
MEMORANDUM

TO: SUPPLEMENTAL RETIREMENT BOARD OF TRUSTEES
FROM: MARY BUONFIGLIO
SUBJECT: PARTICIPANT RECORDKEEPER FEE STRUCTURE
DATE: OCTOBER 13, 2015

The attached spreadsheet provides additional information pertaining to participant record-keeper fee structure alternatives. In reviewing this information there are a few items to note:

- The spreadsheet combines data for both the NC 401(k) and NC 457 plans.
- The far left columns (member demographics) show how the population breaks down according to account size. The column labeled “% of Total Member Population” is cumulative. As an example, 53% of the population have a combined account balance less than \$10,000.
- Moving to the right, “Current Fees” shows participant fees in dollars based upon the current fee of 12.3 basis points.
- “The New Contract Pricing Scenarios” show the seven alternate fee structures. An additional combination scenario (#1) of \$5 and 8.2 bps has been added.
- This chart is useful in understanding the impact a change in fee structure will have to the participant base. As an example, under Combo Fee #2 participants with account balance under \$10,000 (53% of the population) will experience a percentage increase in fees (indicated in green) of between 46% and 924%. Similarly, under that same scenario participants with balances above \$10,000 (45% of the population) will experience fee reductions between 3% and 48% (indicated in red).
- This analysis - percent of the population impacted and the magnitude of the change - is provided for each alternative. Please note the analysis is truncated at account balances of \$250,000 (Only 2% of the population, or approximately 6100 participants, have account balances over \$250,000) to keep the spreadsheet in a manageable format.

Participant Recordkeeping Fee Structure
By Michael McCann - Prudential

Member Demographics			Current Fees	New Contract Pricing Scenarios													
Participant Account Balance Examples	Members with a Balance < (401k and 457 Plans)	% of Total Member Population	Current Fees (12.3 bps) - Fees Paid	Proposed Asset Fee (9.9 bps) - Fees Paid	Proposed Asset Fee (9.9 bps) - % Change	Combo Fee #1 (\$5 + 8.2 bps) - Fees Paid	Combo Fee #1 (\$5 + 8.2 bps) - % Change	Combo Fee #2 (\$12 + 5.9 bps) - Fees Paid	Combo Fee #2 (\$12 + 5.9 bps) - % Change	Combo Fee #3 (\$16 + 4.5 bps) - Fees Paid	Combo Fee #3 (\$16 + 4.5 bps) - % Change	Combo Fee #4 (\$20 + 3.2 bps) - Fees Paid	Combo Fee #4 (\$20 + 3.2 bps) - % Change	Proposed Per Head Fee (\$29) - Fees Paid	Proposed Per Head Fee (\$29) - % Change	Hybrid Per Head Fee (\$31) - Fees Paid	Hybrid Per Head Fee (\$31) - % Change
\$ 1,000	68,049	23%	\$ 1.23	\$ 0.99	-20%	\$ 5.82	373%	\$ 12.59	924%	\$ 16.45	1237%	\$ 20.32	1552%	\$ 29.00	2258%	\$ 31.00	2420%
\$ 5,000	126,122	42%	\$ 6.15	\$ 4.95	-20%	\$ 9.10	48%	\$ 14.95	143%	\$ 18.25	197%	\$ 21.60	251%	\$ 29.00	372%	\$ 31.00	404%
\$ 10,000	159,041	53%	\$ 12.30	\$ 9.90	-20%	\$ 13.20	7%	\$ 17.90	46%	\$ 20.50	67%	\$ 23.20	89%	\$ 29.00	136%	\$ 31.00	152%
\$ 20,000	197,534	66%	\$ 24.60	\$ 19.80	-20%	\$ 21.40	-13%	\$ 23.80	-3%	\$ 25.00	2%	\$ 26.40	7%	\$ 29.00	18%	\$ 31.00	26%
\$ 25,000	210,642	70%	\$ 30.75	\$ 24.75	-20%	\$ 25.50	-17%	\$ 26.75	-13%	\$ 27.25	-11%	\$ 28.00	-9%	\$ 29.00	-6%	\$ 31.00	1%
\$ 30,000	221,262	73%	\$ 36.90	\$ 29.70	-20%	\$ 29.60	-20%	\$ 29.70	-20%	\$ 29.50	-20%	\$ 29.60	-20%	\$ 29.00	-21%	\$ 31.00	-16%
\$ 50,000	249,111	83%	\$ 61.50	\$ 49.50	-20%	\$ 46.00	-25%	\$ 41.50	-33%	\$ 38.50	-37%	\$ 36.00	-41%	\$ 29.00	-53%	\$ 31.00	-50%
\$ 100,000	277,743	92%	\$ 123.00	\$ 99.00	-20%	\$ 87.00	-29%	\$ 71.00	-42%	\$ 61.00	-50%	\$ 52.00	-58%	\$ 29.00	-76%	\$ 31.00	-75%
\$ 250,000	296,504	98%	\$ 307.50	\$ 247.50	-20%	\$ 210.00	-32%	\$ 159.50	-48%	\$ 128.50	-58%	\$ 100.00	-67%	\$ 29.00	-91%	\$ 31.00	-90%

