

---

**CITY OF UNIVERSITY CITY**

**Nonuniformed Employees  
Retirement System**

***Actuarial Valuation Report***

***Plan Year***    *January 1, 2012 – December 31, 2012*

*June 2012*

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Table of Contents**

	<u>Schedule</u>
Letter of Transmittal	
Funding Policy Contribution	A
Summary of Valuation Results	B
Determination of Annual Contribution	C
Valuation of Accumulated Plan Benefits	D
Summary of Assets and Change in Assets	E
Actuarial Assumptions and Methods	F
Brief Summary of Retirement Plan Provisions	G
Statistical Information	H

June 2012

Board of Trustees  
City of University City  
University City, MO 63130

RE: City of University City Nonuniformed Employees Retirement System

Dear Members of the Board:

Buck Consultants, LLC (Buck) has been retained to perform the actuarial valuation of the City of University City Nonuniformed Employees Retirement System for the plan year beginning January 1, 2012. This report presents the results of the valuation.

The computations herein were performed as of January 1, 2012. They were determined using employee data and financial data furnished by the City. Census and financial data were not audited by Buck, but were reviewed for consistency with the prior year's information.

The mortality was changed to RP-2000 combined static mortality table for both annuitants and non-annuitants with projections with Scale AA to 2027 for non-annuitants and 2019 for annuitants. All other actuarial assumptions and methods are the same as those used in the previous valuation. A summary of the assumptions and methods is found in Schedule F.

### **Comments on the Valuation Results**

The results of the January 1, 2012 valuation reveal that costs have increased for both the Library and the City since the Prior valuation. Costs increased primarily due to a change in the mortality assumptions causing an increase in the unfunded Accrued Liability. There was also a demographic experience loss and lower than expected return on assets. It should be noted that the actuarial value of assets is greater than the market value of assets. Unless the rate of return on the market value of assets exceeds the 6.50% assumed rate, the annual costs will continue to increase over the next few years.

The funding policy is a 30-year amortization of the unfunded accrued liability (or surplus) plus the normal cost. That costs are shown on Schedule A.

### **GASB**

We have not included information in this report but will provide information as needed by the City.

## **Purpose of This Report**

This report is prepared for the Board for the City of University City Nonuniformed Employees Retirement System for its use in its review of the operation of this plan. It is expected that the Board will use the results of this report for the purpose of determining the funding status of plan benefits and contributions to be made for the current plan year. The report is to be used in the preparation of an audited financial report prepared by the plan accountant, if any. The use of this report by other parties and/or for other purposes is not recommended without advance review of the appropriateness of such application by Buck.

## **Actuarial Status of the Plan**

The actuarial assumptions and methods used to value the Plan are individually and in the aggregate reasonable, and in combination represent a reasonable estimate of anticipated future experience.

The cost and actuarial exhibits presented in this report were determined in accordance with generally accepted actuarial procedures and appropriately disclose the actuarial position of the Plan.

BUCK CONSULTANTS, LLC

---

Stephen B. Siepman, F.S.A.  
Principal, Retirement Consulting Actuary

---

Salman Aziz  
Senior Consultant, Retirement Actuary

SBS/SA/em

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Funding Policy Contribution**  
(For the 2012 Plan Year)

Annual, as of January 1, 2012

	<u>City</u>	<u>Library</u>	<u>Total</u>
Normal Annual Cost Plus 30-Year Amortization of Unfunded Accrued Liability	\$ 579,046	\$ 66,929	\$ 645,975

Annual, as of December 31, 2012

Normal Annual Cost Plus 30-Year Amortization of Unfunded Accrued Liability	\$ 616,684	\$ 71,279	\$ 687,963
--	------------	-----------	------------

NOTE: Contributions shown as of the indicated payment date. If the contribution is made on another date, an interest adjustment of 6.5% from the indicated payment date to the actual payment date should be applied to the above figures.

