



PENSION FUND ACTUARIALLY REQUIRED CONTRIBUTIONS (ARC)

A Civic Federation Issue Brief

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The Civic Federation
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OVERVIEW

The purpose of this issue brief is to describe and explain the term “actuarially required contribution” (typically referred to as the “ARC”) and compare the calculation of the ARC to the amount of annual contributions actually made to some of the major public pension funds in Illinois.

DEFINITIONS

The actuarial parameters and reporting requirements for pension valuations, including calculation of the ARC, were established by the Governmental Accounting Standards Board (GASB) in Statements 25 and 27, published in November 1994 and effective June 15, 1996, and June 15, 1997, respectively.¹ The ARC is equal to the sum of (1) the employer’s “normal cost” (defined below) of retirement benefits earned by employees in the current year, and (2) the amount needed to amortize any existing unfunded accrued liability over a period of not more than 30 years.

It is important to understand that the ARC is merely a reporting requirement established by GASB and is not a government funding requirement. However, because paying the normal cost and amortizing the unfunded liability over a period of 30 years does represent a reasonably sound funding policy, the ARC can be used as a comparative indicator of how well a public entity is actually funding their pension plan. Therefore, for the remainder of this article, we will use the ARC as a proxy for the amount of annual employer contribution that is representative of a reasonable funding policy.

Normal cost is that portion of the present value of pension plan benefits and administrative expenses which is allocated to a given valuation year, and is calculated using one of six standard actuarial cost methods. Each of these methods provides a way to calculate the present value of future benefit payments owed to active employees. The methods also specify procedures for systematically allocating the present value of benefits to time periods, usually in the form of the normal cost for the valuation year, and the **actuarial accrued liability (AAL)**. The actuarial accrued liability is that portion of the present value of benefits which is not covered by future normal costs.

METHODS FOR CALCULATING AN ARC

GASB 25 & 27 permit use of one of the following six **cost methods** for calculating normal cost: entry age, frozen entry age, attained age, frozen attained age, projected unit credit, or aggregate. Entry age and projected credit unit are the most common methods used for public pension funds, so those will be described here.

¹ GASB Statement No. 25 set parameters for financial reporting and GASB Statement No. 27 set accounting standards for pension expenditures, liabilities, and related information.

The **entry age** method allocates the present value of benefits for each individual on a level basis over the earnings of that member from the age of entry into the plan to the expected age at retirement. The resulting normal cost is a level percent of payroll.

The **projected unit credit** method allocates the present value of benefits for each individual attributable to service to date, using future compensation projected to retirement. The resulting normal costs can fluctuate, because they are lower for an individual at the start of his or her career and increase over time. The projected unit credit method is required for accounting purposes in the private sector, but *entry age is the most common method for public sector pension funds because it produces a more consistent normal cost.*² However, state statute specifies that the five state retirement systems and the Chicago Public Schools fund must use the projected unit actuarial cost method (40 ILCS 5/22-1001 and 40 ILCS 5/17-129). The Chicago Transit Authority changed from entry age to projected unit credit effective in FY2003 as a result of union negotiations. The Chicago Park District Retirement Fund changed from entry age to projected unit credit in FY2004, which had the effect of lowering its total actuarial liability by \$36.9 million.³ Other major Illinois public pension funds have chosen to use the entry age method.

Actuarial Cost Methods of Major Illinois Public Pension Funds: FY2004	
Entry Age	Projected Unit Credit
Illinois Municipal Retirement Fund	State Employees Retirement System*
Cook County Employees	State University Retirement System*
Cook County Forest Preserve Employees	General Assembly Retirement System*
Metropolitan Water Reclamation District	Judges' Retirement System*
Chicago Municipal Employees	Teachers' Retirement System*
Chicago Laborers	Chicago Teachers Retirement Fund*
Chicago Police	Chicago Transit Authority**
Chicago Fire	Chicago Park District***

*Required by state law to use this method

**Changed from Entry Age to Projected Unit Credit in FY2003

***Changed from Entry Age to Projected Unit Credit in FY2004

² Stephen Gauthier. *Employer's Accounting for Pensions and Other Post-Employment Benefits (OPEB)*. Government Finance Officers Association, Chicago, 2005, p. 38.

³ Park Employees' & Retirement Board Employees' Annuity and Benefit Fund. *Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2004*, p. 47.

COMPONENTS OF AN ARC

An ARC is comprised of normal cost and the amount required to amortize an unfunded actuarial accrued liability.

Normal Cost

Normal cost is calculated for each retirement benefit and can be expressed as a percent of payroll. The employer's share of normal cost is the sum of normal cost for all benefits, net of employee contributions. The following exhibit shows as an example the most recent employer's normal cost for the Chicago Teachers pension fund, a sum equivalent to 9.70% of payroll.

