

NORTH CAROLINA SUPPLEMENTAL RETIREMENT PLANS RECORDKEEPER FEE AND SERVICE BENCHMARKING

MARCH 2017

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Introduction

Mercer conducted a fee and service benchmarking review for the recordkeeping services being provided by Prudential for the North Carolina Supplemental Retirement Plans. This review included comparing the services and fees with other large defined contribution plans (comparison plans). A survey was prepared and sent to the comparison plans. This report summarizes the findings from the survey, as well as additional information recently gathered from recordkeeping companies, and some data from public surveys.

Executive Summary

The survey and other data collected reflect that the Supplemental Retirement Plans are currently receiving recordkeeping services and fees that are competitive to those provided to comparable government defined contribution plans. The following are observations regarding trends and best practices among jumbo plans in this market.

- Fees – flat dollar fees and asset fees with a cap are becoming more prevalent among jumbo plans to provide equitable fee structures and avoid over-charging participants with higher account balances
- Local service – on-site education service continues to be a valued service in the government market, even among plans that have adopted auto-enrollment; staffing levels vary among plans and generally reflect the perceived needs of each participant base
- Recordkeeping and processing – the timely investment of contributions and payment of distributions is a core service provided, and the trend among larger plans is to establish and monitor performance standards in this area, as is currently being performed by North Carolina

Comparison Plans

Comparison plans were intended to include multiple recordkeeping companies, complex plan designs and participant base, as well as large plan size. Surveys were sent to and completed by the following plans:

- California Savings Plus (CA)
- County of Los Angeles Defined Contribution Program (LA County)
- Michigan 401(k) and 457 Plans (MI)
- Missouri Deferred Compensation Plan (MO)
- New York State Deferred Compensation Plan (NY)
- Virginia Defined Contribution Plans (VA)
- Washington Department of Retirement Systems Defined Contribution Plans (WA)

Below are summary statistics for the comparison plans:

	NC	CA	LA County	MI	MO	NY	VA	WA
Plan types	457, 401(k), 403(b)	457, 401(k), 401(a) ARP, PST	457, 401(k), 401(a) TPP, PST	457, 401(k), with core DC contribution	457, 401(a) match	457	457, 401(a) match, hybrid DC (457 + 401)	457, 401(a) hybrid DC
Total assets	\$9.6 B	\$11.6 B	\$11.6 B	\$7.2 B	\$1.9 B	\$19.8 B	\$2.8 B	\$8.1 B
Unique SS#	266,000	318,000	121,000	174,000	66,000	219,000	97,000	129,000
TPA	Prudential	Nationwide	Empower	Voya	ICMA-RC	Nationwide	ICMA-RC	Empower
TPA RFP	2015	2015	2013	2013	2011	2015	2013	2014

ARP = Alternative Retirement Program, which was designed as a 414(h) pick-up plan for employer retirement contributions, which certain CA state employees invest in for 2 years and then become eligible for CalPERS pension; available to employees hired 2004-2013.

PST = Part-time, seasonal, and temporary employee social security offset plan

TPP = Termination Pay Plan, which was designed as a 414(h) pick-up plan for unused accrued vacation, sick and holiday pay; frozen in 2007

Core DC = DC retirement plan provided to employees as primary retirement plan (no DB pension)

Hybrid DC = DC portion of a hybrid retirement plan consisting of a DB component and a DC component

Comparison Plan Details

The information below outlines the differing plan structures (e.g. prevalence of employer contributions, elective vs. mandatory, etc.).

	NC	CA	LA County	MI	MO	NY	VA	WA
457	EE elective; some have ER match	EE elective	EE elective + 4% match for represented EE's	EE elective + 3% match (if not satisfied in 401k)	EE elective	EE elective	EE elective	EE elective
401(k)	EE elective; some have ER match	EE elective	EE elective + 4% match for non- represented EE's	ER 4% +EE elective + 3% match				
401(a)		ARP EE mandatory	Termination pay		ER match (last budgeted in 2010)		ER match 2.5% if EE contribute 4%	Hybrid mandatory EE 5%-15%
Other plans	403(b) EE elective	PST EE 7.5% mandatory 457 plan	PST EE 4.5% + ER 3% mandatory 457 plan				Hybrid mandatory ER 1% + EE 1% + ER match 2.5% 457 and 401(a)	

EE = employee, ER = employer

Observations

- Employees generally are eligible for a pension in NC, CA, LA County, MO, and NY, and the DC plans are generally supplemental
- Virginia employees hired after 1/1/2014 participate in a mandatory hybrid DB/DC retirement plan
- Washington employees can elect to participate in the pension or in an optional hybrid DB/DC retirement plan (hybrid launched in 2002)
- Michigan employees hired after 3/31/1997 participate in the mandatory DC program and are generally not eligible for a pension
- Los Angeles County represented employees participate in the 457 plan and non-represented employees participate in the 401(k)
- Employer match contributions are in place in LA County, MI, and VA (MO last budgeted in 2010)

Participant Detail

Below is the approximate number of accounts by plan type. Respondents also provided the number of multiple account holders, so that the total number below reflects the approximate total unique participants (as opposed to total accounts).

