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#### Summary of the Annual Actuarial Valuation Covering

#### **Christian County**

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June 13, 2008

Christian County Ozark, Missouri

Ladies and Gentlemen:

Submitted in this report is a summary of the results of the Nineteenth Annual Actuarial Valuation, which determines the employer contribution rate(s) required to support, for your employees, the benefits provided by the Missouri Local Government Employees Retirement System ("LAGERS").

Your participation in LAGERS was effective March 1, 1989. The LAGERS provisions reflected in the actuarial valuation are:

	This Year	Last Year
Benefit Program	L-9	L-9
Final Average Salary	3 years	3 years
Rule of 80 Adopted?	No	No
Member Contribution Rate	0%	0%
Contribution Refund Adopted?	No	No

The date of the valuation was February 29, 2008. The valuation was based on data furnished by your LAGERS administrative staff. The new employer contribution rates are shown on page 12.

The financial assumptions and methods used to determine contributions are adopted system wide by the LAGERS Board of Trustees, and are described in the system's Comprehensive Annual Financial Report. In our opinion, they produce results that are reasonable.

The fundamental financial objective of LAGERS is to establish contribution rates which, expressed as percents of active member payroll, will remain approximately level from generation to generation of Missouri citizens.

To test how well the fundamental objective is being achieved, annual actuarial valuations are made, which adjust employer contributions, up or down as the case may be, for differences in the past year between assumed financial experiences and actual financial experiences.

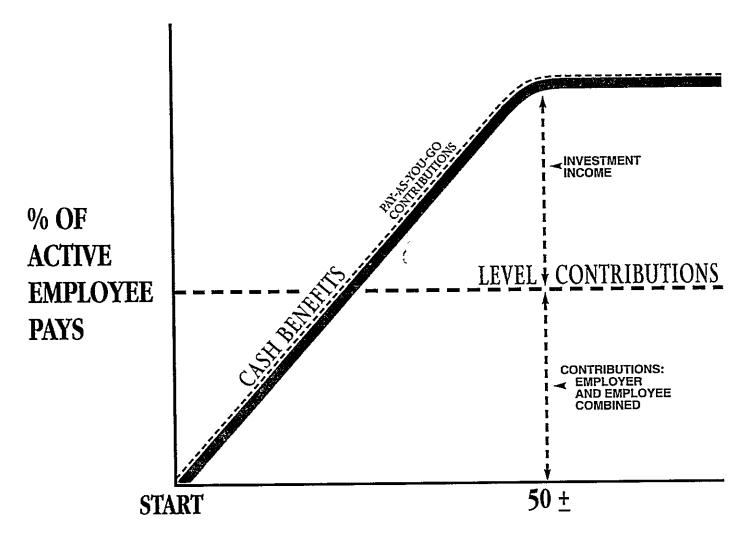
The actuaries submitting this report are Members of the American Academy of Actuaries (M.A.A.A.) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

Gabriel, Roeder, Smith and Company

Mita D. Drazilov, A.S.A., M.A.A.A.

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YEARS OF TIME

CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

Rates of investment return

Rates of pay increase

Changes in active member group size

Non-Economic Risk Areas

Ages at actual retirement

Rates of mortality

Rates of withdrawal of active members (turnover)

Rates of disability

	The Annual Actuarial Valuation Process For LAGERS
	The financing diagram on the preceding page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the federal Social Security program) which is thus an increasing contribution method; and the level contribution method which equalizes contributions between the generations. Missouri law requires the level contribution method.
_	The <i>actuarial valuation</i> is the mathematical process by which liabilities and the level contribution rates are determined, and the flow of activity constituting the valuation may be summarized as follows:
	<ul> <li>A. Covered Person Data, furnished by plan administrator, including:</li> <li>Retired lives now receiving benefits</li> <li>Former employees with vested benefits not yet payable</li> <li>Active employees</li> </ul>
	B. + Asset data (cash and investments), furnished by plan administrator
	<ul> <li>C. + Assumptions concerning future financial experiences in various risk areas, which assumptions are established by the Board of Trustees after consulting with the actuary.</li> </ul>
	D. + <i>The funding method</i> for employer contributions (the long-term, planned pattern for employer contributions).
	E. + Mathematically combining the assumptions, funding method, and the data.
	F. = Determination of:
	Employer's financial position in LAGERS  and  New Employer Contribution Rates.

