Regional Transportation Authority Pension Plan

Actuarial Valuation Report as of January 1, 2017

Contents

GRS Retirement Consulting

P: 312.456.9800 | F: 312.683.3271 | www.grsconsulting.com

August 3, 2017

Board of Trustees
Regional Transportation Authority Pension Plan
Chicago, Illinois

Dear Trustees:

We are pleased to provide our formal annual Actuarial Valuation Report as of January 1, 2017, for the Regional Transportation Authority Pension Plan ("RTA Pension Plan"). The actuarial valuation was performed at the request of the Regional Transportation Authority ("RTA") and is intended for use by the RTA and those designated by the RTA. This report may be provided to parties other than the RTA only in its entirety and only with the permission of the RTA.

This report provides, among other things, the recommended annual contribution of the RTA Pension Plan for the Plan Year commencing January 1, 2017, and ending on December 31, 2017.

Members who meet eligibility conditions may receive a lump sum benefit from the RTA Pension Plan in lieu of an annuity. The assumption basis used by the Plan Administrator to calculate lump sum payments is based on segment interest rates prescribed by the IRS and changes annually. Beginning with the 2013 actuarial valuation, the assumption basis used in the actuarial valuation to project future lump sum payments is updated annually to reflect the actual segment interest rates and mortality table being used. The other actuarial assumptions and the actuarial cost method used in this actuarial valuation are the same as those used in the prior actuarial valuation and are set forth in Section C: Actuarial Valuation Procedures.

Section B outlines the principal benefit provisions of the Plan. There have been no changes to the Plan provisions since the January 1, 2016, actuarial valuation.

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Regional Transportation Authority Pension Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

Lance J. Weiss and Amy Williams are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: Plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in Plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the Plan sponsor.

The actuarial valuation was based upon information furnished by the Regional Transportation Authority agencies and the Plan Administrator, Reed-Ramsey, concerning benefits provided by the Regional Transportation Authority Pension Plan, financial transactions, Plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the Regional Transportation Authority agencies or Reed-Ramsey. As part of the actuarial valuation process, GRS updated service amounts for active members in accordance with the rules established with Reed-Ramsey.

We will be pleased to review this report with you at your convenience.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Lance J. Weiss

Lance J. Weiss, E.A., M.A.A.A., F.C.A.
Senior Consultant and Team Leader

Amy Williams

Amy Williams, A.S.A., M.A.A.A., F.C.A.
Consultant

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SECTION A

ACTUARIAL VALUATION RESULTS

Comments on the Actuarial Valuation

Purpose and Data

At your request we have performed the actuarial valuation of the Regional Transportation Authority Pension Plan as of January 1, 2017.

The purposes of this actuarial valuation are as follows:

- To determine the funding status of the RTA Pension Plan as of the valuation date; and
- To determine the recommended contribution for the current fiscal year.

Accounting information, as required under GASB Statement Number 67 (pension plan accounting) and GASB Statement Number 68 (employer accounting for pension plans), is shown in a separate report. GASB Statement Numbers 67 and 68 were first effective with fiscal year ending December 31, 2014, and December 31, 2015, respectively.

We received the data from the Regional Transportation Authority agencies and Reed-Ramsey. We performed certain checks for reasonableness and found most of the data to be complete and reliable for actuarial valuation purposes. As part of the actuarial valuation process, GRS updated service amounts for active members in accordance with the rules established with Reed-Ramsey.

A total of 1,156 active members were included in the actuarial valuation as of January 1, 2017. Between the 2016 and 2017 actuarial valuations, the number of active employees increased by 42 members, or 3.8 percent. The average annual valuation pay increased by 2.1 percent, from $79,590 to $81,272 between the 2016 and 2017 actuarial valuations. The number of benefit recipients increased from 670 to 730, or 9.0 percent, since the last actuarial valuation. The average monthly benefit increased by 3.0 percent, from $1,498 to $1,543.

Section B outlines the principal benefit provisions of the Plan. There have been no changes to the Plan provisions since the January 1, 2016, actuarial valuation:

Actuarial Assumption and Method Changes

The actuarial assumptions and the actuarial cost method remain unchanged from the prior actuarial valuation as of January 1, 2016, except for the conversion factors used to calculate lump sum benefits. Members who meet eligibility conditions may receive a lump sum benefit from the RTA Pension Plan in lieu of an annuity. The assumption basis used by the Plan Administrator to calculate lump sum payments is based on segment interest rates prescribed by the IRS and changes annually. Beginning with the 2013 actuarial valuation, the assumption basis used in the actuarial valuation to project future lump sum payments is updated annually to reflect the actual segment interest rates being used.

Gain/Loss Analysis

During the plan year ending December 31, 2016, the unfunded actuarial accrued liability ("UAAL") increased from $20,765,465 as of January 1, 2016, to $26,282,070 as of January 1, 2017, which is an increase of $5,516,605. The key factors contributing to the change in UAAL are summarized in the following table:

Comments on the Actuarial Valuation (Continued)

Source	Change in UAAL
UAAL at January 1, 2016	**$ 20,765,465**
Normal Cost and Interest on UAAL and Normal Cost	9,316,168
Recommended Contribution for 2016	(9,534,166)
Change Due to Additional Contribution in 2016	(1,300,000)
Change Due to Updated Assumptions and Methods	588,429
Change Due to Changes in Benefit Provisions	0
(Gain) Loss on Assets [1]	4,371,403
Salary and Demographic (Gain) Loss	2,074,771
UAAL at January 1, 2017	**$ 26,282,070**

[1] *Includes gains and losses on an actuarial value of assets basis.*

There have been losses in each of the last five years due to salary increases that were higher than assumed. We recommend that GRS perform an experience study covering the period January 1, 2013, through January 1, 2017, prior to the next actuarial valuation. This experience study will include a review of the salary increase assumption as well as all other actuarial assumptions used in the actuarial valuation.