	NC	CA	LA County	MI	MO	NY	VA	WA
457	52,000	139,000	100,000	109,000	63,000	219,000	77,000	57,000
401(k)	244,000	110,000	15,000	172,000				
401(a)		9,000	42		40,000		70,000	83,000
Other	1,000	91,000	29,000				70,000	
Overlap*	-31,000	-31,000	-23,000	-107,000	-37,000		-120,000	-11,000
TOTAL	266,000	318,000	121,042	174,000	66,000	219,000	97,000	129,000

*Overlap = number of participants that have multiple accounts.

Assets Detail

The table below reflects the approximate assets by plan type.

(billions)	NC	CA	LA County	MI	MO	NY	VA	WA
457	\$1.2	\$5.8	\$9.0	\$1.9	\$1.4	\$19.8	\$2.3	\$3.8
401(k)	\$8.4	\$5.7	\$2.4	\$5.3				
401(a)		\$0.0	\$0.0		\$0.5		\$0.4	\$4.3
Other	\$0.0	\$0.1	\$0.2				\$0.1	
TOTAL	\$9.6	\$11.6	\$11.6	\$7.2	\$1.9	\$19.8	\$2.8	\$8.1

Observations:

- Survey represents approximately 1.5 million participants and \$72 billion in assets
- Average account size varies widely (see below); the 2016 NAGDCA survey of governmental DC plans indicates the average participant account balance is approximately \$41,000

Average Account	NC	CA	LA County	MI	MO	NY	VA	WA
457	\$23,077	\$41,727	\$90,000	\$17,431	\$22,222	\$90,411	\$29,870	\$66,667
401(k)	\$34,426	\$51,818	\$160,000	\$30,814				
401(a)		\$4,444	\$47,619		\$12,500		\$5,714	\$51,807
Other	\$9,000	\$989	\$6,897				\$1,429	
Unique SS# (exclude other)	\$36,226	\$52,752	\$112,315	\$41,379	\$30,159	\$90,411	\$40,000	\$62,791

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Service Level Review

A key deliverable of this review is to evaluate different aspects of service provided by Prudential. This section of the review includes data provided by the comparison plans and also processing statistics gathered from information submitted during RFP projects.

On-Site Education Representatives

Most large governmental DC plans have dedicated on-site education counselors available to participants. All of the education representatives below are 100% dedicated to the plan(s).

	NC	CA	LA County	MI	MO	NY	VA	WA
On-site education reps	15 reps (+1 for 403(b))	8 reps (7 vendor + 1 internal)	4 reps (+2 admin support)	6 reps	7 reps	17 reps	8 reps (+ admin staff)	5 reps (2 vendor + 3 internal)
457 + 401(k) participants	266,000	218,000	115,000	174,000	63,000	219,000	77,000	57,000
Participant/Rep ratio (1 rep per xx participants)	17,733	27,250	28,750	29,000	9,000	12,882	9,625	11,400

Observations

- The number of representatives varies widely among the comparison plans; Mercer's experience is that the level of service needed is typically plan specific, and can be impacted by geography, participant needs, and also plan design (e.g. prevalence of auto-enrollment)
- Numerically, New York has the most field representatives (17) and LA County has the least (4)

- Measured as a ratio to participants, Missouri has one field representative per 9,000 participants while Michigan has one field representative per 29,000 participants

Call Center

The information below reflects the services reported by Prudential compared to standards and services provided by other large recordkeeping companies active in this market. Information from other vendors was gathered during RFP projects.

	NC	Vendor 1	Vendor 2	Vendor 3	Vendor 4	Vendor 5
Average speed to answer standard	80% of calls within 20 seconds	Average 30 seconds	Average 45 seconds	75% of calls within 30 seconds	Average 45 seconds	90% of calls within 90 seconds
Average speed to answer actual	15 seconds	24 seconds	42 seconds	38 seconds	39 seconds	39 seconds
Call center hours (Eastern)	8:00 to 9:00 M-F	8:00 to midnight M-F	8:00 to 9:00 M-F	8:00 to 10:00 M-F 9:00 to 6:00 Sat	8:00 to 8:00 M-F	9:00 to 8:00 M-F
Call abandonment standard	Less than 3.0%	Less than 4.0%	Less than 4.0%	Less than 5.0%	Less than 3.0%	Less than 5.0%
Call abandonment actual	0.4%	1.3%	3.1%	2.9%	2.2%	2.7%

Observations

- Prudential call center statistics are better than the other vendors both in speed to answer and call abandonment.
- Some vendors have longer hours that call center representatives are available, but Prudential's hours are in line with most vendors.