# Brief Summary of LAGERS Benefits and Conditions Evaluated and/or Considered Through February 29, 2008

(Section references are to RSMo)

Voluntary Retirement. Sections 70.645 & 70.600. A member may retire with an age & service allowance after both (i) completing 5 years of credited service, and (ii) attaining the minimum service retirement age.

The minimum service retirement age is age 60 for a general employee and age 55 for a police or fire employee. Optionally, employers may also elect to provide for unreduced benefits for employees whose combination of years of age and years of service equals 80 or more.

*Final Average Salary*. Section 70.600. The average of a member's monthly compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) of credited service producing the highest monthly average, which period is contained within the 120 consecutive months of credited service immediately preceding retirement.

Age & Service Allowance. Section 70.655. The allowance, payable monthly for life, equals a specified percent of a member's final average salary multiplied by the number of years of credited service. Each employer elects the percent applicable to its members, from the following programs:

L-1 Benefit Program: 1.00% for life

L-3 Benefit Program: 1.25% for life

L-7 Benefit Program: 1.50% for life

LT-4 Benefit Program: 1.00% for life, plus 1.00% to age 62

LT-5 Benefit Program: 1.25% for life, plus 0.75% to age 62

LT-8 Benefit Program: 1.50% for life, plus 0.50% to age 62

LT-4(65) Benefit Program: 1.00% for life, plus 1.00% to age 65

LT-5(65) Benefit Program: 1.25% for life, plus 0.75% to age 65

LT-8(65) Benefit Program: 1.50% for life, plus 0.50% to age 65

L-9 Benefit Program: 1.60% for life

LT-10(65) Benefit Program: 1.60% for life, plus 0.40% to age 65

L-12 Benefit Program: 1.75% for life

LT-14(65) Benefit Program: 1.75% for life, plus 0.25% to age 65

L-6 Benefit Program: 2.00% for life

The only LT benefit programs available for adoption after August 1, 1994 are the LT(65) programs.

Benefit programs L-9 and LT-10(65) are not available for adoption after August 1, 2005.

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<u> </u>	Benefit program L-11, available only to groups not covered by social security, provides for 2.5% for life.
	Subsequent to joining the System, the governing body can elect to change benefit programs for the employees, but not more often than once every 2 years.
	Early Allowance. Section 70.670. A member may retire with an early allowance after both (i) completing 5 years of credited service, and (ii) attaining age 55 if a general employee or age 50 if a police or fire employee.
	The early allowance amount, payable monthly for life, is computed in the same manner as an age & service allowance, based upon the service and earnings record to time of early retirement, but reduced to reflect the fact that the age when payments begin is younger than the minimum service retirement age. The amount of the reduction is 1/2% of 1% (.005) for each month the age at retirement is younger than the minimum service retirement age.
	Deferred Allowance. Section 70.675. If a member leaves LAGERS-covered employment (i) before attaining the early retirement age, and (ii) after completing 5 years of credited service, the member becomes eligible for a deferred allowance; provided the former member lives to the minimum service retirement age and does not withdraw the accumulated contributions.
	The deferred allowance amount, payable monthly for life from the minimum service retirement age, is computed in the same manner as an age & service allowance, based upon the service and earnings record to time of leaving LAGERS coverage.
	Deferred allowances are also payable any time after reaching the early retirement age, with the reduction for early retirement noted on the previous page.
	Non-Duty Disability Allowance. Section 70.680. A member with 5 or more years of credited service who becomes totally and permanently disabled from other than duty-connected causes become eligible to receive a non-duty disability allowance computed in the same manner as an age & service allowance, based upon the service & earnings record to time of disability.
	Duty Disability Allowance. Section 70.680. A member who becomes totally and permanently disabled from duty-connected causes becomes eligible to receive a duty disability allowance computed in the same manner as an age & service allowance, based upon the earnings record to time of disability but based upon the years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60.
	<b>Death-in-Service.</b> Section 70.661. Upon the death of a member who had completed 5 years of credited service, the eligible surviving dependents receive the following benefits:
	(a) The surviving spouse receives an allowance equal to the Option A allowance (joint and 75% survivor benefit) computed based upon the deceased members' service & earnings record to time of death.
<del></del>	

