

CERTIFICACIÓN NÚMERO 146 2014-2015

Yo, Ana Matanzo Vicens, Secretaria de la Junta de Gobierno de la Universidad de Puerto Rico, CERTIFICO QUE:

La Junta de Gobierno en su reunión ordinaria celebrada el 18 de mayo de 2015, luego de evaluar las recomendaciones de la Junta de Directores del Sistema de Retiro, según contenidas en la Resolución de ese cuerpo de 24 de octubre de 2014 (copia de la cual se incorpora como Anejo I) así como las recomendaciones de la Directora Ejecutiva de dicho Sistema y de su Comité de Asuntos Financieros y del Sistema de Retiro; y habiendo también considerado la información y datos contenidos en el Estudio de Experiencia del Sistema de Retiro para el periodo del 30 de junio de 2008 al 30 de junio de 2013, así como el informe de Valoración Actuarial al 30 de junio de 2014 sometido por la firma de actuarios Cavanaugh McDonald Consulting, Inc, (copia del cual se incorpora como Anejo II) y los estudios sobre diversos escenarios de amortización de la deuda actuarial realizados por dicha firma, acordó:

Establecer que la deuda actuarial del Sistema de Retiro de la Universidad de Puerto Rico será amortizada bajo un método de financiamiento cerrado, a un término de 40 años, a partir del 1 julio de 2015.

El Sistema de Retiro de la Universidad deberá realizar estudios de experiencia en periodos no mayores de cinco (5) años.

Y PARA QUE ASÍ CONSTE, expido la presente Certificación, en San Juan,

Puerto Rico, 4 de junio de 2015.

Ana Matanzo Vicens Secretaria



Sistema de Retiro Universidad de Puerto Rico Junta de Retiro

RESOLUCIÓN

La Junta de Retiro, en su reunión ordinaria celebrada el viernes, 24 de octubre de 2014, aprobó la siguiente Resolución:

El Sistema de Retiro de la Universidad de Puerto Rico tiene una Por cuanto

obligación ineludible de cumplir con el pago de pensiones a sus

jubilados en el presente y en el futuro,

La Junta de Retiro, en cumplimiento de su responsabilidad debe

tomar medidas para el fortalecimiento y sostenimiento del Sistema de Retiro bajo su estructura actual de beneficios

definidos,

Durante los últimos años el Sistema de Retiro ha confrontado un Por cuanto

flujo de efectivo negativo, teniendo como consecuencia de esto

que recurrir a la liquidación de activos del Fondo de Retiro.

Por Cuanto La Junta de Retiro recomendó y la Junta de Gobierno aprobó una

> enmienda al Inciso A de la Certificación Núm. 139 (2001-2002) de la Junta de Síndicos a los efectos de derogar la disposición que autoriza un aumento de tres por ciento (3%) cada dos años en el sueldo máximo cotizable. El inciso enmendado, lee de la

siguiente manera:

A. Ofrecer a los empleados participantes del Sistema de Retiro la

alternativa de elevar el sueldo máximo cotizable a \$60,000. efectivo el 1 de julio de 2002 e incrementar dicho máximo cotizable automáticamente y en forma prospectiva en un 3% cada dos años hasta el 30 de junio de 2014. A partir del 1 de

julio de 2014 se establece un sueldo máximo cotizable fijo de

\$69,556.44.

Por cuanto La Junta de Retiro ha trabajado intensamente para plantear

responsablemente estos ajustes al Sistema de Retiro para que en conjunto fortalezcan el plan de beneficios definidos para todos

los empleados activos y jubilados del Sistema,

La Junta de Retiro comunicó a la Junta de Gobierno de la Universidad de Puerto Rico la aprobación de los cambios actuariales recomendados en el Estudio de Experiencia que cubre el período de cinco años del 30 de junio de 2008 al 30 de junio de 2013, por la firma de consultores Cavanaugh Macdonald Consulting LLC, para implementarse a partir de la fecha de la

Por cuanto

Valuación Actuarial de 2014 en adelante. Las premisas actuariales aprobadas fueron las siguientes:

- 1. Rendimiento de activos (cambia de 8% a 7.75%)
- 2. Tasa de inflación (cambia de 3.5% a 3%)
- 3. Aumento en la nómina total (cambia de 5% a 3%)
- 4. Aumento en los salarios individuales (cambia de 5% a 3.75%)
- 5. Amortización de la deuda actuarial (cambia de periodo de 30 años abierto a periodo de 30 años cerrado)
- 6. Las premisas demográficas de cuando se espera que se retiren los activos y la tabla de mortalidad se ajustaron de acuerdo a las recomendaciones del actuario.

Por Tanto

La Junta de Retiro, recomendó la aprobación de cambios adicionales a la pensión no ocupacional que considera necesarios al Artículo IV del Reglamento de Pensiones del Sistema de Retiro. Estos cambios son:

- 1. Que se aumente de 10 a 15 años de servicio acreditados del participante para cualificar.
- 2. Que el cálculo para determinar la pensión a pagar, si cualificara para la misma, se haga a base de los años de servicio.
- 3. Que el monto de la pensión sea el 90% de la pensión por servicio que le hubiera correspondido.

Estos cambios serán efectivos tan pronto sean aprobados por la Junta de Gobierno.

Por Tanto

La Junta de Retiro recomienda la aprobación de cambios en los requisitos para acogerse a los beneficios de retiro por años de edad y servicio.

- 1. Aumentar la edad de retiro de 55 a 58 años de edad para aquellos empleados que tengan menos de 25 años de servicio acreditados.
- 2. Aumentar la aportación individual en 1% del sueldo mensual de los participantes activos que tengan menos de 25 años de servicio acreditados.
- 3. La aportación individual al Sistema de Retiro de los empleados nuevos será el 12% del sueldo mensual.
- 4. Se propone que estos cambios entren en vigor al 1 de julio de 2015.
- 5. La Junta de Retiro presentará estos cambios a la Comunidad Universitaria para su discusión.

Se emite, hoy, 24 de octubre de 2014, en las Oficinas del Sistema de Retiro de La Universidad de Puerto Rico, San Juan, Puerto Rico.

Diana Rivera Viera

Dia Ruin Vier

Presidenta



February 6, 2015

Ms. Maria del Carmen López Fuentes Executive Director University of Puerto Rico Retirement System 1019 Ponce de Leon Avenue Rio Piedras, PR 00925

Dear Ms. López:

Enclosed are 40 copies of the "University of Puerto Rico Retirement System Actuarial Valuation Report as of June 30, 2014."

Please let us know if you have any questions concerning the report.

