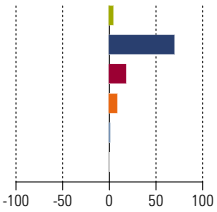
County of San Bernardino: 457(b)

Portfolio Snapshot

Portfolio Value	Benchmark	Account Number	Report Currency
467,498,297.00	SBC 457 2018 Custom Benchmark		USD

Analysis

Asset Allocation



	Portfolio Long	Portfolio Short	Portfolio Net	Bmark Net
Cash	4.13	0.04	4.09	4.09
US Stock	69.57	0.00	69.57	69.57
Non US Stock	17.53	0.00	17.52	17.52
Bond	8.15	0.01	8.14	8.76
Other	0.68	0.00	0.68	0.05
Not Classified	0.00	0.00	0.00	0.00
Total	100.06	0.06	100.00	100.00

Equity Investment Style %

	Value	Core	Growth
Large	18	19	30
Mid	7	8	11
Small	2	2	2

0-10 10-25 25-50 >50

Total Stock Holdings 8139

Not Classified % 0.00

Fixed-Income Investment Style %

	Ltd	Mod	Ext
High	0	53	0
Med	0	0	0
Low	39	7	0

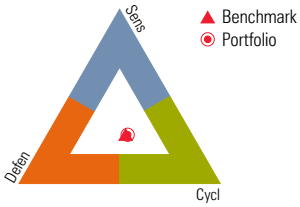
0-10 10-25 25-50 >50

Total Bond Holdings 809

Not Classified % 0.00

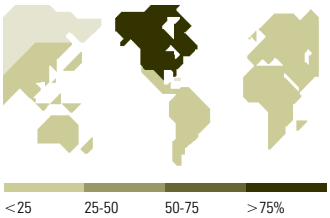
Stock Analysis

Stock Sectors



	Portfolio %	Bmark %
Defen	**21.10**	**21.82**
Cons Defensive	5.31	6.29
Healthcare	13.30	12.37
Utilities	2.49	3.16
Sens	**40.13**	**39.72**
Comm Svcs	2.57	2.60
Energy	6.17	5.55
Industrials	10.37	12.95
Technology	21.02	18.62
Cycl	**38.76**	**38.45**
Basic Matls	3.98	4.76
Cons Cyclical	15.17	12.79
Financial Svcs	15.60	15.05
Real Estate	4.01	5.85
Not Classified	0.01	0.01

Stock Regions

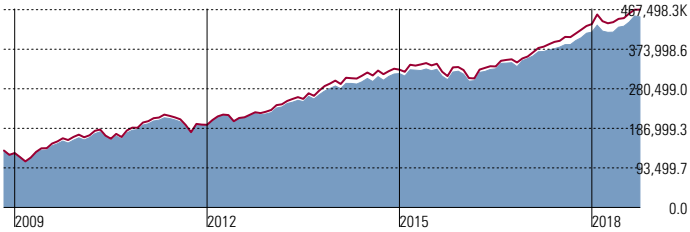


	Portfolio %	Bmark %
Americas	**81.86**	**82.03**
North America	81.12	81.95
Central/Latin	0.74	0.08
Greater Asia	**8.42**	**7.57**
Japan	2.47	3.07
Australasia	0.51	1.75
Asia Developed	3.04	2.45
Asia Emerging	2.40	0.30
Greater Europe	**9.72**	**10.40**
United Kingdom	3.05	3.25
Europe Developed	5.99	6.98
Europe Emerging	0.15	0.01
Africa/Middle East	0.53	0.16
Not Classified	0.00	0.00

Performance (Return as of date 9/30/2018)

Investment Activity Graph

Portfolio — Initial Mkt Value: 134,458,107.28
Benchmark — Final Mkt Value: 467,498,297.00



Trailing Returns	3 Mo	1 Yr	3 Yr	5 Yr	10 Yr
Portfolio Return	4.46	13.67	14.62	11.09	10.96
Benchmark Return	5.14	14.18	14.27	11.07	10.80
+/- Benchmark Return	-0.68	-0.50	0.34	0.01	0.17

Time Period Return	Best %	Worst %
3 Months	28.42 (03/09-05/09)	-22.12 (10/08-12/08)
1 Year	56.71 (03/09-02/10)	-9.62 (03/15-02/16)
3 Years	25.52 (03/09-02/12)	2.50 (10/08-09/11)

Portfolio Yield	Yield %
Trailing 12 Month	1.54

Performance Disclosure

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For information current to the most recent month-end, please visit http://www.morningstaradvisor.com/familyinfo.asp

