



MACRS

CALCULATION BASICS



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June 4, 2016

MACRS 2016 SPRING CONFERENCE

Retirement Allowance Basics

- Retirement Allowance is the sum of:
 - Annuity
 - Pension
- Retirement Options
 - Option A - Life Annuity
 - Option B - Cash Refund Annuity
 - Refund balance in Annuity Reserve Fund (if any)
 - Can name anyone as beneficiary
 - Option C - Joint and Last Survivor Annuity
 - Upon member's death - beneficiary receives 2/3
 - Upon beneficiary's death - member "pops-up" to Option A
 - Limited beneficiaries

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Superannuation - Pre 4/2/12

- Eligibility
 - Groups 1 and 2
 - Age 55 with 10 years of service [§5(1)(a), 5(1)(m)], or
 - 20 years of service at any age [§10(1)]
 - Group 4
 - Age 55 [§5(1)(a), 5(1)(m)], or
 - 20 years of service at any age [§10(1)]
- Allowance Formula
 - (3-yr. avg. salary) x (age/group factor) x (total credited service)
 - Veteran's allowance
 - 80% limitation

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NOTES:

Superannuation Option (A) - Example

- Member's Age: 55 years, 5 months
- Job Group 1
- Non-veteran
- Service: 14 years, 11 months
- 3-year average salary: \$18,533.33
- ASF Balance: \$35,000.00

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Superannuation Option (A) - Example (Cont'd)

CALCULATION OF ALLOWANCE	
3-year avg. salary	18,533.33
x age factor	0.015
= Base	278.00
x Cred Service	14.9167
= Allowance	4,146.84
Div. by 12	345.57
Mult. by 12	4,146.84 (1)
80% of 3-yr. avg.	14,826.66
Div. by 12	1,235.56
Mult. by 12	14,826.72 (2)
Allowance	4,146.84
	lesser of (1) and (2)
+ Vet. Benefit	0.00
Total Allowance	4,146.84

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NOTES:

Superannuation Option (A) - Example (Cont'd)

ALLOCATION OF ALLOWANCE TO ANNUITY AND PENSION	
Accumulated Deductions	35,000.00
Annuity Factor	0.00701
Monthly Annuity	245.35
Annual Annuity	2,944.20
Annual Pension	1,202.64
Annual Allowance	4,146.84
Monthly Allowance	345.57

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Superannuation - Post 4/2/12

- Eligibility
 - Group 1
 - Age 60 with 10 years of service [§5(1)(a), 5(1)(m)]
 - Group 2
 - Age 55 with 10 years of service [§5(1)(a), 5(1)(m)]
 - Group 4
 - Age 55 [§ 5(1)(a), 5(1)(m)]
- Allowance Formula
 - (5-yr. avg. salary) x (age/group factor) x (total cred. service)
 - Veteran's allowance
 - 80% limitation

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NOTES:

Superannuation Option (A) - Example

- Member's Age: 60 years, 5 months
- Job Group 1
- Non-veteran
- Service: 14 years, 11 months
- 5-year average salary: \$18,533.33
- ASF Balance: \$35,000.00

Superannuation Option (A) - Example (Cont'd)

CALCULATION OF ALLOWANCE	
5-year avg. salary	18,533.33
x age factor	0.0145
= Base	268.73
x Cred Service	14.9167
= Allowance	4,008.56
Div. by 12	334.05
Mult. by 12	4,008.60 (1)
80% of 5-yr. avg.	14,826.66
Div. by 12	1,235.56
Mult. by 12	14,826.72 (2)
Allowance	4,008.60
	lesser of (1) and (2)
+ Vet. Benefit	0.00
Total Allowance	4,008.60

NOTES:

Superannuation Option (A) - Example (Cont'd)

ALLOCATION OF ALLOWANCE TO ANNUITY AND PENSION	
Accumulated Deductions	35,000.00
Annuity Factor	0.00759
Monthly Annuity	265.65
Annual Annuity	3,187.80
Annual Pension	820.80
Annual Allowance	4,008.60
Monthly Allowance	334.05

