

CITY OF RICHMOND 457B DEFERRED

Screens Summary (Data as of 12-31-2021)

⊖ Fund Removed from Approved List ⚠ Fund on Watch List

Name	Ticker	Asset Class	Trailing Performance and Risk				Management			Style		Expense				
			1 Yr	3 Yr	5 Yr	10 Yr	Pass/ Fail	Std Dev 3 Yr %	Beta 3 Yr %	Tenure	Pass/ Fail	Style Box	Pass/ Fail	Exp Ratio	Pass/ Fail	
US Stock																
DFA US Core Equity 1 I <i>percentile rank</i> <i># of funds in category</i>	DFEOX	Large Blend	27.54 39 1,394	24.57 50 1,256	16.59 58 1,121	15.72 41 831	✔	19.36	1.10	9.85	✔	☒	✔	0.15	✔	
Vanguard FTSE Social Index Admiral <i>percentile rank</i> <i># of funds in category</i>	VFTAX	Large Blend Index	27.71 37 1,394	— — 1,256	— — 1,121	— — 831	—	—	—	6.03	✔	☒	✖	0.14	✔	
American Funds Growth Fund of Amer R6 <i>percentile rank</i> <i># of funds in category</i>	RGAGX	Large Growth	19.69 64 1,241	28.61 60 1,120	21.26 62 1,020	18.31 39 772	✔	18.09	0.95	28.18	✔	☒	✔	0.30	✔	
State St Russell Lg Cp Val® Indx NL CI C <i>percentile rank</i> <i># of funds in category</i>		Large Value	25.13 61 1,212	17.72 50 1,148	11.22 57 1,041	12.99 35 759	✔	19.29	1.00	22.86	✔	☒	✔	0.04	✔	
ClearBridge Mid Cap Growth IS <i>percentile rank</i> <i># of funds in category</i>	LCMIX	Mid-Cap Growth	22.80 12 591	32.65 11 541	22.06 21 494	— — 383	✔	20.73	0.99	11.34	✔	☒	✔	0.75	✔	
Vanguard Mid-Cap Value Index Admiral <i>percentile rank</i> <i># of funds in category</i>	VMVAX	Mid-Cap Value	28.76 53 415	19.11 50 393	11.61 24 353	13.57 13 267	✔	21.92	0.98	15.38	✔	☒	✔	0.07	✔	
State St Russell Sm Cap® Gr Indx NL CI C <i>percentile rank</i> <i># of funds in category</i>		Small Growth	2.73 82 617	20.96 83 582	14.34 79 520	14.02 75 394	✔	23.40	1.00	12.33	✔	☒	✔	0.05	✔	
State St Russell Sm Cp® Val Indx NL CI C <i>percentile rank</i> <i># of funds in category</i>		Small Value	28.08 68 447	18.06 55 419	9.15 44 393	12.03 38 301	✔	25.14	0.99	12.33	✔	☒	✔	0.05	✔	
Non-US Stock																
American Funds New World R6 <i>percentile rank</i> <i># of funds in category</i>	RNWGX	Diversified Emerging Mkts	5.13 27 794	19.03 9 721	14.59 8 616	9.58 3 344	✔	17.60	0.88	22.56	✔	☒	✔	0.57	✔	
American Funds Intl Gr and Inc R6 <i>percentile rank</i> <i># of funds in category</i>	RIGGX	Foreign Large Blend	10.12 54 771	14.97 27 704	10.55 21 607	7.90 49 415	✔	18.84	1.09	13.26	✔	☒	✔	0.54	✔	
Vanguard International Growth Adm <i>percentile rank</i> <i># of funds in category</i>	VWILX	Foreign Large Growth	-0.74 89 452	27.75 4 387	21.14 3 333	13.96 4 225	✔	20.05	0.97	18.91	✔	☒	✔	0.32	✔	
DFA International Value I <i>percentile rank</i> <i># of funds in category</i>	DFIVX	Foreign Large Value	18.69 4 350	10.34 47 326	6.93 43 286	6.60 40 180	✔	22.82	1.28	11.85	✔	☒	✔	0.34	✔	
American Funds New Perspective R6 <i>percentile rank</i> <i># of funds in category</i>	RNPGX	World Stock	18.10 28 355	27.28 28 306	20.28 22 261	15.81 15 166	✔	18.04	1.04	21.10	✔	—	✔	0.41	✔	

