

Cash Flow Update

City of Allentown

Presented by

Pat Wing, CFA
Vice President

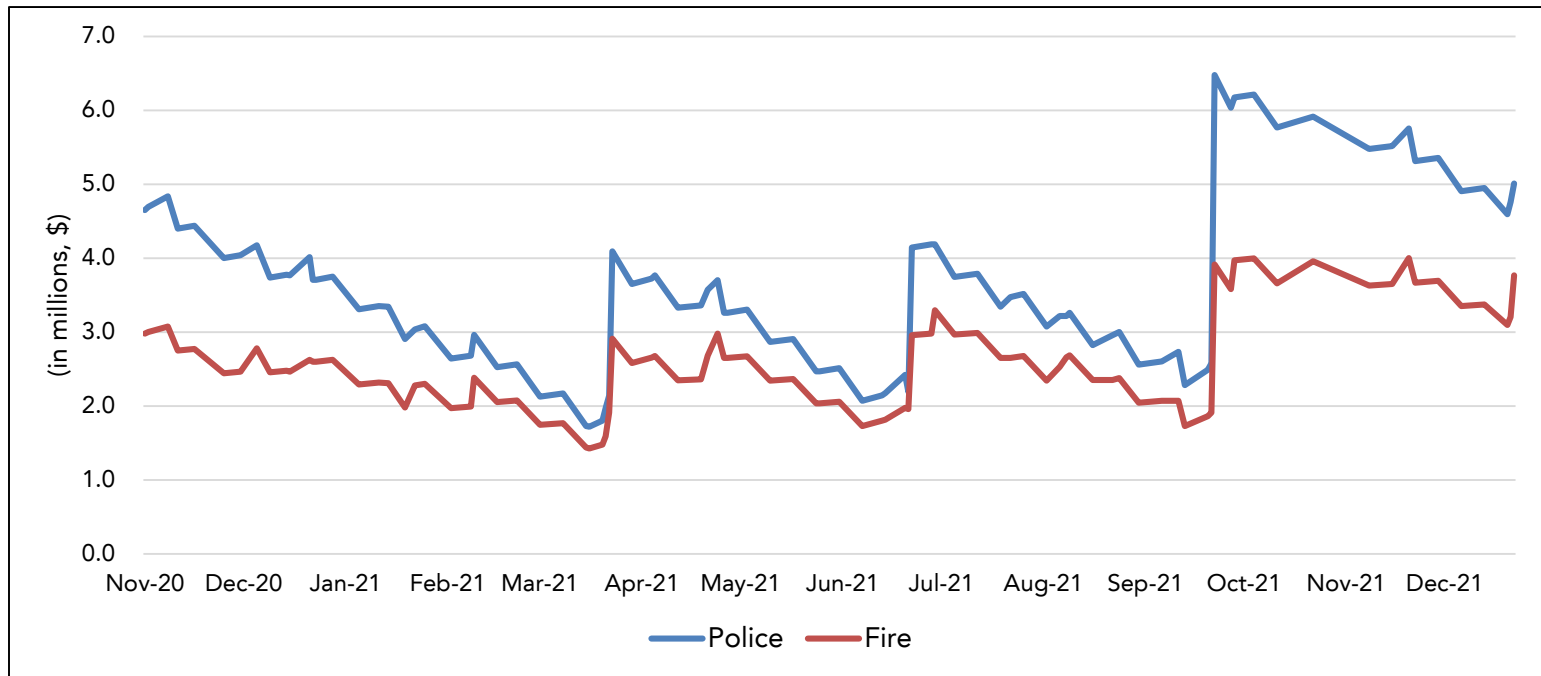
Cash Flow Projection Assumptions*

- Bi-weekly withdrawals
 - Police: \$438,462
 - Fire: \$326,923
 - Officers & Employees: \$65,385
- Bi-weekly contributions
 - Police: \$40,000
 - Fire: \$22,308
 - Officers & Employees: \$0
- Projected 2021 MMO payments**:
 - Police: \$7.8M
 - Fire: \$4.0M
 - Officers & Employees: \$200,000
- Bond maturities
- Fees are deducted

