.21	.42****	20,483,790
1993	464,000,000	1,102,722	1,652,617	.36	.41****	21,843,275
1994	470,000,000	1,058,778	320,344	.07	.37****	24,150,799
1995	515,122,000	1,059,537	1,506,726	.29	.34****	25,312,906
1996	456,604,000	1,027,066	1,230,694	.27	.27****	26,514,847
1997	460,540,000	930,321	1,166,197	.25	.27****	28,156,245
1998	432,750,000	1,022,029	839,204	.19	.25****	30,206,085
1999	355,148,948	944,740	1,257,860	.35	.24****	32,320,298
2000	369,509,233	1,023,333	1,336,453	.36	.24****	22,231,871
2001	403,265,472	1,037,601	681,004	.17	.24****	24,428,829
2002	430,397,884	1,107,061	2,760,650	.64	.27****	23,552,296
2003	472,432,303	1,154,061	1,451,604	.31	.25****	24,159,068
2004	522,227,280	1,235,285	2,557,099	.49	.26****	23,211,839
2005	554,839,816	1,344,393	1,237,126	.22	.26****	25,396,120
2006	574,315,572	1,416,598	684,738	.12	.26****	26,438,032
2007	604,514,525	1,493,732	2,624,785	.43	.28****	25,697,532

\* Provided by Retirement Office.

\*\* Reflects credit of interest earnings on Claim Reserves but not on the General Reserve.

\*\*\* This rate is artificially high due to the introduction of cost-of-living increases in the Claim Reserve Calculation.

\*\*\*\* Average of rates for last 20 years.

Note: Starting in 1987, expenses are not included.

## Section 2 — Disability Fund

### G. Permanent Total Disability Benefits Reserve

The Total Reserve for the Permanent and Total Disability Benefits is \$38.0 million and the required Claim Reserve is \$12.3 million as of July 1, 2007. As a result, the General Reserve is a positive \$25.7 million.

	Total Reserves								
	2006 *			2007 *			2008 (estimated)		
	Total Reserve (A)	Claim Reserve (B)	Net General Reserve (C): (A) + (B)	Total Reserve (D)	Claim Reserve (E)	Net General Reserve (F): (D) + (E)	Total Reserve (G)	Claim Reserve (H)	Net General Reserve (I): (G) + (H)
Reserve, BOY	\$37,271,605	\$(11,875,485)	\$25,396,120	\$37,581,657	\$(11,143,625)	\$26,438,032	\$37,972,210	\$(12,274,678)	\$25,697,532
Contributions Made	197,458			199,223			199,223		
Sub Total	37,469,063			37,780,880			38,171,433		
Benefits Paid	(1,416,598)			(1,493,732)			(1,493,732)		
Balance forward	36,052,465			36,287,148			36,677,701		
Interest on Mean Balance	1,529,192			1,685,062			0		
Reserve, EOY	\$37,581,657	\$(11,143,625)	\$26,438,032	\$37,972,210	\$(12,274,678)	\$25,697,532	\$36,677,701	\$(12,274,678)	\$24,403,023

\* Provided by Retirement Office.

	Claim Reserves		
	2006 *	2007 *	2008 (estimated)
Present Value - PTD Report Cases	\$10,946,167	\$10,946,167	\$10,946,167
Pending = This Years Contributions	197,458	199,223	199,223
Required PTD Claim Reserve	11,143,625	11,145,390	11,145,390

\* Provided by Retirement Office.

