Gabriel Roeder Smith & Company
Consultants & Actuaries

WAYNE COUNTY EMPLOYEES' RETIREMENT SYSTEM

ANNUAL ACTUARIAL VALUATION REPORT

SEPTEMBER 30, 2014

CONTENTS

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June 9, 2015

The Retirement Commission
Wayne County Employees' Retirement System
Detroit, Michigan

Dear Commission Members:

The results of the Annual Actuarial Valuation of the assets, actuarial present values and contribution rates needed to fund benefits provided by the Wayne County Employees' Retirement System are presented in this report. The date of the valuation was September 30, 2014. The report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the Retirement System only in its entirety and only with the permission of the Board. The valuation was based upon data, furnished by County staff, concerning financial operations and active members, vested former members, retirees, and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data.

Valuation results and comments are presented in Section A.

The purpose of the valuation is to measure the System's funding progress, to determine the County and Airport contribution rates for the fiscal year beginning October 1, 2015, and to reiterate contribution requirements for the Mental Health Authority. Information related to the Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68 is provided in a separate document. The results of the valuation are not applicable for other purposes.

The signing actuaries are independent of the plan sponsor.

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. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report was prepared by actuaries who have substantial experience valuing public employee retirement plans. To the best of our knowledge, this report is complete and accurate and the valuation was conducted in accordance with standards of practice prescribed by the Actuarial Standards Board.

Judith A. Kermans and Brian B. Murphy are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

Judith A. Kermans

Judith A. Kermans, EA, FCA, MAAA

Brian B. Murphy

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JAK/BBM:bd

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SECTION A

VALUATION RESULTS AND COMMENTS

Funding Objective

The funding objective for the Retirement System is to establish and receive contributions which, when invested at the assumed rate of return, will accumulate assets over each member's working years that will be sufficient to pay expected retirement benefits.

Contribution Rates

The Retirement System is supported by member contributions, employer contributions and investment income on Retirement System assets. Members contribute percentages of their pay (by Ordinance and/or collective bargaining agreement) and the employer contributes the actuarially determined remainder needed to meet the funding objective.

Contributions are determined by the actuarial valuation and are sufficient to:

(1) cover the actuarial costs allocated to the current year by the actuarial cost method (the normal cost); and

(2) finance over a period of future years the actuarial costs not covered by present assets and anticipated future normal costs (unfunded actuarial accrued liability).

Contribution requirements for the fiscal year beginning October 1, 2015 are shown on page A-3.

CONTRIBUTIONS AS A PERCENT OF PAYROLL TO FINANCE DEFINED BENEFIT PLANS OF THE RETIREMENT SYSTEM FOR THE FISCAL YEAR BEGINNING OCTOBER 1

Defined Benefit Plans - Contributions for	2015		2014	
	County	Airport	County	Airport
Normal Cost				
Service allowances	8.52 %	5.25 %	8.66 %	5.23 %
Disability allowances	1.53 %	0.73 %	1.54 %	0.71 %
Survivor allowances	0.17 %	0.12 %	0.17 %	0.12 %
Termination benefits				
Deferred service allowances	0.90 %	0.51 %	0.88 %	0.49 %
Refunds of member contributions	0.52 %	0.14 %	0.37 %	0.12 %
Total Normal Cost	11.64 %	6.75 %	11.62 %	6.67 %
Less Portion Paid by Members*	4.54 %	1.11 %	2.77 %	0.69 %
County Defined Benefit Normal Cost	7.10 %	5.64 %	8.85 %	5.98 %
Unfunded Actuarial Accrued Liability#	43.58 %	17.36 %	41.63 %	18.76 %
POAM Member Rate Adjustment@	n/a		(1.53)%	
Total Computed Employer Rate	**50.68 %**	**23.00 %**	**48.95 %**	**24.74 %**

* *Weighted average of the various contribution rates.*

\# *Amortized as a level percent of pay over a period of 24 years for County (26 years in 2013) and as a level dollar amount over a period of 24 years for Airport (26 years in 2013), in accordance with Actuarial Funding Policy.*

@ *Retirement System staff indicated that the member contribution rate for POAM members increased by 5.1% effective May 2014. While this happened after September 30, 2013, it was a substantive event. Therefore, an approximate negative adjustment in the net employer (Total County) rate of 1.53% of payroll was reflected in the 2013 valuation results. The POAM member rate is explicitly included in the 2014 results.*

The Wayne County Airport Authority (WCAA) DB Plans are closed to new hires, which is why the level dollar amortization method is being used. The rate shown above is computed based on estimated 2015 payroll. This rate is expected to increase each year. The contribution dollar amount is expected to remain relatively level (see page A-3).

Historical contribution rates for prior fiscal years are shown on page A-4. The total computed employer contribution rate shown for the County on this page should be applied to Defined Benefit Plan payroll to determine dollar contributions from the County. For the Airport, the dollar amount shown on page A-3 should be deposited into the Retirement System.

CONTRIBUTIONS AS A PERCENT OF PAYROLL TO FINANCE DEFINED BENEFIT PLANS OF THE RETIREMENT SYSTEM FOR THE FISCAL YEAR BEGINNING OCTOBER 1, 2015

Defined Benefit Plans - Contributions for	Sheriff POAM	Sheriff Local 3317	Non-Sheriff	Total County	Airport	Mental Health Authority
Normal Cost						
Service allowances	9.97 %	10.72 %	7.54 %	8.52 %	5.25 %	
Disability allowances	2.03 %	1.46 %	1.28 %	1.53 %	0.73 %	
Survivor allowances	0.18 %	0.16 %	0.16 %	0.17 %	0.12 %	
Termination benefits						
Deferred service allowances	0.84 %	0.80 %	0.94 %	0.90 %	0.51 %	
Refunds of member contributions	0.68 %	0.33 %	0.45 %	0.52 %	0.14 %	
Total Normal Cost	13.70 %	13.47 %	10.37 %	11.64 %	6.75 %	
Less Portion Paid by Members*	7.88 %	3.79 %	2.84 %	4.54 %	1.11 %	
County Defined Benefit Normal Cost	5.82 %	9.68 %	7.53 %	7.10 %	5.64 %	
Unfunded Actuarial Accrued Liability#	n/a	n/a	n/a	43.58 %	17.36 %	
Total Computed Employer Rate	**n/a**	**n/a**	**n/a**	**50.68 %**	**23.00 %**	
Estimated Dollar Amounts					**$6,156,621**	**$8,780,444**

* *Weighted average of the various contribution rates.*

\# *Amortized as a level percent of pay over a period of 24 years for County (26 years in 2013) and a level dollar over a period of 24 years for Airport (26 years in 2013) in accordance with Funding Policy, and level dollar over 3 years for MHA (MHA separating from WCERS) effective October 1, 2014 (2 years remaining) which is closed to new hires and accrued benefits for current MHA members were frozen on that date.*

The Wayne County Airport Authority (WCAA) DB Plans are closed to new hires, which is why the level dollar amortization method is being used. The rate shown above is computed based on estimated 2015 payroll. This rate is expected to increase each year. The contribution dollar amount is expected to remain relatively level.

Historical contribution rates for prior fiscal years are shown on page A-4.

The total computed employer contribution rate shown for the County on this page should be applied to Defined Benefit Plan payroll to determine dollar contributions from the County. Please keep in mind that the payment needed for the unfunded portion of the contribution alone is $54.8 million. For the Airport and MHA division, the dollar amount shown above should be deposited into the Retirement System.

Historical Schedule of Normal Cost Rates and Unfunded Actuarial Accrued Liabilities Contribution Amounts for Defined Benefit Plans

		County			Airport		
Fiscal Year Beginning	Valuation Date September 30	Normal Cost Rate	UAAL Contribution Rate	Total Contribution Rate	Normal Cost Rate	UAAL Contribution Rate	Total Contribution Rate
2000	1999	13.14 %	(8.35)%	4.79 %	13.14 %	(8.35)%	4.79 %
2001	2000	13.14 %	(13.14)%	0.00 %	13.14 %	(13.14)%	0.00 %
2002	2001 *	14.49 %	(11.35)%	3.14 %	14.49 %	(11.35)%	3.14 %
2003	2002	12.39 %	(4.33)%	8.06 %	12.39 %	(4.33)%	8.06 %
2004	2003	11.10 %	1.20 %	12.30 %	11.10 %	1.20 %	12.30 %
2005	2004 #	10.08 %	3.72 %	13.80 %	10.08 %	3.72 %	13.80 %
2006	2005	9.32 %	6.71 %	16.03 %	9.32 %	6.71 %	16.03 %
2007	2006 *	7.60 %	8.22 %	15.82 %	7.60 %	8.22 %	15.82 %
2008	2007	9.93 %	13.74 %	23.67 % *	6.40 %	7.08 %	13.48 %
2009	2008	10.09 %	17.73 %	27.82 % *	6.49 %	7.31 %	13.80 %
2010	2009	10.08 %	20.18 %	30.26 % *	6.31 %	8.60 %	14.91 %
2011	2010	11.06 %	28.62 %	39.68 % *	6.28 %	10.07 %	16.35 %
2012	2011 #	9.11 %	39.63 %	48.74 % *	6.50 %	12.47 %	18.97 % *
2013	2012	9.16 %	41.50 %	50.66 % *	6.21 %	15.05 %	21.26 % *
2014	2013	8.85 %	40.10 %	48.95 % *!	5.98 %	18.76 %	24.74 % *
2015	**2014**	**7.10 %**	**43.58 %**	**50.68 % !**	**5.64 %**	**17.36 %**	**23.00 %**

* *After benefit changes and/or transfers from Plan 4 to Plan 5.*

\# *After assumption changes (adopted after Experience Study).*

! *After separation of Mental Health Authority. Additional contribution needed for Mental Health Authority is shown on page A-3.*

Note: Hybrid Plan 5 exists September 30, 2003 and later. Beginning with the September 30, 2007 valuation, separate contribution rates were calculated for the County and the Airport. Beginning with the September 30, 2014 valuation, The Wayne County Airport Authority DB plans are closed to new hires.

FUNDING PROGRESS INDICATORS

The funding progress and status of the defined benefit plans is measured by the following indicators:

- ***The ratio of the funding value of assets to accrued liabilities***. The ratio is expected to hold steady or gradually move toward 100% in the absence of benefit changes, assumption changes or valuation method changes.
- ***The ratio of the unfunded actuarial accrued liability to member payroll***. In a soundly financed retirement system, the amount of the unfunded actuarial accrued liabilities will be controlled and prevented from increasing in the absence of benefit improvements. The ratio is a relative indicator of the condition in an inflationary environment.

Valuation Date September 30	Accrued Liability	Funding Value of Assets @	Funded Ratio	Defined Benefit Member Payroll	Unfunded Actuarial Accrued Liability Dollars	Unfunded Actuarial Accrued Liability % of Payroll
			($ in thousands)			
			County			
2010*	$1,403,934	$ 839,740	60%	$ 118,937	$ 564,195	474 %
2011*#	1,483,736	734,104	49%	118,173	749,632	634 %
2012*	1,507,526	682,431	45%	125,159	825,095	659 %
2013*!	1,512,840	672,284	44%	125,485	840,556	670 %
2014!	1,499,542	681,573	45%	117,308	817,969	697 %
			Airport			
2010	$ 98,239	$ 61,102	62%	$ 21,909	$ 37,137	170 %
2011*#	111,124	60,539	54%	25,227	50,585	201 %
2012*	117,134	64,016	55%	22,297	53,118	238 %
2013*&	131,994	76,234	58%	26,412	55,760	211 %
2014&	136,799	84,435	62%	27,204	52,364	192 %
			Total			
2010*	$1,502,173	$900,842	60%	$ 140,846	$601,332	427 %
2011*#	1,594,860	794,643	50%	143,400	800,217	558 %
2012*	1,624,660	746,447	46%	147,456	878,213	596 %
2013*!&	1,658,585	748,518	45%	151,897	910,067	599 %
2014!&	1,636,341	766,008	47%	144,512	870,333	602 %

* *Benefit changes and/or transfers to Plan 5 and/or Plan 6 are reflected in this valuation.*
\# *After changes in assumptions (adopted after Experience Study).*
@ *Reserve for inflation equity not included in this schedule; member payments for transfers/upgrades are included.*
! *After separation of Mental Health Authority. Does not include amounts received after valuation date.*
& *Wayne County Airport Authority DB plans closed to new hires.*

SHORT CONDITION TEST

If the contributions to WCERS are level in concept and soundly executed, the System will ***pay all promised benefits when due – the ultimate test of financial soundness.*** Testing for level contribution rates is ***the long-term test. A short condition test*** is one means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with:

1) Active member contributions on deposit;
2) The liabilities for future benefits to present retired lives; and
3) The liabilities for service already rendered by active members.

The test is shown below. As of September 30, 2014, the WCERS had 100% of the assets needed to cover liabilities related to member contributions on deposit. Almost every system has assets at least equal to member contributions. Beyond that, the WCERS had 53% of the assets needed to cover retiree liabilities. While many systems have assets sufficient to cover 100% of retiree liabilities, particularly in the current economy, many also do not. Lack of assets allocated to funding active member liabilities does indicate a need for increased funding. However, it is important that progress be made in funding for retiree liability at 100%.

Valuation Date	Aggregate Actuarial Accrued Liabilities For: (1) Member Contributions	(2) Retirees and Beneficiaries	(3) Members (Employer Financed Portion)	Valuation Assets (Funding Value)	Portion of Accrued Liabilities Covered by Assets: (1)	(2)	(3)
	(. . . $1,000s . . .)						
9/30/2009	$ 122,822	$ 1,003,697	$ 317,797	$ 970,945	100%	84%	0%
9/30/2010	114,588	1,113,575	274,011	900,842	100%	71%	0%
9/30/2011	114,797	1,180,306	299,757	794,642	100%	58%	0%
9/30/2012	125,731	1,180,343	318,586	746,447	100%	53%	0%
9/30/2013	129,867	1,192,362	322,605	748,518	100%	52%	0%
9/30/2014	122,306	1,206,495	307,540	766,008	100%	53%	0%

DERIVATION OF EXPERIENCE GAIN (LOSS)
YEAR ENDED SEPTEMBER 30, 2014

Actual experience will never (except by coincidence) coincide exactly with assumed experience. Gains and losses often cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain (loss) is shown below.

