

WAYNE COUNTY EMPLOYEES' RETIREMENT SYSTEM
ANNUAL ACTUARIAL VALUATION REPORT
SEPTEMBER 30, 2008

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September 16, 2009

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 purpose of this valuation was to measure the System's funding progress and to recommend a contribution rate for the fiscal year beginning October 1, 2009.

The date of the valuation was September 30, 2008. Separate contribution rates are calculated for the County General Fund and for the Airport Authority.

Valuation results and comments are presented in Section A.

The valuation was based upon information, furnished by your Executive Secretary and staff concerning Retirement System benefits, financial assets and transactions, individual members, terminated members, retired members and beneficiaries. Data was checked for year-to-year consistency, but was not otherwise audited. This information is summarized in Section B.

To the best of our knowledge, this report is complete and accurate and was made in accordance with standards of practice prescribed by the Actuarial Standards Board and in compliance with the Retirement System Ordinance. The actuarial assumptions used for the valuation were adopted by the Retirement Commission pursuant to the 5-year experience study for the period October 1, 1999 through September 30, 2004, and produce results which, in the aggregate, appear to be reasonable.

The actuaries submitting this report are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Judith A. Kermans, EA, MAAA



Norman L. Jones, FSA, EA, MAAA

NLJ/JAK/BBM:mrB

SECTION A

VALUATION RESULTS AND COMMENTS

FUNDING OBJECTIVE

The funding objective for the Retirement System is to establish and receive percent of payroll 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, 2009 are shown on page A-2.

**CONTRIBUTIONS TO FINANCE DEFINED BENEFIT PLANS
OF THE RETIREMENT SYSTEM
FOR THE FISCAL YEAR BEGINNING OCTOBER 1**

Defined Benefit Plans - Contributions for	2009		2008	
	General Fund	Airport	General Fund	Airport
Normal Cost				
Service allowances	8.57 %	5.14 %	8.55 %	5.12 %
Disability allowances	1.64 %	0.79 %	1.40 %	0.70 %
Survivor allowances	0.54 %	0.43 %	0.57 %	0.44 %
Termination benefits				
Deferred service allowances	0.54 %	0.33 %	0.53 %	0.34 %
Refunds of member contributions	0.16 %	0.03 %	0.14 %	0.03 %
Total Normal Cost	11.45 %	6.72 %	11.19 %	6.63 %
Less Portion Paid by Members*	1.36 %	0.23 %	1.26 %	0.23 %
County Defined Benefit Normal Cost	10.09 %	6.49 %	9.93 %	6.40 %
Unfunded Actuarial Accrued Liability#	17.73 %	7.31 %	13.74 %	7.08 %
Total Computed Employer Rate	27.82 %	13.80 %	23.67 %	13.48 %

* Weighted average of the various contribution rates.

Amortized as a level percent of pay over an open period of 20 years.

Historical contribution rates for prior fiscal years are shown on page A-3. The total computed employer contribution rates shown on this page are meant to be applied to Plan 1, 2, 3, 5 and 6 payroll to determine dollar contributions from the General Fund and the Airport into the Retirement System.

Beginning with the September 30, 2007 valuation, separate contribution rates were calculated for the General Fund and Airport Authority.

**HISTORICAL SCHEDULE OF NORMAL COST RATES
AND UNFUNDED ACTUARIAL ACCRUED LIABILITIES
CONTRIBUTION AMOUNTS FOR DEFINED BENEFIT PLANS**

Fiscal Year Beginning	Valuation Date September 30+	County - General Fund			County - Airport		
		Normal Cost Rate	UAAL Contribution Rate	Total Contribution Rate	Normal Cost Rate	UAAL Contribution Rate	Total Contribution Rate
1991	1990	11.55 %	N/A	N/A	11.55 %	N/A	N/A
1992	1991#@	11.33 %	N/A	N/A	11.33 %	N/A	N/A
1993	1992*	12.45 %	N/A	N/A	12.45 %	N/A	N/A
1994	1993*	13.11 %	N/A	N/A	13.11 %	N/A	N/A
1995	1994	13.06 %	N/A	N/A	13.06 %	N/A	N/A
1996	1995*	14.62 %	N/A	N/A	14.62 %	N/A	N/A
1997	1996*@	12.36 %	N/A	N/A	12.36 %	N/A	N/A
1998	1997*	12.52 %	N/A	N/A	12.52 %	N/A	N/A
1999	1998#	13.18 %	N/A	N/A	13.18 %	N/A	N/A
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	2008a	10.15 %	15.76 %	25.91 %	6.49 %	7.31 %	13.80 %
2009	2008b	10.08 %	15.10 %	25.18 %	6.49 %	7.31 %	13.80 %
2009	2008c	10.09 %	17.73 %	27.82 %	6.49 %	7.31 %	13.80 %

* Benefit changes are reflected in this valuation.

After assumption changes.

@ Adjustment made to funding value of assets.

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

Beginning with the September 30, 2007 valuation, separate contribution rates were calculated for the General Fund and the Airport. The results above are displayed as follows:

- a) Base benefits, without Plan 4 to Plan 5 member transfers
- b) Includes Plan 4 to Plan 5 member transfers
- c) Includes benefit changes and transfers

Note: Hybrid Plan 5 exists September 30, 2003 and later.

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(1)	Funded Ratio	Member Payroll +	Unfunded Actuarial Accrued Liability	
					Dollars	% of Payroll
(\$ in thousands)						
<u>General Fund</u>						
2007*	\$1,090,515	\$891,423	82%	\$276,681	\$199,092	72 %
2008*	1,256,869	926,432	74%	281,035	330,437	118 %
<u>Airport</u>						
2007	\$79,007	\$56,441	71%	\$48,702	\$22,566	46 %
2008	81,927	58,594	72%	49,035	23,333	48 %
<u>Total</u>						
1999	\$ 915,339	\$ 965,798	106%	\$ 256,379	\$(50,458)	-
2000	947,557	1,028,626	109%	275,627	(81,069)	-
2001*	979,176	1,041,645	106%	294,128	(62,469)	-
2002	1,010,744	1,043,282	103%	308,962	(32,538)	-
2003	1,007,734	996,621	99%	289,250	11,113	4 %
2004#	959,697	910,056	94%	343,330	49,642	14 %
2005	969,333	891,427	92%	298,581	77,906	26 %
2006#	1,000,231	894,499	89%	319,611	105,732	33 %
2007*	1,169,522	947,864	81%	325,383	221,658	68 %
2008*	1,338,796	985,026	74%	330,070	353,770	107 %

* *Benefit changes are reflected in this valuation.*

After changes in assumptions.

+ *Includes defined contribution Plan 4 payroll.*

(1) *Reserve for inflation equity not included in this schedule.*

@ *After one-time adjustment of funding value of assets.*

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

Note: Hybrid Plan 5 exists September 30, 2003 and later.

COMMENTS ON THE ACTUARIAL VALUATION

1. **Experience:** The Market Value rate of return during fiscal year 2008 was (15.2)%, which is considerably less than the assumed rate of 8.0%. Under the asset valuation method, gains and losses are spread over a 4-year period. The net result of this year's Market Value loss, and carryover gains and losses from prior years, is a net loss of \$23.8 million. As of September 30, 2008, the Funding Value of assets exceeds the Market Value by \$138.0 million. Given this, and the fact that the remainder of this year's asset losses will be recognized during each of the next three years under the asset valuation method, the computed contribution rates will likely increase substantially over the next three years.
2. **Status:** Computed actuarial accrued liabilities exceed the Funding Value of assets by \$330.4 million for the General Fund and \$23.3 million for the Airport. Unfunded actuarial accrued liabilities are currently being amortized over an open 20-year period in accordance with Retirement Commission policy. The open 20-year amortization period was first adopted for the September 30, 2004 valuation. The General Fund of the Wayne County Employees' Retirement System (WCERS) is 74% funded, and the Airport is 72% funded.
3. **Contribution Rates:** Contribution rates are calculated separately for the County General Fund and the Airport Authority. The calculated contribution rates are 27.82% for the General Fund and 13.80% for the Airport Authority. These rates were calculated by allocating total system assets between the Airport and General Fund. The method used for the allocation was agreed upon by County staff and Airport Authority staff and was first implemented in the September 30, 2007 valuation. Detail on this year's allocation is shown on page B-11. **We continue to recommend that the employer maintain separate accounts for General and Airport so that the actuary is not responsible for the allocation.**
4. **Benefit Changes:** Early Retirement Incentives, the creation of Plan 6, transfers from Plan 4 to Plan 5 at subsidized service purchase rates, as well as benefit increases for certain Plan 3 members contributed to the increase in the General Fund contribution rate. It is our understanding that contract settlements are in process for active members. Any benefit changes reflected in the contracts, if adopted, will also act to increase the contribution rate for the September 30, 2009 valuation.
5. **Other Recommendations:** As mentioned in the September 30, 2007 valuation report, with the General Fund and the Airport now making separate contributions, the WCERS may no longer be considered a cost sharing plan. We recommend that your auditor review the status of the plan and the Governmental Accounting Standards Board (GASB) reporting requirements.