Chicago Teachers' Pension Fund Employer's Normal Cost for the Year Beginning July 1, 2005		
	Normal Cost	% of payroll*
Basic retirement pension	\$ 178,314,403	9.06%
Post retirement increases	\$ 46,712,447	2.37%
Lump sum death benefits	\$ 886,116	0.05%
Survivor's pension	\$ 20,433,800	1.04%
Disability benefits	\$ 6,634,654	0.34%
Withdrawal benefits	\$ 35,572,792	1.81%
Health insurance reimbursement	\$ 59,651,860	3.03%
Administrative expenses	\$ 8,396,502	0.43%
TOTAL Normal Cost	\$ 356,602,574	18.11%
Employee Contributions	\$ 165,584,207	8.41%
Employer's Share of Normal Cost	\$ 191,018,367	9.70%

*Payroll of \$1,968,612,235 as of June 30, 2005

Source: Public School Teachers' Pension and Retirement Fund of Chicago 110th Comprehensive Annual Financial Report for the year ended June 30, 2005, p. 74

Amortization of Unfunded Liability

An ARC includes both the employer's normal cost and the amount required to amortize the unfunded actuarial accrued liability (UAAL). UAAL is the actuarial accrued liability not covered by the actuarial value of assets. A UAAL is often the result of underfunding, (i.e., failure to pay the normal cost plus any other increase in accrued liability) but there are three principal reasons why even a plan that has always paid the full ARC may have a UAAL. First, actual experience always differs from that predicted by the actuarial assumptions, and any resulting actuarial gains or losses mean that the actuarially projected ARC was not what was needed in reality, thus creating a UAAL.⁴ Second, benefit enhancements are often made retroactive (especially in public sector plans), such that a more favorable formula is applied to

⁴ UAAL can be positive or negative. Positive UAAL occurs when actuarial accrued liability exceeds actuarial assets, and negative UAAL occurs when actuarial accrued liability is less than actuarial assets. See GASB Statement 27, page 6.

past years of service, thus creating a UAAL.⁵ Third, many plans had an unfunded liability at inception due to prior service credit for employees, and this original liability may never have been fully amortized.

From June 15, 1996 to June 14, 2006, the maximum amortization period for a UAAL was 40 years, according to GASB 25. Beginning June 15, 2006, the maximum amortization period is 30 years.⁶ GASB 25 permits the amortization to be calculated either as a **level dollar amount** or as a **level percent of projected payroll**. When using the level percent of payroll method, the assumed payroll growth rate should not include an assumed increase in the number of plan members. The amortization period must also be identified as either **open** or **closed**. An open amortization period remains the same every year (e.g., each valuation amortizes UAAL over 30 years), while a closed amortization period declines as each year passes (e.g., successive valuations amortize at 30 years, 29 years, 28 years, etc.). In general, level dollar amount is considered a more aggressive payment plan than level percent of payroll because it takes on more costs earlier; likewise, short or closed amortization periods are more aggressive than long, open periods.

For example, the State of Illinois “1995 funding law” established by Public Act 88-593 and modified by Public Act 94-0004 is an example of a closed amortization period using a level percent of payroll: the five state pension systems are to amortize their UAAL such that they will be 90% funded by the year 2045. However, the State funding schedule is much less aggressive than the ARC recommended by GASB because: 1) it set a long (50-year) amortization period; 2) it has a target funded ratio of 90%, not 100%; and 3) it includes a ramp-up period or reduced contributions which effectively backloads the payment schedule and increases total required contributions.

The ARC is the sum of the employer’s normal cost and the amount required to amortize the UAAL. The following exhibit shows the most recent ARC for the Chicago Teachers pension fund.

Chicago Teachers' Pension Fund ARC for the Year Beginning July 1, 2006	
Employer's Normal Cost	\$ 191,018,367
Annual amount to amortize the UAAL over 40 years as a level percent of payroll	\$ 137,347,454
TOTAL (ARC)	\$ 328,365,821

Source: Public School Teachers' Pension and Retirement Fund of Chicago 110th Comprehensive Annual Financial Report for the year ended June 30, 2005, p. 76.

⁵ Stephen Gauthier. *Employer’s Accounting for Pensions and Other Post-Employment Benefits (OPEB)*. Government Finance Officers Association, Chicago, 2005, p. 46.

⁶ The GASB believes that, for most employee groups, the standard service period is 30 years, and that the amortization period should not exceed estimated years of service. The Board allowed for a 40-year amortization period for the first 10 years of GASB 27 implementation in order to provide a transition period for funds that been using longer amortization periods. The Board encourages use of shorter periods. See GASB Statement 27, pp. 75-76.