## Section 3 — Actuarial Assumptions, Methods and Plan Provisions

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### EXHIBIT I

#### Actuarial Assumptions and Actuarial Cost Method Used for Temporary and Extended Temporary Disability Benefit

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<b>Plan Year</b>	July 1 through June 30.
<b>Definition of Active Member</b>	First day of biweekly payroll period following employment for new Department employees or immediately following transfer from other City departments.
<b>Covered Payroll</b>	\$604.5 million for 2006-2007. \$574.3 million for the 2005-2006 plan year
<b>Net Investment Return</b>	5.00%.
<b>Member Contribution Rate</b>	Employees start contributing on the first day of the payroll period following the completion of 26 continuous weeks of Department and/or City service at the rate of \$1.00 for each biweekly payroll period.
<b>Department Contribution Rate</b>	Rate recommended by Board's Actuary multiplied by the total monthly equivalent of Compensation.
<b>Funding Method</b>	Annual contributions equal the present value of all future disability payments for those expected to become disabled during the year with a further adjustment for interest credited to the reserves. Subject to modification by the Department's funding policy.
<b>Funding Policy</b>	A contribution rate to reach a target General Reserve equal to 20% of the Claim Reserve at the end of ten years from June 30, 1998.

## **Section 3 — Actuarial Assumptions, Methods and Plan Provisions**

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### **EXHIBIT I**

#### **Actuarial Assumptions and Actuarial Cost Method Used for Temporary and Extended Temporary Disability Benefit (continued)**

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<b>Claim Reserve</b>	The sum of the Open Claim Reserve and the Pending Claim Reserve.
<b>Open Claim Reserve</b>	The number of open claims times the reserve factor specified in Section IIID(2) of the Plan. The reserve factor was increased to \$4,200 for 2006 and \$4,368 for 2007. These reserve factors are provided by the Retirement Office and accepted by Buck Consultants without audit.
<b>Pending Claim Reserve</b>	1/26 of the total benefits paid during the preceding fiscal year.
<b>Incurred Claims</b>	Paid claims for the year plus the increase in Claim Reserves.

## Section 3 — Actuarial Assumptions, Methods and Plan Provisions

### EXHIBIT II

#### Summary of Temporary and Extended Temporary Disability Benefit

**Age Requirement** Any age.

**Service Requirement** Six months of continuous service.

**Temporary Benefit** The biweekly benefit is a percentage of the biweekly compensation payable from the fifteenth day of disability through the end of the twelfth month of disability. The percentage is based on the following table.

Period of Continuous Service		Maximum Period Payable at Percentage of Compensation			
Not Less Than	Less Than	85%	60%	50%	40%
6 months	3 Years	2 Weeks	1 Week	26 Weeks	21 Weeks
3 Years	5 Years	4 Weeks	2 Weeks	26 Weeks	18 Weeks
5 Years	10 Years	6 Weeks	3 Weeks	26 Weeks	15 Weeks
10 Years	15 Years	18 Weeks	10 Weeks	22 Weeks	--
15 Years	20 Years	20 Weeks	12 Weeks	18 Weeks	--
20 Years	25 Years	22 Weeks	14 Weeks	14 Weeks	--
25 Years	30 Years	24 Weeks	16 Weeks	10 Weeks	--
30 Years	35 Years	26 Weeks	18 Weeks	6 Weeks	--
35 Years		28 Weeks	20 Weeks	2 Weeks	--

**Extended Disability Requirements** Received 50 weeks of Temporary Disability Benefits and is not eligible for Permanent Total Disability.

**Extended Disability Benefit** The biweekly benefit is 33-1/3 percent of biweekly compensation payable from the end of the twelfth month of disability through the twenty-fourth month of disability. However, if a member qualifies for Permanent Total Disability while such member is receiving Extended Temporary Disability Benefits, such benefits shall be terminated and the member shall receive the Permanent Total Disability Benefits to which he/she is entitled.