(b) When no spouse benefit is payable, the dependent children under age 18 (age 23 if they are full-time students) each receive an equal share of 60% of an age & service allowance computed based upon the deceased member's service & earnings record to time of death. (c) If the death is determined to be duty related, the 5 year service requirement is waived and the benefit is based on years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60. Benefit Changes After Retirement. Section 70.655. There is an annual redetermination of the monthly benefit amount, beginning the October first following 12 months of retirement. As of each October first the amount of each eligible benefit is redetermined as follows: (a) Subject to the maximum in (b), the redetermined amount is the current amount increased by a percentage determined by the LAGERS Board of Trustees. The aggregate increase to all retirees is limited to 4% annually. (b) The redetermined amount may not exceed the amount otherwise payable multiplied by the ratio of the Consumer Price Index for the immediately preceding month of June to the Consumer Price Index for the month of June immediately preceding retirement. Sections 70.690 & 70.700. Each member contributes 4% of Member Contributions. compensation beginning after completion of sufficient employment for 6 months of credited service. If a member leaves LAGERS-covered employment before an allowance is payable, the accumulated contributions may be refunded to the member. If the member dies, his accumulated contributions may be refunded to a designated beneficiary. The law governing LAGERS also has a provision for the adoption of a non-contributory plan in which the full cost of LAGERS participation is paid by the employer. Adoption of the noncontributory provisions may be done at the time of membership or a later date; however, a change from contributory to non-contributory or vice-versa may not be made more frequently than every 5 years. Under the non-contributory provisions there is no individual account maintained for each employee and no refund of contributions if an employee terminates before being eligible for a benefit. Employer Contributions. Section 70.730. Each employer contributes the remainder amounts necessary to finance the employees' participation in LAGERS. Contributions to LAGERS are determined based upon level-percent-of-payroll principles, so that contribution rates do not have to increase over decades of time.

There were 48 retirees and beneficiaries with total annual benefits of \$246,153 reported as of February 29, 2008.

#### **Christian County**

#### Retirees and Beneficiaries Added To and Removed From Rolls Comparative Schedule

	Added to Rolls *		ed to Rolls * Removed from Rolls			ear End
Valuation Date	Number	Annual Benefits	Number	Annual Benefits	Number	Annual Benefits <sup>#</sup>
2/28/2003	5	\$19,172		\$	33	\$165,846
2/29/2004	5	15,805	-		38	181,651
2/28/2005	2	26,168	1	15,104	39	192,715
2/28/2006	1	9,863	1 1	896	39	201,682
2/28/2007	4	20,519			43	222,201
2/29/2008	5	23,952			48	246,153

<sup>\*</sup> Includes post-retirement adjustments.

Benefits to retirees and beneficiaries are paid out of the Benefit Reserve Fund, which is a pooled fund over all employers. When a member retires, employer and member assets are transferred to the pooled Benefit Reserve Fund in order to pay the lifetime benefits to the retiring member. Therefore, the assets and liabilities associated with the above retirees and beneficiaries are not included in this report. However, the pooled Benefit Reserve Fund is more than fully funded, assuring that all promised benefits will be paid to existing retirees and beneficiaries.

<sup>#</sup> Dollar amounts will not always add up, due to rounding.