Plan Asset Return

On a market value basis, the RTA Pension Plan assets earned an investment return of approximately 8.4 percent. Partial recognition of the fiscal year end 2014 and 2015 investment losses, which was somewhat offset by partial recognition of the investment gains during fiscal years ending 2012, 2013 and 2016, resulted in an estimated net asset rate of return of 5.8 percent on an actuarial basis, which compares to the assumed rate of return of 7.50 percent for fiscal year 2016.

Statutory and Recommended Employer Contributions

The minimum employer contribution is defined in Chapter 40, Section 5/22-103 of the Illinois Compiled statutes. This section states:

1. An “under-funded pension Plan” is defined as a pension Plan which has a funded ratio of less than 90% at the last actuarial valuation.
2. An “under-funded pension Plan” shall contribute, in addition to amounts otherwise required, amounts sufficient to bring the funded ratio up to 90% over a maximum period of 50 years from January 1, 2009.
3. The additional contributions shall be in substantially equal annual amounts over the funding period.

The pension Plan document defines the employers’ funding policy as contributions at least equal to an amount determined advisable by the Plan’s actuary to maintain the Plan on a sound actuarial basis.

Comments on the Actuarial Valuation (Continued)

The Plan was no longer considered an "under-funded pension Plan" at the last actuarial valuation because the funded ratio was greater than 90%. Beginning with the actuarial valuation as of January 1, 2015, the Board adopted a 30-year level-dollar closed-period amortization policy, meaning the amortization period began at 30 years at the actuarial valuation as of January 1, 2015, and decreases by one year each year thereafter. This contribution policy targets a funded ratio of 100% at the end of 30 years and therefore exceeds the minimum employer contribution as defined in the statutes. The contribution for fiscal year 2017 which is developed in the actuarial valuation as of January 1, 2017, is expected to be contributed at the end of fiscal year 2017.

The recommended contribution for fiscal year 2017 of $10,581,706, based on a 30-year closed-period, level-dollar amortization policy effective January 1, 2015, increased by $1,047,540, from the recommended contribution of $9,534,166 for fiscal year 2016. The increase is primarily due to the asset loss on an actuarial value of assets basis during 2016 and unfavorable plan experience during the year.

The actuarial value of assets is currently 105 percent of the market value of assets. There is $14,081,450 in net losses currently being deferred that will be phased into the actuarial value of assets over the next four years. This will put upward pressure on recommended employer contribution absent any future offsetting actuarial gains.

Based on the current funding policy of contributing normal cost plus 30-year closed period level-dollar amortization of the unfunded liability, the funded ratio is projected to steadily increase and reach 100% at the end of 30 years. The normal cost is projected to increase by 3.25% each year and the amortization payment is projected to remain level until the end of the amortization period. Gains and losses, including recognition of deferred gains and losses in the actuarial value of assets, will decrease or increase the contribution requirement.

Funded Ratio

The funded ratio measures the portion of the actuarial accrued liability (calculated based on the actuarial assumptions disclosed in this report) that is currently funded. The funded ratio is 91.3 percent based on actuarial value of assets and 86.6 percent based on market value of assets. The funded ratio is not appropriate for assessing the sufficiency of plan assets for any other purpose.

GASB 67/68

A separate actuarial valuation report with calculations completed in accordance with the provisions of GASB Statement Nos. 67 and 68 has been issued.

Summary of Actuarial Valuation Results

			January 1, 2016 Results		January 1, 2017 Results
Membership					
Data	Active Members		1,114		1,156
	Vested Terminated		402		405
	Deferred Beneficiaries		6		6
	Transfers		72		75
	Retirees		572		620
	Beneficiaries		73		83
	QDRO (Alternate Payee)		25		27
	TOTAL		2,264		2,372
Plan					
Liabilities	Actuarial Accrued Liability:				
	Active Members	$	147,635,721	$	147,562,588
	Retirees and Beneficiaries		120,267,062		135,226,094
	Deferred Vested		18,555,163		19,285,415
	TOTAL	$	286,457,946	$	302,074,097
	Actuarial Value of Assets at Valuation Date	$	265,692,481	$	275,792,027
	Unfunded (Overfunded) Actuarial Accrued Liability	$	20,765,465	$	26,282,070
	Funded Position of Plan's Actuarial Accrued Liability [1]		92.8 %		91.3 %

			Fiscal Year 2016		Fiscal Year 2017
Recommended Annual Contribution Requirements					
	Annual Normal Cost as of Valuation Date	$	6,692,541	$	7,127,301
	Normal Cost Expense Load		524,908		603,675
	Interest on Normal Cost to End of Year [2]		541,309		579,823
	30-Year Level Dollar Amortization of Unfunded Actuarial Accrued Liability at End of Year [3]		1,775,408		2,270,907
	Total Recommended Annual Contribution for the Current Plan Year	$	9,534,166	$	10,581,706
	Total Covered Payroll	$	88,663,051	$	93,950,500
	Recommended Annual Contribution (As a percentage of pay)		10.753%		11.263%

[1] *Equals the ratio of the actuarial value of assets to the total actuarial accrued liability.*
[2] *Assumes the contribution will be made at the end of the current fiscal year.*
[3] *29-year period as of January 1, 2016, and 28-year period as of January 1, 2017.*

Summary of Actuarial Valuation Results (Continued)

Allocation of Recommended FY2017 Annual Contribution Requirements	**2016 Pensionable Payroll [1]**	**Allocation Percent**	**Allocated Recommended Annual Contribution Requirements for FY2017**
Metra	$ 43,354,715	54.3%	$ 5,745,866
Pace	28,594,157	35.8%	3,788,251
RTA	7,900,294	9.9%	1,047,589
Total	$ 79,849,166	100.0%	$ 10,581,706

Allocation of Recommended FY2016 Annual Contribution Requirements	**2015 Pensionable Payroll [2]**	**Allocation Percent**	**Allocated Recommended Annual Contribution Requirements for FY2016**
Metra	$ 40,833,326	53.1%	$ 5,062,642
Pace	28,109,111	36.5%	3,479,971
RTA	7,977,441	10.4%	991,553
Total	$ 76,919,879	100.0%	$ 9,534,166

[1]2016 pensionable payroll for members active during both 2016 and 2017.
[2]2015 pensionable payroll for members active during both 2015 and 2016.