Reference material: Presentation from 09.17.2015 Board of Trustees Meeting

FEE STRUCTURES

Fees for recordkeeping and communications were offered in three alternatives. Current Prudential fees are 7.9 bp on all assets + 5.5 bp on non-stable value assets (= 12.3 bp on all assets). Some objectives that plan sponsors consider when evaluating fee alternatives include:

- Limit change for participants
- Simplicity for ease of understanding
- Transparency of fees
- Fees are a reflection of services received
- Promoting retirement readiness
 - Encourage enrollment/participation
 - Limit excessive fees
- Competitiveness versus alternatives (e.g. rollovers for retirees \$70M in Q1 2015)

Note: State of NC will continue to collect 2.5 bp of assets for administration.

What are the pros and cons?

Fee Type	Example	Pros	Cons
Asset fee	0.099%	<ul style="list-style-type: none"> • Lower fees for small accounts • Same as current structure 	<ul style="list-style-type: none"> • Less transparent • Higher fees for large accounts • May discourage retirees from keeping large accounts in Plans
Flat fee	\$29.00/participant account	<ul style="list-style-type: none"> • Most transparent • Lower fee for large accounts • More closely reflects RK cost to provide service 	<ul style="list-style-type: none"> • Higher fees for small accounts
Capped	0.128% on first \$100K	<ul style="list-style-type: none"> • More balanced for small and large accounts • Capped fee for large accounts 	<ul style="list-style-type: none"> • Less transparent • Higher fees for large accounts • Increased asset fee when cap only benefits large accounts
Hybrid flat fee	\$31.00/participant account, waive in year one for new enrollees	<ul style="list-style-type: none"> • More transparent • Encourages enrollment • Lower fees for large accounts 	<ul style="list-style-type: none"> • Fee waiver only benefits new enrollees
Combination	\$12/account + 0.059% \$16/account + 0.045% \$20/account + 0.032%	<ul style="list-style-type: none"> • Seeks to balance the benefits of asset fees for small accounts and flat fees for large accounts 	<ul style="list-style-type: none"> • Less transparent • More complicated fee structure

