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October 22, 2012

Mr. Michael Wooldridge
City of Ladue
9345 Clayton Road
Ladue, MO 63124

***RE: City of Ladue Pension Plan for Non-Uniform Employees –
Section 105.665 Cost Statement***

Dear Mr. Wooldridge:

The purpose of this letter is to provide the Board Members of the City of Ladue Pension Plan for Non-Uniform Employees with a cost statement that may be required under the Missouri Revised Statute Section 105.665.

The proposed “changes in plan benefits” that are subject to this statement are as follows:

1. Exclude lump sum cash-out of unused vacation and sick leave time from retirement calculations, effective for retirements after December 31, 2012.

The most recent periodic actuarial valuation of the plan was prepared as of January 1, 2012. The cost statement is based on that report.

Our cost statement, numbered to correspond with Section 105.665, follows below:

1. The level normal cost of plan benefits currently in effect is 12.24% of covered payroll, as presented in the January 1, 2012 actuarial valuation.
2. There is no unfunded Actuarial Liability under the Aggregate Cost Method.
3. The total contribution rate from items one and two above is 12.24% of covered payroll.
4. The City is currently paying the total contribution rate.
5. The total contribution rate required to fund the proposed plan change is 9.84% of covered payroll.
6. N/A. The total dollar amount of contributions is expected to decrease.
7. As long as the City continues to contribute the full contribution requirement, the proposed changes will not impact the ability of the Plan to meet its obligations.
8. The actuarial assumptions used in the January 1, 2012 actuarial valuation are shown in Exhibit I.
9. In our opinion, the actuarial assumptions, method and techniques used in the January 1, 2012 actuarial valuation produce results which in the aggregate are reasonable.

10. The actuarial cost method used in the January 1, 2012 actuarial valuation is described in Exhibit I.
11. N/A. The total dollar amount of contributions is expected to decrease.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the City of Ladue. This information includes, but is not limited to, Plan documents and provisions, employee data, and financial information. In our examination of these data, we have found them reasonably consistent and comparable with data used for other purposes.

Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Actuarial computations included in this report are for the exclusive purposes cited in this report. Determinations for purposes other than those specifically referenced in this report may be significantly different. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security on a settlement basis.

These cost estimates are subject to the uncertainties of a regular actuarial valuation; the costs are inexact because they are based on assumptions that are themselves necessarily inexact, even though we consider them reasonable. Thus, the emerging costs may vary from those presented in this letter to the extent actual experience differs from that projected by the actuarial assumptions.

We have not explored any legal issues with respect to the proposed plan changes. We are not attorneys and cannot give legal advice on such issues. We suggest that you review this proposal with counsel.

This report has been prepared for the internal use of and is only to be relied upon by the City of Ladue and its' auditors; it is not for the use or benefit of any third party for any purpose. No



portion of this report may be disclosed to any other party (other than Missouri State regulatory personnel) without Milliman's prior written consent. In the event such consent is given, the report must be provided in its entirety, unless prior written consent is obtained from Milliman. We recommend that any such party have its own actuary or other qualified professional review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates. We respectfully submit the following exhibits, and we look forward to discussing them with you.

We are available to address any questions that you may have.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael J. Zwiener".

Michael J. Zwiener, FSA
Consulting Actuary

MJZ/giy

**The City of Ladue Pension Plan for
Non-Uniform Employees**

January 1, 2012 Actuarial Valuation

Actuarial Assumptions and Methods

Interest

7.5% per annum, compounded annually

Salary Increases

5.0% per annum, compounded annually

Inflation

3.0% per annum

Mortality

Healthy Lives: RP-2000 Combined White Collar Mortality Table, male and female rates, projected to 2017 by Scale AA.

Disabled Lives: Post-1994 Disability Mortality Table as prescribed by IRS Revenue Ruling 96-7, male and female rates.

Withdrawal

Rates vary by age and gender. Rates at selected ages are:

<u>Age</u>	Male Percent <u>Withdrawing</u>	Female Percent <u>Withdrawing</u>
20	20.0%	22.5%
25	15.0	17.5
30	10.0	12.5
35	7.5	9.0
40	5.0	6.5
45	3.4	4.5
50	2.0	3.0
55	1.0	1.5
60	0.0	0.0

**The City of Ladue Pension Plan for
Non-Uniform Employees**

January 1, 2012 Actuarial Valuation

Actuarial Assumptions and Methods

Retirement

Rates vary by age as follows:

<u>Age</u>	<u>Percent Retiring</u>
62	30%
63	20
64	10
65	100

Terminated vested participants are assumed to retire at Normal Retirement Age.

Disability

Rates vary by age and gender. Rates at selected ages are:

<u>Age</u>	<u>Male Percent Becoming Disabled</u>	<u>Female Percent Becoming Disabled</u>
35	0.00	0.00
40	0.05	0.10
45	0.10	0.20
50	0.20	0.30
55	0.31	0.45
60	0.45	0.63
65	0.00	0.00

Administrative Expenses

\$20,000 per year

Marriage

80% of members are assumed to be married at the time of withdrawal, retirement, death or disability. Males are assumed to be 4 years older than their spouses.