Derivation of Experience (Gain)/Loss
Year Ended January 1, 2017

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is expected that gains and losses will cancel each other over a period of years, but year-to-year fluctuations are not uncommon. Detail on the derivation of the experience (gain) loss, along with a year-by-year comparative schedule, is shown below and on the next page.

1.	Unfunded Actuarial Accrued Liability at 01/01/2016	$ 20,765,465
2.	Normal Cost at 01/01/2016	7,217,449
3.	Interest on (1) and (2) to 01/01/2017 (at 7.50% per annum)	2,098,719
4.	Recommended Contribution for 2016 Plan Year	9,534,166
5.	Expected Unfunded Actuarial Accrued Liability at 01/01/2017 [(1) + (2) + (3) - (4)]	$ 20,547,467
6.	Effect of Additional Contributions Made in FY 2016	$ (1,300,000)
7.	Effect of Updating Lump Sum Conversion Factors	$ 588,429
8.	Effect of Plan Provision Changes	$ -
9.	Expected Unfunded Actuarial Accrued Liability at 01/01/2017 After Additional Contributions and Assumption and Plan Provision Changes [(5) + (6) + (7) + (8)]	$ 19,835,896
10.	Actual Unfunded Actuarial Accrued Liability at 01/01/2017	$ 26,282,070
11.	(Gain)/Loss at 01/01/2017 [(10) - (9)]	$ 6,446,174

Derivation of Experience (Gain) Loss
Year Ended January 1, 2017 (Continued)

Year Ending December 31	Experience (Gain) Loss as % of Beginning of Year Accrued Liability	Estimated Rate of Return on Market Value of Assets	Estimated Rate of Return on Actuarial Value of Assets
2007	N/A	5.38 %	10.31 %
2008	N/A	(22.24)%	(6.40)%
2009	N/A	24.40 %	12.68 %
2010 [1]	N/A	11.14 %	5.06 %
2011 [2]	1.67 %	(0.31)%	3.01 %
2012 [3]	3.53 %	12.26 %	4.16 %
2013 [3]	(1.38)%	15.05 %	11.15 %
2014 [3]	0.93 %	1.92 %	8.08 %
2015 [3]	3.91 %	(4.84)%	4.58 %
2016 [3]	2.25 %	8.44 %	5.81 %
5-Year Average	1.83 %	6.32 %	6.72 %
10-Year Average	N/A	4.37 %	5.72 %

[1] *Amounts prior to 2011 from prior actuary's valuation report as of January 1, 2011.*
[2] *2011 experience loss of 1.67% is net of change due to accrual accounting of market value of assets.*
[3] *Experience gains and losses are net of changes due to additional contributions and changes in assumptions and plan provisions.*

Analysis of Actuarial Gains and Losses

	(Gains) Losses During the Year			
Attributable to:	FY 2013	FY 2014	FY 2015	FY 2016
Assets [1]	$ (5,052,783)	$ (564,991)	$ 5,511,049	$ 4,371,403
New Actives	339,420	685,031	552,800	909,383
Salary Changes	959,832	2,837,717	2,506,255	428,349
Active Member Data Changes [2]	Not Available	Not Available	Not Available	1,200,566
New Retirees from Deferred Vested	Not Available	Not Available	Not Available	212,766
Other Demographic Experience [3]	704,147	(790,381)	1,994,506	(676,293)
Composite Actuarial (Gain) Loss	$ (3,049,384)	$ 2,167,376	$ 10,564,610	$ 6,446,174
	Additional (Decreases) Increases in Unfunded Liability			
Expected Change in Unfunded Liability	$ (604,342)	$ (493,771)	$ (717,428)	$ (217,998)
Additional Contributions	(7,397,590)	-	(63,496,198)	(1,300,000)
Changes in Actuarial Assumptions	(914,433)	19,073,525	(355,162)	588,429
Changes in Plan Provisions	-	-	588,069	-
Total Additional Changes	$ (8,916,365)	$ 18,579,754	$ (63,980,719)	$ (929,569)
Total Change in Unfunded Liability	$ (11,965,749)	$ 20,747,130	$ (53,416,109)	$ 5,516,605

[1] *Includes gains and losses on an actuarial value of assets basis.*
[2] *Includes gains and losses based on service changes other than one year for continuing actives.*
[3] *Includes net impact of deviations from assumptions due to death, termination, transfer, retirement, disability, lump sum conversions and miscellaneous data changes.*

Statement of Plan Net Position
as of December 31, 2015, and December 31, 2016

	December 31, 2015	December 31, 2016
Net Plan Position Available for Benefits - Beginning of Year	$ 194,510,431	$ 246,440,267
Additions		
Investment Gain		
Net (depreciation) appreciation in fair value of investments	(11,639,559)	16,286,994
Interest and dividends	2,953,517	4,185,588
Total investment (loss) return	(8,686,042)	20,472,582
Less investment expenses		
Investment managers	318,277	320,695
Trust fees	10,525	4,125
Investment advisor	85,500	177,500
Total investment expenses	414,302	502,320
Net investment loss (gain)	(9,100,344)	19,970,262
Contributions		
METRA pension contributions	$ 39,848,577	$ 5,062,642
PACE pension contributions	33,844,343	3,479,971
RTA pension contributions	3,402,174	2,291,553
Total contributions	77,095,094	10,834,166
Total Additions	$ 67,994,750	$ 30,804,428
Deductions		
Benefit Payments	$ 15,658,298	$ 15,067,599
Administrative Expenses	406,616	466,519
Total Deductions	$ 16,064,914	$ 15,534,118
Net Increase in Net Assets Available for Benefits	$ 51,929,836	$ 15,270,310
Net Plan Position for Benefits - End of Year	$ 246,440,267	$ 261,710,577

Assets are based on accrual accounting and consistent with asset values shown in the Plan's financial statement.