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Accidental Disability

- Eligibility
 - Permanently disabled
 - Job-related
 - No minimum age/service requirements
- Allowance Formula
 - (72% x salary) + annuity
 - If hired after January 1, 1988 or not continuously a member in service since January 1, 1988, then 75% limit on allowance
 - Veteran's allowance (local option)
 - Additional Dependent allowance

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NOTES:

Accidental Disability Option (A) - Example

- Member's Age: 49 years, 0 months
- Job Group 4
- Non-veteran
- Service: 9 years, 0 months
- Annual salary: \$35,000.00
- ASF Balance: \$25,000.00
- Retirement Date: January 1, 2016
- Membership Date: January 1, 2007

Accidental Disability Option (A) - Example (Cont'd)

CALCULATION OF ALLOWANCE	
Annual Rate of Regular Compensation:	35,000.00
x 72%:	0.72
= Pension	25,200.00
Div. by 12	2,100.00
Mult. by 12	25,200.00 (a)
Accumulated Deductions:	25,000.00
Annuity Factor:	0.00654
Monthly Annuity:	163.50
Annual Annuity:	1,962.00 (b)
= Uncapped Allowance:	27,162.00 (1) = (a) + (b)
75% of Ann. Rate of Reg. Comp.:	26,250.00
Div. by 12	2,187.50
Mult. By 12	26,250.00 (2) = capped allowance
Accidental Disability Allowance	26,250.00 Lesser of (1) and (2)

NOTES:

Accidental Disability Option (A) - Example *(Cont'd)*

ALLOCATION OF ALLOWANCE TO ANNUITY AND PENSION	
Accumulated Deductions	25,000.00
Annuity Factor	0.00654
Monthly Annuity	163.50
Annual Annuity	1,962.00
Annual Pension	24,288.00
Annual Allowance	26,250.00
Monthly Allowance	2,187.50

Ordinary Disability - Pre 4/2/12

- Eligibility
 - Permanently disabled
 - Not job-related
 - 15 years of service (10 years if elect local option or if veteran)
- Allowance Formula
 - Veterans
 - $(50\% \times \text{salary}) + \text{annuity}$
 - Non-Veterans
 - $(3\text{-yr. avg. salary}) \times (\text{age/group factor}) \times (\text{total credited service})$
 - If younger than age 55, use age 55 factor
 - If age 55 or older, use factor at actual age
 - 80% limitation

NOTES:

Ord. Disab. Non-Vet. Option (A) - Example

- Member's Age: 49 years, 0 months
- Job Group 4
- Non-veteran
- Service: 16 years, 11 months
- 3-year average salary: \$36,666.67
- ASF Balance: \$44,000.00

Ord. Disab. Non-Vet. Opt. (A) - Example (Cont'd)

CALCULATION OF ALLOWANCE	
3-year avg. salary	36,666.67
x age factor	0.025
= Base	916.67
x Cred Service	16.9167
= Allowance	15,507.03
Div. by 12	1,292.25
Mult. by 12	15,507.00

NOTES:

Ord. Disab. Non-Vet. Opt. (A) - Example (Cont'd)

ALLOCATION OF ALLOWANCE TO ANNUITY AND PENSION	
Accumulated Deductions	44,000.00
Annuity Factor	0.00654
Monthly Annuity	287.76
Annual Annuity	3,453.12
Annual Pension	12,053.88
Annual Allowance	15,507.00
Monthly Allowance	1,292.25

Ord. Disab. Veteran Option (A) - Example

- Member's Age: 57 years, 10 months
- Job Group 4
- Veteran
- Service: 15 years, 0 months
- Annual salary: \$50,000.00
- ASF Balance: \$30,000.00

NOTES:

Ord. Disab. Veteran Opt. (A) - Example (Cont'd)

CALCULATION OF ALLOWANCE	
Annual Rate of Regular Compensation:	50,000.00
x 50%:	0.50
= Pension	25,200.00
Div. by 12	2,083.33
Mult. by 12	24,999.96 (a)
Accumulated Deductions:	30,000.00
Annuity Factor:	0.00733
Monthly Annuity:	219.90
Annual Annuity:	2,638.80 (b)
= Allowance:	27,638.76 (1) = (a) + (b)

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Ordinary Disability - Post 4/2/12

