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**STATE OF ILLINOIS**

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**OFFICE OF THE AUDITOR GENERAL**

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**ANNUAL REVIEW**

**INFORMATION SUBMITTED BY THE  
CHICAGO TRANSIT AUTHORITY'S  
EMPLOYEE RETIREMENT PLAN**

**DECEMBER 2010**

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**WILLIAM G. HOLLAND**

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**AUDITOR GENERAL**

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OFFICE OF THE AUDITOR GENERAL  
WILLIAM G. HOLLAND

*To the Legislative Audit Commission, the  
Speaker and Minority Leader of the House  
of Representatives, the President and  
Minority Leader of the Senate, the members  
of the General Assembly, and  
the Governor:*

This is our 2010 Annual Review of Information Submitted by the Chicago Transit Authority's Employee Retirement Plan.

The review was conducted pursuant to Public Act 95-708 which amended the Illinois State Auditing Act by adding a requirement for the Auditor General to annually review and report on information submitted by the Board of Trustees of the Retirement Plan for Chicago Transit Authority Employees.

The report for this review is transmitted in conformance with Section 5/3-2.3(e) of the Illinois State Auditing Act.

A handwritten signature in blue ink, appearing to read "William G. Holland". The signature is stylized and includes a large, sweeping flourish that extends upwards and to the right. A small number "2" is written at the bottom right of the signature.

WILLIAM G. HOLLAND  
Auditor General

Springfield, Illinois  
December 2010





STATE OF ILLINOIS  
OFFICE OF THE  
**AUDITOR GENERAL**

William G. Holland, Auditor General

**SUMMARY REPORT DIGEST**

**REVIEW OF INFORMATION SUBMITTED BY THE CHICAGO TRANSIT  
AUTHORITY'S EMPLOYEE RETIREMENT PLAN**

**2010 ANNUAL REVIEW**

**Release Date: December 2010**

**SYNOPSIS**

- The Auditing Act requires the Retirement Plan for Chicago Transit Authority Employees (Retirement Plan) to submit for review to the Auditor General its most recent audit, an annual statement, and an actuarial statement by September 30 of each year. The OAG reviewed documents submitted by the Retirement Plan and concluded that the Plan had complied with the requirements established in the Auditing Act.
- The Illinois Pension Code requires the Retirement Plan to determine, based on a report prepared by an enrolled actuary, the estimated funded ratio of the Retirement Plan's total assets to its total actuarially determined liabilities. The Auditor General is then required to review the determination and the assumptions on which it is based and determine whether they are "unreasonable in the aggregate".
- The OAG reviewed the Retirement Plan's assumptions contained in the January 1, 2010 Actuarial Valuation submitted on October 14 and concluded that they were not unreasonable in the aggregate. However, the investment return assumption of 8.75 percent, while selected using established standards for pension plans and not unreasonable in the aggregate, is an **optimistic** assumption and should be viewed as such.
- Salary scale assumptions were revised in this year's Actuarial Valuation to reflect expectations based on current furlough and salary programs and collective bargaining agreements. However, when we requested the documentation to support these changes, the Plan's actuary stated that "the parameters used to develop the salary scale assumptions . . . were provided to us in a conference call with various CTA and Retirement Plan members." The Plan's actuary subsequently summarized these conversations which explained changes in the headcount growth and salary increase assumptions.
- The January 1, 2010 Actuarial Valuation Report sets forth the statutory minimum contribution rates that are necessary to keep the projected funded ratio above 60 percent in all years through 2039, based on assumptions which are not unreasonable in the aggregate. The Retirement Plan Board voted to keep the Plan's 2010 employee and employer contribution rates in effect for plan year 2011. These rates are slightly higher than the statutorily minimum required contribution rates for 2011. The January 1, 2010 Actuarial Valuation noted that the "adoption of slightly higher rates by the Board will improve the funding of the Retirement Plan and reduce the fluctuation of the contribution rate in the future should the Plan incur actuarial losses."



**FINDINGS, CONCLUSIONS, AND**  
**RECOMMENDATIONS**

**STATUTORY REQUIREMENTS**

**The OAG reviewed documents submitted by the Retirement Plan and concluded that the Plan had complied with the requirements established in the Auditing Act.**

The Auditing Act (30 ILCS 5/3-2.3(e)) requires the Retirement Plan for Chicago Transit Authority Employees to submit to the Office of the Auditor General (OAG) an audit, an annual statement, and an actuarial statement by September 30 of each year. On September 30, 2010, the Retirement Plan submitted these documents to the OAG. The OAG reviewed these documents and concluded that the Retirement Plan had complied with the requirements established in the Auditing Act.

In addition, the Illinois Pension Code (40 ILCS 5/22-101(e)(3)) requires the Retirement Plan to determine, based on a report prepared by an enrolled actuary, the estimated funded ratio of the Retirement Plan's total assets to its total actuarially determined liabilities. The Plan is then required to determine the employee and employer contribution rates needed to meet funding requirements established by the Pension Code. The Auditor General is required to review the determination and the assumptions on which it is based and determine whether they are "unreasonable in the aggregate".