ACTUARIAL BALANCE SHEET - SEPTEMBER 30, 2008

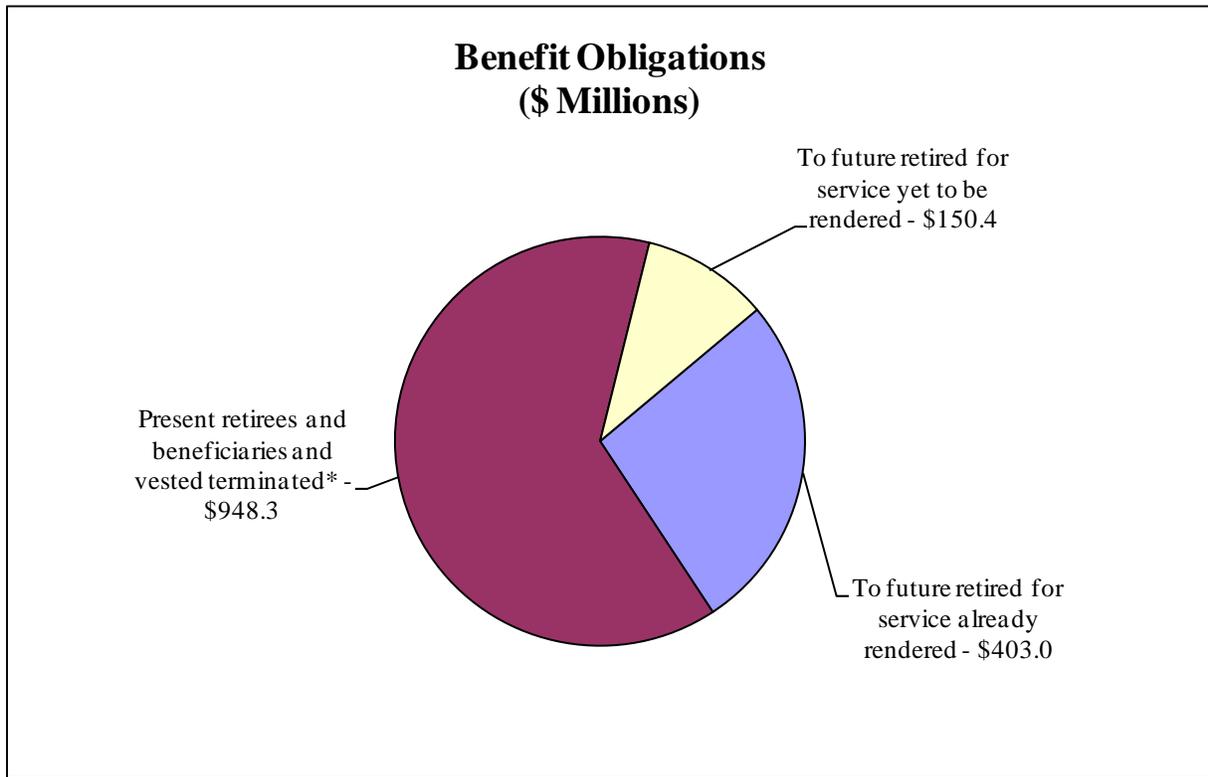
Present Resources and Expected Future Resources

A. Valuation assets	
1. Net assets from system financial statements (market value)	\$859,527,777
2. Valuation adjustment	137,980,560
3. Valuation assets	997,508,337
B. Actuarial present value of expected future employer contributions	
1. For normal costs	135,020,697
2. For unfunded actuarial accrued liabilities	353,769,630
3. Total	488,790,327
C. Actuarial present value of expected future member contributions	15,360,806
D. Total Actuarial Present Value of Present and Expected Future Resources	\$1,501,659,470

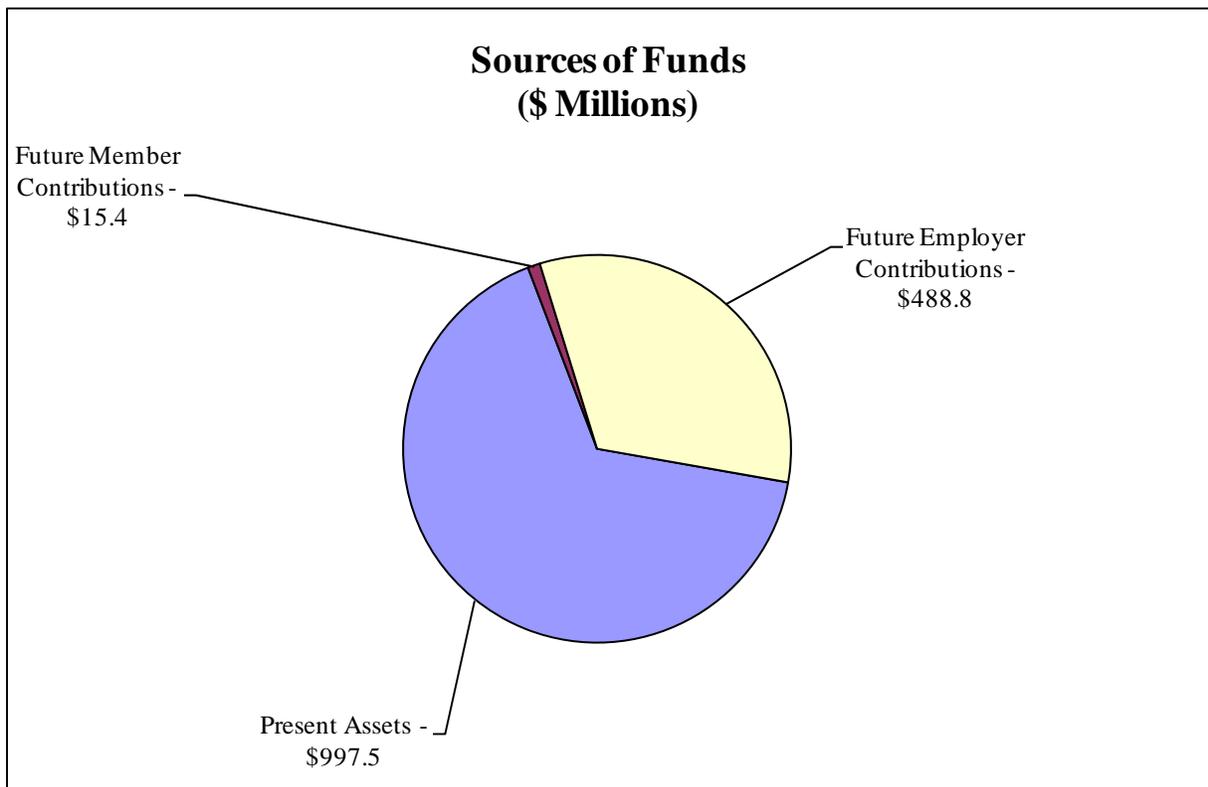
Actuarial Present Value of Expected Future Benefit Payments and Reserves

A. To retired members and beneficiaries	\$ 883,852,759
B. To vested terminated members	5,794,191
C. To present active members	
1. Allocated to service rendered prior to valuation date	402,964,149
2. Allocated to service likely to be rendered after valuation date	150,381,503
3. Total	553,345,652
D. Total Actuarial Present Value of Expected Future Benefit Payments	1,442,992,602
E. Inflation Equity Benefits	58,666,868
F. Total Actuarial Present Value of Expected Future Benefit Payments and Reserves	\$1,501,659,470

**FINANCING \$1,501.7 MILLION OF BENEFIT PROMISES
SEPTEMBER 30, 2008**



* Includes Inflation Equity Fund



SECTION B

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

BRIEF SUMMARY OF BENEFIT PROVISIONS
DEFINED BENEFIT PLAN 1
(SEPTEMBER 30, 2008)

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.