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Summary of Valuation Results**  
(As of January 1 of the Applicable Year)

	<u>City</u>	
	<u>2011</u>	<u>2012</u>
A. Number of Active Employees in Valuation	118	119
B. Applicable Annual Compensation	\$ 5,694,005	\$ 5,683,833
C. Average Annual Compensation	\$ 48,254	\$ 47,763
Average Age for Actives	45.8	46.7
Average Service for Actives	12.2	11.8
D. Number of Retired and Beneficiaries	56	56
E. Annual Benefits Payable to Retired and Beneficiaries	\$ 910,359	\$ 944,825
F. Number of Terminated Employees with Vested Deferred Pensions	17	29 <sup>(1)</sup>
G. Annual Pensions Payable to Deferred	\$ 330,336	\$ 402,243
H. Accrued Liability		
Active	8,295,236	8,535,392
Retired, Beneficiaries & Vested Deferred	<u>10,570,057</u>	<u>11,531,277</u>
Total	\$ 18,865,293	\$ 20,066,669
I. Assets - Actuarial Value	\$ 15,548,090	\$ 15,587,790
J. Unfunded Accrued Liability (UAL)	\$ 3,317,203	\$ 4,478,879
K. Employer Normal Cost <sup>(2)</sup>	\$ 234,851	\$ 256,998
L. 30-Year Amortization of UAL	\$ 238,519	\$ 322,048
M. Contribution Required to Fund City – Normal Cost and UAL	\$ 473,370	\$ 579,046
N. Cost as a Percentage of Annual Compensation	8.31%	10.19%
O. Funded Percentage (I)/(H)	82.4%	77.7%

<sup>(1)</sup> Includes 3 members awaiting a refund of employee contributions.

<sup>(2)</sup> Includes premium payment for Group Life Insurance of \$12,293 for 2012 and \$26,525 for 2011.

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Summary of Valuation Results**  
(As of January 1 of the Applicable Year)

**Library**

	<u>2011</u>	<u>2012</u>
A. Number of Active Employees in Valuation	16	16
B. Applicable Annual Compensation	\$ 684,684	\$ 655,963
C. Average Annual Compensation	\$ 42,793	\$ 40,998
Average Age for Actives	53.1	52.9
Average Service for Actives	13.3	16.1
D. Number of Retired and Beneficiaries	2	3
E. Annual Benefits Payable to Retired and Beneficiaries	\$ 21,378	\$ 86,394
F. Number of Terminated Employees with Vested Deferred Pensions	2	2
G. Annual Pensions Payable to Deferred	\$ 13,098	\$ 13,098
H. Accrued Liability		
Active	\$ 1,551,879	\$ 1,174,276
Retired, Beneficiaries & Vested Deferred	185,065	874,102
Total	\$ 1,736,944	\$ 2,048,378
I. Assets - Actuarial Value	\$ 1,460,931	\$ 1,527,051
J. Unfunded Accrued Liability (UAL)	\$ 276,013	\$ 521,327
K. Employer Normal Cost <sup>(1)</sup>	\$ 38,617	\$ 29,444
L. 30-Year Amortization of UAL	\$ 19,846	\$ 37,485
M. Contribution Required to Fund Library – Normal Cost and UAL	\$ 58,463	\$ 66,929
N. Cost as a Percentage of Annual Compensation	8.54%	10.20%
O. Funded Percentage (I)/(H)	84.1%	74.5%

<sup>(1)</sup> Includes premium payment for Group Life Insurance of \$1,230 for 2012 and \$2,464 for 2011.

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Summary of Valuation Results**  
(As of January 1 of the Applicable Year)

	<u>Total</u>		<u>2011</u>	<u>2012</u>
A. Number of Active Employees in Valuation			134	135
B. Applicable Annual Compensation		\$	6,378,689	\$ 6,339,796
C. Average Annual Compensation		\$	47,602	\$ 46,961
Average Age for Actives			46.6	47.5
Average Service for Actives			12.4	12.3
D. Number of Retired and Beneficiaries			58	59
E. Annual Benefits Payable to Retired and Beneficiaries		\$	931,737	\$ 1,031,219
F. Number of Terminated Employees with Vested Deferred Pensions			19	31 <sup>(1)</sup>
G. Annual Pensions Payable to Deferred		\$	343,434	\$ 415,341
H. Accrued Liability				
Active		\$	9,847,115	\$ 9,709,668
Retired, Beneficiaries & Vested Deferred			<u>10,755,122</u>	<u>12,405,379</u>
Total		\$	20,602,237	\$ 22,115,047
I. Assets - Actuarial Value		\$	17,009,021	\$ 17,114,841
J. Unfunded Accrued Liability (UAL)		\$	3,593,214	\$ 5,000,206
K. Employer Normal Cost <sup>(2)</sup>		\$	273,468	\$ 286,442
L. 30-Year Amortization of UAL		\$	258,366	\$ 359,533
M. Contribution Required to Fund Both Groups – Normal Cost and UAL		\$	531,833	\$ 645,975
N. Total Cost as a Percentage of Total Annual Compensation			8.34%	10.19%
O. Funded Percentage (I)/(H)			82.6%	77.4%

<sup>(1)</sup> Includes 3 members awaiting a refund of employee contributions.