ARC VS. ACTUAL CONTRIBUTIONS

While the ARC prescribes what an employer should contribute in order to cover current (normal) costs incurred and to pay down the unfunded liability (UAAL), many public funds in Illinois do not fund at the ARC. Because there are no federal funding requirements for public sector plans, state laws and union contracts typically establish employer contribution rates which may or may not relate to actuarial funding needs. Several major Illinois public pension funds do have funding requirements that are related to actuarial funding needs. For example:

- All downstate firefighter funds, downstate police funds, and the Illinois Municipal Retirement Fund require employer funding at a level consistent with the ARC.
- As specified in Public Act 88-593, the five state retirement systems are required to receive annual appropriations from state general funds sufficient to bring their funded ratios to 90% by 2045 (but as demonstrated by Public Act 94-0004, this funding schedule is subject to change by the General Assembly).⁷
- Per state statute, employer contributions to the Chicago Teachers' pension fund usually consist of a lump sum from the State of Illinois (roughly \$65 million), as well as additional amounts from the State and the Chicago Board of Education when the funded ratio falls below 90%.

For many Chicago-area local pension funds, however, the annual employer contribution is not related to the actuarial needs, but is instead set in state statute as a fixed multiple of the total employee contribution made two years prior. The statute requires that the employer levy a property tax not to exceed the multiple amount. Employers levy an amount for the pension fund that, when added to the revenue from Personal Property Replacement Taxes, equals the multiple amount.⁸

These multiples are fixed, and except for the Chicago Teachers' fund, the employer is not permitted to reduce its contribution unless the funded ratio reaches 100%. There are sometimes exceptions to this rule. For example, Public Act 93-0654 allowed the Chicago Park District to reduce its employer contribution by \$5 million in each of calendar years 2004 and 2005, although the District was not required to reduce its property tax levy equivalently. This will represent roughly a 50% reduction in the employer contributions for the Park's fund in FY2005 and FY2006.

For the Chicago Transit Authority pension plan, the annual employer contribution is also not linked to the actuarial needs, but is instead set in the collective bargaining agreement as a fixed percentage of payroll. Currently under the CTA plan, employees contribute 3% of pay and the

⁷ Public Act 94-0004 permitted the state to reduce its FY2006 and FY2007 contributions to the 5 retirement systems by \$1.2 billion and \$1.1 billion, respectively.

⁸ The Personal Property Replacement Tax (PPRT) is a corporate income tax, established when the Illinois General Assembly abolished all ad valorem personal property taxes on corporations in 1979. The State distributes PPRT revenues to local taxing districts according to a formula based partly on each district's share of personal property tax collection in 1976 or 1977.

CTA contributes 6% of pay. These percentages bear no relationship to the actuarial needs of the plan. However, Public Act 94-0839, signed by Governor Blagojevich in June 2006, states that in 2009 the CTA must begin making annual pension contributions sufficient to bring the funded ratio to 90% by the year 2058. Like the State funding requirements outlined in Public Act 94-0004 (see p. 6), this funding schedule is significantly less aggressive than the ARC recommended by GASB.

Occasionally there are legislated requirements for additional employer contributions. For example, Public Act 90-766 required the City of Chicago to make additional contributions to the Firemen's fund for FY1999-FY2013 in order to reduce the unfunded liability. However, Public Act 93-0654 rescinded that requirement for FY2004-FY2013.

The following table lists the employer contributions for local pension funds, not including special additions or subtractions specified in statute:

**STATUTORILY REQUIRED EMPLOYER CONTRIBUTIONS
FOR LOCAL GOVERNMENT PENSION FUNDS**

FUND	STATUTE	EMPLOYER CONTRIBUTION
Chicago Fire	40 ILCS 5/6-107	2.26 x employee contributions made 2 years prior
Chicago Police	40 ILCS 5/5-168	2.00 x employee contributions made 2 years prior
Chicago Municipal	40 ILCS 5/8-173	1.25 x employee contributions made 2 years prior
Chicago Laborers	40 ILCS 5/11-169	1.00 x employee contributions made 2 years prior
Chicago Teachers	40 ILCS 5/17-127	State pays amount equal to 20-30% of the contribution made to TRS. State pays an additional amount equal to 0.544% of total teacher payroll, unless Fund was 90% or more funded (actuarial) in the previous fiscal year. Beginning 1999, the employer contributes an amount equal to 0.58% of each teacher's salary, to offset a portion of costs associated with P.A. 90-582, unless Fund was 90% or more funded (actuarial) in the previous fiscal year.
Chicago Parks	40 ILCS 5/12-149	1.10 x employee contributions made 2 years prior
MWRD	40 ILCS 5/13-503	2.19 x employee contributions made 2 years prior, except for employee contributions to optional additional benefits made after January 1, 2003, which are multiplied by 1.00.
Cook County	40 ILCS 5/9-169	1.54 x employee contributions made 2 years prior
Cook Forest Preserve	40 ILCS 5/10-107	1.30 x employee contributions made 2 years prior
CTA	N/A	employer contribution collectively bargained, not governed by statute ⁹
Downstate Fire	40 ILCS 5/4-118	amount sufficient to fund 1) normal cost or 17.5% of payroll, whichever is greater, and 2) amortization of unfunded liability through June 30, 2033
Downstate Police	40 ILCS 5/3-125 and 40 ILCS 5/3-127	amount sufficient to fund 1) normal cost and 2) amortization of unfunded liability through June 30, 2033
IMRF	40 ILCS 5/7-171 and 40 ILCS 5/7-172	amount sufficient to fund 1) disability benefits, 2) death benefits, 3) supplemental retirement benefits, 4) normal cost, and 5) amortization of unfunded liability over 10 years or 25 years, depending on funded ratio ¹⁰

⁹ Provisions of the CTA Retirement Plan are subject to collective bargaining between the CTA and Locals 241 and 208 of the Amalgamated Transit Union. Plan text is available at <http://www.ctapension.com/about/PlanDocument.asp>.

¹⁰ This applies to most employers. There are some exceptions, for example participating instrumentalities without taxing authority generally amortize unfunded liabilities over 5 years. Separate employer contribution rates are calculated for IMRF Sheriff Law Enforcement Employees and IMRF Elected County Officials.

It is essential to note that although paying the normal cost and amortizing the unfunded liability over a period of 30 years represents a reasonably sound funding policy, funding at the ARC does not guarantee a 100% funding ratio. As noted on page 5, a UAAL can develop due to differences between actuarial predictions and actual experience, or retroactive benefit enhancements. In addition, the time required to close the financial books, compile an actuarial valuation, and levy taxes usually creates a timing lag of at least two years between the year on which the ARC is based and the year in which the employer contribution is made. Historic unfunded liabilities, significant investment losses or benefit enhancements during the time lag can result in a funding ratio well below 100%. For example, the IMRF, downstate fire, and downstate police (all funded at the ARC) had FY2004 funded ratios of 95.6%, 72.4%, and 65.7%, respectively. By contrast, the Chicago fire and police funds (funded by a fixed employer multiple) had funding ratios of 42.3% and 55.9%, respectively.

GASB REPORTING REQUIREMENTS

GASB 25 requires that the financial statements of public pension funds include a **schedule of employer contributions** that compares the ARC to actual contributions for the previous six years. The following exhibit shows the most recent schedule of employer contributions for the Chicago Teachers pension fund, including ARC as a percent of payroll. In FY2005, the actual employer contribution was only 28.6% of the ARC. Tables showing the schedule of employer contributions for other major Illinois public pension funds are included in Appendix A.

Chicago Teachers' Pension Fund Schedule of Employer Contributions						
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll
2000	\$ 138,440,544	\$ 79,729,145	57.6%	\$ 1,651,810,084	8.4%	4.8%
2001	\$ 188,922,506	\$ 77,135,200	40.8%	\$ 1,690,264,167	11.2%	4.6%
2002	\$ 178,954,824	\$ 77,679,068	43.4%	\$ 1,759,045,853	10.2%	4.4%
2003	\$ 160,195,509	\$ 78,747,983	49.2%	\$ 1,706,205,814	9.4%	4.6%
2004	\$ 202,971,485	\$ 78,127,279	38.5%	\$ 1,767,631,306	11.5%	4.4%
2005	\$ 258,883,211	\$ 73,917,464	28.6%	\$ 1,968,612,235	13.2%	3.8%

Source: Public School Teachers' Pension and Retirement Fund of Chicago 109th Comprehensive Annual Financial Report for the year ended June 30, 2005, pp. 38 and 80.

For those funds whose employer contributions are statutory multiples of employee contributions, the actuary will sometimes express the ARC as a multiple and compare it to the statutory multiple (this is not required by GASB). For example, for FY2004 the MWRD plan's actuaries calculated that the actuarially required employer multiple should have been 3.64, instead of the statutory 2.19; this shortfall resulted in a \$16.4 million increase in the plan's unfunded liability for FY2004. The following table compares statutory multiples to actuarially required multiples for several local pension funds.

