

AGENDA

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GLASTONBURY BOARD OF FINANCE - AGENDA OF SPECIAL MEETING

Monday, January 24, 2022, 4:00 PM

Held through Zoom Video Conferencing (details on page 2)

Board Members: Constantine Constantine; Chairman, Jennifer Sanford; Vice Chairman, Susan Karp, Robert Lynn, James McIntosh, and James Zeller.

1. Public Comment Session: Comments pertaining to the call.

2. Communication: Becky Sielman from Milliman to discuss Pension Valuation

3. Communication: Chris Kachmar from Fiducient Advisors to discuss Asset Allocation Analysis, Capital Markets Overview and Portfolio and Manager Review

4. Communication: Minutes of December 15, 2021 Regular Meeting

5. Communication: Pension Report – November 2021

6. Communication: Month End Investments – November 2021

7. Communication: Financial Summary (Revenues & Expenditures) for 6 months - December 2021

8. Communication: Capital Projects – December 2021

9. Communication: Self Insurance Reserve Fund – December 2021

10. Communication: Transfers Approved by Town Manager Since Last Meeting

a. \$2K Community Development – Advertising

b. \$250 Property Assessment – Data Processing

11. **Action:** Transfers over \$5,000

a. \$16,250 Financial Administration – Lease Management Software

12. Communication: Budget Schedule FY22/23

13. Communication: Audit Review Meeting (identify BOF representatives)

14. Board of Finance Committee Reports, comments and remarks (no action to be taken)

15. Adjournment

THIS BOARD OF FINANCE SPECIAL MEETING WILL BE CONDUCTED THROUGH ZOOM VIDEO CONFERENCING.

Join the Meeting - The public may join the Zoom Video Conference as an Attendee (view and listen function only) as follows:

Join by Zoom Meeting link:

<https://us02web.zoom.us/j/83832966647?pwd=Nitadm2TjITM21BOFNOYmtrV2wxQT09>

Passcode: 435712

Join by Phone:

Dial: +1 312 626 6799 **or** +1 646 558 8656

Webinar ID: 838 3296 6647

Passcode: 435712

Public Comment - May be submitted through a form at the following link no later than 2:00 p.m. one business day BEFORE the meeting is held for your comments to be included in the public comment session of the meeting. Be sure to select *Board of Finance* in question 4 of the form:

www.glastonbury-ct.gov/publiccomment

There is also the opportunity to give Public Comment as part of the virtual meeting if joining through the Zoom Meeting Link.

Watch the Meeting - This meeting will be broadcast in real-time through Public Access Television on Channel 16, or live streamed on the town website. [Click here to view by live streaming.](#)

If you are unable to join/participate in the meeting at the time it is held, the meeting will be available on the [Video On Demand page of the town website](#) within one week of the meeting date.*

**The Video On Demand page is accessible through any web browser EXCLUDING Internet Explorer. Please use Chrome, Edge, Firefox, Safari or any other web browser excluding IE to access meeting video content.*



TOWN OF GLASTONBURY RETIREMENT INCOME PLAN

**Actuarial Valuation as of July 1, 2021
To Determine Funding for Fiscal Year 2022-23**

Prepared by

Rebecca A. Sielman, FSA
Consulting Actuary

Michelle L. Boyles, FSA
Consulting Actuary

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Certification

We have performed an actuarial valuation of the Plan as of July 1, 2021 to determine funding for fiscal year 2022-23. This report presents the results of our valuation.

The ultimate cost of a pension plan is the total amount needed to provide benefits for plan members and beneficiaries and to pay the expenses of administering the plan. Pension costs are met by contributions and by investment return on plan assets. The principal purpose of this report is to set forth an actuarial recommendation of the contribution, or range of contributions, which will properly fund the plan, in accordance with applicable government regulations. In addition, this report provides:

- A valuation of plan assets and liabilities to review the year-to-year progress of funding.
- Information needed to meet disclosure requirements.
- Review of plan experience for the previous year to ascertain whether the assumptions and methods employed for valuation purposes are reflective of actual events and remain appropriate for prospective application.
- Assessment of the relative funded position of the plan, i.e., through a comparison of plan assets and projected plan liabilities.
- Comments on any other matters which may be of assistance in the funding and operation of the plan.

This report may not be used for purposes other than those listed above without Milliman's prior written consent. If this report is distributed to other parties, it must be copied in its entirety, including this certification section.

Milliman's work is prepared solely for the internal business use of the Town of Glastonbury ("Town"). To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions: (a) the Town may provide a copy of Milliman's work, in its entirety, to the Town's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Town; and (b) the Town may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law. No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

In preparing this report, we relied on employee census data and financial information as of the valuation date, furnished by the Town. We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have found them to be reasonably consistent and comparable with data used for other purposes. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete and our calculations may need to be revised. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Certification

The calculations reported herein have been made on a basis consistent with our understanding of ERISA and the related sections of the tax code. Additional determinations may be needed for purposes other than meeting funding requirements, such as judging benefit security at plan termination or meeting employer accounting requirements. On the basis of the foregoing, we hereby certify that, to the best of our knowledge, this report is complete and accurate and all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices.

The valuation results were developed using models intended for valuations that use standard actuarial techniques. In addition to the models described previously, Milliman has developed certain models to develop the expected long term rate of return on assets used in this analysis. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP). The models, including all input, calculations, and output may not be appropriate for any other purpose.

We further certify that, in my opinion, each actuarial assumption, method and technique used is reasonable taking into account the experience of the Plan and reasonable expectations or would, in the aggregate, result in a total contribution equivalent to that which would be determined if each such assumption, method, or technique were reasonable. Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurement.

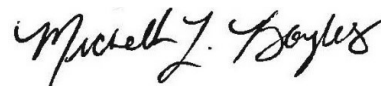
The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impact the objectivity of our work.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Rebecca A. Sielman, FSA
Consulting Actuary



Michelle L. Boyles, FSA
Consulting Actuary

Section I - Executive Summary Changes Since the Prior Valuation

Changes in Actuarial Methods and Assumptions

None.

Plan Changes

Employee contributions as a percentage of earnings have been updated for non-hybrid Town and Housing Authority employees, Animal Control Officers, Police officers hired before January 1, 2013, IUOE employees, Dispatchers, Secretaries, Paraprofessionals and Nurses. Please see page 49 of this report for details.

Other Significant Changes

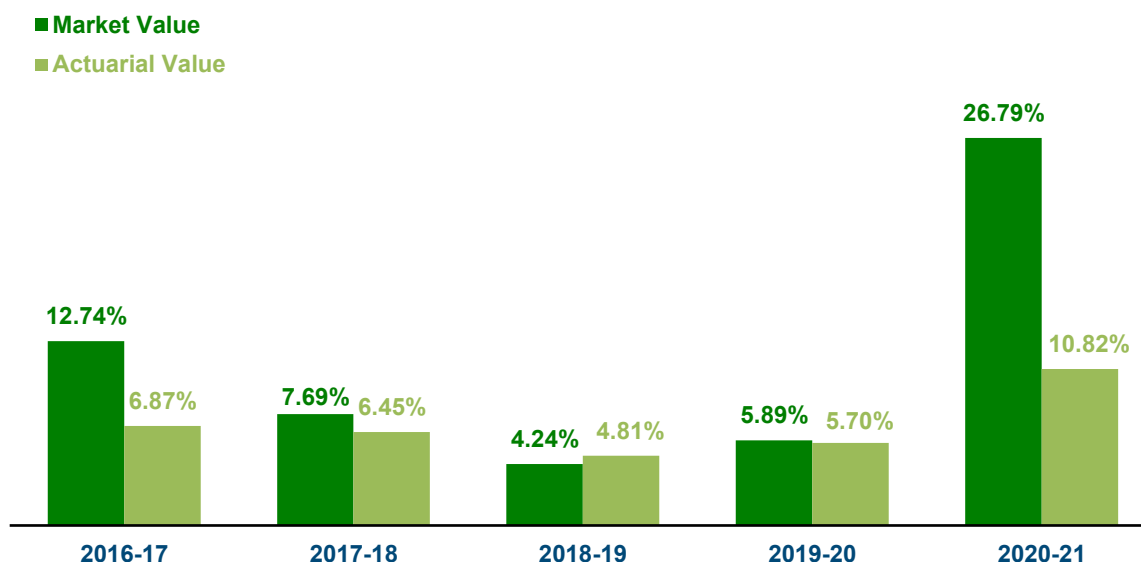
Although it is possible that the COVID-19 pandemic could have a material impact on the projected mortality, liabilities, and contribution requirements, we have chosen not to make an adjustment in the projections at this time, given the substantial current uncertainty regarding the impact of COVID-19 on mortality and plan costs, including whether the pandemic will increase or decrease mortality during the term of our projections. We will be monitoring this development closely and may adjust future projections to reflect the impact of COVID-19, if and when it becomes appropriate.

Section I - Executive Summary Assets

There are two different measures of the plan's assets that are used throughout this report. The Market Value is a snapshot of the plan's investments as of the valuation date. The Actuarial Value is a smoothed asset value designed to temper the volatile fluctuations in the market by recognizing investment gains or losses non-asymptotically over five years.

	Market	Actuarial
Value as of July 1, 2020	\$163,025,392	\$163,766,959
Town and Member Contributions	11,972,324	11,972,324
Investment Income	43,757,303	17,763,035
Benefit Payments and Administrative Expenses	(11,304,894)	(11,304,894)
Value as of July 1, 2021	207,450,125	182,197,424

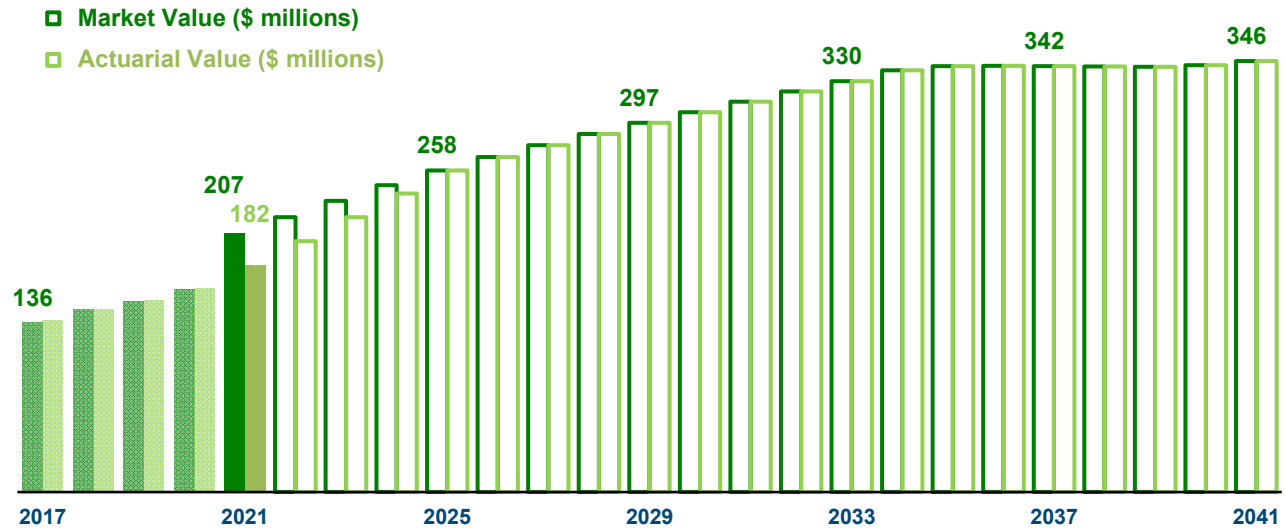
For fiscal year 2020-21, the plan's assets earned 26.79% on a Market Value basis and 10.82% on an Actuarial Value basis. The actuarial assumption for this period was 6.25% for the Non-Hybrid Plan and 5.00% for the Hybrid Plan; the result is an asset gain of about \$33.6 million on a Market Value basis and a gain of about \$7.5 million on an Actuarial Value basis. Historical rates of return are shown in the graph below.



Please note that the Actuarial Value currently is less than the Market Value by \$25.3 million. This figure represents investment gains that will be gradually recognized in future years. This process will exert downward pressure on the Town's contribution, unless there are offsetting market losses.

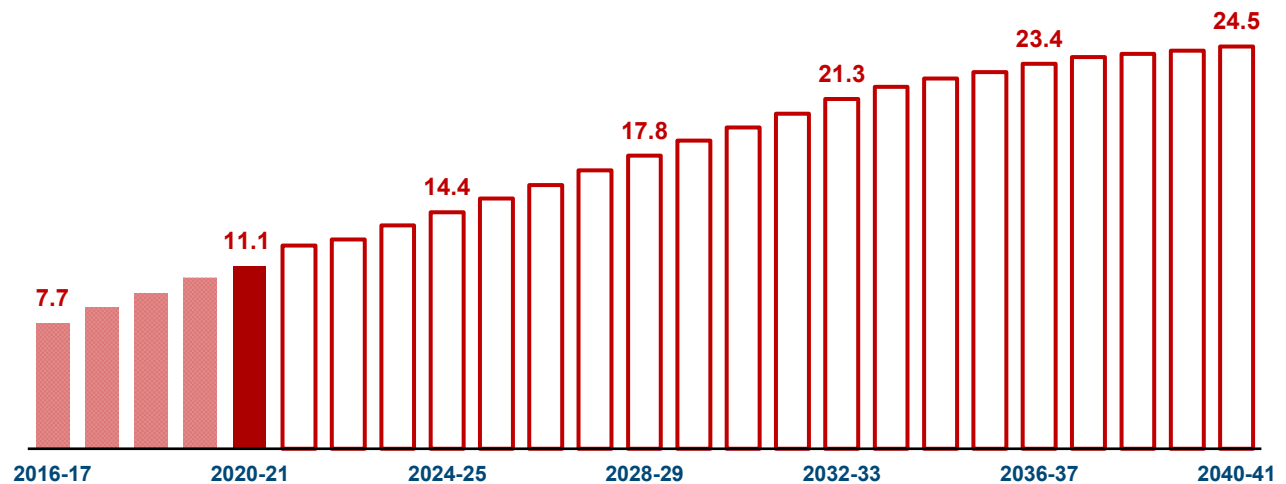
Section I - Executive Summary Assets (continued)

The graph below shows how this year's asset values compare to where the plan's assets have been over the past several years and how they are projected to change over the next 20 years. For purposes of this projection, we have assumed that the Town always contributes the Actuarially Determined Contribution and the investments always earn the assumed interest rate each year.



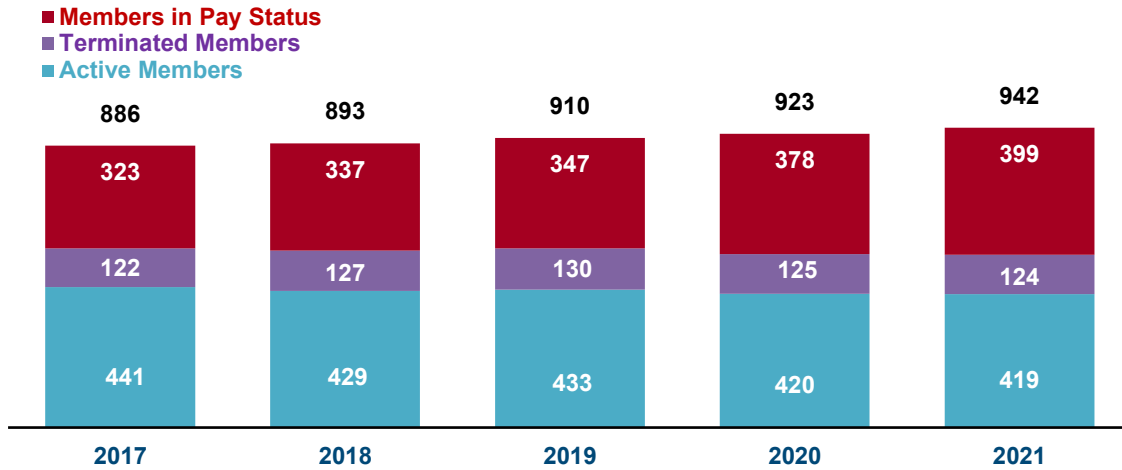
In 2020-21, the plan paid out \$11.1 million in benefits to members. Over the next 20 years, the plan is projected to pay out a total of \$387 million in benefits to members.