- Eligibility
 - Permanently disabled
 - Not job-related
 - 15 years of service (10 years if elect local option or if veteran)
- Allowance Formula
 - Veterans
 - (50% x salary) + annuity
 - Non-Veterans
 - (5-yr. avg. salary) x (age/group factor) x (total credited service)
 - Group 1:
 - » If younger than age 60, use age 60 factor
 - » If age 60 or older, use factor at actual age
 - Groups 2 and 4:
 - » If younger than age 55, use age 55 factor
 - » If age 55 or older, use factor at actual age
 - 80% limitation

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NOTES:

Ord. Disab. Non-Vet. Option (A) - Example

- Member's Age: 49 years, 0 months
- Job Group 4
- Non-veteran
- Service: 16 years, 11 months
- 5-year average salary: \$36,666.67
- ASF Balance: \$44,000.00

Ord. Disab. Non-Vet. Opt. (A) - Example *(Cont'd)*

CALCULATION OF ALLOWANCE	
5-year avg. salary	36,666.67
x age factor	0.022
= Base	806.67
x Cred Service	16.9167
= Allowance	13,646.19
Div. by 12	1,137.18
Mult. by 12	13,646.16

NOTES:

Ord. Disab. Non-Vet. Opt. (A) - Example *(Cont'd)*

ALLOCATION OF ALLOWANCE TO ANNUITY AND PENSION	
Accumulated Deductions	44,000.00
Annuity Factor	0.00654
Monthly Annuity	287.76
Annual Annuity	3,453.12
Annual Pension	10,193.04
Annual Allowance	13,646.16
Monthly Allowance	1,137.18

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Section 12(2)(d) - Pre 4/2/12

- Eligibility
 - If beneficiary is nominated
 - No minimum age/service requirement
 - Spousal election
 - Can elect even if someone else is nominated as Option (d) beneficiary
 - 2 years of creditable service
 - Married at least 1 year and living together (or apart for justifiable cause)
- Allowance Formula
 - The Option C allowance the member would have received had he/she attained age 55 on the date of death, or actual age if older than 55
 - (3-yr. avg. salary) x (age/group factor) x (total cred. service)
 - Minimum allowance (\$3,000 or \$6,000)
 - 2 years of creditable service
 - Married at least 1 year and living together (or apart for justifiable cause)
 - Veteran's allowance
 - Dependent allowance

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NOTES:

Section 12(2)(d) - Example

- Member's Age: 49 years, 0 months
- Beneficiary's Age: 58 years, 5 months
 - Option C factor is based on member age 55 and beneficiary age 64
- Job Group 1
- Non-veteran
- Service: 16 years, 11 months
- 3-year average salary: \$36,666.67
- ASF Balance: \$44,000.00

Section 12(2)(d) - Example (Cont'd)

CALCULATION OF ALLOWANCE	
3-year avg. salary	36,666.67
x age factor	0.015
= Base	550.00
x Cred Service	16.9167
= Allowance	9,304.19
Div. by 12	775.35
Mult. by 12	9,304.20 (1)
80% of 3-yr. avg.	29,333.34
Div. by 12	2,444.45
Mult. by 12	29,333.40 (2)
Allowance	9,304.20 Lesser of (1) and (2)
+ Vet. Benefit	0.00
Total Opt. A Allowance	9,304.20
Mo. Option D Allowance	741.39 = 775.35 x .9562 (divisible by 3)
Ann. Option D Allowance	8,896.68

NOTES:

Section 12(2)(d) - Example (Cont'd)

ALLOCATION OF ALLOWANCE TO ANNUITY AND PENSION	
Accumulated Deductions	44,000.00
Annuity Factor	0.00733*
Monthly Annuity	322.52
Annual Annuity	3,870.24
Annual Pension	5,026.44
Annual Allowance	8,896.68
Monthly Allowance	741.39

*Based on beneficiary's actual age

Section 12(2)(d) - Post 4/2/12

- Eligibility
 - Same as for Pre 4/2/12
- Allowance Formula
 - Group 1
 - The Option C allowance the member would have received had he/she attained age 60 on the date of death, or actual age if older than 60
 - Groups 2 and 4
 - The Option C allowance the member would have received had he/she attained age 55 on the date of death, or actual age if older than 55
 - (5-yr. avg. salary) x (age/group factor) x (total cred. service)
 - Minimum allowance (\$3,000 or \$6,000)
 - 2 years of creditable service
 - Married at least 1 year and living together (or apart for justifiable cause)
 - Veteran's allowance
 - Dependent allowance

