



Montana SAVVA

**Level of Benefits Guaranteed by
Employers in Individual Account Plans**

May 19, 2010

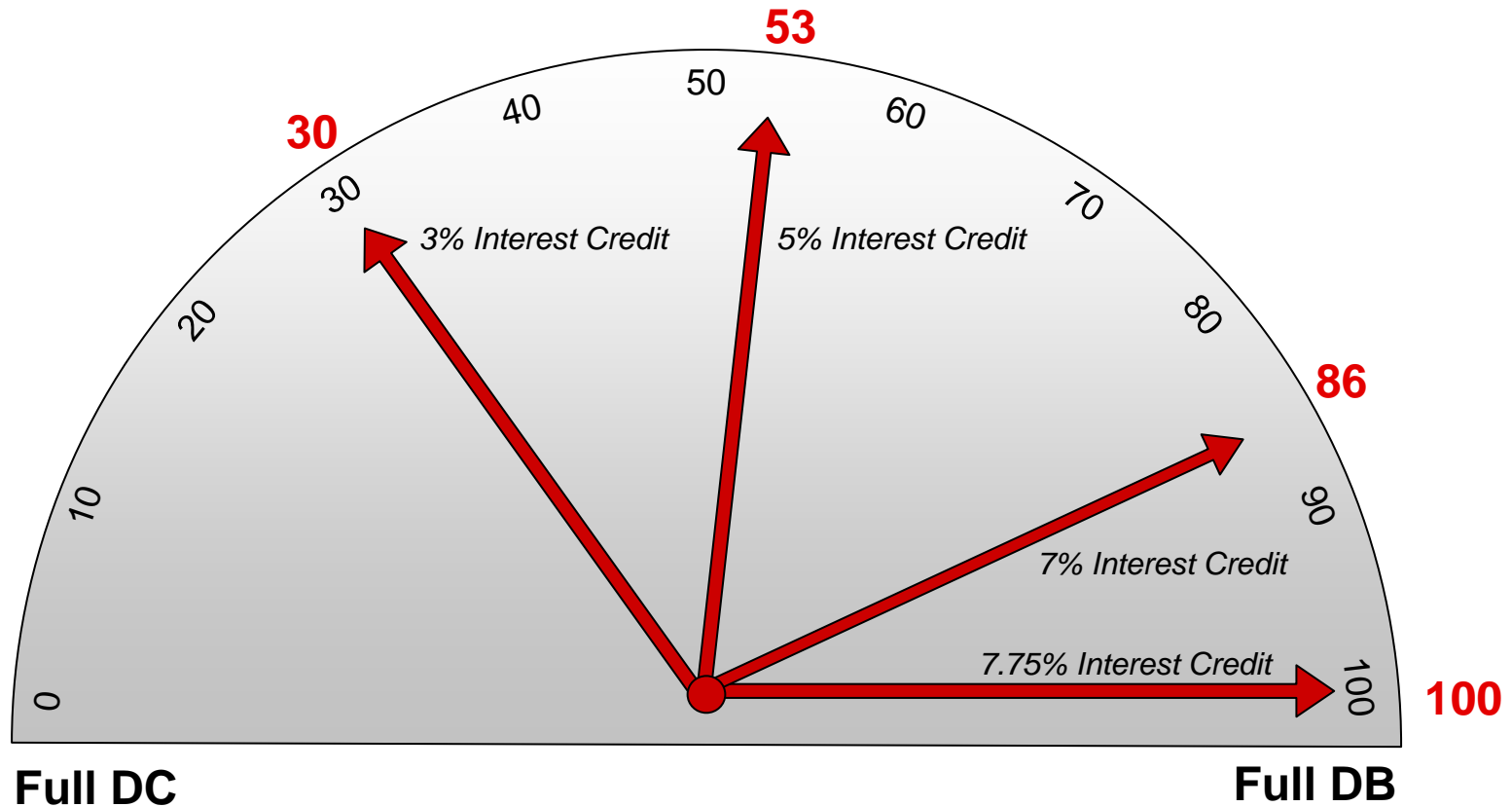
Defining Employer Guarantee

- Account balances accumulated under a Money Purchase or Cash Balance plan are determined by the contribution crediting rate and the interest credit
- Plan value can be provided by benefits that are guaranteed by the vested accumulated account balance and additional benefits that can be provided from investment return in excess of the interest credit or nonvested account balances
- The level of employer guarantee is dependent on the contribution crediting rate, the interest crediting rate and the vesting schedule
- A traditional defined benefit plan can be seen as providing benefits that are fully guaranteed by the employer
- A defined contribution plan with member directed accounts can be seen as providing benefits with no employer guarantee
- Benefits in excess of the guaranteed benefits can be provided, but depend on investment return in excess of the interest credit or nonvested account balances