Processing

	NC	Vendor 1	Vendor 2	Vendor 3	Vendor 4	Vendor 5
Contribution processing standard	99% within 1 business day	Within 1 business day	Within 1 business day	Within 1 business day	Within 2 business days	Within 1 business day
Contribution processing actual	100% within 1 business day	Within 1 business day	Within 1 business day	Within 1 business day	Within 2 business days	Within 1 business day
Distribution processing standard	99% within 2 business days	Within 1 business day	Within 2 business days	Within 5 business days	Within 2 business days	Within 2 business days
Distribution processing actual	100% within 2 business days	Within 1 business day	Within 2 business days	Not tracked	Within 2 business days	Within 2 business days
Statement release standard	99% mailed/posted to website in 10 business days	20 calendar days	15 business days	10 business days	15 business days	10 business days
Statement release actual	3 business days	99% in 7 calendar days	15 business days	99% in 5 business days	15 business days	10 business days

Observations

- Prudential contribution and distribution processing speeds are in line with industry standards.
- Prudential statement release via mail and website are relatively fast compared to other vendors.

Website

Below is the standard for website availability for Prudential, along with standards at other vendors.

	NC	Vendor 1	Vendor 2	Vendor 3	Vendor 4	Vendor 5
Website availability standard	97.5%	99.5%	99.5%	95%	98%	95%

Below are summary observations from Prudential's website, along with observations from a review of the comparison plans' websites.

	NC	CA	LA County	MI	MO	NY	VA	WA
Custom site	www.ncplans.prudential.com	www.savingsplusnow.com	www.countyla.com	https://stateofmi.voya.com	www.modeferredcomp.org	www.nysdcp.com	www.varetire.org	www.savewithwa.empower-retirement.com
Custom attributes	URL, branding, colors, messaging, video	URL, branding, colors, messaging	URL, branding, colors, messaging, video	URL, branding, colors, messaging	URL, branding, colors, messaging, videos	URL, branding, colors, messaging	URL, branding, colors, messaging	URL, branding, colors, messaging, videos
Financial planning tools and education resources	Calculators for retirement income, budgeting, returns, RMD, Roth, Social Security, and mutual fund fees Retiree checklist (3 years out)	Calculators for retirement planner, pay impact, peer comparison, future value, payout values, and Roth Library of financial topics	Calculators for retirement income gap, contributions, 12 e-learning seminars	Calculators for pay impact and retirement income Several education videos on estate planning, withdrawal strategies, etc.	Calculators for pay impact and retirement income, Roth, withdrawals, RMD, contributions and others Several financial education webinars	Calculators for pay impact and retirement income, peer comparison, Roth and payout illustrator, and asset allocation tool Several education topics covered	Calculators for pay impact, savings boost, RMD, Roth, and several publications and education videos and live webinars	Calculators for pay impact and retirement income, annuity estimator, life expectancy, and several publications and education videos Plan choice calculator

	NC	CA	LA County	MI	MO	NY	VA	WA
Counselor contact info	Listed by geography	Listed by geography	Contact local office	Seminars on front page	Listed by geography	Listed by geography	Listed by geography	Not located
Other observations	Link to ORBIT for annual benefit statement Significant education material on Treasurer's website (retirement savings 101, replacement ratios, etc.)	HR site has schedule of seminars	Front page tracking S&P 500, DJIA, etc. and adding mobile web icon Most DC content is on vendor website	Front page advertises 1-on-1 advice appointments and mobile app with retirement income projection and transaction capability Most DC content is on vendor website	Front page advertises mobile app with transaction capability; also has plans stats listed for assets, average contributions, number of meetings held Videos include 7 participant testimonies	Front page advertises green/paperless, website security enhancements, retirement planner and "tell a friend" e-mail Most DC content is on vendor website	Access plan sites via the VRS site Front page advertises get text updates (balance, rate of return, etc.)	DRS site has several seminars Front page advertises 457 auto enrollment (new)

Observations

- Each plan had a custom website with transaction capabilities for participants, and most prominently identify retirement counselors and how to contact them
- Each website included retirement income calculators and other tools; education topics beyond retirement planning included estate planning, debt management, and other financial education topics
- There is a significant use of videos with most of the websites
- The VA DC plans website is accessed via the State's site (www.varetire.org)
- MI and MO sites prominently advertise the plan's mobile application; LA County advertises mobile web icon and VA advertises signing up for text updates

Managed Accounts

	NC	CA	LA County	MI	MO	NY	VA	WA
Managed accounts	No	Nationwide ProAccount with Wilshire	No	Voya Account Manager with Financial Engines	No	No	No	No
Other planning service considering all ppt assets?	No	No	No	No	CFP staff provide goal specific plans and comprehensive financial plans	No	No	No

Observations

- Adoption of managed account services by plan sponsors has been modest, but continues to grow; two of the comparison plans offer managed accounts
- Supporters of managed accounts typically value the customized advice available to participants while non-adopters often cite the additional cost and appropriate participant usage as concerns
- One comparison plan has Certified Financial Planners® available to participants that assist in developing goal specific plans or comprehensive financial plans
- Regarding managed accounts, data from the 2016 PlanSponsor DC Survey indicates the following:

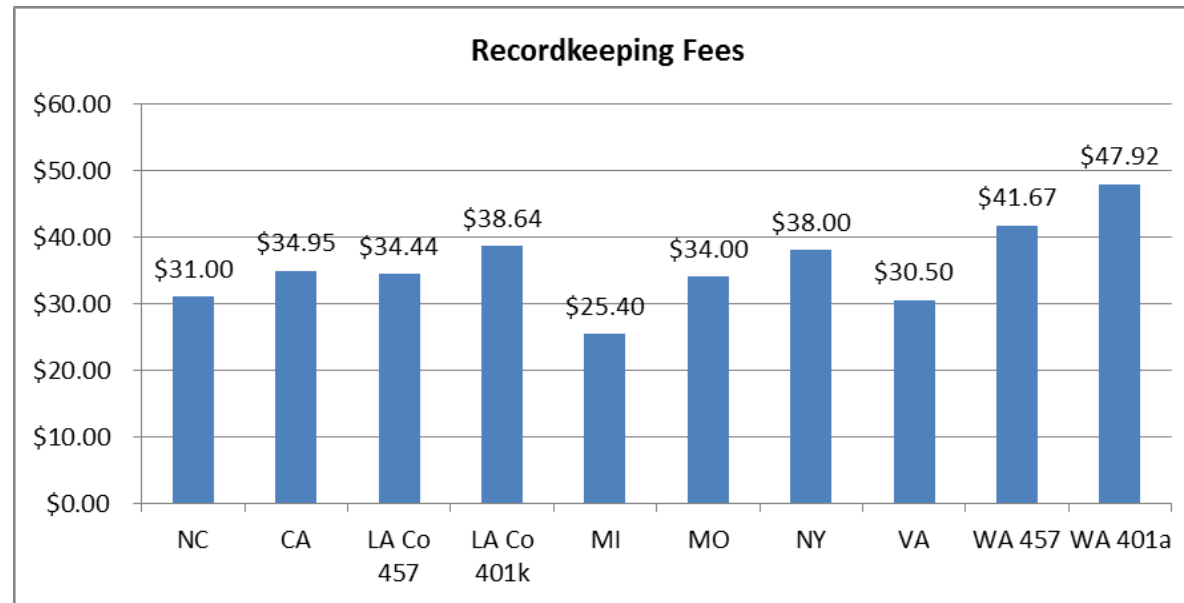
	All Industries		457 Plans	
	Overall	Mega (\$1B+)	Overall	Mega (\$1B+)
Managed accounts	31%	45%	36%	40%

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Fee Review Recordkeeping Fees

	NC	CA	LA County	MI	MO	NY	VA	WA
Total recordkeeping and administration participant fees	\$31.00/yr. and 0.025% (2.5 bp)	\$18.00/yr. and 0.05% (5 bp)	457: \$58.44/yr. 401(k): \$86.64/yr.	\$41.00/yr.	\$15/yr. and 0.09% (9 bp)	\$20.00/yr. and 0.04% (4 bp) on accounts \$20,000 to \$200,000 (\$80 cap)	\$30.50/yr.	457: 0.1283% (12.83 bp) 401(a): 0.1133% (11.33 bp)
Recordkeeper component of participant fees	\$31.00/yr. per account	\$34.95/yr. per account PST: \$9.25/\$6.25 active/inactive ARP: \$9.85/\$7.85 active/inactive	457: \$34.44/yr. per account 401(k): \$38.64/yr. per account	\$25.40/yr. per account	\$34.00/yr. per participant	*\$38.00/yr. per account or \$35.50/yr. if using electronic communications	\$30.50/yr. per participant	457: 0.0625% (6.25 bp) 401(a): 0.0925% (9.25 bp)
Handling of multiple accounts	Fees charged on each account	Fees charged on each account	Fees are plan specific	Fees charged once per SS#	Flat fees charged once per SS#	N/A – single plan type	Fees charged once per SS#	Fees are plan specific