NOTES:

Section 12(2)(d) - Example

- Member's Age: 49 years, 0 months
- Beneficiary's Age: 58 years, 5 months
 - Option C factor is based on member age 60 and beneficiary age 69
- Job Group 1
- Non-veteran
- Service: 16 years, 11 months
- 5-year average salary: \$36,666.67
- ASF Balance: \$44,000.00

Section 12(2)(d) - Example (Cont'd)

CALCULATION OF ALLOWANCE	
5-year avg. salary	36,666.67
x age factor	0.0145
= Base	531.67
x Cred Service	16.9167
= Allowance	8,994.10
Div. by 12	749.51
Mult. by 12	8,994.12 (1)
80% of 5-yr. avg.	29,333.34
Div. by 12	2,444.45
Mult. by 12	29,333.40 (2)
Allowance + Vet. Benefit	8,994.12 Lesser of (1) and (2) 0.00
Total Opt. A Allowance	8,994.12
Mo. Option D Allowance	706.20 = 749.51 x .9422 (divisible by 3)
Ann. Option D Allowance	8,474.40

NOTES:

Section 12(2)(d) - Example (Cont'd)

ALLOCATION OF ALLOWANCE TO ANNUITY AND PENSION	
Accumulated Deductions	44,000.00
Annuity Factor	0.00733*
Monthly Annuity	322.52
Annual Annuity	3,870.24
Annual Pension	4,604.16
Annual Allowance	8,474.40
Monthly Allowance	706.20

*Based on beneficiary's actual age

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Accidental Death

- Eligibility
 - If member in service, die from an injury sustained or hazard undergone in the performance of duties, or
 - If previously retired for accidental disability, die from the same disabling cause
- Allowance Formula
 - Member in service
 - Return of Accumulated Deductions in Annuity Savings Fund
 - (72% x salary)
 - Dependent allowance
 - Accidental disability retiree
 - Greater of (72% x salary), or current pension amount of accidental disability retirement allowance
 - Dependent allowance

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NOTES:

Anti-Spiking Basics

- Two provisions added to Chapter 32 of the General Laws by Chapter 176 of the Acts of 2011
 - Section 14 - amended §5(2)(a)
 - Section 18 - added §5(2)(f)
 - Further amended by §68 of Ch. 165 of the Acts of 2014
- PERAC Memos
 - Memo #38/2012 - explains anti-spiking in detail
 - Memo #16/2014 - clarifies anti-spiking when there's a bona fide change in position
 - Memo #29/2014 - adds new exemption
- Who is affected?
 - Retires on or after April 2, 2012, and
 - Benefit calculated under §5, §6 (non-veteran), §10(1) or §12(2)(d)

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Section 14 of Chapter 176

- Amends G.L. c. 32, §5(2)(a) by adding the following text:

...[I]f in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100 per cent, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement.

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NOTES:

What Does This Mean?

- If in the last 5 years of creditable service, the rate of regular compensation increases by more than 100% (i.e. more than doubles) between two consecutive years, then Section 14 is violated.
- If Section 14 is violated, **MUST** use the average of **the last 5 years!**
- There are **NO** exceptions.

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Section 14 - Example 1

2016 - \$80,000 (Mayor)

2015 - \$80,000 (Mayor)

2014 - \$80,000 (Mayor)

2013 - \$20,000 (City Council)

2012 - \$20,000 (City Council)

➡ Is Section 14 violated? Why or why not?

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NOTES:

Section 14 - Example 2

- 2016 - \$80,000 (Mayor)
- 2015 - \$80,000 (Mayor)
- 2014 - \$80,000 (Mayor)
- 2013 - \$80,000 (Mayor)
- 2012 - \$80,000 (Mayor)
- 2011 - \$20,000 (City Council)
- 2010 - \$20,000 (City Council)

➡ Is Section 14 violated? Why or why not?