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			1 Yr	3 Yr	5 Yr	10 Yr	Pass/ Fail	Std Dev 3 Yr %	Beta 3 Yr %	Tenure	Pass/ Fail	Style Box	Pass/ Fail	Exp Ratio	Pass/ Fail
Alternative															
PIMCO Commodity Real Ret Strat Instl <i>percentile rank</i> <i># of funds in category</i>	PCRIX	Commodities Broad Basket	33.48 25 114	14.74 7 109	5.99 21 86	-1.76 42 55		18.67	1.19	7.00		—	—	0.82	
Vanguard Real Estate Index Admiral <i>percentile rank</i> <i># of funds in category</i>	VGSLX	Real Estate	40.40 59 255	19.95 42 235	11.24 49 202	11.51 31 151		18.85	0.94	25.65		—		0.12	
Fixed Income															
PIMCO High Yield Instl <i>percentile rank</i> <i># of funds in category</i>	PHIYX	High Yield Bond	4.05 68 680	8.00 43 636	5.62 34 560	6.17 36 373		8.14	0.87	11.98		—	—	0.56	
BlackRock Inflation Protected Bond K <i>percentile rank</i> <i># of funds in category</i>	BPLBX	Inflation- Protected Bond	5.79 23 210	8.61 14 203	5.35 18 180	2.99 23 125		4.06	1.03	4.88		—	—	0.39	
Baird Aggregate Bond Instl <i>percentile rank</i> <i># of funds in category</i>	BAGIX	Intermediate- Term Bond	-1.46 40 426	5.43 20 389	4.01 13 351	3.74 9 256		3.86	1.09	21.27			—	0.30	
PIMCO Income Instl <i>percentile rank</i> <i># of funds in category</i>	PIMIX	Multisector Bond	2.61 45 339	5.46 58 277	5.08 25 238	6.97 1 134		5.79	0.83	14.77		—	—	0.62	
Federated Hermes Govt Ultrashort R6 <i>percentile rank</i> <i># of funds in category</i>	FGULX	Ultrashort Bond	0.06 53 239	1.20 73 214	1.32 72 175	— — 94		0.54	0.05	24.49		—	—	0.24	
PIMCO International Bond (USD-Hdg) Instl <i>percentile rank</i> <i># of funds in category</i>	PFORX	World Bond	-1.67 41 125	3.86 61 110	3.55 28 81	4.78 4 48		3.60	0.71	7.27		—	—	0.52	
Target Date															
Vanguard Target Retirement 2015 Fund <i>percentile rank</i> <i># of funds in category</i>	VTXVX	Target Date	5.78 97 123	10.24 85 118	7.71 78 89	7.46 68 45		6.82	0.81	8.86		—		0.12	
Vanguard Target Retirement 2020 Fund <i>percentile rank</i> <i># of funds in category</i>	VTWNX	Target Date	8.17 68 172	12.55 49 161	9.26 37 127	8.71 32 65		9.04	0.97	8.86		—		0.13	
Vanguard Target Retirement 2025 Fund <i>percentile rank</i> <i># of funds in category</i>	VTTVX	Target Date	9.80 57 222	14.17 39 205	10.35 30 169	9.60 20 89		10.69	1.02	8.86		—		0.13	
Vanguard Target Retirement 2030 Fund <i>percentile rank</i> <i># of funds in category</i>	VTHRX	Target Date	11.38 61 223	15.45 50 204	11.23 42 169	10.36 24 94		11.97	0.99	8.86		—		0.14	