<sup>(2)</sup> Includes premium payment for Group Life Insurance of \$13,523 for 2012 and \$28,989 for 2011.



CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Determination of Annual Contribution**  
(As of January 1)

	<u>City</u>	<u>Library</u>	<u>Sum of City Plus Library</u>
1. Actuarial Present Value of Future Benefits:			
a. Actives	\$ 12,715,673	\$ 1,575,963	\$ 14,291,636
b. Inactives	<u>11,531,277</u>	<u>874,102</u>	<u>12,405,379</u>
c. TOTAL	\$ 24,246,950	\$ 2,450,065	\$ 26,697,015
2. Normal Cost			
a. Total Normal Cost	\$ 415,220	\$ 47,893	\$ 463,113
b. Member Normal Cost (3% of active payroll)	<u>170,515</u>	<u>19,679</u>	<u>190,194</u>
c. Employer Normal Cost	\$ 244,705	\$ 28,214	\$ 272,919
d. Expense Load (death benefit premiums)	<u>12,293</u>	<u>1,230</u>	<u>13,523</u>
e. Total Employer Normal Cost	\$ 256,998	\$ 29,444	\$ 286,442
3. Total Compensation for Participants under Assumed Retirement Age	\$ 5,683,833	\$ 655,963	\$ 6,339,796
4. Employer Cost Rate: (2c) / (3)	4.3053%	4.3012%	N/A
5. Actuarial Present Value of Future Compensation	\$ 57,222,579	\$ 5,501,662	\$ 62,724,241
6. Actuarial Present Value of Future Employer Normal Costs: (4) x (5)	\$ 2,463,604	\$ 236,637	\$ 2,700,241
7. Actuarial Present Value of Future Participant Contribution: 3% x (5)	\$ 1,716,677	\$ 165,050	\$ 1,881,727
8. Accrued Liability: (1c) – (6) – (7)	\$ 20,066,669	\$ 2,048,378	\$ 22,115,047
9. Actuarial Value of Assets	\$ 15,587,790	\$ 1,527,051	\$ 17,114,841
10. Unfunded Accrued Liability: (8) – (9)	\$ 4,478,879	\$ 521,327	\$ 5,000,206
11. Contribution to Amortize the UAL over 30 years (if greater than \$0)	\$ 322,048	\$ 37,485	\$ 359,533
12. Recommended Employer Contribution: (2) + (11), if (11) > 0	\$ 579,046	\$ 66,929	\$ 645,975
13. Recommended Employer Contribution as % of Compensation (12) / (3)	10.19%	10.20%	N/A

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Valuation of Accumulated Plan Benefits**  
(As of January 1)

	<u>2011</u>	<u>2012</u>
A. Actuarial Present Value of Accumulated Plan Benefits:		
1. Vested Benefits		
a. Retired & Beneficiaries	\$ 8,627,089	\$ 9,742,319
b. Vested Deferred	2,128,033	2,663,061
c. Active	<u>5,514,866</u>	<u>5,211,495</u>
TOTAL	\$ 16,269,988	\$ 17,616,875
2. Non-Vested Benefits	\$ 451,644	\$ 345,943
3. Total Actuarial Present Value of Accumulated Plan Benefits	\$ 16,721,632	\$ 17,962,818
B. Pension Assets at Market	\$ 15,653,809	\$ 15,273,923
C. Net Unfunded Accumulated Plan Benefits	\$ 1,067,823	\$ 2,688,895
D. Number of Active Employees Fully Vested	73	70
E. Interest Rate	6.50%	6.50%

Changes in the Actuarial Present Value of Accumulated  
Plan Benefits from 2011 to 2012

Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2011		\$ 16,721,632
Benefit Payments	\$ (1,146,998)	
Increase for Interest	\$ 1,049,629	
Assumption Changes	\$ 725,171	
Plan Changes	\$ 0	
Benefits Accumulated and Other Gains and Losses	<u>\$ 613,384</u>	
Subtotal	\$ 1,241,186	
Actuarial Present Value of Accumulated Plan Benefits at January 1, 2012		\$ 17,962,818

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Summary of Assets and Change in Assets**