FY2004 Statutory Multiple for Employer Contribution vs. Actuarially Required Multiple		
	Actuarially Required Multiple (Normal Cost + UAAL Amortization)	Statutory Multiple
MWRD	3.64	2.19
Chicago Police	5.00	2.00
Chicago Fire	5.19	2.26
Chicago Municipal	2.23	1.25
Chicago Laborers	0.67	1.00
Cook County	3.10	1.54
Cook County Forest Preserve	3.41	1.30

SUMMARY

GASB Statements 25 and 27 established reporting requirements for pension valuations, including calculation of an actuarially required contribution for employers. The ARC is equal to the sum of (1) the employer's "normal cost" of retirement benefits earned by employees in the current year, and (2) the amount needed to amortize any existing unfunded accrued liability over a period of not more than 30 years.

The ARC is merely a reporting requirement established by GASB and is not a government funding requirement. Because paying the normal cost and amortizing the unfunded liability over a period of 30 years does represent a reasonably sound funding policy, the ARC can be used as a comparative indicator of how well a public entity is actually funding its pension plan. However, funding at the ARC does not guarantee a funded ratio of 100%.

The Illinois Municipal Retirement Fund, downstate police funds, and downstate fire funds all require employer funding at the ARC. The five state retirement funds, the Chicago Public Schools, and the Chicago Transit Authority (beginning in 2009) are all statutorily required to make employer contributions that are related to actuarial funding needs, though not at the ARC. However, most Chicago-area local pension funds receive employer contributions that are not related to actuarial needs, but are instead set in statute as a fixed multiple of the total employee contribution made two years prior. Most funds using a fixed multiple have employer contributions that fail to meet the ARC.

APPENDIX A: SCHEDULES OF EMPLOYER CONTRIBUTIONS

In the following tables, “n/a” indicates that the actuarial valuation for that year is not yet available.

Cook County Pension Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 190,557,579	\$ 158,474,997	83.2%	\$ 1,261,050,576	15.1%	12.6%	94.0%
2001	\$ 211,188,715	\$ 161,141,138	76.3%	\$ 1,274,942,064	16.6%	12.6%	88.9%
2002	\$ 253,942,375	\$ 178,410,973	70.3%	\$ 1,330,456,896	19.1%	13.4%	74.7%
2003	\$ 364,658,305	\$ 185,608,032	50.9%	\$ 1,307,079,312	27.9%	14.2%	67.5%
2004	\$ 457,427,014	\$ 201,957,937	44.2%	\$ 1,371,540,481	33.4%	14.7%	70.9%
2005	\$ 428,971,126	\$ 218,292,478	50.9%	\$ 1,387,459,142	30.9%	15.7%	75.8%

Source: Cook County Employees' Annuity and Benefit Fund Actuarial Valuation as of December 31, 2005, pp. 21 and 22.

Cook County Forest Preserve Pension Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 3,741,475	\$ 3,355,316	89.7%	\$ 32,211,624	11.6%	10.4%	103.7%
2001	\$ 4,816,346	\$ 3,675,320	76.3%	\$ 28,631,232	16.8%	12.8%	98.0%
2002	\$ 5,165,491	\$ 3,993,607	77.3%	\$ 25,781,400	20.0%	15.5%	81.6%
2003	\$ 7,725,882	\$ 3,436,122	44.5%	\$ 17,348,472	44.5%	19.8%	77.8%
2004	\$ 9,326,465	\$ 3,890,142	41.7%	\$ 16,635,794	56.1%	23.4%	76.0%
2005	\$ 7,466,836	\$ 3,224,743	43.2%	\$ 18,077,621	41.3%	17.8%	86.9%

Source: Cook County Forest Preserve District Employees' Annuity and Benefit Fund Actuarial Valuation as of December 31, 2005, pp. 18 and 19.

MWRD Pension Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 28,905,278	\$ 27,390,000	94.8%	\$ 126,929,425	22.8%	21.6%	87.6%
2001	\$ 28,552,646	\$ 28,027,000	98.2%	\$ 136,382,287	20.9%	20.6%	85.9%
2002	\$ 33,414,603	\$ 28,663,000	85.8%	\$ 137,679,573	24.3%	20.8%	77.3%
2003	\$ 38,039,355	\$ 28,779,000	75.7%	\$ 142,593,596	26.7%	20.2%	75.5%
2004	\$ 40,146,454	\$ 30,982,000	77.2%	\$ 146,360,302	27.4%	21.2%	73.6%
2005	\$ 43,164,572	\$ 26,175,000	60.6%	\$ 149,246,356	28.9%	17.5%	70.8%

Source: Metropolitan Water Reclamation District Retirement Fund Comprehensive Annual Financial Report for the Year Ending December 31, 2005, pp. 28 and 79.