BRIEF SUMMARY OF BENEFIT PROVISIONS
DEFINED BENEFIT PLAN 1
(SEPTEMBER 30, 2008)

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.

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, 2008)

Availability - Defined Benefit Plan 2 was available to persons hired after August 15, 1983 and to DBP 1 and DBP 3 members who elect 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.

BRIEF SUMMARY OF BENEFIT PROVISIONS
DEFINED BENEFIT PLAN 3
(SEPTEMBER 30, 2008)

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 (Sheriffs): 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.

BRIEF SUMMARY OF BENEFIT PROVISIONS
DEFINED CONTRIBUTION PLAN 4
(SEPTEMBER 30, 2008)

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 (Sheriffs), 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, 2008)

Availability - Hybrid Plan 5 is obligatory for persons hired after October 1, 2001. Exempt employees may choose between Plan 5 and DC Plan 4. Members may transfer from Plan 4 into this Plan.

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% for all years of credited service. 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).

Average Final Compensation (AFC) - Monthly average of covered compensation for the last 5 years of credited service, with the exception of Sheriff Command Officers 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.

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 (Sheriffs), 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.

BRIEF SUMMARY OF BENEFIT PROVISIONS
HYBRID PLAN 5
(SEPTEMBER 30, 2008)

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 2% multiplier contribute 1% of pay. Others contribute 0% of pay.

DEFINED CONTRIBUTION PROVISIONS

Contributions:

4% of base compensation (2% member plus 2% employer) for General Fund; 6% of base compensation (3% member plus 3% employer) for Airport Authority. 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, 2008)

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

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 (Sheriffs), 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.

BRIEF SUMMARY OF BENEFIT PROVISIONS
HYBRID PLAN 6
(SEPTEMBER 30, 2008)

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% General Fund.

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:	2006	2007	2008	2009	2010	2011
A. Funding Value Beginning of Year	\$945,747,768	\$948,313,645	\$967,359,485			
B. Market Value End of Year	987,415,361	1,037,978,404	859,527,777			
C. Market Value Beginning of Year	991,448,564	987,415,361	1,037,978,404			
D. Non-Investment Net Cash Flow	(90,619,780)	(87,186,213)	(22,532,418)			
E. Investment Income						
E1. Market Total: B - C - D	86,586,577	137,749,256	(155,918,209)			
E2. Amount for Immediate Recognition	72,035,030	72,377,643	76,487,462			
E3. Amount for Phased-In Recognition: E1-E2	14,551,547	65,371,613	(232,405,671)			
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.25 x E3	3,637,887	16,342,903	(58,101,418)			
F2. First Prior Years	14,314,436	3,637,887	16,342,903	\$(58,101,418)		
F3. Second Prior Years	(440,816)	14,314,436	3,637,887	16,342,903	\$(58,101,418)	
F4. Third Prior Years	3,639,120	(440,816)	14,314,436	3,637,887	16,342,903	\$(58,101,417)
F5. Total Recognized Investment Gain	21,150,627	33,854,410	(23,806,192)	(38,120,628)	(41,758,515)	(58,101,417)
G. Funding Value End of Year: A + D + E2 + F5	\$948,313,645	\$ 967,359,485	\$997,508,337			
H. Difference between Market & Funding Value	39,101,716	70,618,919	(137,980,560)	(99,859,932)	(58,101,417)	0
I. Recognized Rate of Return	10.3%	11.7%	5.5%			
J. Market Value Rate of Return	9.2%	14.6%	(15.2)%			
K. Ratio of Funding Value to Market Value	96.0%	93.2%	116.1%			

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 GENERAL FUND AND AIRPORT AUTHORITY

	General Fund	Airport Authority	WCERS	Inflation Equity Fund	Total (WCERS + IEF)
(1) Market Value BOY	\$ 909,168,750	\$ 60,872,866	\$ 970,041,616	\$67,936,788	\$1,037,978,404
(2) Employee Contributions	70,028,319	67,920	70,096,239		70,096,239
(3) Employer Contributions	14,909,806	3,509,818	18,419,624		18,419,624
(4) Benefit Payments	97,070,257	4,708,104	101,778,361	9,269,920	111,048,281
(5) Average Balance: (1) + 1/2 (2+3-4)	903,102,684	60,307,683	963,410,367		1,026,712,195
(6) Percent of Total	93.74%	6.26%	100.00%		
(7) Net Investment Income Allocation	(146,158,021)	(9,760,188)	(155,918,209)		(155,918,209)
(8) Market Value EOY: (1)+(2)+(3)-(4)+(7)	\$ 750,878,597	\$ 49,982,312	\$ 800,860,909	\$ 58,666,868	\$859,527,777
(9) Market Value Rate of Return: (7)/(5)	(16.18)%	(16.18)%	(16.18)%	0.0%	(15.19)%
(10) Percentage of WCERS Market Value	93.76%	6.24%	100.00%		
(11) Funding Value Allocation: (Total-IEF) x (10)	\$880,247,689	\$58,593,780	\$938,841,469	\$58,666,868	\$997,508,337

Beginning of year balances were developed in the September 30, 2007 valuation based on the method agreed upon by the County and Airport divisions. Separate cash flow amounts for 2008 were provided by the County. See Comment 3 on page A-5.

DERIVATION OF RESERVE FOR INFLATION EQUITY FUND (IEF)

	September 30, 2008	September 30, 2007
Rate of investment return		
(1) Actual return on funding value of assets	5.51 %	11.74 %
(2) Threshold return	9.00 %	9.00 %
(3) Excess, if any, of (1) over (2)	0.00 %	2.74 %
Actuarial present value of pensions	\$883,852,759	\$848,765,014
Dollars available for allocation to IEF	0	23,256,161
Reserve balance - start of year	67,936,788	53,814,457
Disbursements during year	9,269,920	9,133,830
Transfer for minimum pensions	0	0
Current year addition	0	23,256,161
Reserve balance - end of year	\$ 58,666,868	\$ 67,936,788
Reserve for year end transfer	N/A	N/A

RETIRED MEMBERS AND BENEFICIARIES ADDED AND REMOVED

Year Ended Sept. 30	Added		Removed		Net Increase		End of Year	
	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

@ Includes benefit adjustments.

RETIRED MEMBERS AND BENEFICIARIES COMPARATIVE SCHEDULE

Valuation Date Sept. 30	Pensions Being Paid					Active Member Ratio(2)	
	No.	Amount*	% of Member Payroll#	Annual % Increase(1)			Average Pension
				No.	Amount		
1950	477	\$ 450	2.0 %	37.9 %	44.4 %	\$ 943	11.9
1955	931	1,166	3.6 %	14.3 %	21.0 %	1,252	6.9
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
1996	6,219	70,730	94.9 %	0.0 %	5.0 %	11,373	0.9
1997	6,202	73,995	103.2 %	(0.3)%	4.6 %	11,931	0.9
1998	6,140	75,600	112.1 %	(1.0)%	2.2 %	12,313	0.9
1999	6,052	76,954	113.3 %	(1.4)%	1.8 %	12,715	1.0
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

(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.

* In thousands of dollars.

EXCLUDES Defined Contribution Plan payroll after 1991.

**RETIRED MEMBERS AND BENEFICIARIES SEPTEMBER 30, 2008
BY ATTAINED AGE GROUPS**

Attained Age Grouping	General Fund		Airport		WCERS Total	
	Number	Annual Pensions	Number	Annual Pensions	Number	Annual Pensions
Under 35	5	\$ 50,973	0	\$ 0	5	\$ 50,973
35-39	3	60,961	0	0	3	60,961
40-44	20	533,095	3	61,103	23	594,198
45-49	61	1,905,844	2	79,455	63	1,985,299
50-54	148	5,242,720	14	703,661	162	5,946,381
55-59	456	15,697,388	32	1,836,551	488	17,533,939
60-64	719	20,658,950	24	1,278,634	743	21,937,584
65-69	729	15,512,057	18	583,136	747	16,095,193
70-74	644	10,650,916	4	279,273	648	10,930,189
75-79	772	10,597,453	0	0	772	10,597,453
80-84	879	9,919,138	1	40,241	880	9,959,379
85-89	598	5,292,658	0	0	598	5,292,658
90-94	240	1,624,909	0	0	240	1,624,909
95-99	71	386,570	0	0	71	386,570
100 & Over	5	7,401	0	0	5	7,401
Totals	5,350	\$98,141,033	98	\$4,862,054	5,448	\$103,003,087

Average age now:	73.5 yrs.	60.1 yrs.	73.2 yrs.
Average age at retirement:	55.2 yrs.	56.3 yrs.	55.2 yrs.
Average service at retirement:	23.8 yrs.	28.9 yrs.	23.9 yrs.

