

City of Burlington
Table 1 - Asset Allocation

	(1) Cooperative	(2) Scaled	(3) Burlington	(4) Proposed	(5) NKC
US Equity	40%	35%	48%	41%	40%
Foreign Equity	16%	14%	20%	20%	25%
US Fixed	30%	26%	20%	25%	25%
Foreign Fixed	5%	4%	0%	0%	0%
Alternative	12%	11%	4%	4%	0%
Real Estate	9%	8%	8%	10%	10%
Cash	2%	2%	0%	0%	0%
Total	114%	100%	100%	100%	100%

Our Consultant’s Cooperative has a composite comprised of 443 portfolios in the Public Fund Universe. Mix 1 represents median distribution values for seven asset classes and subclasses. Median values do not always sum to 100% (and in this case they do not). In Mix 2 we have scaled them proportionately to 100%. We believe Mix 2 fairly represents the current state of asset allocations for public plans of all sizes.

Relative to the average plan (Mix 2), our plan (Mix 3) has more domestic and foreign equity, less alternatives and fixed income.

Mix 4 is a proposed allocation shift with more fixed income and slightly more real estate, both taken from domestic equity. Mix 5 is an existing public fund client of ours, North Kansas City, with a similar asset allocation. NKC has indexed equity, active management for real estate and fixed income. NKC returns and ranks are on the following page.

MANAGER PERFORMANCE SUMMARY - GROSS OF FEES

Portfolio	(Universe)	Quarter	FYTD	1 Year	3 Years	5 Years	10 Years or Inception	
Total Portfolio	(Public Fund)	9.3 (24)	0.3 (44)	4.2 (48)	9.5 (9)	7.0 (11)	11.1 (9)	03/09
<i>Manager Shadow</i>		<i>8.9 ---</i>	<i>-0.1 ---</i>	<i>3.8 ---</i>	<i>8.9 ---</i>	<i>7.3 ---</i>	<i>10.6 ---</i>	<i>03/09</i>
Vanguard Inst	(LC Core)	13.7 (37)	-1.7 (36)	9.5 (25)	13.5 (33)	10.9 (35)	10.7 (33)	12/13
<i>S&P 500</i>		<i>13.6 ---</i>	<i>-1.7 ---</i>	<i>9.5 ---</i>	<i>13.5 ---</i>	<i>10.9 ---</i>	<i>10.7 ---</i>	<i>12/13</i>
Vanguard Extended	(Smid Cap)	16.0 (40)	-5.1 (41)	5.0 (38)	13.4 (37)	8.0 (50)	8.1 (48)	12/13
<i>S&P Completion</i>		<i>16.0 ---</i>	<i>-5.2 ---</i>	<i>4.8 ---</i>	<i>13.2 ---</i>	<i>7.8 ---</i>	<i>7.9 ---</i>	<i>12/13</i>
Vanguard Developed	(Intl Eq)	10.3 (56)	-4.2 (66)	-4.6 (39)	7.7 (64)	2.8 (72)	2.8 (75)	12/13
<i>Blended Index</i>		<i>10.2 ---</i>	<i>-4.4 ---</i>	<i>-4.4 ---</i>	<i>7.5 ---</i>	<i>2.9 ---</i>	<i>2.9 ---</i>	<i>12/13</i>
Vanguard Emerging	(Emerging Mkt)	11.4 (35)	4.4 (26)	-6.7 (37)	10.0 (57)	3.7 (64)	3.5 (67)	12/13
<i>Emg Mkts Index</i>		<i>11.2 ---</i>	<i>4.1 ---</i>	<i>-6.4 ---</i>	<i>9.5 ---</i>	<i>3.6 ---</i>	<i>3.4 ---</i>	<i>12/13</i>
Bailard		2.8 ---	5.0 ---	10.4 ---	12.0 ---	--- ---	12.3 ---	12/15
<i>NCREIF ODCE</i>		<i>1.4 ---</i>	<i>3.2 ---</i>	<i>7.5 ---</i>	<i>8.0 ---</i>	<i>10.2 ---</i>	<i>8.1 ---</i>	<i>12/15</i>
Johnson	(Core Fixed)	3.6 (12)	4.9 (26)	5.0 (18)	--- ---	--- ---	3.3 (40)	12/16
<i>Aggregate Index</i>		<i>2.9 ---</i>	<i>4.6 ---</i>	<i>4.5 ---</i>	<i>2.0 ---</i>	<i>2.7 ---</i>	<i>2.9 ---</i>	<i>12/16</i>