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			1 Yr	3 Yr	5 Yr	10 Yr	Pass/ Fail	Std Dev 3 Yr %	Beta 3 Yr %	Tenure	Pass/ Fail	Style Box	Pass/ Fail	Exp Ratio	Pass/ Fail
Vanguard Target Retirement 2035 Fund <i>percentile rank</i> <i># of funds in category</i>	VTTHX	Target Date	12.96 79 215	16.66 57 202	12.06 47 166	11.10 31 86	✓	13.24	0.95	8.86	✓	—	✓	0.14	✓
Vanguard Target Retirement 2040 Fund <i>percentile rank</i> <i># of funds in category</i>	VFORX	Target Date	14.56 81 217	17.89 53 204	12.88 40 169	11.69 31 94	✓	14.51	0.94	8.86	✓	—	✓	0.14	✓
Vanguard Target Retirement 2045 Fund <i>percentile rank</i> <i># of funds in category</i>	VTIVX	Target Date	16.16 68 215	19.06 49 202	13.55 38 166	12.04 25 85	✓	15.74	0.96	8.86	✓	—	✓	0.15	✓
Vanguard Target Retirement 2050 Fund <i>percentile rank</i> <i># of funds in category</i>	VFIFX	Target Date	16.41 74 217	19.19 56 204	13.62 43 169	12.07 28 86	✓	15.77	0.94	8.86	✓	—	✓	0.15	✓
Vanguard Target Retirement 2055 Fund <i>percentile rank</i> <i># of funds in category</i>	VFFVX	Target Date	16.44 78 215	19.18 62 202	13.61 51 164	12.05 34 65	✓	15.77	0.94	8.86	✓	—	✓	0.15	✓
Vanguard Target Retirement 2060 Fund <i>percentile rank</i> <i># of funds in category</i>	VTTSX	Target Date	16.44 81 209	19.17 67 189	13.61 57 140	— — —	✓	15.75	1.44	8.86	✓	—	✓	0.15	✓
Vanguard Target Retirement 2065 Fund <i>percentile rank</i> <i># of funds in category</i>	VLXVX	Target Date	16.46 76 135	19.13 79 17	— — —	— — —	✖	15.79	1.44	4.47	✓	—	✓	0.15	✓
Vanguard Target Retirement Income Fund <i>percentile rank</i> <i># of funds in category</i>	VTINX	Target Date	5.25 65 169	9.43 47 153	6.85 46 128	5.88 38 79	✓	5.87	0.83	8.86	✓	—	✓	0.12	✓

Balanced

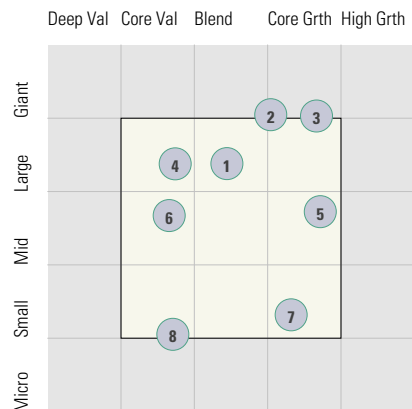
Vanguard LifeStrategy Cnsvr Gr Inv <i>percentile rank</i> <i># of funds in category</i>	VSCGX	Target Risk	6.05 85 504	11.01 48 466	8.05 31 428	7.09 33 284	✓	7.46	1.01	27.27	✓	—	✓	0.12	✓
Vanguard LifeStrategy Growth Inv <i>percentile rank</i> <i># of funds in category</i>	VASGX	Target Risk	14.35 70 321	17.58 37 294	12.53 22 265	11.12 25 196	✓	14.06	1.03	27.27	✓	—	✓	0.14	✓
Vanguard LifeStrategy Income Inv <i>percentile rank</i> <i># of funds in category</i>	VASIX	Target Risk	1.92 90 195	7.61 61 182	5.70 39 168	4.98 47 110	✓	4.63	0.97	27.27	✓	—	✓	0.11	✓
Vanguard LifeStrategy Moderate Gr Inv <i>percentile rank</i> <i># of funds in category</i>	VSMGX	Target Risk	10.08 88 711	14.28 62 666	10.30 52 602	9.12 58 434	✓	10.70	0.99	27.27	✓	—	✓	0.13	✓

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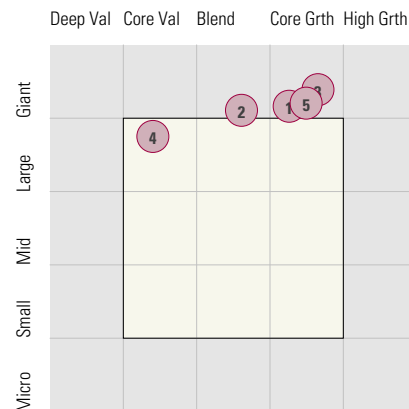
Style Analysis (Data as of 12-31-2021)