(1)	UAAL* at start of year	$ 902,066,852
(2)	Normal cost from last valuation	12,008,613
(3)	Employer contributions	80,180,620
(4)	Interest accrual (1 + 1/2 (2 - 3)) x 7.75%	67,268,516
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	901,163,361
(6)	Change from revised actuarial assumptions/methods	0
(7)	Expected UAAL after changes: (5) + (6)	901,163,361
(8)	Actual UAAL at end of year	870,333,409
(9)	Gain (loss): (7) - (8)	30,829,951
(10)	Gain (loss) as percent of actuarial accrued liabilities at start of year	1.9%

* *Unfunded Actuarial Accrued Liability.*

Reconciliation of Gains (Losses)

(1)	Total gain (loss)	$30,829,951
(2)	Investment gain (loss)	4,857,693
(3)	Non-investment gain (loss)#: (1) - (2)	25,972,258

\# *Other gains (losses) include those created directly by member activity or compensation including, but not limited to, retired members living longer than (or not as long as) expected and/or pay increases above or below expected levels.*

COMMENTS ON THE ACTUARIAL VALUATION

1. ***Experience:*** The Market Value rate of return during fiscal year 2014 was 10.2%, and the fund gained $77.2 million in investment income. The fund was assumed to earn 7.75% or $56.5 million. This means that this year's asset gain on a Market Value basis was $20.7 million. Under the asset valuation method, investment gains and losses are spread over a 4-year period; in the September 30, 2014 valuation, an 80%-120% market value corridor was implemented in accordance with the WCERS Funding Policy (although this had no effect on the final Funding Value of Assets). The net result of this year's Market Value gain, and carryover actuarial gains and losses from prior years, is a net recognized gain of $4.9 million (see page B-10). As of September 30, 2014, the Market Value of assets exceeds the Funding Value by $46.4 million. An aggregate gain/(loss) analysis is shown on page A-7. Additional detail on gains and losses would require an additional study.

2. ***Status:*** Computed actuarial accrued liabilities exceed the Funding Value of assets by $818.0 million for the County and $52.4 million for the Airport. Unfunded actuarial accrued liabilities are currently being amortized over a 24-year period in accordance with the WCERS Funding Policy. A revised Funding Policy was adopted in 2015 and was incorporated into the September 30, 2014 valuation. The remaining amortization years will decrease by 2 years each annual valuation cycle in accordance with the Funding Policy; therefore, in next year's valuation, there will be 22 years remaining in the schedule. The County group of the Wayne County Employees' Retirement System (WCERS) is 45% funded, and the Airport is 62% funded, both based upon the Funding Value of Assets. Based on the Market Value of Assets, the County group is 48% funded and the Airport group is 65% funded.

   We remain concerned about potential cash flow problem for the WCERS. The assets in the plan are not sufficient to cover current retiree liabilities and the ratio of assets (Market Value) to retiree benefit payroll is 6.2. This means that approximately six years of retiree benefit payments can be paid from current assets; the ability to make such payments beyond that period is heavily dependent upon future contributions and future investment return. The WCERS Funding Policy promotes accelerated funding by shortening the amount of time in which the unfunded liabilities should be paid off. In the absence of significant market losses or improvements to benefit provisions, and if the Funding Policy is adhered to by the Employer, the ratio of assets to retiree benefit payroll should improve in the future.

3. ***Allocation from Inflation Equity Fund:*** In the September 30, 2011 valuation, $32 million of the Inflation Equity Fund was used as an offset to that year's ARC. It is our understanding, based on a recent court order, that this may be repaid in 2015. Depending on the structure of the repayment, this valuation may need to be redone.

4. ***Mental Health Authority Spinoff:*** MHA members separated in 2013 but accrued service through September 30, 2014. In the September 30, 2013 valuation, a 3-year payment schedule was established for the MHA that requires three payments of $8.7 million each. So far, the WCERS has received two such payments. The first payment is included in the assets shown on page B-10. The second payment was received subsequent to this valuation calculation date and, therefore, is not included in the assets on page B-10. In this valuation, we have established a risk reserve for the MHA equivalent to the theoretical unfunded accrued liability based on valuation assumptions and considering payments made by the MHA as of the current valuation date. The risk reserve will continue until all MHA payments have been received. Once payments are completed, the reserve will be released over a period of years.

5. ***Data for Measurement of Assumed Age and Service Increase:*** Certain adjustments are incorporated into the valuation to account for: 1) unavailable data for individuals who elected a joint and survivor form of benefit (the straight life pop-up amount is not included in the data), and 2) lump sums included in Average Final Compensation (AFC) at retirement. Beginning September 30, 2013, we received data from Retirement System staff regarding lump sums included in AFC. We recommend continued receipt of this information on an annual basis; the analysis will be incorporated into the next Experience Study, and the adjustments may change at that time. We also received information from Retirement System staff regarding straight life pop-up amounts and joint and survivor reduction factors for some of the joint and survivor retirees; we appreciate Retirement System staff members' efforts in providing this detail. As a result, we have directly incorporated this information into the valuation process. It has also been noted that the Airport active member data reflects the most recent date of hire (not the original date of hire) in some cases. We would like to receive original dates of hire and/or service amounts for Airport members in future valuations.

6. ***GASB Reporting Requirement Changes:*** Changes in the plan's GASB reporting requirements began in fiscal year 2014. GASB Statement No. 67 financial reporting for pension plans was first effective for plan years beginning after June 15, 2013; GASB Statement No. 68, reporting for employers, was first effective for fiscal years beginning after June 15, 2014. GASB Statements No. 67 and No. 68 reports were provided under separate cover in March 2015.

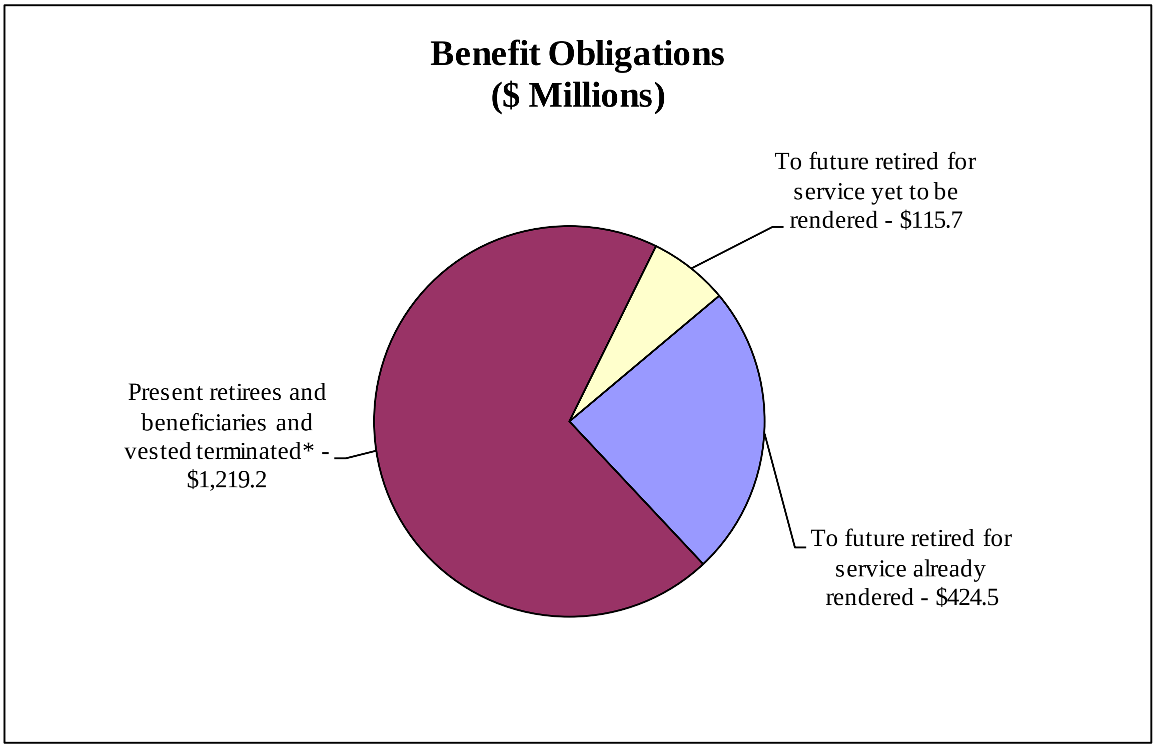
Present Resources and Expected Future Resources

A. Valuation assets	
1. Net assets from System financial statements (market value)	$ 814,619,598
2. Valuation adjustment	(48,611,928)
3. Valuation assets	766,007,670
B. Actuarial present value of expected future employer contributions	
1. For normal costs	78,999,257
2. For unfunded actuarial accrued liabilities	870,333,409
3. Total	949,332,666
C. Actuarial present value of expected future member contributions	44,123,466
D. Total Actuarial Present Value of Present and Expected Future Resources	$1,759,463,802

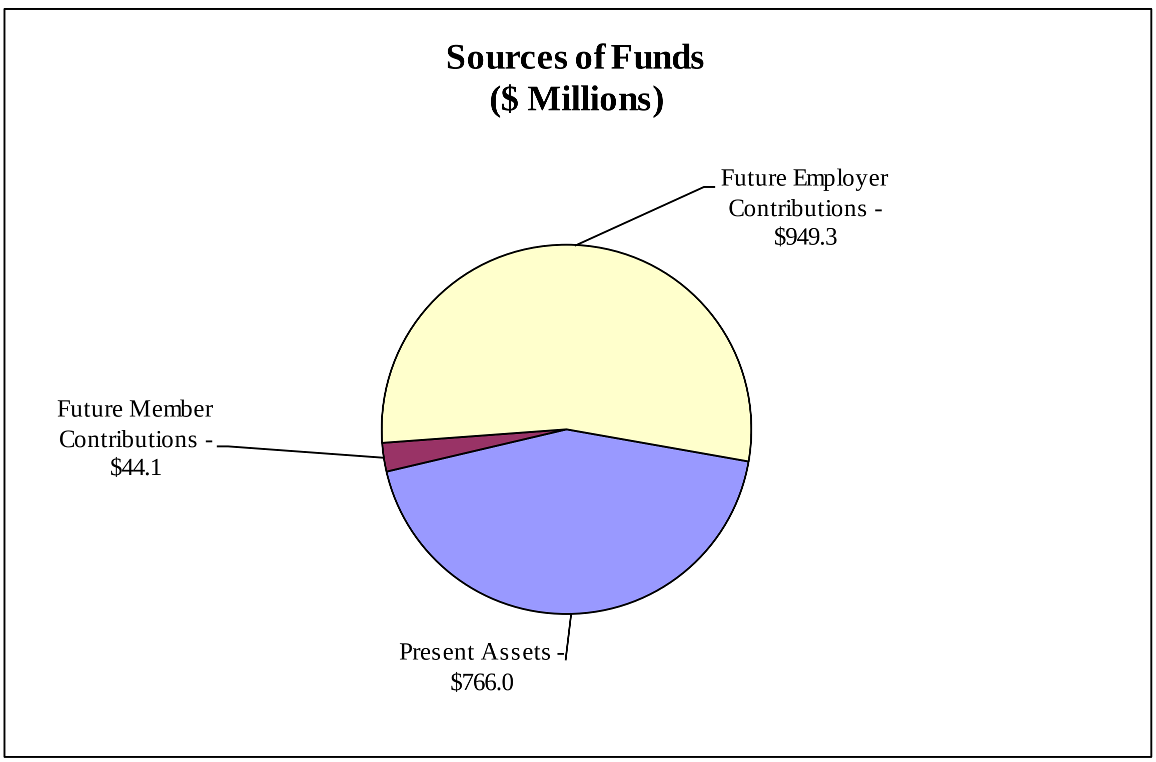
Actuarial Present Value of Expected Future Benefit Payments and Reserves

A. To retired members and beneficiaries	$1,206,495,129
B. To vested terminated members	10,518,812
C. To present active members	
1. Allocated to service rendered prior to valuation date	424,489,561
2. Allocated to service likely to be rendered after valuation date	115,702,693
3. Total	540,192,254
D. Total actuarial present value of expected future benefit payments	1,757,206,195
E. Inflation equity benefits	2,257,607
F. Total Actuarial Present Value of Expected Future Benefit Payments and Reserves	$1,759,463,802

FINANCING $1,759.4 MILLION OF BENEFIT PROMISES
SEPTEMBER 30, 2014



* *Includes Inflation Equity Fund*



SECTION B

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

BRIEF SUMMARY OF BENEFIT PROVISIONS
DEFINED BENEFIT PLAN 1
(SEPTEMBER 30, 2014)

Availability:

Defined Benefit Plan 1 was closed to new hires on August 15, 1983
(or on the date in a negotiated agreement).

Normal Retirement (no reduction factor for age):

Eligibility - Sheriff: 25 years of service.
Others: Age 50 with 25 years of service, age 60 with 5 years of service or any age with 30 years of service.

Pension Amount – Total service times 2.65% of average final compensation.

Maximum pension is 75% of AFC (less worker's compensation payments). Minimum monthly pension is $5 times years of service.

Average Final Compensation (AFC) - Monthly average of covered compensations for best 4 years of credited service. Some lump sums, overtime & premium pay are included.

Vested Termination (deferred retirement):

Eligibility - 8 years of service. Pension begins at age 60.

Pension Amount - Computed as normal retirement but based upon service and AFC at time of termination.

Duty Disability Retirement:

Eligibility - No age or service requirements.

Pension Amount - Computed as normal retirement with additional service credit granted from date of retirement to age 60. Minimum pension is $4,800 annually. Maximum pension is the lesser of 75% of AFC, and 100% of AFC less outside earnings and social security disability benefits. Worker's compensation payments offset the maximum.

Non-Duty Disability Retirement:

Eligibility - 10 years of service.

Pension Amount - Computed as normal retirement but based on service and AFC at time of retirement.

Duty Death Before Retirement:

Eligibility - No age or service requirements.

Pension Amount - Pension to the spouse is computed as a normal retirement but actuarially reduced in accordance with a 100% joint and survivor election. Additional service credit is granted from date of death to date the deceased member would have attained 60 years of age. If there is no eligible spouse, unmarried children under age 18 receive equal shares of 50% of normal retirement pension. Spouse's pension shall not be less than $4,800. Worker's compensation payments and social security offset the maximum.

Non-Duty Death Before Retirement:

Eligibility - 10 years of service.