*Source: participant website www.nysdcp.com



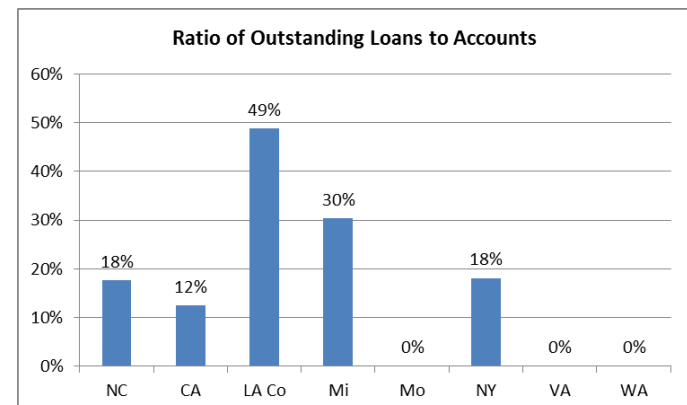
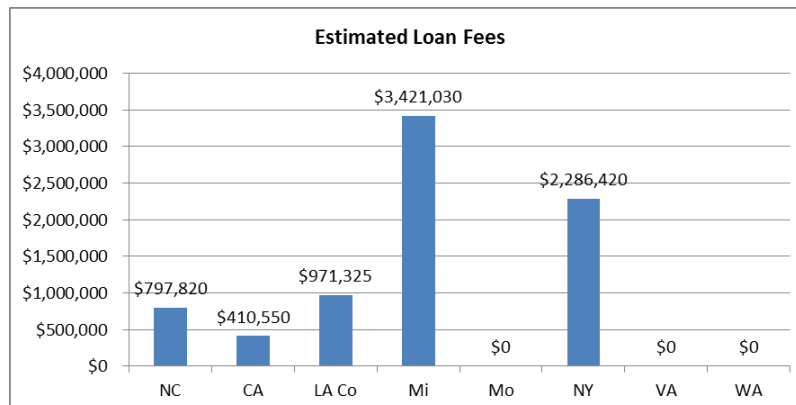
Note: WA fees were calculated based on value of asset based fees and number of accounts.

Observations:

- While there are varying structures used to charge participant fees (e.g. asset based, flat dollar, combinations, caps, etc.), the recordkeeping fee structure with most of the comparison plans is calculated on a per-participant basis, similar to North Carolina
- Los Angeles County and Washington both have separate fee structures for each of their plans; it is notable that their plans generally have different participant bases (represented and non-represented employees with LA County, and the 401(a) plan in WA is only used by participants that elected the hybrid retirement plan instead of the pension plan)
- Missouri and Virginia have flat fees that are only charged once, regardless of the number of accounts held by a participant; it is notable that both of these plans have 401(a) match accounts, so there is a high percentage of participants with multiple accounts
- New York has a recordkeeping fee structure with lower fees charged for accounts using electronic communications
- When considering recordkeeping fees, it is prudent to also consider the loan fees collected

Loan Fees

	NC	CA	LA County	MI	MO	NY	VA	WA
Loan fees	\$60 loan initiation No loan maintenance fee	\$50 loan initiation fee No loan maintenance fee	\$75 loan initiation No loan maintenance fee	\$75 loan initiation \$35/yr. loan maintenance fee	Loans not permitted	\$40 loan initiation \$50/yr. loan maintenance fee	Loans not permitted	Loans not permitted
Total loans	52,026	30,911	56,104	89,168	N/A	39,694	N/A	N/A
2016 new loans	13,297 (through 9/30)	8,211	12,951 (through 9/30)	4,002	N/A	7,543 (through 11/30)	N/A	N/A
Number of loans permitted outstanding (per plan)	One loan	Two loans since 2009; limit to one loan 3/31/2017	Two loans	Limited to two on 1/1/2015 and limited to one on 1/1/2016	N/A	One loan	N/A	N/A



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Other Areas of Interest

Additional questions were included in the surveys to the comparison plans. This section contains a summary of those responses.

Auto Enrollment

	NC	CA	LA County	MI	MO	NY	VA	WA
Auto-enroll?	No	No	No	Yes – set at 3% into 401(k) plan	Yes - set at 1% contribution, and working to get approval for auto-increases	No	Yes - since mandatory hybrid rollout in 2014, limit auto-enroll to non-hybrid positions, but auto-increase participants up to 4% (2.5% match)	Yes - new in 2017 set at 3% into 457 plan for state agencies; municipalities and school districts can adopt also

Regarding auto-enrollment, data from the 2016 PlanSponsor DC Survey indicates the following:

	All Industries		457 Plans	
	Overall	Mega (\$1B+)	Overall	Mega (\$1B+)
Use auto-enrollment	41%	66%	39%	50%
TDF default investment	62%	74%	73%	86%
Default deferral rate	Defer 1% - 5%	Defer 1% - 5%	Defer 1% - 8%	Defer 1% - 10%
	Defer 2% - 9%	Defer 2% - 7%	Defer 2% - 10%	Defer 2% - 20%
	Defer 3% - 45%	Defer 3% - 38%	Defer 3% - 32%	Defer 3% - 30%
	Defer 4% - 12%	Defer 4% - 12%	Defer 4% - 20%	Defer 4% - 15%
	Defer 5% - 11%	Defer 5% - 15%	Defer 5% - 12%	Defer 5% - 10%
	Defer 6% - 14%	Defer 6% - 18%	Defer 6% - 13%	Defer 6% - 10%
	Defer >6% - 4%	Defer >6% - 4%	Defer >6% - 5%	Defer >6% - 0%

Retirement Readiness

The survey asked respondents if they track retirement readiness, and if they do, how it is defined.

	NC	CA	LA County	MI	MO	NY	VA	WA
Define retirement readiness?	80% of pre-retirement income at age 62	Not currently	No	Not currently	80% of pre-retirement income; considering 15% goal from DC	No	Track replacement rates	No

Annual Benefit Statement

The survey asked respondents if participants receive and annual benefit statement, and what assets are included in the projections.