Sincerely,

José I. Fernández, ASA, FCA, MAAA, EA

Principal and Consulting Actuary

JIF:dpb

Enclosure

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The experience and dedication you deserve



University of Puerto Rico Retirement System

Actuarial Valuation Valuation Report

As of June 30, 2014





The experience and dedication you deserve

February 6, 2015

Board of Trustees & Retirement Board University of Puerto Rico Retirement System P.O. Box 21769 San Juan, Puerto Rico 00925

Dear Board Members:

We are pleased to submit the results of the annual actuarial valuation of the University of Puerto Rico Retirement System (the System) as of June 30, 2014.

The purpose of this report is to provide a summary of the funded status of the System as of June 30, 2014, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 27 (GASB 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation results indicate that the combined employer and member contribution rates in the table below are sufficient to fund the normal cost for all members and the unfunded accrued liability. In the table below we also present the estimated required University contribution amount for fiscal year 2015 to fund the System. For comparison we present the contribution rates and amounts for fiscal year 2014 based on the 2013 valuation.

| Valuation Date | June 30, 2014 | June 30, 2013 | |
|---|---------------|---------------|--|
| Recommended Contributions for Fiscal Year | 2015 | 2014 | |
| Total Contribution Rate | 25.00% | 21.24% | |
| Average Member Contribution Rate | 7.71% | 6.08% | |
| University Contribution Rate | 17.29% | 15.16% | |
| Estimated University Contribution (\$'s millions) | \$ 86.6 | \$ 74.5 | |



The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the individual entry age normal cost method and openend supplemental liability. The valuation reflects the assumption and method changes based on the most recent experience study of the Retirement System. A five-year smoothing of the market value of assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll over a closed 30-year period, on the assumption that payroll will increase by 3% annually and the amortization period will decrease by one year until reaching 0 years. The assumptions recommended by the actuary and adopted by the Board are, in the aggregate, reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 27.

The recommended assumptions and methods include amortization of the unfunded accrued liability over a closed 30-year period. As requested, below we also present the University contribution rate and estimated contribution amount assuming an open 30-year period. Since as of June 30, 2014 both the closed and open periods are 30 years, the contribution rates and amounts are the same under both methods.

| Unfunded Accrued Liability Amortization Method | Closed (Recommended) | Open |
|---|----------------------|----------|
| Contributions for Fiscal Year | 2015 | 2015 |
| Total Contribution Rate | 25.00% | 25.00% |
| Average Member Contribution Rate | 7.71% | 7.71% |
| University Contribution Rate | 17.29% | 17.29% |
| Estimated University Contribution (\$'s millions) | \$ 86.6 | \$ 86.6 |
| Amortization Period | 30 years | 30 years |



All historical information that references a valuation date prior to June 30, 2013 was prepared by the previous actuary.

Future actuarial results may differ significantly from the current results 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

José I. Fernández, ASA, FCA, MAAA, EA

Principal and Consulting Actuary



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Section I – Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

| | June 30, 2014 | June 30, 2013 |
|---|------------------------------------|------------------------------------|
| Number of Active Members | 10,711 | 11,008 |
| Annual Covered Payroll (Salary used for valuation purposes) | \$501,190,385 | \$491,291,305 |
| Number of Retired and Disabled Members and Survivors | 8,081 | 7,863 |
| Annual Benefits | \$170,304,912 | \$168,669,795 |
| Number of Terminated Vested Members Number of Non-Vested Terminated Members | 476 7,941 | 453 7,941 |
| Total Assets Actuarial Value Market Value | \$1,179,752,077 \$1,325,364,820 | \$1,070,402,499 \$1,161,568,590 |
| Actuarial Accrued Liability | \$2,684,515,789 | \$2,622,367,510 |
| Unfunded Actuarial Accrued Liability | \$1,504,763,712 | \$1,551,965,011 |
| RECOMMENDED CONTRIBUTIONS FOR FISCAL YEAR ENDING | June 30, 2015 | June 30, 2014 |
| Total Contribution Rate: Normal (Including Administrative Expenses) Unfunded Accrued Liability Total Contribution Rate | 7.15% <u>17.85%</u> 25.00% | 5.86% <u>15.38%</u> 21.24% |
| Average Member Contribution Rate University Contribution Rate | 7.71% 17.29% | 6.08% 15.16% |
| Amortization Period | 30 years | 30 years |





Section I – Summary of Principal Results

- Comments on the valuation results as of June 30, 2014 are given in Section IV and further discussion of the contribution levels is set out in Section V.
- 3. Schedule B shows the development of the actuarial value of assets. Schedules D and E of this report outline the full set of actuarial assumptions and methods used in the current valuation. Based on the most recent experience study of the Retirement System, the following changes to the assumptions have been adopted by the Retirement Board since the previous valuation:
 - Change assumed rates of termination from age-based to service-based rates
 - Reduce assumed rates of retirement
 - Reduce assumed rates of disability retirement
 - Update mortality to RP-2000 projected to 2020
 - Reduce assumed salary increases to 3.75%
 - Reduce assumed rate of investment return to 7.75%
 - Reduce price inflation assumption to 3.0%
 - Reduce wage inflation assumption to 3.75%
 - Reduce payroll growth assumption to 3.0%
 - Increase administrative expense load to 0.70% of payroll
 - Change amortization method from 30 year open to 30 year closed
- 4. The valuation takes into account the effect of amendments to the System through the valuation date. The Main Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. Effective July 1, 2014, the compensation limit for Certification 139 was frozen at \$69,556.44. There were no other changes to the provisions since the previous valuation.





Section II – Membership Data

1. Membership data for use in the valuation was furnished by the System. The following table shows the number of active members and their annual compensation for valuation purposes, as of June 30, 2014, on which the valuation was based.

TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF JUNE 30, 2014

| Number | Compensation | Average Compensation | Average Age | Average Service |
|--------|---------------|-------------------------|----------------|--------------------|
| 10,711 | \$501,190,385 | \$46,792 | 49.1 | 17.4 |

2. The following table shows a four-year history of active member valuation data.

TABLE 2
SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA

| Valuation Date | Number | Annual Compensation | Average Annual Compensation | % Increase in Average Compensation |
|-------------------|--------|---------------------|--------------------------------|--|
| 6/30/2014 | 10,711 | 501,190,385 | 46,792 | 4.8 |
| 6/30/2013 | 11,008 | 491,291,305 | 44,630 | -0.3 |
| 6/30/2012 | 11,148 | 499,027,788 | 44,764 | -0.1 |
| 6/30/2011 | 11,398 | 510,706,620 | 44,807 | |





Section II - Membership Data

3. The following table shows the number and annual retirement benefits payable to retired members and survivors on the roll of the System as of the valuation date.