Style Analysis

Morningstar Style Box US Stock



Morningstar Style Box Non-US Stock



US Stock Funds

	Category	Super Sectors %			Asset Allocation %			Avg Mkt Cap M\$	
		Cyclical	Defensive	Sensitive	Cash	US Stock	Foreign		
1	DFA US Core Equity 1 I	Large Blend	31.90	20.28	47.83	0.90	98.06	1.03	75.75
2	Vanguard FTSE Social Index Admiral	Large Blend Index	31.52	20.09	48.40	-0.08	98.45	1.62	237.95
3	American Funds Growth Fund of Amer R6	Large Growth	34.33	14.91	50.78	3.33	85.02	11.21	187.45
4	State St Russell Lg Cp Val® Indx NL CI C	Large Value	34.75	31.05	34.20	0.68	98.14	1.17	78.52
5	ClearBridge Mid Cap Growth IS	Mid-Cap Growth	26.64	21.04	52.31	2.51	94.83	2.66	25.30
6	Vanguard Mid-Cap Value Index Admiral	Mid-Cap Value	47.19	23.69	29.11	1.05	96.91	2.04	23.93
7	State St Russell Sm Cap® Gr Indx NL CI C	Small Growth	25.55	29.85	44.61	0.95	97.52	1.53	3.18
8	State St Russell Sm Cp® Val Indx NL CI C	Small Value	50.48	19.21	30.30	0.72	98.24	1.05	2.32

Non-US Stock Funds

	Category	Super Sectors %			Regional Exposure %			Market Maturity %			
		Cyclical	Defensive	Sensitive	Americas	Greater Asia	Greater Europe	Developed	EM%	Avg Mkt Cap M\$	
1	American Funds New World R6	Diversified Emerging Mkts	37.47	21.32	41.22	37.45	39.39	23.15	61.07	38.93	66.76
2	American Funds Intl Gr and Inc R6	Foreign Large Blend	38.21	22.80	38.99	12.73	30.07	57.20	83.84	16.16	55.02
3	Vanguard International Growth Adm	Foreign Large Growth	38.02	25.18	36.80	19.77	31.83	48.40	78.61	21.39	85.43
4	DFA International Value I	Foreign Large Value	59.19	11.16	29.67	11.13	30.09	58.78	99.40	0.60	32.79
5	American Funds New Perspective R6	World Stock	38.03	18.33	43.63	61.53	12.23	26.24	95.76	4.24	157.93