**REVIEW OF ACTUARIAL VALUATION**

**The OAG reviewed the Retirement Plan's assumptions contained in the January 1, 2010 Actuarial Valuation submitted on October 14 and concluded that they were not unreasonable in the aggregate.**

The Retirement Plan submitted the Actuarial Valuation as of January 1, 2010, to the OAG on September 30, 2010. This Actuarial Valuation was presented to the Retirement Plan Board at its September 23, 2010 meeting. At that meeting, the Board of Trustees approved the valuation for January 2010 and certified the employer and employee contribution rates for 2011. On October 14, 2010, the Plan submitted to the OAG a revised Actuarial Valuation as of January 1, 2010 which reflected a change of \$50,000 in the market value of assets based on the Plan's audit report. This revision did not have an effect on the contribution rates that were approved by the Board at its September meeting. The conclusions contained in this report are based on the Actuarial Valuation submitted on October 14, 2010.

**The investment return assumption of 8.75 percent, while selected using established standards for pension plans and not unreasonable in the aggregate, is an optimistic assumption and should be viewed as such.**

The OAG reviewed the Retirement Plan's assumptions contained in the Actuarial Valuation submitted on October 14 and concluded that they were not unreasonable in the aggregate. However, the investment return assumption of 8.75 percent, while selected using established standards for pension plans and not unreasonable in the aggregate, is an optimistic assumption and should be viewed as such.

Furthermore, the salary scale assumptions were revised in this year's Actuarial Valuation to reflect expectations based on current furlough and salary programs and collective bargaining agreements, according to Plan officials. However, when we requested the documentation to support these changes, the Plan's actuary stated that "the parameters used to develop the salary scale assumptions that we used for our 2010 actuarial valuation, including the rate increases embedded in the Collective Bargaining Agreements, were provided to us in a conference call with various CTA and Retirement Plan members." On November 9, 2010 the Plan's actuary provided an email summarizing their conversations with the CTA Retirement Plan and CTA Budget and Finance staff and explaining changes in the headcount growth and salary increase assumptions.

### **CONTRIBUTION RATES**

The Pension Code requires the CTA to contribute 12 percent of pay, less up to a 6 percent credit for debt service paid on the bonds issued for contribution to the Retirement Plan; employees are required to pay 6 percent of pay. The Pension Code further requires that contribution rates be increased if the funded ratio is projected to decline below 60 percent prior to 2040, with the CTA paying two-thirds and employees one-third of the required contribution.

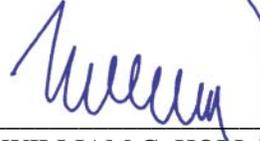
**The Retirement Plan Board voted to keep the Plan's 2010 employee and employer contribution rates in effect for plan year 2011. These rates are slightly higher than the statutorily minimum required contribution rates for 2011.**

The Actuarial Valuation Report submitted by the Retirement Plan to the Office of the Auditor General sets forth the statutory minimum contribution rates that are necessary to keep the projected funded ratio above 60 percent in all years through 2039, based on assumptions which are not unreasonable in the aggregate. The Retirement Plan Board voted to keep the Plan's 2010 employee and employer contribution rates in effect for plan year 2011. These rates (employee contribution of 8.345 percent of pay and employer contribution of 10.690 percent (which is net of the employer debt service credit of 6% per pay)) are slightly higher than the statutorily minimum required contribution rates for 2011. The January 1, 2010 Actuarial Valuation noted that the "adoption of slightly higher rates by the Board will improve the funding of the Retirement Plan and reduce the fluctuation of the contribution rate in the future should the Plan incur actuarial losses."

### **DELAYS IN REQUESTED INFORMATION**

The Office of the Auditor General and our consulting actuaries Aon Hewitt experienced delays in getting timely responses to questions and supporting documentation during the course of this year's review. Documentation, such as Board meeting minutes and employee and CTA contribution amounts for

2009, took almost three weeks for the Plan to provide to the Auditor General. Similarly, responses to questions and associated follow-up questions and requested documentation were not always provided timely to our consultants.

A handwritten signature in blue ink, appearing to read 'William G. Holland', is written over a horizontal line.

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WILLIAM G. HOLLAND  
Auditor General

WGH:JFS

This Annual Review was conducted by OAG staff with the assistance of our consultants, Aon Hewitt.



<b>TABLE OF CONTENTS</b>		
	Auditor General's Transmittal Letter Report Digest	i
<b>REPORT</b>	Report Conclusions	1
	Background	3
	Review of Retirement Plan Submissions	3
	Review of Actuarial Determination and Assumptions	4
	Review of Actuarial Assumptions Used	5
	Investment Return Assumption	5
	Other Actuarial Assumptions	7
	Funded Ratio	9
	Scope of Annual Review	10
	Delays in Requested Information	11

<b>APPENDIX</b>	<b>TITLE</b>	<b>PAGE</b>
Appendix A	Statutory Authority	13



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**Annual Review**

# **Information Submitted by the CTA Retirement Plan**

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The Illinois State Auditing Act (30 ILCS 5/3-2.3(e)), as amended by Public Act 95-708, requires the Auditor General to review certain documents submitted by the Board of Trustees of the Retirement Plan for Chicago Transit Authority Employees (Retirement Plan). In addition, the Illinois Pension Code (40 ILCS 5/22-101(e)(3)) requires the Retirement Plan to determine, based on a report prepared by an enrolled actuary, the estimated funded ratio of the Retirement Plan's total assets to its total actuarially determined liabilities. The Plan is also required to determine the employee and employer contribution rates needed to meet funding requirements established by the Pension Code. The Auditor General is then required to review the determination and the assumptions on which it is based and determine whether they are "unreasonable in the aggregate".

