CHAPTER TEXT:

LAWS OF NEW YORK, 2013

CHAPTER 3

(See FISCAL NOTE at end of Chapter.)

AN ACT to amend the administrative code of city of New York, in relation to the rate of regular interest used in the actuarial valuation of liabilities for the purpose of calculating contributions to the New York city employees' retirement system, the New York city teachers' retirement system, the police pension fund, subchapter two, the fire department pension fund, subchapter two and the board of education retirement system of such city by public employers and other obligors required to make employer contributions to such retirement systems, the establishment of the entry age actuarial cost method of determining employer contributions to such retirement systems, the making of contributions to such retirement systems by such public employers and such other obligors, and the crediting of special interest and additional interest to members of such retirement systems, and the allowance of interest on the funds of such retirement systems; and to amend the education law, in relation to employer contributions to the board of education retirement system of such city

Became a law January 30, 2013, with the approval of the Governor.
Passed by a majority vote, three-fifths being present.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Subparagraph (a) of paragraph 1 of subdivision b of section 13-127 of the administrative code of the city of New York is amended by adding two new items (i-a) and (i-b) to read as follows:

(i-a) all unfunded accrued liability installments as required by section 13-638.2 of this title or any other provision of law; and

(i-b) any other payments to the contingent reserve fund as required by applicable law; and

§ 2. Subparagraph (c) of paragraph 1 of subdivision b of section 13-127 of the administrative code of the city of New York is amended by adding a new item (iv) to read as follows:

(iv) The city and all other responsible obligors (as defined in paragraph ten of subdivision a of section 13-638.2 of this title) shall make all payments to the retirement system required by applicable law in accordance with the time of payment requirements set forth in subdivision c of section 13-133 of this chapter. Any responsible obligor which does not make all or any portion of such required payments to the retirement system in a timely manner in fiscal year two thousand twelve--two thousand thirteen, or in any fiscal year thereafter, shall be required to pay interest to the retirement system on such overdue amounts, as determined by the actuary. The actuary shall determine, at such time as he or she deems appropriate, interest payments on such overdue amounts using a rate of interest equivalent to the valuation rate of interest (as defined in paragraph eleven of subdivision a of section 13-638.2 of this title). Responsible obligors shall make such

EXPLANATION--Matter in **italics** is new; matter in brackets [-] is old law to be omitted.

interest payments on overdue amounts to the retirement system in the manner and at such time as the actuary deems appropriate.

§ 3. Item (i) of subparagraph (a) of paragraph 2 of subdivision b of section 13-127 of the administrative code of the city of New York, as amended by chapter 85 of the laws of 2000, is amended to read as follows:

(i) **Notwithstanding the succeeding provisions of this subparagraph or the provisions of subparagraph (a-one), (b) or (c) of this paragraph, for fiscal year two thousand eleven--two thousand twelve, and for each fiscal year thereafter, the amount of the normal contribution payable to the contingent reserve fund shall be determined pursuant to the provisions of subparagraph (d) of this paragraph.** Upon the basis of the latest mortality and other tables herein authorized and regular interest, the actuary shall determine as of June thirtieth, nineteen hundred eighty and as of each succeeding June thirtieth, the amount of the total liability for all benefits provided in this title, in articles eleven and fourteen of the retirement and social security law and in any other law prescribing benefits payable by the retirement system on account of all members and beneficiaries, excluding the liability on account of future increased-take-home-pay contributions, if any, and the liability for benefits attributable to the annuity savings fund, provided, however, that in determining such total liability as of June thirtieth, nineteen hundred ninety-five and as of each succeeding June thirtieth, the actuary shall include (A) the liability on account of future increased-take-home-pay contributions, if any, (B) the liability on account of future public employer obligations under the provisions of subdivision twenty of section two hundred forty-three of the military law, to pay in behalf of members qualifying for such benefit, member contributions with respect to certain periods of the military service of such members and (C) the liability for benefits attributable to the annuity savings fund.

§ 4. Paragraph 2 of subdivision b of section 13-127 of the administrative code of the city of New York is amended by adding a new subparagraph (d) to read as follows:

(d) (i) Notwithstanding the preceding subparagraphs of this paragraph or any other provision of law to the contrary, the normal contribution payable to the contingent reserve fund in fiscal year two thousand eleven--two thousand twelve, and in each fiscal year thereafter, shall be the entry age normal contribution, as determined by the actuary pursuant to this subparagraph in a manner consistent with the entry age actuarial cost method. The actuary shall determine the entry age normal contribution for each such fiscal year as of June thirtieth of the second fiscal year preceding the fiscal year in which such normal contribution is payable, based on the latest mortality and other tables applicable at the time he or she performs such calculations, and the valuation rate of interest as provided for the retirement system in paragraph two of subdivision b of section 13-638.2 of this title.

(ii) In calculating the entry age normal contribution payable in any such fiscal year pursuant to this subparagraph, the actuary, in his or her discretion, may make certain adjustments in the calculation methodology, provided that such adjustments are generally accepted as consistent with the entry age actuarial cost method, and are designed, in general, to fund, on a level basis over the working lifetimes of members from their ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary. Such generally accepted adjustments in the calculation methodology, in the discretion of the actuary, may include, but are not limit-

ed to, the calculation of the entry age normal contribution (A) on an individual member basis by calculating the amount of the entry age normal contribution attributable to each individual member, and then adding together such individual member amounts, (B) on an aggregate basis for all members or (C) on any combination of an individual member basis and an aggregate basis which is consistent with the entry age actuarial cost method, and the preceding provisions of this item.

(iii) For each such fiscal year, the actuary, in his or her discretion, shall determine, in accordance with the provisions of item (ii) of this subparagraph, the methodology for calculating the entry age normal contribution payable for that particular fiscal year.

(iv) The methodology determined by the actuary in accordance with item (iii) of this subparagraph may provide for the actuary to calculate the entry age normal contribution on an individual member basis by (A) multiplying the entry age normal contribution rate for each individual member, as determined by the actuary, by the salary expected to be paid to that member during the fiscal year in which such normal contribution is payable, and (B) calculating the sum of the individual entry age normal contributions attributable to all such members. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an individual basis which he or she deems appropriate, and which are consistent with the provisions of item (ii) of this subparagraph.

(v) In the alternative, the methodology determined by the actuary in accordance with item (iii) of this subparagraph may provide for the actuary to calculate the entry age normal contribution on an aggregate basis by multiplying the entry age normal contribution rate for all members in the aggregate, as determined by the actuary, by the aggregate amount of the salaries expected to be paid to all members during the fiscal year in which the normal contribution is payable. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an aggregate basis which he or she deems appropriate, and which are consistent with the provisions of item (ii) of this subparagraph.

(vi) In the alternative, the methodology determined by the actuary in accordance with item (iii) of this subparagraph may provide for the calculation of the entry age normal contribution on any other basis which the actuary deems appropriate, and which is consistent with the entry age actuarial cost method and the provisions of item (ii) of this subparagraph.

(vii) (A) Where the methodology determined by the actuary in accordance with item (iii) of this subparagraph requires the determination of an entry age normal contribution rate for each individual member in order to calculate the entry age normal contribution for each individual member, the actuary shall determine such rate for each such member in accordance with the entry age actuarial cost method, and such rate, as determined by the actuary for each such member, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetime of that particular member from his or her age at entry, the actuarial present value of benefits to which such member is expected to become entitled, as determined by the actuary.

(B) Where the methodology determined by the actuary in accordance with item (iii) of this subparagraph requires the determination of an entry age normal contribution rate for all members in the aggregate in order to calculate the entry age normal contribution for all members in the aggregate, the actuary shall determine such rate in accordance with the

entry age actuarial cost method, and such rate, as determined by the actuary, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetimes of members from their ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary.

§ 5. Paragraph 1 of subdivision c of section 13-133 of the administrative code of the city of New York is amended by adding a new subparagraph (G) to read as follows:

(G) Where a responsible obligor (as defined in paragraph ten of subdivision a of section 13-638.2 of this title) is required to make payments to the retirement system pursuant to applicable provisions of law in fiscal year two thousand twelve--two thousand thirteen, and in any fiscal year thereafter, and the provisions of this subdivision or the provisions of any other applicable law do not otherwise specifically require such responsible obligor to make such payments by a particular date or dates during such fiscal year, such responsible obligor shall make such payments either (i) in total on or before January first of such fiscal year, or (ii) in twelve equal monthly installments, as determined by the actuary, with each monthly installment to be paid on or before the last day of each month.

§ 6. Subparagraph 3 of paragraph (e) of subdivision 4 of section 13-194 of the administrative code of the city of New York, as amended by chapter 255 of the laws of 2000, is amended to read as follows:

(3) Except as otherwise provided in **subdivision eleven of this section and in** sections 13-195 and 13-195.1 of this chapter, nothing contained in this section shall create or impose any obligation on the part of the retirement system, or the funds or monies thereof, or authorize such funds or monies to be appropriated or used for any payment under this section or for any purpose thereof.

