



# State of Montana

## Mutual Fund Share Class Fee Analysis

October 2015

## Executive Summary

The State of Montana 457 DC Plans have twelve investment options that may benefit from improvements in share classes, but we only recommend four at this time.

Our recommendation shows the reduction in fees to the State's 457(b) Plan and 401(a) Plan if each plan chooses the mix of funds that nets the largest decrease in fees, while accounting for the potential loss of revenue sharing for some of the share class changes. There are eight additional options where a lower fee share class is available but in these cases the reduction in revenue sharing appears *larger* than the decrease in the expense ratio. Revenue sharing in the Plans are credited back to participants, so these potential share class changes may not be in the best interests of plan participants after taking revenue sharing changes into account.

The 457(b) Plan would benefit from improving the share class on the following three funds:

- 1) Vanguard Small Cap Index (Adm to Instl)
- 2) Vanguard Small Cap Growth Index (Inv to Instl)
- 3) American Funds New Perspective (R4 to R6)

The 401(a) Plan would benefit from improving the share class on the following four funds:

- 1) Vanguard Small Cap Index (Adm to Instl)
- 2) Vanguard Small Cap Growth Index (Inv to Instl)
- 3) American Funds New Perspective (A to R4)
- 4) Vanguard Total International Stock Index (Inv to Adm)

## Summary of Recommended Changes

Plan(s)	Current Share Class	Improved Share Class	Change in Fees	Change in Revenue Sharing	Net Change
457(b) and 401(a) Plans	Vanguard Small Cap Index Adm	Vanguard Small Cap Index Instl	0.09 to 0.08	0.00	1 bps
457(b) and 401(a) Plans	Vanguard Small Cap Growth Index Inv	Vanguard Small Cap Growth Index Instl	0.23 to 0.08	0.00	15 bps
401(a) Plan 457(b) Plan	American Funds New Perspective A American Funds New Perspective R4	American Funds New Perspective R6	0.76 to 0.45 0.80 to 0.45	0.25 0.35	6 bps 0 bps
401(a) Plan	Vanguard Total Intl Stock Index Inv	Vanguard Total Intl Stock Index Adm	0.22 to 0.14	0.00	8 bps

**Total annual 457(b) Plan fees would be reduced by approximately \$13,000**

**Total annual 401(a) Plan fees would be reduced by approximately \$11,000**

## Asset Allocation and Estimated Fees Based on Assets as of September 30, 2015 457(b) Plan

457(b) Plan	Assets as of 9/30/15	Current Prospectus Expense Ratio	Current Revenue Sharing	New Share Class	New Expense Ratio	New Revenue Sharing	Current Net Fees	New Net Fees	Best Case
<b>Stable Value</b>									
State of Montana Stable Value	\$229,943,763	0.50	0.00	-	-	-	\$1,149,719	-	\$1,149,719
<b>Bond Funds</b>									
Prudential Total Return Bond Q	\$6,259,798	0.49	0.00	-	-	-	\$30,673	-	\$30,673
Neuberger Berman High Income Bond Instl*	\$2,790,523	0.69	0.00	-	-	-	\$19,255	-	\$19,255
<b>Target Date/Balanced Funds</b>									
Vanguard Balanced Index I	\$17,018,020	0.08	0.00	-	-	-	\$13,614	-	\$13,614
T. Rowe Price Retirement Balanced	\$567,699	0.57	0.15	-	-	-	\$2,384	-	\$2,384
T. Rowe Price Retirement 2005	\$272,877	0.59	0.15	-	-	-	\$1,201	-	\$1,201
T. Rowe Price Retirement 2010	\$1,185,277	0.59	0.15	-	-	-	\$5,215	-	\$5,215
T. Rowe Price Retirement 2015	\$2,230,174	0.63	0.15	-	-	-	\$10,705	-	\$10,705
T. Rowe Price Retirement 2020	\$6,609,540	0.67	0.15	-	-	-	\$34,370	-	\$34,370
T. Rowe Price Retirement 2025	\$4,093,068	0.70	0.15	-	-	-	\$22,512	-	\$22,512
T. Rowe Price Retirement 2030	\$2,388,858	0.73	0.15	-	-	-	\$13,855	-	\$13,855
T. Rowe Price Retirement 2035	\$2,247,915	0.75	0.15	-	-	-	\$13,487	-	\$13,487
T. Rowe Price Retirement 2040	\$1,727,527	0.76	0.15	-	-	-	\$10,538	-	\$10,538
T. Rowe Price Retirement 2045	\$749,836	0.76	0.15	-	-	-	\$4,574	-	\$4,574
T. Rowe Price Retirement 2050	\$379,672	0.76	0.15	-	-	-	\$2,316	-	\$2,316
T. Rowe Price Retirement 2055	\$334,464	0.76	0.15	-	-	-	\$2,040	-	\$2,040
<b>U.S Equity Funds</b>									
Vanguard Equity-Income Adm	\$13,583,457	0.20	0.00	-	-	-	\$27,167	-	\$27,167
Parnassus Core Equity Instl	\$2,024,042	0.67	0.10	-	-	-	\$11,537	-	\$11,537
Vanguard Institutional Index I	\$25,495,159	0.04	0.00	-	-	-	\$10,198	-	\$10,198
Fidelity Contrafund	\$30,439,904	0.64	0.25	-	-	-	\$118,716	-	\$118,716
MFS Mid Cap Value R5	\$5,728,569	0.84	0.00	-	-	-	\$48,120	-	\$48,120
Victory Munder Mid-Cap Core Growth A	\$9,455,805	1.32	0.50	R6	0.95	0.00	\$77,538	\$89,830	\$77,538
Neuberger Berman Genesis Tr	\$11,847,777	1.10	0.35	R6	0.78	0.00	\$88,858	\$92,413	\$88,858
Vanguard Small Cap Index Adm	\$5,061,643	0.09	0.00	Instl	0.08	0.00	\$4,555	\$4,049	\$4,049
Vanguard Small Cap Growth Index Inv	\$8,052,227	0.23	0.00	Instl	0.08	0.00	\$18,520	\$6,442	\$6,442
<b>International Equity Funds</b>									
American Funds New Perspective R4	\$11,088,121	0.80	0.35	R6	0.45	0.00	\$49,897	\$49,897	\$49,897
Franklin Mutual Global Discovery Z	\$9,013,479	0.96	0.15	R6	0.85	0.00	\$73,009	\$76,615	\$73,009
Dodge & Cox International Stock	\$9,574,572	0.64	0.10	-	-	-	\$51,703	-	\$51,703
Artisan International Inv	\$2,711,692	1.17	0.35	Instl	0.95	0.00	\$22,236	\$25,761	\$22,236
Oppenheimer Developing Markets Y	\$508,801	1.03	0.25	I	0.86	0.00	\$3,969	\$4,376	\$3,969
<b>Totals</b>	<b>\$423,384,259</b>						<b>\$1,942,480</b>	<b>\$1,953,280</b>	<b>\$1,929,896</b>