Statement of Changes in Net Plan Position as of December 31, 2015, and December 31, 2016

	Fiscal Year Ending	
	December 31, 2015	December 31, 2016
Assets:		
Cash and Cash Equivalents	$ 68,753,531	$ 4,911,803
Investments, at Fair Value		
Corporate Fixed Income Mutual Fund	62,872,362	60,681,495
Equity Mutual Funds	74,813,197	138,460,425
Common Stocks	9,588,063	14,773,350
Venture Capital	8,080,230	8,071,760
Balanced Funds	22,389,854	34,907,271
Total Investments	177,743,706	256,894,301
Receivables:		
Accrued Interest	$ 5,698	$ 891
Accrued Dividends	2,259	3,489
Pending Investment Sales	-	75,711
Total Receivables	7,957	80,091
Total Assets	$ 246,505,194	$ 261,886,195
Liabilities:		
Due to RTA	$ -	$ -
Accrued Expense	64,927	104,928
Pending Investment Purchases	-	70,690
Total Liabilities	$ 64,927	$ 175,618
Plan Net Position - Available for Benefits	$ 246,440,267	$ 261,710,577

Assets are based on accrual accounting and consistent with asset values shown in the Plan's financial statement.

Development of Actuarial Value of Assets

	2015	2016	2017	2018	2019	2020
Beginning of Year:						
(1) Market Value of Assets	$194,510,431	$246,440,267				
(2) Actuarial Value of Assets	196,142,829	265,692,481				
End of Year:						
(3) Market Value of Assets	246,440,267	261,710,577				
(4a) Contributions	77,095,094	10,834,166				
(4b) Net Disbursements	16,150,414	15,711,618				
(5) Total Investment Income						
=(3)-(1)-(4a)+(4b)	(9,014,844)	20,147,762				
(6) Projected Rate of Return	7.50%	7.50%				
(7) Projected Investment Income						
=(1)x(6)-([1+(6)]^.5-1)x(4b)	13,993,591	17,904,486				
(8) Asset Adjustment	0	0				
(9) Investment Income in						
Excess of Projected Income	(23,008,435)	2,243,276				
(10) Excess Investment Income Recognized						
This Year (5-year recognition)						
(10a) From This Year	(4,601,687)	448,655				
(10b) From One Year Ago	(2,140,668)	(4,601,687)	$ 448,655			
(10c) From Two Years Ago	2,210,323	(2,140,668)	(4,601,687)	$ 448,655		
(10d) From Three Years Ago	1,155,891	2,210,323	(2,140,668)	(4,601,687)	$ 448,655	
(10e) From Four Years Ago	(2,012,478)	1,155,889	2,210,324	(2,140,666)	(4,601,687)	$ 448,656
(10f) Total Recognized Investment Gain/(Loss)	(5,388,619)	(2,927,488)	(4,083,376)	(6,293,698)	(4,153,032)	448,656
(11) Change in Actuarial Value of Assets						
=(4a)-(4b)+(7)+(8)+(10f)	69,549,652	10,099,546				
End of Year:						
(3) Market Value of Assets	**246,440,267**	**261,710,577**				
(12) Preliminary Actuarial Value of Assets = (2)+(11)	265,692,481	275,792,027				
(12a) Upper Corridor Limit 120% x (3)	295,728,320	314,052,692				
(12b) Lower Corridor Limit 80% x (3)	197,152,214	209,368,462				
(13) Adjustment to Remain within 20% Corridor	0	0				
(14) Final Actuarial Value of Assets as of 12/31	**265,692,481**	**275,792,027**				
(15) Difference Between Market & Actuarial Values	(19,252,214)	(14,081,450)				
(16) Market Value Rate of Return	(4.84)%	8.44%				
(17) Actuarial Value Rate of Return	4.58%	5.81%				
(18) Ratio of Actuarial Value to Market Value	108%	105%				

Disbursements include investment advisor fees.

SECTION B

BENEFIT PROVISIONS AND ACTUARIAL VALUATION DATA

Brief Summary of Plan Provisions as of January 1, 2017

Following is a summary of the major Plan provisions used in the actuarial valuation. The Regional Transportation Authority is solely responsible for the validity, accuracy and comprehensiveness of this information. If any of the Plan provisions shown below are not accurate and complete, the actuarial valuation results may differ significantly from those shown in this report and may require a revision of this report. Moreover, these Plan provisions may be susceptible to different interpretations, each of which could be reasonable, and the different interpretations could lead to different valuation results.

Effective Date and Plan Year	The RTA Pension Plan became effective July 1, 1976, and was amended and restated effective June 1, 1984, January 1, 1987, and January 1, 1996. The Plan year is the calendar year.
Most Recent Amendment	The RTA Pension Plan was most recently amended and restated effective July 1, 2016.
Plan Year	The Plan year prior to July 1, 1984, was the twelve-month period commencing each July 1. There was a Short Plan Year from July 1, 1984, to December 31, 1984. Thereafter, the Plan year is the calendar year.
Employees Eligible to Participate	Each employee on and after July 1, 1976, who commences employment with the Authority or an Affiliate Employer becomes a participant as of the later of July 1, 1976, and the first day of the month coincident with or next following the date of his commencement of employment with the Authority. Effective January 1, 1987, directors may participate if an irrevocable election is filed with the Committee. Special provisions apply to certain PACE employees who entered the Plan in 1985 and certain METRA employees who entered the Plan in 1987.
Employee Contributions	Employee contributions are neither required nor allowed by the RTA Pension Plan.
Normal Retirement Date	First day of the calendar month coincident with or next following a participant's 65th birthday.
Early Retirement Date	An employee may retire early if he has attained age 55 and has completed 10 years of Vesting Service.
Disability Retirement Date	A participant who becomes disabled may commence receiving a disability income on the later of (1) his Normal Retirement date and (2) the cessation of long term disability benefits under the RTA Pension Plan.