TABLE 3

THE NUMBER AND ANNUAL RETIREMENT BENEFITS
OF RETIRED MEMBERS AND SURVIVORS OF DECEASED MEMBERS
AS OF JUNE 30, 2014

| Type of Retirement | Number | Annual Benefits | Average Monthly Benefit | Average Age | Actuarial Liabilities |
|-----------------------|--------|-----------------|-------------------------------|-------------|--------------------------|
| Retiree | 6,864 | \$160,028,073 | \$1,943 | 71.4 | \$1,445,874,987 |
| Disability | 1,146 | \$9,957,886 | \$724 | 67.1 | \$77,475,391 |
| Beneficiary | 71 | \$318,953 | \$374 | 65.2 | \$2,721,593 |
| Total | 8,081 | \$170,304,912 | \$1,756 | | \$1,526,071,971 |

4. Schedule G shows the distribution by age and service of the number and annual compensation of active members.





Section III - Assets

Schedule C shows the additions and deductions for the year preceding the valuation date and a reconciliation of the fund balances at market value. The market value of assets as of June 30, 2014 used to determine the actuarial value of assets is shown below. The market related actuarial value of assets used for the current valuation was \$1,179,752,077. Schedule B shows the development of the actuarial value of assets. The following table shows historical asset information.

TABLE 4
HISTORICAL ASSET INFORMATION
(in \$1,000s)

| Plan Year | Market Value as of June 30 | Actuarial Value as of June 30 | Benefit Payments | Expenses | University and Member Contribs. | Market Value Yield | Actuarial Value Yield |
|--------------|-------------------------------|-------------------------------------|---------------------|----------|--|--------------------------|-----------------------------|
| 2014 | 1,325,365 | 1,179,752 | 169,163 | 3,914 | 129,589 | 18.2% | 14.6% |
| 2013 | 1,161,569 | 1,070,402 | 162,182 | 3,777 | 115,333 | 15.2% | 8.1% |
| 2012 | 1,055,909 | 1,039,441 | 153,890 | 3,518 | 114,405 | 4.5% | 4.0% |
| 2011 | 1,052,467 | 1,041,628 | 143,198 | 3,070 | 110,823 | 20.9% | 4.8% |
| 2010 | 902,867 | 1,028,918 | 133,113 | 3,709 | 112,915 | 13.0% | 1.8% |
| 2009 | 821,867 | 1,034,645 | 124,353 | 3,935 | 116,436 | -12.7% | 2.1% |
| 2008 | 954,307 | 1,024,987 | 118,779 | 3,640 | 124,518 | -5.0% | 7.3% |
| 2007 | 1,002,117 | 953,197 | 110,831 | 3,443 | 118,341 | 14.8% | 9.2% |
| 2006 | 869,349 | 869,211 | 105,090 | 3,263 | 112,368 | 7.3% | 5.4% |
| 2005 | 806,229 | 820,501 | 100,459 | 3,781 | 105,755 | 8.2% | 1.9% |
| 2004 | 743,761 | 803,498 | 94,188 | 2,675 | 102,369 | 11.4% | 2.5% |
| 2003 | 662,518 | 778,265 | 89,313 | 2,420 | 88,988 | 4.0% | 2.1% |
| 2002 | 639,813 | 765,329 | 84,455 | 2,105 | 78,220 | -5.6% | 12.8% |
| 2001 | 686,067 | 686,067 | 78,613 | 2,178 | 78,424 | -8.7% | -8.7% |
| 2000 | 754,280 | 754,280 | 72,043 | 2,215 | 72,036 | 16.4% | 16.4% |
| 1999 | 650,295 | 650,295 | 64,269 | 6,245 | 75,034 | 10.1% | 10.1% |
| 1998 | 586,095 | 586,095 | 58,507 | 1,763 | 66,866 | 14.6% | 14.6% |





Section IV - Comments on Valuation

- 1. The total valuation balance sheet on account of benefits shows that the System has total prospective benefit liabilities of \$2,940,879,329, of which \$1,526,071,971 is for the prospective benefits payable on account of present retired members, disabled members and survivors of deceased members, \$46,542,365 is for the prospective benefits payable on account of inactive members entitled to future benefits, and \$1,368,264,993 is for the prospective benefits payable on account of present active members. Against these benefit liabilities the System has a total present actuarial value of assets of \$1,179,752,077 as of June 30, 2014. The difference of \$1,761,127,252 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of benefits. Of this amount, \$256,363,540 is the present value of future contributions expected to be made by members, and the balance of \$1,504,763,712 represents future University contributions.
- Since the average member contribution rate exceeds the Normal Rate of the System, the University's contributions on account of benefits consist of accrued liability contributions only.
- 3. It is recommended that the accrued liability contribution rate payable on account of retirement benefits be set at 17.85% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of \$1,504,763,712 over 30 years beginning June 30, 2014 on the assumption that the aggregate payroll will increase by 3% each year. Of the total unfunded accrued liability rate of 17.85%, the employer will contribute 17.29% and the extra 0.56% of payroll is from the average member contribution rate, which is 7.71%, that is in excess of the total normal contribution rate of 7.15%.





Section V – Contributions Payable by Employer

The employer contribution rates according to the Rules and Regulations of the System are shown in the following table.

TABLE 5

| | June 30, 2014 | June 30, 2013 |
|---|----------------------|----------------------|
| A. Funding Results | | |
| Present Value of Future Benefits | \$2,940,879,329 | \$2,793,837,407 |
| 2. Actuarial Value of Assets | <u>1,179,752,077</u> | <u>1,070,402,499</u> |
| 3. PV of Future Contributions (1) – (2) | 1,761,127,252 | 1,723,434,908 |
| 4. PV of Future Member Contributions | <u>256,363,540</u> | <u>171,469,897</u> |
| 5. PV of Future University Contributions (3) – (4) | 1,504,763,712 | 1,551,965,011 |
| PV of Future University Normal Conts. | <u>0</u> | <u>0</u> |
| 7. Unfunded Accrued Liability (5) – (6) | 1,504,763,712 | 1,551,965,011 |
| B. Annual Contribution Rate (% of payroll) | | |
| 1.Total | | |
| a. Normal rate (including expenses) | 7.15% | 5.86% |
| b. Unfunded accrued liability | <u>17.85%</u> | <u>15.38%</u> |
| c. Sub-total | 25.00% | 21.24% |
| 2. Members | <u>7.71%</u> | <u>6.08%</u> |
| 3. University | 17.29% | 15.16% |
| | | |