Pension Amount - Pension to the spouse is computed as a normal retirement but actuarially reduced in accordance with a 100% joint and survivor election. If there is no eligible spouse, unmarried children under age 18 receive equal shares of 50% of normal retirement pension.

Post-Retirement Cost-of-Living Adjustment:

Eligible for distributions from Reserve for Inflation Equity.

Member Contributions:

Sheriff Command Officers and Deputies: 5.00% of annual compensation. Effective May 2014, the rate for POAM members increases by 5.10% (to 10.10%).

Others:

Credited Service	Contribution Rate*
0 yrs. thru 8 yrs.	6.00% or 6.58% of compensation
9 yrs. thru 12 yrs.	4.00% or 4.58% of compensation
13 yrs. thru 16 yrs.	3.00% or 3.58% of compensation
17 yrs. or more	2.00% or 2.58% of compensation

* *Contribution rate is determined by coverage group from Collective Bargaining Agreement (CBA).*

Brief Summary of Benefit Provisions
Defined Benefit Plan 2
(September 30, 2014)

Availability - Defined Benefit Plan 2 was available to persons hired after August 15, 1983 and to DBP 1 and DBP 3 members who elected to be covered by DBP 2. **Eligibility to enter this Plan ceased as of October 1, 2001.**

Normal Retirement (no reduction factor for age):

Eligibility - Age 55 with 25 years of service or age 60 with 15 or 20 years of service; or, age 65 with 8 years of service.

Pension Amount - Average final compensation multiplied by the sum of a) 1% of credited service up to 20 years; and, b) 1.25% of credited service over 20 years. Maximum County financed portion is 75% of AFC.

Average Final Compensation (AFC) - Monthly average of covered compensation for the best 5 years of credited service. Covered compensation includes overtime, premium and holiday pay, but not lump sums.

Vested Termination (deferred retirement):

Eligibility - 8 years of service. Pension begins at age 65.

Pension Amount - Computed as normal retirement based on service and AFC at time of termination.

Duty Disability Retirement:

Eligibility - No age or service requirements.

Pension Amount - Computed as normal retirement with additional service credit granted from date of retirement to age 60. Maximum pension is the lesser of 75% of AFC, and 100% of AFC less outside earnings and social security disability benefits. Worker's compensation payments, social security benefit payments, and outside earnings offset the maximum. Minimum pension for select unions is 75% of AFC.

Non-Duty Disability Retirement:

Eligibility - 10 years of service.

Pension Amount - Computed as normal retirement but based on service and AFC at time of termination. Social security benefit payments and outside earnings offset the maximum.

Death Before Retirement:

Eligibility - 10 years of service; or age 65 and 8 years of service (any amount of service if Duty related).

Pension Amount - Pension to the spouse is computed as a normal retirement but actuarially reduced in accordance with a 100% joint and survivor election. If there is no eligible spouse, unmarried children under 18 receive equal shares of 50% of normal retirement pension.

Post-Retirement Cost-of-Living Adjustment:

Eligible for distributions from the Reserve for Inflation Equity.

Member Contributions:

None. Effective May 2014, the rate for POAM members increases to 5.10%.

BRIEF SUMMARY OF BENEFIT PROVISIONS
DEFINED BENEFIT PLAN 3
(SEPTEMBER 30, 2014)

Availability - Plan 3 was available to persons last hired after August 15, 1983; and, to other persons if offered by collective bargaining agreement. **Eligibility to enter this Plan ceased as of March 31, 1986.**

Normal Retirement (no reduction factor for age):

Eligibility - Age 55 with 25 years of service; or age 60 with 15 or 20 years of service; or age 65 with 5 years of service. Sheriff Command Officers may retire with 25 years of service regardless of age.

Pension Amount - Average final compensation multiplied by the sum of:
For select negotiated CBAs: a) 2.0% of credited service up to 20 years; and b) 2.5% of credited service between 20 and 25 years; and c) 3.0% of credited service over 25 years. Certain CBA's also had the option to upgrade (via purchase) to a 2.5% multiplier for the first 20 years of service.
Others: a) 1.5% of credited service up to 20 years; and b) 2.0% of credited service between 20 and 25 years; and, c) 2.5% of credited service over 25 years.

Maximum County financed portion is 75% of AFC (less worker's compensation payments).

Average Final Compensation (AFC) - Monthly average of covered compensation for the best 5 years of credited service.
For select negotiated CBAs: Covered compensation includes overtime, premium and holiday pay, 75% of accumulated sick leave and 100% of accumulated vacation time.
Others: Covered compensation includes overtime, premium and holiday pay, up to 320 hours of lump sum payments for unused sick leave and up to 120 hours of lump sum payments for unused vacation time.

Vested Termination (deferred retirement):

Eligibility - 8 years of service. Pension begins at age 65.

Pension Amount - Computed as normal retirement but based upon service and AFC at time of termination.

Duty Disability Retirement:

Select Unions (Sheriff Command Officers) receive 75% of AFC. Worker's compensation, social security benefit payments, and outside earnings may offset pension.

Others: covered outside of Retirement System.

Non-Duty Disability Retirement:

Covered outside of Retirement System.

Death Before Retirement:

Eligibility - 10 years of service; or, age 65 with 5 years of service (any amount of service if Duty related).

Pension Amount - Pension to the spouse is computed as a normal retirement but actuarially reduced in accordance with a 100% joint and survivor election. If there is no eligible spouse, unmarried children under age 18 receive equal shares of 50% of normal retirement pension.

Post-Retirement Cost-of-Living Adjustment:

Eligible for distributions from the Reserve for Inflation Equity.

Member Contributions:

3% of covered compensation. Effective May 2014, the rate for POAM members increases by 5.10% (to 8.10%).

BRIEF SUMMARY OF BENEFIT PROVISIONS
DEFINED CONTRIBUTION PLAN 4
(SEPTEMBER 30, 2014)

Defined Contribution Plan 4 is not included in this valuation with the exception of the following provision covered under the Defined Benefit Plans:

Duty Disability Retirement:

Eligibility – No age or service requirements.

The Duty Disability benefit is partially funded by the member's account balance. For select negotiated CBAs, benefit is equal to 75% of the employee's average final compensation as otherwise provided in Defined Benefit Plan 1. The employee is required to surrender all funds in Defined Contribution Plan 4 and pay any outstanding loans.

Members in Plan 4 are eligible to roll account balances into Defined Benefit Plan 5 to receive a defined benefit during periods as specified in CBAs. This benefit would be based on the amount of service that can be purchased by the member's account balance.

Brief Summary of Benefit Provisions Hybrid Plan 5 (September 30, 2014)

Availability - Hybrid Plan 5 is obligatory for new County employees hired after October 1, 2001, except Exempt County employees may choose between Plan 5 and Plan 4. A defined contribution plan is obligatory for most new Wayne County Airport Authority (WCAA) employees. County and WCAA members may transfer into Plan 5 when allowed by CBA.

Defined Benefit Provisions

Normal Retirement (no reduction for age):

Eligibility - Age 55 with 25 years of service; or age 60 with 20 years of service; or age 65 with 8 years of service; or 30 years of service regardless of age.

Pension Amount –
For select negotiated CBAs – Average final compensation multiplied by 2.0% of credited service (1.5% for select Circuit Court coverage groups). Maximum pension is 75% of AFC (less worker's compensation payments).
Others – Average final compensation multiplied by the sum of a) 1.25% of credited service up to 20 years; and b) 1.5% of credited service over 20 years. Maximum pension is 75% of AFC (less worker's compensation payments).
Plan 5A (WCAA) – Average final compensation multiplied by the sum of a) 1.50% of credited service up to 20 years; and b) 1.75% of credited service over 20 years. Maximum pension is 75% of AFC (less worker's compensation payments).

Average Final Compensation (AFC) - Monthly average of covered compensation for the last 5 years of credited service, with the exception of Sheriff Command Officers and Executives where AFC is for the best 5 years of credited service. Covered compensation includes overtime and premium pay, and also includes payout of sick and annual leave banks for select negotiated CBAs. For Plan 5A (WCAA), compensation does not include payout of sick and annual leave banks.

Vested Termination (deferred retirement):

Eligibility - 8 years of service. Pension begins at age 65.

Pension Amount - Computed as normal retirement but based upon service and AFC at time of termination.

Duty Disability Retirement:

Eligibility - No age or service requirements.

Pension Amount - Computed as normal retirement with additional service credit granted from date of retirement to age 60. Worker's compensation payments, Social Security benefit payments and outside earnings offset the defined benefit portion of the pension. For select negotiated CBAs, the benefit is equal to 75% of AFC as otherwise provided in Defined Benefit Plan 1. The employee is required to surrender all Defined Contribution funds in Hybrid Plan 5 and pay any outstanding loans.

Non-Duty Disability Retirement:

Eligibility - 10 years of service.

Pension Amount - Computed as normal retirement but based on service and AFC at time of termination. Social security benefit payments and outside earnings offset the maximum.

Duty Death Before Retirement:

Eligibility - No age or service requirements.

Pension Amount - Pension to the spouse is computed as a normal retirement but actuarially reduced in accordance with a 100% joint and survivor election. Additional service credit is granted from date of death to date the deceased member would have attained 60 years of age. If there is no eligible spouse, unmarried children under age 18 receive equal shares of 50% of normal retirement pension. Worker's compensation payments offset the maximum.

Non-Duty Death Before Retirement:

Eligibility - 10 years of service, or age 65 with 8 years of service.

Pension Amount - Pension to the spouse is computed as a normal retirement but actuarially reduced in accordance with a 100% joint and survivor election. If there is no eligible spouse, unmarried children under age 18 receive equal shares of 50% of normal retirement pension.

Post-Retirement Cost-of-Living Adjustment:

Eligible for distributions from the Reserve for Inflation Equity, except for members hired after execution of certain CBAs, who will not be eligible for distributions upon retirement.

Member Contributions:

Individuals with 1.25%/1.5% multiplier contribute 0% of covered compensation, depending on CBA.
Individuals with 2% multiplier contribute 1% or 5% of covered compensation, depending on CBA.
Plan 5A (WCAA): 3% of covered compensation until the Airport funding ratio is 100%. If funding is 100%, contributions reduce to 2% of covered compensation until Airport funding ratio is less than 100%, at which point contributions increase to 3% of covered compensation. Effective May 2014, the rate for POAM members increases by 5.10%.

DEFINED CONTRIBUTION PROVISIONS

Contributions:

Either 4% of base compensation (2% member (contribution rate is determined by coverage group from collective bargaining agreement (CBA)) plus 2% employer) or voluntary amount for members (subject to IRS regulations) plus 0% employer for County. 6% of base compensation (3% member plus 3% employer) for Airport Authority and Circuit Court. Contributions are invested by the members based on investment options established by the Retirement Commission. Contribution balances are credited with actual net market rates of return of the selected investments.

Vesting:

Member portion – 100% immediately.
Employer portion – 50% after 1 year of total service; 75% after 2 years; 100% after 3 years.

Distribution Options:

Terminating members may choose between:

- Lump sum distribution of vested account balance, or
- Rollover of vested account balance to a qualified plan, or
- Annuitized vested account balance if the member is also eligible for a defined benefit pension.

Brief Summary of Benefit Provisions
Hybrid Plan 6
(September 30, 2014)

Availability - Hybrid Plan 6 is available effective October 1, 2008 for County members of Hybrid Plan 5 who are allowed to transfer and pay the required contribution for each year of service, when allowed by CBA.

Defined Benefit Provisions

Normal Retirement (no reduction for age):

Eligibility - Age 55 with 25 years of service; or age 60 with 20 years of service; or age 65 with 8 years of service; or 30 years of service regardless of age.

Pension Amount - Average final compensation multiplied by 2.5% for all years of credited service. Maximum pension is 75% of AFC (less worker's compensation payments).

Average Final Compensation (AFC) - Monthly average of covered compensation for the best 5 years of the last 7 years of credited service. Covered compensation includes overtime and premium pay, and also includes payout of sick and annual leave banks for select negotiated CBAs.

Vested Termination (deferred retirement):

Eligibility - 8 years of service. Pension begins at age 65.

Pension Amount - Computed as normal retirement but based upon service and AFC at time of termination.

Duty Disability Retirement:

Eligibility - No age or service requirements.

Pension Amount - Computed as normal retirement with additional service credit granted from date of retirement to age 60. Worker's compensation payments, Social Security benefit payments and outside earnings offset the defined benefit portion of the pension. For select negotiated CBAs, the benefit is equal to 75% of AFC as otherwise provided in Defined Benefit Plan 1. The employee is required to surrender all Defined Contribution funds in Hybrid Plan 6 and pay any outstanding loans.

Non-Duty Disability Retirement:

Eligibility - 10 years of service.

Pension Amount - Computed as normal retirement but based on service and AFC at time of termination. Social security benefit payments and outside earnings offset the maximum.

Duty Death Before Retirement:

Eligibility - No age or service requirements.

Pension Amount - Pension to the spouse is computed as a normal retirement but actuarially reduced in accordance with a 100% joint and survivor election. Additional service credit is granted from date of death to date the deceased member would have attained 60 years of age. If there is no eligible spouse, unmarried children under age 18 receive equal shares of 50% of normal retirement pension. Worker's compensation payments offset the maximum.

Non-Duty Death Before Retirement:

Eligibility - 10 years of service, or age 65 with 8 years of service.

Pension Amount - Pension to the spouse is computed as a normal retirement but actuarially reduced in accordance with a 100% joint and survivor election. If there is no eligible spouse, unmarried children under age 18 receive equal shares of 50% of normal retirement pension.

Post-Retirement Cost-of-Living Adjustment:

Eligible for distributions from the Reserve for Inflation Equity, except for members hired after execution of certain CBAs, who will not be eligible for distributions upon retirement.

Member Contributions:

4.0% of covered compensation. Effective May 2014, the rate for POAM members increases by 5.10% (to 9.10%).

DEFINED CONTRIBUTION PROVISIONS

Contributions:

Voluntary for member (subject to IRS regulations), 0% employer. Contributions are invested by the members based on investment options established by the Retirement Commission. Contribution balances are credited with actual net market rates of return of the selected investments.

Vesting:

Member portion – 100% immediately.

Distribution Options:

Terminating members may choose between:

- Lump sum distribution of vested account balance, or
- Rollover of vested account balance to a qualified plan, or
- Annuitized vested account balance if the member is also eligible for a defined benefit pension.