Holdings

Top 10 holdings out of 17	Ticker	Type	Holding Value	% Assets
Vanguard Institutional Index Instl Pl	VIIIX	MF	90,640,231.00	19.39
American Funds Growth Fund of Amer R6	RGAGX	MF	89,657,805.00	19.18
Vanguard Mid Cap Index Institutional	VMCIX	MF	46,581,807.00	9.96
American Funds Capital World Gr&Inc R6	RWIGX	MF	43,982,127.00	9.41
Vanguard Small Cap Index I	VSCIX	MF	34,590,006.00	7.40
Baron Growth Instl	BGRIX	MF	26,715,724.00	5.71
Vanguard Instl Trgt Retire 2040 Instl	VIRSX	MF	21,029,201.00	4.50
Vanguard Instl Trgt Retire 2030 Instl	VTTWX	MF	19,351,032.00	4.14
Loomis Sayles Investment Grade Bond Y	LSIIX	MF	19,153,482.00	4.10
Vanguard Total Intl Stock Index I	VTSNX	MF	17,520,388.00	3.75

© 2018 Morningstar. All Rights Reserved. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial advisor which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. This report is supplemental sales literature, and therefore must be preceded or accompanied by a prospectus and disclosure statement. Please read the prospectus carefully.

MORNINGSTAR®

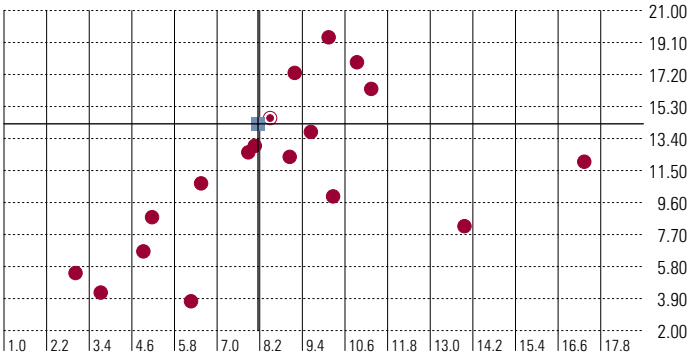
County of San Bernardino: 457(b)

Portfolio Snapshot

Portfolio Value	Benchmark	Account Number	Report Currency
467,498,297.00	SBC 457 2018 Custom Benchmark		USD

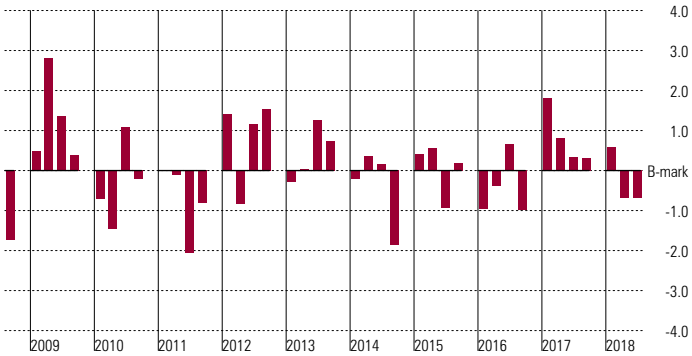
Risk Analysis

Risk/Reward Scatterplot ◉ Portfolio ● Holding ■ B-mark 3-Year Mean



3-Year Standard Deviation

Performance History Graph ■ Portfolio Quarterly Return +/- Benchmark in %



Risk and Return Statistics	3 Yr		5 Yr		10 Yr	
As of Date 9/30/2018	Portfolio	B-mark	Portfolio	B-mark	Portfolio	B-mark
Standard Deviation	8.49	8.15	8.90	8.44	14.59	13.50
Mean	14.62	14.27	11.09	11.07	10.96	10.80
Sharpe Ratio	1.55	1.57	1.17	1.22	0.77	0.81

MPT Statistics	3 Yr	5 Yr	10 Yr
As of Date 9/30/2018			
Alpha	0.24	-0.24	-0.47
Beta	1.01	1.03	1.07
R-squared	93.31	95.01	98.22

Fundamental Analysis

Market Maturity		
% of Stocks		
Developed Markets	96.19	99.45
Emerging Markets	3.81	0.55
Not Available	0.00	0.00

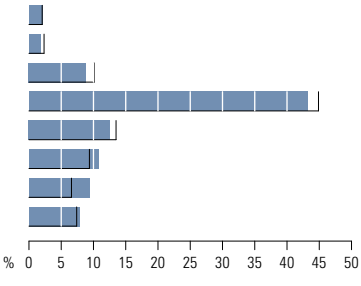
Geometric Avg Capitalization (Mil)	
Portfolio	40,963.54
Benchmark	24,308.89

Valuation Multiples	Portfolio	B-mark
Price/Earnings	19.26	18.32
Price/Book	2.76	2.45
Price/Sales	1.94	1.54
Price/Cash Flow	12.82	11.45

Credit Quality	% of Bonds
AAA	37.93
AA	5.06
A	17.66
BBB	17.08
BB	6.57
B	5.77
Below B	0.91
NR/NA	9.03