Compensation	The amounts actually paid as base salary to salaried employees and the amounts actually paid as regular, hourly wages (excluding overtime or shift differential pay) to non-salaried employees, including, at the time of deferral, amount deferred at the election of a Participant while an Employee under a cafeteria Plan, 401(k) qualified cash or deferred arrangement or eligible deferred compensation Plan maintained by an Employer which are excludable from such Participant's taxable income under Section 125, 132(f), 402 or 457 of the Code.
Average Annual Compensation	The average of the annual compensation received by a Participant in the three completed Plan years, whether consecutive or not, of his Continuous Service in which he receives his highest rates of compensation.
Service Considered	"Continuous Service," with respect to the period prior to July 1, 1976, is the total number of months of his uninterrupted service with the Authority. If an employee is not employed by the Authority during all months in a plan year after July 1, 1976, and does not complete 1,000 hours of service, he is credited with one month of Continuous Service for each 83 hours of service completed during that Plan Year. If he completes 1,000 hours of service during any Plan year after July 1, 1976, he will be credited with 12 months of service for that year, with the exception of the Short Plan Year. During the Short Plan Year commencing July 1, 1984, and ending December 31, 1984, an employee is credited with one month of Continuous Service for each month in which he has 83 hours of service. For purposes of determining Continuous Service for vesting and eligibility for early retirement, service credited for the Short Plan Year is 12 months. "Credited Service" is the sum of a participant's "Continuous Service" and any "Prior Service Credit" to which he is entitled. This latter term applies to employees who commenced employment prior to June 2, 1984, and also were employed on a full time basis prior to their current employment with the Authority by either 1. or 2. as follows: 1. The United States, any state, or any political subdivision of any State, or any agency created under an interstate contract approved by the Congress of the United States.

2. Any entity which, at any time during such Employee's employment with such entity, provided public transportation or freight services by bus or rail in the United States.

The Prior Service Credit is then equal to 4% of the service under the prior Plan for each month of continuous service with the Authority which is in excess of 23 months, subject to a maximum credit of 100% of such prior service. Thus, the full credit is granted after 48 months (four years) of employment with the Authority.

All Prior Service Credits were fully accrued at the valuation date.

Rule of 85

Unreduced early retirement is available to participants between ages 55 and 65 if the Rule of 85 is satisfied. The Rule of 85 is satisfied if a participant's vesting service plus age at retirement is greater than or equal to 85 years.

Normal Retirement Benefit

A participant who retires at or after his Normal Retirement Date will receive an annual retirement income equal to the product of 1. And 2. below:

1. Final Average Annual Compensation
2. 1.75% times Credited Service (max 70%)

Thus, the maximum Credited Service is 40 years.

Early Retirement Benefit

A participant who retires at an Early Retirement Date will receive at his Normal Retirement Date an annual retirement income equal to the benefit described in the immediately preceding section. In lieu of the above benefit, a Participant may elect to receive a reduced amount of retirement income commencing on the first day of any month between his Early and Normal Retirement Dates. The reduction will be 2.0% per year for each year that his payment commencement date precedes his Normal Retirement Date. Unreduced early retirement is available to participants between age 55 and 65 if the Rule of 85 is satisfied.

Brief Summary of Plan Provisions as of January 1, 2017 (Continued)

Deferred Vested Benefit

A participant who terminates his employment after completion of five years of Credited Service will be entitled to his accrued benefit commencing at his Normal Retirement Date. A participant who terminates his employment after completion of 10 years of Credited Service can elect reduced early retirement at age 55.

Disability Benefit

A disabled participant who is eligible to commence normal retirement benefits is entitled to an amount determined as if Continuous Service continued until the Normal Retirement Date. Compensation is assumed to continue unchanged from the last calendar year worked.

Death Benefit (with Surviving Spouse)

If an active or inactive participant dies prior to his Retirement Date after completion of at least five years of service and is not eligible for the Rule of 85 and is survived by a spouse to whom he has been married for at least one year, the surviving spouse will receive a monthly benefit equal to 50% of the amount of pension which would have been payable to the participant if his Retirement Date had occurred on his date of death and he had elected a Joint and Survivor Pension.

1. If the participant died after completion of 10 years of service
   a) If the employee was age 55 or older at death, the benefit will commence to the spouse immediately.
   b) If the employee was less than age 55 at death, the benefit will commence on the date that employee would have attained age 55.

2. If the participant died after completion of 5 years of service but less than 10 years
   a) The benefit will commence on the date the employee would have been eligible for Normal Retirement.

If an active participant dies after his Normal Retirement Date or is Eligible for the Rule of 85 at the time of death, the Eligible Spouse will receive a monthly benefit payable immediately based on a 100% Joint and Survivor Pension. In lieu of this survivor benefit, the surviving spouse may elect instead to receive a lump sum distribution equal to the lump sum amount the participant would have been entitled to upon the date of his death.

Brief Summary of Plan Provisions as of January 1, 2017 (Continued)

Death Benefit (without Surviving Spouse)

If an active or inactive participant dies prior to his Retirement Date and is not survived by a spouse, dependent children under age 26 will receive monthly benefits payable until age 26 that are actuarially equivalent to the Single Life Annuity to which the participant would otherwise be entitled.