§ 7. Section 13-194 of the administrative code of the city of New York is amended by adding a new subdivision 11 to read as follows:

11. In the event that, for any calendar year covered by a payment guarantee, the assets of the variable supplements fund are not sufficient to pay benefits under this section for such year, an amount sufficient to pay such benefits shall be appropriated from the contingent reserve fund of the retirement system and transferred to the correction officers' variable supplements fund.

§ 8. Subparagraph (a) of paragraph 1 of subdivision b of section 13-228 of the administrative code of the city of New York is amended by adding two new items (i-a) and (i-b) to read as follows:

(i-a) all unfunded accrued liability installments as required by section 13-638.2 of this title or any other provision of law; and

(i-b) any other payments to the contingent reserve fund as required by applicable law; and

§ 9. Subparagraph (c) of paragraph 1 of subdivision b of section 13-228 of the administrative code of the city of New York is amended by adding a new item (iv) to read as follows:

(iv) The city shall make all payments to the pension fund required by applicable law in accordance with the time of payment requirements set forth in subdivision c of section 13-231 of this chapter. Commencing with payments due in fiscal year two thousand twelve--two thousand thirteen, in any fiscal year in which the city does not make all or any portion of such required payments to the pension fund in a timely manner, the city shall be required to pay interest to the pension fund on such overdue amounts, as determined by the actuary. The actuary shall determine, at such time as he or she deems appropriate, interest

payments on such overdue amounts using a rate of interest equivalent to the valuation rate of interest (as defined in paragraph eleven of subdivision a of section 13-638.2 of this title). The city shall make such interest payments on overdue amounts to the pension fund in the manner and at such time as the actuary deems appropriate.

§ 10. Item (i) of subparagraph (a) of paragraph 2 of subdivision b of section 13-228 of the administrative code of the city of New York, as amended by chapter 598 of the laws of 1996, is amended to read as follows:

(i) **Notwithstanding the succeeding provisions of this subparagraph or the provisions of subparagraph (a-one), (b), (c) or (d) of this paragraph, for fiscal year two thousand eleven--two thousand twelve, and for each fiscal year thereafter, the amount of the normal contribution payable to the contingent reserve fund shall be determined pursuant to the provisions of subparagraph (e) of this paragraph.** Upon the basis of the latest mortality and other tables herein authorized and regular interest, the actuary shall determine, as of June thirtieth, nineteen hundred eighty and as of each succeeding June thirtieth, the amount of the total liability for all benefits provided in this subchapter, in article eleven of the retirement and social security law, article fourteen of such law (if and when applicable) and in any other law prescribing benefits payable by the pension fund on account of all members and beneficiaries, excluding the liability on account of future increased-take-home-pay contributions, if any, and the liability for benefits attributable to the annuity savings fund, provided, however, that in determining such total liability for all benefits as of June thirtieth, nineteen hundred ninety-five and as of each succeeding June thirtieth, the actuary shall include (A) the liability on account of future increased-take-home-pay contributions, if any, (B) the liability on account of future public employer obligations under the provisions of subdivision twenty of section two hundred forty-three of the military law, to pay in behalf of members qualifying for such benefit, member contributions with respect to certain periods of the military service of such members and (C) the liability for benefits attributable to the annuity savings fund.

§ 11. Paragraph 2 of subdivision b of section 13-228 of the administrative code of the city of New York is amended by adding a new subparagraph (e) to read as follows:

(e) (i) Notwithstanding the preceding subparagraphs of this paragraph or any other provision of law to the contrary, the normal contribution payable to the contingent reserve fund in fiscal year two thousand eleven--two thousand twelve, and in each fiscal year thereafter, shall be the entry age normal contribution, as determined by the actuary pursuant to this subparagraph in a manner consistent with the entry age actuarial cost method. The actuary shall determine the entry age normal contribution for each such fiscal year as of June thirtieth of the second fiscal year preceding the fiscal year in which such normal contribution is payable, based on the latest mortality and other tables applicable at the time he or she performs such calculations, and the valuation rate of interest as provided for the pension fund in paragraph two of subdivision b of section 13-638.2 of this title.

(ii) In calculating the entry age normal contribution payable in any such fiscal year pursuant to this subparagraph, the actuary, in his or her discretion, may make certain adjustments in the calculation methodology, provided that such adjustments are generally accepted as consistent with the entry age actuarial cost method, and are designed, in general, to fund, on a level basis over the working lifetimes of members

from their ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary. Such generally accepted adjustments in the calculation methodology, in the discretion of the actuary, may include, but are not limited to, the calculation of the entry age normal contribution (A) on an individual member basis by calculating the amount of the entry age normal contribution attributable to each individual member, and then adding together such individual member amounts, (B) on an aggregate basis for all members or (C) on any combination of an individual member basis and an aggregate basis which is consistent with the entry age actuarial cost method, and the preceding provisions of this item.

(iii) For each such fiscal year, the actuary, in his or her discretion, shall determine, in accordance with the provisions of item (ii) of this subparagraph, the methodology for calculating the entry age normal contribution payable for that particular fiscal year.

(iv) The methodology determined by the actuary in accordance with item (iii) of this subparagraph may provide for the actuary to calculate the entry age normal contribution on an individual member basis by (A) multiplying the entry age normal contribution rate for each individual member, as determined by the actuary, by the salary expected to be paid to that member during the fiscal year in which such normal contribution is payable, and (B) calculating the sum of the individual entry age normal contributions attributable to all such members. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an individual basis which he or she deems appropriate, and which are consistent with the provisions of item (ii) of this subparagraph.

(v) In the alternative, the methodology determined by the actuary in accordance with item (iii) of this subparagraph may provide for the actuary to calculate the entry age normal contribution on an aggregate basis by multiplying the entry age normal contribution rate for all members in the aggregate, as determined by the actuary, by the aggregate amount of the salaries expected to be paid to all members during the fiscal year in which the normal contribution is payable. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an aggregate basis which he or she deems appropriate, and which are consistent with the provisions of item (ii) of this subparagraph.

(vi) In the alternative, the methodology determined by the actuary in accordance with item (iii) of this subparagraph may provide for the calculation of the entry age normal contribution on any other basis which the actuary deems appropriate, and which is consistent with the entry age actuarial cost method and the provisions of item (ii) of this subparagraph.

(vii) (A) Where the methodology determined by the actuary in accordance with item (iii) of this subparagraph requires the determination of an entry age normal contribution rate for each individual member in order to calculate the entry age normal contribution for each individual member, the actuary shall determine such rate for each such member in accordance with the entry age actuarial cost method, and such rate, as determined by the actuary for each such member, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetime of that particular member from his or her age at entry, the actuarial present value of benefits to which such member is expected to become entitled, as determined by the actuary.

(B) Where the methodology determined by the actuary in accordance with item (iii) of this subparagraph requires the determination of an entry age normal contribution rate for all members in the aggregate in order to calculate the entry age normal contribution for all members in the aggregate, the actuary shall determine such rate in accordance with the entry age actuarial cost method, and such rate, as determined by the actuary, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetimes of members from their ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary.

§ 12. Paragraph 3 of subdivision b of section 13-271 of the administrative code of the city of New York, as amended by chapter 247 of the laws of 1988, is amended to read as follows:

(3) Except as otherwise provided in **subdivision f of this section and in** sections 13-232 and 13-232.1 of this chapter, nothing contained in this subchapter shall create or impose any obligation on the part of pension fund, subchapter one or pension fund, subchapter two or the funds or monies thereof, or authorize such funds or monies to be appropriated or used for any payment under this subchapter or for any purpose thereof.

§ 13. Section 13-271 of the administrative code of the city of New York is amended by adding a new subdivision f to read as follows:

f. In the event that the assets of the variable supplements fund are not sufficient to pay benefits under this section for any calendar year, an amount sufficient to pay such benefits shall be appropriated from the contingent reserve fund of pension fund, subchapter two and transferred to the police officers' variable supplements fund.

§ 14. Paragraph 3 of subdivision b of section 13-281 of the administrative code of the city of New York, as amended by chapter 479 of the laws of 1993, is amended to read as follows:

(3) Except as otherwise provided in **subdivision f of this section and in** sections 13-232, 13-232.2 and 13-232.3 of this chapter, nothing contained in this subchapter shall create or impose any obligation on the part of pension fund, subchapter one or pension fund, subchapter two or the funds or monies thereof, or authorize such funds or monies to be appropriated or used for any payment under this subchapter or for any purpose thereof.

§ 15. Section 13-281 of the administrative code of the city of New York is amended by adding a new subdivision f to read as follows:

f. In the event that the assets of the variable supplements fund are not sufficient to pay benefits under this section for any calendar year, an amount sufficient to pay such benefits shall be appropriated from the contingent reserve fund of pension fund, subchapter two and transferred to the police superior officers' variable supplements fund.