RETIRED MEMBERS AND BENEFICIARIES SEPTEMBER 30, 2008
BY TYPE OF RETIREMENT – GENERAL FUND

Type of Pension Being Paid	Benefits Paid	Number
Age & Service Pensions		
S.S. Equated		
Straight Life	\$ 24,176,866	1,136
Option 1	1,176,937	47
Option 2	16,539,387	619
Option 3	12,148,752	417
Total	54,041,942	2,219
Not S.S. Equated		
Straight Life	\$ 13,247,546	1,028
Option 1	920,271	32
Option 2	7,480,110	310
Option 3	7,613,454	399
Total	29,261,381	1,769
Survivor beneficiary of deceased retired member	7,907,076	776
Total Age and Service Pensions	\$ 91,210,399	4,764
Casualty Pensions		
Duty Disability	\$ 3,305,559	179
Non-Duty Disability	1,487,523	162
Survivor beneficiary of deceased retired member	871,907	98
Duty Death	112,609	16
Non-Duty Death	1,153,036	131
Total Casualty Pensions	6,930,634	586
Total Pensions Being Paid	\$ 98,141,033	5,350

RETIRED MEMBERS AND BENEFICIARIES SEPTEMBER 30, 2008
BY TYPE OF RETIREMENT – AIRPORT

<u>Type of Pension Being Paid</u>	<u>Benefits Paid</u>	<u>Number</u>
Age & Service Pensions		
S.S. Equated		
Straight Life	\$ 943,109	20
Option 1	44,348	1
Option 2	1,572,575	33
Option 3	1,464,539	25
Total	4,024,571	79
Not S.S. Equated		
Straight Life	\$ -	0
Option 1	-	0
Option 2	164,066	4
Option 3	364,174	5
Total	528,240	9
Survivor beneficiary of deceased retired member	31,233	1
Total Age and Service Pensions	\$ 4,584,044	89
Casualty Pensions		
Duty Disability	\$ 232,638	8
Non-Duty Disability	45,372	1
Survivor beneficiary of deceased retired member	-	0
Duty Death	-	0
Non-Duty Death	-	0
Total Casualty Pensions	278,010	9
Total Pensions Being Paid	\$ 4,862,054	98

RETIRED MEMBERS AND BENEFICIARIES SEPTEMBER 30, 2008
BY PENSION AMOUNT AND YEAR OF RETIREMENT

Annual Pension Range	Year of Retirement																Totals	Average Service at Retirement
	Before 1960	1960s	1970s	1980-84	1985-89	1990-94	1995-99	2000	2001	2002	2003	2004	2005	2006	2007	2008		
\$0-999	3	8	13	13	6	13	5	1	1								63	10
1,000-1,999	3	14	26	22	23	19	18	1	6	3	3	5	5	5	2	5	160	12
2,000-2,999	3	7	36	22	30	33	39	2	10	9	5	2	9	5	4	5	221	14
3,000-3,999		6	37	33	31	26	35	6	6	5	3	11	5	2	5	6	217	17
4,000-4,999		2	48	44	32	30	24	7	6	6	6	6	9	7	12	1	240	18
5,000-5,999	1	1	61	69	36	45	31	5	5	8	5	7	4	7	5	6	296	20
6,000-6,999			39	89	53	39	26	4	2	5	8	5	4	4	6	9	293	20
7,000-7,999		1	34	89	43	33	20	4	3	3	9	1	5	6	7	5	263	20
8,000-8,999			41	69	32	40	27	1	2	3	7	2	1	8	5	3	241	22
9,000-9,999			28	75	44	37	23	5	2	5	2	7	3	5	6	6	248	22
10,000-10,999		2	24	75	41	41	20	3	4	6	2	6	2	6	1	5	238	23
11,000-11,999			23	69	38	34	22	3		1	4	3	6	4	6	7	220	24
12,000-12,999			11	82	43	33	22		2	5	3	2	5	4	3	5	220	23
13,000-13,999			15	38	41	37	26	3	3	3	3		4	5	3	2	183	25
14,000-14,999			11	46	30	34	14	2	3	3	5	1	4	1	5	2	161	25
15,000-15,999			6	36	21	32	14	1	4	1	2	4	3	3		2	129	26
16,000-16,999			4	31	18	23	19	3	2	5	3	5		2	1	1	117	26
17,000-17,999			4	37	9	21	12	4	2	2	2	3	1	4	1	1	103	26
18,000-18,999			2	21	14	12	15	1	2	3	2	1	4	2	5	1	85	28
19,000-19,999			2	16	14	21	10	1	3	2		1	4			2	76	26
20,000-20,999				11	10	20	17		3	2		1	3	3	1	1	72	27
21,000-21,999			1	13	11	24	19	2		1		1	1	3	1	2	79	27
22,000-22,999			1	10	7	5	20			1	3	1	1			2	52	28
23,000-23,999			1	14	9	13	17		2	1	4	3	1	1		2	70	28
24,000-24,999				12	2	10	13	4	2	2	1	2	1	1	1		51	27
25,000-25,999				6	4	9	16	2	1	2	1		1	2	1	3	48	26
26,000-26,999			1	3	7	9	23	3		2	2	4		1	2	2	59	27
27,000-27,999			1	3	3	12	11	1	3	3		1	2		1	1	42	29
28,000-28,999				2	5	3	13	4	1	2		2			2	2	36	28
29,000-29,999				5	5	10	18	2	1	4	3	3	2	3	2	2	60	29
30,000-39,999			1	14	12	44	115	28	13	19	14	30	9	18	13	40	370	29
40,000-49,999			1	1	2	20	74	14	15	23	28	41	16	19	12	27	293	30
50,000-59,999						4	43	12	7	24	21	32	11	9	2	22	187	31
60,000-69,999						2	13	8	9	16	16	28	6	7	5	13	123	31
70,000-79,999							4		8	8	11	16	3	7	4	4	65	31
80,000-89,999							2	2	8	3	6	11	1	2	1	3	39	31
90,000-99,999									1			2	10	2			17	32
100,000-109,999												2	4	1			7	33
110,000-119,999												2					2	36
120,000 & Up											1				1		2	40
Totals	10	41	472	1,070	676	788	840	139	143	193	187	264	140	159	126	200	5,448	

VESTED FORMER MEMBERS SEPTEMBER 30, 2008
TABULATED BY ATTAINED AGE GROUPS

Attained Ages	No.	Estimated Annual Allowances
35-39	6	\$ 41,267
40-44	6	46,389
45-49	18	97,982
50-54	22	242,518
55-59	45	365,871
60-64	22	159,660
65-69	8	32,302
70 & Up	3	59,432
Totals	130	\$1,045,421

Vested former members included in the valuation totaled 130. A vested former member is a person who has left the employ of the County 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.

Former members who were transferred to State employment during 1981 and are eligible for deferred retirement, and former members who transferred to the State and have since terminated are included in the schedule above.