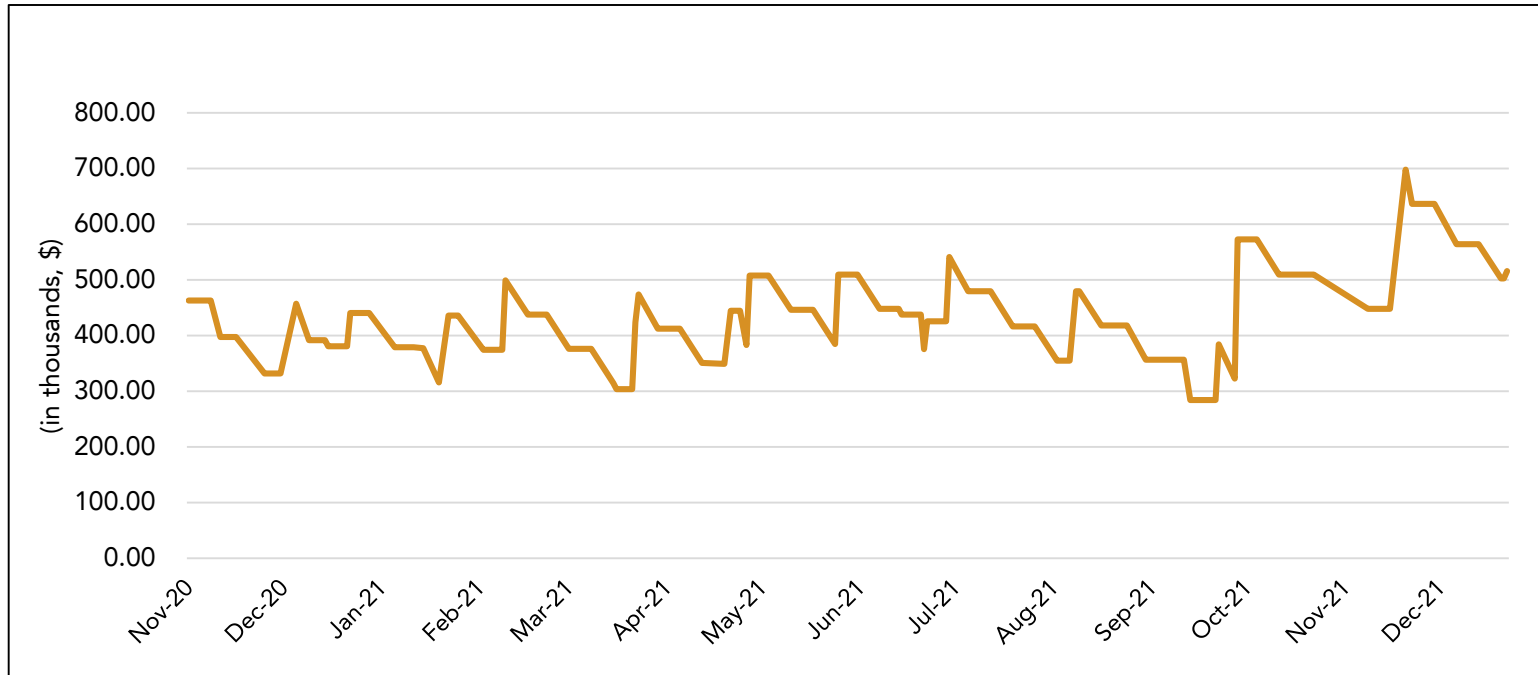
*Employee contribution, benefit payment and MMO estimates provided by Cheiron.