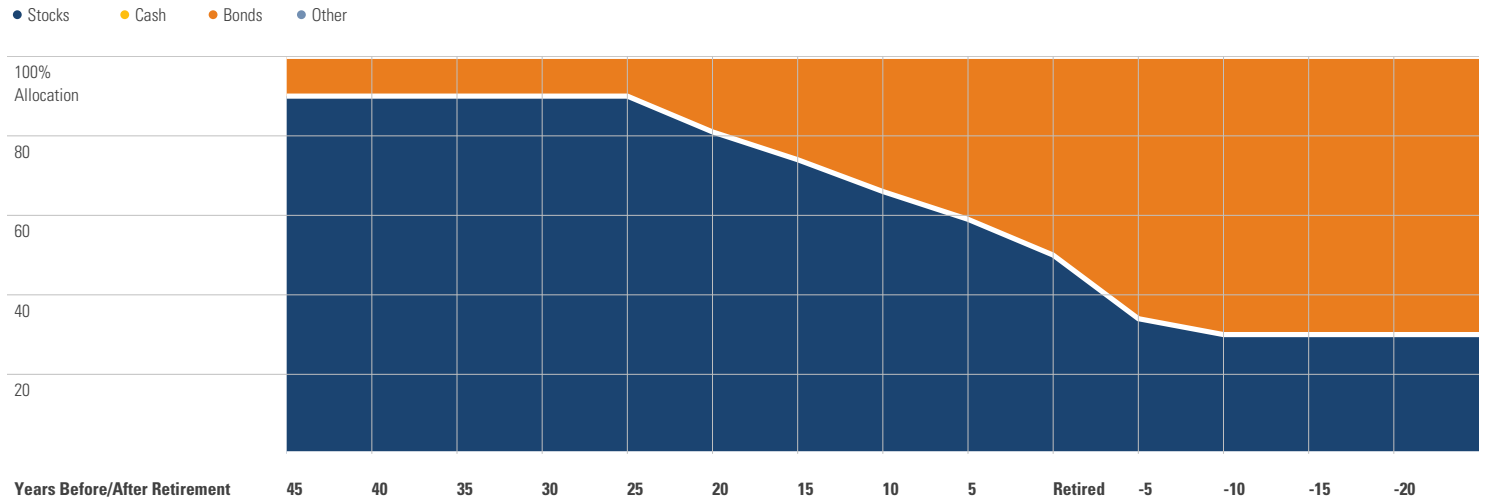
Fixed Income Funds

	Category	Super Sectors %				Other Stats		Credit Quality %		
		US Govt Debt	Mtg	US Credit	Non US	Avg Eff Duration	Inv Grade	Below Inv Grade	NR/NA	
1	PIMCO High Yield Instl	High Yield Bond	0.01	0.00	77.87	0.00	3.74	13.00	87.00	0.00
2	BlackRock Inflation Protected Bond K	Inflation-Protected Bond	95.96	0.00	1.91	0.00	6.91	98.70	0.15	1.15
3	Baird Aggregate Bond Inst	Intermediate-Term Bond	30.09	18.36	43.28	0.00	6.78	99.30	0.70	0.00
4	PIMCO Income Instl	Multisector Bond	53.76	6.54	15.92	0.00	1.74	81.00	19.00	0.00
5	Federated Hermes Govt Ultrashort R6	Ultrashort Bond	12.75	49.06	0.00	0.00	0.40	100.00	0.00	0.00
6	PIMCO International Bond (USD-Hdg) Instl	World Bond	64.24	3.07	7.24	0.00	7.02	93.00	7.00	0.00

CITY OF RICHMOND 457B DEFERRED

Target Date Analysis (Data as of 12-31-2021)

Target Date Allocation



Target Date Portfolio Data

Asset Allocation %

	Total Stock	US Stock	Non-US Stock	Total Bond	Infl Prot Bond	HY Bond	Cash	Other	Avg Mkt Cap \$M
Vanguard Target Retirement 2015 Fund	30.36	18.11	12.25	65.78	19.08	0.24	3.36	0.50	73.70
Vanguard Target Retirement 2020 Fund	44.76	26.98	17.78	51.87	14.46	0.20	2.95	0.42	74.41
Vanguard Target Retirement 2025 Fund	56.19	33.94	22.25	40.74	2.58	0.19	2.67	0.39	74.55
Vanguard Target Retirement 2030 Fund	64.47	38.93	25.54	32.65	0.00	0.16	2.54	0.33	74.53
Vanguard Target Retirement 2035 Fund	71.81	43.33	28.48	25.31	0.00	0.12	2.62	0.26	74.47
Vanguard Target Retirement 2040 Fund	79.01	47.60	31.41	18.29	0.00	0.09	2.51	0.19	74.37
Vanguard Target Retirement 2045 Fund	86.30	52.07	34.23	10.88	0.00	0.05	2.70	0.13	74.47
Vanguard Target Retirement 2050 Fund	88.31	53.29	35.02	8.97	0.00	0.04	2.61	0.11	74.48
Vanguard Target Retirement 2055 Fund	88.15	53.35	34.80	9.05	0.00	0.04	2.70	0.11	74.69
Vanguard Target Retirement 2060 Fund	88.01	53.55	34.46	9.09	0.00	0.04	2.78	0.11	75.05
Vanguard Target Retirement 2065 Fund	87.90	52.71	35.19	9.12	0.00	0.04	2.87	0.11	74.06
Vanguard Target Retirement Income Fund	29.11	17.36	11.75	66.98	19.63	0.24	3.40	0.50	73.68