## Section 3 — Actuarial Assumptions, Methods and Plan Provisions

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### EXHIBIT III

#### Actuarial Assumptions and Actuarial Cost Method Used for Permanent Total Disability Benefit

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<b>Plan Year</b>	July 1 through June 30.
<b>Definition of Active Member</b>	First day of biweekly payroll period following employment for new Department employees or immediately following transfer from other City departments.
<b>Covered Payroll</b>	\$604.5 million for the 2006-2007 plan year and \$574.3 million for 2005-2006.
<b>Net Investment Return</b>	5.00%.
<b>Consumer Price Index</b>	Increase of 4.0% per year, benefit increases due to inflation subject to 3.0% maximum.
<b>Mortality</b>	Based on plan experience.
<b>Member Contribution Rate</b>	Employees start contributing on the first day of the payroll period following the completion of 26 continuous weeks of Department and/or City service at the rate of \$1.00 for each biweekly payroll period.
<b>Department Contribution Rate</b>	Rate recommended by Board's Actuary multiplied by the total monthly equivalent of compensation.
<b>Funding Method</b>	Annual contributions equal the present value of all future disability payments for those expected to become disabled during the year with a further adjustment for interest credited to the reserves. Subject to modification by the Department's funding policy.
<b>Funding Policy</b>	A contribution rate to maintain a target General Reserve equal to 20% of the Claim Reserve.

## **Section 3 — Actuarial Assumptions, Methods and Plan Provisions**

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### **EXHIBIT III**

#### **Actuarial Assumptions and Actuarial Cost Method Used for Permanent Total Disability Benefit (continued)**

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<b>Claim Reserve</b>	The sum of the Open Claim Reserve and the Pending Claim Reserve.
<b>Open Claim Reserve</b>	The present value of future disability benefits for open claims.
<b>Pending Claim Reserve</b>	Contributions made during the fiscal year.
<b>Incurred Claims</b>	Paid claims for the year plus the increase in Claim Reserves.

## **Section 3 — Actuarial Assumptions, Methods and Plan Provisions**

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### **EXHIBIT IV**

#### **Summary of Permanent Total Disability Benefit**

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<b>Age Requirement</b>	Any age.
<b>Service Requirement</b>	Six months of continuous service.
<b>Other Requirements</b>	Received 50 weeks of Temporary Disability Benefits and satisfies the rules for Permanent Total Disability.
<b>Monthly Benefit</b>	The monthly benefit is 40% of the monthly compensation payable from the end of the twelfth month of disability (or later if benefits are payable under the extended temporary disability benefit) until the first day of the calendar month following the sixty-fifth birthday. If Permanent Total Disability Benefits commence after the member's sixtieth birthday, the benefit is payable for 60 months. Permanent Total Disability Benefits are subject to annual cost-of-living adjustments, based on the CPI up to a maximum of 3% per year.

## Section 3 — Actuarial Assumptions, Methods and Plan Provisions

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### EXHIBIT V

#### Actuarial Assumptions and Actuarial Cost Method Used for Supplemental Industrial Disability Benefit

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<b>Plan Year</b>	July 1 through June 30.
<b>Definition of Active Member</b>	First day of biweekly payroll period following employment for new Department employees or immediately following transfer from other City departments.
<b>Covered Payroll</b>	\$604.5 million for the 2006-2007 plan year and \$574.3 million for 2005-2006.
<b>Net Investment Return</b>	5.00%.
<b>Member Contribution Rate</b>	None.
<b>Department Contribution Rate</b>	Funded on a cash basis.
<b>Funding Method</b>	Pay as you go.
<b>Funding Policy</b>	Funded on a cash basis.
<b>Claim Reserve</b>	None.
<b>Open Claim Reserve</b>	None.
<b>Pending Claim Reserve</b>	None.
<b>Incurred Claims</b>	Paid claims for the year.

## **Section 3 — Actuarial Assumptions, Methods and Plan Provisions**

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### **EXHIBIT VI**

#### **Summary of Supplemental Industrial Disability Benefit**

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<b>Age Requirement</b>	Any age.
<b>Service Requirement</b>	Six months of continuous service.
<b>Additional Requirements</b>	Injury or disease which arises out of and in the course of employment in the Department. Receiving workers' compensation benefits.
<b>Supplemental Benefit</b>	For the first ten days the biweekly benefit is biweekly compensation offset by the amount received from workers' compensation. Afterwards, the biweekly benefit is the Temporary, Extended Temporary, or Permanent Total Disability Benefits offset by the amount received from workers' compensation.