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

	Year Ended September 30:	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
	Assumed Investment Return	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%
A.	Funding Value Beginning of Year	$794,009,722	$748,012,535	$751,584,281			
B.	Market Value End of Year	728,084,796	782,124,005	814,619,598			
C.	Market Value Beginning of Year	695,445,679	728,084,796	782,124,005			
D.	Non-Investment Net Cash Flow	(62,199,913)	(45,992,975)	(44,692,639)			
E.	Investment Income						
	E1. Market Total: B - C - D	94,839,030	100,032,184	77,188,232			
	E2. Amount for Immediate Recognition	59,125,507	56,188,744	56,515,942			
	E3. Amount for Phased-In Recognition: E1-E2	35,713,523	43,843,440	20,672,290			
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.25 x E3	8,928,381	10,960,860	5,168,073			
	F2. First Prior Year	(20,199,621)	8,928,381	10,960,860	$ 5,168,073		
	F3. Second Prior Year	(6,313,643)	(20,199,621)	8,928,381	10,960,860	$5,168,073	
	F4. Third Prior Year	(25,337,898)	(6,313,643)	(20,199,621)	8,928,384	10,960,860	$5,168,071
	F5. Total Recognized Investment Gain	(42,922,781)	(6,624,023)	4,857,693	25,057,317	16,128,933	5,168,071
G.	Funding Value End of Year:						
	G1. Preliminary: A + D + E2 + F5			768,265,277			
	G2. Upper Corridor Limit: 120% x B			977,543,518			
	G3. Lower Corridor Limit: 80% x B			651,695,678			
	G4. Funding Value End of Year	**$748,012,535**	**$751,584,281**	**$768,265,277**			
H.	Difference between Market & Funding Value	(19,927,739)	30,539,724	46,354,321	21,297,004	5,168,071	0
I.	**Recognized Rate of Return**	**2.1%**	**6.8%**	**8.4%**			
J.	Market Value Rate of Return	14.3%	14.2%	10.2%			
K.	Ratio of Funding Value to Market Value	102.7%	96.1%	94.3%			

The Funding Value of Assets recognizes assumed investment income (line E2) fully each year. Differences between actual and assumed investment income (line E3) are phased-in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than Market Value. The Funding Value of Assets is *unbiased* with respect to Market Value. At any time it may be either greater or less than Market Value. If assumed rates are exactly realized for 3 consecutive years, it will become equal to Market Value.

DEVELOPMENT OF ASSET ALLOCATION FOR COUNTY AND AIRPORT AUTHORITY

	County	Airport Authority	WCERS	Inflation Equity Fund	Total (WCERS + IEF)
(1) Market Value Beginning of Year	$ 699,720,008	$ 79,146,862	$ 778,866,870	$ 3,257,135	$ 782,124,005
(2) Employee Contributions	7,161,792	1,359,927	8,521,719		8,521,719
(3) Employer Contributions	71,704,902	8,475,718	80,180,620	-	80,180,620
(4) Benefit Payments & Refunds	124,774,103	7,621,347	132,395,450	999,528	133,394,978
(5) Average Balance: (1) + 1/2 (2+3-4)	676,766,304	80,254,011	757,020,315		759,777,686
(6) Net Investment Income Allocation	69,005,274	8,182,958	77,188,232		77,188,232
(7) Market Value End of Year: (1)+(2)+(3)-(4)+(6)	$ 722,817,873	$ 89,544,118	$ 812,361,991	$ 2,257,607	**$ 814,619,598**
(8) Market Value Rate of Return: (6)/(5)	10.2%	10.2%	10.2%	0.0%	10.2%
(9) Percentage of WCERS Market Value	88.98%	11.02%	100.00%		
(10) Funding Value Allocation: (Total-IEF) x (9)	**$ 681,573,044**	**$ 84,434,626**	**$ 766,007,670**	**$ 2,257,607**	**$ 768,265,277**

DERIVATION OF RESERVE FOR INFLATION EQUITY FUND (IEF)

	September 30, 2014	September 30, 2013
Rate of investment return		
(1) Actual return on funding value of assets	8.42 %	6.84 %
(2) Threshold return	9.00 %	9.00 %
(3) Excess, if any, of (1) over (2)	0.00 %	0.00 %
Actuarial present value of pensions	$1,206,495,129	$1,192,361,674
Dollars available for allocation to IEF	0	0
Reserve balance - start of year	3,257,135	4,252,552
Disbursements during year	(999,528)	(995,417)
Transfers (including for minimum pensions)	0	0
Current year addition	0	0
Reserve balance - end of year September 30	**$ 2,257,607**	**$ 3,257,135**
Reserve for year end transfer	N/A	N/A

On November 1, 2014, the total distribution amount for the 2014 benefit check was reported to be $999,510. Therefore, the current remaining balance available in the Reserve for Inflation Equity is $1,258,097.

Section 141-32 of the Wayne County Retirement Ordinance (WCRO) outlines parameters for credits to and distributions from the IEF. As of the date of this report, the key provisions noted in the WCRO are as follows:

- The IEF balance cannot exceed $12,000,000.
- The Retirement Commission *may* credit* the reserve on an annual basis with a portion of the excess (if any) of the funding value rate of return over the designated threshold rate of return.
- The total distribution from the IEF in any given year cannot exceed $5,000,000.
- Subsection (d): "The formula for the distribution shall be as from time to time determined by the Retirement commission and shall take into account the period of retirement and period of credited service."

* *The updated Ordinance does not define the exact method for crediting amounts to the IEF. The WCERS may want to seek clarification on this issue.*

RETIRED MEMBERS AND BENEFICIARIES ADDED AND REMOVED

Year	Added		Removed		Net Increase		End of Year	
Ended Sept. 30*	No.	Annual Pensions	No.	Annual@ Pensions	No.	Annual Pensions	No.	Annual Pensions
1970	298	$1,887,508	148	$ 307,186	150	$1,580,322	2,454	$ 7,067,753
1975	323	2,300,782	129	575,157	194	1,725,625	3,277	14,532,239
1980	322	3,629,866	140	1,009,861	182	2,620,005	4,359	28,307,255
1985	329	4,609,633	204	2,002,018	125	2,607,615	5,861	53,297,557
1990	176	3,004,814	172	1,986,571	4	1,018,243	6,149	59,607,315
1991	169	2,531,422	154	1,868,781	15	662,641	6,164	60,269,956
1992	195	3,876,810	148	1,831,565	47	2,045,245	6,211	62,315,201
1993	172	3,914,864	173	1,885,010	(1)	2,029,854	6,210	64,345,055
1994	191	3,626,150	163	1,844,072	28	1,782,078	6,238	66,127,133
1995	150	3,481,882	171	2,223,393	(21)	1,258,489	6,217	67,385,622
1996	212	6,445,919	210	3,101,236	2	3,344,683	6,219	70,730,305
1997	171	4,593,132	188	1,328,817	(17)	3,264,315	6,202	73,994,620
1998	112	3,428,743	174	1,823,043	(62)	1,605,700	6,140	75,600,320
1999	133	3,496,500	221	2,143,122	(88)	1,353,378	6,052	76,953,698
2000	136	4,414,263	204	2,481,571	(68)	1,932,692	5,984	78,886,390
2001	131	4,993,401	221	2,733,398	(90)	2,260,003	5,894	81,146,393
2002	125	4,462,475	186	2,247,194	(61)	2,215,281	5,833	83,361,674
2003	177	7,530,715	201	2,267,018	(24)	5,263,697	5,809	88,625,371
2004	96	3,645,959	309	3,569,564	(213)	76,395	5,596	88,701,766
2005	264	10,505,300	225	2,768,648	39	7,736,652	5,635	96,438,418
2006	135	4,004,469	273	2,922,793	(138)	1,081,676	5,497	97,520,094
2007	163	4,746,709	187	2,589,568	(24)	2,157,141	5,473	99,677,235
2008	177	6,300,153	202	2,974,301	(25)	3,325,852	5,448	103,003,087
2009	295	14,354,073	155	2,017,870	140	12,336,203	5,588	115,339,290
2010	315	14,240,898	276	3,687,346	39	10,553,552	5,627	125,892,842
2011	142	5,627,241	216	2,994,494	(74)	2,632,747	5,553	128,525,589
2012	154	4,065,999	161	3,009,985	(7)	1,056,014	5,546	129,581,603
2013	142	5,313,174	194	3,512,872	(52)	1,800,302	5,494	131,381,905
2014	**154**	**5,880,873**	**208**	**3,556,398**	**(54)**	**2,324,475**	**5,440**	**133,706,380**

* *Valuations before 1998 were based on a fiscal year ending November 30.*
@ *Includes benefit adjustments.*

RETIRED MEMBERS AND BENEFICIARIES COMPARATIVE SCHEDULE

Valuation Date Sept. 30*	Pensions Being Paid						Active Member Ratio(2)
	No.	Amount ($ Thousands)	% of Member Payroll#	Annual % Increase(1) No.	Annual % Increase(1) Amount	Average Pension	
1960	1,487	$ 2,454	5.9 %	9.3 %	14.7 %	$ 1,565	4.7
1965	1,949	4,025	7.8 %	7.4 %	14.2 %	2,065	3.8
1970	2,454	7,068	8.7 %	6.5 %	11.9 %	2,880	3.3
1975	3,277	14,532	12.5 %	6.3 %	15.5 %	4,435	2.4
1980	4,359	28,307	15.9 %	5.9 %	14.3 %	6,494	1.6
1985	5,861	53,298	41.0 %	6.1 %	13.5 %	9,094	0.8
1990	6,149	59,607	37.9 %	1.0 %	2.3 %	9,694	0.8
1995	6,217	67,386	85.0 %	0.2 %	2.5 %	10,839	0.9
2000	5,984	78,886	118.0 %	(1.1)%	2.5 %	13,183	1.0
2001	5,894	81,146	128.7 %	(1.5)%	2.9 %	13,768	1.0
2002	5,833	83,362	97.4 %	(1.0)%	2.7 %	14,291	1.0
2003	5,809	88,625	106.5 %	(0.4)%	6.3 %	15,257	1.0
2004	5,596	88,702	89.8 %	(3.7)%	0.1 %	15,851	1.2
2005	5,635	96,438	113.9 %	0.7 %	8.7 %	17,114	1.0
2006	5,497	97,520	104.4 %	(2.4)%	1.1 %	17,741	1.1
2007	5,473	99,677	74.6 %	(0.4)%	2.2 %	18,213	1.0
2008	5,448	103,003	63.4 %	(0.5)%	3.3 %	18,907	1.0
2009	5,588	115,339	77.3 %	2.6 %	12.0 %	20,641	0.9
2010	5,627	125,893	89.4 %	0.7 %	9.2 %	22,373	0.8
2011	5,553	128,526	89.6 %	(1.3)%	2.1 %	23,145	0.8
2012	5,546	129,582	87.9 %	(0.1)%	0.8 %	23,365	0.8
2013	5,494	131,382	86.5 %	(0.9)%	1.4 %	23,914	0.8
2014	**5,440**	**133,706**	**92.5 %**	**(1.0)%**	**1.8 %**	**24,578**	**0.7**

* *Valuations before 1998 were based on a fiscal year ending November 30.*

(1) *For 1950, 1955, 1960, 1965, 1970, 1975, 1980, 1985, 1990 and 1995 the percentage increase shown is the average of the 5 annual increases ending with the stated year.*

(2) *Number of active members (including defined contribution plan members) divided by number of retired members and beneficiaries.*

\# *EXCLUDES Defined Contribution Plan payroll after 1991.*

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RETIRED MEMBERS AND BENEFICIARIES SEPTEMBER 30, 2014
BY ATTAINED AGE GROUPS

Attained Age Grouping	County		Airport		WCERS Total	
	Number	Annual Pensions	Number	Annual Pensions	Number	Annual Pensions
Under 35	4	$ 69,795	0	$ 0	4	$ 69,795
35-39	0	0	1	29,542	1	29,542
40-44	23	850,657	0	0	23	850,657
45-49	117	5,164,394	6	108,128	123	5,272,522
50-54	230	10,626,987	17	623,087	247	11,250,074
55-59	326	14,627,051	30	1,289,916	356	15,916,967
60-64	613	24,304,933	58	2,415,765	671	26,720,698
65-69	884	23,314,801	45	2,136,380	929	25,451,181
70-74	751	15,935,072	20	654,809	771	16,589,881
75-79	594	10,556,400	7	249,454	601	10,805,854
80-84	639	9,375,920	1	59,672	640	9,435,592
85-89	606	6,964,174	2	145,724	608	7,109,898
90-94	353	3,353,349	0	0	353	3,353,349
95-99	98	767,176	0	0	98	767,176
100 & Over	15	83,194	0	0	15	83,194
Totals	**5,253**	**$125,993,903**	**187**	**$7,712,477**	**5,440**	**$133,706,380**

	County	Airport	WCERS Total
Average age now:	73.4 yrs.	63.2 yrs.	73.0 yrs.
Average age at retirement:	54.8 yrs.	56.3 yrs.	54.8 yrs.
Average service at retirement:	23.9 yrs.	26.1 yrs.	24.0 yrs.