Section VI – Accounting Information

 Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS AS OF JUNE 30, 2014

| Group | Number |
|---|---------------|
| Retirees and beneficiaries currently receiving benefits | 8,081 |
| Terminated employees entitled to but not yet receiving benefits | 8,417 |
| Active Members | <u>10,711</u> |
| Total | 27,209 |

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

| Actuarial Valuation Date | Value of Plan Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded AAL (UAAL) (b – a) | Funded Ratio (a / b) | Covered Payroll (c) | UAAL as a Percentage of Covered Payroll ((b – a) / (c)) |
|--------------------------------|--------------------------------|--|-----------------------------------|----------------------------|---------------------------|---|
| 6/30/2014 | 1,179,752,077 | 2,684,515,789 | 1,504,763,712 | 43.9 | 501,190,385 | 300.2% |
| 6/30/2013 | 1,070,402,499 | 2,622,367,510 | 1,551,965,011 | 40.8 | 491,291,305 | 315.9% |
| 6/30/2012 | 1,039,441,000 | 2,617,989,147 | 1,578,548,147 | 39.7 | 499,027,788 | 316.3% |
| 6/30/2011 | 1,041,628,000 | 2,542,444,021 | 1,500,816,021 | 41.0 | 510,706,620 | 293.9% |
| 6/30/2010 | 1,028,918,000 | 2,436,913,244 | 1,407,995,244 | 42.2 | 540,867,018 | 260.3% |
| 6/30/2009 | 1,034,645,000 | 2,331,619,466 | 1,296,974,466 | 44.4 | 570,122,184 | 227.5% |





Section VI – Accounting Information

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2014. All historical information that references a valuation date prior to June 30, 2013 was prepared by the previous actuary.

| Valuation Date | June 30, 2014 | |
|-------------------------------|-----------------------------|--|
| Actuarial Cost Method | Individual Entry Age Normal | |
| Amortization Method | Level percent, closed | |
| Payroll Growth Rate | 3% | |
| Remaining Amortization Period | 30 years | |
| Asset Valuation Method | 5 Year Smoothed Market | |
| Actuarial Assumptions: | | |
| Investment rate of return* | 7.75% | |
| Projected salary increases* | 3.75% | |
| Cost-of-living adjustments | None | |
| *Includes inflation at | 3.00% | |
| | | |





SCHEDULE OF EMPLOYER CONTRIBUTIONS (\$ Millions)

| Fiscal Year | Annual Required Contribution (ARC) | Percent of ARC Contributed |
|-------------|---------------------------------------|-------------------------------|
| 2014 | \$78.2 | 117.2% |
| 2013 | 77.8 | 100.9% |
| 2012 | 72.2 | 104.1% |
| 2011 | 68.5 | 103.3% |
| 2010 | 63.7 | 111.7% |
| 2009 | 64.1 | 113.3% |
| 2008 | 59.2 | 137.7% |
| 2007 | 57.5 | 136.1% |
| 2006 | 55.4 | 133.0% |





CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL) DURING PLAN YEAR

| Beginning of Year: a) Unfunded Actuarial Accrued Liability b) Total Normal Cost with Administrative Expenses c) Expected Total Contributions based on prior valuation contribution rate with Administrative Expenses d) Actual Total Contributions based on contribution rate applicable to current fiscal year | \$1,551,965,011 28,773,996 104,339,945 129,588,674 |
|---|---|
| 2) End of Year: a) Expected UAAL from previous valuation [(1a) + (1b)] * 1.08 – (1c) * 1.04 b) Expected UAAL on actual contributions [(1a) + (1b)] * 1.08 – (1d) * 1.04 c) Increase (Decrease) in UAAL due to deficiency (surplus) (2b) – (2a) | \$1,598,684,585 1,572,425,907 (26,258,678) |
| 3) Gains (Losses) on Year's Activities a) Liability – Assumed vs. Actual b) Assets – Assumed vs. Actual c) Change in Plan Assumptions d) Change in Plan Provisions e) Change in Methods f) Total 4) Actual UAAL at End of Year (2a) + (2c) – (3f) | \$(22,624,736) 68,944,467 (6,202,119) 27,544,583 0 \$67,662,195 \$1,504,763,712 |

^{*} Expected Total Contributions are based on the Annual Required Contribution (ARC) rate, the average member contribution rate, and annual covered payroll as of the previous valuation date.





GAINS & LOSSES IN ACTUARIAL ACCRUED LIABILITIES DURING PLAN YEAR

| Type of Activity | Gain (or Loss) |
|--|-------------------|
| Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss. | \$7,544,031 |
| Disability Retirements. If disability claims are less than assumed, there is a gain. If more, a loss. | (2,071,864) |
| Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss. | (217,670) |
| Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss. | (7,774,507) |
| Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. | (3,145,146) |
| New Members. Additional unfunded accrued liability will produce a loss. | (2,250,670) |
| Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss. | 68,944,467 |
| Death After Retirement. If retirees live longer than assumed, there is a loss. If not as long, a gain. | (7,008,508) |
| Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc. | <u>18,558,276</u> |
| Gain (or Loss) During Year From Financial Experience | \$72,578,409 |
| Non-Recurring Items. Adjustments for plan amendments, assumptions changes and method changes. | <u>21,342,464</u> |
| Composite Gain (or Loss) During Year | \$93,920,873 |





VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES AS OF JUNE 30, 2014

| PRESENT AND PROSPECT | IVE ASSETS | |
|---|--|------------------------|
| Actuarial Value of Present Assets | | \$1,179,752,077 |
| Present Value of Future Member Contributions | | \$256,363,540 |
| Present Value of Future Employer Contributions | | |
| Normal Contributions | 0 | |
| Unfunded Accrued Liability Contributions | <u>\$1,504,763,712</u> | |
| Total Prospective Employer Contributions | | \$1,504,763,712 |
| Total Present and Prospective Assets | | \$2,940,879,329 |
| ACTUARIAL LIABILI | TIES | |
| Present Value of Benefits Payable on Account of Retired Members and Survivors of Deceased Members Now Drawing Retirement Benefits | | \$1,526,071,971 |
| Present Value of Prospective Benefits Payable on Account of Inactive Members | | \$46,542,365 |
| Present Value of Prospective Benefits Payable on Account of Present Active Members: | | |
| Service Retirement Benefits Disability Retirement Benefits Death Benefits Separation Benefits | \$1,275,343,050 \$26,429,411 \$31,637,063 <u>\$34,855,469</u> | |
| Total | | <u>\$1,368,264,993</u> |
| Total Actuarial Liabilities | | <u>\$2,940,879,329</u> |