Benefit Payments (\$ millions)



Section I - Executive Summary Membership

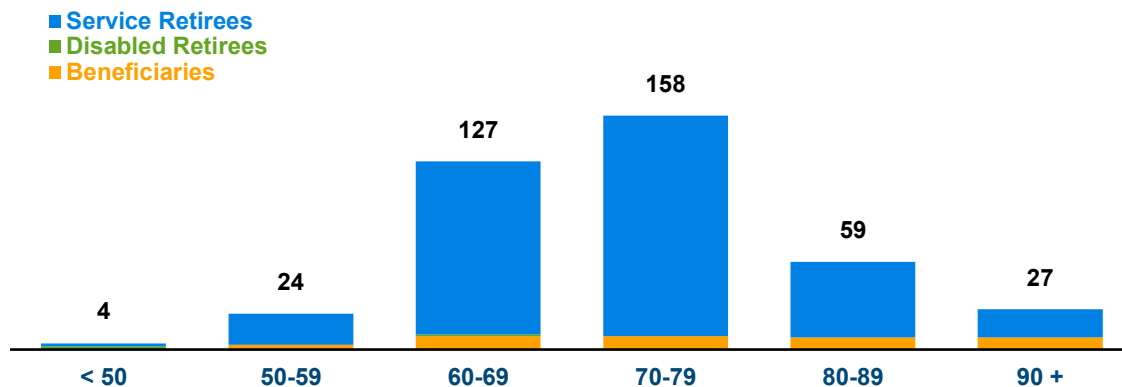
There are three basic categories of plan members included in the valuation: (1) members who are receiving monthly pension benefits, (2) former employees who have a vested right to benefits but have not yet started collecting, and (3) active employees who have met the eligibility requirements for membership.



Members in Pay Status on July 1, 2021

Board of Education	169	Total Count	399
Highway / Veh Maint / Refuse	31	Average Age	72.7
Dispatchers	4	Total Annual Benefit	\$11,277,334
Housing Authority	6	Average Annual Benefit	28,264
Police Pre-2013	70		
Police Post-2012	0		
Town	106		
Facilities / Wastewater	13		
Town Hybrid	0		
Housing Authority Hybrid	0		

The members in pay status fall across a wide distribution of ages:



Section I - Executive Summary Membership (continued)

Terminated Vested Members on July 1, 2021

Board of Education	55	Total Count	103
Highway / Veh Maint / Refuse	2	Average Age	56.4
Dispatchers	2	Total Annual Benefit	\$749,805
Housing Authority	3	Average Annual Benefit	7,280
Police Pre-2013	5		
Police Post-2012	0		
Town	35		
Facilities / Wastewater	1		
Town Hybrid	0		
Housing Authority Hybrid	0		

Nonvested Members Due Refunds on July 1, 2021

Board of Education	9	Total Count	21
Highway / Veh Maint / Refuse	0		
Dispatchers	2		
Housing Authority	0		
Police Pre-2013	2		
Police Post-2012	0		
Town	0		
Facilities / Wastewater	0		
Town Hybrid	6		
Housing Authority Hybrid	2		

Section I - Executive Summary Membership (continued)

Active Members on July 1, 2021

Board of Education	212	Total Count	419
Highway / Veh Maint / Refuse	15	Average Age	51.8
Dispatchers	10	Average Service	12.2
Housing Authority	9	Payroll	\$29,754,081
Police Pre-2013	30	Average Payroll	71,012
Police Post-2012	23		
Town	59		
Facilities / Wastewater	9		
Town Hybrid	49		
Housing Authority Hybrid	3		

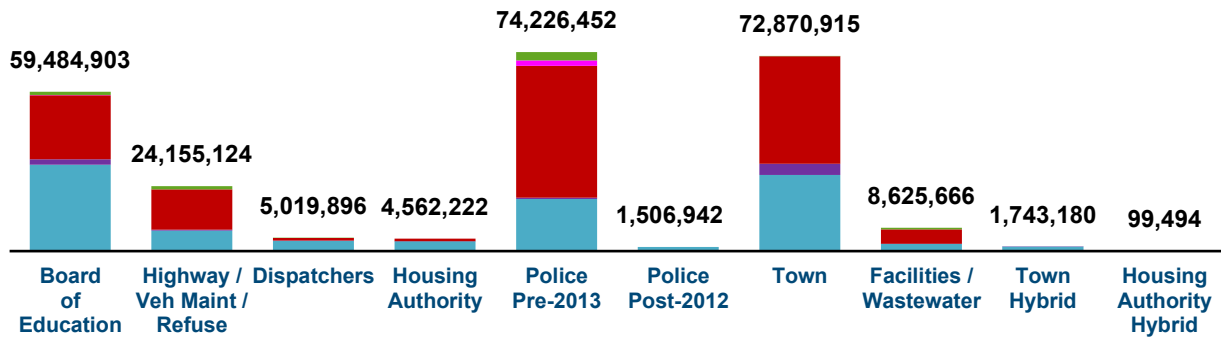
The table below illustrates the age and years of service of the active membership:

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25	4	1						5
25-29	12	4						16
30-34	14	8	4					26
35-39	8	13	6	2				29
40-44	9	9	7	7	2			34
45-49	11	6	1	10	6			34
50-54	15	15	13	11	5	1	1	61
55-59	17	19	16	12	16	2	15	97
60-64	2	10	14	18	20	5	11	80
65+	2	3	6	6	6	3	11	37
Total	94	88	67	66	55	11	38	419

Section I - Executive Summary Accrued Liability

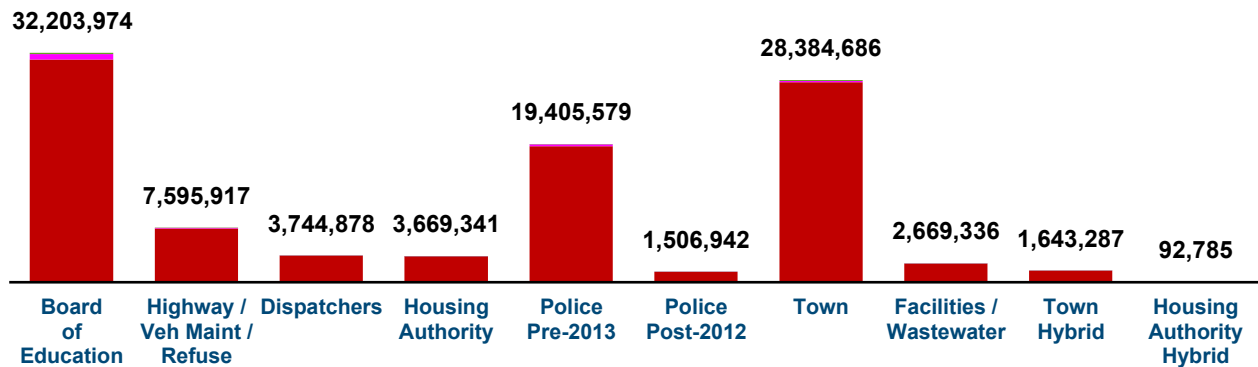
The Accrued Liability as of July 1, 2021 equals \$252,294,794, which consists of the following pieces:

- **Beneficiaries = \$6.3 million**
- **Disabled Retirees = \$2.0 million**
- **Service Retirees = \$135.7 million**
- **Terminated Vested Members = \$7.5 million**
- **Active Members = \$100.9 million**



The Accrued Liability for active members can be broken down further by the different types of benefits provided by the plan:

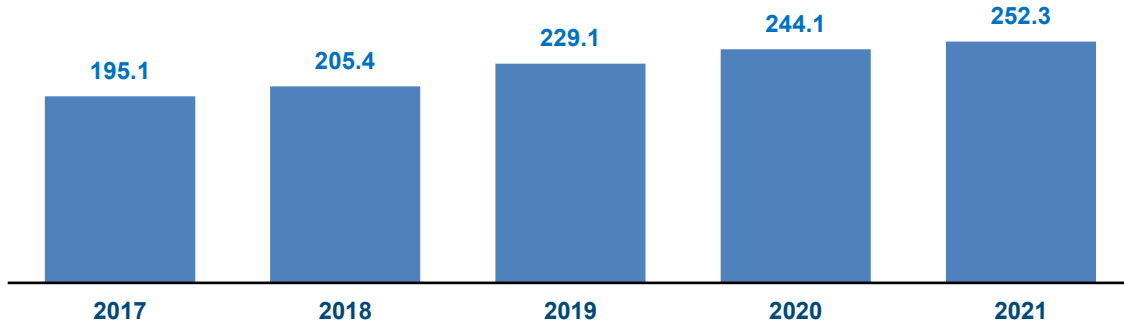
- **Preretirement Death = \$634,250**
- **Disability = \$1,409,473**
- **Retirement = \$98,792,799**
- **Termination = \$80,203**



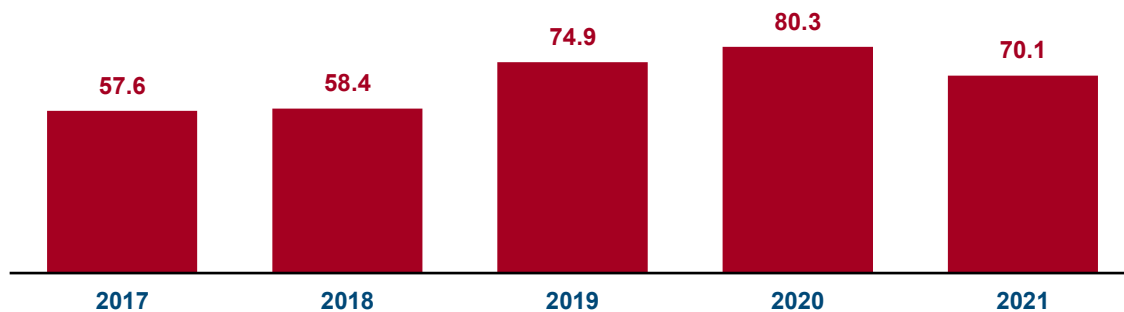
Section I - Executive Summary Funded Status

The Accrued Liability grows over time as active members earn additional benefits, and goes down over time as members receive benefits; it may also change when there are changes to the plan provisions or changes in the actuarial assumptions. The Unfunded Accrued Liability is the dollar difference between the Accrued Liability and the Actuarial Value of Assets; the Funded Ratio is the ratio of the two.

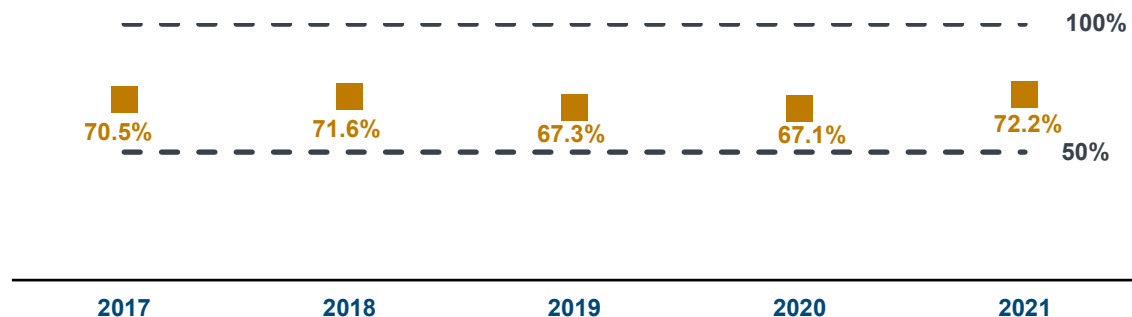
Accrued Liability (\$ millions)



Unfunded Accrued Liability (\$ millions)



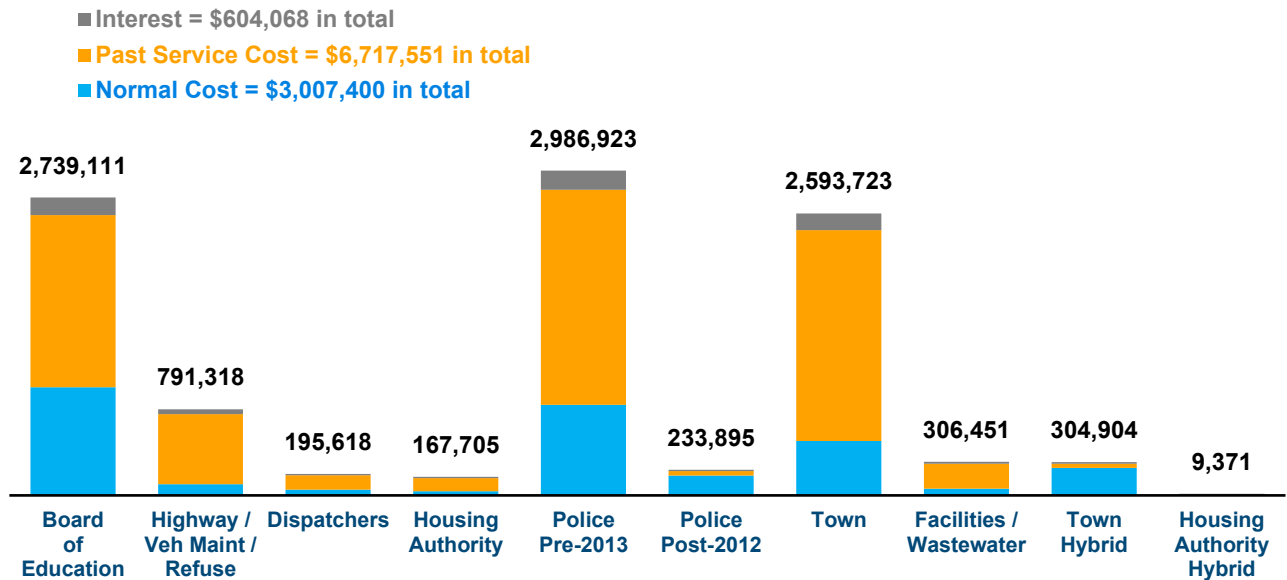
Funded Ratio



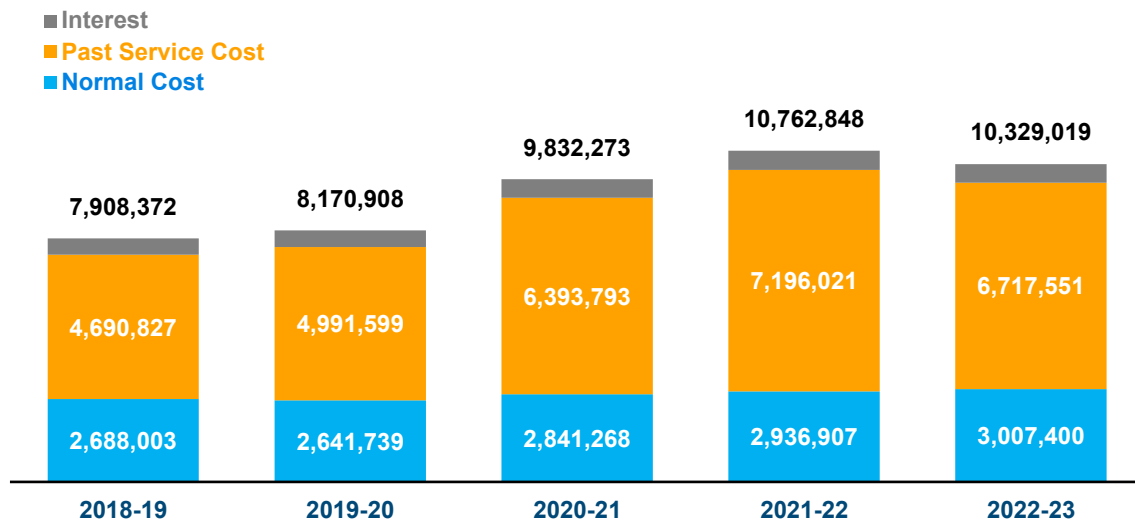
Section I - Executive Summary Actuarially Determined Contribution

The Actuarially Determined Contribution consists of three pieces: a Normal Cost payment to fund the benefits earned each year, a Past Service Cost to gradually reduce any unfunded or surplus liability, and Interest to reflect the timing of the contribution relative to the valuation date.

The Actuarially Determined Contribution for fiscal year 2022-23 is \$10,329,019; its component pieces are shown graphically below.