**Like 2020, assumes deposits are made in April and July, while Q3 and Q4 MMOs are deposited together in October.

Police & Fire: Cash Projections



Officers & Employees: Cash Projections



Options

1. Leave in cash (Current MM yield: 0.01%)
2. Extend ladder

Treasury Yield Curve

	6 Mo.	1 Yr.	2 Yr.	3 Yr.	5 Yr.
05/08/20	0.15	0.15	0.16	0.21	0.33
08/12/20	0.12	0.13	0.16	0.19	0.30
11/10/20	0.11	0.12	0.19	0.26	0.46

Police Projections¹

Year	Benefit Payments	Expenses	Employee Contributions	MMO	Net Cash Flow	Bond Maturities
2020	11,300,000	110,000	1,040,000	7,700,000	(2,670,000)	4,485,000
2021	11,400,000	110,000	1,090,000	7,800,000	(2,620,000)	2,532,000
2022	11,800,000	110,000	1,140,000	8,900,000	(1,870,000)	2,418,000
2023	11,900,000	120,000	1,190,000	8,900,000	(1,930,000)	1,921,000
2024	12,400,000	120,000	1,240,000	10,000,000	(1,280,000)	-

¹Provided by Cheiron.

City of Allentown

	TICKER	TOTAL ASSETS	ALLOCATIONS	REBALANCING	TOTAL ASSETS	ALLOCATIONS	TARGET	LAST TRADE
Police Pension Plan		191,404,307	100.0%	0	191,404,307	100.0%	100.0%	
U.S. Equity								
Vanguard Equity Income Fund Admiral	VEIRX	10,745,931	5.6%	0	10,745,931	5.6%	6.0%	Sale - 8/21/20
Vanguard Mid Cap Value Index	VMVAX	10,315,329	5.4%	0	10,315,329	5.4%	6.0%	Sale - 8/21/20
Vanguard Total Stock Market Index	VITSX	50,864,812	26.6%	0	50,864,812	26.6%	38.0%	Sale - 8/21/20
Vanguard Total Stock Market Index ETF	VTI	22,041,564	11.5%	0	22,041,564	11.5%		-
Total U.S. Equity		93,967,636	49.1%	0	93,967,636	49.1%	50.0%	
Global Equity								
Dodge & Cox Global	DODWX	7,002,251	3.7%	0	7,002,251	3.7%	4.0%	-
Total Global Equity		7,002,251	3.7%	0	7,002,251	3.7%	4.0%	
Non-U.S. Equity								
American Funds Int'l Growth & Income	RIGGX	11,381,223	5.9%	0	11,381,223	5.9%	6.0%	Sale - 8/21/20
MFS Int'l Intrinsic Value Equity	MINJX	11,511,730	6.0%	0	11,511,730	6.0%	6.0%	Sale - 8/21/20
Total Non-U.S. Equity		22,892,953	12.0%	0	22,892,953	12.0%	12.0%	
Real Estate								
Morgan Stanley PRIME Property Fund (as of 9/30/20)	-	17,156,318	9.0%	0	17,156,318	9.0%	10.0%	-
Total Real Estate		17,156,318	9.0%	0	17,156,318	9.0%	10.0%	
U.S. Fixed Income								
Vanguard Total Bond Market Index Inst	VBTIX	37,368,431	19.5%	0	37,368,431	19.5%	17.0%	Buy - 8/24/20
BB&T Inst'l Investment Advisers - Short-Term Bonds	-	8,364,644	4.4%	0	8,364,644	4.4%	6.0%	-
Total U.S. Fixed Income		45,733,075	23.9%	0	45,733,075	23.9%	23.0%	
Cash & Equivalents								
Federated Govt. Obligations MM Fund	GOIXX	4,652,073	2.4%	0	4,652,073	2.4%	1.0%	-
Total Cash & Equivalents		4,652,073	2.4%	0	4,652,073	2.4%	1.0%	

Market Values as of November 11, 2020.