§ 16. Subparagraph (a) of paragraph 1 of subdivision b of section 13-331 of the administrative code of the city of New York is amended by adding two new items (i-a) and (i-b) to read as follows:

(i-a) all unfunded accrued liability installments as required by section 13-638.2 of this title or any other provision of law; and

(i-b) any other payments to the contingent reserve fund as required by applicable law; and

§ 17. Subparagraph (c) of paragraph 1 of subdivision b of section 13-331 of the administrative code of the city of New York is amended by adding a new item (iv) to read as follows:

(iv) The city shall make all payments to the pension fund required by applicable law in accordance with the time of payment requirements set

forth in subdivision c of section 13-334 of this chapter. Commencing with payments due in fiscal year two thousand twelve--two thousand thirteen, in any fiscal year in which the city does not make all or any portion of such required payments to the pension fund in a timely manner, the city shall be required to pay interest to the pension fund on such overdue amounts, as determined by the actuary. The actuary shall determine, at such time as he or she deems appropriate, interest payments on such overdue amounts using a rate of interest equivalent to the valuation rate of interest (as defined in paragraph eleven of subdivision a of section 13-638.2 of this title). The city shall make such interest payments on overdue amounts to the pension fund in the manner and at such time as the actuary deems appropriate.

§ 18. Item (i) of subparagraph (a) of paragraph 2 of subdivision b of section 13-331 of the administrative code of the city of New York, as amended by chapter 249 of the laws of 1996, is amended to read as follows:

(i) Notwithstanding the succeeding provisions of this subparagraph or the provisions of subparagraph (a-one), (b), (c) or (d) of this paragraph, for fiscal year two thousand eleven--two thousand twelve, and for each fiscal year thereafter, the amount of the normal contribution payable to the contingent reserve fund shall be determined pursuant to the provisions of subparagraph (e) of this paragraph. Upon the basis of the latest mortality and other tables herein authorized and regular interest, the actuary shall determine, as of June thirtieth, nineteen hundred eighty and as of each succeeding June thirtieth, the amount of the total liability for all benefits provided in this subchapter, in article eleven of the retirement and social security law and in any other law prescribing benefits payable by the pension fund, on account of all members and beneficiaries, excluding the liability on account of future increased-take-home-pay contributions, if any, and the liability for benefits attributable to the annuity savings fund, provided, however, that in determining such total liability for all benefits as of June thirtieth, nineteen hundred ninety-five and as of each succeeding June thirtieth, the actuary shall include (A) the liability on account of future increased-take-home-pay contributions, if any, (B) the liability on account of future public employer obligations under the provisions of subdivision twenty of section two hundred forty-three of the military law, to pay in behalf of members qualifying for such benefit, member contributions with respect to certain periods of the military service of such members and (C) the liability for benefits attributable to the annuity savings fund.

§ 19. Paragraph 2 of subdivision b of section 13-331 of the administrative code of the city of New York is amended by adding a new subparagraph (e) to read as follows:

(e) (i) Notwithstanding the preceding subparagraphs of this paragraph or any other provision of law to the contrary, the normal contribution payable to the contingent reserve fund in fiscal year two thousand eleven--two thousand twelve, and in each fiscal year thereafter, shall be the entry age normal contribution, as determined by the actuary pursuant to this subparagraph in a manner consistent with the entry age actuarial cost method. The actuary shall determine the entry age normal contribution for each such fiscal year as of June thirtieth of the second fiscal year preceding the fiscal year in which such normal contribution is payable, based on the latest mortality and other tables applicable at the time he or she performs such calculations, and the valuation rate of interest as provided for the pension fund in paragraph two of subdivision b of section 13-638.2 of this title.

(ii) In calculating the entry age normal contribution payable in any such fiscal year pursuant to this subparagraph, the actuary, in his or her discretion, may make certain adjustments in the calculation methodology, provided that such adjustments are generally accepted as consistent with the entry age actuarial cost method, and are designed, in general, to fund, on a level basis over the working lifetimes of members from their ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary. Such generally accepted adjustments in the calculation methodology, in the discretion of the actuary, may include, but are not limited to, the calculation of the entry age normal contribution (A) on an individual member basis by calculating the amount of the entry age normal contribution attributable to each individual member, and then adding together such individual member amounts, (B) on an aggregate basis for all members or (C) on any combination of an individual member basis and an aggregate basis which is consistent with the entry age actuarial cost method, and the preceding provisions of this item.

(iii) For each such fiscal year, the actuary, in his or her discretion, shall determine, in accordance with the provisions of item (ii) of this subparagraph, the methodology for calculating the entry age normal contribution payable for that particular fiscal year.

(iv) The methodology determined by the actuary in accordance with item (iii) of this subparagraph may provide for the actuary to calculate the entry age normal contribution on an individual member basis by (A) multiplying the entry age normal contribution rate for each individual member, as determined by the actuary, by the salary expected to be paid to that member during the fiscal year in which such normal contribution is payable, and (B) calculating the sum of the individual entry age normal contributions attributable to all such members. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an individual basis which he or she deems appropriate, and which are consistent with the provisions of item (ii) of this subparagraph.

(v) In the alternative, the methodology determined by the actuary in accordance with item (iii) of this subparagraph may provide for the actuary to calculate the entry age normal contribution on an aggregate basis by multiplying the entry age normal contribution rate for all members in the aggregate, as determined by the actuary, by the aggregate amount of the salaries expected to be paid to all members during the fiscal year in which the normal contribution is payable. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an aggregate basis which he or she deems appropriate, and which are consistent with the provisions of item (ii) of this subparagraph.

(vi) In the alternative, the methodology determined by the actuary in accordance with item (iii) of this subparagraph may provide for the calculation of the entry age normal contribution on any other basis which the actuary deems appropriate, and which is consistent with the entry age actuarial cost method and the provisions of item (ii) of this subparagraph.

(vii) (A) Where the methodology determined by the actuary in accordance with item (iii) of this subparagraph requires the determination of an entry age normal contribution rate for each individual member in order to calculate the entry age normal contribution for each individual member, the actuary shall determine such rate for each such member in accordance with the entry age actuarial cost method, and such rate, as determined by the actuary for each such member, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetime of that particular member from his or her age at entry, the actuarial present value of benefits to which such member is expected to become entitled, as determined by the actuary.

(B) Where the methodology determined by the actuary in accordance with item (iii) of this subparagraph requires the determination of an entry age normal contribution rate for all members in the aggregate in order to calculate the entry age normal contribution for all members in the aggregate, the actuary shall determine such rate in accordance with the entry age actuarial cost method, and such rate, as determined by the actuary, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetimes of members from their ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary.

§ 20. Paragraph 1 of subdivision a of section 13-527 of the administrative code of the city of New York is amended by adding two new subparagraphs (a-1) and (a-2) to read as follows:

(a-1) all unfunded accrued liability installments as required by section 13-638.2 of this title or any other provision of law; and

(a-2) any other payments to the contingent reserve fund as required by applicable law; and

§ 21. Paragraph 3 of subdivision a of section 13-527 of the administrative code of the city of New York is amended by adding a new subparagraph (iv) to read as follows:

(iv) The city and all other responsible obligors (as defined in paragraph ten of subdivision a of section 13-638.2 of this title) shall make all payments to the retirement system required by applicable law in accordance with the time of payment requirements set forth in subdivision (c) of section 13-533 of this chapter. Any responsible obligor which does not make all or any portion of such required payments to the retirement system in a timely manner in fiscal year two thousand twelve--two thousand thirteen, or in any fiscal year thereafter, shall be required to pay interest to the retirement system on such overdue amounts, as determined by the actuary. The actuary shall determine, at such time as he or she deems appropriate, interest payments on such overdue amounts using a rate of interest equivalent to the valuation rate of interest (as defined in paragraph eleven of subdivision a of section 13-638.2 of this title). Responsible obligors shall make such interest payments on overdue amounts to the retirement system in the manner and at such time as the actuary deems appropriate.