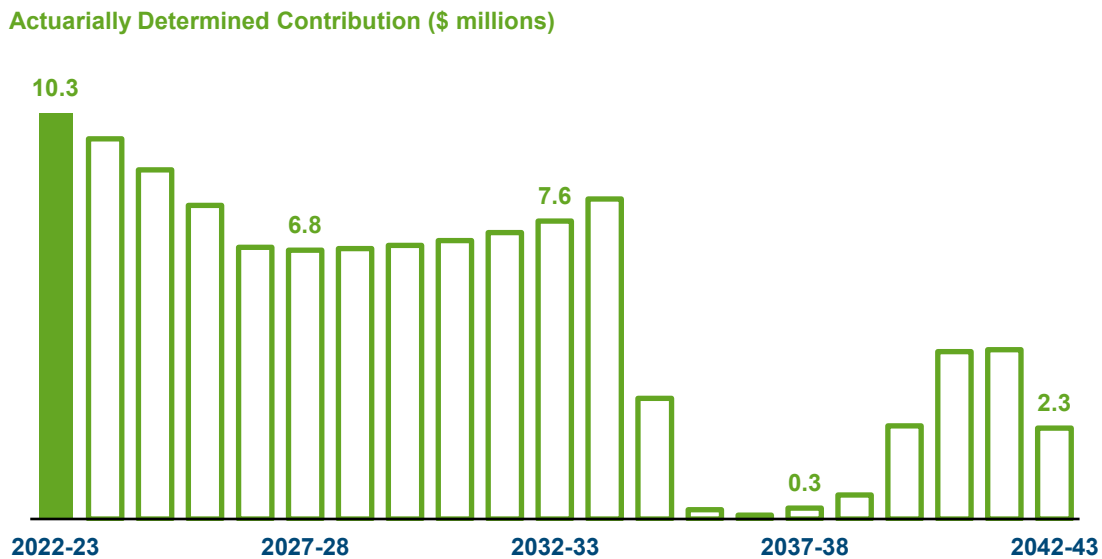
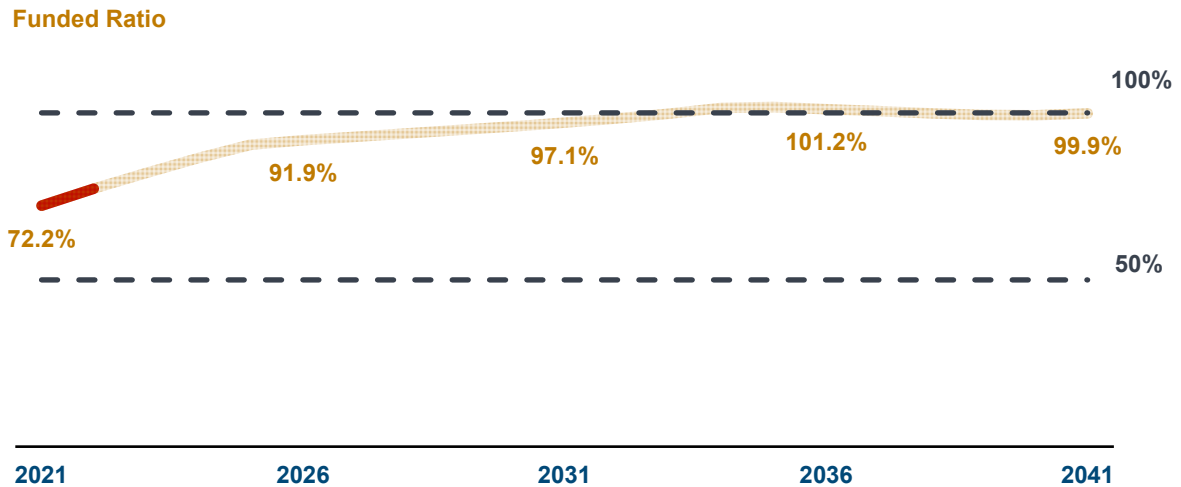


The chart below shows the Actuarially Determined Contribution for the past five fiscal years. Note that the Normal Cost is relatively consistent from year to year, whereas the Past Service Cost tends to be more volatile since it reflects the impact of asset performance.



Section I - Executive Summary Long-Range Forecast

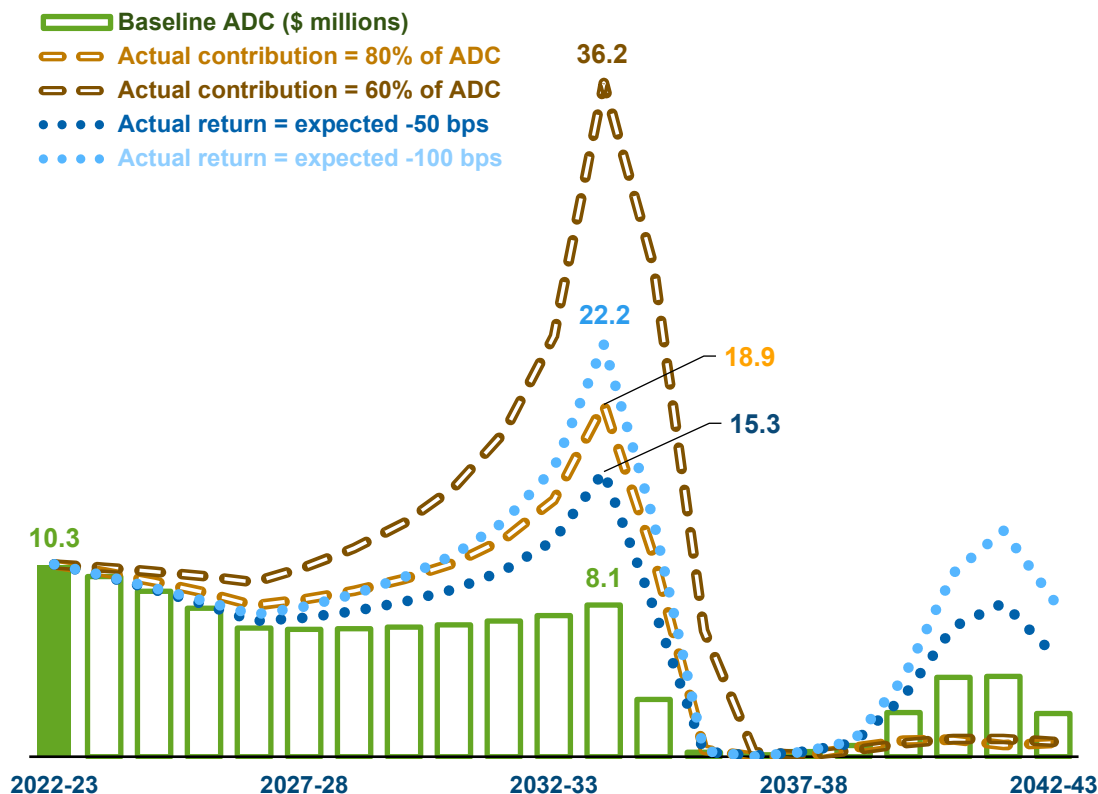
If the Town pays the Actuarially Determined Contribution each year, the investments earn exactly the assumed interest rate each year, and there are no changes in the plan provisions or in the actuarial methods and assumptions, then we project the following changes in the plan's funded status and the long-range contribution levels:



To the extent that there are future investment or liability gains or losses, changes in the actuarial assumptions or methods, or plan changes, the actual valuation results will differ from these forecasts. Please see Section III E for more details of the long range forecast.

Section I - Executive Summary Long-Range Forecast (continued)

Pension benefits are paid for through a combination of contributions from the Town and from employees, and from investment income. If the Town pays less than the Actuarially Determined Contribution each year, or if the investments persistently earn less than the assumed interest rate, then the plan's funded status would suffer, and to compensate, the Town's contribution levels would be pushed higher. The risks of underfunding and underearning are illustrated in the hypothetical scenarios below:



The scenarios illustrated above are based on deterministic projections that assume emerging plan experience always exactly matches the actuarial assumptions; in particular that actual asset returns will be constant in every year of the projection period. Variation in asset returns, contribution amounts, and many other factors may have a significant impact on the long-term financial health of the plan, the liquidity constraints on plan assets, and the Town's future contribution levels. Stochastic projections could be prepared that would enable the Town to understand the potential range of future results based on the expected variability in asset returns and other factors. Such analysis was beyond the scope of this engagement.

Section I - Executive Summary Summary of Principal Results

Membership as of	July 1, 2020	July 1, 2021
Active Members	420	419
Terminated Members	125	124
Members in Pay Status	<u>378</u>	<u>399</u>
Total Count	923	942
 Payroll	 \$29,063,202	 \$29,754,081
Assets and Liabilities as of	July 1, 2020	July 1, 2021
Market Value of Assets	\$163,025,392	\$207,450,125
Actuarial Value of Assets	163,766,959	182,197,424
 Accrued Liability for Active Members	 96,165,011	 100,916,725
Accrued Liability for Terminated Members	8,647,657	7,459,872
Accrued Liability for Members in Pay Status	<u>139,296,134</u>	<u>143,918,197</u>
Total Accrued Liability	244,108,802	252,294,794
 Unfunded Accrued Liability	 80,341,843	 70,097,370
 Funded Ratio	 67.1%	 72.2%
Actuarially Determined Contribution for Fiscal Year	2021-22	2022-23
Normal Cost	\$2,936,907	\$3,007,400
Past Service Cost	7,196,021	6,717,551
Interest	<u>629,920</u>	<u>604,068</u>
Actuarially Determined Contribution	10,762,848	10,329,019

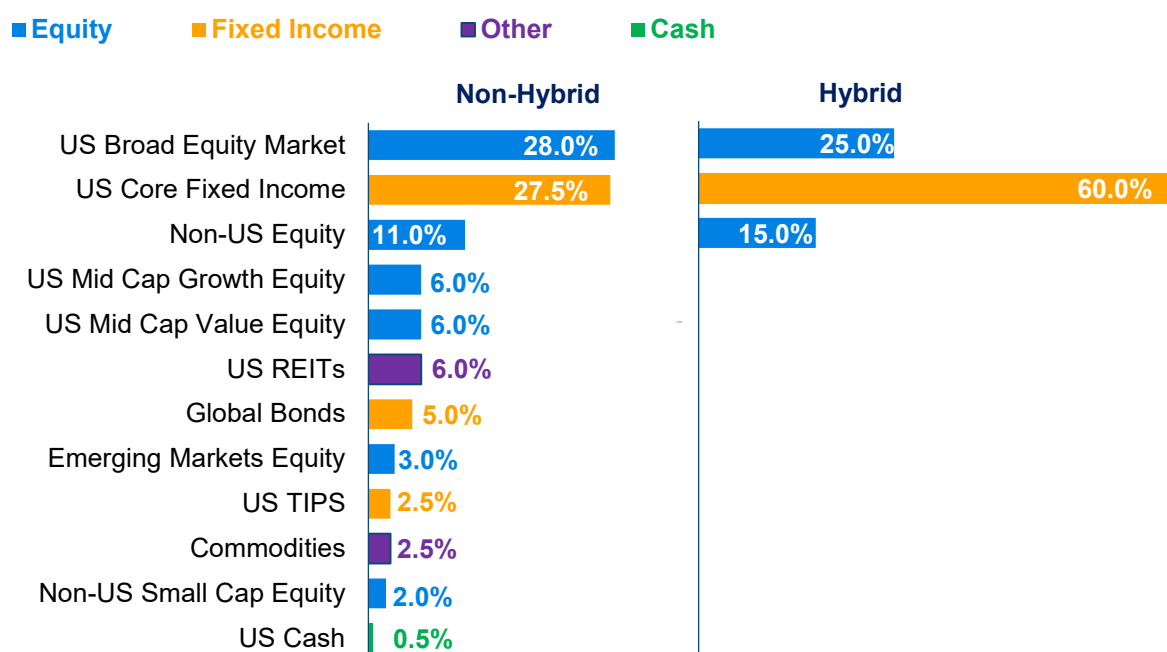
Section II - Plan Assets

A. Summary of Fund Transactions

	Non-Hybrid	Hybrid	Total
Market Value as of July 1, 2020	\$162,124,351	\$901,041	\$163,025,392
Town Contributions	9,665,497	214,693	9,880,190
Member Contributions	1,865,569	226,565	2,092,134
Net Investment Income	43,584,088	173,215	43,757,303
Benefit Payments	(11,098,850)	(8,689)	(11,107,539)
Administrative Expenses	(196,978)	(377)	(197,355)
Market Value as of June 30, 2021	205,943,677	1,506,448	207,450,125
Expected Return on Market Value of Assets	10,141,495	55,840	10,197,335
Market Value (Gain)/Loss	(33,442,593)	(117,375)	(33,559,968)
Approximate Rate of Return *	26.86%	15.51%	26.79%

* The rate shown here is not the dollar or time weighted investment yield rate which measures investment performance. It is an approximate net return assuming all activity occurred on average midway through the fiscal year.

Target Asset Allocation as of June 30, 2021



Section II - Plan Assets

B. Development of Actuarial Value of Assets

In order to minimize the impact of market fluctuations on the contribution level, we use an Actuarial Value of Assets that recognizes gains and losses over a five year period. The Actuarial Value of Assets as of July 1, 2021 is determined below.

	Non-Hybrid	Hybrid	Total			
1. Expected Rate of Return, July 1, 2020 Valuation	6.25%	5.00%				
2. Expected Market Value of Assets:						
Market Value as of July 1, 2020	\$162,124,351	\$901,041	\$163,025,392			
Employer and Employee Contributions	11,531,066	441,258	11,972,324			
Benefit Payments and Administrative Expenses	(11,295,828)	(9,066)	(11,304,894)			
Expected Net Investment Income	<u>10,141,495</u>	<u>55,840</u>	<u>10,197,335</u>			
Expected Market Value as of July 1, 2021	172,501,084	1,389,073	173,890,157			
3. Actual Market Value as of July 1, 2021	205,943,677	1,506,448	207,450,125			
4. Market Value (Gain)/Loss: (2) - (3)	(33,442,593)	(117,375)	(33,559,968)			
5. Delayed Recognition of Market (Gains)/Losses:						
	Market (Gains)/Losses		Amount Not Recognized			
Year	Percent	Non-Hybrid	Hybrid	Non-Hybrid	Hybrid	Total
2021	80%	(\$33,442,593)	(\$117,375)	(\$26,754,074)	(\$93,900)	(\$26,847,974)
2020	60%	961,160	(32,965)	576,696	(19,779)	556,917
2019	40%	3,327,433	(7,509)	1,330,973	(3,004)	1,327,969
2018	20%	(1,455,334)	7,268	<u>(291,067)</u>	<u>1,454</u>	<u>(289,613)</u>
				(25,137,472)	(115,229)	(25,252,701)
6. Actuarial Value of Assets as of July 1, 2021: (3) + (5)				180,806,205	1,391,219	182,197,424
7. Rate of Return on Actuarial Value of Assets				10.84%	7.90%	10.82%
8. Actuarial Value (Gain)/Loss				(7,485,019)	(31,568)	(7,516,587)

Section III - Development of Contribution A. Non-Hybrid Past Service Cost

In determining the Past Service Cost, the Unfunded Accrued Liability is amortized as a level percent over 14 years starting on July 1, 2019.

	Board of Education	Highway / Veh Maint / Refuse	Dispatchers	Housing Authority	Police Pre-2013	Police Post-2012	Town	Facilities / Wastewater	Non-Hybrid Total
1. Accrued Liability									
Active Members	32,203,974	7,595,917	3,744,878	3,669,341	19,405,579	1,506,942	28,384,686	2,669,336	99,180,653
Terminated Members	2,048,950	331,420	142,599	17,695	518,163	0	4,227,132	67,311	7,353,270
Service Retirees	23,924,309	15,130,050	977,322	875,186	49,243,983	0	40,135,663	5,378,584	135,665,097
Disabled Retirees	53,269	0	0	0	1,939,067	0	0	0	1,992,336
Beneficiaries	<u>1,254,401</u>	<u>1,097,737</u>	<u>155,097</u>	<u>0</u>	<u>3,119,660</u>	<u>0</u>	<u>123,434</u>	<u>510,435</u>	<u>6,260,764</u>
Total Accrued Liability	59,484,903	24,155,124	5,019,896	4,562,222	74,226,452	1,506,942	72,870,915	8,625,666	250,452,120
2. Actuarial Value of Assets*	42,943,296	17,438,049	3,623,960	3,293,556	53,585,504	1,087,890	52,606,916	6,227,034	180,806,205
3. Unfunded Accrued Liability: (1) - (2)	16,541,607	6,717,075	1,395,936	1,268,666	20,640,948	419,052	20,263,999	2,398,632	69,645,915
4. Amortization Period	12	12	12	12	12	12	12	12	12
5. Amortization Growth Rate	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
6. Past Service Cost: (3) amortized over (4)	1,585,827	643,959	133,827	121,626	1,978,826	40,174	1,942,689	229,954	6,676,882
7. Total Payroll	11,065,791	1,416,391	778,746	663,922	3,710,649	2,079,753	4,906,777	731,675	25,353,704
8. Past Service Cost as a % of Total Payroll: (6) / (7)	14.33%	45.46%	17.18%	18.32%	53.33%	1.93%	39.59%	31.43%	26.33%

*The Actuarial Value of Assets (see Section IIB) was allocated in proportion to the Accrued Liability.