**Chicago Teachers' Pension Fund
Schedule of Employer Contributions**

Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$138,440,544	\$ 79,729,145	57.6%	\$ 1,651,810,084	8.4%	4.8%	96.7%
2001	\$188,922,506	\$ 77,135,200	40.8%	\$ 1,690,264,167	11.2%	4.6%	100.0%
2002	\$178,954,824	\$ 77,679,068	43.4%	\$ 1,759,045,853	10.2%	4.4%	96.3%
2003	\$160,195,509	\$ 78,747,983	49.2%	\$ 1,706,205,814	9.4%	4.6%	92.0%
2004	\$202,971,485	\$ 78,127,279	38.5%	\$ 1,767,631,306	11.5%	4.4%	85.8%
2005	\$258,883,211	\$ 73,917,464	28.6%	\$ 1,968,612,235	13.2%	3.8%	79.0%

Source: Public School Teachers' Pension and Retirement Fund of Chicago 109th Comprehensive Annual Financial Report for the year ended June 30, 2005, pp. 38 and 80.

**Chicago Park District Pension Fund
Schedule of Employer Contributions**

Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 6,427,000	\$ 8,982,701	139.8%	\$ 101,268,000	6.3%	8.9%	95.7%
2001	\$ 6,197,000	\$ 9,206,851	148.6%	\$ 105,740,000	5.9%	8.7%	96.7%
2002	\$ 6,288,000	\$ 9,977,765	158.7%	\$ 103,787,000	6.1%	9.6%	94.0%
2003	\$ 7,215,000	\$ 9,842,559	136.4%	\$ 102,330,000	7.1%	9.6%	89.0%
2004	\$ 7,518,000	\$ 9,840,681	130.9%	\$ 87,841,000	8.6%	11.2%	82.6%
2005	\$ 14,760,000	\$ 4,768,605	32.3%	\$ 95,707,000	15.4%	5.0%	80.0%

Source: Park Employees' Annuity & Benefit Fund of Chicago Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2005, pp. 32 and 84.

**Chicago Municipal Employees' Pension Fund
Schedule of Employer Contributions**

Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 93,016,467	\$ 140,171,920	150.7%	\$ 1,243,439,345	7.5%	11.3%	94.5%
2001	\$ 83,526,133	\$ 131,439,834	157.4%	\$ 1,375,048,892	6.1%	9.6%	93.3%
2002	\$ 92,711,870	\$ 130,966,381	141.3%	\$ 1,377,909,441	6.7%	9.5%	84.5%
2003	\$ 158,614,805	\$ 141,882,893	89.5%	\$ 1,395,513,060	11.4%	10.2%	79.9%
2004	\$ 198,199,001	\$ 153,919,476	77.7%	\$ 1,303,127,528	15.2%	11.8%	72.0%
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source: Municipal Employees' Annuity and Benefit Fund of Chicago Comprehensive Annual Financial Report For the year ended December 31, 2004, pp. 31 and 88.

Chicago Laborers' Pension Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution*	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ -	\$ 683,352	-	\$ 185,051,048	0.0%	0.4%	133.9%
2001	\$ -	\$ 659,946	-	\$ 211,203,088	0.0%	0.3%	125.2%
2002	\$ -	\$ 82,865	-	\$ 207,403,973	0.0%	0.0%	111.3%
2003	\$ -	\$ 366,920	-	\$ 205,691,917	0.0%	0.2%	103.1%
2004	\$ 8,513,018	\$ 202,684	2.4%	\$ 171,476,937	5.0%	0.1%	98.5%
2005	\$ 12,774,103	\$ 40,435	0.3%	\$ 182,809,397	7.0%	0.0%	93.9%

*The City did not levy a property tax for the Laborer's fund in these years because it was over 100% funded, excluding the liabilities attributable to the Early Retirement Incentive. These amounts represent miscellaneous income and changes in reserves for tax loss and collections for prior years. The FY2005 funded ratio excluding the ERI is 96.3%, thus the City is required begin making regular employer contributions again in FY2007.

Source: Laborers' Annuity and Benefit Fund of Chicago Actuarial Valuation Report For the year ended December 31, 2005, pp. 6, 88 and 91.

Chicago Firemens' Pension Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 90,530,458	\$ 65,928,675	72.8%	\$ 275,106,756	32.9%	24.0%	59.4%
2001	\$ 104,014,168	\$ 60,399,909	58.1%	\$ 277,964,912	37.4%	21.7%	60.2%
2002	\$ 105,106,367	\$ 59,452,787	56.6%	\$ 277,053,144	37.9%	21.5%	57.9%
2003	\$ 111,079,054	\$ 60,234,206	54.2%	\$ 335,170,501	33.1%	18.0%	47.4%
2004	\$ 134,762,334	\$ 55,532,454	41.2%	\$ 334,423,753	40.3%	16.6%	42.3%
2005	\$ 161,696,388	\$ 90,128,915	55.7%	\$ 341,252,492	47.4%	26.4%	41.8%

Source: Chicago Firemens' Annuity and Benefit Fund Actuarial Valuation For the year ended December 31, 2005, pp. 65 and 66.