#### **Christian County**

#### Retirees and Beneficiaries on Rolls as of February 29, 2008 By Disbursing Fund and Type of Benefit Being Paid

Type of Benefit	Number	Annual Benefits #
a : 7 : 0 D C :		
Service Early & Deferred	22	#100 DO4
Life Option	33	\$188,294
Option A	5	19,290
Option B	2 4	7,331
Option C	2	17,059
Beneficiary Receiving		6,006
Totals	46	237,980
D-4- Di-1:1:4-		
Duty Disability	1	6,805
Life Option	1	0,803
Option A		
Option B		
Option C	1	6,805
Totals	1	0,803
Non-Duty Disability		
Life Option		
Option A		
Option B		
Option C		
Totals		
Totais		
Beneficiary receiving		
Total Disability	1	6,805
	-	
Death-In-Service		
Spouse Receiving	1	1,368
Children Receiving		·
Totals	1	1,368
		<u> </u>
Totals of Fare 2	± 48 maj	\$246,153

<sup>#</sup> Dollar amounts will not always add up, due to rounding.

#### **Christian County**

#### Active and Vested Former Members as of February 29, 2008

	1	Active Members						
			_	Averages *				
Division	Number	Annual Payroll	Annual Pay	Age	Service	Number of Vested Former Members		
General	125	\$3,530,202	\$28,242	46.7 yrs.	6.0 yrs.	40		
Police	60	1,856,919	30,949	36.0	3.5	37		

<sup>\*</sup> These items are included for their general interest, but are not used in the valuation.

A vested former member is a person who terminated employment after 5 or more years of LAGERS service, with rights to a deferred benefit commencing at age 60 (age 55 for police and fire members). Former members who terminated with this employer and now work for another LAGERS-covered employer are also included in the above right-most column.

#### Meaning of Actuarial Accrued Liabilities

"Actuarial Accrued Liabilities" are the present value \$ of plan promises to pay benefits in the future allocated to service already rendered --- a liability has been established ("accrued") because the service has been rendered, but the resulting monthly cash benefit may not be payable until years in the future. Accrued liability \$ are the result of complex mathematical calculations, which are made by the plan's actuary (which is the name given to the specialist who makes such calculations).

"Unfunded Accrued Liabilities" are the difference between the accrued liabilities and the assets on hand. The assets credited to your account in the Employer Accumulation Fund and the Members Deposit Fund were reported to the actuary on a cost basis. For actuarial valuation purposes, the actuary adjusted the reported cost basis assets to a market related value ("actuarial value of assets"). Unfunded accrued liabilities were amortized over a period of future years.

#### **Christian County**

Employer Accumulation Fund (EAF) and Members Deposit Fund (MDF) Actuarial Accrued Liabilities and Actuarial Value of Assets as of February 29, 2008

	Accrued	Reported Assets (Cost Basis)			Actuarial Value of	Unfunded Accrued
	Liabilities	EAF	MDF	Total	Assets	Liabilities
Division	(1)	(2)	(3)	(4)=(2)+(3)	(5)	(6)=(1)-(5)
General	\$4,193,977	\$2,139,877	\$628,998	\$2,768,875	\$3,270,041	\$923,936
Police	1,749,560	1,399,693	239,295	1,638,988	1,935,645	(186,085)

#### **Christian County**

## **Employer Contributions to the Retirement System For the Ensuing Fiscal Year**

	Employer Con	tributions Express	essed as %'s of Active Member Payro		
	Curre	nt Cost	Prior		
	Service Disability		Service	Total Employer	
Division	Retirement	Retirement	Cost	Contribution Rate	
General	10.0%	0.5%	1.8%	12.3%	
Police	9.8	0.5	(0.7)	9.6	

The current cost for service retirements was determined by financing each member's retirement benefits over the period from the member's date of hire until the member's projected date of retirement (entry age actuarial cost method). The current cost for service retirements is credited to the employer's account in the Employer Accumulation Fund.

The current cost for disability retirements represents the value of disability benefits in excess of members' accrued service retirement benefits, and was determined system-wide using a modified terminal funding method. The current cost for disability retirements is credited to the system-wide pooled Casualty Reserve Fund.

The prior service cost is computed by financing the unfunded accrued liabilities over a period or periods of future years. If the prior service cost is negative, it is used to partially offset the current cost. The prior service cost is credited to the employer's account in the Employer Accumulation Fund.