Section III - Development of Contribution
B. Non-Hybrid Actuarially Determined Contribution for FY 2022-23

	Board of Education	Highway / Veh Maint / Refuse	Dispatchers	Housing Authority	Police Pre-2013	Police Post-2012	Town	Facilities / Wastewater	Non-Hybrid Total
1. Total Normal Cost	\$1,690,910	\$180,389	\$100,729	\$80,652	\$1,096,945	\$360,719	\$795,168	\$106,358	\$4,411,870
2. Expected Member Contributions	746,941	99,147	54,512	48,134	324,682	181,978	355,741	54,876	1,866,011
3. Expected Administrative Expenses	48,191	19,569	4,067	3,696	60,133	1,221	59,035	6,988	202,900
4. Net Normal Cost: (1) - (2) + (3)	992,160	100,811	50,284	36,214	832,396	179,962	498,462	58,470	2,748,759
5. Past Service Cost (see Section IIIA)	1,585,827	643,959	133,827	121,626	1,978,826	40,174	1,942,689	229,954	6,676,882
6. Interest on (4) + (5)	161,124	46,548	11,507	9,865	175,701	13,759	152,572	18,027	589,103
7. Actuarially Determined Contribution for FY 2022-23: (4) + (5) + (6)	2,739,111	791,318	195,618	167,705	2,986,923	233,895	2,593,723	306,451	10,014,744
8. Total Payroll	11,065,791	1,416,391	778,746	663,922	3,710,649	2,079,753	4,906,777	731,675	25,353,704
9. Actuarially Determined Contribution as a % of Total Payroll: (7) / (8)	24.75%	55.87%	25.12%	25.26%	80.50%	11.25%	52.86%	41.88%	39.50%

Section III - Development of Contribution

C. Hybrid Past Service Cost

In determining the Past Service Cost, the Unfunded Accrued Liability is amortized as a level percent over 14 years starting on July 1, 2019.

	Town Hybrid	Housing Authority Hybrid	Hybrid Total
1. Accrued Liability			
Active Members	1,643,287	92,785	1,736,072
Terminated Members	99,893	6,709	106,602
Service Retirees	0	0	0
Disabled Retirees	0	0	0
Beneficiaries	<u>0</u>	<u>0</u>	<u>0</u>
Total Accrued Liability	1,743,180	99,494	1,842,674
2. Actuarial Value of Assets*	1,316,101	75,118	1,391,219
3. Unfunded Accrued Liability: (1) - (2)	427,079	24,376	451,455
4. Amortization Period	12	12	12
5. Amortization Growth Rate	3.50%	3.50%	3.50%
6. Past Service Cost: (3) amortized over (4)	38,473	2,196	40,669
7. Total Payroll	3,285,624	162,888	3,448,512
8. Past Service Cost as a % of Total Payroll: (6) / (7)	1.17%	1.35%	1.18%

*The Actuarial Value of Assets (see Section IIB) was allocated in proportion to the Accrued Liability.

Section III - Development of Contribution
D. Hybrid Actuarially Determined Contribution for FY 2022-23

	Town Hybrid	Housing Authority Hybrid	Hybrid Total
1. Total Normal Cost	\$465,100	\$17,295	\$482,395
2. Expected Member Contributions	213,566	10,588	224,154
3. Expected Administrative Expenses	378	22	400
4. Net Normal Cost: (1) - (2) + (3)	251,912	6,729	258,641
5. Past Service Cost (see Section IIIC)	38,473	2,196	40,669
6. Interest on (4) + (5)	14,519	446	14,965
7. Actuarially Determined Contribution for FY 2022-23: (4) + (5) + (6)	304,904	9,371	314,275
8. Total Payroll	3,285,624	162,888	3,448,512
9. Actuarially Determined Contribution as a % of Total Payroll: (7) / (8)	9.28%	5.75%	9.11%

Section III - Development of Contribution

E. Long Range Forecast

This forecast is based on the results of the July 1, 2021 actuarial valuation and assumes that the Town will pay the Actuarially Determined Contribution each year, the assets will return the assumed interest rate on a market value basis each year, and there are no future changes in the actuarial methods or assumptions or in the plan provisions. For purposes of this forecast the amortization period declines to 1 year to illustrate the progress of the plan towards becoming fully funded; in actual practice the amortization period will not be less than 1 years in order to shield the Town from contribution volatility. Actual results at each point in time will yield different values, reflecting the actual experience of the plan membership and assets.

Valuation Date	Values as of the Valuation Date				Fiscal Year	Cash Flows Projected to the Following Fiscal Year			
	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Ratio		Town Contributions	Member Contributions	Benefit Payments	Net Cash Flows
7/1/2021	\$252,294,794	\$182,197,424	\$70,097,370	72.2%	2022-23	\$10,329,019	\$2,173,857	(\$12,738,352)	(\$235,476)
7/1/2022	260,685,000	201,581,000	59,104,000	77.3%	2023-24	9,681,000	2,201,000	(13,589,000)	(1,707,000)
7/1/2023	269,264,000	220,749,000	48,515,000	82.0%	2024-25	8,889,000	2,256,000	(14,401,000)	(3,256,000)
7/1/2024	277,499,000	239,880,000	37,619,000	86.4%	2025-26	7,983,000	2,295,000	(15,231,000)	(4,953,000)
7/1/2025	285,400,000	258,370,000	27,030,000	90.5%	2026-27	6,916,000	2,355,000	(16,054,000)	(6,783,000)
7/1/2026	292,897,000	269,117,000	23,780,000	91.9%	2027-28	6,843,000	2,389,000	(16,946,000)	(7,714,000)
7/1/2027	300,032,000	278,630,000	21,402,000	92.9%	2028-29	6,882,000	2,430,000	(17,840,000)	(8,528,000)
7/1/2028	306,637,000	287,756,000	18,881,000	93.8%	2029-30	6,967,000	2,478,000	(18,761,000)	(9,316,000)
7/1/2029	312,663,000	296,593,000	16,070,000	94.9%	2030-31	7,084,000	2,536,000	(19,566,000)	(9,946,000)
7/1/2030	318,075,000	305,147,000	12,928,000	95.9%	2031-32	7,293,000	2,597,000	(20,396,000)	(10,506,000)
7/1/2031	322,951,000	313,561,000	9,390,000	97.1%	2032-33	7,585,000	2,624,000	(21,298,000)	(11,089,000)
7/1/2032	327,286,000	321,899,000	5,387,000	98.4%	2033-34	8,147,000	2,667,000	(22,044,000)	(11,230,000)
7/1/2033	330,850,000	330,130,000	720,000	99.8%	2034-35	3,066,000	2,751,000	(22,553,000)	(16,736,000)
7/1/2034	333,741,000	338,703,000	(4,962,000)	101.5%	2035-36	230,000	2,849,000	(22,936,000)	(19,857,000)
7/1/2035	336,253,000	342,105,000	(5,852,000)	101.7%	2036-37	92,000	2,905,000	(23,450,000)	(20,453,000)
7/1/2036	338,567,000	342,473,000	(3,906,000)	101.2%	2037-38	268,000	2,981,000	(23,858,000)	(20,609,000)
7/1/2037	340,480,000	342,227,000	(1,747,000)	100.5%	2038-39	602,000	3,115,000	(24,045,000)	(20,328,000)
7/1/2038	342,108,000	341,776,000	332,000	99.9%	2039-40	2,367,000	3,236,000	(24,246,000)	(18,643,000)
7/1/2039	343,713,000	341,557,000	2,156,000	99.4%	2040-41	4,259,000	3,336,000	(24,496,000)	(16,901,000)
7/1/2040	345,288,000	343,028,000	2,260,000	99.3%	2041-42	4,309,000	3,464,000	(24,637,000)	(16,864,000)

Section III - Development of Contribution
F. History of Funded Status

Valuation Date	Actuarial Value of Assets	Accrued Liability	Unfunded Accrued Liability	Funded Ratio
July 1, 2013	\$100,043,439	\$149,596,651	\$49,553,212	66.9%
July 1, 2014	111,242,055	157,479,604	46,237,549	70.6%
July 1, 2015	121,001,212	167,525,980	46,524,768	72.2%
July 1, 2016	128,069,667	180,580,934	52,511,267	70.9%
July 1, 2017	137,484,904	195,101,288	57,616,384	70.5%
July 1, 2018	146,970,419	205,400,511	58,430,092	71.6%
July 1, 2019	154,273,071	229,132,148	74,859,077	67.3%
July 1, 2020	163,766,959	244,108,802	80,341,843	67.1%
July 1, 2021	182,197,424	252,294,794	70,097,370	72.2%

Section III - Development of Contribution

G. History of Town Contributions

Fiscal Year	Actuarially Determined Contribution	Actual Town Contribution	Payroll	Actual Contribution as a Percent of Payroll
2014-15	\$6,001,585	\$6,001,585	\$27,153,582	22.1%
2015-16	6,118,624	6,118,624	26,362,701	23.2%
2016-17	6,325,362	6,325,363	27,677,315	22.9%
2017-18	7,193,600	7,137,123	28,655,358	24.9%
2018-19	7,908,372	7,908,372	29,581,276	26.7%
2019-20	8,170,908	9,170,908	28,602,606	32.1%
2020-21	9,832,273	9,880,190	29,331,962	33.7%
2021-22	10,762,848	TBD	29,063,202	TBD
2022-23	10,329,019	TBD	29,754,081	TBD

Section IV - Membership Data

A. Reconciliation of Membership from Prior Valuation

Details of the changes in the Plan membership since the last valuation are shown below. Additional details on the Plan membership are provided in the remainder of Section IV.

	Active Members	Terminated Vested Members	Nonvested Members Due Refunds	Service Retirees	Disabled Retirees	Bene- ficiaries	Total
Count July 1, 2020	420	108	17	340	3	35	923
Terminated							
- refunds due	(3)	-	3	-	-	-	0
- paid refund	(7)	(2)	-	-	-	-	(9)
- vested benefits due	(3)	3	-	-	-	-	0
Retired	(18)	(6)	-	24	-	-	0
Died							
- with beneficiary	-	-	-	(3)	-	3	0
- no beneficiary	-	-	-	(2)	-	(1)	(3)
Benefits expired	-	-	-	-	-	-	0
New member	30	-	1	-	-	-	31
Rehired	-	-	-	-	-	-	0
New Alternate Payee	-	-	-	-	-	-	0
Correction	-	-	-	-	-	-	0
Count July 1, 2021	419	103	21	359	3	37	942

Section IV - Membership Data

B. Statistics of Active Membership

		As of July 1, 2020	As of July 1, 2021
Number of Active Members	Board of Education	218	212
	Highway / Veh Maint / Refuse	15	15
	Dispatchers	8	10
	Housing Authority	9	9
	Police Pre-2013	31	30
	Police Post-2012	22	23
	Town	63	59
	Facilities / Wastewater	9	9
	Town Hybrid	42	49
	Housing Authority Hybrid	<u>3</u>	<u>3</u>
	Total	420	419
Average Age	Board of Education	55.0	54.7
	Highway / Veh Maint / Refuse	54.0	55.0
	Dispatchers	48.8	46.0
	Housing Authority	58.4	59.4
	Police Pre-2013	43.3	44.2
	Police Post-2012	34.8	35.0
	Town	56.8	57.3
	Facilities / Wastewater	53.0	54.0
	Town Hybrid	44.9	44.6
	Housing Authority Hybrid	32.2	38.7
	Total	52.0	51.8
Average Service	Board of Education	11.8	11.7
	Highway / Veh Maint / Refuse	21.0	22.0
	Dispatchers	18.7	15.8
	Housing Authority	17.4	18.4
	Police Pre-2013	14.1	14.9
	Police Post-2012	3.2	3.9
	Town	18.3	19.5
	Facilities / Wastewater	15.4	16.4
	Town Hybrid	2.5	2.8
	Housing Authority Hybrid	3.3	4.0
	Total	12.1	12.2

Section IV - Membership Data
B. Statistics of Active Membership (continued)

		As of July 1, 2020	As of July 1, 2021
Total Payroll	Board of Education	\$11,313,540	\$11,518,220
	Highway / Veh Maint / Refuse	1,309,166	1,416,391
	Dispatchers	719,095	778,746
	Housing Authority	715,802	761,135
	Police Pre-2013	3,736,561	3,710,649
	Police Post-2012	1,875,728	2,079,753
	Town	5,476,269	5,309,000
	Facilities / Wastewater	776,757	731,675
	Town Hybrid	3,002,621	3,285,624
	Housing Authority Hybrid	<u>137,663</u>	<u>162,888</u>
	Total	29,063,202	29,754,081
Average Payroll	Board of Education	51,897	54,331
	Highway / Veh Maint / Refuse	87,278	94,426
	Dispatchers	89,887	77,875
	Housing Authority	79,534	84,571
	Police Pre-2013	120,534	123,688
	Police Post-2012	85,260	90,424
	Town	86,925	89,983
	Facilities / Wastewater	86,306	81,297
	Town Hybrid	71,491	67,054
	Housing Authority Hybrid	45,888	54,296
	Total	69,198	71,012

Section IV - Membership Data

C. Distribution of Active Members as of July 1, 2021

Board of Education

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25	2	1						3
25-29	2	2						4
30-34	4	1	2					7
35-39	2	3	2					7
40-44	8	3	2	1				14
45-49	3	2	1	3	3			12
50-54	8	10	11	3				32
55-59	11	14	12	7	9	1	5	59
60-64	2	6	11	13	16	2	3	53
65+	1	2	3	3	4	3	5	21
Total	43	44	44	30	32	6	13	212

Highway / Veh Maint / Refuse

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29								0
30-34								0
35-39		1						1
40-44		1						1
45-49				1				1
50-54					1			1
55-59			1				5	6
60-64				1	1		2	4
65+				1				1
Total	0	2	1	3	2	0	7	15

Dispatchers

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29	1							1
30-34	2							2
35-39		2						2
40-44								0
45-49								0
50-54				1				1
55-59				1				1
60-64							3	3
65+								0
Total	3	2	0	2	0	0	3	10

Section IV - Membership Data

C. Distribution of Active Members as of July 1, 2021 (continued)

Housing Authority

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29								0
30-34								0
35-39								0
40-44								0
45-49		1						1
50-54			1	1		1		3
55-59							2	2
60-64								0
65+			1	1	1			3
Total	0	1	2	2	1	1	2	9

Police Pre-2013

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29								0
30-34		1	2					3
35-39		1	3	2				6
40-44			1	6				7
45-49		1		4				5
50-54		1	1	2	3		1	8
55-59					1			1
60-64								0
65+								0
Total	0	4	7	14	4	0	1	30

Police Post-2012

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25	1							1
25-29	5	1						6
30-34	4	2						6
35-39	1	3						4
40-44		3						3
45-49	1	1						2
50-54								0
55-59		1						1
60-64								0
65+								0
Total	12	11	0	0	0	0	0	23

Section IV - Membership Data

C. Distribution of Active Members as of July 1, 2021 (continued)

Town

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29								0
30-34								0
35-39		1	1					2
40-44			4		1			5
45-49	1			1	3			5
50-54		1		2				3
55-59	2	3	3	3	6	1	3	18
60-64	1	3	3	3	3	3	2	15
65+	1	2	1	1			6	11
Total	0	7	13	10	14	4	11	59

Facilities / Wastewater

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29								0
30-34								0
35-39								0
40-44					1			1
45-49				1				1
50-54				2	1			3
55-59				1				1
60-64		1		1			1	3
65+								0
Total	0	1	0	5	2	0	1	9

Town Hybrid

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25	1							1
25-29	4	1						5
30-34	4	3						7
35-39	5	1						6
40-44	1	2						3
45-49	6							6
50-54	7	3						10
55-59	6	2						8
60-64		2						2
65+	1							1
Total	35	14	0	0	0	0	0	49

Section IV - Membership Data
C. Distribution of Active Members as of July 1, 2021 (continued)

Housing Authority Hybrid

Age	Years of Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
< 25								0
25-29								0
30-34		1						1
35-39		1						1
40-44								0
45-49	1							1
50-54								0
55-59								0
60-64								0
65+								0
Total	1	2	0	0	0	0	0	3

Section IV - Membership Data
D. Statistics of Inactive Membership

	As of July 1, 2020	As of July 1, 2021
Terminated Vested Members		
Number	108	103
Total Annual Benefit	\$869,766	\$749,805
Average Annual Benefit	8,053	7,280
Average Age	54.3	56.4
Nonvested Members Due Refunds		
Number	17	21
Service Retirees		
Number	340	359
Total Annual Benefit	\$10,011,739	\$10,517,386
Average Annual Benefit	29,446	29,296
Average Age	72.1	72.5
Disabled Retirees		
Number	3	3
Total Annual Benefit	\$87,249	\$114,469
Average Annual Benefit	29,083	38,156
Average Age	52.3	53.3
Beneficiaries		
Number	35	37
Total Annual Benefit	\$617,960	\$645,479
Average Annual Benefit	17,656	17,445
Average Age	75.3	76.2

Section IV - Membership Data
E. Distribution of Inactive Members as of July 1, 2021

	Age	Number	Annual Benefits
Terminated Vested Members	< 30	2	\$119,340
	30 - 39	12	311,615
	40 - 49	22	296,553
	50 - 59	41	21,801
	60 - 64	29	496
	65 +	<u>18</u>	<u>0</u>
	Total	124	749,805
Service Retirees	< 50	2	\$45,905
	50 - 59	21	1,112,476
	60 - 69	117	4,332,276
	70 - 79	149	3,889,840
	80 - 89	51	949,575
	90 +	<u>19</u>	<u>187,314</u>
	Total	359	10,517,386
Disabled Retirees	< 50	2	\$110,183
	50 - 59	0	0
	60 - 69	1	4,286
	70 - 79	0	0
	80 - 89	0	0
	90 +	<u>0</u>	<u>0</u>
	Total	3	114,469
Beneficiaries	< 50	0	\$0
	50 - 59	3	57,791
	60 - 69	9	138,179
	70 - 79	9	163,428
	80 - 89	8	150,120
	90 +	<u>8</u>	<u>135,961</u>
	Total	37	645,479

Section V - Analysis of Risk

A. Introduction

The results of this actuarial valuation are based on one set of reasonable assumptions. However, it is almost certain that future experience will not exactly match these assumptions. As an example, the plan's investments may perform better or worse than assumed in any single year and over any longer time horizon. It is therefore important to consider the potential impacts of these likely differences when making decisions that may affect the future financial health of the plan, or of the plan's members.