SOLVENCY TEST

| Aggregate Accrued Liabilities | | | | | | ed By |
|--|--|--|---|--|------------------------------------|-----------------------------------|
| (1) Active Member Contributions | (2) Retired Members & Beneficiaries | (3) Active Members (Employer Financed Portion) | Actuarial Value of Assets | (1) | (2) | (3) |
| \$472,105,689 | \$1,556,930,333 | \$655,479,767 | \$1,179,752,077 | 100.0% | 45.5% | 0.0% |
| \$444,754,422 | \$1,359,422,890 | \$818,190,198 | \$1,070,402,499 | 100.0% | 46.0% | 0.0% |
| \$429,151,111 | \$1,320,121,857 | \$868,716,179 | \$1,039,441,000 | 100.0% | 46.2% | 0.0% |
| | (1) Active Member Contributions \$472,105,689 \$444,754,422 | (1) (2) Active Retired Member Members & Beneficiaries \$472,105,689 \$1,556,930,333 \$444,754,422 \$1,359,422,890 | (3) Active (1) Active Retired Members Member Members & Beneficiaries \$472,105,689 \$1,556,930,333 \$655,479,767 \$444,754,422 \$1,359,422,890 \$818,190,198 | (1) (2) Members Active Retired (Employer Actuarial Member Members & Financed Value of Contributions Beneficiaries Portion) Assets \$472,105,689 \$1,556,930,333 \$655,479,767 \$1,179,752,077 \$444,754,422 \$1,359,422,890 \$818,190,198 \$1,070,402,499 | Aggregate Accrued Liabilities (3) | Aggregate Accrued Liabilities (3) |





DEVELOPMENT OF THE JUNE 30, 2014 ACTUARIAL VALUE OF ASSETS

| | Valuation date June 30: | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|----|---|-------------------------------------|---|--------------------------------|---------------|---------------|---------------|
| Α. | Actuarial Value Beginning of Year | 1,041,628,000 | \$1,039,441,230 | \$1,070,402,499 | | | |
| B. | Market Value End of Year | 1,055,908,704 | 1,161,568,590 | 1,325,364,820 | | | |
| C. | Market Value Beginning of Year Audit Adjustment Adjusted Market Value Beginning of Year | 1,052,466,560 0 1,052,466,560 | 1,055,908,704 (4,550) 1,055,904,154 | 1,161,568,590 1,161,568,590 | | | |
| D. | Cash Flow | 1,002,400,000 | 1,000,004,104 | 1,101,000,000 | | | |
| Б. | D1. Contributions | 114,404,938 | 115,333,059 | 129,588,674 | | | |
| | D2. Benefit Payments | (153,890,144) | (162,182,241) | (169,162,756) | | | |
| | D3. Administrative Expenses | (3,517,749) | (3,776,854) | (3,913,504) | | | |
| | D4. Investment Expenses | 0 | 0 | 0 | | | |
| | D5. Net | (43,002,955) | (50,626,036) | (43,487,586) | | | |
| E. | Investment Income | | , , , | , , , | | | |
| | E1. Market Total: BCD5. | 46,445,099 | 156,290,472 | 207,283,816 | | | |
| | E2. Assumed Rate | 8.00% | 8.00% | 8.00% | | | |
| | E3. Amount for Immediate Recognition | 82,477,207 | 82,447,291 | 91,185,984 | | | |
| | E4. Amount for Phased-In Recognition | (36,032,108) | 73,843,181 | 116,097,832 | | | |
| F. | Phased-In Recognition of Investment Income | | | | | | |
| | F1. Current Year: 0.20*E4. | (7,206,422) | 14,768,636 | 23,219,566 | 0 | 0 | 0 |
| | F2. First Prior Year | 22,846,600 | (7,206,422) | 14,768,636 | 23,219,566 | 0 | 0 |
| | F3. Second Prior Year | 8,022,800 | 22,846,600 | (7,206,422) | 14,768,636 | 23,219,566 | 0 |
| | F4. Third Prior Year | (39,291,600) | 8,022,800 | 22,846,600 | (7,206,422) | 14,768,636 | 23,219,566 |
| | F5. Fourth Prior Year | (26,032,400) | (39,291,600) | 8,022,800 | 22,846,600 | (7,206,422) | 14,768,636 |
| | F6. Total Recognized Investment Gain | (41,661,022) | (859,986) | 61,651,180 | 53,628,381 | 30,781,780 | 37,988,202 |
| G. | Actuarial Value End of Year: | | | | | | |
| | A.+D5.+E3.+F6. | \$1,039,441,230 | \$1,070,402,499 | \$1,179,752,077 | | | |
| H. | Difference Between Market & Actuarial Values | \$ 16,467,474 | \$ 91,166,091 | \$ 145,612,743 | \$ 91,984,361 | \$ 61,202,580 | \$ 23,214,378 |
| l. | Market Value Rate of Return | 4.51% | 15.17% | 18.19% | | | |
| J. | Actuarial Value Rate of Return | 4.00% 1 | 8.05% 1 | 14.57% ¹ | | | |
| | ¹ Reflects phase-in of 5-year "smoothed" market | value of assets. | | | | | |



Schedule C – Summary of Changes in Net Assets

SUMMARY OF CHANGES IN NET ASSETS FOR THE YEAR ENDING JUNE 30, 2014

| Additions for the Year | | |
|--|----------------------|------------------------|
| Contributions | | |
| Members | \$37,899,651 | |
| University | \$91,689,023 | |
| Transfers | <u>\$0</u> | |
| Total | | \$129,588,674 |
| Net Investment Income | | <u>\$207,283,816</u> |
| TOTAL | | \$336,872,490 |
| Deductions for the Year | | |
| Benefit Payments | (\$169,162,756) | |
| Administrative Expenses | <u>(\$3,913,504)</u> | |
| TOTAL | | (\$173,076,260) |
| Excess of Additions Over Deductions | | |
| TOTAL | | \$163,796,230 |
| Reconciliation of Asset Balances | | |
| Market Value of Assets as of June 30, 2013 Audit Adjustment | | \$1,161,568,590 \$0 |
| Excess of Additions over Deductions | | \$163,796,230 |
| Market Value of Assets as of June 30, 2014* | | \$1,325,364,820 |

^{*} The Market Value of Assets shown above is used in the determination of the Actuarial Value of Assets (Schedule B).





INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually (net of investment expenses).

INFLATION ASSUMPTION: 3.00% per year.

PAYROLL GROWTH ASSUMPTION: 3.00% per year

ADMINISTRATIVE EXPENSE ASSUMPTION: 0.70% of total payroll of covered employees

PERCENT MARRIED: 80% of employees are assumed to be married, and wives are assumed to be the same age as their husbands.

ACTUARIAL METHOD: Individual Entry Age Normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. The unfunded actuarial accrued liability is amortized over a closed 30-year period beginning June 30, 2014. This amortization assumes future payroll increases of 3% per annum. See Schedule E for a detailed explanation.

DECREMENTS:

PRE-RETIREMENT MORTALITY: RP-2000 Healthy Annuitant Mortality for ages 50 and greater and the RP-2000 Combined Mortality table for ages less than 50 projected to 2020 using Scale BB, set back 5 years for males and set forward 1 year for females. Representative values are presented below.

| Age | Men | Women |
|-----|--------|--------|
| 20 | 0.025% | 0.018% |
| 25 | 0.033% | 0.020% |
| 30 | 0.035% | 0.029% |
| 35 | 0.042% | 0.048% |
| 40 | 0.073% | 0.073% |
| 45 | 0.102% | 0.115% |
| 50 | 0.142% | 0.232% |
| 55 | 0.524% | 0.348% |
| 60 | 0.603% | 0.555% |
| 64 | 0.719% | 0.814% |



• **POST-RETIREMENT HEALTHY MORTALITY:** RP-2000 Healthy Annuitant Mortality for ages 50 and greater and the RP-2000 Combined Mortality table for ages less than 50 projected to 2020 using Scale BB, set back 5 years for males and set forward 1 year for females. Representative values are presented below.

| Age | Men | Women |
|-----|---------|---------|
| 50 | 0.142% | 0.232% |
| 55 | 0.524% | 0.348% |
| 60 | 0.603% | 0.555% |
| 65 | 0.772% | 0.897% |
| 70 | 1.142% | 1.459% |
| 75 | 1.779% | 2.432% |
| 80 | 3.031% | 3.989% |
| 85 | 5.156% | 6.785% |
| 90 | 8.521% | 11.827% |
| 95 | 14.701% | 18.579% |

 POST-RETIREMENT DISABLED MORTALITY: RP-2000 Disabled Mortality projected to 2020 using Scale BB, set back 5 years for males and set forward 2 years for females. Representative values are presented below.

| Age | Men | Women |
|-----|--------|--------|
| 50 | 2.13% | 1.27% |
| 55 | 2.73% | 1.62% |
| 60 | 3.34% | 1.89% |
| 65 | 3.65% | 2.46% |
| 70 | 3.94% | 3.37% |
| 75 | 4.63% | 4.68% |
| 80 | 6.07% | 6.46% |
| 85 | 8.08% | 8.99% |
| 90 | 10.47% | 13.35% |
| 95 | 14.70% | 19.87% |

• **DISABILITY:** Representative values are presented below (65% of the projected disabilities are assumed to be due to occupational causes).





| Age | Men | Women |
|-----|--------|--------|
| 20 | 0.005% | 0.005% |
| 25 | 0.029% | 0.029% |
| 30 | 0.052% | 0.052% |
| 35 | 0.076% | 0.076% |
| 40 | 0.100% | 0.100% |
| 45 | 0.150% | 0.150% |
| 50 | 0.200% | 0.250% |
| 55 | 0.300% | 0.200% |
| 60 | 0.200% | 0.200% |

• **TERMINATION:** Assumed rates are presented below.

| Years of | |
|----------|------|
| Service | Rate |
| 0 | 22% |
| 1 | 22% |
| 2 | 15% |
| 3 | 10% |
| 4 | 7% |
| 5 | 7% |
| 6 | 5% |
| 7 | 4% |
| 8 | 3% |
| 9 | 3% |
| 10-14 | 2% |
| 15+ | 1% |





• **RETIREMENT:** Representative values are presented below.

| Age | Less than 25 Years of Service | 25 Years of Service or More, but Less than 30 | 30 or More Years of Service |
|-----|--|--|-----------------------------------|
| 45 | | | 9.5% |
| 50 | | | 9.5% |
| 55 | | 5% | 42% |
| 58 | 5% | 5% | 32% |
| 60 | 5% | 5% | 26% |
| 61 | 10% | 10% | 23% |
| 62 | 11% | 11% | 28% |
| 63 | 10% | 10% | 28% |
| 64 | 10% | 10% | 28% |
| 65 | 20% | 20% | 28% |
| 66 | 15% | 15% | 30% |
| 67 | 15% | 15% | 30% |
| 68 | 15% | 15% | 30% |
| 69 | 15% | 15% | 30% |
| 70+ | 100% | 100% | 100% |

ASSETS: The method of valuing assets is intended to recognize a "smoothed" market value of assets. Under this method, the difference between actual return on market value from investment experience and the expected return on market value is recognized over a 5-year period.

INTEREST CREDIT: 4% per annum on member contribution account balances.

SALARY INCREASES: 3.75% per annum





Schedule E – Actuarial Cost Method

- The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement, disability or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future interest earnings rate (currently 7.75%). The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected benefits payable to the present group of members and survivors.
- 2. The employer contributions required to support the benefits of the System are determined using the individual entry age normal cost method. Under this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit.

The portion of the actuarial present value allocated to a valuation year is called the normal cost. The normal cost is calculated for each individual member. The normal cost rate is defined as the total of the individual normal cost divided by the total annual covered payroll.

The portion of the actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of assets and (b) the actuarial present value of future normal cost is called the Unfunded Actuarial Accrued Liability (UAAL). The UAAL is amortized as a level percentage of the projected salaries of the present and future members of the System, over a 30 year period beginning June 30, 2014 on a closed basis.





- 1. Provisions applicable to those members who had completed 20 years of service by July 1, 1979 (Certification 7/7 Supplemented)
 - a) Service retirement annuity payable:
 - i. After 30 years of service; or
 - ii. At age 58 after 10 years of service; or
 - iii. At age 55 after 25 years of service.
 - b) Amount of service retirement annuity:
 - i. Before age 65 member with at least 30 years of service: 75% of average compensation if age 55 at beginning date; 65% if under age 55. If member completed 30 years of service before July 1973, annuity is increased by 2% of average compensation for each year of service beyond 30 and before July 1973, but to not more than 85% of average compensation.
 - ii. Before age 65 member with less than 30 years of service: 1.50% of average compensation per year of service for member with 20 or fewer years. Percentage increased by 0.05% for each year in excess of 20 years up to a maximum of 1.95% of average compensation per year of service. Amount reduced by ½% for each month member is under age 58 at time annuity begins.
 - iii. After age 65 same as before age 65.
 - iv. Minimum annuity: \$250 per month.
 - v. Average compensation means the average for the highest-paid 36 months of service without limit on compensation.
 - vi. Employee contributions:
 - Complete supplementation: 7.00% of compensation.
 - Coordinated: 4.00% up to \$4,200 of compensation plus 6.50% of compensation in excess of \$4,200.