§ 22. Paragraph 1 of subdivision b of section 13-527 of the administrative code of the city of New York, as amended by chapter 85 of the laws of 2000, is amended to read as follows:

(1) Notwithstanding the succeeding provisions of this paragraph or the provisions of paragraph one-a, two, three or four of this subdivision, for fiscal year two thousand eleven--two thousand twelve, and for each fiscal year thereafter, the amount of the normal contribution payable to the contingent reserve fund shall be determined pursuant to the provisions of paragraph five of this subdivision. Upon the basis of the latest mortality and other tables herein authorized and regular interest, the actuary shall determine as of June thirtieth, nineteen hundred eighty and as of each succeeding June thirtieth, the amount of the total liability for all benefits provided in this chapter, in articles eleven

and fourteen of the retirement and social security law and in any other law prescribing benefits payable by the retirement system on account of all contributors and beneficiaries, excluding the liability on account of future increased-take-home-pay contributions, if any, and the liability for benefits attributable to the annuity savings fund and to the variable annuity savings fund, provided, however, that in determining such total liability as of June thirtieth, nineteen hundred ninety-five and as of each succeeding June thirtieth, the actuary shall include (a) the liability on account of future reserve-for-increased-take-home-pay contributions, if any, (b) the liability on account of future city obligations under the provisions of subdivision twenty of section two hundred forty-three of the military law, to pay in behalf of contributors qualifying for such benefit, member contributions with respect to certain periods of the military service of such contributors, and (c) the liability for benefits attributable to the annuity savings fund and to the variable annuity savings fund, and provided further that in determining such total liability as of June thirtieth, nineteen hundred ninety-nine and as of each succeeding June thirtieth, the actuary shall include any other liability, as determined by the actuary, for benefits attributable to the variable annuity programs, and provided further that in determining such total liability as of June thirtieth, two thousand and as of each succeeding June thirtieth, the actuary shall include the amount, if any, as estimated by the actuary, of the total liability of the retirement system on account of payments which the retirement system may be required to make to any other fund without a corresponding offset in the liabilities of the retirement system.

§ 23. Subdivision b of section 13-527 of the administrative code of the city of New York is amended by adding a new paragraph 5 to read as follows:

(5) (a) Notwithstanding the preceding paragraphs of this subdivision or any other provision of law to the contrary, the normal contribution payable to the contingent reserve fund in fiscal year two thousand eleven--two thousand twelve, and in each fiscal year thereafter, shall be the entry age normal contribution, as determined by the actuary pursuant to this paragraph in a manner consistent with the entry age actuarial cost method. The actuary shall determine the entry age normal contribution for each such fiscal year as of June thirtieth of the second fiscal year preceding the fiscal year in which such normal contribution is payable, based on the latest mortality and other tables applicable at the time he or she performs such calculations, and the valuation rate of interest as provided for the retirement system in paragraph two of subdivision b of section 13-638.2 of this title.

(b) In calculating the entry age normal contribution payable in any such fiscal year pursuant to this paragraph, the actuary, in his or her discretion, may make certain adjustments in the calculation methodology, provided that such adjustments are generally accepted as consistent with the entry age actuarial cost method, and are designed, in general, to fund, on a level basis over the working lifetimes of members from their ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary. Such generally accepted adjustments in the calculation methodology, in the discretion of the actuary, may include, but are not limited to, the calculation of the entry age normal contribution (i) on an individual member basis by calculating the amount of the entry age normal contribution attributable to each individual member, and then adding together such individual member amounts, (ii) on an aggregate basis for all

members or (iii) on any combination of an individual member basis and an aggregate basis which is consistent with the entry age actuarial cost method, and the preceding provisions of this subparagraph.

(c) For each such fiscal year, the actuary, in his or her discretion, shall determine, in accordance with the provisions of subparagraph (b) of this paragraph, the methodology for calculating the entry age normal contribution payable for that particular fiscal year.

(d) The methodology determined by the actuary in accordance with subparagraph (c) of this paragraph may provide for the actuary to calculate the entry age normal contribution on an individual member basis by (i) multiplying the entry age normal contribution rate for each individual member, as determined by the actuary, by the salary expected to be paid to that member during the fiscal year in which such normal contribution is payable, and (ii) calculating the sum of the individual entry age normal contributions attributable to all such members. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an individual basis which he or she deems appropriate, and which are consistent with the provisions of subparagraph (b) of this paragraph.

(e) In the alternative, the methodology determined by the actuary in accordance with subparagraph (c) of this paragraph may provide for the actuary to calculate the entry age normal contribution on an aggregate basis by multiplying the entry age normal contribution rate for all members in the aggregate, as determined by the actuary, by the aggregate amount of the salaries expected to be paid to all members during the fiscal year in which the normal contribution is payable. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an aggregate basis which he or she deems appropriate, and which are consistent with the provisions of subparagraph (b) of this paragraph.

(f) In the alternative, the methodology determined by the actuary in accordance with subparagraph (c) of this paragraph may provide for the calculation of the entry age normal contribution on any other basis which the actuary deems appropriate, and which is consistent with the entry age actuarial cost method and the provisions of subparagraph (b) of this paragraph.

(g) (i) Where the methodology determined by the actuary in accordance with subparagraph (c) of this paragraph requires the determination of an entry age normal contribution rate for each individual member in order to calculate the entry age normal contribution for each individual member, the actuary shall determine such rate for each such member in accordance with the entry age actuarial cost method, and such rate, as determined by the actuary for each such member, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetime of that particular member from his or her age at entry, the actuarial present value of benefits to which such member is expected to become entitled, as determined by the actuary.

(ii) Where the methodology determined by the actuary in accordance with subparagraph (c) of this paragraph requires the determination of an entry age normal contribution rate for all members in the aggregate in order to calculate the entry age normal contribution for all members in the aggregate, the actuary shall determine such rate in accordance with the entry age actuarial cost method, and such rate, as determined by the actuary, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetimes of members from their

ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary.

§ 24. Subdivision (c) of section 13-533 of the administrative code of the city of New York is amended by adding a new paragraph 2-a to read as follows:

(2-a) Where a responsible obligor (as defined in paragraph ten of subdivision a of section 13-638.2 of this title) is required to make payments to the retirement system pursuant to applicable provisions of law in fiscal year two thousand twelve--two thousand thirteen, and in any fiscal year thereafter, and the provisions of this subdivision or the provisions of any other applicable law do not otherwise specifically require such responsible obligor to make such payments by a particular date or dates during such fiscal year, such responsible obligor shall make such payments either (A) in total on or before January first of such fiscal year, or (B) in twelve equal monthly installments, as determined by the actuary, with each monthly installment to be paid on or before the last day of each month.

§ 25. Paragraph 2 of subdivision b of section 13-638.2 of the administrative code of city of New York, as amended by chapter 180 of the laws of 2011, is amended to read as follows:

(2) With respect to each retirement system, such rate of interest shall be as hereinafter set forth in this paragraph:

Retirement System	Rate of interest per centum per annum, compounded annually	First day and last day of fiscal year or series of fiscal years for which rate is effective
NYCERS	[~~8~~] **7**%	July 1, [~~2004~~] **2011** to June 30, [~~2012~~] **2016**
NYCTRS	[~~8~~] **7**%	July 1, [~~2004~~] **2011** to June 30, [~~2012~~] **2016**
PPF	[~~8~~] **7**%	July 1, [~~2004~~] **2011** to June 30, [~~2012~~] **2016**
FPF	[~~8~~] **7**%	July 1, [~~2004~~] **2011** to June 30, [~~2012~~] **2016**
BERS	[~~8~~] **7**%	July 1, [~~2004~~] **2011** to June 30, [~~2012~~] **2016**

§ 26. Paragraph 2 of subdivision f of section 13-638.2 of the administrative code of the city of New York, as amended by chapter 180 of the laws of 2011, is amended to read as follows:

(2) Such special interest shall be allowed at the rates and for the periods set forth below in this paragraph:

Retirement System	Rate of interest per centum per annum, compounded annually	First day and last day of fiscal year or series of fiscal years for which rate is effective
NYCERS	1 1/4%	July 1, [~~2004~~] **2011** to June 30, [~~2012~~] **2016**

NYCTRS	1 1/4%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
PPF	1 1/4%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
FPF	1 1/4%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
BERS	1 1/4%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016

§ 27. Paragraph 2 of subdivision g of section 13-638.2 of the administrative code of the city of New York, as amended by chapter 180 of the laws of 2011, is amended to read as follows:

(2) Such additional interest shall be included at the rates and for the periods set forth below in this paragraph:

Retirement System	Rate of interest per centum per annum, compounded annually	First day and last day of fiscal year or series of fiscal years for which rate is effective
NYCERS	1 1/4%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
NYCTRS	1 1/4%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
PPF	1 1/4%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
FPF	1 1/4%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
BERS	1 1/4%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016

§ 28. Paragraph 2 of subdivision i of section 13-638.2 of the administrative code of the city of New York, as amended by chapter 180 of the laws of 2011, is amended to read as follows:

(2) Such supplementary interest shall be allowed at the rates and for the periods set forth below in this paragraph:

Retirement System	Rate of interest per centum per annum, compounded annually	First day and last day of fiscal year or series of fiscal years for which rate is effective
NYCERS	[~~1~~] 0%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
NYCTRS	[~~1~~] 0%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
PPF	[~~1~~] 0%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
FPF	[~~1~~] 0%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016
BERS	[~~1~~] 0%	July 1, [~~2004~~] 2011 to June 30, [~~2012~~] 2016