In addition, as plans mature they accumulate larger pools of assets and liabilities. The increase in size in turn increases the potential magnitude of adverse experience. As an example, the dollar impact of a 10% investment loss on a plan with \$1 billion in assets and liabilities is much greater than the dollar impact for a plan with \$1 million in assets and liabilities. Since pension plans make long-term promises and rely on long-term funding, it is important to consider how mature the plan is today, and how mature it may become in the future.

Actuarial Standard of Practice No. 51 (ASOP 51) directs actuaries to provide pension plan sponsors with information concerning the risks associated with the plan:

- Identify risks that may be significant to the plan.
- Assess the risks identified as significant to the plan. The assessment does not need to include numerical calculations.
- Disclose plan maturity measures and historical information that are significant to understanding the plan's risks.

This section of the report uses the framework of ASOP 51 to communicate important information about significant risks to the plan, the plan's maturity, and relevant historical plan data.

Please see Section III E for more information on the basis for the projected results shown on the following pages.

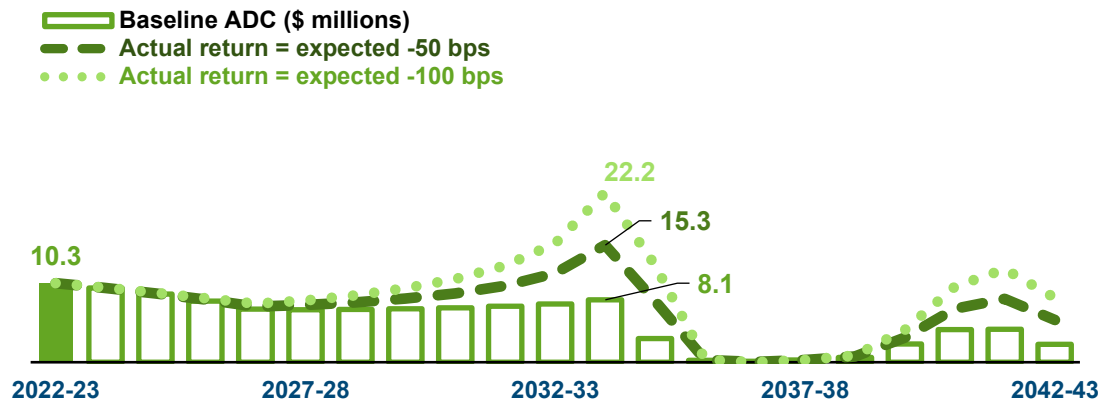
Section V - Analysis of Risk

B. Risk Identification and Assessment

Investment Risk

Definition: This is the potential that investment returns will be different than expected.

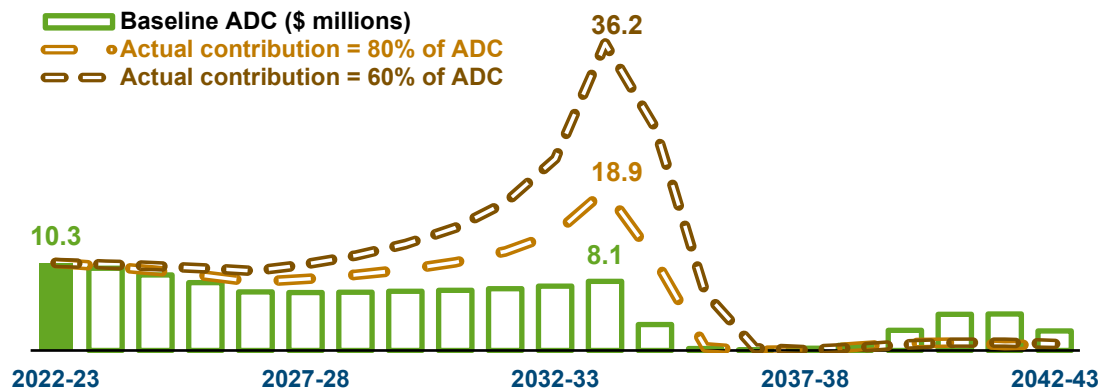
Identification: To the extent that actual investment returns differ from the assumed investment return, the plan's future assets, Actuarially Determined Contributions, and funded status may differ significantly from those presented in this valuation. The consequences of persistent underperformance on future Actuarially Determined Contribution levels are illustrated below:



Contribution Risk

Definition: This is the potential that actual future contributions will be less than the Actuarially Determined Contribution.

Identification: Over the past 7 years, actual contributions have been 102.2% of the Actuarially Determined Contribution in total. The consequences of persistent underfunding on future Actuarially Determined Contribution levels are illustrated below:



Section V - Analysis of Risk

B. Risk Identification and Assessment

Liquidity Risk

Definition: This is the potential that assets must be liquidated at a loss earlier than planned in order to pay for the plan's benefits and operating costs. This risk is heightened for plans with negative cash flows, in which contributions are not sufficient to cover benefit payments plus expenses.

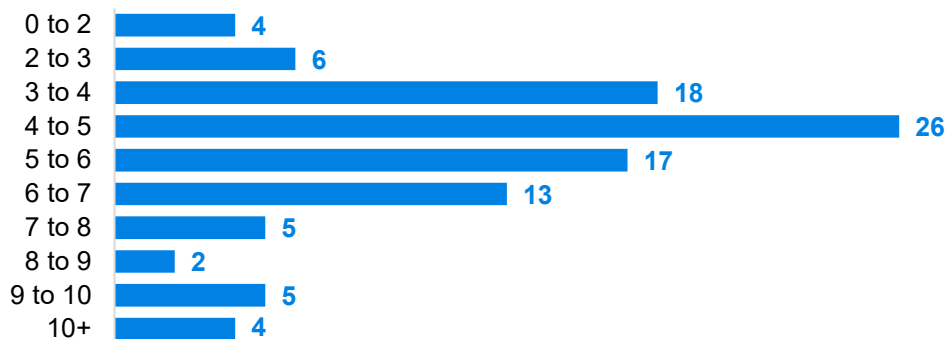
Identification: In 2020-21, the plan had positive cash flow, with town and member contributions to the plan of \$11,972,324 compared to \$11,304,894 of benefit payments and administrative expenses paid out of the plan. We suggest that you consult with your investment advisors with respect to the liquidity characteristics of the plan's investment holdings.

Maturity Risk

Definition: This is the potential for total plan liabilities to become more heavily weighted toward inactive liabilities over time, and for plan assets and/or liabilities to become larger relative to the active member liability.

Identification: The plan is subject to maturity risk because as plan assets and liabilities continue to grow, the dollar impact of any gains or losses on the assets or liabilities also becomes larger.

Assessment: As of July 1, 2021, the plan's Asset Volatility Ratio (the ratio of the market value of plan assets to payroll) is 7.0. According to Milliman's 2021 Public Pension Funding Study, the 100 largest US public pension plans have the following range of Asset Volatility Ratios:



Inflation Risk

Definition: This is the potential for a pension to lose purchasing power over time due to inflation.

Identification: The members of pension plans without fully inflation-indexed benefits are subject to the risk that their purchasing power will be reduced over time due to inflation.

Assessment: This plan provides for postretirement benefit increases that are directly tied to each year's rate of actual inflation. However, there is a maximum annual adjustment and a maximum lifetime adjustment. Further, not all members are eligible for these increases; this leaves members bearing some inflation risk.

Section V - Analysis of Risk

B. Risk Identification and Assessment

Insolvency Risk

Definition: This is the potential that a plan will become insolvent; that is, assets will be fully depleted.

Identification: If a plan becomes insolvent, contractually required benefits must be paid from the plan sponsor's other remaining assets.

Assessment: Under the GASB 68 depletion date methodology, the plan is not projected to become insolvent. Please see the GASB 68 report for more details on the underlying analysis.

Demographic Risks

Definition: This is the potential that mortality, turnover, retirement, or other demographic experience will be different than expected.

Identification: The pension liabilities reported herein have been calculated by assuming that members will follow patterns of demographic experience as described in Appendix B. If actual demographic experience or future demographic assumptions are different from what is assumed to occur in this valuation, future pension liabilities, Actuarially Determined Contributions, and funded status may differ significantly from those presented in this valuation. Formal Experience Studies performed on a regular basis are helpful in ensuring that the demographic assumptions reflect emerging plan experience.

Retirement Risk

Definition: This is the potential for members to retire and receive subsidized benefits that are more valuable than expected.

Identification: This plan has valuable early retirement benefits. If members retire at earlier ages than are anticipated by the actuarial assumptions, this will put upward pressure on subsequent Actuarially Determined Contributions.

Pensionable Earnings Risk

Definition: This is the potential for active members to add items to their pensionable earnings and receive pension benefits that are higher than expected.

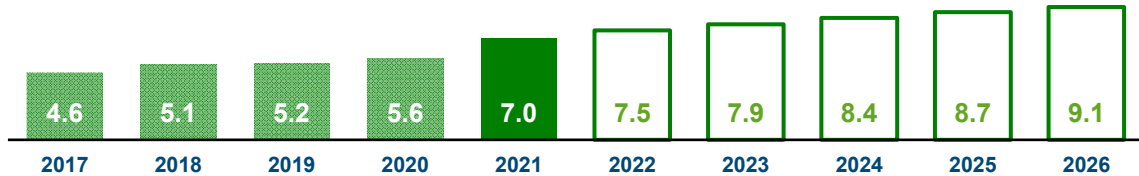
Identification: As Earnings include overtime payments, commissions, bonuses and any other additional compensation, a participant can significantly increase their final years of Earnings which are included in their Average Annual Earnings to calculate their final benefit. We have reflected a load for compensated absences for the groups that are eligible for these adjustments.

Section V - Analysis of Risk

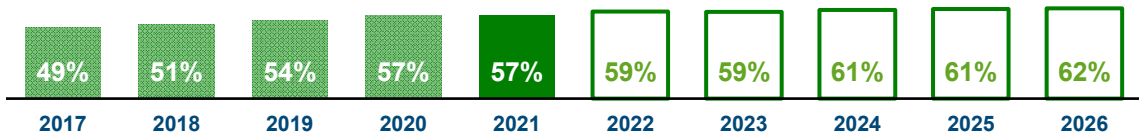
C. Maturity Measures

The metrics presented below are different ways of understanding the plan's maturity level, both in the past and as it is expected to change in the coming years.

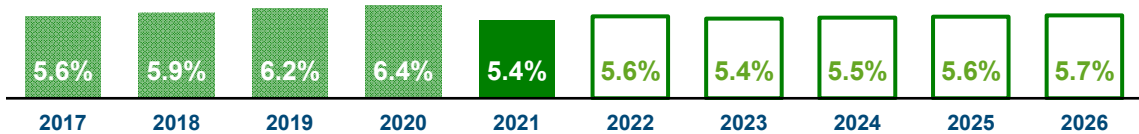
Asset Volatility Ratio: Market Value of Assets compared to Payroll



Accrued Liability for members in pay status compared to total Accrued Liability

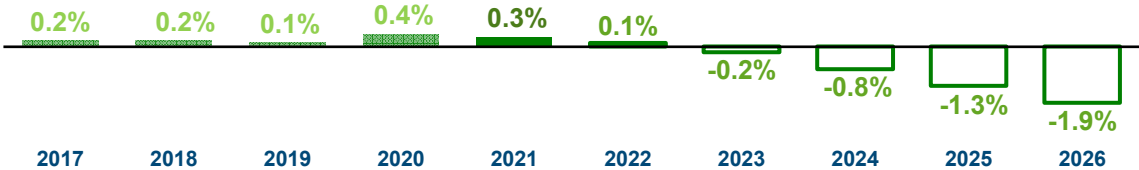


Benefit Payments compared to Market Value of Assets

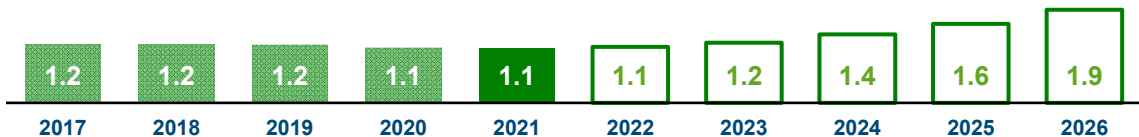


Net Cash Flows compared to Market Value of Assets

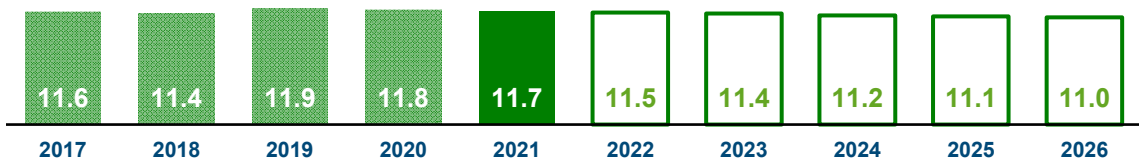
Net Cash Flows = Contributions - Benefit Payments and Administrative Expenses



Benefit Payments compared to Town Contributions



Duration of Accrued Liability (based on GASB 68 sensitivity disclosures)



Appendix A - Actuarial Funding Method

The actuarial funding method used in the valuation of this Plan is known as the Entry Age Normal Method. The Actuarially Determined Contribution consists of three pieces: Normal Cost plus a Past Service Cost payment to gradually eliminate the Unfunded Accrued Liability plus Interest to reflect the timing of the contribution relative to the valuation date.

The Normal Cost is determined by calculating the present value of future benefits for present active Members that will become payable as the result of death, disability, retirement or termination. This cost is then spread as a level percentage of earnings from entry age to termination as an Active Member. If Normal Costs had been paid at this level for all prior years, a fund would have accumulated. Because this fund represents the portion of benefits that would have been funded to date, it is termed the Accrued Liability. In fact, it is calculated by adding the present value of benefits for Retired Members and Terminated Vested Members to the present value of benefits for Active Members and subtracting the present value of future Normal Cost contributions.

The funding cost of the Plan is derived by making certain specific assumptions as to rates of interest, mortality, turnover, etc. which are assumed to hold for many years into the future. Since actual experience may differ somewhat from the assumptions, the costs determined by the valuation must be regarded as estimates of the true costs of the Plan.

The Unfunded Accrued Liability is the excess of the Accrued Liability over the assets which have been accumulated for the plan. This Unfunded Accrued Liability is amortized as a level percent over 14 years starting with July 1, 2019. The amortization period will decline by 1 each year until it reaches 10 years, after which time it will remain at 10 years.

The Actuarial Value of Assets is determined by recognizing market gains and losses non-asymptotically over a five year period.

The long-range forecasts included in this report have been developed by assuming that members will terminate, retire, become disabled, and die according to the actuarial assumptions with respect to these causes of decrement, and that pay increases, cost of living adjustments, and so forth will likewise occur according to the actuarial assumptions. For those unions whose new employees are eligible to participate in this plan, members who are projected to leave active employment are assumed to be replaced by new active members with the same age, service, gender, and pay characteristics as those hired in the past few years.

Appendix B - Actuarial Assumptions

Each of the assumptions used in this valuation was set based on industry standard published tables and data, the particular characteristics of the plan, relevant information from the plan sponsor or other sources about future expectations, and our professional judgment regarding future plan experience. We believe the assumptions are reasonable for the contingencies they are measuring, and are not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

Interest Rate Non-Hybrid plan: 6.25%

Hybrid plan: 5.00%

Inflation 2.75%

Salary Scale Graded salary growth with an ultimate rate of 3.00%.

Age	Police	Town/BOE
25	6.50%	6.25%
30	6.00%	5.75%
35	4.75%	4.50%
40	3.75%	4.25%
45	3.50%	4.00%
50	3.50%	3.50%
55	3.25%	3.25%
60+	3.00%	3.00%

Amortization Growth Rate 3.50%

Administrative Expenses Prior year administrative expenses increased 3.0% and rounded to the nearest hundred.