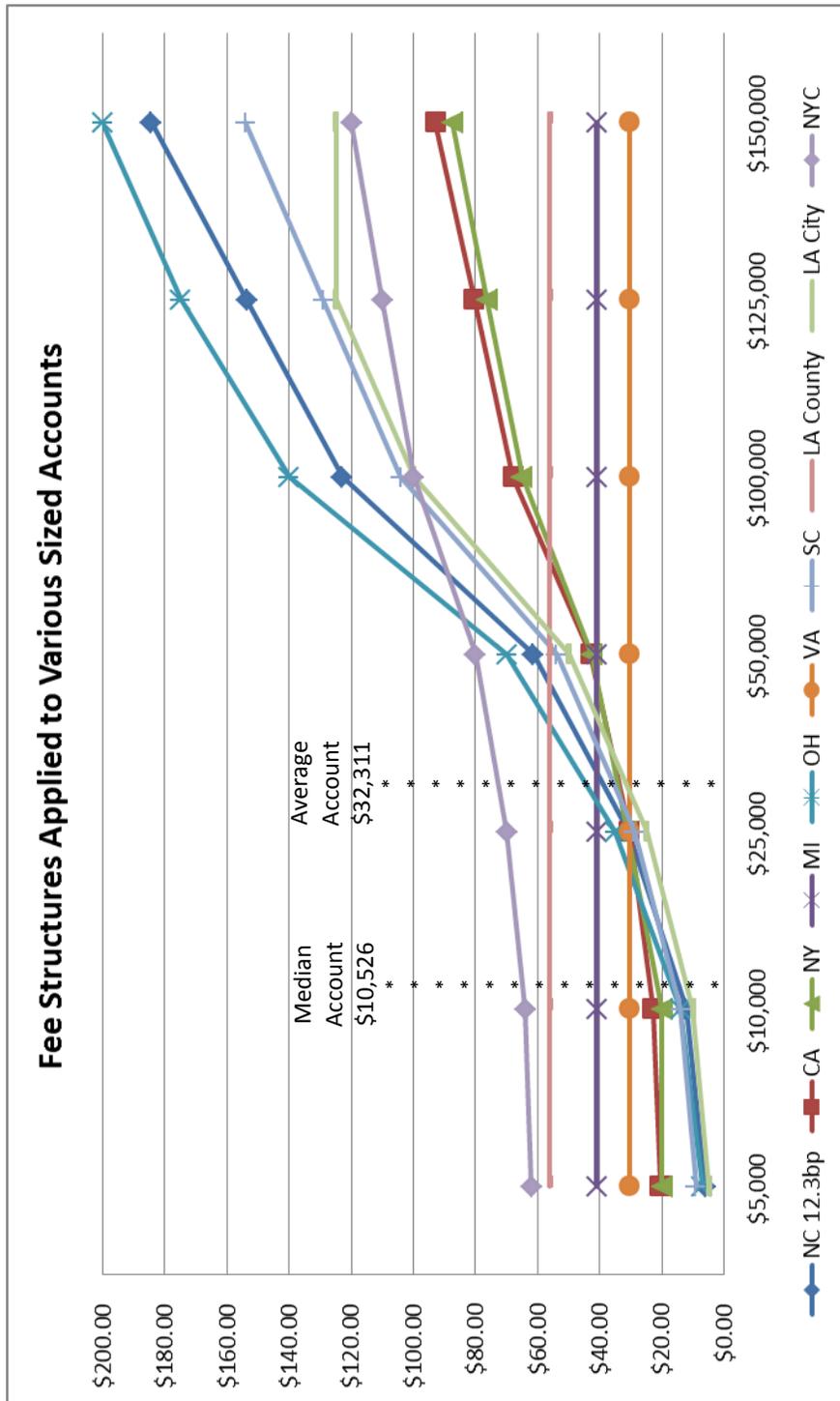
How do other large plans charge fees?

CA	NY ¹	MI	OH ²	VA	SC	LA County	LA City ³	NY City
0.05% + \$18.00	0.045% + \$20.00	\$41.00	0.14%	\$30.50	0.10% + \$4.00	\$56.04	0.10%	0.04% + \$60.00

¹New York – 4.5 basis points is charged on assets above \$20,000 and capped at \$200,000

²Ohio – moving to 14 bp fee in 2016, and waived for accounts below \$5,000 and capped at \$200/year

³City of Los Angeles – 10 basis point fee is capped at \$125,000



FEE STRUCTURES

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401(k) Plan Participant Statistics	
Number of Participants with a Balance:	248,775
Average Participant Account Balance:	\$32,311
Participants with a Balance < \$12	5,393
Participants with a Balance < \$16	6,401
Participants with a Balance < \$20	7,115
Participants with a Balance < \$29	8,545
Participants with a Balance < \$31	8,855
Participants with a Balance < \$50	10,803
Participants with a Balance < \$100	14,963
Participants with a Balance < \$500	34,122
Participants with a Balance < \$1000	48,198
Participants with a Balance < \$2500	71,757

457 Plan Participant Statistics	
Number of Participants with a Balance:	52,371
Average Participant Account Balance:	\$22,405
Participants with a Balance < \$12	957
Participants with a Balance < \$16	1,248
Participants with a Balance < \$20	1,430
Participants with a Balance < \$29	1,978
Participants with a Balance < \$31	2,148
Participants with a Balance < \$50	3,070
Participants with a Balance < \$100	5,073
Participants with a Balance < \$500	14,284
Participants with a Balance < \$1000	19,851
Participants with a Balance < \$2500	26,903