§ 29. Subparagraph (i) of paragraph 1 of subdivision k of section 13-638.2 of the administrative code of the city of New York, as added by chapter 85 of the laws of 2000, is amended to read as follows:

(i) Subject to the provisions of subparagraphs (iii) and (iv) of this paragraph, in any case where the valuation rate of interest for a retirement system is changed by law for any period beginning on or after July first, two thousand four, or where the board of trustees of a retirement system, for any period beginning on or after July first, nineteen hundred ninety-nine, adopts changed actuarial tables used in valuing the liabilities of such retirement system, or where a significant change in an actuarial valuation method (as defined in paragraph sixteen of subdivision a of this section) is made for any period beginning on or after July first, nineteen hundred ninety-nine in relation to a retirement system, the actuary thereof shall calculate, as of June thirtieth next preceding the first day of the fiscal year for which such changed rate or changed tables or significant change in an actuarial valuation method first becomes or became effective, an unfunded accrued liability adjustment applicable to each responsible obligor in relation to such retirement system**, provided, however, that no unfunded accrued liability adjustment shall be established under this subdivision for any retirement system with respect to any change in the valuation rate of interest, change in actuarial tables or significant change in an actuarial valuation method where such changed valuation rate of interest, actuarial tables or actuarial valuation method applies to such retirement system with respect to any actuarial valuation performed by the actuary as of June thirtieth, two thousand ten or as of any date thereafter**.

§ 30. Section 13-638.2 of the administrative code of the city of New York is amended by adding a new subdivision k-1 to read as follows:

k-1. All installments of contribution resulting from any unfunded accrued liability established for any retirement system prior to the establishment of the unfunded accrued liability as of June thirtieth, two thousand ten for the retirement systems pursuant to the provisions of paragraph one of subdivision k-2 of this section which are payable to any retirement system on or after July first, two thousand eleven are hereby canceled and shall not be due and payable on or after such July first.

§ 31. Section 13-638.2 of the administrative code of the city of New York is amended by adding a new subdivision k-2 to read as follows:

k-2. (1) (i) The actuary for each of the retirement systems (as defined in paragraph one of subdivision a of this section), upon the basis of the latest mortality and other tables applicable at the time he or she performs the calculations, and the valuation rate of interest (as defined in paragraph eleven of subdivision a of this section), shall calculate separately for each of the retirement systems, as of June thirtieth, two thousand ten and as of each succeeding June thirtieth, an unfunded accrued liability for each of the retirement systems in accordance with the succeeding subparagraphs of this paragraph.

(ii) The actuary shall calculate, as of the applicable June thirtieth, an amount equal to the sum of (A) the total actuarial present value of all benefits payable by the retirement system pursuant to applicable law, as determined by the actuary, and (B) the liability of the retirement system, as determined by the actuary, for amounts which the retirement system may be required by applicable law to pay to any other fund on account of related benefits financed through the retirement system,

without a corresponding offset in the liabilities of the retirement system.

(iii) The unfunded accrued liability of the retirement system as of the applicable June thirtieth shall be the amount obtained by deducting from the amount of such total liability of the retirement system on account of benefits, as determined by the actuary pursuant to subparagraph (ii) of this paragraph, the sum of:

(A) the actuarial present value of entry age normal contributions payable to the retirement system, as determined by the actuary as of the applicable June thirtieth in a manner consistent with the entry age actuarial cost method, and with the applicable methodologies set forth for NYCERS in subparagraph (d) of paragraph two of subdivision b of section 13-127 of this title, for the PPF in subparagraph (e) of paragraph two of subdivision b of section 13-228 of this title, for the FPF in subparagraph (e) of paragraph two of subdivision b of section 13-331 of this title, for the NYCTRS in paragraph five of subdivision b of section 13-527 of this title or for BERS in item (v) of subparagraph four of paragraph (c) of subdivision sixteen of section twenty-five hundred seventy-five of the education law;

(B) the present value of future member contributions of all members of the retirement system, as determined by the actuary as of the applicable June thirtieth;

(C) the total funds on hand of the retirement system, as determined by the actuary as of the applicable June thirtieth; and

(D) the present value of future installments of unfunded accrued liability contributions to the retirement system.

(iv) The actuary, in determining the unfunded accrued liability pursuant to this paragraph, may make any adjustments which he or she deems appropriate due to the calculation of the unfunded accrued liability as of the second June thirtieth preceding the fiscal year in which the first installment of such unfunded accrued liability becomes payable or creditable.

(2) (i) The unfunded accrued liability calculated by the actuary as of June thirtieth, two thousand ten for each retirement system pursuant to paragraph one of this subdivision shall be known as the "2010 UAL" or, with respect to NYCERS as the "NYCERS 2010 UAL", with respect to NYCTRS as the "NYCTRS 2010 UAL", with respect to the PPF as the "PPF 2010 UAL", with respect to the FPF as the "FPF 2010 UAL" and with respect to BERS as the "BERS 2010 UAL".

(ii) The 2010 UAL for each retirement system shall be amortized in twenty-one annual installments, as determined by the actuary, payable over a period of twenty-two fiscal years following its establishment as of June thirtieth, two thousand ten, with payments commencing with the two thousand eleven--two thousand twelve fiscal year. The actuary for each of the retirement systems shall determine the schedule of contribution installments so that each installment after the first shall equal one hundred three per centum of the next preceding installment.

(3) (i) The unfunded accrued liability calculated pursuant to paragraph one of this subdivision by the actuary as of June thirtieth, two thousand eleven, and as of each succeeding June thirtieth, shall be known as a "post-2010 UAL adjustment". With respect to each retirement system, such unfunded accrued liability shall be known by the name consisting of the applicable abbreviation for the retirement system, as defined in paragraph three, four, five, six or seven of subdivision a of this section, followed by the calendar year as of which the unfunded

accrued liability was established, followed by the term "UAL adjustment".

(ii) Each post-2010 UAL adjustment for each retirement system shall be amortized in equal installments payable or creditable, as determined by the actuary, as follows:

(A) that portion of a post-2010 UAL adjustment which is attributable to actuarial gains or losses, as determined by the actuary, shall be amortized in fourteen annual installments, as determined by the actuary, payable or creditable over a period of fifteen fiscal years following the June thirtieth as of which the unfunded accrued liability was established, with payments or credits commencing with the second fiscal year succeeding the June thirtieth as of which the unfunded accrued liability was established, provided, however, that the portion of a post-2010 UAL adjustment which is attributable to actuarial gains and losses shall be an amount equal to the total amount of such post-2010 UAL adjustment minus an amount equal to the sum of the portions of such post-2010 UAL adjustment, if any, which are attributable to (1) changes in the valuation rate of interest, changes in actuarial tables and changes in actuarial methods, as determined by the actuary pursuant to item (B) of this subparagraph, and (2) recently enacted changes in benefits which were not incorporated in the unfunded accrued liability established as of the preceding June thirtieth, as determined by the actuary pursuant to item (C) of this subparagraph;

(B) that portion of a post-2010 UAL adjustment which is attributable to changes in the valuation rate of interest, changes in actuarial tables or changes in actuarial methods, as determined by the actuary, shall be amortized in nineteen annual installments, as determined by the actuary, payable or creditable over a period of twenty fiscal years following the June thirtieth as of which the unfunded accrued liability was established, with payments or credits commencing with the second fiscal year succeeding the June thirtieth as of which the unfunded accrued liability was established; or

(C) that portion of a post-2010 UAL adjustment which is attributable to recently enacted changes in benefits which were not incorporated in the unfunded accrued liability established as of the preceding June thirtieth, as determined by the actuary, shall, unless an amortization period of a different length is specified by the law enacting such benefit changes, be payable or creditable in annual installments over a period of fiscal years comparable in length to the number of years which is one less than the number of years of the remaining working lifetimes of members covered by the benefit changes, as determined by the actuary, with the payment or credit of such annual installments commencing with the second fiscal year succeeding the June thirtieth as of which the unfunded accrued liability was established, provided, however, that where the length of the amortization period for the benefit changes is not specified in the law enacting the benefit changes, the actuary, in his or her discretion, and in lieu of amortizing the portion of the unfunded accrued liability attributable to the benefit changes over a period of fiscal years comparable in length to the number of years which is one less than the number of years of the remaining working lifetimes of members covered by the benefit changes, may select an amortization period that is reasonably consistent with past practice for amortizing unfunded accrued liability attributable to the particular type of benefit changes.

(4) Notwithstanding any other provision of law to the contrary, with respect to any installment of an unfunded accrued liability or an

unfunded accrued liability adjustment, in the event that such retirement system has more than one responsible obligor, the actuary for that retirement system shall determine and shall allocate to each such responsible obligor its share of that installment, as determined to be appropriate by the actuary. Each responsible obligor's share of each such installment shall be either a charge or a credit with respect to such responsible obligor for the applicable fiscal year.