Mortality Public Safety and Blue Collar Employees: PubS-2010 Mortality Table with generational projection with 100% of MP 2019 Ultimate Scale, with employee rates before benefit commencement and healthy or disabled annuitant rates after benefit commencement. This assumption includes a margin for improvements in longevity beyond the valuation date.

All Others: PubG-2010 Mortality Table with generational projection with 100% of MP 2019 Ultimate Scale, with employee rates before benefit commencement and healthy or disabled annuitant rates after benefit commencement. This assumption includes a margin for improvements in longevity beyond the valuation date.

Appendix B - Actuarial Assumptions

Survivor's Benefit

It is assumed that husbands are 3 years older than wives and that 90% of the male participants and 60% of the female participants who are or will become eligible for coverage under the Survivor's Benefit will be survived by an eligible survivor.

Turnover

Police: None

Town/BOE: The probability that a participant at the indicated age will terminate is:

Age	Rate
20	13.95%
25	10.20%
30	7.58%
35	5.93%
40	4.88%
45	4.13%
50	3.38%
55	2.33%
60+	0.00%

Retirement

Participants are assumed to retire as shown below:

Town		BOE	
Age	Rate	Age	Rate
60	3%	63-64	10%
61-64	15%	65	50%
65	50%	66-69	30%
66-69	30%	70	100%
70	100%		

Police		Police	
Hired before January 1, 2013		Hired on or after January 1, 2013	
Service	Rate	Service	Rate
20	10%	25	50%
21	15%	26-29	20%
22	30%	30	100%
23-24	15%		
25-29	30%		
30	100%		

For **Police**, minimum assumed retirement age is 50; 100% are assumed to retire at age 60.

Appendix B - Actuarial Assumptions

Disability	50% of the 1985 Disability Pension Table Class 1 Rates. 50% of Police who become disabled are assumed to have a Service Connected Disability.
Compensated Absences	Increase active liability and normal cost by 7% for Town and Highway and by 10% for Police hired before January 1, 2013.
Cost of Living Adjustments	Non-Hybrid: 2.75% Hybrid: 2.00% Cost of Living Adjustments are not available for some groups and are subject to limitations for some groups. These restrictions are reflected in accordance with the plan provisions.

Appendix C - Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Eligibility

Completed one year of continuous Service and elects to make Mandatory Employee Contributions. No Division 005 (Highway / Vehicle Maintenance / Refuse) or Division 007 (Facilities / Wastewater) employees hired on or after September 1, 2013 are eligible to enter the Plan. All other Town and Housing Authority employees hired on or after June 1, 2013 will be eligible for benefits under the Hybrid plan benefit structure.

Earnings

Basic compensation received from the Employer for services as an Employee, plus overtime payments, commissions, bonuses and any other additional compensation.

Effective July 1, 2004, for Employees hired on or after such date, Highway / Vehicle Maintenance / Refuse employees shall not include sick leave payments as Earnings.

Effective July 1, 1994, Facilities / Wastewater employees shall not include sick leave payments as Earnings.

Effective January 1, 2013, for Employees hired on or after such date, Police employees shall not include overtime, private duty or sick leave payments as Earnings.

Average Annual Earnings

Town, Board of Education, Dispatchers, Housing Authority and Facilities / Wastewater

The highest average Earnings received in any five consecutive Earnings Computation Periods during the Participant's period of Credited Service in which their Earnings were highest and dividing the aggregate of such five years Earnings by 5.

Police

The highest average Earnings received in any 48 consecutive calendar months during the Participant's period of Credited Service in which Earnings were highest and dividing the aggregate of such 48 months Earnings by 4.

Highway / Vehicle Maintenance / Refuse / Hybrid plan groups

The highest average Earnings received in any 60 consecutive calendar months during the Participant's period of Credited Service in which their Earnings were highest and dividing the aggregate of such five years Earnings by 5.

Appendix C - Summary of Plan Provisions

Service	All years of Service with the employer, computed to the nearest 1/12 of a year, from date of employment to date of termination of employment, retirement date or date of death.
Credited Service	Participant's continuous Service completed prior to July 1, 1963 and subsequent to the date of coverage during which they have made contributions in accordance with the eligibility requirements, computed to the nearest 1/12 of a year, excluding any time absent from work due to a qualified disability, and excluding service after age 60 for police officers.
Social Security	The yearly Primary Insurance Amount for which the participant is estimated to be eligible at his or her Social Security Normal Retirement Age under the Social Security Act as in effect on their Normal Retirement Date, or the date their Service ceases, if earlier. The estimate is based upon the participant's compensation for which they have paid taxes under the Social Security Act. It is assumed that the participant will not receive any future compensation which would be treated as wages for the purpose of the Social Security Act.
Normal Form of Annuity	Single Life Annuity
Normal Retirement Date	Town, Board of Education, Highway / Vehicle Maintenance / Refuse, Housing Authority and Facilities / Wastewater / Hybrid plan groups If a participant became covered under the Plan prior to January 1, 1983, the day on which the participant attains age 65. If a participant becomes covered under the plan on or after January 1, 1983, the day on which the participant attains age 65, or, if later, the earlier of the day on which the participant completes ten years of Service or the tenth anniversary of their participation commencement date. Police Effective July 1, 1991, the day on which the participant attains age 55 or, if earlier, the day on which the participant completes 25 years of Service. Effective July 1, 1994, for a participant with an Hour of Service on or after July 1, 1994, the day on which the participant attains age 55 or, if earlier, the day on which the participant completes 20 years of Service or the date the participant would have completed 20 years of Service if the participant's employment had not ceased. For new participants hired on or after January 1, 2013, the day on which the participant attains age 55, or, if earlier, the day on which the participant completes 25 years of Service.

Appendix C - Summary of Plan Provisions

Normal Retirement Date

Dispatchers

If a participant became covered under the Plan prior to January 1, 1983, the day on which the participant attains age 65.

If a participant became covered under the Plan on or after January 1, 1983, but prior to July 1, 1991, the day on which the participant attains age 65 or, if later, the earlier of the day on which the participant completes 10 years of Service with the Employer or the 10th anniversary of their participation commencement date.

On or after July 1, 1991, the day on which the participant attains age 62 or, if later the earlier of the day on which the Participant completes 10 years of Service or the 10th anniversary of their participation commencement date.

Normal Retirement Benefit

Town, Housing Authority, Dispatchers, and Highway / Vehicle Maintenance / Refuse (CILU)

1.75% of Average Annual Earnings times Credited Service plus 0.50% of Average Annual Earnings over \$15,000 times Credited Service.

Board of Education

2.00% of Average Annual Earnings times Credited Service.

Police

Greater of 2.50% of Average Annual Earnings times Credited Service (maximum 30 years of Credited Service or 75% of Annual Average Earnings) or \$360.

For Officers hired on or after January 1, 2013, 2.0% of Final Average Earnings times Credited Service to a maximum of 70% of Annual Average Earnings.

Facilities / Wastewater (AFSCME)

2.15% of Average Annual Earnings times Credited Service.

Maximum Benefit – 70% of Average Annual Earnings for Employees hired after November 29, 2005. 60% of Average Annual Earnings for Employees hired after June 30, 2008.

Hybrid plan groups

1.50% of Average Annual Earnings times Credited Service (maximum 30 years of Credited Service or 45% of Annual Average Earnings).

Appendix C - Summary of Plan Provisions

Vested Benefit Accrued benefit as of date of termination adjusted by the applicable vesting percentage, payable as of Normal Retirement Date.

Vesting Schedule **Town, Housing Authority, Board of Education, Highway / Vehicle Maintenance / Refuse and Dispatchers**

Years of Service	Vesting Percentage
0 ≤ Years of Service < 5	0%
5 ≤ Years of Service < 6	50%
6 ≤ Years of Service < 7	60%
7 ≤ Years of Service < 8	70%
8 ≤ Years of Service < 9	80%
9 ≤ Years of Service < 10	90%
10 ≤ Years of Service	100%

Police / Hybrid plan groups

Years of Service	Vesting Percentage
0 ≤ Years of Service < 10	0%
10 ≤ Years of Service	100%

Facilities / Wastewater

Years of Service	Vesting Percentage
0 ≤ Years of Service < 5	0%
5 ≤ Years of Service < 6	80%
6 ≤ Years of Service < 7	90%
7 ≤ Years of Service	100%

Early Retirement Date Ten years early with 10 years of Service.

Early Retirement Benefit Normal Retirement benefit accrued to early retirement, actuarially reduced for the number of months the participant's Annuity Commencement Date precedes the participant's Normal Retirement Date.

Appendix C - Summary of Plan Provisions

Pre Retirement Spouse Benefit

Town, Housing Authority, Board of Education, Highway / Vehicle Maintenance / Refuse, Dispatchers and Facilities / Wastewater / Hybrid plan groups

To be eligible, must be actively contributing to the plan, have attained age 40 with 10 years of Service, and been married one full year prior to death. The benefit is the greater of 50% of the Ultimate Benefit times a Spouse Age Adjustment Factor or \$120.

Police

To be eligible, must be actively contributing to the plan, have been married one full year prior to death, and death occurs within two years of a Service connected incident. The benefit is the lesser of 2.50% of Average Annual Earnings times Credited Service at NRD or 75% of Average Annual Earnings.

Disability Eligibility

Town, Housing Authority, Board of Education, Highway / Vehicle Maintenance / Refuse, Dispatchers and Facilities / Wastewater / Hybrid

Actively contributing to the plan and 10 years of continuous Service and total disablement.

Police

Non Service Connected Disability - Attained age 40 with 10 years of Service.

Service Connected Disability - Totally and permanently disabled.

Disability Benefit Payable Before Normal Retirement Date

Town / Housing Authority / Hybrid plan groups

The lesser of 75% of Earnings at date of disability or \$15,000, minus Worker's Compensation.

Highway / Vehicle Maintenance / Refuse and Facilities / Wastewater

Lesser of 75% of Earnings at date of disability or \$18,750.

Police

Non Service Connected Disability: 2.50% of Average Annual Earnings times Credited Service as of date of disability (maximum 30).

Service Connected Disability: lesser of 2.50% of Average Annual Earnings times Credited Service at NRD (maximum 30) or 75% of Average Annual Earnings as of date of disability.

Appendix C - Summary of Plan Provisions

Disability Benefit Payable Before Normal Retirement Date

Board of Education and Dispatchers

Non Service Connected Disability: lesser of (A) or (B), minus Worker's Compensation

- A. 1.0% of Average Annual Earnings times Credited Service at Disability plus 0.67% of Average Annual Earnings over \$4,800 times Credited Service at Disability.
- B. 66.67% of Average Annual Earnings less 66.67% of Social Security.

Service Connected Disability: lesser of [greater of (A) or (B)] and (C), minus Worker's Compensation

- A. 1.0% of Average Annual Earnings times Credited Service at Disability plus 0.67% of Average Annual Earnings over \$4,800 times Credited Service at Disability.
- B. 50.00% of Average Annual Earnings less 66.67% of Social Security.
- C. 66.67% of Average Annual Earnings less 66.67% of Social Security.

Disability Benefit Payable After Normal Retirement Date

Town / Housing Authority / Dispatchers / Hybrid plan groups

Lesser of 50% of Earnings at date of disability or \$10,000.

Highway / Vehicle Maintenance / Refuse and Facilities / Wastewater

Lesser of 50% of Earnings at date of disability or \$14,000.

Police

Non Service Connected Disability: 2.50% of Average Annual Earnings times Credited Service as of date of disability (maximum 30).

Service Connected Disability: Lesser of 2.50% of Average Annual Earnings times Credited Service at NRD (maximum 30) or 75% of Average Annual Earnings as of date of disability.

Appendix C - Summary of Plan Provisions

Disability Benefit Payable After Normal Retirement Date

Board of Education

Non Service Connected Disability: lesser of 1.0% of Average Annual Earnings times Credited Service at Disability plus 0.67% of Average Annual Earnings over \$4,800 times Credited Service at Disability, or 66.67% of Average Annual Earnings less 66.67% of Social Security.

Service Connected Disability: lesser of [greater of (A) or (B)] and (C) minus Worker's Compensation

- A. 1.0% of Average Annual Earnings times Credited Service at Disability plus 0.67% of Average Annual Earnings over \$4,800 times Credited Service at Disability.
- B. 50.00% of Average Annual Earnings less 66.67% of Social Security.
- C. 66.67% of Average Annual Earnings less 66.67% of Social Security.

Death / Termination Refund

Pre Retirement: Refund of Employee Contributions with interest to date of termination or death, if not eligible for Spouse benefit.

Post Retirement: Excess of Employee Contributions with interest over annuity payments.

Appendix C - Summary of Plan Provisions

Employee Contributions

Town and Housing Authority

7.00% of Earnings as of January 1, 2021, increasing to 7.25% as of January 1, 2022. Animal Control Officer is 6.75% of Earnings as of July 1, 2021, increasing to 7.00%, 7.25%, and 7.50% as of July 1, 2022, 2023 and 2024, respectively.

Effective August 1, 2013, Employee Contributions are made on a pre-tax (Section 414(h)(2)) basis.

Hybrid plan group

6.50% of Earnings.

Board of Education (excluding Custodians)

Secretary/Paraprofessionals/Nurses: 6.75% of Earnings as of July 1, 2021, increasing to 7.00%, 7.25%, 7.50% and 7.75% as of July 1, 2022, 2023, 2024 and 2025, respectively.

Non-Contract/Security Guards/School Foods: 6.75% of Earnings as of July 1, 2021.

Board of Education (Custodians)

6.75% as of July 1, 2021, previously 6.00% of Earnings.

Police

Hired before January 1, 2013: 8.75% of Earnings as of July 1, 2021, increased to 9.00% and 9.25% as of July 1, 2022 and 2023, respectively. Reduced to 5.25% after 30 years of service.

Hired on or after January 1, 2013: 8.75% of Earnings. Reduced to 5.25% after 30 years of service.

Highway / Vehicle Maintenance / Refuse

7.00% of Earnings as of July 1, 2021, increasing to 7.25%, 7.50% and 7.75% as of January 1, 2022, 2023 and 2024, respectively.

Effective September 1, 2013, Employee Contributions are made on a pre-tax (Section 414(h)(2)) basis.

Dispatchers

7.00% of Earnings as of July 1, 2021, increasing to 7.25%, 7.50% and 7.75% as of July 1, 2022, 2023 and 2024, respectively.

Facilities / Wastewater

7.50% of Earnings as of July 1, 2021.

Effective September 1, 2013, Employee Contributions are made on a pre-tax (Section 414(h)(2)) basis.

Appendix C - Summary of Plan Provisions

Interest Credited on Employee Contributions 6.00%

Eligibility for Cost of Living Adjustments Any participant, contingent annuitant, dependent spouse or beneficiary who is currently receiving retirement payments. Police who retired prior to February 1, 2013: at age 55. Police who retire on or after February 1, 2013: at age 57. Hybrid plan: at age 67.

Amount of Cost of Living Adjustments The annual cost-of-living adjustment is effective May 1st each year and is equal to the ratio of the current year's Consumer Price Index over the Consumer Price Index in the year of retirement, subject to certain applicable annual and lifetime maximums:

Town, Housing Authority, Board of Education and Dispatchers

Maximum Annual Adjustment 5.00%
Maximum Lifetime Adjustment 50.00%

Highway / Vehicle Maintenance / Refuse

Maximum Annual Adjustment 5.00% Employment Date ≤ 6/30/2004
Maximum Lifetime Adjustment 50.00%

Highway employees hired on or after July 18, 2005 are not eligible for cost-of-living adjustments.

Facilities / Wastewater

Maximum Annual Adjustment 5.00% Employment Date ≤ 11/28/2005
Maximum Annual Adjustment 2.50% Employment Date > 11/28/2005 and ≤ 06/30/2008
Maximum Lifetime Adjustment 50.00%

Wastewater / Building Maintenance employees hired on or after July 1, 2008 are not eligible for cost-of-living adjustments.

Police

Maximum Annual Adjustment 4.00% Employment Date ≤ 12/13/2005
Maximum Annual Adjustment 3.00% Employment Date ≥ 12/14/2005
Maximum Lifetime Adjustment 50.00% Retirement Date ≤ 06/30/1987
Maximum Lifetime Adjustment N/A Retirement Date ≥ 07/01/1987

Police hired on or after January 1, 2013 are not eligible for cost-of-living adjustments.

Hybrid plan group

Maximum Annual Adjustment 2.00%
Maximum Lifetime Adjustment 50.00%

Appendix D - Glossary

Actuarial Cost Method - This is a procedure for determining the Actuarial Present Value of Benefits and allocating it to time periods to produce the Actuarial Accrued Liability and the Normal Cost.