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## **REPORT CONCLUSIONS**

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The Auditing Act (30 ILCS 5/3-2.3(e)) requires the Retirement Plan to submit to the Office of the Auditor General (OAG) an audit, an annual statement, and an actuarial statement by September 30 of each year. On September 30, 2010, the Retirement Plan submitted these documents to the OAG. The OAG reviewed these documents and concluded that the Retirement Plan had complied with the requirements established in the Auditing Act.

In addition, the Illinois Pension Code (40 ILCS 5/22-101(e)(3)) requires the Retirement Plan to determine, based on a report prepared by an enrolled actuary, the estimated funded ratio of the Retirement Plan's total assets to its total actuarially determined liabilities. The Plan is then required to determine the employee and employer contribution rates needed to meet funding requirements established by the Pension Code. The Auditor General is required to review the determination and the assumptions on which it is based and determine whether they are "unreasonable in the aggregate".

The Retirement Plan submitted the Actuarial Valuation as of January 1, 2010, to the OAG on September 30, 2010. This Actuarial Valuation was presented to the Retirement Plan Board at its September 23, 2010 meeting. At that meeting, the Board of Trustees approved the valuation for January 2010 and certified the employer and employee contribution rates for 2011. On October 14, 2010, the Plan submitted to the OAG a revised Actuarial Valuation as of January 1, 2010 which reflected a change of \$50,000 in the market value of assets based on the Plan's audit report. This revision did not have an effect on the contribution rates approved by the Board at its September

meeting. The conclusions contained in this report are based on the Actuarial Valuation submitted on October 14, 2010.

The OAG reviewed the Retirement Plan's assumptions contained in the Actuarial Valuation submitted on October 14 and concluded that they were not unreasonable in the aggregate. However, the investment return assumption of 8.75 percent, while selected using established standards for pension plans and not unreasonable in the aggregate, is an optimistic assumption and should be viewed as such.

Furthermore, the salary scale assumptions were revised in this year's Actuarial Valuation to reflect expectations based on current furlough and salary programs and collective bargaining agreements, according to Plan officials. However, when we requested the documentation to support these changes, the Plan's actuary stated that "the parameters used to develop the salary scale assumptions that we used for our 2010 actuarial valuation, including the rate increases embedded in the Collective Bargaining Agreements, were provided to us in a conference call with various CTA and Retirement Plan members." On November 9, 2010 the Plan's actuary provided an email summarizing their conversations with the CTA Retirement Plan and CTA Budget and Finance staff and explaining changes in the headcount growth and salary increase assumptions.

The Pension Code requires the CTA to contribute 12 percent of pay, less up to a 6 percent credit for debt service paid on the bonds issued for contribution to the Retirement Plan; employees are required to pay 6 percent of pay. The Pension Code further requires that contribution rates be increased if the funded ratio is projected to decline below 60 percent prior to 2040, with the CTA paying two-thirds and employees one-third of the required contribution.

The Actuarial Valuation Report submitted by the Retirement Plan to the Office of the Auditor General sets forth the statutory minimum contribution rates that are necessary to keep the projected funded ratio above 60 percent in all years through 2039, based on assumptions which are not unreasonable in the aggregate. The Retirement Plan Board voted to keep the Plan's 2010 employee and employer contribution rates in effect for plan year 2011. These rates are slightly higher than the statutorily minimum required contribution rates for 2011. The January 1, 2010 Actuarial Valuation noted that the "adoption of slightly higher rates by the Board will improve the funding of the Retirement Plan and reduce the fluctuation of the contribution rate in the future should the Plan incur actuarial losses."

The Office of the Auditor General and our consulting actuaries Aon Hewitt experienced delays in getting timely responses to questions and supporting documentation during the course of this year's review. Documentation, such as Board meeting minutes and employee and CTA contribution amounts for 2009, took almost three weeks for the Plan to provide to the Auditor General. Similarly, responses to questions and associated follow-up questions and requested documentation were not always provided timely to our consultants.

## BACKGROUND

The Retirement Plan for CTA Employees was significantly underfunded, with a funded ratio of 34 percent as of January 1, 2006. In addition, the Plan was responsible for administering both the retirement benefits and retiree health care benefits. Public Act 94-839 required the CTA to separate the funding for retiree health care benefits from the funding of the retirement system by January 1, 2009.

Public Act 95-708 made sweeping changes to the Retirement Plan for CTA Employees. Public Act 95-708 gave the CTA the authority to issue bonds to help fund both the retirement and retiree health care plans. Public Act 95-708 also established the Retiree Health Care Trust to handle the retiree health care benefits. The Retiree Health Care Trust was established in May 2008 and by July 1, 2009, the Retirement Plan and Retiree Health Care Trust were required to be separate, according to the Plan’s Executive Director.

The legislation requires that the contributions from the CTA and employees must be at a level so that the funded ratio of the Retirement Plan does not decline below 60 percent for each year up to and including fiscal year 2039, and achieve 90 percent funding by fiscal year 2059. It also stipulates that employees are required to pay one-third of the annual required contribution and the CTA is required to pay two-thirds of the required contribution. During the time period 2009 through 2040, the amount paid by the CTA with respect to debt service on bonds issued for contribution to the Retirement Plan shall be treated as a credit against the amount of required contribution, up to an amount not to exceed six percent of the compensation paid by the CTA in the following year.