Schedule F- Summary of Plan Provisions

- 2. Provisions applicable to all members who were affected under Certification 37 and who had not completed 20 years of service by July 1, 1979 plus those members who entered the system on or after July 1, 1978 and who did not elect Certification 55 or 94 and did not elect full supplementation under Certification 54 (Certification 37/37 Coordinated)
 - a) Service retirement annuity payable:
 - i. After 30 years of service; or
 - ii. At age 58 after 10 years of service; or
 - iii. At age 55 after 25 years of service.
 - b) Amount of service retirement annuity:
 - i. Before age 65 member with at least 30 years of service: 75% of average compensation. Amount reduced by ½% for each month member is under age 58 at time annuity begins.
 - ii. Before age 65 member with less than 30 years of service: 1.50% of average compensation per year of service for member with 20 or fewer years. Percentage increased by 0.05% for each year in excess of 20 years up to a maximum of 1.95% of average compensation per year of service. Amount reduced by ½% for each month member is under age 58 at time annuity begins.
 - iii. After age 65 Benefit is coordinated. Annuity is reduced by ½% of average compensation not in excess of the Social Security wage base in effect at retirement for each year of service up to 30 years. If member was under age 58 at beginning date, the coordination adjustment is made before application of ½% reduction per month under 58.
 - iv. Minimum annuity: \$250 per month.
 - Average compensation means the average for the highest-paid 36 months of service, excluding that portion of compensation in any year which is in excess of \$35,000.
 - vi. Employee contributions for coordinated benefit: 5.00% of compensation up to maximum salary of \$35,000.





- 3. Provision applicable to all members who were affected by Certification 37 and who had not completed 20 years of service by July 1, 1979 as well as those members who entered the system on or after July 1, 1978 and later elected Certification 55 or those who elected full supplementation under Certification 54 (but not Certification 94) (Certification 55/55 Coordinated)
 - a) Service retirement annuity payable:
 - i. After 30 years of service; or
 - ii. At age 58 after 10 years of service; or
 - iii. At age 55 after 25 years of service.
 - b) Amount of service retirement annuity:
 - i. Before age 65 member with at least 30 years of service: 75% of average compensation. Amount reduced by $^{1}/_{3}$ % for each month member is under age 55 at time annuity begins.
 - ii. Before age 65 member with less than 30 years of service: 1.50% of average compensation per year of service for member with 20 or fewer years. Percentage increased by 0.05% for each year in excess of 20 years up to a maximum of 1.95% of average compensation per year of service. Amount reduced by ½% for each month member is under age 58 at time annuity begins.
 - iii. After age 65 if member elected full supplementation, annuity is the same as before age 65. Otherwise, annuity is reduced by ½% of average compensation at time of retirement multiplied by years of service up to 30 years.
 - iv. Minimum annuity: \$250 per month.
 - v. Average compensation means the average for the highest-paid 36 months of service, excluding that portion of compensation in any year which is in excess of \$35,000.
 - vi. Employee contributions:
 - Complete supplementation: 7.00% of compensation up to \$35,000.





Schedule F- Summary of Plan Provisions

- Coordinated: 4.00% up to \$4,200 of compensation plus 6.50% of the excess up to the compensation limit of \$35,000.
- 4. For those entering between January 1, 1990 and June 30, 1998 who did not elect Certification 94 (Certification 55/55 Supplemented)
 - a) Service retirement annuity payable:
 - i. After 30 years of service; or
 - ii. At age 58 after 10 years of service; or
 - iii. At age 55 after 25 years of service.
 - b) Amount of service retirement annuity:
 - i. Before age 65 member with at least 30 years of service: 75% of average compensation. Amount reduced by ¹/₃% for each month member is under age 55 at time annuity begins.
 - ii. Before age 65 member with less than 30 years of service: 1.50% of average compensation per year of service for member with 20 or fewer years. Percentage increased by 0.05% for each year in excess of 20 years up to a maximum of 1.95% of average compensation per year of service. Amount reduced by 1/2% for each month member is under age 58 at time annuity begins.
 - iii. After age 65 Same as before age 65.
 - iv. Minimum annuity: \$250 per month.
 - v. Average compensation means the average for the highest-paid 36 months of service, excluding that portion of compensation in any year which is in excess of \$35,000.
 - vi. Employee contributions:
 - All completely supplemented: 8.00% of compensation up to compensation limit of \$35,000.



Schedule F- Summary of Plan Provisions

5. Certification 94:

- a) Increase compensation up to \$50,000.
- b) Those electing coverage under the above certification agree to pay 9.00% of compensation up to \$50,000.

6. Certification 139:

- a) Increase compensation up to a \$60,000 maximum. The \$60,000 cap was increased by 3.00% every two years until 7/1/2014. Effective 7/1/2014, the maximum compensation is frozen at \$69,557.
- b) Those electing coverage under the above certification agree to pay 11.00% of compensation up the applicable indexed maximum (see (a) above).

7. Disability Benefits

- a) A disability retirement annuity is payable upon:
 - i. Disability due to occupational causes, regardless of service, or
 - ii. Disability due to non-occupational causes after 10 years of service. If member is also eligible for a service retirement annuity, benefit payable is the higher of the two.
- b) Amount of disability retirement annuity:
- i. Before age 65 If service connected, 50% of rate of salary (subject to applicable salary cap) at retirement. If not service connected, 30% of average compensation plus additional 1.00% for each year of service over 10 (subject to a maximum of 50%).
- ii. After age 65 Reduced to amount payable by the applicable retirement benefit formula above. However, if post 65 retirement benefit plus Primary Social Security benefit is less than pre 65 disability benefit, then post 65 benefit is adjusted (increased) by the amount necessary to match pre 65 disability benefit.
- iii. Minimum annuity: \$250 per month.





8. Vested Benefits

A member whose employment terminates after ten (10) years of service, and who does not withdraw his contributions, receives a retirement annuity payable beginning at age 60 based on the applicable retirement formula above.

