

# CITY OF RICHMOND 457B DEFERRED

## Screens Summary (Data as of 12-31-2020)

⊖ 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	
<b>US Stock</b>																
DFA US Core Equity 1 I <i>percentile rank</i> <i># of funds in category</i>	DFEOX	Large Blend	16.42 51 1,369	11.80 58 1,237	14.16 43 1,078	12.87 44 817	✔	20.98	1.11	8.85	✔	☐	✔	0.17	✔	
Vanguard FTSE Social Index Admiral <i>percentile rank</i> <i># of funds in category</i>	VFTAX	Large Blend Index	22.67 11 1,369	— — 1,237	— — 1,078	— — 817	—	—	—	5.03	✔	☐	✖	0.14	✔	
American Funds Growth Fund of Amer R6 <i>percentile rank</i> <i># of funds in category</i>	RGAGX	Large Growth	38.28 35 1,291	20.07 53 1,204	18.97 40 1,081	15.66 40 796	✔	19.72	0.97	27.18	✔	☐	✔	0.30	✔	
State St Russell Lg Cp Val® Indx NL CI C <i>percentile rank</i> <i># of funds in category</i>		Large Value	3.01 46 1,202	6.14 44 1,130	9.78 41 1,000	10.52 32 717	✔	19.87	1.00	21.86	✔	☐	✔	0.04	✔	
ClearBridge Mid Cap Growth IS <i>percentile rank</i> <i># of funds in category</i>	LCMIX	Mid-Cap Growth	45.15 27 604	21.47 35 564	17.65 48 504	— — 383	✔	22.44	1.02	10.34	✔	☐	✔	0.75	✔	
Vanguard Mid-Cap Value Index Admiral <i>percentile rank</i> <i># of funds in category</i>	VMVAX	Mid-Cap Value	2.54 55 415	4.75 39 396	9.17 43 349	— — 247	✔	22.68	0.98	14.38	✔	☐	✔	0.07	✔	
State St Russell Sm Cap® Gr Indx NL CI C <i>percentile rank</i> <i># of funds in category</i>		Small Growth	34.14 56 616	15.99 60 576	16.20 62 505	13.37 57 383	✔	25.45	1.00	11.33	✔	☐	✔	0.05	✔	
State St Russell Sm Cp® Val Indx NL CI C <i>percentile rank</i> <i># of funds in category</i>		Small Value	5.09 36 416	3.85 25 386	9.71 21 358	8.67 32 259	✔	26.29	0.99	11.33	✔	☐	✔	0.05	✔	
<b>Non-US Stock</b>																
JPMorgan Emerging Markets Equity R6 <i>percentile rank</i> <i># of funds in category</i>	JEMWX	Diversified Emerging Mkts	35.00 8 797	14.53 4 697	19.49 2 597	— — 279	✔	20.83	1.01	15.34	✔	☐	✔	0.79	✔	
American Funds Europacific Growth R6 <i>percentile rank</i> <i># of funds in category</i>	REGX	Foreign Large Blend	25.27 33 452	10.74 43 388	12.47 38 318	8.14 36 234	✔	19.13	1.02	19.60	✔	☐	✔	0.46	✔	
Vanguard International Growth Adm <i>percentile rank</i> <i># of funds in category</i>	VWILX	Foreign Large Growth	59.74 4 452	22.45 4 388	21.77 4 318	12.39 5 234	✔	21.50	1.09	17.91	✔	☐	✔	0.33	✔	
DFA International Value I <i>percentile rank</i> <i># of funds in category</i>	DFIVX	Foreign Large Value	-2.14 73 353	-2.25 90 323	5.01 58 281	2.88 75 184	✔	23.30	1.25	10.85	✔	☐	✔	0.39	✔	
American Funds New Perspective R6 <i>percentile rank</i> <i># of funds in category</i>	RNPGX	World Stock	33.81 14 869	18.14 10 762	16.85 11 636	13.04 9 390	✔	19.35	1.06	20.10	✔	☐	✔	0.42	✔	