RETIRED MEMBERS AND BENEFICIARIES SEPTEMBER 30, 2014
BY TYPE OF RETIREMENT – COUNTY

Type of Pension Being Paid	Benefits Paid	Number
Age & Service Pensions		
S.S. Equated		
Straight Life	$ 13,180,451	890
Option 1	1,822,195	54
Option 2	6,756,609	245
Option 3	6,977,565	272
Total	28,736,820	1,461
Not S.S. Equated		
Straight Life	$ 37,611,931	1,360
Option 1	2,782,677	95
Option 2	21,140,626	625
Option 3	19,365,343	498
Total	80,900,577	2,578
Survivor Beneficiary of Deceased Retired Member	8,976,439	706
Total Age and Service Pensions	**$ 118,613,836**	**4,745**
Casualty Pensions		
Duty Disability	$ 3,927,596	176
Non-Duty Disability	1,567,648	147
Survivor Beneficiary of Deceased Retired Member	966,161	90
Duty Death	142,041	9
Non-Duty Death	776,621	86
Total Casualty Pensions	**7,380,067**	**508**
Total Pensions Being Paid	**$ 125,993,903**	**5,253**

RETIRED MEMBERS AND BENEFICIARIES SEPTEMBER 30, 2014
BY TYPE OF RETIREMENT – AIRPORT

Type of Pension Being Paid	Benefits Paid	Number
Age & Service Pensions		
S.S. Equated		
Straight Life	$ 172,237	5
Option 1	173,242	5
Option 2	242,335	7
Option 3	425,783	11
Total	1,013,597	28
Not S.S. Equated		
Straight Life	$ 2,146,311	51
Option 1	111,937	4
Option 2	1,808,887	43
Option 3	1,999,572	37
Total	6,066,707	135
Survivor Beneficiary of DeceasedRetired Member	346,583	12
Total Age and Service Pensions	**$ 7,426,887**	**175**
Casualty Pensions		
Duty Disability	$ 198,882	8
Non-Duty Disability	75,597	3
Survivor Beneficiary of Deceased Retired Member	-	0
Duty Death	11,111	1
Non-Duty Death	-	0
Total Casualty Pensions	**285,590**	**12**
Total Pensions Being Paid	**$ 7,712,477**	**187**

RETIRED MEMBERS AND BENEFICIARIES SEPTEMBER 30, 2014
BY PENSION AMOUNT AND YEAR OF RETIREMENT

Annual Pension Range	Before 1970	1970s	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010	2011	2012	2013	2014	Totals	Average Service at Retirement
$0-999	4	5	6	4	10	3	1			1	1	2		37	10
1,000-1,999	6	12	10	22	21	10	13	15	2	2	3	2	3	121	13
2,000-2,999	3	13	11	22	29	25	26	26	6	2	5	5	2	175	14
3,000-3,999	3	17	17	24	26	27	24	24	2	2	4	4	4	178	17
4,000-4,999	1	34	23	33	25	15	19	24	5	1	9	3	3	195	18
5,000-5,999	1	21	33	30	34	19	23	26	7	4	5	4	4	211	19
6,000-6,999		16	60	41	37	24	19	20	9	3	7	3	6	245	20
7,000-7,999	1	16	59	33	36	14	16	24	3	2	6	6	5	221	20
8,000-8,999		21	49	21	33	24	11	26	4	2	10	4	3	208	21
9,000-9,999		13	53	34	26	18	14	22	2	2	7		4	195	22
10,000-10,999		8	41	23	38	22	18	15	2	3	2	7	6	185	22
11,000-11,999		11	43	25	25	21	7	25	3	6	2	2	4	174	24
12,000-12,999	1	5	54	26	19	21	13	16	5	2	3	1	3	169	23
13,000-13,999		6	24	31	31	25	8	16	2	3	4	4	1	155	24
14,000-14,999		8	33	21	21	12	13	10	7	4	4	4	3	140	25
15,000-15,999		3	21	20	27	16	11	14	3	1	6	3	1	126	25
16,000-16,999		4	18	14	17	22	20	8	1	2	5	5	2	118	26
17,000-17,999			27	5	21	12	13	8	2	3		1	1	93	26
18,000-18,999			15	11	9	16	9	15	2	5	6	3	3	94	26
19,000-19,999		1	15	7	17	13	11	9	1	1	4		5	84	25
20,000-20,999			10	7	17	17	5	14		2	7	1	2	82	26
21,000-21,999			10	7	17	16	6	4	2	5	3	3	3	76	26
22,000-22,999			8	5	6	17	11	5	1	3	4			60	28
23,000-23,999		1	7	9	9	17	12	8		1	5	4	2	75	28
24,000-24,999			8	2	9	14	10	7		2	1		2	55	27
25,000-25,999			4	3	5	12	4	8	1	3	5	2	1	48	28
26,000-26,999		1	2	8	6	19	11	6	1	1	2	4	2	63	27
27,000-27,999			2	2	8	10	10	14	2	1	2	2	1	54	28
28,000-28,999			2	4	1	11	11	8		2	2	3	2	46	26
29,000-29,999			3	2	6	12	9	15	2	3	3		3	58	28
30,000-39,999			7	10	29	103	100	132	16	18	24	20	23	482	28
40,000-49,999		1	1	3	13	53	103	192	14	21	19	22	11	453	28
50,000-59,999					3	28	82	119	4	13	13	11	13	286	29
60,000-69,999					3	3	61	97	9	6	7	13	9	208	29
70,000-79,999						2	35	59	4	6	9	4	4	123	30
80,000-89,999						2	23	26		9	2	3	6	71	30
90,000-99,999							10	18		1			3	32	30
100,000-109,999							5	8	3	1	1	1	2	21	32
110,000-119,999							3	6		3	1		1	14	31
120,000 & Up							1	4	1	2		1		9	32
Totals	**20**	**217**	**676**	**509**	**634**	**695**	**801**	**1,093**	**128**	**154**	**203**	**157**	**153**	**5,440**	

VESTED FORMER MEMBERS SEPTEMBER 30, 2014
TABULATED BY ATTAINED AGE GROUPS

Attained Ages	No.	Estimated Annual Allowances
30-34	8	$ 86,248
35-39	6	55,077
40-44	15	141,215
45-49	17	210,118
50-54	29	353,266
55-59	22	282,291
60-64	26	225,856
65-69	6	38,771
70 & Up	10	41,529
Totals	**139**	**$1,434,371**

A vested former member is a person who has left the employ of the County or Airport after acquiring credited service sufficient for a vested pension and has not withdrawn their accumulated member contributions from the Reserve for Accumulated Member Contributions. A vested former member may retire upon satisfying the conditions for normal retirement.

In addition, there are 38 Mental Health Authority members with frozen deferred benefits. Estimated benefits were not provided by WCERS staff. The average age and service as of September 30, 2014 for these 38 members are 53.2 and 9.8 years, respectively.

ACTIVE MEMBERS SEPTEMBER 30, 2014 – COUNTY

Plan	No.	Valuation Payroll	Average Pay	Average Age	Average Service
				(in years)	
Defined Benefit Plan 1					
Non-Sheriff	49	$ 2,920,006	$59,592	64.6	34.5
Sheriff	2	178,435	89,218	61.3	35.7
Total	51	3,098,441	60,754	64.5	34.5
Defined Benefit Plan 2					
Non-Sheriff	35	1,901,617	54,332	55.3	24.3
Sheriff	19	1,454,638	76,560	47.3	20.5
Total	54	3,356,255	62,153	52.5	23.0
Defined Benefit Plan 3					
Non-Sheriff	8	474,801	59,350	54.0	28.8
Sheriff	6	406,487	67,748	54.6	29.9
Total	14	881,288	62,949	54.2	29.3
Hybrid Plan 5					
Non-Sheriff	900	43,170,584	47,967	44.7	8.3
Sheriff	289	17,312,742	59,906	39.2	10.1
Total	1,189	60,483,326	50,869	43.4	8.7
Hybrid Plan 6					
Non-Sheriff	338	25,284,687	74,807	51.3	21.1
Sheriff	310	24,204,502	78,079	44.7	19.1
Total	648	49,489,189	76,372	48.1	20.1
Defined Benefit Sub-total*	1,956	117,308,499	59,974	45.8	13.7
Defined Contribution Plan 4	1,487	92,804,174	62,410	50.5	18.1
Total	**3,443**	**$210,112,673**	**$61,026**	**47.8**	**15.6**

* *Includes Plan 4 members that transferred into Plan 5 after the valuation date.*

ACTIVE MEMBERS SEPTEMBER 30, 2014 – AIRPORT

Plan	No.	Valuation Payroll	Average Pay	Average Age	Average Service
				(in years)	
Defined Benefit Plan 1					
General	1	$ 107,633	$107,633	62.7	40.4
Public Safety	1	75,551	75,551	55.2	31.4
Total	2	183,184	91,592	59.0	35.9
Defined Benefit Plan 2					
General	2	91,840	45,920	39.6	16.2
Public Safety	2	144,474	72,237	41.8	13.3
Total	4	236,314	59,079	40.7	14.8
Defined Benefit Plan 3					
General	0	n/a	n/a	n/a	n/a
Public Safety	2	191,435	95,718	51.9	30.4
Total	2	191,435	95,718	51.9	30.4
Hybrid Plan 5 #					
General	225	16,779,438	74,575	48.9	13.8
Public Safety	129	9,813,822	76,076	44.9	18.0
Total	354	26,593,260	75,122	47.4	15.3
Defined Benefit Sub-total*	362	27,204,193	75,150	47.5	15.5
Defined Contribution Plan 4	218	17,275,075	79,243	48.3	14.3
Total	**580**	**$44,479,268**	**$ 76,688**	**47.8**	**15.0**

* *Includes Plan 4 members that transferred into Plan 5 after the valuation date.*
# *Includes Plan 5A members.*

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ACTIVE AND INACTIVE MEMBERS IN VALUATION
HISTORICAL SCHEDULE – ALL WCERS
PLAN 1 ONLY

Valuation Date September 30	Inactive		Active Members				
	No.	Estimated Pensions	No.	Valuation Payroll	Average Pay	Average Age	Average Service
Defined Benefit Plan 1							
1970	283	N/A	8,170	$ 81,395,280	$ 9,963	41.8 yrs.	10.2 yrs.
1975	254	$ 579,747	7,906	115,811,211	14,649	42.0	10.5
1980	323	1,107,547	6,832	178,221,092	26,086	42.8	12.1
1985	245	1,229,467	3,520	104,007,698	29,548	43.6	13.4
1990	181	985,556	2,212	83,199,604	37,613	47.7	18.2
1995	110	700,859	1,454	67,055,260	46,118	50.3	22.1
2000	72	519,980	874	53,822,371	61,582	52.3	24.2
2001	69	490,230	773	49,891,050	64,542	52.7	24.7
2002	64	454,657	686	46,125,812	67,239	53.4	25.3
2003	60	419,316	525	34,354,679	65,437	53.3	26.3
2004	58	410,561	493	32,695,112	66,319	54.4	27.2
2005	36	236,163	308	20,380,626	66,171	53.7	27.5
2006	56	450,126	307	20,424,223	66,528	54.7	27.4
2007	51	419,300	243	16,492,157	67,869	56.3	28.1
2008	47	395,524	199	14,132,826	71,019	57.3	29.3
2009	38	312,602	137	10,188,214	74,366	58.1	29.9
2010	38	330,001	111	7,242,826	65,251	59.5	30.9
2011	35	285,005	94	5,993,953	63,765	60.8	31.5
2012	30	240,804	82	5,240,100	63,904	61.9	32.2
2013	25	206,955	70	4,621,895	66,027	62.4	32.8
2014	**22**	**180,809**	**53**	**3,281,625**	**61,918**	**64.3**	**34.6**

ACTIVE AND INACTIVE MEMBERS IN VALUATION
HISTORICAL SCHEDULE – ALL WCERS
PLANS 2, 3, 4, 5 AND 6

Valuation Date September 30	Inactive		Active Members				
	No.	Estimated Pensions	No.	Valuation Payroll	Average Pay	Average Age	Average Service
Defined Benefit Plan 2							
2009	60	$ 266,065	80	$ 4,467,910	$55,849	48.9 yrs.	18.8 yrs.
2010	55	185,567	74	4,057,230	54,827	49.6	19.5
2011	55	185,567	69	3,867,325	56,048	50.1	19.8
2012	50	168,103	64	3,788,331	59,193	50.7	20.8
2013	47	159,001	60	3,803,836	63,397	51.4	21.5
2014	**44**	**232,398**	**58**	**3,592,569**	**61,941**	**51.7**	**22.4**
Defined Benefit Plan 3							
2009	6	$ 43,334	47	$ 2,993,520	$63,691	53.2 yrs.	24.6 yrs.
2010	7	69,430	36	2,331,159	64,755	53.8	25.2
2011	7	69,430	32	2,135,091	66,722	53.9	26.0
2012	4	75,559	30	2,087,118	69,571	54.6	27.0
2013	4	75,559	24	1,702,498	70,938	54.8	28.2
2014	**3**	**53,881**	**16**	**1,072,723**	**67,045**	**54.0**	**29.4**
Defined Contribution Plan 4							
2009	NA	NA	2,517	$148,343,850	$58,937	47.2 yrs.	13.7 yrs.
2010	NA	NA	2,336	136,543,489	58,452	47.2	13.9
2011	NA	NA	2,159	128,696,570	59,609	48.4	15.5
2012	NA	NA	1,970	121,520,584	61,686	49.1	16.4
2013	NA	NA	1,872	117,947,778	63,006	49.8	17.0
2014	**NA**	**NA**	**1,705**	**110,079,249**	**64,562**	**50.2**	**17.6**
Hybrid Plan 5							
2009	14	$ 153,120	1,407	$76,940,045	$54,684	43.4 yrs.	10.1 yrs.
2010	14	193,287	1,379	76,047,701	55,147	43.7	10.3
2011	20	243,313	1,381	77,831,410	56,358	44.0	10.3
2012	39	460,807	1,410	78,138,603	55,417	43.7	9.9
2013	55	617,797	1,551	86,976,453	56,077	44.2	9.9
2014	**61**	**708,597**	**1,543**	**87,076,586**	**56,433**	**44.3**	**10.3**
Hybrid Plan 6							
2009	2	$ 58,858	750	$ 54,534,000	$72,712	45.6 yrs.	18.7 yrs.
2010	0	0	682	51,167,613	75,026	45.8	17.5
2011	1	44,434	720	53,571,790	74,405	46.4	18.3
2012	5	223,281	784	58,201,501	74,237	47.4	19.3
2013	7	203,082	716	54,792,102	76,525	47.9	19.5
2014	**9**	**258,686**	**648**	**49,489,189**	**76,372**	**48.1**	**20.1**

ACTIVE AND INACTIVE MEMBERS IN VALUATION
HISTORICAL SCHEDULE – ALL WCERS
RETIREMENT SYSTEM TOTALS

Valuation Date September 30	Inactive		Active Members				
	No.	Estimated Pensions	No.	Valuation Payroll	Average Pay	Average Age	Average Service
Retirement System Totals							
1970	283	$ 461,045	8,170	$ 81,396,280	$ 9,963	41.7 yrs.	10.2 yrs.
1975	254	579,747	7,906	115,811,211	14,649	42.0	10.5
1980	323	1,107,547	6,832	178,221,092	26,086	42.8	12.1
1985	245	1,229,467	4,758	129,534,998	27,225	41.1	11.0
1990	251	1,286,311	4,999	157,406,461	31,488	41.0	10.9
1995	198	1,114,099	5,407	192,903,829	35,677	41.1	10.3
1999	153	893,028	5,903	256,378,506	43,432	41.9	10.3
2000	152	885,974	5,995	275,626,572	45,976	42.1	10.3
2001	150	860,061	6,076	294,127,729	48,408	42.6	10.4
2002	145	824,488	6,019	308,961,722	51,331	43.1	10.7
2003	140	786,431	5,995	289,250,256	48,249	43.2	10.8
2004	118	956,869	6,987	343,329,533	49,138	44.0	11.0
2005	83	622,669	5,867	298,580,651	50,892	44.1	11.8
2006	139	962,718	5,775	319,610,910	55,344	44.8	12.4
2007	139	965,814	5,667	325,383,059	57,417	45.3	12.8
2008	130	1,045,421	5,508	330,069,425	59,926	45.6	13.3
2009	120	833,979	4,938	297,467,539	60,241	46.2	14.1
2010	114	778,285	4,618	277,390,018	60,067	46.4	14.0
2011	118	827,749	4,455	272,096,139	61,077	47.0	14.8
2012	128	1,168,554	4,340	268,976,237	61,976	47.3	15.3
2013	138	1,262,394	4,293	269,844,562	62,857	47.7	15.3
2014	**139**	**1,434,371**	**4,023**	**254,591,941**	**63,284**	**47.8**	**15.5**

In addition, there are 38 Mental Health Authority members with frozen deferred benefits. Estimated benefits were not provided by WCERS staff. The average age and service as of September 30, 2014 for these 38 members are 53.2 and 9.8 years, respectively.