	NC	CA	LA County	MI	MO	NY	VA	WA
Annual benefit statement?	Yes, with DB, DC and SS projection	Adding in 2017 with DB, DC, SS and any outside assets added by participant	No	Yes, with DC and SS projection, and DB if added by participant	Yes, with DB and DC; awaiting approval to add SS projection	No	Annual DB statement includes DB, DC, and SS projection	No statements, but can access DB, DC and SS estimate online

Annuities

The survey asked respondents about the prevalence of annuities as either accumulation options or distribution options.

	NC	CA	LA County	MI	MO	NY	VA	WA
Annuity as accumulation option?	No	No	No	No	No	No	No	No
Annuity as distribution option?	Transfer benefit provided through pension	No	Yes, MetLife and Pacific Life	No	No	No	Yes, MetLife	Yes, MetLife

Regarding annuities/income products, data from the 2016 PlanSponsor DC Survey indicates the following:

	All Industries		457 Plans	
	Overall	Mega (\$1B+)	Overall	Mega (\$1B+)
Offer in-plan income products that guarantee monthly income	9%	11%	24%	24%
Offer out of plan annuity purchase service	5%	16%	11%	24%
Do not offer now but may consider adding	20%	40%	17%	19%

3(38) Services

The survey asked respondents about the prevalence of 3(38) services for custom investment portfolios.

	NC	CA	LA County	MI	MO	NY	VA	WA
3(38) services for any investments?	Stable value assets only	No 3(38) delegation	No 3(38) delegation	No 3(38) delegation	Yes, 3(38) manager used for custom target date portfolios	No 3(38) delegation	No 3(38) delegation	No 3(38) delegation

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Appendix – Investments

North Carolina

Tier I Asset Allocation	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
GoalMaker	Fixed Income BlackRock Debt Index	Stable Value Fund Galliard	
		Fixed Income Fund TCW Core Plus Prudential Core Plus	
		Inflation Responsive Fund PIMCO IRMAF	
	Large Cap Equity BlackRock Equity Index	Large Cap Value Fund Hotchkis & Wiley Large Value Delaware Large Value Robeco BP Large Value	
		Large Cap Growth Fund Sands Capital Large Growth Wellington Opportunistic Growth Loomis Large Growth	
		Small – Mid Cap Value Fund Hotchkis & Wiley SMID Value Earnest Partners SMID Value Wedge SMID Value	
		Small – Mid Cap Growth Fund TimesSquare SMID Growth Brown Advisory SMID Growth	
		Global Equity Fund Wellington Global Opportunities Arrowstreet Global Equity ACWI	
	International Equity BlackRock ACWI ex US Index	International Equity Ballie Gifford ACWI ex US Growth Mondrian ACWI ex US Value	

California

Tier I Asset Allocation	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
		STIF – Cash RBC Global, Bank of Oklahoma, Nationwide Bank, Union Bank, BlackRock	
		Short Term Investment Fund Janus Capital Management Wells Capital Management	
	Fixed Income BlackRock	Bond Fund Amundi Core Plus, T Rowe Price Core Plus, BlackRock	
Target Date Funds Custom portfolios using core funds and core managers		Diversified Real Return Fund Northern Trust TIPS Index Wellington Diversified Inflation Hedge CBRE REITS	
Socially Responsible Fund Boston Trust & Investment Management	Large Cap Equity BlackRock	Large Cap Fund Boston Company, Boston Partners, Ceredex Value Advisors, Voya Investment Management, BlackRock	
	Mid Cap Equity BlackRock	Mid Cap Fund Systematic Financial, T Rowe Price, Voya Investment Management, Wedge Capital, BlackRock	
	Small Cap Equity Northern Trust	Small Cap Fund Dalton Grenier Hartman Maher, Dimensional Fund Advisors, Frontier Capital, William Blair, Northern Trust	
	International Equity Northern Trust	International Equity Ballie Gifford, Manning & Napier, Templeton, Wellington, Northern Trust	Self-Directed Brokerage Schwab PCRA

Note: Investments are generally custom, multi-manager white-label portfolios.

County of Los Angeles

Tier I Asset Allocation	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
Target Date Funds Custom portfolios using core funds and core managers		Bank Depository Fund Bank of the West	
		Stable Value Fund Invesco	
		Bond Fund Loomis Sayles Core Plus Full Discretion TCW Metropolitan West Core Bond	
		Inflation Protected Fund SSgA Real Asset Fund Treasury Inflation Protected Securities	
Balanced Dodge & Cox Balanced Fund	Large Cap Equity Fund SSgA S&P 500 Index Fund		
		Mid Cap Fund Artisan Partners Mid Growth Sasco Capital Mid Value Wedge Capital Mid Value William Blair Mid Growth SSgA S&P Mid Cap Index Fund	
		Small Cap Fund Brandywine Small Value Phocas Financial Small Value Dimensional Fund Advisors Small Value Peregrine Capital Small Growth Elk Creek Partners Small Growth Rice Hall James & Assoc. Small Growth SSgA Russell Small Cap Index Fund	
		International Equity Causeway International Value Fund Capital Guardian International Fund	Self-Directed Brokerage Schwab PCRA