(5) For each fiscal year, commencing with the two thousand eleven--two thousand twelve fiscal year, the actuary shall determine whether the sum of the charges and credits applicable to each responsible obligor for such fiscal year with respect to the applicable retirement system shall constitute a total charge or a total credit. Where such amount for such responsible obligor for such fiscal year with respect to such retirement system is a total charge, the responsible obligor shall pay an amount equal to such total charge to the retirement system in a timely manner, as required by paragraph six of this subdivision. Where such amount for such responsible obligor for such fiscal year with respect to such retirement system is a total credit, the amount of employer contributions otherwise payable by such responsible obligor to such retirement system for such fiscal year pursuant to applicable provisions of law, as determined by the actuary, shall be reduced by the amount of such total credit, provided, however, that such total amount of employer contributions otherwise payable by such responsible obligor to such retirement system for such fiscal year shall not be reduced below an amount equivalent to the amount payable by such responsible obligor for such fiscal year for administrative expenses, as determined by the actuary in accordance with the provisions of subdivision f of section 13-103 of this title for NYCERS, subdivision h of section 13-216 of this title for the PPF, subdivision d of section 13-518 of this title for the NYCTRS or paragraph (e) of subdivision twenty-three of section twenty-five hundred seventy-five of the education law for BERS, and shall not be reduced below zero for the FPF, provided further, that where a total credit for a responsible obligor with respect to a retirement system has been offset against employer contributions otherwise payable by such obligor to such retirement system for such fiscal year by the maximum amount permissible pursuant to the preceding provisions of this paragraph, and all or a portion of such credit remains after such offset, the remaining credit shall be carried forward, together with interest calculated on such amount at the valuation rate of interest, as a credit for such obligor for the following fiscal year, as determined by the actuary.

(6) All responsible obligors shall make all unfunded accrued liability payments to a retirement system required pursuant to the provisions of this subdivision in accordance with the time of payment requirements set forth in subdivision c of section 13-133 of this title for NYCERS, subdivision c of section 13-231 of this title for the PPF, subdivision c of section 13-334 of this title for the FPF, subdivision (c) of section 13-533 of this title for the NYCTRS or paragraph (j) of subdivision sixteen of section twenty-five hundred seventy-five of the education law for BERS.

§ 32. Subdivision d of section 13-705 of the administrative code of the city of New York, as amended by chapter 152 of the laws of 2006, is amended to read as follows:

d. In each city fiscal year, beginning with investment expenses paid during the nineteen hundred ninety-eight--nineteen hundred ninety-nine fiscal year, whenever the income, interest or dividends derived from deposits or investments of the funds of a retirement system are used pursuant to subdivision b of this section to pay the expenses incurred by such retirement system in acquiring, managing or protecting investments of its funds, the monies so paid shall be made a charge to be paid by each participating employer otherwise required to make contributions to such retirement system no later than the end of the fiscal year next succeeding the fiscal year during which such monies were drawn upon, provided, however, that where such charge is for such investment expenses paid during fiscal year two thousand four--two thousand five or during any subsequent fiscal year, such charge shall be paid by each such participating employer no later than the end of the second fiscal year succeeding the fiscal year during which such monies were drawn upon**, provided further that the provisions of this subdivision shall not apply to investment expenses paid during the two thousand nine--two thousand ten fiscal year or during any subsequent fiscal year**. In the event that such retirement system has more than one participating employer, the actuary shall calculate and allocate to each such participating employer its share of such charge. All charges to be paid pursuant to this subdivision shall be paid at the regular rate of interest utilized by the actuary in determining employer contributions to the retirement system pursuant to the provisions of paragraph two of subdivision b of section 13-638.2 of this title.

§ 33. Subparagraph 2 of paragraph (c) of subdivision 16 of section 2575 of the education law is amended by adding two new items (i-A) and (i-B) to read as follows:

(i-A) all unfunded accrued liability installments as required by section 13-638.2 of the administrative code of the city of New York or any other provision of law; and

(i-B) any other payments to the contingent reserve fund as required by applicable law; and

§ 34. Subparagraph 3 of paragraph (c) of subdivision 16 of section 2575 of the education law is amended by adding a new item (vii) to read as follows:

(vii) The board of education and all other responsible obligors (as defined in paragraph ten of subdivision a of section 13-638.2 of the administrative code of the city of New York) shall make all payments to the retirement system required by applicable law in accordance with the time of payment requirements set forth in paragraph (j) of this subdivision. Any responsible obligor which does not make all or any portion of such required payments to the retirement system in a timely manner in fiscal year two thousand twelve--two thousand thirteen, or in any fiscal year thereafter, shall be required to pay interest to the retirement system on such overdue amounts, as determined by the actuary. The actuary shall determine, at such time as he or she deems appropriate, interest payments on such overdue amounts using a rate of interest equivalent to the valuation rate of interest (as defined in paragraph eleven of subdivision a of section 13-638.2 of the administrative code of the city of New York). Responsible obligors shall make such interest payments on overdue amounts to the retirement system in the manner and at such time as the actuary deems appropriate.

§ 35. Item (i) of subparagraph 4 of paragraph (c) of subdivision 16 of section 2575 of the education law, as amended by chapter 85 of the laws of 2000, is amended to read as follows:

(i) **Notwithstanding the succeeding provisions of this item or the provisions of item (i-A), (ii), (iii) or (iv) of this subparagraph, for fiscal year two thousand eleven--two thousand twelve, and for each fiscal year thereafter, the amount of the normal contribution payable to**

the contingent reserve fund shall be determined pursuant to the provisions of item (v) of this subparagraph. Upon the basis of the latest mortality and other tables authorized by the applicable provisions of the rules and regulations and regular interest, the actuary shall determine, as of June thirtieth, nineteen hundred eighty and as of each succeeding June thirtieth, the amount of the total liability for all benefits provided in the rules and regulations, in articles eleven and fourteen of the retirement and social security law and in any other law prescribing benefits payable by the retirement system on account of all members and beneficiaries, excluding the liability on account of future increased-take-home-pay contributions, if any, and the liability for benefits attributable to the annuity savings fund and to the variable annuity savings fund, provided, however, that in determining such total liability as of June thirtieth, nineteen hundred ninety-five and as of each succeeding June thirtieth, the actuary shall include (A) the liability on account of future increased-take-home-pay contributions, if any, (B) the liability on account of future public employer obligations under the provisions of subdivision twenty of section two hundred forty-three of the military law, to pay in behalf of members qualifying for such benefit, member contributions with respect to certain periods of the military service of such members and (C) the liability for benefits attributable to the annuity savings fund and to the variable annuity savings fund, and provided further that in determining such total liability as of June thirtieth, nineteen hundred ninety-nine and as of each succeeding June thirtieth, the actuary shall include any other liability, as determined by the actuary, for benefits attributable to the variable annuity programs, and provided further that in determining such total liability as of June thirtieth, two thousand and as of each succeeding June thirtieth, the actuary shall include the amount, if any, as estimated by the actuary, of the total liability of the retirement system on account of payments which the retirement system may be required to make to any other fund without a corresponding offset in the liabilities of the retirement system.

§ 36. Subparagraph 4 of paragraph (c) of subdivision 16 of section 2575 of the education law is amended by adding a new item (v) to read as follows:

(v) (A) Notwithstanding the preceding items of this subparagraph or any other provision of law to the contrary, the normal contribution payable to the contingent reserve fund in fiscal year two thousand eleven--two thousand twelve, and in each fiscal year thereafter, shall be the entry age normal contribution, as determined by the actuary pursuant to this item in a manner consistent with the entry age actuarial cost method. The actuary shall determine the entry age normal contribution for each such fiscal year as of June thirtieth of the second fiscal year preceding the fiscal year in which such normal contribution is payable, based on the latest mortality and other tables applicable at the time he or she performs such calculations, and the valuation rate of interest as provided for the retirement system in paragraph two of subdivision b of section 13-638.2 of the administrative code of the city of New York.

(B) In calculating the entry age normal contribution payable in any such fiscal year pursuant to this item, the actuary, in his or her discretion, may make certain adjustments in the calculation methodology, provided that such adjustments are generally accepted as consistent with the entry age actuarial cost method, and are designed, in general, to fund, on a level basis over the working lifetimes of members from their

ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary. Such generally accepted adjustments in the calculation methodology, in the discretion of the actuary, may include, but are not limited to, the calculation of the entry age normal contribution (1) on an individual member basis by calculating the amount of the entry age normal contribution attributable to each individual member, and then adding together such individual member amounts, (2) on an aggregate basis for all members or (3) on any combination of an individual member basis and an aggregate basis which is consistent with the entry age actuarial cost method, and the preceding provisions of this sub-item.

(C) For each such fiscal year, the actuary, in his or her discretion, shall determine, in accordance with the provisions of sub-item (B) of this item, the methodology for calculating the entry age normal contribution payable for that particular fiscal year.