### REVIEW OF RETIREMENT PLAN SUBMISSIONS

The Auditing Act (30 ILCS 5/3-2.3(e)) requires the Retirement Plan to submit certain specific documents to the Auditor General by September 30 of each year:

<b>ILLINOIS PENSION CODE REQUIREMENTS</b>
<p>The Auditing Act requires the CTA Retirement Plan to annually file with the Auditor General the following information specified in Section 1A-109 of the Pension Code:</p> <ol style="list-style-type: none"> <li>(1) a financial balance sheet as of the close of the fiscal year;</li> <li>(2) a statement of income and expenditures;</li> <li>(3) an actuarial balance sheet;</li> <li>(4) statistical data reflecting age, service, and salary characteristics concerning all participants;</li> <li>(5) special facts concerning disability or other claims;</li> <li>(6) details on investment transactions that occurred during the fiscal year covered by the report;</li> <li>(7) details on administrative expenses; and</li> <li>(8) such other supporting data and schedules as in the judgement of the Division may be necessary for a proper appraisal of the financial condition of the pension fund and the results of its operations. The annual statement shall also specify the actuarial and interest tables used in the operation of the pension fund.</li> </ol>
<p>Source: Pension Code (40 ILCS 5/1A-109) and Auditing Act (30 ILCS 5/3-2.3(e))</p>

1. **Audit.** The most recent audit or examination of the Retirement Plan;
2. **Annual Statement.** An annual statement containing the information specified in Section 1A-109 of the Illinois Pension Code (see inset); and
3. **Actuarial Statement.** A complete actuarial statement applicable to the prior plan year, which may be the annual report of an enrolled actuary retained by the Retirement Plan specified in Section 22-101(e) of the Illinois Pension Code.

On September 30, 2010 the Retirement Plan Board submitted the three documents below. We reviewed the documents and concluded the information required by Section 5/3-2.3(e) of the Auditing Act was contained in these reports:

- Audited Financial Statements for the Plan for the year ended December 31, 2009;
- Investment Performance Report for the period ending December 31, 2009; and
- Actuarial Valuation for the Plan as of January 1, 2010.

### **Review of Actuarial Determination and Assumptions**

The Illinois Pension Code (40 ILCS 5/22-101(e)(3)) places an additional reporting requirement on the Auditor General. The Code requires that the Retirement Plan, “*By September 15 of each year beginning in 2009 and ending on December 31, 2039, on the basis of a report prepared by an enrolled actuary retained by the Plan, the Board of Trustees of the Retirement Plan shall determine the estimated funded ratio of the total assets of the Retirement Plan to its total actuarially determined liabilities. A report containing that determination and the actuarial assumptions on which it is based shall be filed with the . . . Auditor General . . .*” The Pension Code requires the Auditor General to review the determination and the assumptions on which it is based to determine whether they are unreasonable in the aggregate.

At the Retirement Board’s September 23, 2010 meeting, the Board adopted contribution rates for 2011 that were unchanged from 2010. This Actuarial Valuation was presented to the Retirement Plan Board at its September 23, 2010 meeting. At that meeting, the Board of Trustees approved the valuation for January 2010 and certified the employer and employee contribution rates for 2011.

On September 30, 2010, the Retirement Plan submitted the Actuarial Valuation as of January 1, 2010, to the OAG. On October 14, 2010, the Plan submitted to the OAG a revised Actuarial Valuation as of January 1, 2010 which reflected a change of \$50,000 in the market value of assets based on the Plan’s audit report. This revision did not have an effect on the contribution rates approved by the Board at its September meeting. The conclusions contained in this report are based on the Actuarial Valuation submitted on October 14, 2010.

## Review of Actuarial Assumptions Used

We reviewed assumptions used in the Retirement Plan's Actuarial Valuation as of January 1, 2010 submitted pursuant to 40 ILCS 5/22-101(e)(3) and found that the assumptions used are not unreasonable in the aggregate.

### Investment Return Assumption

While the assumptions used in the January 1, 2010 Actuarial Valuation are not unreasonable in the aggregate, one assumption, the investment return assumption, warrants additional discussion. Last year, we noted that the investment return assumption of 8.75 percent, while selected using established standards for pension plans and not unreasonable in the aggregate, is an optimistic assumption. We continue to have concerns regarding the aggressiveness of this assumption.

### 2009 Experience Study

Our 2009 Annual Review discussed that the 8.75 percent investment return assumption was based on an experience study completed by the Plan's prior actuary in August 2009. The experience study covered the period January 1, 2001 through December 31, 2007. The primary purpose of the study was to compare the demographic and economic experience against the Plan's actuarial assumptions used in the annual valuations.

An experience study provides critical information to the actuary by assessing how well assumptions used by the plan align with the actual experience of the plan. The 2009 experience study noted that for any retirement system, actuarial assumptions are intended to provide reasonable estimates of future expected events. To the extent that the actual experience deviates from the assumptions, gains or losses to the plan will occur.

In order to select an investment return rate, the Plan's actuaries ran a "Monte Carlo" simulation, which projects the return on assets numerous times (i.e., trials), and then examines the annual returns determined in each projection in aggregate. As a result of this simulation, the actuaries found the **median investment return** over 30 years to be **7.63 percent**. They determined the 75<sup>th</sup> percentile investment return to be 8.85 percent, and while not disclosed, the 25<sup>th</sup> percentile investment return can be estimated by extrapolation as 6.4 percent. Under actuarial standards of practice known as "*best estimate range*," a return assumption is generally assumed to be reasonable if it falls within this 25<sup>th</sup> to 75<sup>th</sup> percentile range. The 8.75 percent investment return fell within this range. However, selecting an assumption at the edge of this interval can be overly optimistic. In fact, in the experience study, the Plan's actuary noted that an investment

return rate of 8.75 percent has only a 27 percent chance of occurring over the next 30 years.