ACTIVE MEMBERS SEPTEMBER 30, 2008 – GENERAL FUND

Plan	No.	Valuation Payroll	Average		
			Pay	Age	Service
				(in years)	
Defined Benefit Plan 1					
General & DPS	172	\$ 11,849,664	\$68,893	57.5	29.3
Sheriff	11	795,414	72,310	57.9	30.6
Total	183	12,645,078	69,099	57.5	29.4
Defined Benefit Plan 2					
General & DPS	62	3,354,498	54,105	52.7	20.6
Sheriff	28	1,729,432	61,765	39.8	13.8
Total	90	5,083,930	56,488	48.7	18.5
Defined Benefit Plan 3					
General & DPS	36	2,278,279	63,286	54.0	23.4
Sheriff	42	3,129,527	74,513	50.0	25.9
Total	78	5,407,806	69,331	51.8	24.8
Hybrid Plan 5					
General & DPS	1,120	60,789,473	54,276	45.6	11.0
Sheriff	704	40,125,680	56,997	39.3	12.0
Total	1,824	100,915,153	55,326	43.2	11.4
Hybrid Plan 6					
General & DPS	70	8,143,223	116,332	52.7	23.5
Sheriff	90	6,756,677	75,074	44.6	22.2
Total	160	14,899,900	93,124	48.1	22.8
Defined Benefit Sub-total*	2,335	138,951,867	59,508	45.1	14.3
Defined Contribution Plan 4	2,461	142,082,763	57,734	46.4	13.0
Total	4,796	\$281,034,630	\$58,598	45.8	13.6

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

ACTIVE MEMBERS SEPTEMBER 30, 2008 – AIRPORT

Plan	No.	Valuation Payroll	Average		
			Pay	Age	Service
				(in years)	
Defined Benefit Plan 1					
General & DPS	11	\$ 946,949	\$86,086	56.4	27.7
Sheriff	5	540,799	108,160	52.2	28.0
Total	16	1,487,748	92,984	55.1	27.8
Defined Benefit Plan 2					
General & DPS	2	76,714	38,357	33.6	10.2
Sheriff	2	156,181	78,091	35.8	7.3
Total	4	232,895	58,224	34.7	8.8
Defined Benefit Plan 3					
General & DPS	1	84,755	84,755	51.0	23.9
Sheriff	3	266,240	88,747	48.0	24.4
Total	4	350,995	87,749	48.8	24.3
Hybrid Plan 5					
General & DPS	283	16,634,770	58,780	42.3	8.1
Sheriff	66	4,695,898	71,150	36.7	9.3
Total	349	21,330,668	61,119	41.2	8.3
Defined Benefit Sub-total	373	23,402,306	62,741	41.8	9.3
Defined Contribution Plan 4	339	25,632,489	75,612	46.5	12.8
Total	712	\$49,034,795	\$68,869	44.1	11.0

**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	Age	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
1999	74	529,010	981	55,641,299	56,719	51.8	23.9
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

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

Valuation Date September 30	Inactive		Active Members				
	No.	Estimated Pensions	No.	Valuation Payroll	Pay	Average Age	Service
Defined Benefit Plan 2							
2002	81	\$369,832	152	\$ 6,838,161	\$44,988	43.0 yrs.	11.6 yrs.
2003	80	367,115	137	5,700,048	41,606	44.1	12.5
2004	55	253,284	123	5,633,831	45,804	44.8	14.5
2005	47	386,506	113	5,212,864	46,132	46.2	15.1
2006	77	478,758	105	5,398,717	51,416	46.6	16.4
2007	75	435,103	101	5,402,969	53,495	47.6	17.2
2008	70	538,486	94	5,316,825	56,562	48.1	18.1
Defined Benefit Plan 3							
2002	0	\$ 0	103	\$ 6,021,860	\$58,465	47.1 yrs.	17.4 yrs.
2003	0	0	102	5,719,859	56,077	47.9	18.4
2004	0	0	106	6,097,671	57,525	49.7	19.1
2005	0	0	122	7,083,769	58,064	51.1	19.3
2006	5	21,656	89	5,616,210	63,103	50.3	21.5
2007	6	43,334	85	5,544,204	65,226	50.9	22.4
2008	6	43,334	82	5,758,801	70,229	51.7	24.7
Defined Contribution Plan 4							
2002	NA	NA	4,499	\$223,379,142	\$49,651	41.9 yrs.	8.6 yrs.
2003	NA	NA	4,351	206,015,408	47,349	42.7	9.4
2004	NA	NA	4,842	244,543,363	50,505	44.4	10.7
2005	NA	NA	4,123	213,910,414	51,882	44.3	11.7
2006	NA	NA	3,983	226,219,515	56,796	45.2	12.5
2007	NA	NA	3,331	191,770,414	57,571	46.2	12.8
2008	NA	NA	2,800	167,715,252	59,899	46.4	13.0
Hybrid Plan 5							
2002	NA	NA	579	\$ 26,596,747	\$45,936	39.6 yrs.	8.3 yrs.
2003	NA	NA	880	37,460,262	42,568	38.9	7.3
2004	NA	NA	1,423	54,359,556	38,201	38.4	5.6
2005	NA	NA	1,201	51,992,978	43,291	39.9	7.1
2006	1	12,178	1,291	61,952,245	47,988	40.7	7.7
2007	7	68,077	1,907	106,173,315	55,675	41.9	10.1
2008	7	\$ 68,077	2,173	122,245,821	56,256	42.9	10.9
Hybrid Plan 6							
2008	NA	NA	160	\$ 14,899,900	\$93,124	48.1 yrs.	22.8 yrs.

**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	Age	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

**DEFINED BENEFIT PLAN 1 – GENERAL FUND
ACTIVE MEMBERS SEPTEMBER 30, 2008
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
45-49					9	13	1	23	\$ 1,634,349
50-54				3	11	16	11	41	3,246,070
55-59			1	6	3	18	26	54	3,972,503
60				1	2	3	3	9	455,146
61			1		1	1	7	10	619,249
62			2		1		5	8	404,942
63				1	1	1	6	9	647,777
64				1	1		2	4	166,512
65					1	1	4	6	407,817
66					2	1	3	6	345,184
67			1				2	3	98,342
68							2	2	170,167
71							1	1	27,434
72							3	3	202,003
73							1	1	27,434
75						1		1	27,434
79 & Over							2	2	192,715
Totals			5	12	32	55	79	183	\$12,645,078

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

Age: 57.5 years
Service: 29.4 years
Annual Pay: \$69,099

* Includes purchased service.

**DEFINED BENEFIT PLAN 1 – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2008
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
40-44						1		1	\$ 64,028
45-49						3		3	285,802
50-54						4	1	5	535,377
55-59					1		3	4	398,958
60			1					1	37,325
61					1			1	78,870
79 & Over							1	1	87,388
Totals			1		2	8	5	16	\$1,487,748

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

Age: 55.1 years
Service: 27.8 years
Annual Pay: \$92,984

**DEFINED BENEFIT PLAN 2 – GENERAL FUND
ACTIVE MEMBERS SEPTEMBER 30, 2008
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
25-29		1						1	\$ 50,125
30-34		3	3					6	352,310
35-39		4	5	5	1			15	830,838
40-44		2		2	2			6	339,445
45-49		1	1	8	7	1		18	1,046,780
50-54		3	2	6	6	1		18	1,117,236
55-59		1	2	5	3		5	16	758,765
60						1		1	35,234
61					1		1	2	140,589
62				1				1	86,632
63							2	2	161,877
65				1				1	37,524
66					1			1	40,927
70			1					1	32,793
72					1			1	52,855
Totals		15	14	28	22	3	8	90	\$5,083,930

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

Age: 48.7 years
Service: 18.5 years
Annual Pay: \$56,488

* Includes purchased service.

**DEFINED BENEFIT PLAN 2 – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2008
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
25-29		1						1	\$ 43,310
30-34		1						1	84,403
35-39		1	1					2	105,182
Totals		3	1					4	\$232,895

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

Age: 34.7 years
Service: 8.8 years
Annual Pay: \$58,224

**DEFINED BENEFIT PLAN 3 – GENERAL FUND
ACTIVE MEMBERS SEPTEMBER 30, 2008
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
40-44					4	1		5	\$ 283,470
45-49					10	21		31	2,393,234
50-54					11	5		16	1,037,320
55-59					14	5		19	1,242,980
60					1			1	73,676
63				1	1			2	110,828
64				1	1			2	138,540
68					1			1	72,901
69					1			1	54,857
Totals				2	44	32		78	\$5,407,806

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

Age: 51.8 years
Service: 24.8 years
Annual Pay: \$69,331

* Includes purchased service.

**DEFINED BENEFIT PLAN 3 – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2008
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
40-44					1			1	\$ 64,654
45-49					1			1	125,474
50-54					2			2	160,867
55-59									
Totals					4			4	\$350,995

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

Age: 48.8 years
Service: 24.3 years
Annual Pay: \$87,749

DEFINED CONTRIBUTION PLAN 4 – GENERAL FUND
ACTIVE MEMBERS SEPTEMBER 30, 2008
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	3	1						4	\$ 127,178
25-29	17	25	5					47	1,895,395
30-34	20	104	67	2				193	9,702,831
35-39	32	125	171	64	7			399	21,130,916
40-44	24	107	147	108	68	1		455	25,993,514
45-49	20	104	120	116	74	8	1	443	26,582,317
50-54	31	91	119	100	66	12	6	425	26,436,769
55-59	21	60	88	74	36	7	11	297	18,401,194
60	9	6	6	4	2		3	30	1,813,684
61	2	9	10	8	4	2	1	36	2,368,502
62	4	8	8	7	1	1		29	1,744,775
63		2	6	2	4			14	893,942
64		4	9	5			2	20	1,105,016
65		7	5	6	1	1		20	1,045,039
66	2	4	6	1	1			14	762,645
67		4	3	1	1			9	493,713
68			3	3				6	367,869
69		2				1		3	241,391
70			1	1	1			3	151,531
71			3					3	171,165
72		1	2					3	180,547
73				3	1	1		5	321,924
76	1		1					2	121,796
79 & Over			1					1	29,110
Totals	186	664	781	505	267	34	24	2,461	\$142,082,763

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

Age: 46.4 years
Service: 13.0 years
Annual Pay: \$57,734

Excludes members that transferred to Plan 5 after the valuation date.