(D) The methodology determined by the actuary in accordance with sub-item (C) of this item may provide for the actuary to calculate the entry age normal contribution on an individual member basis by (1) multiplying the entry age normal contribution rate for each individual member, as determined by the actuary, by the salary expected to be paid to that member during the fiscal year in which such normal contribution is payable, and (2) calculating the sum of the individual entry age normal contributions attributable to all such members. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an individual basis which he or she deems appropriate, and which are consistent with the provisions of sub-item (B) of this item.

(E) In the alternative, the methodology determined by the actuary in accordance with sub-item (C) of this item may provide for the actuary to calculate the entry age normal contribution on an aggregate basis by multiplying the entry age normal contribution rate for all members in the aggregate, as determined by the actuary, by the aggregate amount of the salaries expected to be paid to all members during the fiscal year in which the normal contribution is payable. The actuary, in his or her discretion, may make any adjustments to such methodology for determining the entry age normal contribution on an aggregate basis which he or she deems appropriate, and which are consistent with the provisions of sub-item (B) of this item.

(F) In the alternative, the methodology determined by the actuary in accordance with sub-item (C) of this item may provide for the calculation of the entry age normal contribution on any other basis which the actuary deems appropriate, and which is consistent with the entry age actuarial cost method and the provisions of sub-item (B) of this item.

(G) (1) Where the methodology determined by the actuary in accordance with sub-item (C) of this item requires the determination of an entry age normal contribution rate for each individual member in order to calculate the entry age normal contribution for each individual member, the actuary shall determine such rate for each such member in accordance with the entry age actuarial cost method, and such rate, as determined by the actuary for each such member, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetime of that particular member from his or her age at entry, the actuarial present value of benefits to which such member is expected to become entitled, as determined by the actuary.

(2) Where the methodology determined by the actuary in accordance with sub-item (C) of this item requires the determination of an entry age

normal contribution rate for all members in the aggregate in order to calculate the entry age normal contribution for all members in the aggregate, the actuary shall determine such rate in accordance with the entry age actuarial cost method, and such rate, as determined by the actuary, shall be consistent with a method designed, in general, to fund, on a level basis over the working lifetimes of members from their ages at entry, the actuarial present value of benefits to which such members are expected to become entitled, as determined by the actuary.

§ 37. Paragraph (j) of subdivision 16 of section 2575 of the education law is amended by adding a new subparagraph 2-a to read as follows:

(2-a) Where a responsible obligor (as defined in paragraph ten of subdivision a of section 13-638.2 of the administrative code of the city of New York) is required to make payments to the retirement system pursuant to applicable provisions of law in fiscal year two thousand twelve--two thousand thirteen, and in any fiscal year thereafter, and the provisions of this paragraph or the provisions of any other applicable law do not otherwise specifically require such responsible obligor to make such payments by a particular date or dates during such fiscal year, such responsible obligor shall make such payments either (i) in total on or before January first of such fiscal year, or (ii) in twelve equal monthly installments, as determined by the actuary, with each monthly installment to be paid on or before the last day of each month.

§ 38. This act shall take effect immediately and shall be deemed to have been in full force and effect on and after July 1, 2011. Notwithstanding any other provision of law, for the purposes of calculating an actuarial reserve pursuant to the provisions of section 13-557 of the administrative code of the city of New York, the valuation rate of interest and mortality tables in effect on June 30, 1988 shall be utilized by the actuary.

FISCAL NOTE.--Pursuant to Legislative Law, Section 50: BACKGROUND: In reports dated February 10, 2012, the Actuary presented proposed changes in actuarial assumptions and methods for determining employer contributions for Fiscal Years beginning on and after July 1, 2011 (i.e., the "Silver Books") to each of the Boards of Trustees of the following five actuarially-funded New York City Retirement Systems ("NYCRS"):

* New York City Employees' Retirement System ("NYCERS")
* New York City Teachers' Retirement System ("TRS")
* New York City Board of Education Retirement System ("BERS")
* New York City Police Pension Fund ("POLICE")
* New York City Fire Department Pension Fund ("FIRE")

These Silver Books were developed by the Actuary after reviewing the two most recent actuarial experience studies required by the New York City Charter and prepared by The Segal Company in their Report dated November 2006 and The Hay Group in their Report dated December 2011.

The principal components of the Actuary's proposed changes in actuarial assumptions and methods used to develop employer contributions to the NYCRS are to:

* Reduce the Actuarial Interest Rate ("AIR") assumption from 8.0% per annum (gross of expenses) to 7.0% per annum (net of expenses).
* Retain the current economic actuarial assumptions for the Consumer Price Inflation of 2.5% per year and the General Wage Increase ("GWI") of 3.0% per year.
* Update demographic actuarial assumptions to reflect the Actuary's best estimate of future experience.

* Replace the current Actuarial Cost Method ("ACM") (i.e., the Frozen Initial Liability ("FIL") ACM) with the Entry Age Actuarial Cost Method ("EAACM") and establish certain amortization methods and periods to be used for financing the Unfunded Actuarial Accrued Liabilities ("UAAL") developed under this new ACM.
* Retain the current six-year phase-in period for Unexpected Investment Returns ("UIR") for investment gains and losses for the Actuarial Asset Valuation Method ("AAVM") for Fiscal Year 2012 and beyond. Use a Market Value Restart as of June 30, 2011 and set the June 30, 2010 Actuarial Asset Value ("AAV") equal to the June 30, 2011 Market Value of Assets ("MVA") discounted by the AIR assumption (adjusted for cash flow).

Certain of the proposals developed by the Actuary (e.g., probabilities of decrement from active service, probabilities of death after retirement) require adoption by the Board of Trustees of each of the NYCRS.

Other proposed changes in actuarial assumptions and methods require passage of enabling legislation by the New York State Legislature and enactment by the Governor.

The provisions of this amended proposed legislation, together with the adoption of actuarial tables by the Boards of Trustees of the NYCRS and application of the revised AAVM, represent the packages of actuarial assumptions and methods proposed by the Actuary for financing the NYCRS.

PROVISIONS OF PROPOSED LEGISLATION: This proposed legislation would amend Administrative Code of the City of New York ("ACNY") Sections 13-127, 13-133, 13-194, 13-228, 13-271, 13-281, 13-331, 13-527, 13-533, 13-638.2 and 13-705 and Education Law Section 2575 by including provisions that impact the development of employer contributions to the NYCRS.

Specifically, for each of the NYCRS, this amended proposed legislation would:

* Reduce the AIR assumption to be used for developing employer contributions from 8.0% per annum (gross of expenses) to 7.0% per annum (net of expenses).
* Continue through Fiscal Year 2016 the use of the 8.25% per year crediting rate on Annuity Savings Fund ("ASF") and Increased-Take-Home-Pay ("ITHP") Reserves for Tier I and Tier II members.
* Replace the current ACM (i.e., the FIL ACM) with the EAACM.
* Amortize over a 22-year period the Initial UAAL established under the EAACM with 21 annual payments beginning Fiscal Year 2012 using Increasing Dollar Payments ("IDP"), where the increase in payments would be 3.0% per year, consistent with the proposed GWI assumption.

Amortize over a 20-year period (19 annual payments) additional UAAL attributable to future actuarial assumption and/or method changes, over a 15-year period (14 annual payments) any actuarial gains and losses and over an approximation of the remaining working lifetimes of those impacted (unless the amortization period is established by statute) any benefit changes, using Level Dollar Payments ("LDP").

The Actuary would be provided with the authority to establish UAAL and/or amortization schedules consistent with the EAACM, where such UAAL and/or amortization schedules are appropriate but not provided in legislation.

* Retain the One-Year Lag Methodology ("OYLM").
* Retain the repayment of Administrative Expenses, with interest, in the second fiscal year after occurrence.

Provide for the transfer of assets directly from NYCERS to the Correction Officers' Variable Supplements Fund ("COVSF") in the event that assets of the COVSF are insufficient to meet any legally-required benefit payments.

* Provide for the transfer of assets directly from POLICE to the Police Officers' Variable Supplements Fund ("POVSF") and to the Police Superior Officers' Variable Supplements Fund ("PSOVSF") in the event that assets of the POVSF or the PSOVSF are insufficient to meet any legally-required benefit payments.

* Although recommended by the Actuary, due to concerns expressed by certain FIRE Trustees, not provide for the transfer of assets directly from FIRE to the Firefighters' Variable Supplements Fund ("FFVSF") and to the Fire Officers' Variable Supplements Fund ("FOVSF") in the event that assets of the FFVSF or the FOVSF are insufficient to meet any legally-required benefit payments.

* Provide for the payment of interest on employer contributions made after the due dates determined and communicated by the Actuary to the Boards of Trustees.