The Plan's new actuary stated that they did not perform a full assumption study as part of its January 1, 2010 valuation since the Plan's prior actuary did one in conjunction with the January 1, 2009 valuation. Typically, an experience study should be done every three to five years.

### **Investment Consultant's Report**

For the January 1, 2010 Actuarial Valuation, the Retirement Plan's actuary stated they discussed the 8.75 percent investment return assumption with the Plan's Investment Consultant. The Investment Consultant provided the Plan's actuary with a report which included statistical analysis of average historic asset returns, based on the Retirement Plan's funding policy and rolling averages over 30 years.

Our consultant, Aon Hewitt, reviewed the Investment Consultant's analysis. Using the Plan's current asset allocation and looking at five-year annualized returns, rolling quarterly, for the period 1/1/1926 to 12/31/2009, the 25<sup>th</sup> to 75<sup>th</sup> percentile range of returns is 5.16 percent to 12.54 percent with a median return of 8.72 percent and an average return of 8.46 percent. Further, the Investment Consultant's analysis indicates that the probability of achieving the average annual return (8.46%) or better in five-year return periods is 47 percent.

The report also shows that using thirty-year annualized returns, rolling quarterly, (for the period 1/1/1926 to 12/31/2009), the 25<sup>th</sup> to 75<sup>th</sup> percentile range of returns is 8.67 percent to 9.95 percent with a median return of 9.25 percent, an average return of 9.27 percent and the probability of achieving an average annual return of 8.46 percent or better in thirty-year return periods is 58 percent.

It is important to understand that the underlying assumption with respect to this analysis is that future asset experience will be the same as historic experience. If future asset experience does not replicate past experience, then the expectations and probabilities with respect to future returns will differ.

### **Comparison with Rates of Returns of Other Pension Plans**

An investment return assumption of 8.75 percent is outside the range of investment returns for comparable plans. The Public Fund Survey website, as of October 2010, showed a median investment return assumption of 8.0 percent for 126 public pension plans surveyed with estimated combined assets of \$2.6 trillion. **None of the 126 plans had an investment return assumption as high as 8.75 percent.** Thirteen plans had an investment return assumption of 8.50 percent. In comparing the October 2010 Public Fund Survey data with last year's Public Fund Survey data, we note that of the 19

plans that reported using an 8.50 percent investment return assumption last year, 6 of these plans decreased the investment return assumption in this year's data. Of these, 2 dropped the assumption to 8.25 percent and 4 dropped the assumption to 8.00 percent.

Further, the CTA Retirement Plan's assumed *real rate of return*, which accounts for inflation, was at the upper end of other public pension plans in the Public Fund Survey. The real rate of return is calculated by subtracting the general inflation assumption from the investment return. The January 1, 2010 Actuarial Valuation does not provide a general inflation assumption. When asked, the Plan's actuary stated that the general inflation assumption used in the valuation remains unchanged from last year at 3.25 percent. The CTA Retirement Plan's real rate of return assumption, then, is 5.50 percent (8.75% investment return minus the 3.25% general inflation assumption). The highest real return in the Public Fund Survey data was also 5.50 percent (7 plans). Consequently, when looking at either investment return, or real rate of return assumptions, the CTA Retirement Plan's assumptions are thus equally aggressive or more aggressive than any plan in the Public Fund Survey.

A second study of public retirement plans had similar results. In their 2009 report *City & County Retirement Systems: Funding Levels and Asset Allocation*, Wilshire Consulting examined the asset allocation for 104 city and county retirement systems. This study took the asset allocations of the 104 plans, as well its own assumptions regarding asset returns for each asset class, and determined a median expected return of 7.2%, which is again significantly lower than the 8.75% selected for the Retirement Plan.

### **Conclusion: Investment Return Assumption**

In summary, the investment return assumption of 8.75% is above the median assumptions for comparable plans, and is significantly above the median return expected for the Plan's own assets based on the 2009 experience study. The Plan's Investment Consultant's analysis supports an 8.75% assumption relying exclusively on historic asset performance. We do not find the assumption unreasonable. However, an assumption of 8.50% or 8.00% would generally be considered more reasonable. The Plan's actuary indicated that to the extent that markets continue to provide sub-par investment results over an extended period of time, or to the extent that the interest rate and inflation components of the overall asset returns continue to be at historical lows for an extended period of time, this assumption may need to be adjusted downwards in order to better reflect future expectations of long-term market results.

### **Other Actuarial Assumptions**

For the 2010 Actuarial Valuation, the Retirement Plan's actuary made changes to the headcount growth assumption, to the wage inflation assumption, and to the salary increase assumption. According to the Valuation, these changes were made to reflect the current economic environment, current furlough and salary programs already in place,

and the pay increases included in the current Collective Bargaining Agreements. Despite our repeated requests for documentation to support these changes, no documentation was provided for our review regarding the current furlough programs or current salary programs, except for a wage agreement for the period January 1, 2007 to December 31, 2011 provided by the Retirement Plan. It was not clear how the wage agreement supported the changes made to the wage/salary-related assumptions.