Normal Form and Optional Forms of Retirement Benefits

The normal annuity form for single participant is a single life annuity. The normal annuity form for married participants is a reduced 50% Joint and Survivor annuity. Other available options are a 10-year certain annuity, a joint and survivor annuity with or without a pop-up or any other option offered by the Committee. The lump-sum option is available to participants who retire on or after their Normal Retirement Date and who have earned service credit prior to January 1, 2011.

Actuarial Equivalence

Optional payments forms are converted from a single life annuity according to actuarial factors based on the following:

Mortality

1. Participants – the 94 GAR Blended mortality table (no rating of ages)
2. Beneficiaries – the 94 GAR Blended mortality table (age rated down two years)
3. Lump-sum payment – applicable mortality table under the Pension Protection Act

Interest

1. Optional annuity forms – 6.0%
2. Lump-sum payments – applicable November segmented interest rates under the Pension Protection Act with five-year phase-in.

In no event will the lump sum paid be less than the lump sum amount determined using the interest rate and mortality assumptions for optional annuity forms.

Prior Benefit Offset

Amounts payable from the RTA Pension Plan are offset by the percent of the Prior Service Credit attributed to the benefit payable under the current Plan multiplied by the sum of all prior benefits.

Brief Summary of Plan Provisions as of January 1, 2017 (Continued)

Changes Since Prior Valuation

There have been no changes in Plan provisions since the prior actuarial valuation.

Summary of Changes in Participant Status
(January 1, 2017)

	Actives [1]	Deferred Vested [2]	Deferred Beneficiaries [2]	Transfers [2]	Retirees [3]	Beneficiaries	QDRO (Alternate Payees)	Total
METRA Participants at 01/01/2016	526	148	3	64	305	39	16	1,101
PACE Participants at 01/01/2016	473	183	2	6	167	18	7	856
RTA Participants at 01/01/2016	115	71	1	2	100	16	2	307
Total Participants at 01/01/2016	1,114	402	6	72	572	73	25	2,264
New Entrants and Rehires	151	(3)						148
Non-Vested Terminations	(26)							(26)
Vested Terminations	(32)	32						0
Transfers	(4)	(1)		5				0
Retirement	(37)	(20)		(1)	58			0
Lump Sum Retirement[4]	(8)	(1)						(9)
Death with Beneficiary	(1)	(1)		(1)	(8)	11		0
Death without Beneficiary	(1)	(4)			(2)	(1)		(8)
Benefit Terminations								0
Adjustments		1					2	3
METRA Participants at 01/01/2017	561	151	3	68	323	44	18	1,168
PACE Participants at 01/01/2017	482	181	2	5	195	21	7	893
RTA Participants at 01/01/2017	113	73	1	2	102	18	2	311
Participants at 01/01/2017	1,156	405	6	75	620	83	27	2,372

[1] *Includes 8 disabled members as of January 1, 2016, and includes 6 disabled members as of January 1, 2017.*

[2] *Valued as deferred vested members.*

[3] *Includes zero participants as of January 1, 2016 and two participants as of January 1, 2017 receiving lump sum payments in the upcoming year.*

[4] *Includes one participant who deceased from active and beneficiary will be receiving lump sum payment in the upcoming year.*

Active Members as of January 1, 2017
by Attained Age and Years of Benefit Service

Attained Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 and Over	Totals	Valuation Payroll
Under 25	22	-	-	-	-	-	-	-	**22**	**$ 988,866**
25-29	57	9	-	-	-	-	-	-	**66**	**3,771,137**
30-34	67	29	9	-	-	-	-	-	**105**	**7,507,422**
35-39	57	31	14	2	1	-	-	-	**105**	**8,180,811**
40-44	44	25	19	15	5	-	-	-	**108**	**8,970,776**
45-49	68	30	34	18	11	1	-	-	**162**	**13,365,552**
50-54	50	31	26	33	17	16	1	-	**174**	**14,974,262**
55-59	51	23	29	26	14	24	17	4	**188**	**16,962,301**
60-64	37	29	18	23	13	19	9	8	**156**	**13,923,710**
65-69	4	7	8	11	5	10	6	2	**53**	**4,561,821**
70-74	2	1	5	1	2	-	-	-	**11**	**583,178**
75 and Over	-	2	-	2	1	1	-	-	**6**	**160,665**
Total	**459**	**217**	**162**	**131**	**69**	**71**	**33**	**14**	**1,156**	**$ 93,950,500**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

	Current Valuation	Previous Valuation
Average Age:	48.9 years	49.3 years
Average Benefit Service:	10.0 years	10.6 years
Average Annual Pay:	$81,272	$79,590
Metra:	$92,553	$90,539
Pace:	$68,275	$68,113
RTA:	$80,702	$76,713
Vested Participants:	709	703
Nonvested Participants:	447	411

Deferred Vested Members as of January 1, 2017

Deferred Vested Members[1]

Age Group	Number	Monthly Pension[2]
Under 25	0	$ -
25-29	6	2,402
30-34	26	11,003
35-39	29	15,988
40-44	37	25,215
45-49	65	39,491
50-54	95	55,151
55-59	109	67,217
60-64	102	58,001
65+	17	6,825
Total	486	$ 281,292

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

	Current Valuation	Previous Valuation
Average Age:	52.5	52.7
Average Monthly Benefit:	$579	$563

[1]Includes 405 deferred vested members, 6 deferred beneficiaries and 75 transfers.
[2]If at least 10 years of service, calculated based on a commencement age of 60 and an actuarial reduction applied to the benefit. If less than 10 years of service, calculated based on a commencement age of 65.