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Section 18 of Chapter 176

- Added G.L. c. 32, §5(2)(f)
 - Further amended by §68 of Ch. 165 of the Acts of 2014

In calculating the average annual rate of regular compensation for purposes of this section, regular compensation in any year shall not include regular compensation that exceeds the average of regular compensation received in the 2 preceding years by more than 10 per cent. This paragraph shall not apply to an increase in the annual rate of regular compensation that results from an increase in hours of employment, from overtime wages, from a bona fide change in position, from a modification in the salary or salary schedule negotiated for bargaining unit members under chapter 150E, from an increase in salary for a member whose salary amount is specified by law, or in the case of a teacher, from the performance of any services set forth in the third sentence of the first paragraph of the definition of "regular compensation" in section 1. Any withholdings excluded from the calculation of a member's average annual rate of regular compensation under this paragraph, shall be returned to the member with interest at the assumed actuarial rate.

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NOTES:

What Does This Mean?

- In determining the 3-year (or 5-year) average of regular compensation, if regular compensation in any year (of creditable service) exceeds the average of the regular compensation of the previous two years (of creditable service) by more than 10%, then Section 18 is violated.
- In calculating the benefit, cannot use regular compensation in excess of 10% of the average of the previous two years.

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Exceptions/Exemptions

- If the increase in regular compensation is from one of the following, then Section 18 is not violated:
 - Increase in the number of hours worked
 - Overtime wages (not reg. comp. but included in §18)
 - Bona fide change in position
 - Modification in salary or salary schedule negotiated for bargaining unit members of Chapter 150E
 - Increase in salary for a member whose salary amount is specified by law
 - (For Teachers only) the performance of any service set forth in the third sentence of the first paragraph of the definition of “regular compensation”

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NOTES:

If Section 18 is Violated

- In calculating the benefit, cannot use regular compensation in excess of 10% of the average of regular compensation received in the previous two years.
- Any withholdings excluded from the calculation of the member's average annual rate of regular compensation shall be returned to the member with interest at the actuarial assumed rate.

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Section 18 - Example 1

2016 - \$11,400

2015 - \$10,700

2014 - \$10,000

2013 - \$10,000

2012 - \$10,000

- ➡ In the absence of any exemptions, is Section 18 violated? Why or why not? If yes, when?

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NOTES:

Section 18 - Example 1 (Continued)

YEAR	SALARY	AVG. PREV. 2 YEARS	110% OF AVG.	SALARY TO USE
2016	\$11,400	\$10,350	\$11,385	\$11,385
2015	\$10,700	\$10,000	\$11,000	\$10,700
2014	\$10,000	\$10,000	\$11,000	\$10,000
2013	\$10,000			
2012	\$10,000			

Section 18 - Example 2

2016 - \$50,000

2015 - \$45,000

2014 - \$40,000

2013 - \$39,000

2012 - \$37,000

➡ In the absence of any exemptions, is Section 18 violated? Why or why not? If yes, when?

NOTES:

Section 18 - Example 2 (continued)

YEAR	SALARY	AVG. PREV. 2 YEARS	110% OF AVG.	SALARY TO USE
2016	\$50,000	\$42,500	\$46,750	\$46,750
2015	\$45,000	\$39,500	\$43,450	\$43,450
2014	\$40,000	\$38,000	\$41,800	\$40,000
2013	\$39,000			
2012	\$37,000			

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Section 18 - Example 3

7/1/15 - \$90,000
 7/1/14 - \$80,000
 1/1/14 - \$70,000 (promotion)
 7/1/13 - \$56,000
 7/1/12 - \$54,000
 7/1/11 - \$52,000

- Memo #16/2014
- Member retires on 6/30/2016

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NOTES:

Section 18 - Example 3 (Cont'd)

YEAR	SALARY	AVG. PREV. 2 YEARS	110% OF AVG.	SALARY TO USE
7/1/15 – 6/30/16	\$90,000	\$71,500	\$78,650	\$78,650
7/1/14 – 6/30/15	\$80,000	\$58,500	\$64,350	\$64,350
7/1/13 – 6/30/14	\$63,000	\$53,000	\$58,300	\$58,300
7/1/12 – 6/30/13	\$54,000			
7/1/11 – 6/30/12	\$52,000			