9. Non-vested Termination Benefits

If termination of employment occurs prior to completing ten (10) years of service, member is entitled only to a refund of his/her own contributions. Refund of a member's own contributions can also be obtained after attainment of ten (10) years of service but in that event the vested benefit is forfeited.

10. Pre-retirement Death Benefits

- a) A pre-retirement death benefit is payable upon:
 - i. A service-connected death, or
 - ii. A non-service connected death.
- b) Amount of pre-retirement death benefit:
- i. The widow of a deceased member whose death is service-connected receives an annuity of 50% of final salary (subject to applicable salary cap), plus \$10 per month for each child under age 18 (21 if at school) or disabled. If no annuity is paid to widow, \$20 per month per eligible child. Widow receives annuity until death or remarriage. Maximum family benefit is 75% of final salary (subject to applicable salary cap).

If there is no surviving widow or eligible children, a lump sum amount equal to the member's contributions plus one year's final salary (subject to applicable salary cap), but not less than \$6,000, will be payable to the employee's designated beneficiary.

ii. Should the member's death be non-service connected then a lump sum amount is paid which is equal to the member's contributions plus one year's final salary (subject to applicable salary cap), but not less than \$6,000.





11. Post-retirement Death Benefits

Member contributions are refunded to the extent that they exceed retirement payments already made, unless a reversionary annuity was elected. Minimum payment is \$600. In addition, 50% of retirement annuity is payable to the surviving spouse until death, remarriage, or until the spouse begins to receive Social Security benefits. Minimum annuity, \$75 per month; maximum annuity, \$150 per month.

12. Reversionary Annuity

Member may elect to receive a reduced annuity in order to provide a lifetime benefit after death to a spouse or relative. The benefit to the spouse or relative may be as low as \$25 per month or as high as 100% of the member's reduced annuity. This option is not permitted if member retires on a disability annuity.

13. Christmas Bonus

A \$400 annual bonus is given to all retired participants.





SCHEDULE OF ACTIVE MEMBER DATA AS OF JUNE 30, 2014

| | Completed Years of Service | | | | | | | | |
|----------|----------------------------|--------|----------|-------|-------|----------|-------|--------|-------------|
| Age | Under 5 | 5 to 9 | 10 to 14 | | | 25 to 29 | 30+ | Total | Payroll |
| Under 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 to 24 | 49 | 1 | 0 | 0 | 0 | 0 | 0 | 50 | 867,097 |
| 25 to 29 | 288 | 32 | 1 | 0 | 0 | 0 | 0 | 321 | 6,495,033 |
| 30 to 34 | 257 | 264 | 123 | 1 | 0 | 0 | 0 | 645 | 18,899,673 |
| 35 to 39 | 217 | 346 | 477 | 130 | 2 | 0 | 0 | 1,172 | 41,495,237 |
| 40 to 44 | 138 | 260 | 393 | 489 | 96 | 1 | 0 | 1,377 | 56,682,593 |
| 45 to 49 | 90 | 200 | 368 | 480 | 359 | 120 | 0 | 1,617 | 73,794,632 |
| 50 to 54 | 69 | 163 | 274 | 424 | 388 | 549 | 149 | 2,016 | 98,584,108 |
| 55 to 59 | 53 | 96 | 194 | 245 | 305 | 462 | 432 | 1,787 | 94,779,012 |
| 60 to 64 | 31 | 42 | 106 | 159 | 156 | 224 | 356 | 1,074 | 64,941,912 |
| 65 to 69 | 2 | 23 | 39 | 53 | 42 | 93 | 180 | 432 | 28,948,712 |
| 70+ | 0 | 7 | 15 | 11 | 17 | 39 | 131 | 220 | 15,702,375 |
| Total | 1,194 | 1,434 | 1,990 | 1,992 | 1,365 | 1,488 | 1,248 | 10,711 | 501,190,385 |

Average Active Age: 49.1 Average Service: 17.4





DISTRIBUTION OF ACTIVE PARTICIPANTS BY PENSION ELIGIBILITY, CONTRIBUTORY MAXIMUM, AND PLAN TYPE

| Pension Eligibility Certification | Contributory Maximum Certification | Employee Contribution Wage Base | Plan Type | Participant Count @ 6/30/2014 | Participant Count @ 6/30/2013 |
|---|------------------------------------|---------------------------------------|--------------|-------------------------------------|-------------------------------------|
| Cert. #7 | Cert. #7 | None | Coordinated | - | - |
| Cert. #55 | Cert. #55 | \$35,000 | Coordinated | 99 | 114 |
| Cert. #37 | Cert. #37 | \$35,000 | Coordinated | 868 | 978 |
| Cert. #55 | Cert. #55 | \$35,000 | Supplemented | 2,392 | 2,528 |
| Cert. #7 | Cert. #7 | None | Supplemented | - | 2 |
| Cert. #37 | Cert. #94 | \$50,000 | Coordinated | 105 | 123 |
| Cert. #55 | Cert. #94 | \$50,000 | Supplemented | 4,836 | 4,822 |
| Cert. #55 | Cert. #94 | \$50,000 | Coordinated | 40 | 49 |
| Cert. #37 | Cert. #139* | \$69,557 | Coordinated | 121 | 139 |
| Cert. #55 | Cert. #139* | \$69,557 | Coordinated | 12 | 13 |
| Cert. #55 | Cert. #139* | \$69,557 | Supplemented | 2,238 | 2,240 |
| | | | | 10,711 | 11,008 |



^{*}Effective 7/1/2014, the Certification 139 contribution wage base is frozen at \$69,557.



DATA RECONCILIATION AS OF JUNE 30, 2014

| | | Active | Terminated Vested | Receiving Benefits | Total |
|----|---|-----------------------|----------------------|-----------------------|--------------------|
| 1. | Number of Participants as of June 30, 2013 | 11,008 | 453 | 7,863 | 19,324 |
| 2. | Change in status during the plan year: a. Active to inactive b. Active to retiree c. Inactive to active d. Inactive to retired | (391) (350) 131 | 118 (20) (63) | 350 63 | (273) 111 |
| 3. | e. Retired to active No longer participating due to: a. Death b. Termination / Refund c. Deletion of duplicate data d. Data adjustment | 4 (1) (53) | (10) (2) | (4) (197) (6) | (208) (61) |
| 4. | New participant due to: a. Initial participation b. Omitted in error last year c. Pickups and Corrections d. New beneficiaries | 363 | | 6 2 4 | 363 6 2 4 |
| 5. | Number of Participants as of June 30, 2014 | 10,711 | 476 | 8,081 | 19,268 |