\*Neuberger Berman High Income Bond moved from Inv to Instl shares on 10/1/2015.

## Asset Allocation and Estimated Fees Based on Assets as of September 30, 2015 401(a) Plan

401(a) Plan	Assets as of 9/30/15	Current Prospectus Expense Ratio	Current Revenue Sharing	New Share Class	New Expense Ratio	New Revenue Sharing	Current Net Fees	New Net Fees	Best Case
<b>Stable Value</b>									
State of Montana Stable Value	\$11,120,121	0.50	0.00	-	-	-	\$55,601	-	\$55,601
<b>Bond Fund</b>									
Prudential Total Return Bond Q	\$2,642,443	0.49	0.00	-	-	-	\$12,948	-	\$12,948
<b>Target Date/Balanced Funds</b>									
Vanguard Balanced Index I	\$58,543,664	0.08	0.00	-	-	-	\$46,835	-	\$46,835
T. Rowe Price Retirement Balanced	\$57,451	0.57	0.15	-	-	-	\$241	-	\$241
T. Rowe Price Retirement 2005	\$391,735	0.59	0.15	-	-	-	\$1,724	-	\$1,724
T. Rowe Price Retirement 2010	\$111,748	0.59	0.15	-	-	-	\$492	-	\$492
T. Rowe Price Retirement 2015	\$389,592	0.63	0.15	-	-	-	\$1,870	-	\$1,870
T. Rowe Price Retirement 2020	\$850,031	0.67	0.15	-	-	-	\$4,420	-	\$4,420
T. Rowe Price Retirement 2025	\$1,742,001	0.70	0.15	-	-	-	\$9,581	-	\$9,581
T. Rowe Price Retirement 2030	\$1,618,206	0.73	0.15	-	-	-	\$9,386	-	\$9,386
T. Rowe Price Retirement 2035	\$2,545,263	0.75	0.15	-	-	-	\$15,272	-	\$15,272
T. Rowe Price Retirement 2040	\$1,599,542	0.76	0.15	-	-	-	\$9,757	-	\$9,757
T. Rowe Price Retirement 2045	\$2,189,619	0.76	0.15	-	-	-	\$13,357	-	\$13,357
T. Rowe Price Retirement 2050	\$1,904,211	0.76	0.15	-	-	-	\$11,616	-	\$11,616
T. Rowe Price Retirement 2055	\$973,761	0.76	0.15	-	-	-	\$5,940	-	\$5,940
<b>U.S Equity Funds</b>									
Vanguard Equity-Income Adm	\$6,067,842	0.20	0.00	-	-	-	\$12,136	-	\$12,136
BlackRock Equity Idx - Collective F	\$2,144,087	0.04	0.00	-	-	-	\$858	-	\$858
JPMorgan US Equity R5	\$2,825,441	0.59	0.10	R6	0.50	0.00	\$13,845	\$14,127	\$13,845
Alger Capital Appreciation Z	\$8,770,187	0.93	0.00	-	-	-	\$81,563	-	\$81,563
MFS Mid Cap Value R5	\$5,060,265	0.84	0.00	-	-	-	\$42,506	-	\$42,506
Victory Munder Mid-Cap Core Growth A	\$3,609,104	1.32	0.50	R6	0.95	0.00	\$29,595	\$34,286	\$29,595
Prudential Small Cap Value Z	\$2,964,287	0.68	0.25	Q	0.64	0.00	\$12,746	\$18,971	\$12,746
Vanguard Small Cap Index Adm	\$3,617,395	0.09	0.00	Instl	0.08	0.00	\$3,256	\$2,894	\$2,894
Vanguard Small Cap Growth Index Inv	\$4,035,328	0.23	0.00	Instl	0.08	0.00	\$9,281	\$3,228	\$3,228
<b>International Equity Funds</b>									
American Funds New Perspective A	\$5,413,235	0.76	0.25	R6	0.45	0.00	\$27,607	\$24,360	\$24,360
Oakmark International I	\$3,626,189	0.95	0.25	-	-	-	\$25,383	-	\$25,383
Vanguard Total Intl Stock Index Inv	\$1,098,593	0.22	0.00	Adm	0.14	0.00	\$2,417	\$1,538	\$1,538
Oppenheimer Developing Markets Y	\$342,548	1.03	0.25	I	0.86	0.00	\$2,672	\$2,946	\$2,672
<b>Totals</b>	<b>\$136,253,886</b>						<b>\$462,903</b>	<b>\$463,834</b>	<b>\$452,361</b>