Measuring Level of Employer Guarantee

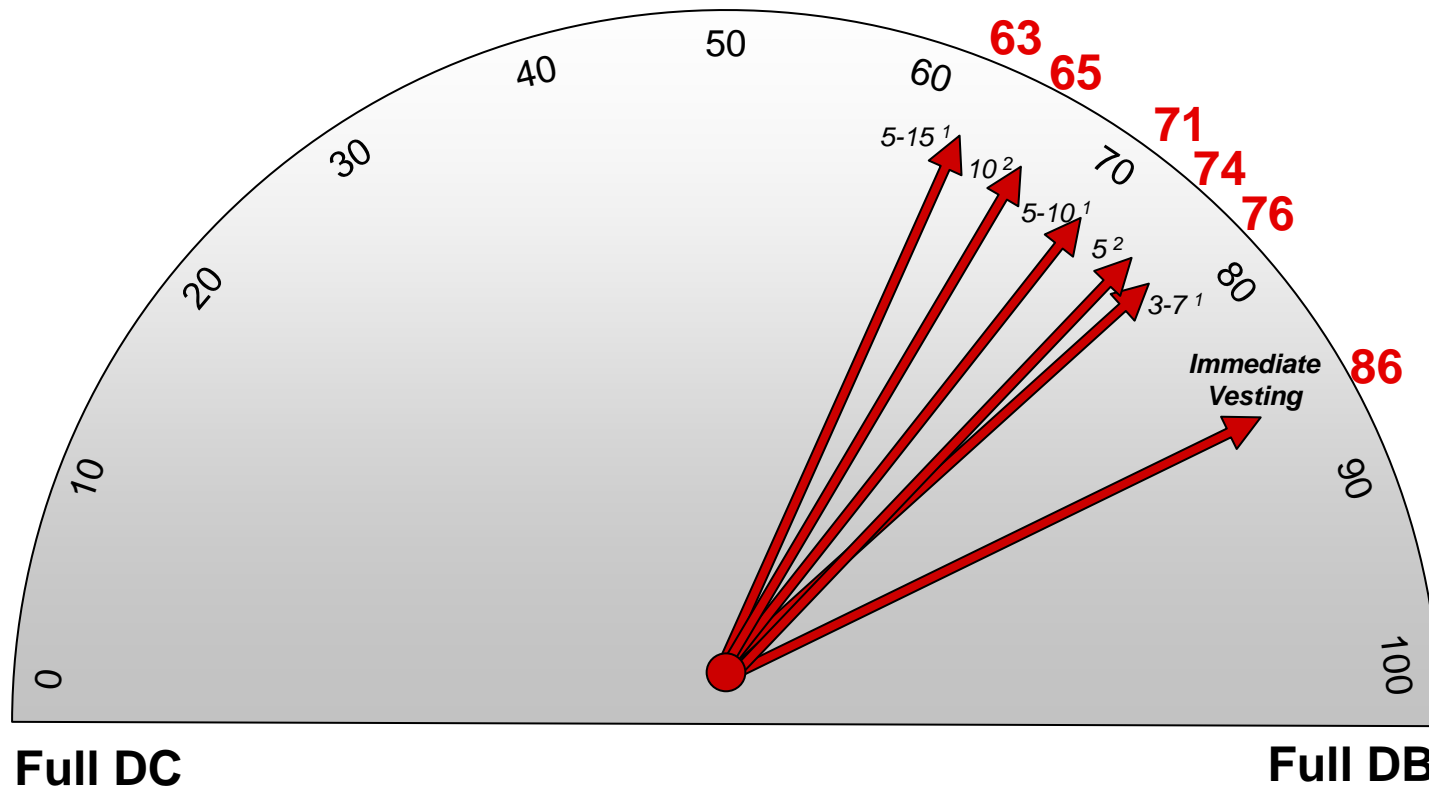
- The following exhibits demonstrate the impact that the interest credit and the vesting schedule have on the employer guarantee level
- All of the scenarios shown are based on member and employer contribution crediting rates of 7% and an assumed long-term investment return of 7.75%
- The Interest Credit example shows the impact the interest credit has on the level of guaranteed benefit. The lower the interest credit rate, the lower the level of employer guarantee. All the scenarios shown on this chart assume 100% immediate vesting.
- The Vesting Schedule example shows the impact the vesting schedule has on the level of guaranteed benefits. The longer the wait for vesting, the lower the level of employer guarantee. All the scenarios shown on this chart assume a 7% interest credit.