City of Burlington
Table 2 - Scenario Analysis

	<u>Mix 3</u> Burlington	<u>Mix 4</u> Proposed
2007	10.37	10.95
2008	-28.25	-25.99
2009	23.76	20.57
2010	15.55	14.36
2011	0.41	1.29
2012	13.99	13.17
2013	18.96	16.57
2014	7.42	7.46
2015	0.05	0.59
2016	9.80	8.87
2017	17.33	16.43
2018	-4.80	-3.94
Annualized Return	7.14	6.85
Standard Deviation	13.93	12.57
Peak Value (Pre-GFC)	\$222.0mm	\$222.0mm
Trough Value (Q1 2009)	\$146.7mm	\$152.9mm
Quarters to return to peak	7 Quarters	7 Quarters
Terminal Value	\$426.0mm	\$413.6mm

Mix 3 - Current Mix:

30% SAP5 / 18% R2500 / 10% EAFE / 10% MSCIEM / 2% CAMBPE / 8% NCRODCE / 2% NCRTIM / 20% SLAGG

Mix 4 - Proposed Mix:

30% SAP5 / 11% R2500 / 10% EAFE / 10% MSCIEM / 2% CAMBPE / 10% NCRODCE / 2% NCRTIM / 25% SLAGG

In Table 2 we use a starting value of \$200mm and compare Mix 3 (Burlington Current) and Mix 4 (Burlington Proposed) using real returns from 2007-2018, focusing on 1) declines in value during the Great Financial Crisis and 2) terminal value. We believe this type of analysis better helps Trustees understand the tradeoffs they are making by expressing risk and reward in dollars as opposed to statistical abstractions.

Table 3
Recent Return Experience Backtest
Actual Portfolio Returns vs Johnson or Garcia Substituted

Quarter Ending	Cash Flow	<u>Burlington Actual</u>		<u>Johnson Substitution</u>		<u>Garcia Substitution</u>	
		\$	Return	\$	Return		
1215	-	\$152,539,462		\$152,539,462		\$152,539,462	
0316	\$ (1,730,879)	\$152,539,462	1.04%	\$152,649,192	1.11%	\$152,650,254	1.11%
0616	\$ 266,995	\$155,410,683	1.73%	\$155,568,152	1.76%	\$155,478,708	1.70%
0916	\$ 1,983,503	\$163,820,244	4.07%	\$164,107,152	4.15%	\$163,816,435	4.03%
1216	\$ (54,598)	\$166,411,368	1.57%	\$166,802,799	1.63%	\$166,624,413	1.70%
0317	\$ (5,459)	\$174,283,845	4.69%	\$174,714,992	4.70%	\$174,548,403	4.72%
0617	\$ (3,747,517)	\$175,690,863	2.95%	\$176,148,229	2.96%	\$175,943,088	2.94%
0917	\$ (46,149)	\$182,544,230	3.89%	\$183,013,255	3.89%	\$182,699,733	3.83%
1217	\$ (47,491)	\$190,681,965	4.45%	\$191,235,042	4.48%	\$191,010,266	4.54%
0318	\$ (48,887)	\$190,107,926	-0.31%	\$190,685,435	-0.30%	\$190,717,048	-0.16%
0618	\$ (1,209,164)	\$191,480,598	1.34%	\$192,092,437	1.35%	\$192,303,223	1.44%
0918	\$ (3,051,362)	\$194,830,341	3.35%	\$195,502,737	3.37%	\$195,640,394	3.33%
1218	\$ (47,255)	\$176,920,863	-9.20%	\$177,420,381	-9.26%	\$177,479,164	-9.29%
0319	\$ (38,269)	\$193,271,386	9.23%	\$194,004,186	9.33%	\$193,687,239	9.12%

We used the actual cash flows and return stream of the portfolio from 1Q16 when the new strategy was instituted, and compared this with returns if Johnson or Garcia had been the manager of the fixed income allocation. Returns for Johnson and Garcia are expressed on a net-of-fee basis.

**City of Burlington
Current Allocation vs Addition of Johnson or Garcia
Growth of \$200mm**