Plan officials, as well as the Plan’s actuary, indicated that these changes were made based on discussions with CTA officials. The Plan’s actuary stated that “the parameters used to develop the salary scale assumptions that we used for our 2010 actuarial valuation, including the rate increases embedded in the Collective Bargaining Agreements, were provided to us in a conference call with various CTA and Retirement Plan members.” On November 9, 2010 the Plan’s actuary provided an email summarizing their conversations with the CTA Retirement Plan and CTA Budget and Finance staff and explaining changes in the headcount growth and salary increase assumptions.

The 2010 Actuarial Valuation included the following changes:

- A 5 percent headcount reduction was added for 2010 and then 0 percent thereafter. The Plan’s actuary stated that this reduction was applied as a result of the February 2010 service reductions, which resulted in significant layoffs of CTA employees at all levels.
- The salary scale assumption was modified to incorporate a “select and ultimate” assumption. This means that there is a set of assumptions that is in effect for a “select” or short-term period. At the end of the select period, in this case 2010 through 2014, the “ultimate” or long term assumption is used. The “ultimate” salary scale assumptions (i.e., those used beyond the 5 year “select” period) are the same as the 2009 valuation assumptions. The salary scale assumption includes a salary inflation component and a compensation increase component. Both of these assumptions have a 5-year select period. The Plan’s actuary stated that the select period was determined to reflect the current economic environment and that it was appropriate to reflect the expected short-term salary scale changes since they “deviate significantly from the long term view” and that these changes “reflect facts that are known with a certain degree of certainty or that already exist as of the valuation date . . . .”

An email received on November 9, 2010 from the Plan’s actuary summarized their conversations with the CTA Retirement Plan and CTA Budget and Finance staff. The actuary indicated that in their review of the January 1, 2010 data, they noticed payroll had decreased by approximately 1.5 percent from 2008 to 2009. They were informed by the CTA that salary decreases were due mainly from furlough programs and reductions in overtime. Also, the actuary was informed that the furlough programs would continue into 2010.

To support the specific assumption of 2.75 percent for 2010 and 2011 salary increases, the actuary acknowledged that the collective bargaining agreement for ATU provided for 3.5 percent annual compensation increases through 2011. However, the actuary stated that other unions and exempt employees did not receive a raise in early 2010. Upon review of the data, the actuary estimated that 75 percent of the CTA employee population was ATU with annual salary increases of 3.5 percent expected for 2010 and 2011. The remaining 25 percent were non-ATU with net annual salary increases of 0 percent expected for 2010 and 2011 (any salary increases would be offset by the continuation of furloughs). This results in an overall salary increase assumption of 2.625 percent which was rounded to 2.75 percent for the valuation.

To support the specific salary increase assumption of 1.50 percent for 2012 through 2014, the CTA Budget and Finance staff told the Plan's actuary that they believed salary increases would "continue to be depressed for the next bargaining agreement cycle". Therefore, 1.50 percent was agreed to be a reasonable assumption for both union and non-union employees. Further, the Plan's actuary concluded that this assumption was consistent with the assumptions used by the CTA in their payroll budget forecasts.

To support the salary increase assumption for years after 2014, the actuary indicated that they would expect the economy should have recovered by 2014 and that the "long-term trends in interest rates, inflation and salary increases would prevail once again." Therefore, they assumed that the salary increase assumption developed by the Plan's prior actuary would apply to the periods beyond 2014.

Our consultants Aon Hewitt concluded that the use of a select and ultimate assumption is reasonable and that based on the above explanation the specific assumption changes made by the Plan's actuary are not unreasonable. Further, page 14 of the 2010 Actuarial Valuation provides actuarial (gain) or loss information with respect to various assumptions including the payroll growth assumption. Therefore, the reader of future reports will be able to monitor the actual experience of the plan with respect to the assumptions.

## **Funded Ratio**

The Illinois Pension Code (40 ILCS 5/22-101(e)(3)) contains specific requirements regarding the funded ratio of the CTA Retirement Plan. The Code states that:

(3). . . . If the funded ratio is projected to decline below 60% in any year before 2040, the Board of Trustees shall also determine the increased contribution required each year as a level percentage of payroll over the years remaining until 2040 using the projected unit credit actuarial cost method so the funded ratio does not decline below 60% . . . .

The Pension Code requires the CTA to contribute 12 percent of pay, less up to a 6 percent credit for debt service paid on the bonds used to fund the Plan; employees are required to pay 6 percent of pay. If the funded ratio is projected to decline below 60 percent prior to 2040, the Pension Code requires the CTA to pay two-thirds and employees one-third of the required contribution.

The Actuarial Valuation report concluded that the statutory minimum contribution rates applicable for plan year 2011 would need to be 10.34 percent (which is net of the employer debt service credit of 6% per pay) for the CTA and 8.17 percent for CTA employees. However, at its September 23, 2010 meeting, the Board decided to keep the 2010 contribution rates of 10.69% (which is net of the employer debt service credit of 6% per pay) for the Authority and 8.345% for the CTA employees), which are slightly higher than the rates needed to meet the statutory funding requirements. The Actuarial Valuation noted that the “adoption of slightly higher rates by the Board will improve the funding of the Plan and reduce the fluctuation of the contribution rate in the future should the Plan incur actuarial losses.”