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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	
<b>Alternative</b>																
PIMCO Commodity Real Ret Strat Instl <i>percentile rank</i> <i># of funds in category</i>	PCRIX	Commodities Broad Basket	0.82 31 124	-0.81 24 106	2.80 24 95	-5.31 29 55		17.63	1.22	6.00		—	—	1.33		
Vanguard Real Estate Index Admiral <i>percentile rank</i> <i># of funds in category</i>	VGSLX	Real Estate	-4.65 44 248	4.96 41 225	5.65 38 199	8.68 31 144		18.90	0.94	24.65		—		0.12		
<b>Fixed Income</b>																
PIMCO High Yield Instl <i>percentile rank</i> <i># of funds in category</i>	PHIYX	High Yield Bond	5.34 48 678	5.69 27 629	7.32 37 556	6.17 22 352		8.36	0.87	10.98		—	—	0.57		
BlackRock Inflation Protected Bond K <i>percentile rank</i> <i># of funds in category</i>	BPLBX	Inflation- Protected Bond	11.85 14 207	5.94 21 197	5.05 26 173	3.57 30 117		4.12	1.05	3.88		—	—	0.60		
Baird Aggregate Bond Instl <i>percentile rank</i> <i># of funds in category</i>	BAGIX	Intermediate- Term Bond	8.63 22 416	5.84 14 381	5.04 11 331	4.68 5 253		3.81	1.07	20.27			—	0.30		
PIMCO Income Instl <i>percentile rank</i> <i># of funds in category</i>	PIMIX	Multisector Bond	5.80 47 340	4.76 47 299	6.30 20 262	7.36 1 138		5.78	0.88	13.77		—	—	1.09		
Federated Hermes Govt Ultrashort R6 <i>percentile rank</i> <i># of funds in category</i>	FGULX	Ultrashort Bond	1.39 53 212	1.82 66 172	— — 134	— — 67		0.48	0.05	23.49		—	—	0.24		
Templeton Global Bond R6 <i>percentile rank</i> <i># of funds in category</i>	FBNRX	World Bond	-4.06 87 316	-0.53 93 269	1.56 89 240	— — 96		6.10	-0.49	19.01		—	—	0.56		
<b>Target Date</b>																
Vanguard Target Retirement 2020 Inv <i>percentile rank</i> <i># of funds in category</i>	VTWXX	Target Date	12.04 46 178	8.07 29 157	9.02 27 118	7.93 15 72		9.85	1.00	7.86		—		0.13		
Vanguard Target Retirement 2025 Inv <i>percentile rank</i> <i># of funds in category</i>	VTTVX	Target Date	13.30 40 214	8.73 27 187	9.88 27 151	8.54 13 87		11.60	1.04	7.86		—		0.13		
Vanguard Target Retirement 2030 Inv <i>percentile rank</i> <i># of funds in category</i>	VTHRXX	Target Date	14.10 38 224	9.16 29 197	10.51 33 158	9.04 18 89		12.98	1.00	7.86		—		0.14		
Vanguard Target Retirement 2035 Inv <i>percentile rank</i> <i># of funds in category</i>	VTTXX	Target Date	14.79 43 207	9.50 37 184	11.11 34 148	9.51 17 84		14.36	0.96	7.86		—		0.14		

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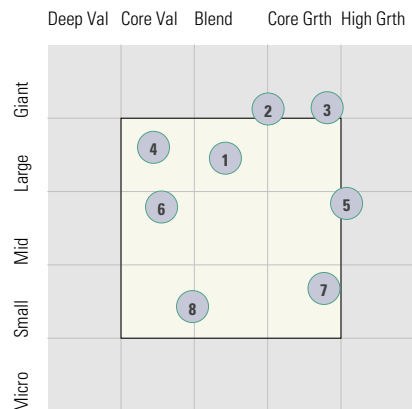
Name	Ticker	Asset Class	Trailing Performance and Risk				Management			Style		Expense			
			1 Yr	3 Yr	5 Yr	10 Yr	Pass/ Fail	Std Dev 3 Yr %	Beta 3 Yr %	Tenure	Pass/ Fail	Style Box	Pass/ Fail	Exp Ratio	Pass/ Fail
Vanguard Target Retirement 2040 Inv <i>percentile rank</i> <i># of funds in category</i>	VFORX	Target Date	15.47 40 218	9.85 36 197	11.71 30 158	9.90 18 89		15.74	0.95	7.86		—		0.14	
Vanguard Target Retirement 2045 Inv <i>percentile rank</i> <i># of funds in category</i>	VTIVX	Target Date	16.30 36 207	10.20 32 184	12.09 28 148	10.09 17 83		16.98	0.97	7.86		—		0.15	
Vanguard Target Retirement 2050 Inv <i>percentile rank</i> <i># of funds in category</i>	VFIFX	Target Date	16.39 37 217	10.24 35 196	12.10 30 157	10.09 24 78		16.99	0.96	7.86		—		0.15	
Vanguard Target Retirement 2055 Inv <i>percentile rank</i> <i># of funds in category</i>	VFFVX	Target Date	16.32 41 207	10.22 36 184	12.09 36 145	10.10 24 44		16.98	0.95	7.86		—		0.15	
Vanguard Target Retirement 2060 Inv <i>percentile rank</i> <i># of funds in category</i>	VTTSX	Target Date	16.32 42 257	10.22 40 181	12.08 46 93	— — —		16.97	0.95	7.86		—		0.15	
Vanguard Target Retirement 2065 Inv <i>percentile rank</i> <i># of funds in category</i>	VLVX	Target Date	16.17 47 257	10.15 43 181	— — 93	— — —		16.99	0.95	3.47		—		0.15	
Vanguard Target Retirement Income Inv <i>percentile rank</i> <i># of funds in category</i>	VTINX	Target Date	10.02 36 168	6.86 25 148	6.86 35 126	5.88 20 84		6.22	0.84	7.86		—		0.12	
<b>Balanced</b>															
Vanguard LifeStrategy Cnsvr Gr Inv <i>percentile rank</i> <i># of funds in category</i>	VSCGX	Target Risk	11.51 27 549	7.78 17 524	8.03 17 462	6.65 25 280		7.92	1.01	26.27		—		0.12	
Vanguard LifeStrategy Growth Inv <i>percentile rank</i> <i># of funds in category</i>	VASGX	Target Risk	15.45 27 325	9.79 23 308	11.32 18 279	9.38 20 188		15.14	1.03	26.27		—		0.14	
Vanguard LifeStrategy Income Inv <i>percentile rank</i> <i># of funds in category</i>	VASIX	Target Risk	9.13 27 177	6.56 14 166	6.24 30 149	5.17 34 93		4.74	0.96	26.27		—		0.11	
Vanguard LifeStrategy Moderate Gr Inv <i>percentile rank</i> <i># of funds in category</i>	VSMGX	Target Risk	13.59 36 673	8.84 36 636	9.71 36 576	8.11 45 414		11.49	0.99	26.27		—		0.13	