Market Value of Assets December 31, 2011

	<u>City</u>	<u>Library</u>	<u>Total</u>
Balance January 1, 2011 (excluding receivable contribution)	\$ 13,721,819	\$ 1,312,158	\$ 15,033,977
Employee Contributions	182,554	19,652	202,206
Employer Contributions for the year	557,981	61,851	619,832
Benefit Payments	(1,082,275)	(64,723)	(1,146,998)
Investment Return	99,482	6,518	106,000
Expenses	<u>(80,011)</u>	<u>(6,176)</u>	<u>(86,187)</u>
Balance	\$ 13,399,550	\$ 1,329,280	\$ 14,728,830
Employer Contributions Receivable	<u>485,172</u>	<u>59,921</u>	<u>545,093</u>
Net Balance December 31, 2011	\$ 13,884,722	\$ 1,389,201	\$ 15,273,923
Market Value Net Rate of Return			0.69%

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

Summary of Assets and Change in Assets

Determination of Actuarial Value of Plan Assets as of January 1, 2012

	<u>City</u>	<u>Library</u>	<u>Total</u>
1. Actuarial Value of Assets on January 1, 2011 (excluding receivable)	\$ 14,990,109	\$ 1,399,080	\$ 16,389,189
2. Contributions	740,535	81,503	822,038
3. Disbursements, Including Expenses	1,162,286	70,899	1,233,185
4. Investment Income at 6.5%	960,650	91,285	1,051,935
5. Expected Actuarial Value of Assets on January 1, 2012	15,529,008	1,500,969	17,029,977
6. Market Value of Assets on January 1, 2012	13,397,058	1,331,772	14,728,830
7. Difference: (6) – (5)	(2,131,950)	(169,197)	(2,301,147)
8. 20% of (7)	(426,390)	(33,839)	(460,229)
9. Actuarial Value of Assets on January 1, 2012 (5) + (8) (excluding receivables)	\$ 15,102,618	\$ 1,467,130	\$ 16,569,748
10. Receivable Contributions	485,172	59,921	545,093
11. Actuarial Value of Assets on January 1, 2012	\$ 15,587,790	\$ 1,527,051	\$ 17,114,841
10. Rate of Return	3.61%	4.09%	3.66%

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Actuarial Assumptions and Methods**

**Interest Rate**

6.50% compounded annually.

**Mortality**

	Current Year
Annuitant	RP-2000 Healthy Combined Mortality Table projected to 2019 with Scale AA
Non-annuitant	RP-2000 Healthy Combined Mortality Table projected to 2027 with Scale AA

**Mortality Rates**

The following are sample withdrawal rates per 100 lives.

<u>Age</u>	<u>Male</u>	<u>Female</u>
25	.0287	.0141
30	.0388	.0201
35	.0675	.0352
40	.0869	.0469
45	.1073	.0727
50	.1421	.1087
55	.2279	.2223
60	.4777	.4525
65	.9671	.8794

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Actuarial Assumptions and Methods**

**Disability Rates**

Following are sample disability rates per 100 lives.

<u>Age</u>	<u>Male</u>	<u>Female</u>
25	0.00	0.00
30	0.00	0.00
35	0.00	0.00
40	0.05	0.10
45	0.10	0.20
50	0.20	0.30
55	0.30	0.45
60	0.45	0.63
65	0.00	0.00

**Assumed Retirement Age**

At earliest unreduced retirement age	50%
Age 65	50%
Age 68	100%

**Salary Increases** 3% compounded annually.

**Expenses**

The normal cost was increased for expected expenses of \$12,293 (City) and \$1,230 (Library) to reflect expected premiums for member life insurance policies. The interest rate is net of all other expenses.

**Actuarial Cost Method**

Entry Age Actuarial Cost Method, with normal cost expressed as a level percentage of covered compensation.

**Asset Valuation Method**

A smoothed actuarial value of assets. The difference between the prior year's expected actuarial value assuming a 6.5% rate of return and the market value is determined at year-end. The actuarial value of assets at year-end is equal to the expected actuarial value plus 20% of that difference.

**Changes in Assumptions or Methods from the Previous Plan Year**

The mortality was changed from the UP-94 Mortality Table to RP-2000 Combined Static Mortality Table for both annuitants and non-annuitants, with projections with Scale AA to 2027 for non-annuitants and 2019 for annuitants.

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Brief Summary of Retirement Plan Provisions**

**A. Eligibility for Participation**

All regular full-time employees of the City or the Library, other than employees who are members of the Police and Firefighters' Retirement System.

**B. Normal Retirement Benefit**

Eligibility: Attained age 65, or attained age 62 with 30 years of creditable service.

Amount: Accrued Benefit determined on Normal Retirement Date.

**C. Early Retirement Benefit**

Eligibility: Attained age 55 with 20 years of creditable service.

Amount: Accrued Benefit determined as of the Early Retirement Date, actuarially reduced for early commencement.