Note: Investments are generally custom, multi-manager white-label portfolios

Michigan

Tier I Asset Allocation	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
		Money Market State Street Cash Treasury Fund	
		Stable Value Voya Investment Management	
	Fixed Income State Street Bond Market Index	Fixed Income PIMCO Total Return	
Target Date Funds State Street Target Retirement Funds		High Yield Prudential High Yield Fund	
Balanced Oakmark Equity & Income	Large Cap Equity State Street S&P 500 Index	Large Cap Value Dodge & Cox Stock Fund	
		Large Cap Growth Jennison Large Cap Growth Fund	
	Mid Cap Equity State Street Mid Cap Index	Mid Cap Value T Rowe Price Mid Cap Value	
		Mid Cap Growth Artisan Mid Cap	
	Small Cap Equity State Street Russell 2000 Index	Small Cap Value Ridgeworth Sm Cap value	
		Small Cap Growth Voya Small Cap Growth	
	International Equity State Street All Cap ex US Index	International Equity American Funds EuroPacific Growth	
	Emerging Markets Vanguard Emerging Mkt Index		Self-Directed Brokerage TD Ameritrade

Note: Investments are generally mutual funds.

Missouri

Tier I Asset Allocation	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
Target Date Funds Custom portfolios managed by Alliance Bernstein Investment managers are SSGA, Vanguard, and BlackRock		Missouri Stable Income Voya	
			Self-Directed Brokerage TD Ameritrade

Note: Target date funds are generally custom, multi-manager white-label portfolios.

New York State

Tier I Asset Allocation	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
<div> Target Date Funds T Rowe Price Retirement Funds Balanced Funds Pax World Balanced Fund Vanguard Wellington Fund </div>	<div> Fixed Income Vanguard Total Bond Mkt Index </div>	<div> Stable Value Fund GSAM Stable Value </div>	
		<div> Fixed Income Fund Federated Total Return Gov't Bond </div>	
	<div> Large Cap Equity Vanguard Int'l Index Fund </div>	<div> Large Cap Core Funds Davis New York Venture Hartford Capital Appreciation </div>	
		<div> Large Cap Value Funds T Rowe Price Equity Income </div>	
		<div> Large Cap Growth Fund Fidelity OTC Portfolio Principal Large Cap Growth Vanguard PRIMECAP Fund </div>	
	<div> Mid Cap Equity Vanguard Mid Cap Index </div>	<div> Mid Cap Funds Hotchkis & Wiley SMID Value Earnest Partners SMID Value Wedge SMID Value </div>	
	<div> Small Cap Equity Vanguard Small Cap Index Fund </div>	<div> Small Cap Funds WF Advantage Small Value Fund Columbia Acorn USA Fund Federated Clover Small Value Fund </div>	
	<div> International Equity Portfolio Northern Trust </div>	<div> International Equity Portfolio MFS, DFA, Wellington, Manning & Napier, Northern Trust </div>	
		<div> Emerging Markets MSIF Emerging Markets Fund </div>	
			<div> Self-Directed Brokerage Schwab PCRA </div>

Note: Investments are generally mutual funds.

Virginia

Tier I Asset Allocation	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
		Money Market Fund BlackRock	
		Stable Value Galliard	
	Fixed Income BlackRock Debt Index		
Target Date Funds BlackRock Index		High Yield Bond Fund JP Morgan Corporate High Yield	
Balanced VRS Investment Portfolio (internally managed, quarterly valued)	Inflation Responsive Fund BlackRock US TIPS		
	Stock Fund BlackRock Equity Index		
	Small – Mid Cap Stock Fund BlackRock Russell 2500 Index		
	International Stock Fund BlackRock MSCI World ex US Index		
			Global Real Estate Fund BlackRock Developed Real Estate Index
			Self-Directed Brokerage TD Ameritrade

Note: Investments are generally custom white-label portfolios.

Washington

Tier I Asset Allocation	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
		Savings Pool Fund Washington State Investment Board	
		Washington State Bond Fund Washington State Investment Board	
Target Date Funds Custom portfolios managed by Alliance Bernstein Investment managers are Alliance Bernstein, BlackRock and WSIB	Large Cap Equity BlackRock		
Socially Responsible Balanced Fund Walden Asset Management	Small Cap Value Equity BlackRock		
Total Allocation Portfolio Washington State Investment Board (401(a) plan only)	Global Equity BlackRock		
	Emerging Markets BlackRock		

Note: Investments are generally custom white-label portfolios.