Example of Interest Credit Impact



Employer Guarantee Level with Immediate Vesting

Example of Vesting Schedule Impact



**Employer Guarantee Level
with 7% Interest Credit**

¹ Vesting Years – Graded

² Vesting Years - Cliff

Impact of Various Interest Crediting Rates and Vesting Schedules on Employer Guarantee Level

- As the interest crediting rate increases to the assumed long term investment return rate, the employer guarantee level increases to 100%
- Assuming a 7% interest crediting rate, as the vesting requirement changes from 20 years to immediate vesting, the employer guarantee level increases from near 63% to 86%
- The chart below shows the guarantee level for various interest crediting rates and vesting schedule combinations

Vesting Schedule	Interest Crediting Rate			
	3%	5%	7%	7.75%
5-15 Years, Graded	10%	32%	63%	78%
10 Year, Cliff	11%	34%	65%	80%
5-10 Years, Graded	16%	39%	71%	86%
5 Years, Cliff	19%	42%	74%	89%
3-7 Years, Graded	20%	43%	76%	90%
Immediate	30%	53%	86%	100%

State of Montana
Teacher's Retirement System

New Tier - Changes only listed

Provisions	Current Plan	New Tier - Changes only listed		
		Revised Defined Benefit	Money Purchase Plan (a.k.a. Cash Balance Plan)	Combination
Features:				
Type of Plan	Traditional Defined Benefit Plan	Traditional Defined Benefit Plan	Individual Account DB Plan (Hybrid)	Both Traditional Defined Benefit Plan and Individual Account DB plan (Hybrid)
Final Average Compensation	Highest 3 consecutive years	Highest 5, 7 or 10 consecutive yrs	N/A	Highest 5, 7 or 10 consecutive yrs (DB portion only)
Contributions	Member: 7.15% of compensation	Member: Fixed rate of 5%, 6%, or 7% of compensation	Member: Fixed rate of 5%, 6%, or 7% of compensation	Member: Fixed rate of 5%, 6%, or 7% of compensation made to DB plan only
	Employer: 9.96% of compensation	Employer: Required for 30-year amortization, not less than member contribution rate	Employer: Required for 30-year amortization, not less than member contribution rate	Employer: Required for 30-year amortization, not less than member contribution rate
Interest on member contributions	Rate approved from time to time by the Retirement Board (currently 1% annually)	Same	See MPP interest rate	Rate approved from time to time by the Retirement Board under DB plan only (currently 1% annually)
Form of Payment:				
Normal Form	Life only with a minimum of a refund of member contributions with interest	Life only with a minimum of a refund of member contributions with interest	Life only with a minimum of a refund of member contributions with interest	Life only with a minimum of a refund of member contributions with interest
Optional Forms	10 year and 20 year certain and life 100%, 50%, and 66 2/3% joint and survivor Refund of member account balance with interest in lieu of monthly payments	10 year and 20 year certain and life 100%, 50%, and 66 2/3% joint and survivor Refund of member account balance with interest in lieu of monthly payments	10 year and 20 year certain and life 100%, 50%, and 66 2/3% joint and survivor Refund of member account balance with interest in lieu of monthly payments	10 year and 20 year certain and life 100%, 50%, and 66 2/3% joint and survivor Refund of member account balance with interest in lieu of monthly payments (DB portion only)
	No full lump sum	No full lump sum	No full lump sum, or Distribution of vested MPP balance in lieu of monthly payments. May limit amount, e.g. \$5,000 or \$10,000	No full lump sum, or Distribution of vested MPP balance in lieu of monthly payments. May limit amount, e.g. \$5,000 or \$10,000

State of Montana
Teacher's Retirement System

New Tier - Changes only listed

Provisions	Current Plan	New Tier - Changes only listed		
		Revised Defined Benefit	Money Purchase Plan (a.k.a. Cash Balance Plan)	Combination
Normal Retirement Benefit:				
Eligibility	25 years of service or 60 and 5	Based on life expectancy at retirement (i.e. 25 yrs) or Social Security Normal Retirement Age	Minimum age 55 for annuity payment	Based on life expectancy at retirement (i.e. 25 yrs) or Social Security Normal Retirement Age
Formula	1/60 of final compensation per year of service (1.6667%)	1/60 of final compensation per year of service (1.6667%), increasing to 1/50 (2.00%) for all years with 30+ yrs of service	Actuarial equivalent of MPP balance	1/100 of final compensation per year of service (1.00%) increasing to 1/80 (1.25%) for all yrs with 30+ yrs service, plus AE of MPP balance
MPP Credit Rate	N/A	N/A	Equal to twice the member contribution rate or Member contribution rate, plus matching employer rate or actuarially sound rate if less	Equal to twice the member contribution rate less actuarial rate of DB benefit, not greater than the member rate with Minimum rate: none, 1%, 2%, or 3%
MPP Interest Rate	N/A	N/A	7% annually or other fixed rate or Rate approved from time to time by the Retirement Board or Prime rate, Federal mid-term rate, or other index rate with Minimum rate: none, 3%, 4%, or 5% Maximum rate: none, 8%, 9%, 10%, 11%, 12%	7% annually or other fixed rate or Rate approved from time to time by the Retirement Board or Prime rate, Federal mid-term rate, or other index rate with Minimum rate: none, 3%, 4%, or 5% Maximum rate: none, 8%, 9%, 10%, 11%, 12%
Early Retirement Benefit:				
Eligibility	Age 50 with 5 years of service	Age 55 with years of service needed for 100% vesting	Age 55 with years of service needed for 100% vesting	Age 55 with years of service needed for 100% vesting
Formula	Normal retirement reduced .5% for each of the first 60 months and .3% for the next 60 months	Normal retirement benefit reduced .5% for each of the first 60 months and .3% for the next 60 months	Actuarial equivalent of MPP balance	Normal retirement benefit reduced .5% for each of the first 60 months and .3% for the next 60 months for DB portion, plus actuarial equivalent of the MPP balance