401(k) Fee Scenarios	
Current Contract Fee Structure (7.9 bps Recordkeeping & 5.5 bps Investment Mgmt)	
Maximum Fee:	\$4,439
Minimum Fee:	\$0.01
Breakeven Participant Account Balance to \$29:	\$21,268
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	159,076
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	63.94%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	86,699
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	36.05%
\$31 Per Participant Fee*	
Maximum Fee:	\$31
Minimum Fee:	\$0
Breakeven Participant Account Balance to \$29:	\$30,809
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	178,550
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	71.77%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	70,225
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	28.22%
\$29 Per Participant Fee	
Maximum Fee:	\$29
Minimum Fee:	\$29
Breakeven Participant Account Balance to \$29:	\$29,297
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	175,892
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	70.70%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	72,883
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	29.30%
9.9 basis Point Fee	
Maximum Fee:	\$3,280
Minimum Fee:	\$0.01
Breakeven Participant Account Balance to \$29:	\$29,297
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	175,892
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	70.70%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	72,883
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	29.30%
\$12 Per Participant Fee & 5.9 basis Point Fee	
Maximum Fee:	\$1,967
Minimum Fee:	\$12.00
Breakeven Participant Account Balance to \$29:	\$28,805
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	174,959
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	70.32%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	73,816
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	29.67%
\$16 Per Participant Fee & 4.5 basis Point Fee	
Maximum Fee:	\$1,507
Minimum Fee:	\$16.00
Breakeven Participant Account Balance to \$29:	\$28,878
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	175,100
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	70.38%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	73,675
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	29.61%
\$20 Per Participant Fee & 3.2 basis Point Fee	
Maximum Fee:	\$1,080
Minimum Fee:	\$20.00
Breakeven Participant Account Balance to \$29:	\$28,112
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	173,706
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	69.82%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	75,069
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	30.18%
12.8 basis Point Fee with Fee Capped at \$100k member balance#	
Maximum Fee:	\$128
Minimum Fee:	\$0.01
Breakeven Participant Account Balance to \$29:	\$22,266
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	161,480
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	64.91%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	87,295
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	35.09%

457 Fee Scenarios	
Current Contract Fee Structure (7.9 bps Recordkeeping & 5.5 bps Investment Mgmt)	
Maximum Fee:	\$2,614
Minimum Fee:	\$0.01
Breakeven Participant Account Balance to \$29:	\$21,270
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	42,062
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	80.31%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	10,309
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	19.68%
\$31 Per Participant Fee*	
Maximum Fee:	\$31
Minimum Fee:	\$0
Breakeven Participant Account Balance to \$29:	\$30,818
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	44,265
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	84.52%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	8,106
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	15.47%
\$29 Per Participant Fee	
Maximum Fee:	\$29
Minimum Fee:	\$29
Breakeven Participant Account Balance to \$29:	\$29,295
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	43,993
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	84.00%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	8,378
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	16.00%
9.9 basis Point Fee	
Maximum Fee:	\$1,931
Minimum Fee:	\$0.01
Breakeven Participant Account Balance to \$29:	\$29,295
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	43,993
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	84.00%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	8,378
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	16.00%
\$12 Per Participant Fee & 5.9 basis Point Fee	
Maximum Fee:	\$1,163
Minimum Fee:	\$12.00
Breakeven Participant Account Balance to \$29:	\$28,805
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	43,911
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	83.85%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	8,460
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	16.15%
\$16 Per Participant Fee & 4.5 basis Point Fee	
Maximum Fee:	\$894
Minimum Fee:	\$16.00
Breakeven Participant Account Balance to \$29:	\$28,884
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	43,923
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	83.69%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	8,448
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	16.13%
\$20 Per Participant Fee & 3.2 basis Point Fee	
Maximum Fee:	\$644
Minimum Fee:	\$20.00
Breakeven Participant Account Balance to \$29:	\$28,110
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	43,767
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	83.57%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	8,604
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	16.42%
12.8 basis Point Fee with Fee Capped at \$100k member balance#	
Maximum Fee:	\$128
Minimum Fee:	\$0.01
Breakeven Participant Account Balance to \$29:	\$22,266
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven):	42,357
Effect on Fees on Participant's Accounts (Acct Balance < Breakeven - as a %):	80.88%
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven):	10,014
Effect on Fees on Participant's Accounts (Acct Balance > Breakeven - as a %):	19.12%

*\$31 per participant fee would be waived for members during the first 12 months after enrollment

#Not under consideration due to dynamics of BNY assessing the basis point fee

	Limit Change	Simplicity	Transparency	Reflect Service	Encourage Enrollment	Limit Excessive Fees	Competitive vs. Alternatives
Asset Fee (9.9 bp)							
Flat Fee (\$29)							
Capped (12.8 bp on first \$100,000)							
Hybrid Flat Fee (\$31, waived in first year)							
Combination (\$16 + 4.5 bp)							

Key

-  Supports objective
-  Somewhat supports objective
-  Does not contribute to supporting objective