Accrued Liability - This is the portion of the Actuarial Present Value of Benefits attributable to periods prior to the valuation date by the Actuarial Cost Method (i.e., that portion not provided by future Normal Costs).

Actuarial Assumptions - With any valuation of future benefits, assumptions of anticipated future events are required. If actual events differ from the assumptions made, the actual cost of the plan will vary as well. Some examples of key assumptions include the interest rate, salary scale, and rates of mortality, turnover and retirement.

Actuarial Present Value of Benefits - This is the present value, as of the valuation date, of future payments for benefits and expenses under the Plan, where each payment is: a) multiplied by the probability of the event occurring on which the payment is conditioned, such as the probability of survival, death, disability, termination of employment, etc.; and b) discounted at the assumed interest rate.

Actuarial Value of Assets - This is the value of cash, investments and other property belonging to the plan, typically adjusted to recognize investment gains or losses over a period of years to dampen the impact of market volatility on the Actuarially Determined Contribution.

Actuarially Determined Contribution (“ADC”) - This is the employer’s periodic contributions to a defined benefit plan, calculated in accordance with actuarial standards of practice.

Attribution Period - The period of an employee’s service to which the expected benefit obligation for that employee is assigned. The beginning of the attribution period is the employee’s date of hire and costs are spread across all employment.

Interest Rate - This is the long-term expected rate of return on any investments set aside to pay for the benefits. In a financial reporting context (e.g., GASB 68) this is termed the Discount Rate.

Normal Cost - This is the portion of the Actuarial Present Value of Benefits allocated to a valuation year by the Actuarial Cost Method.

Past Service Cost - This is a catch-up payment to fund the Unfunded Accrued Liability over time (generally 10 to 30 years). A closed amortization period is a specific number of years counted from one date and reducing to zero with the passage of time; an open amortization period is one that begins again or is recalculated at each valuation date. Also known as the Amortization Payment.

Return on Plan Assets - This is the actual investment return on plan assets during the fiscal year.

Unfunded Accrued Liability - This is the excess of the Accrued Liability over the Actuarial Value of Assets.



Glastonbury Retirement Plans

Board of Finance Meeting Materials - January 2022

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Past performance does not indicate future performance and there is possibility of a loss.

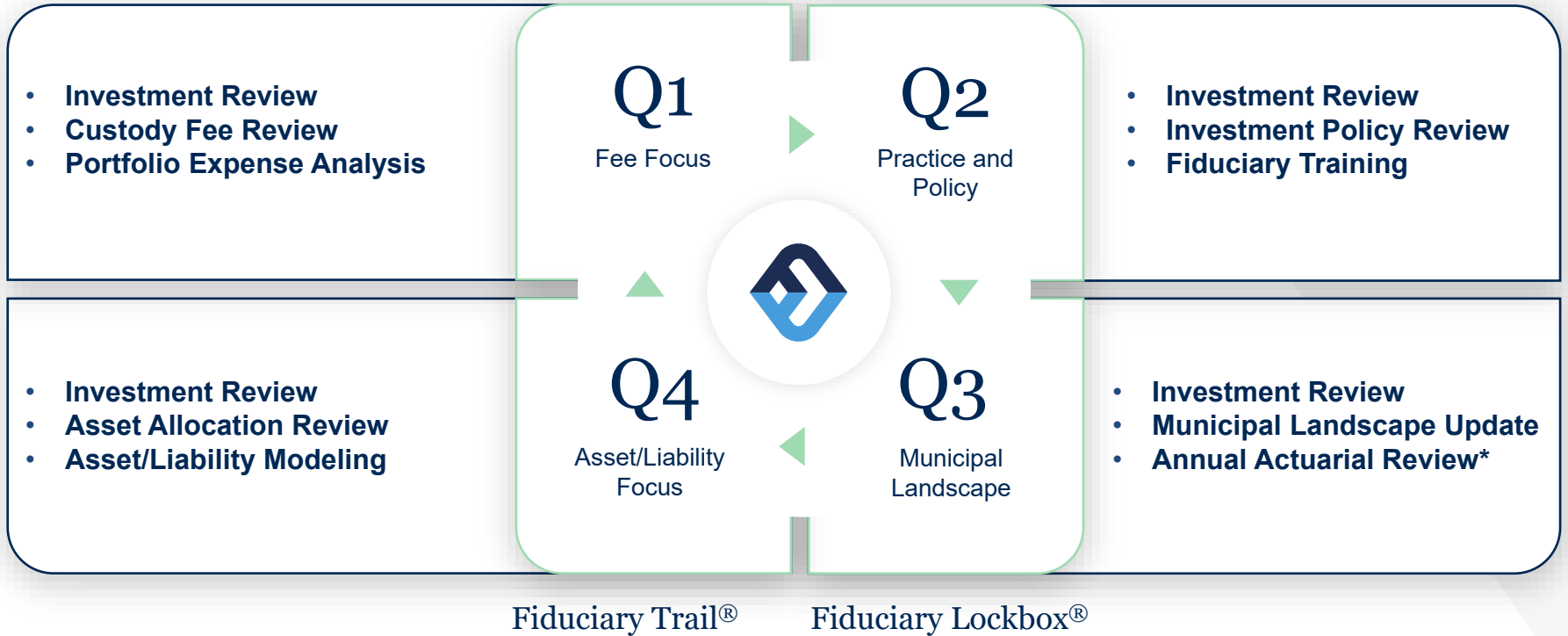
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Fiduciary Governance Calendar



*Timing of actuarial review is dependent on client's individual plan and/or fiscal year and actuarial input.



January 2022 Investment Outlook

Key Observations

- We expect economic recovery to persist in 2022 at a more modest pace as extraordinary pandemic stimulus begins to moderate. Ongoing challenges with a recalibrating global supply chain are expected to continue to lead to persistently higher levels of inflation than we have seen over the last several decades.
- The investing backdrop remains mostly constructive in our view, but investors will likely be served by taking a thoughtful and diversified approach to risk-taking. The global economy is still in transition and pandemic-driven economic uncertainties are ongoing.

Capital Market Factors

- **Economic Growth:** The Conference Board's 2022 global economic growth forecast is 3.9 percent, a level characterized by the Board as "above potential recovery growth." 2023-2026 annualized growth is expected to moderate to 2.5 percent.
- **Monetary Policy:** The Fed's rotation to a tighter policy stance is expected to slow and then end its \$120 billion monthly asset purchase program sometime in 2022 and begin to raise interest rates. At its December 2021 meeting, the Fed indicated an accelerated pace toward the elimination of its bond buying efforts by the middle of next year and a majority of FOMC members now expect at least three interest rate hikes by year-end 2022.
- **Fiscal Policy:** Massive pandemic-relief and infrastructure spending will likely continue to drive short-term deficits, stimulate near-term economic growth and fuel inflationary forces.
- **Inflation:** Current year-over-year inflation is running at a level in excess of 6 percent, which is meaningfully above the Fed's stated target, and is likely to remain high in the immediate future. However, the bond market's expectation is for inflation to gradually moderate back towards 2.5 percent over the next decade.
- **Currency:** The dollar strengthened in 2021 and was supported by a more consistent economic recovery in the U.S. compared to global peers. A more aggressive path to interest rate hikes by the Fed when compared to its peer institutions would support U.S. dollar strength, but volatility is expected as investors continue to digest the implications of Fed tightening in conjunction with actions of other global central banks.



2022-2041 Twenty-Year Outlook

Investment Themes for 2022-2041

Asset Class	2022 Outlook E(R) - 20 Year	2021 Outlook E(R) - 20 Year	Year Over Year Change
Inflation	2.5%	1.8%	0.7%
Cash*	0.7%	0.7%	0.0%
TIPS	2.1%	1.7%	0.3%
Muni Bond**	2.1%	1.6%	0.5%
Muni High Yield**	5.6%	7.7%	-2.1%
US Bond	2.5%	2.1%	0.3%
Dynamic Bonds***	2.8%	2.8%	-0.1%
Global Bonds	2.2%	1.8%	0.4%
Corp HY Bond	4.5%	4.4%	0.1%
Global Equity	8.1%	7.7%	0.5%
US Equity (AC)	6.8%	6.4%	0.4%
US Equity (LC)	6.6%	6.3%	0.4%
US Equity (MC)	7.0%	6.6%	0.4%
US Equity (SC)	7.0%	6.7%	0.3%
Int'l Dev. Equity	8.6%	7.9%	0.8%
EM Equity	10.5%	9.4%	1.2%
Real Estate	6.3%	6.2%	0.1%
Broad Real Assets****	5.6%	4.8%	0.9%
Marketable Alternatives	6.8%	6.3%	0.5%
Private Equity	9.8%	9.4%	0.4%

*3-month forecast

**Tax equivalent yield based on highest marginal tax rate (37%)

***33% Cash, 33% Corp HY, and 34% Global Bonds

****20% REITs, 20% Global Infrastructure, 20% Commodities, 20% US Bonds, 15% Corp High Yield, 5% TIPS

- Nominal return forecasts rose for most asset classes, but rising inflation expectations means most asset classes have declining year-over-year real return expectations.
- Meaningfully negative real returns continues to make cash an expensive opportunity cost for investors.
- Global bond yields generally rose. Despite the increase, most fixed income asset class forward-looking return expectations remain below expected inflation levels.
- Earnings accelerated in 2021 and expanded faster than stock prices. Non-U.S. equities remain more attractive on a valuation basis as U.S. equities have grown to represent 61 percent of the global equity market capitalization compared to 58 percent a year ago.
- With higher inflation expectations, real assets remain an important diversifier. Within real assets, broad real assets return expectations rose meaningfully faster than real estate.
- Alternative asset class return expectations rose modestly.

For additional information on forecast methodologies, please speak with your advisor. Please see Index Proxy Summary slide at the end of this presentation for summary of indexes used to represent each asset class. Past performance does not indicate future performance and there is a possibility of a loss.



Asset Allocation Analysis

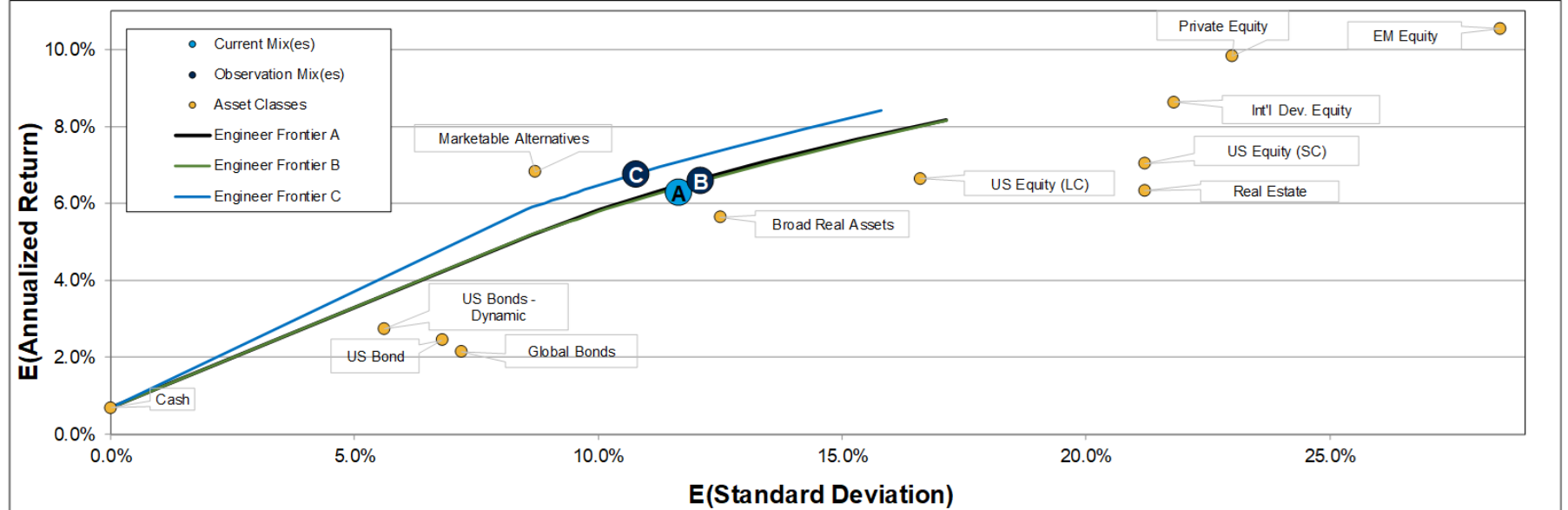
- We believe **Asset Allocation** is the primary determinant of long-term investment results.
- Our proprietary **Frontier Engineer**[®] system is the cornerstone of asset allocation decisions.
- Our Capital Markets Group develops **Capital Market Assumptions** (CMAs) for each major asset class at least annually.
 - ✓ The Capital Markets Group considers and analyzes a wide variety of factors that we believe will have the greatest impact on future returns and risks for each asset class studied.
 - ✓ Our CMAs are not intended to predict the future return in any single year, but rather to reflect our median expected outcome over the next ten years.
 - ✓ Our forecasting efforts center on a **ten-year horizon**. Any adjustments made to extend the forecast horizon to **twenty years** or beyond are grounded in our expectation that asset classes ultimately mean revert toward longer term historical averages.
 - ✓ Fiducient Advisors' Capital Markets Team develops our CMAs based on a “building block” approach outlined in our white paper “Capital Market Forecasts”. *(Copies are available upon request.)*
- **Correlations** (how asset classes behave in reference to one another) also significantly impact asset allocation analysis.
- **Fat Tails** (non-normal return elements of skewness and kurtosis) also meaningfully impact our asset allocation analysis.
- Given the current market environment, full market cycle (10 year) return assumptions are lower than long term (20 year) assumptions.

FRONTIER ENGINEER® ANALYSIS

20 YEAR OUTLOOK



12/31/2021	Asset Allocation																Forecasts				Past (1/88-12/21)	
	Fixed Income	Equity	Real Assets	Alternatives	Cash	US Bond	US Bonds - Dynamic	Global Bonds	US Equity (LC)	US Equity (SC)	Int'l Dev. Equity	EM Equity	Real Estate	Broad Real Assets	Marketable Alternatives	Private Equity	Annualized Return	Annualized Volatility	Normal 100 Year Flood*	Non-Normal 100 Year Flood**	Annualized Return	Annualized Volatility
Current Mix (A)	33%	56%	11%		0.5%	27.5%		5.0%	29.5%	10.5%	11.6%	4.4%	6.0%	5.0%			6.3%	11.6%	-20%	-26%	9.0%	9.6%
Observation Mix (B)	33%	58%	9%		1%	19%	10%	3%	25%	8%	17%	8%	3%	6%			6.6%	12.1%	-21%	-28%	8.8%	9.8%
Observation Mix (C)	33%	45%	7%	15%	1%	19%	10%	3%	19%	6%	13%	6%	3%	5%	8%	8%	6.8%	10.8%	-18%	-24%	9.0%	8.2%



*The expected one in a hundred worst case calendar year return based on normally distributed capital market assumptions. Greater losses are possible (1% expected likelihood).

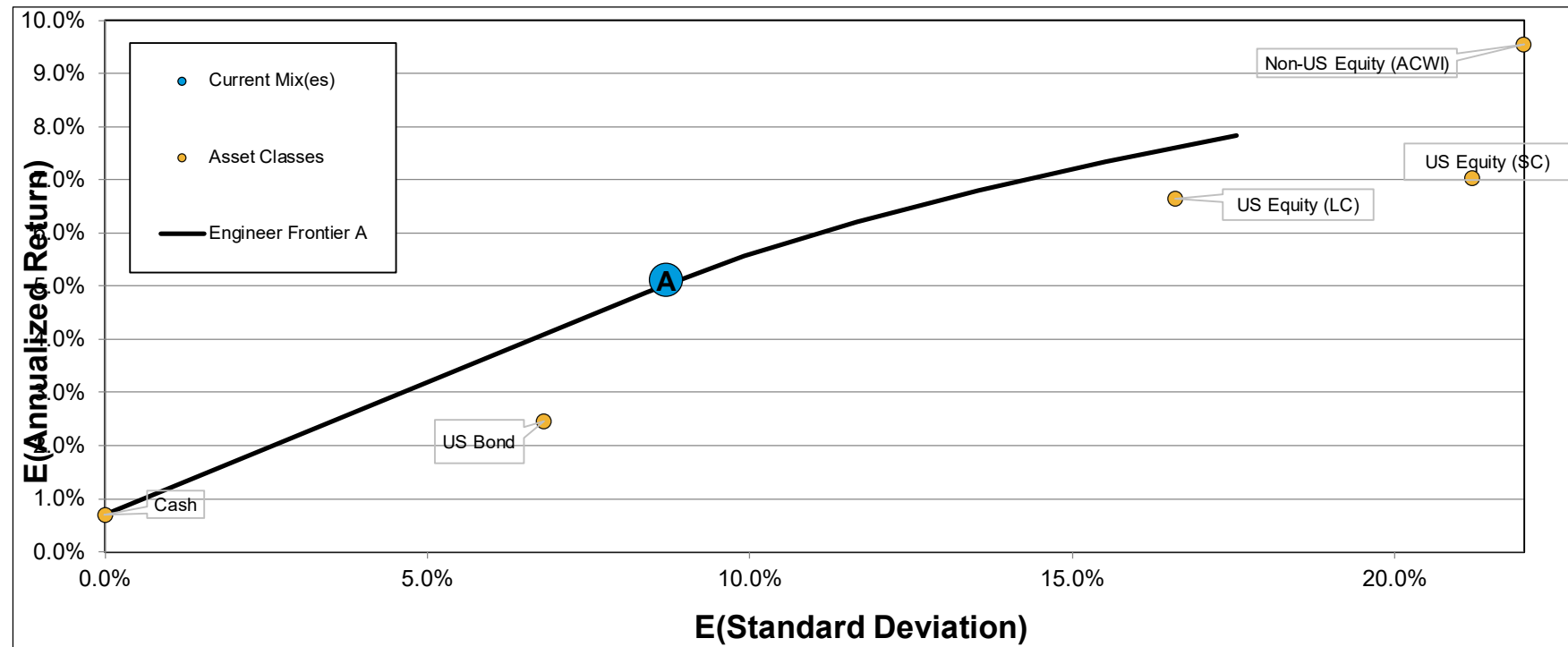
**The expected one in a hundred worst case calendar year return based on non-normally distributed capital market assumptions (factoring in skewness & kurtosis). Greater losses are possible (1% expected likelihood).