State of Montana
Teacher's Retirement System

Provisions	Current Plan	New Tier - Changes only listed		
		Revised Defined Benefit	Money Purchase Plan (a.k.a. Cash Balance Plan)	Combination
Death Benefit:				
Eligibility	5 years of service	Same	Same	Same
Formula	Actuarially adjusted normal retirement benefit as date of death. \$200 to each child until age 18. Lump sum of \$500 paid upon death of active or retired member.	Same	Same	Same
Disability Benefit:				
Eligibility	5 years of service	Same	Same	Same
Formula	normal retirement benefit as of date of disability, minimum of 1/4 of final compensation	Same	Same	Same
Withdrawal benefit:				
Eligibility	Vested benefit at 5 years of service, member contributions are immediately vested	Same	Same	Same
Alternatives	N/A	or 3 yr 20% per yr, 100% at 7 Yr 5 yr 50%, 10% per yr, 100% at 10 yr 100% at 10 yrs 5 yr 25%, 5% / yr to 50% at 10 yrs, the 10% per yr to 100% at 15 yrs	or 3 yr 20% per yr, 100% at 7 Yr 5 yr 50%, 10% per yr, 100% at 10 yr 100% at 10 yrs 5 yr 25%, 5% / yr to 50% at 10 yrs, the 10% per yr to 100% at 15 yrs	or 3 yr 20% per yr, 100% at 7 Yr 5 yr 50%, 10% per yr, 100% at 10 yr 100% at 10 yrs 5 yr 25%, 5% / yr to 50% at 10 yrs, the 10% per yr to 100% at 15 yrs
Formula	If less than 5 years: refund of employee contribution with interest. More than 5 years: refund of contributions with interest or vested benefit at retirement	If not vested: refund of employee contribution with interest. If partially or fully vested: refund of contributions with interest or vested benefit at retirement	Actuarial equivalent of MPP balance at retirement or refund of member contributions with interest	Vested DB portion at retirement plus AE of accumulated MPP contributions, or refund of member contributions with interest
GABA	1.5% paid January 1 after receiving benefits for 36 months	Index based on investments returns/funded status/CPI for new hires or for all employees, not to exceed 1.5% per yr paid after receiving benefits for 36 months Example of GABA based on funded status: GABA of 1.5% if funded ratio is at least 90%. GABA is 1.0% if funded ratio is at least 85%, but less than 90%. GABA is 0.5% if funded ratio is at least 80% but less than 85%, and there is no GABA in years were the funded ratio is below 80%.	1.5% GABA included in actuarial equivalence used to calculate annuity at retirement - or indexed based on investment return/funded status/CPI Example of GABA based on funded status: GABA of 1.5% if funded ratio is at least 90%. GABA is 1.0% if funded ratio is at least 85%, but less than 90%. GABA is 0.5% if funded ratio is at least 80% but less than 85%, and there is no GABA in years were the funded ratio is below 80%.	1.5% GABA on DB portion and included in actuarial equivalence used to calculate annuity at retirement - or indexed based on investment return/funded status/CPI Example of GABA based on funded status: GABA of 1.5% if funded ratio is at least 90%. GABA is 1.0% if funded ratio is at least 85%, but less than 90%. GABA is 0.5% if funded ratio is at least 80% but less than 85%, and there is no GABA in years were the funded ratio is below 80%.
Investment Administration				
Management Decisions	State Board of Investments	State Board of Investments	State Board of Investments	State Board of Investments
Trust Accounting	Single Trust Fund	Single Trust Fund	Single Trust Fund, with two separate accounts, one for DB and another for MPP	Single Trust Fund, with two separate accounts, one for DB and another for MPP