	Pre-Rebalancing Allocations		
	Portfolio	Target	Difference
U.S. Equity	51.11%	52.0%	-0.89%
Non-U.S. Equity	13.61%	14.0%	-0.39%
Real Estate	8.96%	10.0%	-1.04%
Fixed Income	23.89%	23.0%	0.89%
Cash	2.43%	1.0%	1.43%
Total	100.00%	100.0%	-

	Post-Rebalancing Allocations		
	Portfolio	Target	Difference
U.S. Equity	51.11%	52.0%	-0.89%
Non-U.S. Equity	13.61%	14.0%	-0.39%
Real Estate	8.96%	10.0%	-1.04%
Fixed Income	23.89%	23.0%	0.89%
Cash	2.43%	1.0%	1.43%
Total	100.00%	100.0%	-

Fire Projections¹

Year	Benefit Payments	Expenses	Employee Contributions	MMO	Net Cash Flow	Bond Maturities
2020	8,500,000	80,000	580,000	4,000,000	(4,000,000)	5,445,000
2021	8,600,000	90,000	610,000	4,000,000	(4,080,000)	4,302,000
2022	8,800,000	90,000	630,000	4,600,000	(3,660,000)	3,647,000
2023	8,900,000	90,000	660,000	4,700,000	(3,630,000)	3,536,000
2024	9,100,000	100,000	690,000	5,000,000	(3,510,000)	-

¹Provided by Cheiron.

City of Allentown

	TICKER	TOTAL ASSETS	ALLOCATIONS	REBALANCING	TOTAL ASSETS	ALLOCATIONS	TARGET	LAST TRADE
Firemen Pension Plan		120,817,212	100.0%	0	120,817,212	100.0%	100.0%	
U.S. Equity								
Vanguard Equity Income Fund Admiral	VEIRX	6,851,602	5.7%	0	6,851,602	5.7%	6.0%	Sale - 8/21/20
Vanguard Mid Cap Value Index	VMVAX	6,535,315	5.4%	0	6,535,315	5.4%	6.0%	Sale - 8/21/20
Vanguard Total Stock Market Index	VITSX	33,047,662	27.4%	0	33,047,662	27.4%	38.0%	Sale - 8/21/20
Vanguard Total Stock Market Index ETF	VTI	13,166,775	10.9%	0	13,166,775	10.9%		-
Total U.S. Equity		59,601,353	49.3%	0	59,601,353	49.3%	50.0%	
Global Equity								
Dodge & Cox Global	DODWX	4,459,406	3.7%	0	4,459,406	3.7%	4.0%	Sale - 1/13/20
Total Global Equity		4,459,406	3.7%	0	4,459,406	3.7%	4.0%	
Non-U.S. Equity								
American Funds Int'l Growth & Income	RIGGX	7,213,387	6.0%	0	7,213,387	6.0%	6.0%	Sale - 8/21/20
MFS Int'l Intrinsic Value Equity	MINJX	7,314,054	6.1%	0	7,314,054	6.1%	6.0%	Sale - 8/21/20
Total Non-U.S. Equity		14,527,441	12.0%	0	14,527,441	12.0%	12.0%	
Real Estate								
Morgan Stanley PRIME Property Fund (as of 9/30/20)	-	11,577,476	9.6%	0	11,577,476	9.6%	10.0%	-
Total Real Estate		11,577,476	9.6%	0	11,577,476	9.6%	10.0%	
U.S. Fixed Income								
Vanguard Total Bond Market Index Inst	VBTIX	15,050,715	12.5%	0	15,050,715	12.5%	12.0%	Buy - 8/24/20
BB&T Inst'l Investment Advisers - Short-Term Bonds	-	12,622,907	10.4%	0	12,622,907	10.4%	11.0%	-
Total U.S. Fixed Income		27,673,622	22.9%	0	27,673,622	22.9%	23.0%	
Cash & Equivalents								
Federated Govt. Obligations MM Fund	GOIXX	2,977,913	2.5%	0	2,977,913	2.5%	1.0%	-
Total Cash & Equivalents		2,977,913	2.5%	0	2,977,913	2.5%	1.0%	

Market Values as of November 11, 2020.