ACTUARIAL PRESENT VALUES OF BENEFITS: Enactment of this amended proposed legislation, together with the other changes in actuarial assumptions and methods adopted by the Boards of Trustees of the NYCRS, would result in an increase in the Actuarial Present Value ("APV") of Benefits ("APVB") (inclusive of the APVB of the Variable Supplements Funds ("VSFs")) of the NYCRS of approximately $36.0 billion as of June 30, 2010, as shown in the following Table I:

TABLE I

Comparison of Actuarial Present Values of Benefits
Before and After Proposed Changes
in Actuarial Assumptions and Methods
as of June 30, 2010

($ Billions)

Actuarial Present Values of Benefits{1}

Retirement System	Before Changes{2}	After Changes{3}	Difference{4}
NYCERS	$ 64.7	$ 78.0	$ 13.3
TRS	58.3	68.2	9.9
BERS	3.7	4.6	.9
POLICE	42.3	50.7	8.4
FIRE	17.0	20.5	3.5
Total	$186.0	$222.0	$ 36.0

{1} Amounts include APVB of the VSFs.

{2} Equals APVB as of June 30, 2010 based on preliminary census data used for the June 30, 2010 (Lag) actuarial valuations, on preliminary calculations using actuarial software being replaced and on current actuarial assumptions and methods.

{3} Equals APVB as of June 30, 2010 based on final census data used for the June 30, 2010 (Lag) actuarial valuations, on final calculations using new actuarial software and on proposed actuarial assumptions and methods.

{4} Equals After Changes minus Before Changes.

ANNUAL EMPLOYER CONTRIBUTIONS: Under the EAACM, the Actuarial Present Value ("APV") of Projected Benefits ("APVB") of each individual included in the actuarial valuation is allocated on a level basis over the earnings (or service) of the individual between entry age and assumed exit age(s).

The portion of this APV allocated to a valuation year is referred to as the Normal Contribution. The portion of this APV not provided for at a valuation date by the APV of Future Normal Contributions is the Actuarial Accrued Liability ("AAL"). The excess, if any, of the AAL over the AAV is the UAAL.

Under this method, actuarial gains (losses), as they occur, reduce (increase) the UAAL and are explicitly identified and amortized. Increases (decreases) in obligations due to benefit changes, actuarial assumption and/or method changes are also explicitly identified and amortized.

The initial UAAL as of June 30, 2010 would be amortized over 22 years with 21 annual payments beginning Fiscal Year 2012 increasing by 3.0% per year, recognizing the impact of employer contributions made during Fiscal Year 2011 under the OYLM.

Furthermore, the Actuary proposes revising the AAVM as of June 30, 2010 for each of the NYCRS. The new method would retain the current six-year phase-in period for Unexpected Investment Returns ("UIR") for the AAVM of 15%, 15%, 15%, 15%, 20% and 20% for investment gains/losses for Fiscal Year 2012 and beyond. However, the AAV as of June 30, 2011 would be set equal to the MVA as of that date and the June 30, 2010 AAV would be set equal to the June 30, 2011 MVA, discounted by the AIR assumption and adjusted for cash flow.

The One-Year Lag Methodology and the repayment of Administrative Expenses with interest, in the second fiscal year after occurrence, would be retained.

EMPLOYER CONTRIBUTIONS - FISCAL YEAR 2012: The following Table II presents the combined impact of all of the proposed changes in actuarial assumptions and methods on the Fiscal Year 2012 employer contributions to the NYCRS.

Specifically, Table II shows a comparison between: (1) estimated Fiscal Year 2012 employer contributions based upon the actuarial assumptions and methods currently in effect ("Before Changes") and (2) final Fiscal Year 2012 employer contributions computed in accordance with this proposed legislation and all of the other proposed actuarial assumptions and methods ("After Changes").

TABLE II

Comparison of Fiscal Year 2012 Employer Contributions Calculated using Current Actuarial Assumptions and Methods with Those Calculated using Proposed Actuarial Assumptions and Methods

($ Billions)

Retirement System	Before Changes{1}	After Changes{2}	Difference{3}
NYCERS	$ 2.59	$ 3.02	$ .43
TRS	2.62	2.67	.05
BERS	.17	.21	.04
POLICE	2.20	2.39	.19
FIRE	.95	.98	.03

Total	$ 8.53	$ 9.27	$ .74

{1} Equals estimated employer contributions for Fiscal Year 2012 based on preliminary census data used for the June 30, 2010 (Lag) actuarial valuations, on preliminary calculations using actuarial software being replaced and on current actuarial assumptions and methods.
{2} Equals final employer contributions for Fiscal Year 2012 based on final census data used for the June 30, 2010 (Lag) actuarial valuations, on final calculations using new actuarial software and on proposed actuarial assumptions and methods.
{3} Equals After Changes minus Before Changes.
EMPLOYER CONTRIBUTIONS - FISCAL YEARS 2012 TO 2016: The financial impact of the proposed changes in actuarial assumptions and methods, relative to the current actuarial assumptions and methods, is to increase and to smooth the pattern of employer contributions to the NYCRS for Fiscal Years 2012 to 2016.
The following Table III compares the estimated employer contributions for the five actuarially-funded NYCRS combined under the current actuarial assumptions and methods and under the proposed actuarial assumptions and methods:

TABLE III

Comparison of Employer Contributions
For Fiscal Years 2012 to 2016
Calculated using Current Actuarial Assumptions and Methods with
Those Calculated using Proposed Actuarial Assumptions and Methods{1}

($ Billions)

Fiscal Year	Before Changes{2}	After Changes{3}	Difference{4}
2012	$ 8.53	$ 9.27	$ .74
2013	8.37	9.39	1.02
2014	8.36	9.37	1.01
2015	8.66	9.34	.68
2016	8.87	9.57	.70

{1} Amounts shown are estimated based on preliminary June 30, 2010 census data and on preliminary calculations using actuarial software that is being replaced, with adjustments in amounts shown After Changes to be consistent with final Fiscal Year 2012 amounts.
{2} Equals employer contributions for the respective Fiscal Years based upon the second prior June 30 actuarial valuations and on current actuarial assumptions and methods.
{3} Equals employer contributions for the respective Fiscal Years based upon the second prior June 30 actuarial valuations and on proposed actuarial assumptions and methods.
{4} Equals After Changes minus Before Changes.
CENSUS DATA: The census data used to determine APVB and estimated Fiscal Year 2012 employer contributions Before Changes and After Changes are the active and retired members included in the June 30, 2010 (Lag) actuarial valuations of the NYCRS.
ACTUARIAL ASSUMPTIONS AND METHODS: The actuarial assumptions and methods used to determine estimated Fiscal Year 2012 employer contributions Before Changes are generally the same as those utilized in the June 30,

2009 actuarial valuations of the NYCRS to determine Fiscal Year 2011 employer contributions.

The actuarial assumptions and methods used to determine Fiscal Year 2012 employer contributions After Changes are those proposed by the Actuary to the Boards of Trustees of each of the NYCRS during February 2012.

The actuarial assumptions used to estimate employer contributions for Fiscal Years 2013 to 2016 include projection assumptions consistent with those used to develop estimates for the April 2011 New York City Financial Plan.

APVB and employer contribution amounts shown Before Changes are estimated based on preliminary June 30,2010 census data and on actuarial software that is being replaced.

APVB and employer contributions After Changes used to determine Fiscal Year 2012 employer contributions are based on final June 30, 2010 census data and generally on new actuarial software.

Estimated employer contributions After Changes for Fiscal Years 2013 to 2016 are based on June 30, 2010 census data and projections of APVB adjusted to be consistent with Fiscal Year 2012 results.

ECONOMIC VALUES OF BENEFITS: The actuarial assumptions used to determine the financial impact of the proposed legislation discussed in this Fiscal Note are those appropriate for budgetary models and for determining annual employer contributions to NYCRS. However, the economic assumptions (current and proposed) that are used for determining employer contributions do not develop risk-adjusted, economic values of benefits. Such risk-adjusted, economic values of benefits would likely differ significantly from those developed by the budgetary models.

STATEMENT OF ACTUARIAL OPINION: I, Robert C. North, Jr., am the Chief Actuary for the New York City Retirement Systems. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

FISCAL NOTE IDENTIFICATION: This estimate is intended for use only during the 2013 Legislative Session. It is Fiscal Note 2013-01, dated December 14, 2012, prepared by the Chief Actuary for the New York City Employees' Retirement System, the New York City Teachers' Retirement System, the New York City Board of Education Retirement System, the New York City Police Pension Fund and the New York City Fire Department Pension Fund.

The Legislature of the STATE OF NEW YORK **ss:**

Pursuant to the authority vested in us by section 70-b of the Public Officers Law, we hereby jointly certify that this slip copy of this session law was printed under our direction and, in accordance with such section, is entitled to be read into evidence.

DEAN G. SKELOS
Temporary President of the Senate

SHELDON SILVER
Speaker of the Assembly