DEFINED BENEFIT PLAN 1 – COUNTY
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date*							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Salary
50-54						2	4	6	$ 458,828
55-59						1	5	6	483,599
60					1		1	2	195,944
61							1	1	118,854
62				1	2		1	4	211,055
63							3	3	215,262
64					1		5	6	366,083
66						1	3	4	144,066
67					1		2	3	135,852
68							1	1	48,742
69						1	3	4	243,677
70					1	1	1	3	101,094
71							2	2	80,688
72						1		1	27,434
73					1		2	3	98,342
78							1	1	53,030
79 & Over							1	1	115,891
Totals				**1**	**7**	**7**	**36**	**51**	**$3,098,441**

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

Age:	64.5	years
Service:	34.5	years
Annual Pay:	$60,754	

* *Includes purchased service, if any.*

DEFINED BENEFIT PLAN 1 – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	**Years of Service to Valuation Date***							**Totals**	
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 Plus**	**No.**	**Salary**
55-59							1	1	$ 75,551
63							1	1	107,633
Totals							**2**	**2**	**$ 183,184**

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

Age:	59.0	years
Service:	35.9	years
Annual Pay:	$91,592	

* *Includes purchased service, if any.*

DEFINED BENEFIT PLAN 2 – COUNTY
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date*							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Salary
30-34			1					1	$ 52,155
35-39			1					1	92,316
40-44			3	4	1			8	496,324
45-49			2	1	2	4		9	520,290
50-54					3	6	1	10	699,441
55-59			1	4	3	7		15	1,001,645
60			1			1	1	3	188,571
61							1	1	45,282
62						1		1	37,695
63						1		1	39,731
64				1				1	31,113
65					1	1		2	109,710
66							1	1	41,982
Totals			**9**	**10**	**10**	**21**	**4**	**54**	**$3,356,255**

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

Age:	52.5	years
Service:	23.0	years
Annual Pay:	$62,153	

* *Includes purchased service, if any.*

DEFINED BENEFIT PLAN 2 – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date*							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Salary
35-39				1				1	$ 49,157
40-44			2	1				3	187,157
Totals			**2**	**2**				**4**	**$ 236,314**

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

Age:	40.7	years
Service:	14.8	years
Annual Pay:	$59,079	

* *Includes purchased service, if any.*

DEFINED BENEFIT PLAN 3 – COUNTY
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date*							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Salary
45-49						2		2	$113,044
50-54						3	3	6	463,373
55-59						4		4	242,136
61						1		1	32,877
63						1		1	29,858
Totals						**11**	**3**	**14**	**$881,288**

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

Age:	54.2	years
Service:	29.3	years
Annual Pay:	$62,949	

* *Includes purchased service, if any.*

DEFINED BENEFIT PLAN 3 – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date*							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Salary
50-54						1	1	2	$ 191,435
Totals						**1**	**1**	**2**	**$ 191,435**

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

Age:	51.9	years
Service:	30.4	years
Annual Pay:	$95,718	

* *Includes purchased service, if any.*

DEFINED CONTRIBUTION PLAN 4 – COUNTY
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date							Totals	
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 Plus**	**No.**	**Salary**
20-24	1							1	$ 35,000
25-29	4	2						6	362,141
30-34	7	6	6	1				20	1,050,918
35-39	8	15	30	50	2			105	6,297,462
40-44	8	12	54	119	44	2		239	14,447,693
45-49	15	9	54	113	65	60		316	19,137,668
50-54	10	9	42	90	76	67	8	302	19,546,899
55-59	9	17	41	81	59	55	15	277	18,041,587
60	2	2	9	19	11	12	2	57	3,479,372
61	4	5	6	12	8	5	2	42	2,469,818
62	3	3	2	6	4	3	1	22	1,414,098
63	1		7	5	3	3	1	20	1,267,683
64		2	2	6	4	1	1	16	1,111,421
65		1	3	8	4	1		17	1,151,359
66		3	2	1	2	2		10	610,009
67	1	2	1	6	3		1	14	1,139,220
68			2	2	1	2		7	347,809
69				1				1	30,936
70				2		1		3	123,301
71	1		1	2			1	5	320,473
72		1		1	1			3	234,584
73				2				2	71,517
77				1				1	51,398
79 & Over	1							1	61,808
Totals	**75**	**89**	**262**	**528**	**287**	**214**	**32**	**1,487**	**$92,804,174**

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

Age:	50.5	years
Service:	18.1	years
Annual Pay:	$62,410	

DEFINED CONTRIBUTION PLAN 4 – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Salary
20-24	3							3	$ 99,224
25-29	2							2	63,252
30-34	9		1					10	513,248
35-39	7	1	10	8				26	1,716,828
40-44	8	4	1	17	3	1		34	2,765,146
45-49	2	1	11	15	10			39	3,173,527
50-54	10	3	8	12	8	7		48	3,963,046
55-59	1	1	9	4	10	3	3	31	2,600,314
60	1		1	1	1			4	288,297
61			1	1		2		4	303,533
62	1		1					2	218,202
63	1	1	2	1		1		6	599,580
64					2	1		3	265,862
65		1		1				2	150,127
66	1		1		1			3	434,037
67		1						1	120,852
Totals	**46**	**13**	**46**	**60**	**35**	**15**	**3**	**218**	**$17,275,075**

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

Age:	48.3	years
Service:	14.3	years
Annual Pay:	$79,243	

HYBRID PLAN 5 – COUNTY
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date*							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Salary
15-19	1							1	$ 22,335
20-24	35							35	1,030,223
25-29	66	15						81	3,356,144
30-34	92	50	34	3				179	8,945,293
35-39	53	52	57	18	2			182	9,629,043
40-44	57	30	44	31	9	3		174	9,423,799
45-49	66	33	32	16	19	6		172	8,348,691
50-54	42	25	31	18	15	17	2	150	8,140,098
55-59	45	22	25	7	10	13	1	123	6,631,826
60	7	5	1				1	14	754,987
61	4	3	2	1		3		13	867,649
62	4	4	3	2	2	2		17	852,377
63	1	2	3	1	4	1		12	630,001
64	5	1	1	1				8	431,068
65	3	2		2	1			8	460,197
66	1	2			1			4	173,722
67		2	2		1			5	321,652
68	1		1					2	82,513
69		1				1		2	150,764
71			2					2	64,262
72					1			1	39,892
74				1				1	32,475
76		1					1	2	70,459
77		1						1	23,856
Totals	**483**	**251**	**238**	**101**	**65**	**46**	**5**	**1,189**	**$60,483,326**

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

Age:	43.4	years
Service:	8.7	years
Annual Pay:	$50,869	

* *Includes purchased service, if any.*

HYBRID PLAN 5 AND PLAN 5A – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date*							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Salary
20-24	1							1	$ 45,776
25-29	2	4						6	346,169
30-34	5	20	3					28	1,699,482
35-39	9	15	16	6				46	2,751,816
40-44	2	15	7	18	9			51	3,875,504
45-49		11	11	12	15	12	1	62	4,712,090
50-54	3	11	13	13	13	19	3	75	5,839,560
55-59	1	13	6	7	4	14	4	49	4,067,265
60		3	1	2		4		10	766,182
61	1		4		1	1		7	467,989
62		1			1		2	4	416,898
63		1	2		1			4	466,574
64		1	3		1		1	6	557,320
65			1					1	209,733
66		1					1	2	234,380
67			1					1	62,371
69					1			1	74,151
Totals	**24**	**96**	**68**	**58**	**46**	**50**	**12**	**354**	**$26,593,260**

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

Age:	47.4	years
Service:	15.3	years
Annual Pay:	$75,122	

* *Includes purchased service, if any.*

HYBRID PLAN 6 – COUNTY
ACTIVE MEMBERS SEPTEMBER 30, 2014
BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Years of Service to Valuation Date*							Totals	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Salary
25-29	1	2						3	$ 143,949
30-34		8	15	2				25	1,640,092
35-39		10	32	25	3		1	71	4,996,669
40-44	1	2	14	48	32	8	1	106	7,904,402
45-49	1	3	9	32	75	52	2	174	13,855,835
50-54	1	4	11	27	38	46	4	131	10,436,499
55-59		3	10	21	34	23	5	96	7,327,299
60			1	3	3	5		12	864,086
61			1	1	2		1	5	432,252
62	1		1	1	1	2	1	7	440,748
63			2	1	3			6	614,546
64				1				1	75,423
66				1				1	78,038
68				1				1	48,252
69			1	1	1		1	4	347,509
71			1			1		2	128,427
72			1			1		2	118,831
73				1				1	36,332
Totals	**5**	**32**	**99**	**166**	**192**	**138**	**16**	**648**	**$49,489,189**

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

Age:	48.1	years
Service:	20.1	years
Annual Pay:	$76,372	

* *Includes purchased service, if any.*

SECTION C

METHODS AND ASSUMPTIONS

BASIC FINANCIAL PRINCIPLES AND OPERATION OF THE RETIREMENT SYSTEM

Benefit Promises Made Which Must Be Paid For. A retirement program is an orderly means of handing out, keeping track of, and financing pension promises to a group of employees. As each member of the retirement program acquires a unit of service credit the member is, in effect, handed an "IOU" which reads: "The Retirement System promises to pay you one unit of retirement benefits, payments in cash commencing when you retire."

The principal related financial question is: When shall the money required to cover the "IOU" be contributed? This year, when the benefit of the member's service is received? Or, some future year when the "IOU" becomes a cash demand?

The Constitution of the State of Michigan is directed to the question:

> "Financial benefits arising on account of service rendered in each fiscal year shall be funded during that year and such funding shall not be used for financing unfunded accrued liabilities."

This Retirement System meets this requirement by having as its financial objective the establishment and receipt of contributions, expressed as percents of active member payroll, which will remain approximately level from year to year and will not have to be increased for future generations of taxpayers.

Translated into actuarial terminology, a level percent-of-payroll contribution objective means that the contribution rate must be at least:

> Normal Cost (the present value of future benefits assigned to members' service being rendered in the current year)
> . . . plus . . .
> Interest on the Unfunded Actuarial Accrued Liability (the difference between the actuarial accrued liability and current system assets).

The accumulation of invested assets is a by-product of level percent-of-payroll contributions, not the objective. Investment income becomes the third major contributor to the retirement program, and the amount is directly reacted to the amount of contributions and investment performance.

If contributions to the retirement program are less than the preceding amount, the difference, plus investment earnings not realized thereon, will have to be contributed at some later time, or, benefits will have to be reduced, to satisfy the fundamental fiscal equation under which all retirement programs must operate:

$$\mathbf{B = C + I - E}$$

The aggregate amount of **B**enefit payments to any group of members and their beneficiaries cannot exceed the sum of:

The aggregate amount of **C**ontributions received on behalf of the group

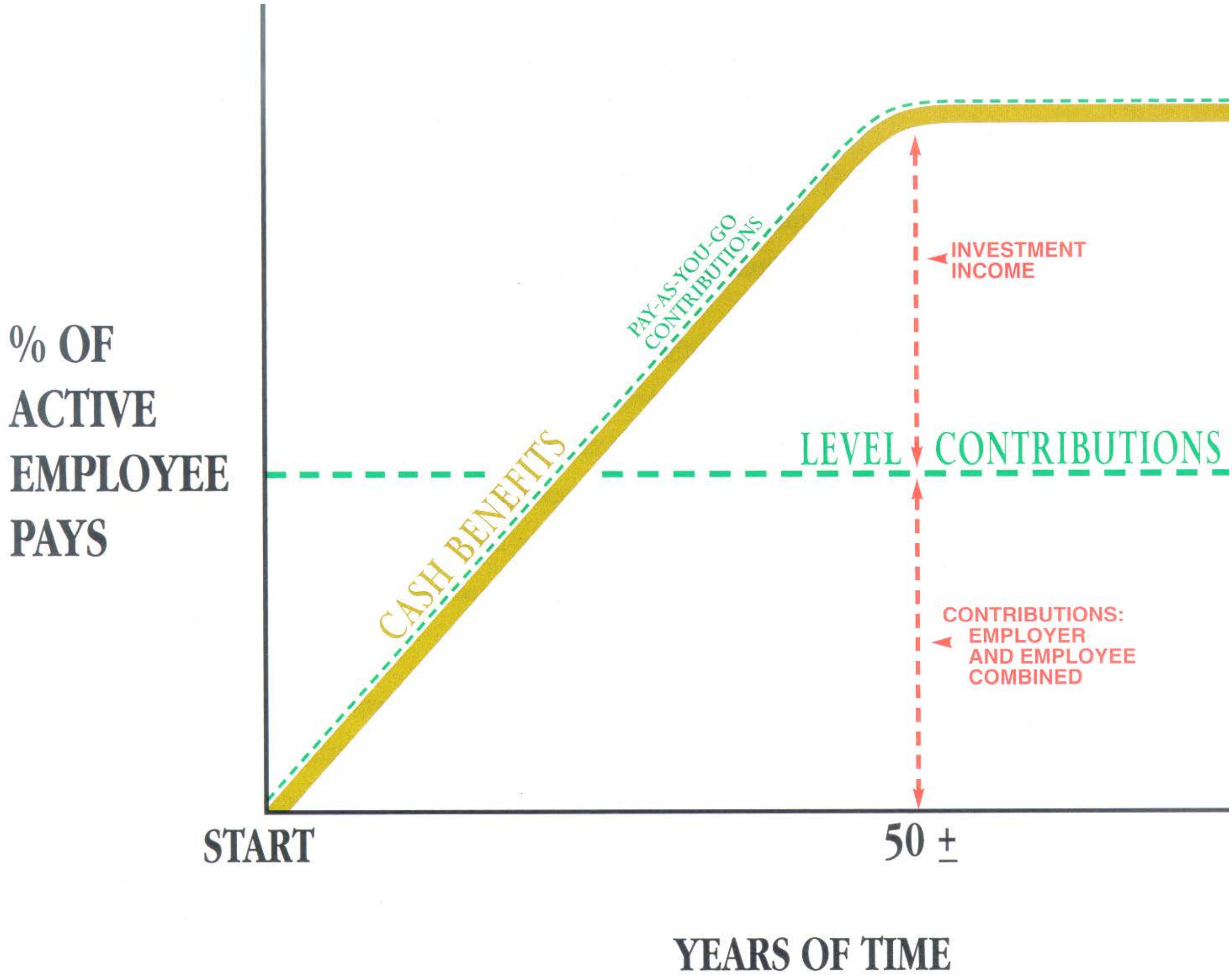
. . . plus . . .