**D. Termination Benefit**

Vesting Percentage: 100% after attainment of ten years of creditable service.

Amount: Accrued Benefit payable on date of termination.

Form of Payment: Life annuity, payable monthly.

Benefit Commencement: Attainment of age 65.

**E. Disability Benefit**

Disability benefits are provided under an insured arrangement with the premiums paid by the Plan.

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Brief Summary of Retirement Plan Provisions**

**F. Death Benefit**

(1) Prior to Normal Retirement Date

Amount: Accumulated employee contributions with interest, plus \$100,000.

Source: The \$100,000 death benefit may, at the city manager's discretion, be provided through a standard life insurance policy purchased with plan funds. If the city manager elects not to purchase insurance policies, then the \$100,000 is payable from plan assets.

(2) After Normal Retirement Date, but prior to actual retirement

Amount: Accumulated employee contributions with interest.

Form of Payment: Lump-sum payment, but if beneficiary is a spouse, the spouse may elect a monthly life annuity instead.

**G. Refund of Contributions**

Eligibility: Termination of employment when no other benefit is payable.

Amount: Accumulated employee contributions with interest.

**H. Contributions**

Employee: 3% of annual compensation.

Employer: The City and the Library Board each contribute the amounts necessary to fund benefits.

**I. Important Definitions**

Accrued Benefit 1.6% of final average compensation times creditable service, plus 0.50% of final average compensation in excess of the breakpoint amount at time of termination times years and months of creditable service, up to a maximum of 35 years. The breakpoint amount is \$26,000 in 1996 and increases by \$1,000 on January 1 of each subsequent year. For employees (active on July 1, 1993) who were hired prior to 1973 the greater of the above formula or 162% of the sum of the following:

(a) 2/3% of final average compensation plus 1% of final average compensation in excess of \$6,600, all multiplied by creditable service rendered prior to January 1, 1968;

(b) 2/3% of final average compensation plus 1% of final average compensation in excess of the average Social Security wage bases, all multiplied by credited service rendered subsequent to January 1, 1968.



CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Brief Summary of Retirement Plan Provisions**

Average Social Security Wage Base	Average of the taxable wage bases under the Federal Insurance Contributions Act for the period starting January 1, 1968 (or the year creditable service commences, if later), and ending with the year preceding the year in which the member's normal retirement date occurs.
Compensation	Wage or salary paid, excluding expense allowances.
Creditable Service	Years and completed months of full-time service prior to the operative date of July 1, 1966 plus years and completed months of full-time service after the operative date during which compensation is received..
Final Average Compensation	The average annual compensation received for the highest 3 consecutive years of creditable service out of the 10 years preceding the determination.

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

**Statistical Information**

Reconciliation of Participant Data

	<u>City</u>				<u>Total</u>
	<u>Active</u>	<u>Retired and Beneficiaries</u>	<u>Vested Terminations</u>	<u>Return of Contributions Payable</u>	
Total January 1, 2011	118	56	17	0	191
Terminations					
- non-vested	(2)				(2)
- vested	(9)		9		0
- return of contributions payable	(3)			3	0
Deaths		(2)			(2)
Beneficiaries					
Retirements	(1)	2	(1)		0
New Entrants	15				15
Rehires	1				1
Data Corrections			1		1
Total January 1, 2012	119	56	26	3	204

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

Statistical Information

Reconciliation of Participant Data

	<u>Library</u>			
	<u>Active</u>	<u>Retired and Beneficiaries</u>	<u>Vested Terminations</u>	<u>Total</u>
Total January 1, 2011	16	2	2	20
Terminations - non-vested - vested				
Deaths				
Beneficiaries				
Retirements	(1)	1		
New Entrants	1			1
Rehires				
Data Corrections	—	—	—	—
Total January 1, 2012	16	3	2	21

CITY OF UNIVERSITY CITY  
NONUNIFORMED EMPLOYEES RETIREMENT SYSTEM

Statistical Information

Reconciliation of Participant Data

	<u>Total</u>				
	<u>Active</u>	<u>Retired and Beneficiaries</u>	<u>Vested Terminations</u>	<u>Return of Contribution Payable</u>	<u>Total</u>
Total January 1, 2011	134	58	19		211
Terminations					
- non-vested	(2)				(2)
- vested	(9)		9		0
- return of contributions payable	(3)			3	0
Withdrew Account Balance					
Deaths		(2)			(2)
Beneficiaries					
Retirements	(2)	3	(1)		0
New Entrants	16				16
Rehires	1				1
Data Corrections			1		1
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total January 1, 2012	135	59	28	3	225