- This is how the anti-spiking calculation would look before we account for the bona fide change in position on 1/1/14
- The average salary (with anti-spiking and ignoring any exceptions) would be \$67,100
- The average salary (using no spiking) would be \$77,667

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Section 18 - Example 3 (Cont'd)

YEAR	SALARY	AVG. PREV. 2 YEARS	110% OF AVG.	SALARY TO USE
7/1/15 – 6/30/16	\$90,000	\$75,000	\$82,500	\$82,500
7/1/14 – 6/30/15	\$80,000	\$70,000	\$77,000	\$77,000
7/1/13 – 6/30/14	\$63,000	\$53,000	\$58,300	\$63,000
7/1/12 – 6/30/13	\$54,000			
7/1/11 – 6/30/12	\$52,000			

- This is how the anti-spiking calculation would look after we account for the bona fide change in position on 1/1/14
- To determine the average pay in any year AFTER the change in position, use the annual pay on the date of the change in position to determine the average of the previous years.
- The average salary (with spiking) would be \$74,167

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NOTES:

Dual Member Calculations

- §7 of Ch. 21 of the Acts of 2009 added G.L. c. 32, §5(2)(e)
 - Further amended by §67 of Ch. 165 of the Acts of 2014

A person who has been a member of 2 or more systems and who, on or after January 1, 2010, has received regular compensation from 2 or more governmental units concurrently for greater than 60 days shall, upon retirement, receive a superannuation retirement allowance to become effective on the date of retirement that is equal to the sum of the benefits calculated pursuant to this section as though the member were retiring solely from each system; provided, however, that notwithstanding paragraph (c) of subdivision (8) of section 3, each system shall pay the superannuation retirement allowance attributable to membership in that system to the member; and provided further, that this section shall not apply to any member who has vested in 2 or more systems as of January 1, 2010 or to any position whose annual regular compensation was less than \$5,000. Paragraph (d) of subdivision (7) of section 3 shall not apply if this paragraph applies. Upon retirement a member shall be considered a dual member if the member satisfies this paragraph. This paragraph shall only apply to the 5 years of creditable service immediately preceding a member's superannuation retirement under this section. This paragraph shall not apply to section 6.

What Does This Mean?

- If in the 5 years of creditable service immediately preceding retirement, a person receives regular compensation from two or more systems for more than 60 days on or after January 1, 2010, he/she will receive an allowance equal to the sum of benefits calculated if solely retiring from each system.
 - Each system pays the superannuation retirement allowance attributable to service in said system
- Exemptions
 - A person who was vested in both systems as of January 1, 2010
 - Any position whose regular compensation was less than \$5,000
 - Allowances paid under Section 6

NOTES:

Section 5(2)(e) - Example

- Member works in System A for 30 years
- Average salary in System A is \$80,000
- Member works in System B for 3 years
- Average salary in System B is \$80,000
- The 3 years worked in System B are concurrent with service in System A and are after January 1, 2010. The member retires immediately upon completion of these 3 years.
- Member is age 65
- Member is not a veteran
- Member elects to receive benefits under Option A

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Section 5(2)(e) - Example *(Cont'd)*

- If there was no §5(2)(e), the member would be entitled to an annual allowance of \$120,000 [$(\$160,000) \times (2.5\%) \times (30)$]
- Under §5(2)(e), the member is entitled to an annual allowance of \$66,000 [$\$60,000$ from System A ($\$80,000 \times 2.5\% \times 30$) and $\$6,000$ from System B ($\$80,000 \times 2.5\% \times 3$)]
 - Must apply to retire from both Systems
 - Must retire on same date from both Systems
 - Must elect same Option from both Systems, and
 - Each System would pay COLA based on the amount they are paying to the retiree, their own COLA base and the applicable COLA percentage

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NOTES:

COMMONWEALTH OF MASSACHUSETTS

Public Employee Retirement Administration Commission

Five Middlesex Avenue, Suite 304 | Somerville, MA 02145

Phone: 617-666-4446 | Fax: 617-628-4002

TTY: 617-591-8917 | Web: www.mass.gov/perac