Investment earnings on contributions received and not required for immediate cash payments of benefits

. . . minus . . .

The **E**xpenses of operating the program.

Computed Contribution Rate Needed To Finance Benefits. From a given schedule of benefits and from the data furnished, the actuary calculates the contribution rate ***by means of an actuarial valuation*** - the technique of assigning monetary values to the risks assumed in operating a retirement program.

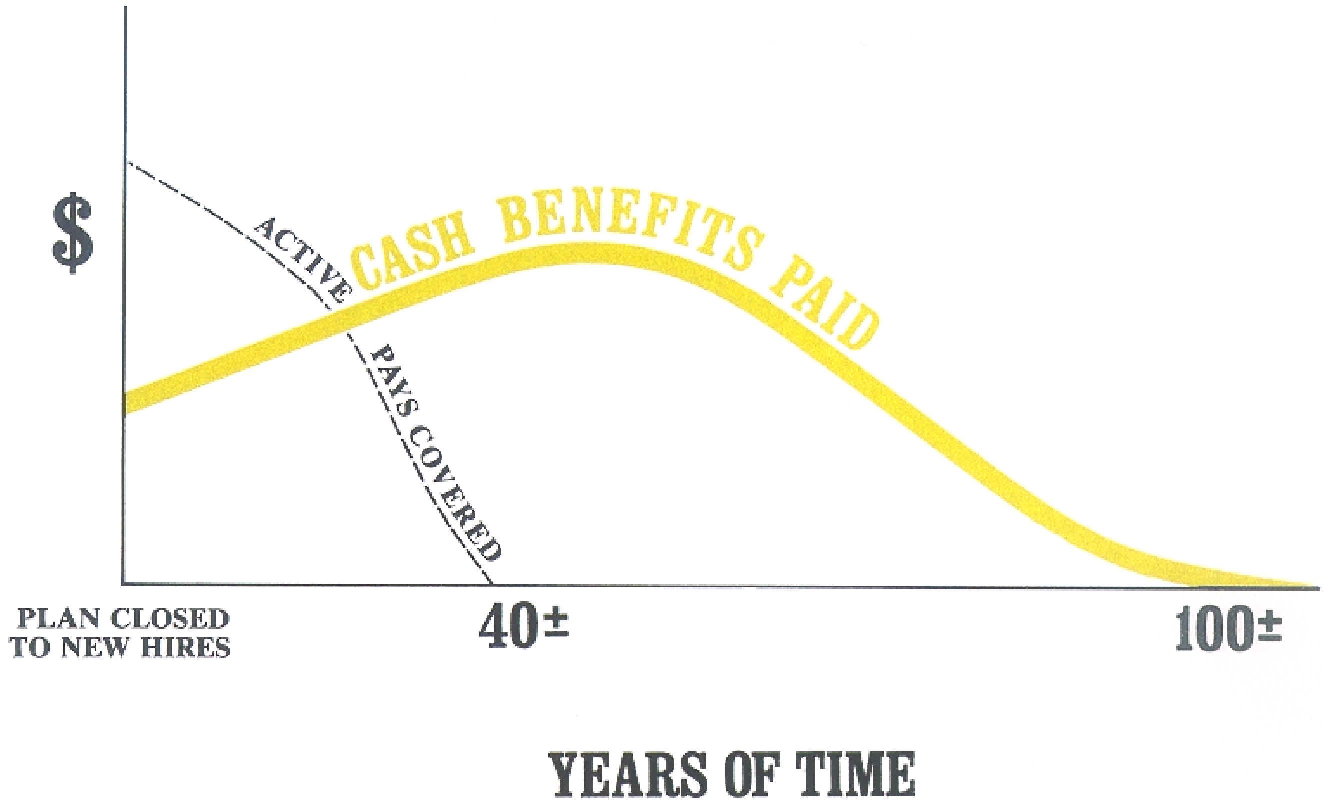


CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

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

- Economic Risk Areas
  - Rates of investment return
  - Rates of pay increase
  - Changes in active member group size
- Non-Economic Risk Areas
  - Ages at actual retirement
  - Rates of mortality
  - Rates of withdrawal of active members (turnover)
  - Rates of disability

A CLOSED PENSION PLAN



A plan becomes closed when no new hires are admitted to active membership. The persons covered by the plan at the time of closing continue their normal activities and continue to be covered by the plan, until the last survivor dies.

CASH BENEFITS LINE. After a pension plan becomes closed, the usual pattern is for cash benefits to continue to increase for decades of time. Eventually the cash benefits will peak, and then gradually decrease over more decades of time, ultimately to zero. The last cash benefit is likely to occur a century after the time the plan is closed.

The precise amounts of cash benefits cannot be known now, and must be estimated by assumptions of future experiences in a variety of financial risk areas.

THE ACTUARIAL VALUATION PROCESS

The financing diagram on page C-3 shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is an ***increasing contribution method***; and the ***level contribution method*** which equalizes contributions between the generations.

The actuarial valuation is the mathematical process by which the level contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

A. ***Census Data***, furnished by plan administrator.

Retired lives now receiving benefits

Former employees with vested benefits not yet payable

Active employees

B. + ***Asset data*** (cash & investments), furnished by plan administrator

C. + ***Assumptions concerning future experience in various risk areas,*** which assumptions are established by the Retirement System after consulting with the actuary

D. + ***The funding method*** (the long-term, planned pattern for employer contributions)

E. + ***Mathematically combining the assumptions, the funding method, and the data***

F. = Determination of:

Plan financial position; and/or

New Employer Contribution Rate

ACTUARIAL COST METHODS

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

- the annual normal costs for each individual active member, payable from the date of employment to the date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement; and

- each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Asset Valuation Method. Last year's valuation assets are increased by contributions and reduced by refunds, benefit payments and expenses. An amount equal to the assumed investment return for the year is then added. Differences between actual return on a market value basis and an assumed return are phased-in over a four-year period. An 80%-120% market value corridor was incorporated in the September 30, 2014 valuation in accordance with WCERS Actuarial Funding Policy.

The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial accrued liability. Deducting accrued assets from the actuarial accrued liability determines the unfunded actuarial accrued liability.

The base rate of increase in salaries used to calculate the actuarial liability was assumed to be 3.5%.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

Contribution requirements and actuarial present values are calculated by applying estimates of future experience (actuarial assumptions) to the benefit provisions and participant data of the System, using the actuarial cost methods described on page C-6.

The principal areas of activity which require experience estimates are:

- long-term rates of investment return to be generated by the assets of the System
- patterns of pay increases to members
- rates of mortality among members, retired members and beneficiaries
- rates of withdrawal of active members
- rates of disability among active members
- the age patterns of actual retirements

In an actuarial valuation, the monetary effect of each activity 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 System will not coincide exactly with the experience estimates. Each valuation provides a complete recalculation of estimated future experience and takes into account all past differences between estimated and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time one or more of the estimates are modified to reflect experience trends but not random or temporary year-to-year fluctuations.

Investment Return (net of administrative expenses).

7.75% per year, compounded annually. This rate consists of a real rate of return of **4.25**% per year plus a long-term rate of wage inflation of **3.50**% per year.

No specific price inflation assumption is necessary for this valuation. However, the above assumptions would be consistent with a price inflation assumption in the 3.00% area.

This assumption is used to equate the value of payments due at different points in time and was first used following the September 30, 2011 valuation. Approximate rates of investment return, for the purpose of comparisons with assumed rates, are shown below.

	Year Ended September 30					5-Year
	2014	**2013**	**2012**	**2011**	**2010**	**Average**
Recognized Rate of Return	8.4%	6.8%	2.1%	(4.4)%	0.4%	2.6%

The nominal rate of return was computed using the approximate formula i = I divided by 1/2 (A + B - I), where I is recognized investment income net of expenses, A is the beginning of year asset value, and B is the end of year asset value.

Rates of salary increase were as follows:

Merit and Longevity Pay Increases			
All Others		**Sheriffs/Public Safety**	
Age	**Increase**	**Service**	**Increase**
20	4.35%	5	4.01%
25	3.75%	10	2.49%
30	2.40%	15	1.73%
35	1.70%	20	1.49%
40	1.55%	25	1.36%
45	1.20%	30	1.13%
50	0.85%	35	0.68%
55	0.50%	40 & Over	0.00%
60	0.25%		
65 & Over	0.00%		
Ref:	**391**	**Ref:**	**471**

These rates are used to project current salaries to those upon which pension amounts are likely to be based. The current rates were first used for the September 30, 2011 actuarial valuation.

Rates of separation from active membership were as follows:

% of Active Members Separating within the Next Year							
All Others				**Sheriffs/Public Safety**			
Ages		**Service**		**Ages**		**Service**	
20	9.50%	0 - 1	19%	20	4.50%	0 - 1	18%
21	9.50%	1 - 2	16%	21	4.50%	1 - 2	18%
22	9.50%	2 - 3	12%	22	4.50%	2 - 3	9%
23	9.45%	3 - 4	11%	23	4.46%	3 - 4	7%
24	9.40%	4 - 5	10%	24	4.42%	4 - 5	6%
25	9.35%			25	4.38%		
30	6.64%			30	3.22%		
35	4.78%			35	2.44%		
40	4.52%			40	2.34%		
45	3.79%			45	2.12%		
50	3.07%			50	1.70%		
55	2.59%			55	1.20%		
60 & Over	0.00%			60 & Over	0.00%		
Ref:	**1229**		**759**	**Ref:**	**1230**		**760**

Rates for all divisions were first used for the September 30, 2011 valuation.

The probabilities of retirement for members satisfying the age and service conditions for retirement are as follows:

Percent of Active Participants Retiring within Next Year					
Age Based			**Service Based**		
Age	**All Others**	**Sheriffs/Public Safety**	**Service**	**All Others**	**Sheriffs/Public Safety**
55	30%	25%	30	30%	22%
56	20%	25%	31	20%	20%
57	15%	25%	32	15%	20%
58	30%	25%	33	30%	30%
59	30%	25%	34	30%	40%
60	40%	25%	35	40%	50%
61	30%	25%	36	30%	25%
62	30%	25%	37	30%	25%
63	30%	27%	38	30%	25%
64	20%	27%	39	20%	25%
65	30%	27%	40	100%	100%
66	30%	27%			
67	20%	27%			
68	40%	30%			
69	80%	30%			
70	100%	100%			
71	100%	100%			
72	100%	100%			
73	100%	100%			
74	100%	100%			
75	100%	100%			
Ref:	2119	369		2120	957
anchor	55	55		30	30

The rates were first used for the September 30, 2011 valuation.

Probabilities of retirement were increased to 50% once the member accrues the maximum benefit of 75% of Average Final Compensation.

Rates of disability are represented by the following table:

Sample Ages	**Percent Becoming Disabled within Next Year**	
	All Others	**Sheriffs/Public Safety**
20	0.08%	0.10%
25	0.08%	0.10%
30	0.05%	0.07%
35	0.09%	0.12%
40	0.21%	0.28%
45	0.38%	0.51%
50	0.61%	0.81%
55	0.85%	1.13%
60	1.08%	1.44%
Ref	8 x 75%	8 x 100%

Number of active members: The number of County active members (with the exception of Mental Health Authority) was assumed to remain constant. The Airport group is closed to new hires.

The mortality table used to measure pre- and post-retirement mortality was the RP-2000 Combined Healthy Mortality Table projected 20 years. This assumption was first used for the September 30, 2011 actuarial valuation. Rates were set forward 5 years for disabled retirees.

Mortality rates are used to measure the probabilities of members dying before retirement and the probabilities of each pension payment being made after retirement. The mortality rates include some margin for future improvements in mortality for both genders.

Sample Attained Ages	Single Life Retirement Values					
	Present Value of $1 Monthly for Life		Percent Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women	Men	Women
45	$146.99	$148.32	0.1161%	0.0814%	37.54	39.46
50	141.85	143.48	0.1487%	0.1189%	32.77	34.63
55	134.75	136.92	0.2469%	0.2314%	28.04	29.88
60	125.55	128.59	0.4887%	0.4573%	23.47	25.31
65	114.30	118.49	0.9607%	0.8780%	19.17	21.02
70	101.20	106.80	1.6413%	1.5145%	15.22	17.06
75	85.72	93.45	2.8538%	2.3935%	11.58	13.47
80	68.87	78.41	5.2647%	3.9866%	8.42	10.23
Ref:	454 x 1.00	455 x 1.00				

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS
SEPTEMBER 30, 2014

Marriage Assumption:	100% of males and 100% of females are assumed to be married. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing:	Beginning of (Fiscal) year.
Decrement Timing:	Decrements are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined using the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and turnover do not operate during retirement eligibility.
Normal Form of Benefit:	The assumed normal form of benefit is straight life.
Adjustments:	Age and service benefits were increased by the following percentages to account for lump sum redemptions of unused sick leave, vacation time, and other items at retirement: County Plan One: 5%. County Plan Two: 3%. County Plans Three, Five, and Six: 7%. Airport Plans One and Three, 5%. Airport Plans Two and Five: 2%. Age and service benefits were increased by 1% for County and 2% for Airport to account for missing or incomplete data. Straight Life amounts are provided for some retired members who elect the pop-up provision. Retiree liabilities were increased by 1% to account for the plan's pop-up provision.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Option Factors:	Option factors are based upon 7.0% interest and the 1983 Group Annuity Mortality Table with an 85% Unisex Blend.