As of January 1, 2010, the actuarial value of assets for pension benefits was \$1.9 billion and the actuarial liability was approximately \$2.6 billion, according to the Actuarial Valuation by the Retirement Plan’s actuary. The funded ratio **decreased** from 75.8 percent as of January 1, 2009 to 74.8 percent as of January 1, 2010. The Actuarial Valuation notes the decrease is due to changes in the population, actuarial assumptions, payroll, and investment return.

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## SCOPE OF ANNUAL REVIEW

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The Office of the Auditor General conducted an annual review of information submitted by the Retirement Plan pursuant to the Illinois State Auditing Act and the Illinois Pension Code. This report does not constitute an audit as that term is defined in generally accepted government auditing standards.

The OAG performed the review with assistance from our consultants, Aon Hewitt. Aon Hewitt’s review concluded that:

1. The required documents submitted by the Board of Trustees of the Retirement Plan have been made, and meet the statutory requirements of Section 5/3-2.3(e)(1), (2), and (3) of the Auditing Act.
2. The assumptions stated in the actuarial report submitted pursuant to 40 ILCS 5/22-101(e)(3) are not unreasonable in the aggregate.
3. The investment return assumption of 8.75 percent, while selected using established standards for pension plans and not unreasonable in the aggregate, is an optimistic assumption and should be viewed as such.

4. The select and ultimate salary scale assumptions added to the valuation reflect expectations based on current furlough programs and collective bargaining agreements. However, no documentation was provided regarding these programs or agreements.
5. The actuarial report submitted by the Plan to the Office of the Auditor General sets forth the Statutory Minimum Contribution Rates that are necessary to keep the projected funded ratio above 60 percent in all years through 2039, based on assumptions which are not unreasonable in the aggregate, so that the funded ratio does not decline below 60 percent. The adopted contribution rates for 2011 are slightly higher than the Statutory Minimum Contribution Rates and are based on the same assumptions as the Statutory Minimum Contribution Rates which are not unreasonable in the aggregate.

The Retirement Plan was provided a draft of this report for their review.

### **Delays in Requested Information**

In conducting this year's review, we experienced delays in receiving requested information and responses to questions from the Retirement Plan. These delays were critical given the limited amount of time that we have to complete our review. The Pension Code requires that our report be completed within 60 days of receiving the actuarial report from the Retirement Plan. An Actuarial Valuation was received on September 30, 2010 and a revised Actuarial Valuation was received on October 14. The conclusions contained in this report are based on the Actuarial Valuation submitted on October 14, 2010.

After reviewing the documents submitted on September 30, the OAG sent follow-up questions to the Plan on October 13. Much of the information requested should have been readily available, such as Board meeting minutes and details on employee and employer contributions to the Plan in 2009. After repeated follow-up emails, the Plan finally responded to the OAG questions on November 1, 2010, or almost three weeks after our initial request was made.

Similarly, our consultant, Aon Hewitt, submitted questions to the Plan on October 13 regarding the actuarial assumptions used by the Plan's actuary in the January 1, 2010 Actuarial Valuation. On October 25, 12 days after the request was made, the Plan provided responses to Aon Hewitt's questions. After reviewing the responses to the questions, Aon Hewitt requested documentation to support the actuarial assumptions on October 26. As noted in this report, documentation supporting changes to certain assumptions related to salaries and headcount were not provided by the Retirement Plan. On November 9, 2010 the Plan's actuary sent the OAG and Aon Hewitt an email which summarized their conversations with the CTA Retirement Plan and CTA Budget and Finance staff regarding headcount growth and salary increase assumptions.



**APPENDIX A**  
**Statutory Authority**



**ILLINOIS STATE AUDITING ACT**

**30 ILCS 5/3-2.3(e)**

(e) Annual Retirement Plan Submission to Auditor General. The Board of Trustees of the Retirement Plan for Chicago Transit Authority Employees established by Section 22-101 of the Illinois Pension Code shall provide the following documents to the Auditor General annually no later than September 30:

- (1) the most recent audit or examination of the Retirement Plan;
- (2) an annual statement containing the information specified in Section 1A-109 of the Illinois Pension Code; and
- (3) a complete actuarial statement applicable to the prior plan year, which may be the annual report of an enrolled actuary retained by the Retirement Plan specified in Section 22-101(e) of the Illinois Pension Code.

The Auditor General shall annually examine the information provided pursuant to this subsection and shall submit a report of the analysis thereof to the General Assembly, including the report specified in Section 22-101(e) of the Illinois Pension Code.

(f) The Auditor General shall annually examine the information submitted pursuant to Section 22-101B(b)(3)(iii) of the Illinois Pension Code and shall prepare the determination specified in Section 22-101B(b)(3)(iv) of the Illinois Pension Code.

**ILLINOIS PENSION CODE**

**40 ILCS 5/1A-109**

Annual statements by pension funds. Each pension fund shall furnish to the Division an annual statement in a format prepared by the Division. The Division shall design the form and prescribe the content of the annual statement and, at least 60 days prior to the filing date, shall furnish the form to each pension fund for completion. The annual statement shall be prepared by each fund, properly certified by its officers, and submitted to the Division within 6 months following the close of the fiscal year of the pension fund.