**DEFINED CONTRIBUTION PLAN 4 – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2008
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
25-29	1	3	1					5	\$ 234,663
30-34	5	19	10					34	1,996,662
35-39	5	9	22	9	1			46	3,247,705
40-44	4	13	18	14	7			56	4,210,486
45-49	4	15	17	10	13	1		60	4,535,055
50-54	6	18	14	15	13	1	1	68	5,400,991
55-59	5	8	10	8	9	1	4	45	3,710,978
60	1	2	2	1	1	1		8	732,079
61	4	2	1					7	705,521
62		1	2					3	240,804
63		1	1					2	72,112
64					1			1	87,196
65	1							1	162,077
66			1	1				2	128,490
70		1						1	167,670
Totals	36	92	99	58	45	4	5	339	\$25,632,489

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

Age: 46.5 years
Service: 12.8 years
Annual Pay: \$75,612

**HYBRID PLAN 5 – GENERAL FUND
ACTIVE MEMBERS SEPTEMBER 30, 2008
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	42	3						45	\$ 1,451,611
25-29	111	71	4					186	8,026,614
30-34	89	85	32	4				210	10,335,790
35-39	69	75	50	47	7			248	13,314,413
40-44	76	38	43	74	62	6		299	16,719,321
45-49	62	45	34	62	80	31	2	316	19,699,089
50-54	44	29	29	34	63	26	4	229	14,132,907
55-59	29	25	18	24	41	11	20	168	10,304,417
60	11	5	1	7	4	2	3	33	1,922,341
61	7	5		4	1	3	2	22	1,363,523
62	1	2	1	2	3		3	12	670,618
63	5	2	1	1		1		10	529,719
64	2	2	1	3	1	2	1	12	714,843
65		3		1	2	1		7	396,587
66	2	1	2	2	3			10	625,462
67		1	2	1	1			5	191,824
68		1	1					2	58,461
69					2			2	105,505
70	1	1						2	113,796
71	1							1	23,388
72		1	1					2	68,979
74		1			1			2	93,735
79 & Over							1	1	52,210
Totals	552	396	220	266	271	83	36	1,824	\$100,915,153

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

Age: 43.2 years
Service: 11.4 years
Annual Pay: \$55,326

Includes members that transferred from Plan 4 after the valuation date.

* Includes purchased service.

**HYBRID PLAN 5 – AIRPORT
ACTIVE MEMBERS SEPTEMBER 30, 2008
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	14							14	\$ 599,100
25-29	39	6						45	2,096,574
30-34	29	12	2					43	2,125,315
35-39	17	6	12	5				40	2,673,342
40-44	21	10	12	15	10			68	4,515,902
45-49	19	11	10	7	17			64	4,318,165
50-54	21	4	1	2	10	2	1	41	2,656,201
55-59	9	5	1	5	2			22	1,587,113
60	2						1	3	158,213
61		2						2	113,101
62	1				1			2	130,036
63			1	1				2	138,954
64					1			1	62,620
71	1							1	92,239
73			1					1	63,793
Totals	173	56	40	35	41	2	2	349	\$21,330,668

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

Age: 41.2 years
Service: 8.3 years
Annual Pay: \$61,119

**HYBRID PLAN 6 – GENERAL FUND
ACTIVE MEMBERS SEPTEMBER 30, 2008
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
30-34			1	1				2	\$ 148,773
35-39			3	7	2			12	865,092
40-44			1	12	30	9		52	4,239,618
45-49				4	18	9		31	2,793,380
50-54			1	3	8	13	5	30	3,335,680
55-59			1	3	4	6	4	18	2,005,731
60			1		1	1		3	236,874
61						1	1	2	160,523
62					1	2		3	334,667
64					1			1	83,923
65				1				1	217,039
67				1				1	80,952
68			1			1		2	269,085
72			1	1				2	128,563
Totals			10	33	65	42	10	160	\$14,899,900

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: 22.8 years
Annual Pay: \$93,124

* Includes purchased service.

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

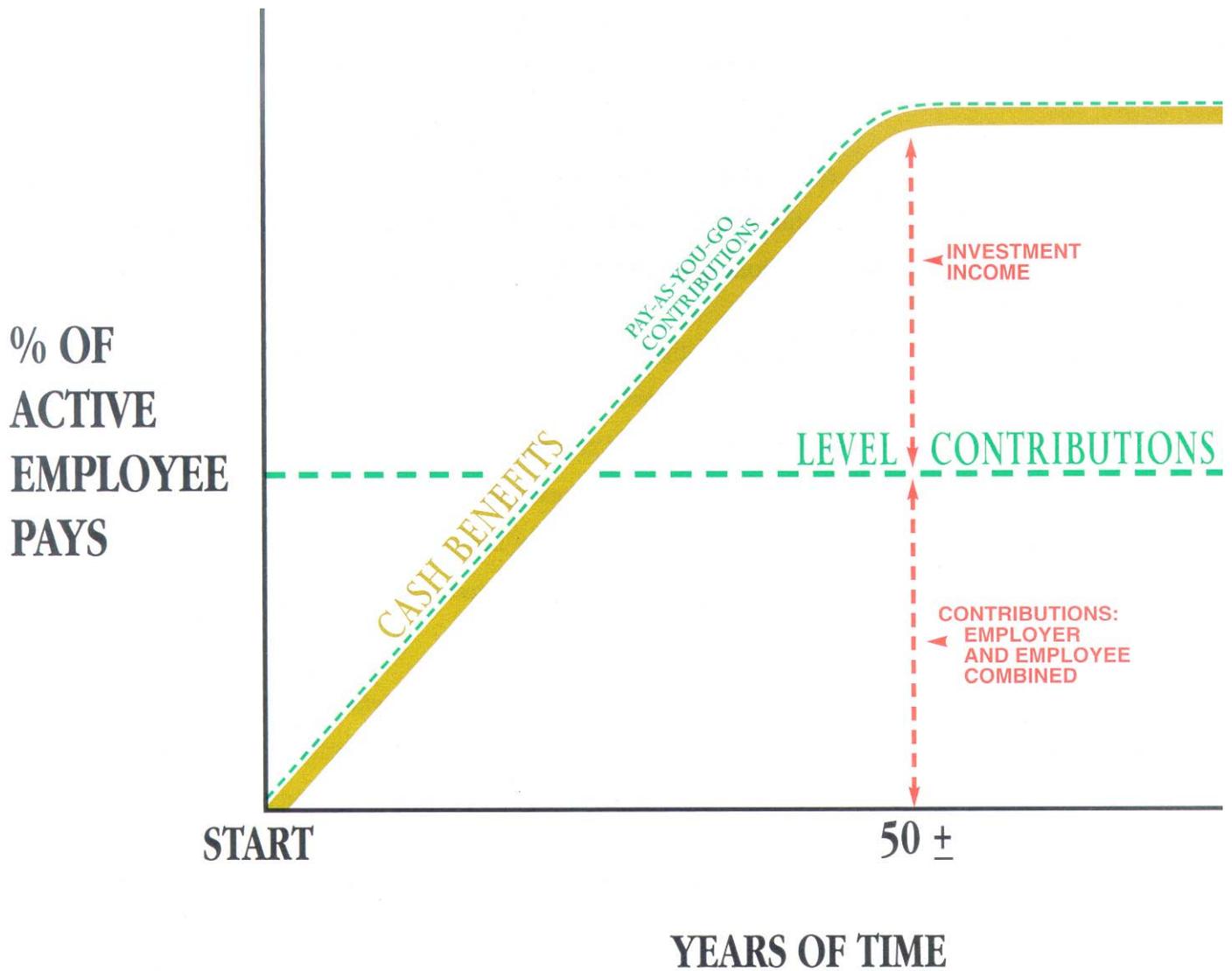
. . . plus . . .