#### **Christian County General Division**

#### **Employer Contributions - Comparative Schedule**

		Acti					
				Averages *			
Valuation Date	Number	Annual Payroll	Annual Pay	Age	Service	Vested Former Members	Employer Contribution Rate
2/28/2003	119	\$2,643,740	\$22,216	44.4 yrs.	4.4 yrs.	16	9.0%
2/29/2004	122	2,894,149	23,723	45.5	4.7	19	9.2
2/28/2005	106	2,561,965	24,169	46.9	5.5	29	9.5
2/28/2006	118	2,874,775	24,363	47.4	5.6	32	12.8
2/28/2007	126	3,192,405	25,337	47.4	5.7	33	12.7
2/29/2008	125	3,530,202	28,242	46.7	6.0	40	12.3

<sup>\*</sup> These items are included for their general interest, but are not used in the valuation.

#### Accrued Liabilities and Assets - Comparative Schedule

				Unfunded Accru	ied Liabilities
Valuation Date	Accrued Liabilities	Actuarial Value of Assets	Funded Percent	Dollar Amount	Percent of Annual Payroll
2/28/2003	\$2,054,593	\$1,033,795	50.3%	\$1,020,798	38.6%
2/29/2004	2,440,984	1,391,447	57.0	1,049,537	36.3
2/28/2005	2,715,683	1,769,797	65.2	945,886	36.9
2/28/2006	3,229,090	2,222,667	68.8	1,006,423	35.0
2/28/2007	3,725,908	2,696,063	72.4	1,029,845	32.3
2/29/2008	4,193,977	3,270,041	78.0	923,936	26.2

#### Amortization of Unfunded Accrued Liabilities as of February 29, 2008

Amortization Period #	Remaining Unamortized Liability
21	\$653,027
17	146,736
27	124,173

<sup>#</sup> The minimum amortization period is 15 years, except for liabilities arising due to adoption of the Non-Contributory Refund provision. The maximum amortization period is 30 years, except in certain cases. The periods shown reflect the remaining amortization periods for: (i) the employer's initial liability and subsequent actuarial gains and losses; and (ii) benefit changes adopted by the employer.

## **Christian County Police Division**

### **Employer Contributions - Comparative Schedule**

	Active Members						!
			Averages *				
Valuation Date	Number	Annual Payroll	Annual Pay	Age	Service	Vested Former Members	Employer Contribution Rate
2/28/2003	38	\$990,654	\$26,070	36.0 yrs.	3.8 yrs.	17	6.5%
2/28/2003	37	957,010	25,865	37.3	4.6	19	6.5
2/29/2004	48	1,151,637	23,992	36.7	2.9	20	6.0
2/28/2005	48	1,246,122	25,961	37.8	3.0	29	10.0
2/28/2007	58	1,561,390	26,921	36.2	3.2	35	9.8
2/29/2008	60	1,856,919	30,949	36.0	3.5	37	9.6

<sup>\*</sup> These items are included for their general interest, but are not used in the valuation.

### Accrued Liabilities and Assets - Comparative Schedule

				Unfunded Accrued Liabilities	
Valuation Date	Accrued Liabilities	Actuarial Value of Assets	Funded Percent	Dollar Amount	Percent of Annual Payroll
2/28/2003	\$870,895	\$869,320	99.8%	\$1,575	0.2%
2/29/2004	962,772	989,090	102.7	(26,318)	-
2/28/2005	985,208	1,111,996	112.9	(126,788)	-
2/28/2005	1,210,416	1,328,639	109.8	(118,223)	-
2/28/2007	1,493,926	1,620,577	108.5	(126,651)	-
2/29/2008	1,749,560	1,935,645	110.6	(186,085)	

## Amortization of Unfunded Accrued Liabilities as of February 29, 2008

Amortization Period #	Remaining Unamortized Liability
21	(\$269,252)
1.7	25,964
27	57,203

<sup>#</sup> The minimum amortization period is 15 years, except for liabilities arising due to adoption of the Non-Contributory Refund provision. The maximum amortization period is 30 years, except in certain cases. The periods shown reflect the remaining amortization periods for: (i) the employer's initial liability and subsequent actuarial gains and losses; and (ii) benefit changes adopted by the employer.