	North Carolina		California		LA County		Michigan	
	Fund	Fee	Fund	Fee	Fund	Fee	Fund	Fee
Tier I								
Target Date	GoalMaker	0.00%	Target Date Funds	0.30%	Horizons TDF	0.45%	State Street Target Ret	0.12%
			Socially Resp Fund	0.39%	Horizons Balanced	0.43%		
Tier II-A								
Bond Index	NC Fixed Income Passive	0.05%	Bond Index Fund	0.08%			SS Bond Index	0.06%
Inflation Protected Index								
Large Index	NC Large Passive	0.03%	Large Index	0.06%	Horizons Large Cap Fund	0.03%	SS S&P 500 Index	0.02%
Mid Index	NC SMID Passive	0.04%	Mid Cap Inex	0.08%			SS MidCap Index	0.05%
Small Index			Small Cap Index	0.08%			SS Russell 2000 Index	0.05%
Int'l Index	NC Int'l Passive	0.09%	Int'l Index	0.12%			SS Global Equity ex US	0.12%
Global Index								
Emerging Mkts Index							Vanguard Emerging Mkt Index	0.10%
Tier II-B								
Stable Value	NC Stable Value	0.37%	Short Term - Cash	0.13%	Horizons Stable Incom	0.35%	Stable Value Fund	0.22%
			Short Term - Cash	0.15%			SS Cash Treasury	0.05%
Fixed income	NC Fixed Income	0.20%	Bond Fund	0.32%	Horizons Bond Fund	0.29%	PIMCO Total Return	0.46%
							Prudential High Yield	0.38%
Inflation Responsive	NC Inflation Sensitive	0.72%	Diversified Real Return	0.69%	Horizons Inflation Protected	0.17%		
Large Cap	NC Large Value	0.42%	Large Cap Fund	0.37%			Dodge & Cox Stock	0.41%
	NC Large Growth	0.46%					Jennison Large Growth	0.32%
Mid Cap	NC SMID Value	0.66%	Mid Cap Fund	0.45%	Horizons Mid Cap	0.47%	T Rowe Mid Value	0.65%
	NC SMID Growth	0.71%					Artisan Mid Cap	0.77%
Small Cap			Small Cap Fund	0.73%	Horizons Small Cap	0.62%	Ridgeworth Sm Cap Val	0.71%
							Voya Small Cap Growth	0.43%
Global Equity	NC Global Equity	0.58%						
Int'l Equity	NC Int'l Equity	0.49%	Int'l Fund	0.58%	Horizons Non-US Equity	0.45%	Amer Funds EuroPacific Gr	0.49%
Emerging Markets								
Tier III								
			Schwab PCRA		Schwab PCRA		TD Ameritrade	
Note:	Includes 2.5 bp admin		includes 5 bp admin fee					

	MOSERS		New York State		Virginia		Washington	
	Fund	Fee	Fund	Fee	Fund	Fee	Fund	Fee
Tier I								
Target Date	Missouri TDF	0.21%	T Rowe Price Retirement		Target Date Funds	0.08%	Target Strategy Funds	0.28%
	MOSERS Investment Portfolio	1.63%	Pax Wold Balanced	0.62%	VRSIP	0.59%	Socially Resp Balanced	0.48%
			Vanguard Wellington	0.18%				
Tier II-A								
Bond Index			Vanguard Total Bond Mkt Indx	0.04%	Bond Fund	0.04%		
Inflation Protected Index					Inflation Protected Bond	0.04%		
Large Index			Vanguard Inst'l Index	0.02%	Stock Fund	0.01%	US Large Cap Index	0.13%
Mid Index			Vanguard Mid Cap Index	0.05%				
Small Index			Vanguard Small Cap Index	0.05%			US Small Cap index	0.15%
Int'l Index			Int'l Equity Index	0.20%	Int'l Stock Fund	0.09%		
Global Index							Global Equity Index	0.19%
Emerging Mkts Index							Emerging Mkt Index	0.33%
Tier II-B								
Stable Value	Missouri Stable income	0.30%	Stable Income Fund	0.35%	Stable Value Fund	0.29%	Savings Pool Fund	0.13%
					Money Market Fund	0.08%		
Fixed income			Federated Total Return Gov't	0.31%			WA State Bond Fund	0.13%
					High Yield Bond Fund	0.39%		
Inflation Responsive								
Large Cap			Davis NY Venture	0.86%				
			Hartford Cap Apprec	0.67%				
			Fidelity OTC	0.83%				
			Principal Large Growth	0.64%				
			Vanguard PRIMECAP	0.34%				
			T Rowe Price Equity Income	0.66%				
Mid Cap			Vanguard Cap Opp	0.38%				
Small Cap			WF Advantage Small Value	0.88%				
			Columbia Acord USA	1.10%				
			Federated Clover Small Value	1.01%				
Global Equity								
Int'l Equity			Int'l Equity Fund Active	0.60%				
Emerging Markets			MSIF Emerging Mkts	1.11%				
Tier III								
	TD Ameritrade		Schwab PCRA		TD Ameritrade			
Note:			Revenue sharing on MF's returned to ppts				Includes 2.1 bp investment fee and 4.5 bp admin fee, 457 fees shown	

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