Members in Pay Status as of January 1, 2017

Members Currently in Pay Status

Age Group	Number	Monthly Pension
Under 55	1	$ 1,260
55-59	37	42,629
60-64	138	300,986
65-69	232	419,967
70-74	153	208,289
75-79	86	90,804
80-84	45	39,837
85-89	25	16,137
90+	11	4,400
Unknown	2	1,721
Total	730	$ 1,126,030

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

	Current Valuation	Previous Valuation
Average Age:	70.2	69.9
Average Monthly Benefit:	$1,543	$1,498

SECTION C

ACTUARIAL VALUATION PROCEDURES

Actuarial Cost Method

Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using the ***Entry Age Normal*** *actuarial cost method* having the following characteristics:

- The normal cost for each individual active member equals a level percentage of an individual's covered payroll (sometimes level dollar). If this rate is contributed from the date of hire (entry age) to the date of retirement, the amount would accumulate to the present value of projected benefits at retirement; and

- The actuarial accrued liability for each individual active member equals the accrual of normal costs that are expected to have been paid in the past. The actuarial accrued liability for retired and inactive members equals the present value of benefits.

Financing of Unfunded Actuarial Accrued Liabilities. The unfunded actuarial accrued liability is amortized using a level-dollar 30-year amortization over a closed period beginning January 1, 2015. 28 years remain as of January 1, 2017

Actuarial Value of Pension Plan Assets. The asset value is the actuarial value of assets which is calculated by recognizing 20 percent of the investment gain or loss (the difference between the actual investment return and the expected investment return, which is 7.75 percent beginning January 1, 2012 and 7.50 percent beginning January 1, 2015) on the market value of assets for each of the five following fiscal years. The actuarial value of assets is subject to a 20% corridor around market value of assets.

Actuarial Assumptions in the Actuarial Valuation Process

The contribution and benefit values of the Plan are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost method described on the previous page.

The principal areas of financial risk which require assumptions about future experiences are:

- Long-term rates of investment return to be generated by the assets of the RTA Pension Plan;
- Patterns of pay increases to members;
- Rates of mortality among members, retirees and beneficiaries;
- Rates of withdrawal of active members;
- Rates of disability among members; and
- The age patterns of actual retirement.

In an actuarial valuation, the monetary effect of each actuarial assumption is calculated for as long as a present covered person survives; a period of time which can be as long as a century.

Actual experience of the Plan will not coincide exactly with assumed experience. Each actuarial valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

Actuarial Valuation Assumptions (Continued)

The actuarial assumptions were last updated first effective with the actuarial valuation as of January 1, 2015, based on the experience study covering the period January 1, 2008, through January 1, 2013.

The assumed rate of price inflation was 2.75%. This assumption is not used directly in the actuarial valuation. However, the price inflation assumption underlies all of the other economic assumptions (investment return, salary increase and payroll growth assumption).

The assumed rate of investment return used was 7.50%, net of investment expenses, annually.

The rates of annual salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefit amounts will be based.

Salary Increases

Age	Rate
20	8.75%
25	5.75%
30	5.50%
35	4.75%
40	4.25%
45	4.00%
50	3.75%
55	3.75%
60	3.75%
65	3.25%

The mortality table used to measure retirement mortality was RP 2014 Employee Mortality table, sex-distinct, for pre-retirement mortality and the RP 2014 Healthy Annuitant Mortality table, sex-distinct, for post-retirement mortality. This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. Based on the most recent experience study, these tables provide a margin for near-term mortality improvements.

	Single Life Retirement Values - Retired				Single Life Retirement Values - Active			
Sample Attained	Present Value of $1 Monthly for Life		Future Life Expectancy (years)		Present Value of $1 Monthly for Life		Future Life Expectancy (years)	
Ages	Men	Women	Men	Women	Men	Women	Men	Women
50	142.80	147.06	32.51	35.19	147.20	152.73	34.37	38.85
55	136.40	141.23	28.23	30.70	140.57	147.90	29.71	34.08
60	128.43	133.63	24.07	26.29	132.06	141.49	25.18	29.39
65	118.42	124.07	20.05	22.04	121.52	132.94	20.85	24.78
70	106.21	112.46	16.23	18.01	108.95	121.82	16.82	20.30
75	91.99	98.84	12.70	14.28	94.28	107.73	13.09	16.01
80	76.20	83.43	9.54	10.90	77.60	90.04	9.73	11.94

Actuarial Valuation Assumptions (Continued)

Rates of separation from active membership are represented by the following table (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members terminating employment.

Employee Withdrawal Rate (5 or more years of service)

Age	Rate	Age	Rate
Under 30 [1]	10.00%	38	5.00%
31	7.50%	39	4.75%
32	7.00%	40	4.50%
33	6.50%	41	4.30%
34	6.00%	42	4.10%
35	5.75%	43	3.90%
36	5.50%	44	3.70%
37	5.25%	45+	3.50%

[1] *Rate for females younger than age 30 is 8.00%.*

The following service-based rates are used instead of the age-based withdrawal rates shown above for the first four years of service:

Years of Service	Male	Female
1	12.0%	10.0%
2	11.0%	9.0%
3	10.0%	8.0%
4	10.0%	8.0%

Members who terminate service with at least 10 years of service are assumed to commence benefits at age 60. Vested terminated members with less than 10 years of service are assumed to commence benefits at age 65.

Actuarial Valuation Assumptions (Continued)

Rates of disability were as follows:

Employee Disablement Rate		
Age	**Males**	**Females**
20	0.015%	0.015%
25	0.019%	0.024%
30	0.024%	0.040%
35	0.035%	0.068%
40	0.059%	0.106%
45	0.101%	0.162%
50	0.179%	0.267%
55	0.361%	0.476%
60	0.628%	0.580%

Rates of retirement for members eligible to retire during the next year were as follows:

Age	Reduced Benefit Rates	Unreduced Benefit Rates	Age	Unreduced Benefit Rates
55	2.0 %	5.0 %	65	20.0 %
56	2.0	2.0	66	20.0
57	2.0	2.0	67	20.0
58	2.0	2.0	68	20.0
59	2.0	2.0	69	30.0
60	10.0	20.0	70	30.0
61	10.0	10.0	71	30.0
62	10.0	10.0	72	30.0
63	5.0	10.0	73	30.0
64	5.0	10.0	74	30.0
			75+	100.0

For members with 40 or more years of service and younger than age 75, the assumed rate of retirement is 75%.