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:

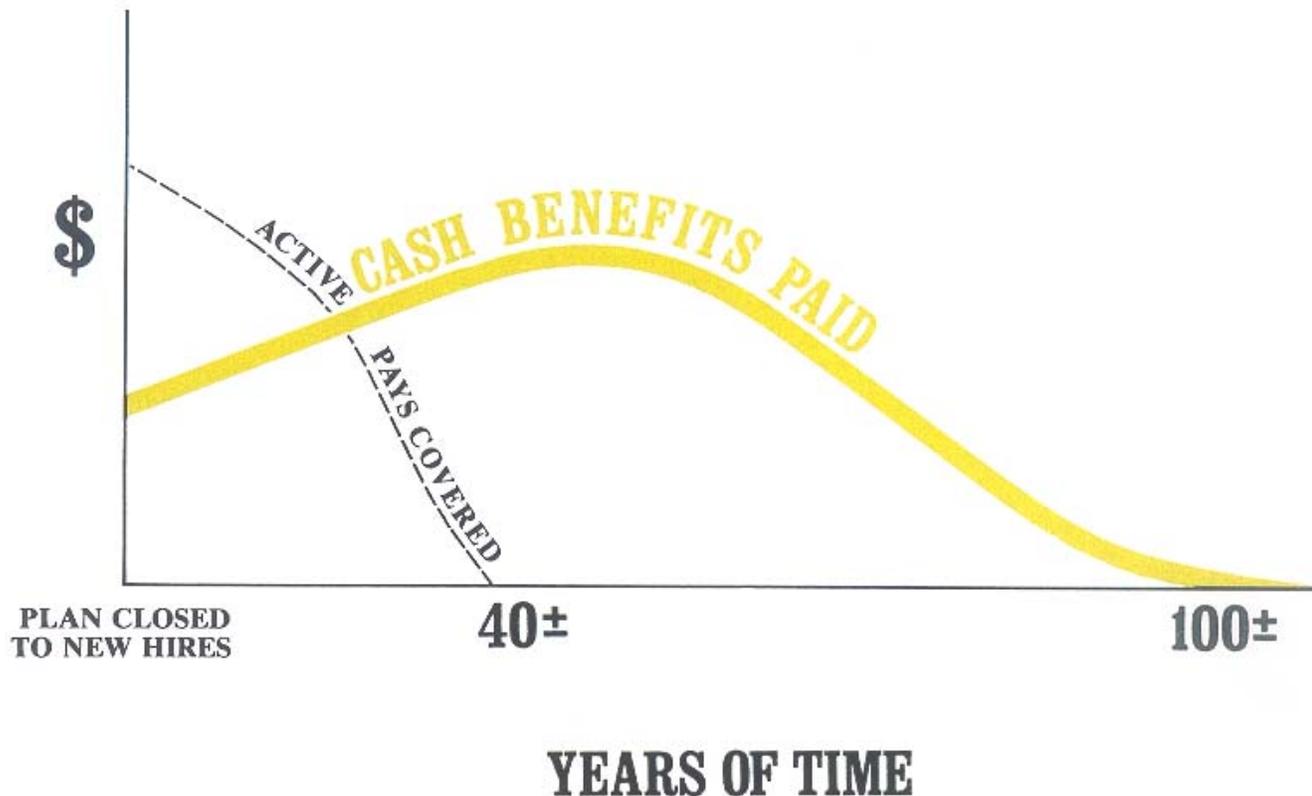
Economic Risk Areas

- 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;
- 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.

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 4.0%.

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.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

Investment Return (net of administrative expenses).

8.0% per year, compounded annually. This rate consists of a real rate of return of **4.0%** a year plus a long-term rate of wage inflation of **4.0%** a year.

No specific Price Inflation assumption is made for this valuation. However, the above assumptions would be consistent with a price inflation assumption in the 3% area.

This assumption is used to equate the value of payments due at different points in time and was first used for the September 30, 1998 valuation. Approximate rates of investment return, for the purpose of comparisons with assumed rates, are shown below.

	Year Ended September 30					5-Year Average
	2008	2007	2006	2005	2004	
Recognized Rate of Return	5.5%	11.7%	10.3%	7.1%	(0.2)%	6.8%

The nominal rate of return was computed using the approximate formula $i = I \text{ divided by } 1/2 (A + B - D)$, 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			
Other		Sheriffs	
Age	Increase	Service	Increase
20	3.70%	5	4.22%
25	3.40%	10	3.38%
30	2.50%	15	2.54%
35	1.90%	20	2.18%
40	1.60%	25	2.04%
45	1.20%	30	1.76%
50	1.00%	35	1.06%
55	0.80%	40	0.64%
60	0.50%	60	0.60%
65 & Over	0.00%	61 & Over	0.00%
Ref:	107	Ref:	110

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, 2004 actuarial valuation.

Rates of separation from active membership were as follows:

% of Active Members Separating Within the Next Year							
Other				Sheriffs			
Ages		Service (Plan 5 only)		Ages		Service (Plan 5 only)	
20	6.00%	0 - 1	20%	20	4.70%	0 - 1	15%
21	6.00%	1 - 2	15%	21	4.70%	1 - 2	13%
22	6.00%	2 - 3	12%	22	4.70%	2 - 3	10%
23	6.00%	3 - 4	10%	23	4.70%	3 - 4	7%
24	6.00%	4 - 5	7%	24	4.70%	4 - 5	5%
25	6.00%			25	4.70%		
30	6.00%			30	3.78%		
35	4.50%			35	2.86%		
40	3.50%			40	1.96%		
45	3.00%			45	1.30%		
50	2.00%			50	0.98%		
55	1.00%			55	0.66%		
60 & Over	0.00%			60 & Over	0.21%		
Ref:	290		31	Ref:	660		148

Rates for all divisions were first used for the September 30, 2004 valuation.

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

Percent of Defined Benefit Active Members Retiring Within Next Year								
Retirement Ages	Plan 1 Non-Sheriffs	Plans 1, 2, & 3 Sheriffs	Plans 2, 3, & 5 Non-Sheriffs	Plan 5 Sheriffs	Service Years	Plan 1 Non-Sheriffs	Plans 1, 2, & 3 Sheriffs	Plan 5 Sheriffs
					25		22%	
					26		20%	
					27		20%	
					28		30%	
					29		40%	
50	25%				30	30%	50%	22%
51	25%				31	30%	25%	20%
52	25%				32	30%	25%	20%
53	25%				33	30%	25%	30%
54	25%				34	30%	25%	40%
55	25%	30%	10%	25%	35	30%	100%	50%
56	25%	30%	10%	25%	36	30%	100%	25%
57	25%	30%	10%	25%	37	30%	100%	25%
58	25%	30%	10%	25%	38	30%	100%	25%
59	25%	30%	10%	25%	39	30%	100%	25%
60	25%	25%	10%	25%	40 & Over	100%	100%	100%
61	25%	25%	10%	25%				
62	35%	35%	20%	25%				
63	35%	35%	20%	27%				
64	35%	35%	30%	27%				
65	35%	35%	50%	27%				
66	35%	35%	30%	27%				
67	35%	35%	40%	27%				
68	35%	35%	50%	30%				
69	35%	35%	80%	30%				
70 & Over	100%	100%	100%	100%				
Ref:	560	1704	92	369	Ref:	556	957	957

The rates were first used for the September 30, 2004 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		
	Non-Sheriffs (Plan 1 only)		Others
20	0.08%		0.10%
25	0.08%		0.10%
30	0.08%		0.07%
35	0.08%		0.12%
40	0.20%		0.28%
45	0.26%		0.51%
50	0.49%		0.81%
55	0.89%		1.13%
60	1.41%		1.44%
Ref	9	x 1	8 x 1

Number of active members: The number of active members was assumed to remain constant.

The mortality table used to measure pre and post-retirement mortality was the 1983 Group Annuity Mortality Table. This assumption was first used for the September 30, 1998 supplemental 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.