The annual statement shall include, but need not be limited to, the following:

- (1) a financial balance sheet as of the close of the fiscal year;
- (2) a statement of income and expenditures;
- (3) an actuarial balance sheet;
- (4) statistical data reflecting age, service, and salary characteristics concerning all participants;
- (5) special facts concerning disability or other claims;
- (6) details on investment transactions that occurred during the fiscal year covered by the report;
- (7) details on administrative expenses; and
- (8) such other supporting data and schedules as in the judgement of the Division may be necessary for a proper appraisal of the financial condition of the pension fund and the results of its operations. The annual statement shall also specify the actuarial and interest tables used in the operation of the pension fund.

(Source: P.A. 90-507, eff. 8-22-97.)

**40 ILCS 5/22-101**

Sec. 22-101(e). Retirement Plan for Chicago Transit Authority Employees.

(1) Beginning January 1, 2009 the Authority shall make contributions to the Retirement Plan in an amount equal to twelve percent (12%) of compensation and participating employees shall make contributions to the Retirement Plan in an amount equal to six percent (6%) of compensation. These contributions may be paid by the Authority and participating employees on a payroll or other periodic basis, but shall in any case be paid to the Retirement Plan at least monthly.

(2) For the period ending December 31, 2040, the amount paid by the Authority in any year with respect to debt service on bonds issued for the purposes of funding a contribution to the Retirement Plan under Section 12c of the Metropolitan Transit Authority Act, other than debt service paid with the proceeds of bonds or notes issued by the Authority for any year after calendar year 2008, shall be treated as a credit against the amount of required contribution to the Retirement Plan by the Authority under subsection (e)(1) for the following year up to an amount not to exceed 6% of compensation paid by the Authority in that following year.

(3) By September 15 of each year beginning in 2009 and ending on December 31, 2039, on the basis of a report prepared by an enrolled actuary retained by the Plan, the Board of Trustees of the Retirement Plan shall determine the estimated funded ratio of the total assets of the Retirement Plan to its total actuarially determined liabilities. A report containing that determination and the actuarial assumptions on which it is based shall be filed with the Authority, the representatives of its participating employees, the Auditor General of the State of Illinois, and the Regional Transportation Authority. If the funded ratio is projected to decline below 60% in any year before 2040, the Board of Trustees shall also determine the increased contribution required each year as a level percentage of payroll over the years remaining until 2040 using the projected

unit credit actuarial cost method so the funded ratio does not decline below 60% and include that determination in its report. If the actual funded ratio declines below 60% in any year prior to 2040, the Board of Trustees shall also determine the increased contribution required each year as a level percentage of payroll during the years after the then current year using the projected unit credit actuarial cost method so the funded ratio is projected to reach at least 60% no later than 10 years after the then current year and include that determination in its report. Within 60 days after receiving the report, the Auditor General shall review the determination and the assumptions on which it is based, and if he finds that the determination and the assumptions on which it is based are unreasonable in the aggregate, he shall issue a new determination of the funded ratio, the assumptions on which it is based and the increased contribution required each year as a level percentage of payroll over the years remaining until 2040 using the projected unit credit actuarial cost method so the funded ratio does not decline below 60%, or, in the event of an actual decline below 60%, so the funded ratio is projected to reach 60% by no later than 10 years after the then current year. If the Board of Trustees or the Auditor General determine that an increased contribution is required to meet the funded ratio required by the subsection, effective January 1 following the determination or 30 days after such determination, whichever is later, one-third of the increased contribution shall be paid by participating employees and two-thirds by the Authority, in addition to the contributions required by this subsection (1).

(4) For the period beginning 2040, the minimum contribution to the Retirement Plan for each fiscal year shall be an amount determined by the Board of Trustees of the Retirement Plan to be sufficient to bring the total assets of the Retirement Plan up to 90% of its total actuarial liabilities by the end of 2059. Participating employees shall be responsible for one-third of the required contribution and the Authority shall be responsible for two-thirds of the required contribution. In making these determinations, the Board of Trustees shall calculate the required contribution each year as a level percentage of payroll over the years remaining to and including fiscal year 2059 using the projected unit credit actuarial cost method. A report containing that determination and the actuarial assumptions on which it is based shall be filed by September 15 of each year with the Authority, the representatives of its participating employees, the Auditor General of the State of Illinois and the Regional Transportation Authority. If the funded ratio is projected to fail to reach 90% by December 31, 2059, the Board of Trustees shall also determine the increased contribution required each year as a level percentage of payroll over the years remaining until December 31, 2059 using the projected unit credit actuarial cost method so the funded ratio will meet 90% by December 31, 2059 and include that determination in its report. Within 60 days after receiving the report, the Auditor General shall review the determination and the assumptions on which it is based and if he finds that the determination and the assumptions on which it is based are unreasonable in the aggregate, he shall issue a new determination of the funded ratio, the assumptions on which it is based and the increased contribution required each year as a level percentage of payroll over the years remaining until December 31, 2059 using the projected unit credit actuarial cost method so the funded ratio reaches no less than 90% by December 31, 2059. If the Board of Trustees or the Auditor General determine that an increased contribution is required to meet the funded ratio required by this subsection, effective January 1 following the determination or 30 days after such determination, whichever is later, one-third of the increased contribution shall be paid by participating employees and two-thirds by the Authority, in addition to the contributions required by subsection (e)(1).

(5) Beginning in 2060, the minimum contribution for each year shall be the amount needed to maintain the total assets of the Retirement Plan at 90% of the total actuarial liabilities of the Plan, and the contribution shall be funded two-thirds by the Authority and one-third by the participating employees in accordance with this subsection.