

# MONTANA PUBLIC EMPLOYEES' RETIREMENT BOARD

TITLE: ACTUARIAL EQUIVALENCE OPTION FACTOR DETERMINATION

POLICY: BOARD Admin 10

EFFECTIVE DATE: 6/10/2010

## I. POLICY AND OBJECTIVES

The objective of this policy is to provide information on how actuarial equivalence option factors are determined for the defined benefit plans the Board administers.

## II. APPLICABILITY

This policy applies to the PERS, JRS, HPORS, SRS and GWPORS defined benefit retirement systems administered by the Board.

## III. OPTION FACTOR DETERMINATION

Based on the 2009 experience study, the Board uses the following mortality information and an interest rate of 7.75% in determining option factors for the listed defined benefit plans. "RP-2000" refers to the RP-2000 Combined Healthy Male and Female Mortality Tables published by the Society of Actuaries.

"RP-2000 – 2015" refers to the same tables but projected to the year 2015 using Projection Scale AA.

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**Actuarial Equivalent Option Factors  
Mortality Assumptions**

Plan	Options Factor	GABA	Mortality	Members	
				Male Blend	Female Blend
PERS	Single Life Annuity	3%	RP-2000 - 2015	50%	50%
PERS	Single Life Annuity Non-Increasing Death Benefit	NO GABA	RP-2000 - 2015	50%	50%
PERS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	RP-2000 - 2015	50%	50%
PERS	Disability Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	RP-2000	50%	50%
PERS	Service Retirements Only 100% J&S with Pop-Up	3%	RP-2000 - 2015	50%	50%
PERS	Disability Retirements Only 100% J&S with Pop-Up	3%	RP-2000	50%	50%
PERS	Service Retirements Only 50% J&S with Pop-Up	3%	RP-2000 - 2015	50%	50%
PERS	Disability Retirements Only 50% J&S with Pop-Up	3%	RP-2000	50%	50%
JRS	Single Life Annuity Non-Increasing Death Benefit	NO GABA	RP-2000 - 2015	75%	25%
JRS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	RP-2000 - 2015	75%	25%
JRS	Disability Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	RP-2000	75%	25%
JRS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	NO GABA 4% Salary Inflation	RP-2000 - 2015	75%	25%
JRS	Disability Retirements Only Reduction for 10 Year C&L and 20 Year C&L	NO GABA 4% Salary Inflation	RP-2000	75%	25%
JRS	Service Retirements Only 100% J&S with Pop-Up	NO GABA 4% Salary Inflation	RP-2000 - 2015	75%	25%
JRS	Disability Retirements Only 100% J&S with Pop-Up	NO GABA 4% Salary Inflation	RP-2000	75%	25%
JRS	Service Retirements Only 50% J&S with Pop-Up	NO GABA 4% Salary Inflation	RP-2000 - 2015	75%	25%
JRS	Disability Retirements Only 50% J&S with Pop-Up	NO GABA 4% Salary Inflation	RP-2000	75%	25%
HPORS	Benefit Reduction	3%	RP-2000 - 2015	80%	20%
SRS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	RP-2000 - 2015	80%	20%
SRS	Disability Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	RP-2000	80%	20%
SRS	Service Retirements Only 100% J&S with Pop-Up	3%	RP-2000 - 2015	80%	20%
SRS	Disability Retirements Only 100% J&S with Pop-Up	3%	RP-2000	80%	20%
SRS	Service Retirements Only 50% J&S with Pop-Up	3%	RP-2000 - 2015	80%	20%
SRS	Disability Retirements Only 50% J&S with Pop-Up	3%	RP-2000	80%	20%
GWPORS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	RP-2000 - 2015	80%	20%
GWPORS	Disability Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	RP-2000	80%	20%
GWPORS	Service Retirements Only 100% J&S with Pop-Up	3%	RP-2000 - 2015	80%	20%
GWPORS	Disability Retirements Only 100% J&S with Pop-Up	3%	RP-2000	80%	20%
GWPORS	Service Retirements Only 50% J&S with Pop-Up	3%	RP-2000 - 2015	80%	20%
GWPORS	Disability Retirements Only 50% J&S with Pop-Up	3%	RP-2000	80%	20%

Plan	Options Factor	GABA	Mortality	Contingent Annuitants	
				Male Blend	Female Blend
PERS	Single Life Annuity	3%	RP-2000 - 2015	50%	50%
PERS	Single Life Annuity Non-Increasing Death Benefit	NO GABA	N/A	50%	50%
PERS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	N/A	50%	50%
PERS	Disability Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	N/A	50%	50%
PERS	Service Retirements Only 100% J&S with Pop-Up	3%	RP-2000 - 2015	50%	50%
PERS	Disability Retirements Only 100% J&S with Pop-Up	3%	RP-2000 - 2015	50%	50%
PERS	Service Retirements Only 50% J&S with Pop-Up	3%	RP-2000 - 2015	50%	50%
PERS	Disability Retirements Only 50% J&S with Pop-Up	3%	RP-2000 - 2015	50%	50%
JRS	Single Life Annuity Non-Increasing Death Benefit	NO GABA	N/A	25%	75%
JRS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	N/A	25%	75%
JRS	Disability Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	N/A	25%	75%
JRS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	NO GABA 4% Salary Inflation	N/A	25%	75%
JRS	Disability Retirements Only Reduction for 10 Year C&L and 20 Year C&L	NO GABA 4% Salary Inflation	N/A	25%	75%
JRS	Service Retirements Only 100% J&S with Pop-Up	NO GABA 4% Salary Inflation	RP-2000 - 2015	25%	75%
JRS	Disability Retirements Only 100% J&S with Pop-Up	NO GABA 4% Salary Inflation	RP-2000 - 2015	25%	75%
JRS	Service Retirements Only 50% J&S with Pop-Up	NO GABA 4% Salary Inflation	RP-2000 - 2015	25%	75%
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SRS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	N/A	20%	80%
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SRS	Service Retirements Only 100% J&S with Pop-Up	3%	RP-2000 - 2015	20%	80%
SRS	Disability Retirements Only 100% J&S with Pop-Up	3%	RP-2000 - 2015	20%	80%
SRS	Service Retirements Only 50% J&S with Pop-Up	3%	RP-2000 - 2015	20%	80%
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GWPORS	Service Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	N/A	20%	80%
GWPORS	Disability Retirements Only Reduction for 10 Year C&L and 20 Year C&L	3%	N/A	20%	80%
GWPORS	Service Retirements Only 100% J&S with Pop-Up	3%	RP-2000 - 2015	20%	80%
GWPORS	Disability Retirements Only 100% J&S with Pop-Up	3%	RP-2000 - 2015	20%	80%
GWPORS	Service Retirements Only 50% J&S with Pop-Up	3%	RP-2000 - 2015	20%	80%
GWPORS	Disability Retirements Only 50% J&S with Pop-Up	3%	RP-2000 - 2015	20%	80%

#### **IV. CROSS REFERENCE GUIDE**

The following laws, rules or policies may contain provisions that pertain to the actuarial equivalence option factor determinations. The list should not be considered exhaustive - other policies may apply.

Article VIII, § 15, Montana Constitution  
§ 19-2-403, MCA

#### **V. HISTORY**

Board Admin 10 Actuarial Equivalence Option Factor Determination  
Originally approved February 14, 2008  
Revised June 10, 2010