Chicago Policemens' Pension Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 125,129,864	\$ 139,481,871	111.5%	\$ 759,343,026	16.5%	18.4%	71.1%
2001	\$ 123,201,657	\$ 139,675,766	113.4%	\$ 763,352,475	16.1%	18.3%	70.5%
2002	\$ 130,237,405	\$ 141,989,027	109.0%	\$ 866,531,789	15.0%	16.4%	64.6%
2003	\$ 181,545,562	\$ 140,807,354	77.6%	\$ 887,555,791	20.5%	15.9%	61.4%
2004	\$ 203,757,534	\$ 135,744,173	66.6%	\$ 874,301,958	23.3%	15.5%	55.9%
2005	\$ 238,423,459	\$ 178,278,371	74.8%	\$ 948,973,732	25.1%	18.8%	50.7%

Source: Chicago Policemens' Annuity and Benefit Fund Actuarial Valuation For the year ended December 31, 2005, pp. 63 and 64.

CTA Pension Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 60,715,000	\$ 25,904,000	42.7%	\$ 431,703,000	14.1%	6.0%	77.5%
2001	\$ 69,310,000	\$ 27,219,000	39.3%	\$ 459,343,000	15.1%	5.9%	66.3%
2002	\$ 128,220,000	\$ 29,076,000	22.7%	\$ 480,740,000	26.7%	6.0%	57.1%
2003	\$ 162,564,000	\$ 29,597,000	18.2%	\$ 486,626,000	33.4%	6.1%	48.5%
2004	\$ 216,540,000	\$ 30,576,000	14.1%	\$ 544,442,000	39.8%	5.6%	39.4%
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source: CTA Actuarial Valuation Report for the year beginning January 1, 2005, pp. 18 and 19.

State Universities Retirement Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 325,300,000	\$ 241,100,000	74.1%	\$ 2,424,200,000	13.4%	9.9%	88.2%
2001	\$ 326,500,000	\$ 247,100,000	75.7%	\$ 2,474,600,000	13.2%	10.0%	72.1%
2002	\$ 436,900,000	\$ 256,100,000	58.6%	\$ 2,607,200,000	16.8%	9.8%	58.9%
2003	\$ 597,500,000	\$ 285,300,000	47.7%	\$ 2,763,400,000	21.6%	10.3%	53.9%
2004*	\$ 691,000,000	\$ 325,505,776	47.1%	\$ 2,814,100,000	24.6%	11.6%	66.0%
2005	\$ 607,800,000	\$ 285,400,000	47.0%	\$ 2,939,100,000	20.7%	9.7%	65.6%

*Pension obligation bond proceeds contributed in FY2004 are excluded from the employer contribution because the four other state funds consider that the bonds do not count towards the annual funding requirement calculated by the actuary. However, the bond proceeds are reflected in the funded ratio.
Source: State Universities Retirement System of Illinois 2005 Comprehensive Annual Financial Report, pp. 37 and 75.

State Employees' Retirement Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 299,081,856	\$ 340,872,521	114.0%	\$ 3,370,696,000	8.9%	10.1%	81.7%
2001	\$ 294,351,538	\$ 366,028,937	124.4%	\$ 3,564,441,000	8.3%	10.3%	65.8%
2002	\$ 306,509,801	\$ 386,116,583	126.0%	\$ 3,713,020,000	8.3%	10.4%	53.7%
2003	\$ 449,348,569	\$ 396,067,236	88.1%	\$ 3,639,334,000	12.3%	10.9%	42.6%
2004*	\$ 576,219,951	\$ 478,773,411	83.1%	\$ 3,439,251,000	16.8%	13.9%	54.2%
2005	\$ 727,428,010	\$ 427,434,612	58.8%	\$ 3,475,528,000	20.9%	12.3%	54.4%

*Pension obligation bond proceeds contributed in FY2004 are excluded from the employer contribution because they do not count towards the annual funding requirement calculated by the actuary. However, the bond proceeds are reflected in the funded ratio.
Source: State Employees' Retirement System of Illinois Comprehensive Annual Financial Report for the Year Ended June 30, 2005, pp. 31 and 50.