Sample Attained Ages	Single Life Retirement Values			
	Present Value of \$1 Monthly for Life		Future Life Expectancy (years)	
	Men	Women	Men	Women
45	\$138.18	\$144.67	33.74	39.69
50	132.10	140.42	29.18	34.92
55	124.57	134.74	24.82	30.24
60	115.04	127.24	20.64	25.67
65	103.26	117.61	16.69	21.29
70	90.18	105.53	13.18	17.13
75	76.40	91.57	10.15	13.37
80	62.65	77.16	7.64	10.20
Ref:	30 x 1.00	31 x 1.00		

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

SEPTEMBER 30, 2008

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 based upon the age nearest birthday and the exact fractional service 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 mortality decrements do not operate during the first 5 years of service. Disability and turnover do not operate during retirement eligibility.
Normal Form of Benefit:	The assumed normal form of benefit is the straight life form.
Adjustments:	<p>Age and service benefits were increased by the following percentages to account for lump sum redemptions of unused sick leave and vacation time at retirement: General Plan One: 5%. General Plan Two: 3%. General Plans Three and Five: 7%. Airport Plans One and Three, 5%. Airport Plans Two and Five: 2%.</p> <p>Age and service benefits were increased by 1% to account for missing or incomplete data.</p> <p>Straight Life amounts are not provided for retired members who elect the pop-up provision. Retiree liabilities were increased by 2% to account for the plan's pop-up provision.</p>
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 1971 Group Annuity Mortality Table projected to 1984, set back six years for females with an 85% Unisex Blend.

SECTION D

FINANCIAL REPORTING

This information is presented in draft form for review by the System's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the System's financial statements.

**STATEMENT OF MARKET VALUE OF ASSETS
AS OF SEPTEMBER 30, 2007 AND SEPTEMBER 30, 2008**

	2008	2007
Assets:		
Cash and short-term investments	\$ 41,054,953	\$ 23,609,199
Receivables:		
Accrued interest and dividends	1,628,053	1,664,057
Investments, at fair value:		
U.S. Government Bonds	65,666,797	76,399,044
Corporate Bonds	49,604,584	43,359,521
Capital Assets	0	5,067
Bond Mutual Funds	17,052,628	16,408,850
Mortgages	0	0
Stock Mutual Funds	192,530,737	191,618,936
Real Estate Investment Trusts	78,858,956	85,499,339
Investments in Partnerships	110,020,545	90,851,430
Stocks	309,236,993	504,188,892
Other	4,343,057	9,382,116
	827,314,297	1,017,713,195
Total Assets	\$869,997,303	\$1,042,986,451
Liabilities		
Payables	10,469,526	5,008,047
Net assets held in trust for pension benefits (A schedule of funding progress for the plan is presented on page D-4.)	\$ 859,527,777	\$1,037,978,404

**STATEMENT OF CHANGES IN MARKET VALUE OF NET ASSETS FOR THE
FISCAL YEARS ENDED SEPTEMBER 30, 2007 AND SEPTEMBER 30, 2008**

	Reconciliation as of September 30	
	2008	2007
Additions:		
Contributions		
Employer	\$ 18,419,624	\$ 15,398,157
Plan members	70,096,239	7,834,258
Total contributions	88,515,863	23,232,415
Investment Income	(148,972,587)	144,677,156
Total Additions	(60,456,724)	167,909,571
Deductions:		
Benefits	101,778,361	101,202,753
13th Check and Refunds	9,269,920	9,215,875
Investment expenses	3,709,573	3,785,565
Administrative expenses & Other	3,236,049	3,142,335
Total deductions	117,993,903	117,346,528
Net Increase	(178,450,627)	50,563,043
Net assets held in trust for pension benefits:		
Beginning of year	1,037,978,404	987,415,361
End of year	\$859,527,777	\$1,037,978,404

@ Includes 13th check disbursement.

Plan Description. The Wayne County Employees' Retirement System is a defined benefit and defined contribution pension plan that covers the employees of Wayne County.

The plan provides retirement, disability, and death benefits to plan members and their beneficiaries.

Contributions. Plan members' contributions are in accordance with Section B.

The employer's funding policy provides for periodic employer contributions based upon a *fundamental financial objective of having rates of contribution which remain relatively level from generation to generation of Wayne County citizens.* To determine the employer contribution rates and to assess the extent to which the fundamental financial objective is being achieved, the System has actuarial valuations prepared annually. In preparing those valuations, the individual entry age normal actuarial cost method is used to determine normal cost and actuarial accrued liabilities.

On the basis of the September 30, 2008 actuarial valuation, the employer contributions were determined to be as follows:

Contributions for	% of Payroll 20-year Amortization	
	General Fund	Airport
Normal Cost	10.09 %	6.49 %
Unfunded Accrued Liabilities	17.73 %	7.31 %
Total Employer DB Plan Contributions	27.82 %	13.80 %

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
(DOLLAR AMOUNTS IN MILLIONS)

TOTAL WCERS

Actuarial Valuation Date	Actuarial Value of Assets* (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered+ Payroll (c)	UAAL as a Percent of Covered Payroll [(b)-(a)]/(c)
11/30/1993#	\$ 749.5	\$ 777.5	\$ 28.0	96.4 %	\$184.0	15.2 %
11/30/1994	766.1	783.5	17.4	97.8 %	182.7	9.5 %
11/30/1995#	781.4	829.2	47.8	94.2 %	192.9	24.8 %
11/30/1996#@	866.9	866.9	0.0	100.0 %	208.6	--
11/30/1997#	877.9	870.1	(7.8)	100.9 %	224.1	--
9/30/1998#	933.0	906.6	(26.4)	102.9 %	231.0	--
9/30/1999	965.8	915.3	(50.5)	105.5 %	256.4	--
9/30/2000&	1,028.6	947.6	(81.0)	108.5 %	275.6	--
9/30/2001#	1,041.6	979.2	(62.4)	106.4 %	294.1	--
9/30/2002	1,043.3	1,010.7	(32.6)	103.2 %	309.0	--
9/30/2003	996.6	1,007.7	11.1	98.9 %	289.3	3.8 %
9/30/2004#	910.1	959.7	49.6	94.8 %	343.3	14.4 %
9/30/2005	891.4	969.3	77.9	92.0 %	298.6	26.1 %
9/30/2006#	894.5	1,000.2	105.7	89.4 %	319.6	33.1 %
9/30/2007#	947.8	1,169.5	221.7	81.0 %	325.4	68.1 %
9/30/2008#	985.0	1,338.8	353.8	73.6 %	330.0	107.2 %

After changes in benefit provisions or revised actuarial assumptions.

* Excludes reserve for inflation equity.

+ Includes defined contribution plan payroll.

@ After one-time adjustment equal to UAAL.

& Change in Inflation Equity calculation.

Note: Hybrid Plan 5 exists September 30, 2003 and later. Hybrid Plan 6 exists October 1, 2008.

**SCHEDULE OF EMPLOYER CONTRIBUTIONS
DEFINED BENEFIT PLANS ONLY
(\$ IN THOUSANDS)**

Fiscal Year Ended September 30@	Annual Required Contributions		WCERS Total Actual Contributions +
	General Fund	Airport	
2001	4.79%	4.79%	\$ 39
2002	0.0%	0.0%	45
2003&	3.14%	3.14%	3,002
2004	8.06%	8.06%	7,374
2005	12.30%	12.30%	11,106
2006	13.80%	13.80%	12,663
2007	16.03%	16.03%	15,398
2008	15.82%	15.82%	18,420
2009	23.67%	13.48%	N/A
2010	27.82%	13.80%	N/A

@ Includes Hybrid Plan 5 after 2003.

& Transfers from DC Plan 4 to DB Plan 5 in 2004 resulted in larger contributions than anticipated. The amount of transfer activity, if any, could not have been known in advance.

+ Actual contributions are based on a percent of current payroll.

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	September 30, 2008
Actuarial cost method	Entry Age Normal
Amortization method	Level percent-of-payroll
Remaining amortization period	20 years – open
Asset valuation method	4-year smoothed market
Actuarial assumptions:	
Investment rate of return*	8.0%
Projected salary increases*	4.0% - 8.4%
Cost-of-living adjustments	N/A

* Includes wage inflation at 4.0%

September 17, 2009

Mr. Ronald Yee
Executive Director
Wayne County Employees' Retirement System
28 W. Adams, Suite 1900
Detroit, Michigan 48226

Dear Ron:

Enclosed are 45 copies of the September 30, 2008 Actuarial Valuation report for the Wayne County Employees' Retirement System.

Sincerely,

A handwritten signature in black ink that reads "Judith A. Kermans". The signature is written in a cursive style with a large, looping initial "J".

Judith A. Kermans

JAK:mr
Enclosures