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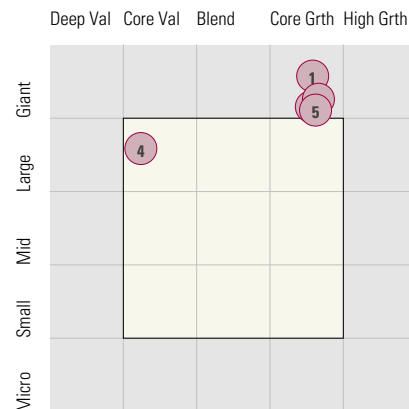
## Style Analysis (Data as of 12-31-2020)

### 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	32.05	22.01	45.94	1.05	97.70	1.25	23.70
2	Vanguard FTSE Social Index Admiral	Large Blend Index	30.94	24.98	44.09	0.54	97.37	2.09	—
3	American Funds Growth Fund of Amer R6	Large Growth	27.07	21.94	51.00	7.92	81.05	10.37	50.19
4	State St Russell Lg Cp Val® Indx NL CI C	Large Value	35.10	34.31	30.58	1.40	96.07	2.49	51.12
5	ClearBridge Mid Cap Growth IS	Mid-Cap Growth	28.98	21.76	49.26	1.32	94.89	3.79	7.51
6	Vanguard Mid-Cap Value Index Admiral	Mid-Cap Value	47.47	25.59	26.94	0.12	96.26	3.62	9.97
7	State St Russell Sm Cap® Gr Indx NL CI C	Small Growth	20.81	40.35	38.85	0.60	98.69	0.71	1.57
8	State St Russell Sm Cp® Val Indx NL CI C	Small Value	51.87	17.76	30.36	0.95	98.00	1.05	1.32

#### 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	JPMorgan Emerging Markets Equity R6	Diversified Emerging Mkts	50.82	20.07	29.10	16.84	74.58	8.58	31.23	68.77	21.94
2	American Funds Europacific Growth R6	Foreign Large Blend	38.16	26.01	35.83	9.53	46.78	43.69	72.93	27.07	39.57
3	Vanguard International Growth Adm	Foreign Large Growth	44.59	20.93	34.49	13.68	38.62	47.71	75.72	24.28	31.23
4	DFA International Value I	Foreign Large Value	61.05	10.45	28.50	9.75	33.12	57.13	99.70	0.30	28.46
5	American Funds New Perspective R6	World Stock	35.61	24.35	40.04	59.55	13.28	27.16	95.76	4.24	55.05