Marital Status: It is assumed that 75% of males and 50% of females have an eligible spouse. The male spouse is assumed to be three years older than the female spouse.

Dependent Assumptions: The following assumptions are made for the dependent preretirement death benefit:

- 5% of males and 10% of females will have dependent children eligible;
- The youngest child of an eligible employee is 35 years younger than the employee; and
- Members younger than age 25 do not have children.

Actuarial Valuation Assumptions (Continued)

Form of Payment: 50% of lump sum eligible retirees were assumed to elect the lump sum form of payment.

Benefit Service: Exact fractional years of service are used to determine the amount of benefit payable.

Decrement Timing: All decrements are assumed to occur mid-year.

Decrement Operation: Turnover decrements do not operate after the member reaches retirement eligibility.

Eligibility Testing: Eligibility for benefits is determined based upon the age nearest birthday and service on the date the decrement is assumed to occur.

Pay Increase Timing: End of (fiscal) year.

Expenses: Expenses added to the Normal Cost were assumed to be 105 percent of the average actual administrative expenses over the past three years.

Fiscal Year End	Administrative Expense	Investment Advisor Expenses	Total Actual Expenses	Assumed Expenses in Following Fiscal Year
2016	$ 466,519	$ 177,500	$ 644,019	$ 603,675
2015	406,616	85,500	492,116	
2014	456,151	132,500	588,651	

Service for Continuing Actives: All members active last year and this year and worked more than 1,000 hours earned a full year of service.

For members hired during 2016, service was credited as follows:
Hired before 8/16/2016 – 12 months
Hired on or after 8/16/2016 and before 8/19/2016 – 5 months
Hired on or after 8/19/2016 and before 9/20/2016 – 4 months
Hired on or after 9/20/2016 and before 10/19/2016 – 3 months
Hired on or after 10/19/2016 and before 11/18/2016 – 2 months
Hired on or after 11/18/2016 and before 12/21/2016 – 1 month
Hired on or after 12/21/2016 – 0 months

Missing/Incomplete Data: For disabled members whose pay rate was not provided, we used the most recent pay rate available in the pension administration data.

Actuarial Valuation Assumptions (Continued)

Lump Sum Conversion Factors:

The annual lump sum conversion factors are based on the November segment rates and the applicable mortality table under the Pension Protection Act.

For actuarial valuation purposes only, the lump sum conversion factors used are based on:

1. The segment rates from the November preceding the valuation for projected lump sum retirements within five years of the valuation date (and are updated annually in the actuarial valuation)
2. Assumed segment rates for projected lump sum retirements more than five years after the valuation date (rates are only updated periodically after experience studies)
3. The current applicable mortality assumption under the Pension Protection Act is used.

Assumed Rates	Assumed Retirements within 5 Years	Assumed Retirements after 5 Years
First Segment	1.79%	2.75%
Second Segment	3.80%	5.35%
Third Segment	4.71%	6.30%

SECTION D

HISTORICAL PLAN TRENDS

Funded Ratio History

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Payroll [(b – a)/c]
1/01/2012	$ 141,387,904	$ 200,844,966	$ 59,457,062	70.4 %	$ 67,176,064	88.5 %
1/01/2013	155,997,793	221,397,986	65,400,193	70.5	70,634,459	92.6
1/01/2014	180,317,254	233,751,698	53,434,444	77.1	74,809,822	71.4
1/01/2015	196,142,829	270,324,403	74,181,574	72.6	83,485,618	88.9
1/01/2016	265,692,481	286,457,946	20,765,465	92.8	88,663,051	23.4
1/01/2017	275,792,027	302,074,097	26,282,070	91.3	93,950,500	28.0

The market value of assets used to develop the actuarial value of assets is based on accrual accounting and consistent with the asset value shown in the Plan's financial statement.

Employer Contribution History

Fiscal Year Ended	Recommended Annual Contribution (a)	Total Employer Contribution (b)	Percentage Contributed (b / a)
12/31/2012	$ 13,493,395	$ 20,240,093	150.0 %
12/31/2013	14,795,180	22,192,770	150.0
12/31/2014	13,689,196	13,689,196	100.0
12/31/2015	13,598,896	77,095,000	566.9
12/31/2016	9,534,166	10,834,166	113.6
12/31/2017	10,581,706	TBD	TBD

SECTION E

GLOSSARY OF TERMS

Glossary of Terms

Actuarial Accrued Liability (AAL). The difference between (i) the actuarial present value of future Plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

Actuarial Assumptions. Estimates of future Plan experience such as investment return, expected lifetimes and the likelihood of receiving a pension from the Pension Plan. Demographic, or "people" assumptions, include rates of mortality, retirement and separation. Economic, or "money" assumptions, include expected investment return, inflation and salary increases.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future Plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Present Value of Future Plan Benefits. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Actuarial Value of Assets (AVA). Smoothed value of assets that recognizes the difference between the expected investment return using the valuation assumption of 8.25 percent and the actual investment return over a five-year period. Dampens volatility of asset value over time.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Annual Required Contribution. The sum of the normal cost and amortization of the unfunded actuarial accrued liability.

Asset Return. The net investment return for the asset divided by the mean asset value. Example: if $1.00 is invested and yields $1.08 after a year, the asset return is 8.00 percent.

Funded Ratio. The actuarial value of assets divided by the actuarial accrued liability. Measures the portion of the actuarial accrued liability that is currently funded.

Market Value of Assets (MVA). The value of assets currently held in the trust available to pay for benefits of the Pension Plan. Each of the investments in the trust is valued at market price which is the price at which buyers and sellers trade similar items in the open market.

Normal Cost (NC). The annual cost assigned, under the actuarial funding method, to current and subsequent Plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Unfunded Actuarial Accrued Liability (UAAL). The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."