SECTION D

RISK MEASURES AND FUNDING POLICY

SUMMARY OF RISK MEASURES
BASED ON MARKET VALUE OF ASSETS

TOTAL WCERS

Actuarial Valuation Date September 30	Funded Ratio	UAAL / Total DB Plan Payroll	Market Value of Assets / Total DB Plan Payroll	Total AAL / Total DB Plan Payroll
2014	49.6 %	6.02	5.62	11.32

Short term fluctuations in the Risk Measures will occur due to experience, plan changes, and assumption and method changes. Long term expectations are described below.

Funded Ratio: The funded ratio is the most widely known measure of a plan's financial strength, but the trend in the funded ratio is much more important than the absolute ratio. The funded ratio should trend to 100%; for WCERS, it is expected to trend toward 100% by September 30, 2028 under the current Funding Policy. As it approaches 100%, it is important to reevaluate the level of investment risk in the portfolio and potentially to reevaluate the assumed rate of return.

UAAL / Total Payroll: The ratio of the unfunded actuarial accrued liability to payroll is expected to trend toward 0% by September 30, 2028 under the current Funding Policy.

Market Value of Assets / Total Payroll and Total AAL / Total Payroll: The ratios of liabilities and assets to payroll give an indication of both maturity and volatility. Many systems have ratios between 5 and 7. Ratios significantly above that range may indicate difficulty in supporting level percent of payroll financing, unless the assets are very conservatively invested. As the funded ratio increases, the Market Value of Assets / Total Payroll ratio is expected to converge to the ratio of Total AAL / Payroll.

CHAPTER 3 – ACTUARIAL FUNDING POLICY

SECTION 2:301- INTRODUCTION.

(A) Purpose

(1) This document and the attached glossary of terms comprise the Actuarial Funding Policy for the Wayne County Employees' Retirement System (WCERS). The purpose of this Actuarial Funding Policy (Funding Policy) for the Defined Benefit Plan is to establish the funding objectives and policy set by the Retirement Commission for WCERS. The Retirement Commission establishes this Funding Policy to help ensure the systematic funding of future benefit payments for members of WCERS.

(B) Act 314

(1) Section 20m of the Public Employee Retirement System Investment Act, Public Act 314 of 1965, as amended ("Act 314") [MCL § 38.1140m], provides for the Retirement Commission's duties and responsibilities with respect to determining and certifying the annual required employer contribution to the Retirement System in relevant part as follows:

(a) The governing board vested with the general administration, management, and operation of a system or other decision-making body that is responsible for implementation and supervision of any system shall confirm in the annual actuarial valuation required under section 20h and the summary annual report required under section 13 that each system under this act provides for the payment of the required employer contribution as provided in this section and shall confirm in the summary annual report that the system has received the required employer contribution for the year covered in the summary annual report. The required employer contribution is the actuarially determined contribution amount. **An annual required employer contribution in a system under this act shall consist of a current service cost payment and a payment of at least the annual accrued amortized interest on any unfunded actuarial liability and the payment of the annual accrued amortized portion of the unfunded principal liability.** For fiscal years that begin before January 1, 2006, the required employer contribution shall not be determined using an amortization period greater than 40 years. **Except as otherwise provided in this section, for fiscal years that begin after December 31, 2005, the required employer contribution shall not be determined using an amortization period greater than 30 years….** In a plan year, any current service cost payment may be offset by a credit for amortization of accrued assets, if any, in excess of actuarial accrued liability. A required employer contribution for a system administered under this act shall allocate the actuarial present value of future plan benefits between the current service costs to be paid in the future and the actuarial accrued liability. The governing board vested with the general administration, management, and operation of a system or other decision-making body that is responsible for implementation and supervision of a system shall act upon the recommendation of an actuary and the board and the actuary shall take into account the standards of practice of the actuarial standards board of the American academy of actuaries in making the determination of the required employer contribution.

[Emphasis added].

(C) GASB

(1) In 2012, the Governmental Accounting Standards Board (GASB) approved two new financial reporting standards. GASB Statement No. 67, "Financial Reporting for Pension Plans" replaces the requirements of Statement No. 25. GASB Statement No. 68, "Accounting and Financial Reporting for Pensions" replaces the requirements of Statements No. 27 and No. 50. Prior to the changes, the Annual Required Contribution (ARC) rate was used as a basis for funding decisions. The new GASB statements separate accounting cost (expense) from funding cost (contributions), necessitating the creation of this Funding Policy.

SECTION 2:302 - FUNDING OBJECTIVES.

(A) General

(1) Maintain a targeted funded ratio of 100%.

(2) Maintain adequate assets so that current plan assets plus future contributions (Employer and Member) and investment earnings should be sufficient to fund all benefits expected to be paid to members and their beneficiaries.

(3) Maintain stability of employer contribution rates, consistent with these funding objectives.

(4) Maintain public policy goals of accountability and transparency. Each policy element is clear in intent and effect, and each should allow an assessment of whether, how and when the funding requirements of the plan will be met.

(5) Monitor material risks to assist in any risk management strategies the Retirement Commission deems appropriate.

(6) Promote intergenerational equity. Each generation of members and employers should incur the cost of benefits for the employees who provide services to them, rather than deferring those costs to future members and employers.

(7) Provide a reasonable margin for adverse experience to help offset risks.

(8) Review investment return assumption, potentially in conjunction with a periodic asset/liability study and in consideration of the Retirement Commission's risk profile.

(9) Continue progress of systematic reduction of the Unfunded Actuarial Accrued Liabilities (UAAL).

CHAPTER 3 – ACTUARIAL FUNDING POLICY

SECTION 2:303 - ELEMENTS OF ACTUARIAL FUNDING POLICY.

(A) Actuarial Cost Method

(1) The Individual Entry Age Normal actuarial cost method of valuation shall be used in determining Actuarial Accrued Liability (AAL) and Normal Cost in accordance with Section 141-36 of the Retirement Ordinance. Differences in the past between assumed experience and actual experience ("actuarial gains and losses") shall become part of the AAL. The Normal Cost shall be determined on an individual basis for each active member.

(B) Asset Smoothing Method

(1) The investment gains or losses of each valuation period, resulting from the difference between actual investment return and assumed investment return, shall be recognized annually in level amounts over a period not to exceed 4 years in calculating the Funding Value of Assets. Regardless of the results obtained from the smoothing method described above, the Funding Value of Assets shall not diverge from the Market Value of Assets by more than 20% (corridor). Based upon consultation with the Actuary, the Retirement Commission may combine bases (scheduled recognition of prior gains and losses) in order to reset the Funding Value of Assets to be equal to the Market Value of Assets when the difference between Market Value of Assets and Funding Value of Assets is 5% or less of Market Value of Assets.

(C) Amortization Method

(1) A level percent of payroll amortization method shall be used to systematically pay off the UAAL over a closed amortization period not to exceed 30 years as required under Section 20m of Act 314 (MCL § 38.1140m).

(2) The amortization period for unfunded accrued liabilities shall be set in a manner to ensure that the plan will be 100% funded as soon as reasonably possible. Starting in conjunction with the actuarial valuation dated September 30, 2014 (determines contribution for Fiscal Year 2016), the amortization period shall be decreased by two (2) years annually. In conjunction with the first valuation report employing a fifteen (15) year amortization period, the Retirement Commission may elect to create a new fifteen (15) year amortization schedule for unfunded liabilities arising during that valuation and subsequent valuations, and to continue the amortization of preexisting unfunded liabilities to their scheduled end date.

(3) Unfunded liabilities associated with benefit changes or assumption changes shall be funded over a period not exceeding 10 years.

(4) Unfunded liabilities arising from benefit increases provided to retirees or in conjunction with early retirement incentive programs offered by the employer shall be separately funded over a period not exceeding 5 future years.

(5) In order to stabilize contributions, the Retirement Commission may from time to time elect to combine separate amortization schedules arising under subparagraphs (3) and (4) into a single schedule over the average remaining amortization period being used.

(6) In the event that the Plan's assets exceed the Plan's liabilities, all amortization schedules other than those related to benefit changes for retirees or early retirement incentive programs offered by the employer shall be considered completed and employer contributions will be set based upon the Normal Cost plus the completion of any remaining amortizations due to benefit changes for retirees or early retirement incentive programs offered by the employer, without regard to such overfunding.

(D) Risk Management

(1) Actuarial Assumption Changes

(a) The actuarial assumptions used for funding shall be those last adopted by the Retirement Commission based on the most recent experience study and upon the advice and recommendation of the Actuary. The Retirement Commission shall direct the actuary to conduct an experience study at least every five years. The results of the study shall be the basis for the actuarial assumptions recommended to the Retirement Commission.

(b) The actuarial assumptions can be updated during the five-year period between experience studies, as advised by the Actuary, if significant plan design changes or other significant events occur.

(2) Risk Control

(a) The Retirement Commission shall carefully monitor the risk measures outlined below and shall consider steps to mitigate risk, with particular regard to funded ratio increases. Risk mitigation may involve a reduction in the assumed rate of investment return. Examples of risk mitigating techniques include, but are not limited to:

i. Review asset allocation with investment advisors and actuary with a goal of reducing the standard deviation of the portfolio return once WCERS becomes fully (100%) funded.

ii. Reduce asset-liability mismatching.

iii. Should such de-risking or future unfavorable experiences cause unfunded liabilities to arise again, such liabilities shall be funded over a closed period of 20 future years.

(3) Risk Measures

(a) The following risk measures will be annually determined by the Retirement System's Actuary to provide quantifiable measurements of risk and its movement over time:

i. Funded ratio (assets / accrued liabilities)

ii. Average UAAL amortization period (years required to pay down the UAAL based on current funding schedule)

iii. Total UAAL / Total Defined Benefit Plan Active Member Payroll – Measures the risk associated with contribution decreases relative impact on the ability to fund the UAAL. A decrease in this measure indicates a decrease in contribution risk.

iv. Total Assets / Total Defined Benefit Plan Active Payroll – Measures the risk associated with the ability to respond to asset experience through adjustments in contributions. A decrease in this measure indicates a decrease in asset risk.

v. Total AAL / Total Defined Benefit Plan Active Payroll – Measures the risk associated with the ability to respond to liability experience through adjustments in contributions. A decrease in this measure indicates a decrease in experience risk. This also provides a long-term measure of the asset risk in situations where the WCERS has a funded ratio below 100%.

(4) Closed Group Funding

(a) Closed groups arise when new hires of a group participating in one of the Defined Benefit Plans of the WCERS are no longer allowed to participate in said defined benefit plan, or when active members of a group are transferred out of the WCERS, leaving only retirees and vested former members in the WCERS.

(b) The liabilities of employers sponsoring closed groups will only be considered discharged if the pension obligations (actuarial accrued liabilities) for the sub-group(s) (retirees, beneficiaries, active vested and non-vested and deferred vested members) leaving the WCERS are transferred to the employer/successor plan or, if such obligations remain with the WCERS, assets sufficient to fund the pension obligation (actuarial accrued liabilities) of any such sub-group(s) either remain and/or are deposited into the WCERS through a lump sum payment made by the employer associated with the closed group. Such transfers and payments will be based on amounts required by the Retirement Commission, based on consultation with the WCERS Actuary. Any such transfers and payments shall include a margin for adverse experience that may occur for the WCERS in the future, as follows:

i. **Closed Groups leaving liability with WCERS.** All calculations related to liabilities remaining with the WCERS shall be based on the Market Value of assets on deposit with the WCERS at the time of the transfer, and the Actuarial Accrued Liability calculated based on a risk-free rate of investment return and such other actuarial assumptions and methods as the Actuary and Retirement Commission deem appropriate for such purpose. Any sub-groups remaining in the WCERS will need to be l00% funded based on current assets and a risk-free rate of investment return but not less than 150% funded based on current assets and actuarial assumptions used in the regular valuation of WCERS. Current assets shall include any required transfers and payments from the employer/successor plan.

ii. **Closed Groups transferring liability from WCERS.** All calculations with respect to liabilities being transferred to the employer or to a successor system or to any assets transferred from the WCERS in conjunction with a release of liability (transferred to the employer/successor plan) will be in an amount equal to 80% of the Funded Ratio of the Actuarial Accrued Liability to be transferred based on the actuarial assumptions used in the regular valuation of WCERS. Such 80%, however, shall not be permitted to result in a transfer of assets that exceeds the actuarial accrued liabilities being transferred.

W.C.E.R.S. Policy - Actuarial Funding Policy	
Category: Board Governance	
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CHAPTER 3 – ACTUARIAL FUNDING POLICY

APPENDIX A

GLOSSARY

1. **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."
2. **Actuarial Assumptions:** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement actuarial assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic actuarial assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
3. **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."
4. **Actuarial Gain (Loss):** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used. For example, if during a given year the assets earn more than the investment return assumption, the amount of earnings above the assumption will cause an unexpected reduction in UAAL, or "actuarial gain" as of the next valuation. These include contribution gains and losses that result from ·actual contributions made being greater or less than the level determined under the policy.
5. **Actuary:** A person who is trained in the application of probability and compound interest to solve problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries (MAAA). *For the purpose of this Funding Policy, Actuary shall only refer to the WCERS actuary.*
6. **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.
7. **Entry Age Normal Actuarial Cost Method:** A funding method that calculates the Normal Cost as a level percentage of pay over the working lifetime of the plan's members.
8. **Experience Study:** An actuarial investigation of demographic and economic experiences of the WCERS during the period studied. The investigation is made for the purpose of updating the actuarial assumptions used in valuing the actuarial liabilities.
9. **Funding Value of Assets:** The value of current plan assets recognized for valuation purposes. Generally based on a phased-in recognition of all or a portion of market related investment return. Sometimes referred to as Actuarial Value of Assets.
10. **Market Value of Assets:** The fair value of plan assets as reported in the plan's audited financial statements.

11. **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.

12. **Unfunded Actuarial Accrued Liability (UAAL):** The positive difference, if any, between the actuarial accrued liability and valuation assets. Sometimes referred to as “unfunded accrued liability.”