Type Weightings

% of Stocks	Portfolio	B-mark
High Yield	2.12	2.05
Distressed	1.76	2.34
Hard Asset	8.84	10.11
Cyclical	43.20	44.88
Slow Growth	12.56	13.50
Classic Growth	10.72	9.37
Aggressive Growth	9.42	6.59
Speculative Growth	7.87	7.40
Not Available	3.51	3.76



Profitability

% of Stocks	Portfolio 2016	Portfolio 2017	B-mark 2017
Net Margin	10.04	13.05	12.57
ROE	16.48	18.04	17.47
ROA	5.28	6.35	5.50
Debt/Capital	41.51	41.21	42.65

Fund Statistics

Potential Cap Gains Exposure	30.71
Avg Net Exp Ratio	0.25
Avg Gross Exp Ratio	0.26

Interest Rate Risk	Portfolio
Maturity	7.03
Duration (total portfolio)	5.01
Avg Credit Quality	BBB

© 2018 Morningstar. All Rights Reserved. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial advisor which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. This report is supplemental sales literature, and therefore must be preceded or accompanied by a prospectus and disclosure statement. Please read the prospectus carefully.

MORNINGSTAR®

County of San Bernardino: 457(b)

Portfolio Snapshot

Portfolio Value	Benchmark	Account Number	Report Currency
467,498,297.00	SBC 457 2018 Custom Benchmark		USD

Non-Load Adjustment Returns (Return as of date 9/30/2018)

Total 17 holdings as of 9/30/2018	Type	Holdings Date	% of Assets	Holding Value	7-day Yield	1 Yr Ret %	3 Yr Ret %	5 Yr Ret %	10 Yr Ret %	Max Front Load %	Max Back Load %
Vanguard Institutional Index Instl Pl	MF	9/30/2018	19.39	90,640,231.00	0.00	17.89	17.30	13.94	11.98	—	—
American Funds Growth Fund of Amer R6	MF	9/30/2018	19.18	89,657,805.00	0.00	22.70	19.41	14.91	12.72	—	—
Vanguard Mid Cap Index Institutional	MF	9/30/2018	9.96	46,581,807.00	0.00	13.45	13.79	11.68	12.44	—	—
American Funds Capital World Gr&Inc R6	MF	9/30/2018	9.41	43,982,127.00	0.00	7.07	12.31	8.48	8.40	—	—
Vanguard Small Cap Index I	MF	9/30/2018	7.40	34,590,006.00	0.00	16.72	16.35	11.49	12.39	—	—
Baron Growth Instl	MF	9/30/2018	5.71	26,715,724.00	0.00	25.86	17.93	11.90	12.67	—	—
Vanguard Instl Trgt Retire 2040 Instl	MF	9/30/2018	4.50	21,029,201.00	0.00	9.39	12.58	—	—	—	—
Vanguard Instl Trgt Retire 2030 Instl	MF	9/30/2018	4.14	19,351,032.00	0.00	7.73	10.74	—	—	—	—
Loomis Sayles Investment Grade Bond Y	MF	8/31/2018	4.10	19,153,482.00	0.00	0.43	4.26	2.85	6.27	—	—
Vanguard Total Intl Stock Index I	MF	9/30/2018	3.75	17,520,388.00	0.00	1.63	9.97	4.49	5.19	—	—
Vanguard Instl Trgt Retire 2050 Instl	MF	9/30/2018	3.44	16,085,217.00	0.00	9.88	12.97	—	—	—	—
Vanguard Instl Trgt Retire 2020 Instl	MF	9/30/2018	3.01	14,068,730.00	0.00	5.92	8.73	—	—	—	—
Dodge & Cox International Stock	MF	6/30/2018	2.19	10,230,890.00	0.00	-5.26	8.20	3.74	5.90	—	—
Invesco Small CapValue Y	MF	6/30/2018	1.39	6,489,818.00	0.00	4.69	12.02	8.59	11.66	—	—
Pioneer Global High Yield Y	MF	9/30/2018	0.88	4,132,874.00	0.00	0.55	6.70	3.38	6.67	—	—
Vanguard Instl Trgt Retire Inc Instl	MF	9/30/2018	0.85	3,976,212.00	0.00	3.34	5.42	—	—	—	—
Oppenheimer International Bond I	MF	9/30/2018	0.70	3,292,753.00	0.00	-3.83	3.74	2.04	3.91	—	—

Performance Disclosure

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For information current to the most recent month-end, please visit http://advisor.morningstar.com/familyinfo.asp.

© 2018 Morningstar. All Rights Reserved. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial advisor which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. This report is supplemental sales literature, and therefore must be preceded or accompanied by a prospectus and disclosure statement. Please read the prospectus carefully.

MORNINGSTAR®