This work product was prepared solely for the City of Ladue for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

**The City of Ladue Pension Plan for
Non-Uniform Employees**

January 1, 2012 Actuarial Valuation

Actuarial Assumptions and Methods

Unused Sick Leave and Vacation Pay

Unused sick leave and vacation pay cashouts are assumed to increase benefits at retirement by 10.0%.

Actuarial Cost Method

The actuarial cost method is the Aggregate Cost Method, where the normal cost rate as a percentage of covered payroll is equal to (a) divided by (b) where

- (a) is the actuarial present value of future benefits on the valuation date, minus the actuarial value of assets on the valuation date, and
- (b) is the present value of future salaries on the valuation date.

The normal annual cost is the product of the normal cost rate times covered payroll on the valuation date.

Actuarial gains or (losses) will decrease (increase) the normal rate and be spread as a constant percent of payroll for the overall group.

Asset Valuation Method

An asset valuation method is used to help smooth short term fluctuations in market value. The actuarial value of assets is equal to the prior year's actuarial value of assets adjusted as follows:

1. increased with actual contributions for the year;
2. reduced by actual benefit payments and expenses for the year;
3. increased by expected investment income calculated using the assumed rate of return
4. increased by phased in investment gains/(losses)
5. limited to no less than 80% of market value and no more than 120% of market value

Each year, the amount of investment gain/(loss) to be phased in is equal to the excess of the plan's market value over the sum of the expected asset value and the unrecognized balances of investment gains/(losses) for the previous five years. 20% of this amount plus 20% of the similar amounts calculated in each of the four preceding years are summed and recognized as the amount of phased-in gains recognized in the current year

**The City of Ladue Pension Plan for
Non-Uniform Employees**

January 1, 2012 Actuarial Valuation

Summary of Plan Provisions

A summary of the current primary provisions of the Plan is presented below. A complete description of the provisions can be found in Ordinance 1931.

Effective Date

Originally effective January 1, 1968; most recently restated effective November 19, 2007 and amended November 21, 2011.

Eligibility

Any regular, full-time, permanent employee of the City of Ladue who is not covered by the City of Ladue Firemen and Policemen's Pension Plan becomes eligible the first day of the month following hire date.

Employee Contributions

Employees are no longer required to contribute to the Pension Fund. Contributions accumulate at an interest rate of 4% as established by the Retirement Committee.

Earnings

Calendar year compensation paid to an employee by the City of Ladue, including unused sick leave, vacation pay, LTD premiums, temporary disability payments, and employee contributions to an eligible deferred compensation plan, cafeteria plan, or transportation expense program.

Final Average Earnings (FAE)

Average monthly salary during the highest 36 consecutive months of salary within the last 120 months of employment, or average monthly salary during an employee's entire employment if employed less than 36 months. The FAE for a disabled participant is determined as of the Date of Disability.

Credited Service

Completed months of continuous service from date of hire to date of termination, including periods on disability and Family and Medical Leave.

**The City of Ladue Pension Plan for
Non-Uniform Employees**

January 1, 2012 Actuarial Valuation

Summary of Plan Provisions

Normal Retirement

Eligibility: Age 62.

Benefit: 1.25% of FAE multiplied by Credited Service not in excess of 35 years.

Members who terminated on or after January 1, 2000 are also entitled to a refund of any accumulated employee contributions with interest.

Disability Benefit

Eligibility: 10 years of Credited Service including period of Disability.

Benefit: The Disability Benefit is paid outside the Plan by the City's Long-Term Disability Plan for disabilities that occur after January 1, 2008. Upon attaining Early or Normal Retirement eligibility, a disabled member is entitled to the Early or Normal Retirement Benefit based on FAE at Date of Disability and Credited Service including the period while on LTD.

Early Retirement

Eligibility: Age 55 with 10 years of Credited Service.

Benefit: Accrued Benefit based on FAE and Credited Service at retirement actuarially reduced for early commencement.

Members who terminated on or after January 1, 2000 are also entitled to a refund of any accumulated employee contributions with interest.

Termination Benefit

All members who terminated on or after January 1, 2000 are entitled to a refund of any accumulated employee contributions with interest. A member with at least 10 years of Credited Service is also entitled to his Accrued Benefit based on FAE and Credited Service at termination actuarially adjusted for date of retirement.

**The City of Ladue Pension Plan for
Non-Uniform Employees**

January 1, 2012 Actuarial Valuation

Summary of Plan Provisions

Late Retirement Benefit

Accrued Benefit based on FAE and Credited Service at retirement.

Members who terminated on or after January 1, 2000 are also entitled to a refund of any accumulated employee contributions with interest.

Pre-Retirement Death Benefit

The spouse of a member who has completed 10 years of Credited Service or attained age 62 is entitled to the amount the spouse would have received had the member retired any time after attaining age 55 and elected the 100% Joint and Survivor Annuity, based on FAE and Credited Service at the time of death.

Normal Form of Payment

Joint & 50% Survivor Annuity for married members, Single Life Annuity for single members.