	Pre-Rebalancing Allocations		
	Portfolio	Target	Difference
U.S. Equity	51.36%	52.0%	-0.64%
Non-U.S. Equity	13.69%	14.0%	-0.31%
Real Estate	9.58%	10.0%	-0.42%
Fixed Income	22.91%	23.0%	-0.09%
Cash	2.46%	1.0%	1.46%
Total	100.00%	100.0%	-

	Post-Rebalancing Allocations		
	Portfolio	Target	Difference
U.S. Equity	51.36%	52.0%	-0.64%
Non-U.S. Equity	13.69%	14.0%	-0.31%
Real Estate	9.58%	10.0%	-0.42%
Fixed Income	22.91%	23.0%	-0.09%
Cash	2.46%	1.0%	1.46%
Total	100.00%	100.0%	-

O&E Projections¹

Year	Benefit Payments	Expenses	Employee Contributions	MMO	Net Cash Flow	Bond Maturities
2020	1,700,000	60,000	0	200,000	(1,560,000)	1,615,000
2021	1,600,000	60,000	0	200,000	(1,460,000)	1,463,000
2022	1,500,000	50,000	0	300,000	(1,250,000)	1,239,000
2023	1,400,000	50,000	0	300,000	(1,150,000)	1,088,000
2024	1,300,000	40,000	0	300,000	(1,040,000)	280,000

¹Provided by Cheiron.

City of Allentown

	<u>TICKER</u>	<u>TOTAL ASSETS</u>	<u>ALLOCATIONS</u>	<u>REBALANCING</u>	<u>TOTAL ASSETS</u>	<u>ALLOCATIONS</u>	<u>TARGET</u>	<u>LAST TRADE</u>
Officers & Employee Pension Plan		9,872,712	100.0%	0	9,872,712	100.0%	100.0%	
U.S. Equity								
Vanguard Equity Income Fund Admiral	VEIRX	404,926	4.1%	0	404,926	4.1%	4.0%	Sale - 8/21/20
Vanguard Mid Cap Value Index	VMVAX	384,590	3.9%	0	384,590	3.9%	4.0%	Sale - 8/21/20
Vanguard Total Stock Market Index	VITSX	2,591,753	26.3%	0	2,591,753	26.3%	25.5%	Sale - 8/21/20
Total U.S. Equity		3,381,270	34.2%	0	3,381,270	34.2%	33.5%	
Global Equity								
Dodge & Cox Global	DODWX	280,436	2.8%	0	280,436	2.8%	3.0%	Sale - 8/21/20
Total Global Equity		280,436	2.8%	0	280,436	2.8%	3.0%	
Non-U.S. Equity								
American Funds Int'l Growth & Income	RIGGX	508,190	5.1%	0	508,190	5.1%	5.0%	Sale - 8/21/20
MFS Int'l Intrinsic Value Equity	MINJX	460,465	4.7%	0	460,465	4.7%	4.5%	Sale - 8/21/20
Total Non-U.S. Equity		968,655	9.8%	0	968,655	9.8%	9.5%	
U.S. Fixed Income								
BB&T Inst'l Investment Advisers - Short-Term Bonds	-	4,779,268	48.4%	0	4,779,268	48.4%	52.0%	Buy - 8/24/20
Total U.S. Fixed Income		4,779,268	48.4%	0	4,779,268	48.4%	52.0%	
Cash & Equivalents								
Federated Govt. Obligations MM Fund	GOIXX	463,083	4.7%	0	463,083	4.7%	2.0%	-
Total Cash & Equivalents		463,083	4.7%	0	463,083	4.7%	2.0%	

Market Values as of November 11, 2020.

	Pre-Rebalancing Allocations			Post-Rebalancing Allocations		
	Portfolio	Target	Difference	Portfolio	Target	Difference
U.S. Equity	35.81%	35.0%	0.81%	35.81%	35.0%	0.81%
Non-U.S. Equity	11.09%	11.0%	0.09%	11.09%	11.0%	0.09%
Fixed Income	48.41%	52.0%	-3.59%	48.41%	52.0%	-3.59%
Cash	4.69%	2.0%	2.69%	4.69%	2.0%	2.69%
Total	100.00%	100.0%	-	100.00%	100.0%	-