Teachers' Retirement Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 1,003,612,000	\$ 688,586,000	68.6%	\$ 6,062,884,000	16.6%	11.4%	68.2%
2001	\$ 1,102,441,000	\$ 778,342,000	70.6%	\$ 6,430,612,000	17.1%	12.1%	59.5%
2002	\$ 1,163,262,000	\$ 861,889,000	74.1%	\$ 6,785,236,000	17.1%	12.7%	52.0%
2003	\$ 1,427,519,000	\$ 970,845,000	68.0%	\$ 7,059,032,000	20.2%	13.8%	49.3%
2004*	\$ 1,716,977,000	\$ 1,103,337,000	64.3%	\$ 7,280,795,000	23.6%	15.2%	61.9%
2005	\$ 1,683,212,000	\$ 987,362,000	58.7%	\$ 7,550,510,000	22.3%	13.1%	60.8%

*Pension obligation bond proceeds contributed in FY2004 are excluded from the employer contribution because they do not count towards the annual funding requirement calculated by the actuary. However, the bond proceeds are reflected in the funded ratio.

Source: Teachers' Retirement System of Illinois Comprehensive Annual Financial Report for the Year Ended June 30, 2005, p. 47.

General Assembly Retirement Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 6,311,995	\$ 3,951,000	62.6%	\$ 10,763,000	58.6%	36.7%	41.6%
2001	\$ 6,530,519	\$ 4,311,909	66.0%	\$ 11,479,000	56.9%	37.6%	34.9%
2002	\$ 6,961,911	\$ 4,721,478	67.8%	\$ 12,089,000	57.6%	39.1%	29.3%
2003	\$ 7,752,005	\$ 5,433,781	70.1%	\$ 12,638,000	61.3%	43.0%	25.3%
2004*	\$ 8,894,016	\$ 5,877,771	66.1%	\$ 12,993,000	68.5%	45.2%	40.1%
2005	\$ 8,302,564	\$ 4,675,000	56.3%	\$ 12,851,000	64.6%	36.4%	39.1%

*Pension obligation bond proceeds contributed in FY2004 are excluded from the employer contribution because they do not count towards the annual funding requirement calculated by the actuary. However, the bond proceeds are reflected in the funded ratio.

Source: General Assembly Retirement System of Illinois Comprehensive Annual Financial Report for the year ended June 30, 2005, pp. 30 and 48.

Judges' Retirement Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 40,205,224	\$ 21,411,577	53.3%	\$ 104,000,000	38.7%	20.6%	48.5%
2001	\$ 42,546,928	\$ 24,348,926	57.2%	\$ 109,900,000	38.7%	22.2%	40.7%
2002	\$ 47,277,311	\$ 27,532,000	58.2%	\$ 118,700,000	39.8%	23.2%	33.7%
2003	\$ 53,470,841	\$ 31,440,103	58.8%	\$ 123,900,000	43.2%	25.4%	30.7%
2004*	\$ 63,261,895	\$ 36,637,612	57.9%	\$ 127,200,000	49.7%	28.8%	46.2%
2005	\$ 57,749,460	\$ 32,043,009	55.5%	\$ 128,700,000	44.9%	24.9%	45.7%

*Pension obligation bond proceeds contributed in FY2004 are excluded from the employer contribution because they do not count towards the annual funding requirement calculated by the actuary. However, the bond proceeds are reflected in the funded ratio.

Source: Judges' Retirement System of Illinois Comprehensive Annual Financial Report for the Year Ended June 30, 2005, pp. 26, 30 and 48.

Illinois Municipal Retirement Fund Schedule of Employer Contributions							
Fiscal Year	Employer ARC	Actual Employer Contribution	% of ARC contributed	Payroll	ARC as % of payroll	Actual Employer Contribution as % of payroll	Actuarial Funded Ratio
2000	\$ 356,153,448	\$ 356,153,448	100.0%	\$ 4,184,702,169	8.5%	8.5%	107.2%
2001	\$ 313,007,639	\$ 313,007,639	100.0%	\$ 4,503,092,615	7.0%	7.0%	106.4%
2002	\$ 294,935,422	\$ 294,935,422	100.0%	\$ 4,755,103,888	6.2%	6.2%	101.5%
2003	\$ 321,049,839	\$ 321,049,839	100.0%	\$ 4,944,767,495	6.5%	6.5%	97.6%
2004	\$ 456,198,098	\$ 456,198,098	100.0%	\$ 5,161,127,432	8.8%	8.8%	94.3%
2005	\$ 543,263,475	\$ 543,263,475	100.0%	\$ 5,374,585,943	10.1%	10.1%	94.6%

Source: Illinois Municipal Retirement Fund 2005 Comprehensive Annual Financial Report, p. 36.