#### Fixed Income Funds

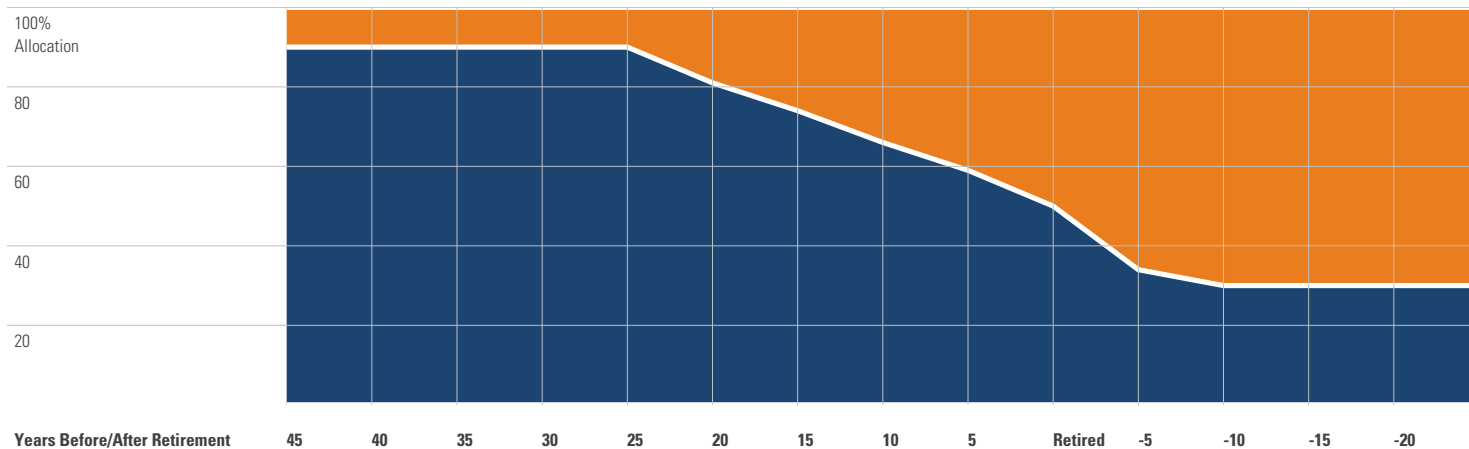
	Category	Super Sectors %				Other Stats	Credit Quality %			
		US Govt Debt	Mtg	US Credit	Non US		Avg Eff Duration	Inv Grade	Below Inv Grade	NR/NA
1	PIMCO High Yield Instl	High Yield Bond	4.80	0.00	79.36	0.00	2.75	13.00	87.00	0.00
2	BlackRock Inflation Protected Bond K	Inflation-Protected Bond	95.14	0.34	1.52	0.00	6.90	99.78	0.22	0.00
3	Baird Aggregate Bond Inst	Intermediate-Term Bond	22.40	26.93	42.38	0.00	5.69	99.40	0.60	0.00
4	PIMCO Income Instl	Multisector Bond	23.42	14.10	18.31	0.00	0.91	81.00	19.00	0.00
5	Federated Hermes Govt Ultrashort R6	Ultrashort Bond	15.26	56.99	0.00	0.00	0.38	100.00	0.00	0.00
6	Templeton Global Bond R6	World Bond	82.53	0.00	0.06	0.00	-1.01	85.16	17.29	-2.44

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## Target Date Analysis (Data as of 12-31-2020)

### Target Date Allocation

● Stocks ● Cash ● Bonds ● Other



### 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 2020 Inv	49.63	29.54	20.09	48.14	13.71	0.00	1.97	0.27	33.09
Vanguard Target Retirement 2025 Inv	59.48	35.39	24.09	38.75	0.02	0.00	1.51	0.25	33.17
Vanguard Target Retirement 2030 Inv	66.87	39.79	27.08	31.41	0.00	0.00	1.51	0.22	33.19
Vanguard Target Retirement 2035 Inv	74.26	44.20	30.06	24.05	0.00	0.00	1.52	0.18	33.13
Vanguard Target Retirement 2040 Inv	81.62	48.77	32.85	16.68	0.00	0.00	1.55	0.14	33.06
Vanguard Target Retirement 2045 Inv	88.73	53.06	35.67	9.64	0.00	0.00	1.52	0.10	33.07
Vanguard Target Retirement 2050 Inv	88.47	52.85	35.62	9.81	0.00	0.00	1.61	0.10	33.08
Vanguard Target Retirement 2055 Inv	88.32	52.70	35.62	9.81	0.00	0.00	1.76	0.10	33.04
Vanguard Target Retirement 2060 Inv	88.23	52.39	35.84	9.81	0.00	0.00	1.85	0.10	33.03
Vanguard Target Retirement 2065 Inv	88.69	52.80	35.89	9.82	0.00	0.00	1.39	0.10	—
Vanguard Target Retirement Income Inv	29.88	17.59	12.29	67.31	21.76	0.00	2.48	0.31	33.08