Historical Returns and Risk Metrics for each Mix represent back-tested calculations developed with the benefit of hindsight. Return calculations use an asset-weighted methodology based on the target asset allocation of each mix and the total return of index proxies used to represent each asset class and are gross of fees. Historical returns are hypothetical and do not represent returns earned by a client. It is not possible to invest in an index. Please see disclosures at the end of this presentation for additional important information, including index proxies used to represent each asset class. Please ask for a copy of Fiducient Advisors' white paper titled 10-Year Capital Market Forecasts. Past performance does not indicate future performance and it is possible to lose money when investing.



Frontier Engineer® Analysis

12/31/2021	Asset Allocation									Forecasts				Past (1/88-12/21)	
	Fixed Income	Equity	Real Assets	Alternatives	Cash	US Bond	US Equity (LC)	US Equity (SC)	Non-US Equity (ACWI)	Annualized Return	Annualized Volatility	Normal 100 Year Flood*	Non-Normal 100 Year Flood**	Annualized Return	Annualized Volatility
Current Mix (A)	60%	40%				60.0%	18.8%	6.3%	15.0%	5.1%	8.7%	-15%	-19%	7.7%	6.5%



*The expected one in a hundred worst case calendar year return based on normally distributed capital market assumptions. Greater losses are possible (1% expected likelihood).

**The expected one in a hundred worst case calendar year return based on non-normally distributed capital market assumptions (factoring in skewness & kurtosis). Greater losses are possible (1% expected likelihood).

Historical Returns and Risk Metrics for each Mix represent back-tested calculations developed with the benefit of hindsight. Return calculations use an asset-weighted methodology based on the target asset allocation of each mix and the total return of index proxies used to represent each asset class and are gross of fees. Historical returns are hypothetical and do not represent returns earned by a client. It is not possible to invest in an index. Please see disclosures at the end of this presentation for additional important information, including index proxies used to represent each asset class. Please ask for a copy of Fiducient Advisor's white paper titled 10-Year Capital Market Forecasts. Past performance does not indicate future performance and it is possible to lose money when investing.

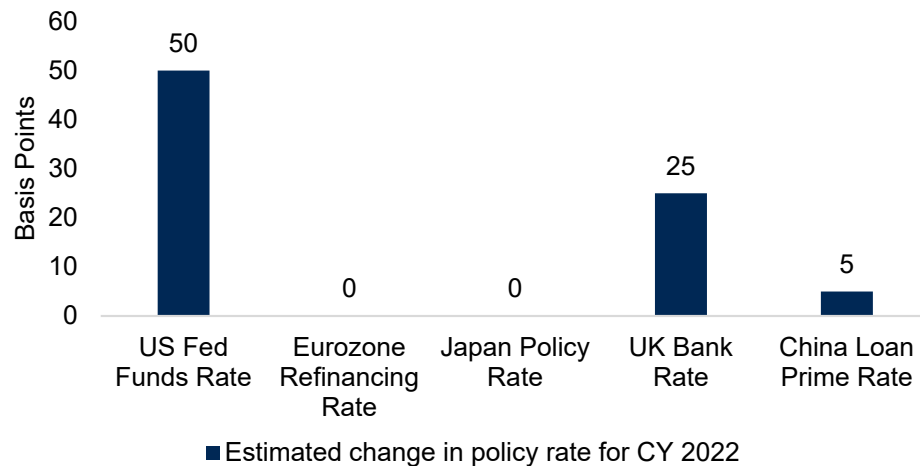


Market Themes

1. Adaptation and flexibility should prove key for investors in 2022, driven by concern for moderating return opportunities and heightened capital market volatility.
2. Investors should remain attuned to a more differentiated array of central bank responses in the New Year as authorities increasingly customize policies to their particular economic circumstances.
3. U.S. large cap equities were among the leaders this quarter as the reopening trade took a back seat and large growth outpaced value. Real estate markets continued their banner year while fixed income was relatively flat, despite increased rate volatility.

Global Policy Rates

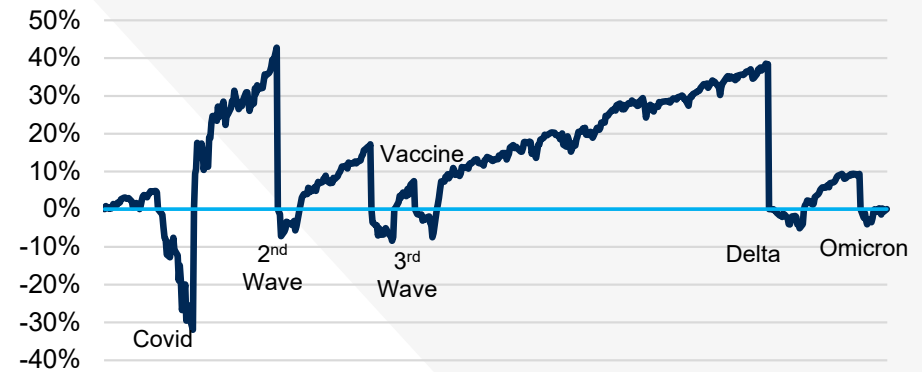
Market expectations are such that central bank coordination is likely to wane in 2022 as policy makers around the world react to their individual markets. This may present both opportunities and risks for investors in the coming quarters.



Source: FactSet. As of January 5, 2022

S&P 500 Drawdowns (% Change from Previous High/Low)

The COVID-19 pandemic has driven volatility over the past two years. Recent variants have had a more subdued impact.



Jan-20 Apr-20 Jul-20 Oct-20 Jan-21 Apr-21 Jul-21 Oct-21

Source: FactSet. As of December 20, 2021

Elevated Rate Volatility

The 10-year U.S. Treasury yield experienced elevated volatility in Q4 as investors digested the emergence of the omicron variant, elevated inflation, an increasingly hawkish Fed and prospects for further economic recovery.



— U.S. 10-Year Treasury Yield

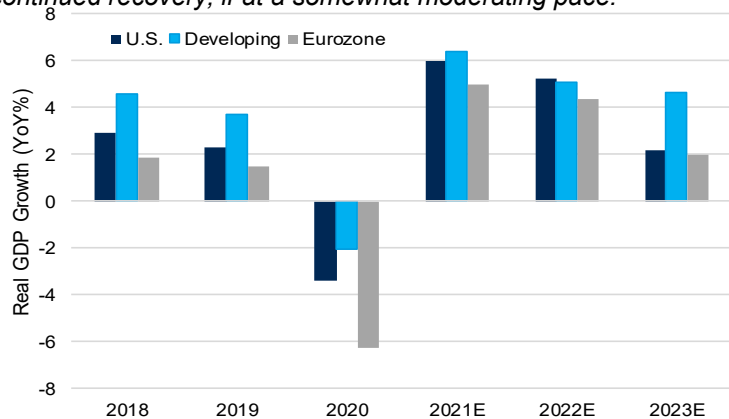
Source: FactSet. As of December 31, 2021.



Economic Review

Real GDP Growth (YoY)

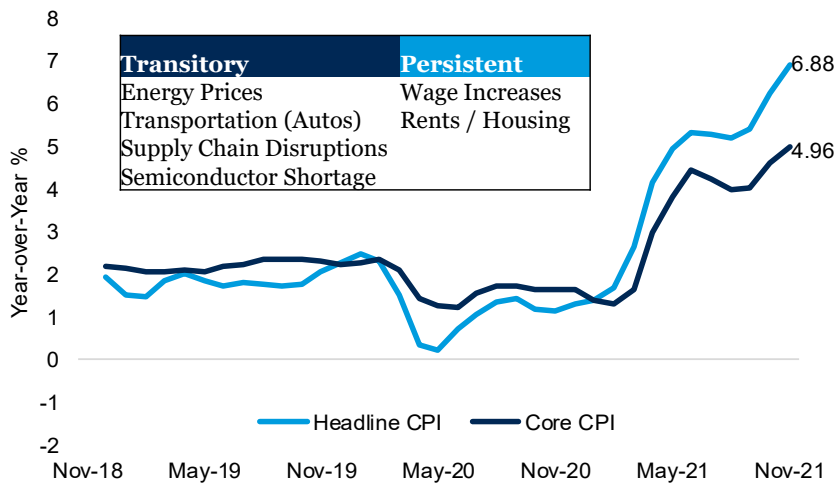
Estimates for positive GDP growth remain strong for 2022. A favorable consumer profile and corporate health provide a solid foundation for continued recovery, if at a somewhat moderating pace.



Source: FactSet, IMF World Economic Outlook. As of December 31, 2021.

U.S. Inflation

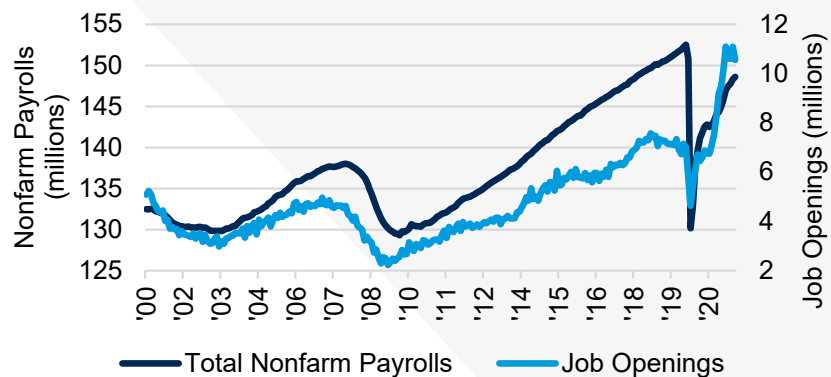
Inflation remains elevated, with energy and transportation seeing the largest increases year-over-year. Inflation may moderate but we don't expect it to revert to benign pre-pandemic levels.



Source: FactSet, Fiducient Advisors. As of November 30, 2021.

U.S. Labor Market

Job openings are at twenty-year highs, yet employment levels (nonfarm payrolls) are still below pre-pandemic levels. This supply/demand imbalance could lead to higher wages and a stronger consumer.



Source: FactSet, U.S. DOL. As of November 30, 2021

Shipping Costs

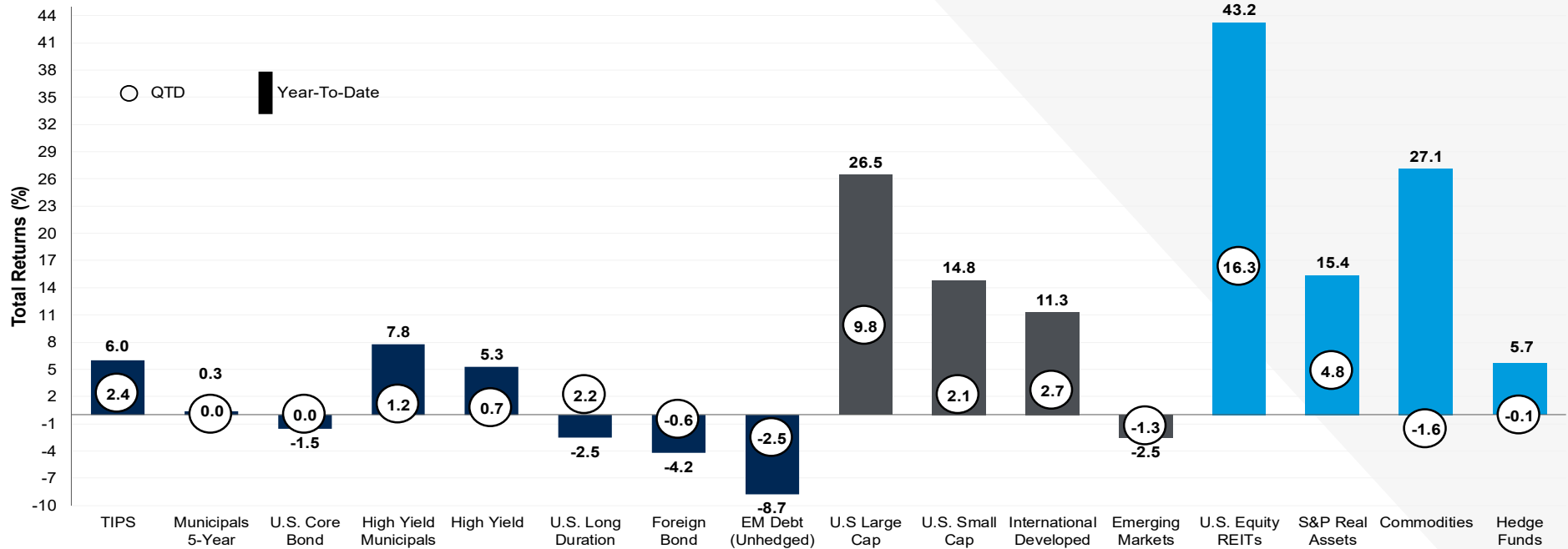
Supply chain issues are easing somewhat. The Baltic Dry Index, a measure of shipping costs of raw materials, has come off recent highs, which could alleviate inflation pressure in the future.



Source: FactSet, Baltic Exchange. As of December 31, 2021



Asset Class Returns



*Hedge fund returns are lagged 1 month. Sources: FactSet, J.P. Morgan, Russell, MSCI, FTSE Russell, Alerian, Morningstar. As of December 31, 2021.

Fixed Income (4Q)

- +/- U.S. bonds were flat on the quarter. A hawkish Federal Reserve incited a flatter yield curve.
- + Credit spreads ultimately ended the quarter tighter as investors continued to demand yield in the low-rate environment.
- Non-USD debt struggled in the period. A rising U.S. dollar coupled with Evergrande's debt default was a headwind for EM debt.

Equity (4Q)

- + Despite a volatile quarter, U.S. and developed international equities ultimately ended the quarter higher following a year-end rally.
- Government regulation and intervention in China continued to weigh on investor enthusiasm, pushing emerging markets into negative territory for the quarter.

Real Asset / Alternatives (4Q)

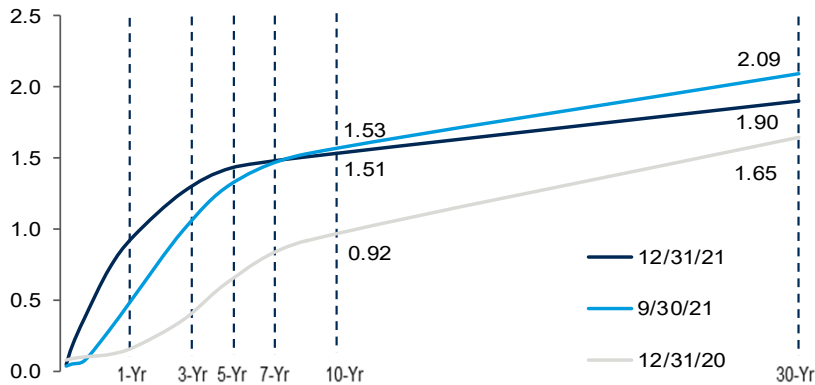
- + REITs benefited from strong industrial, self-storage and residential performance, areas that have continued to benefit during the COVID-19 era.
- Perceptions of lower energy demand due to COVID outbreaks led to falling energy prices, which weighed on the commodity market.



Fixed Income Market Update

U.S. Treasury Yields Curve

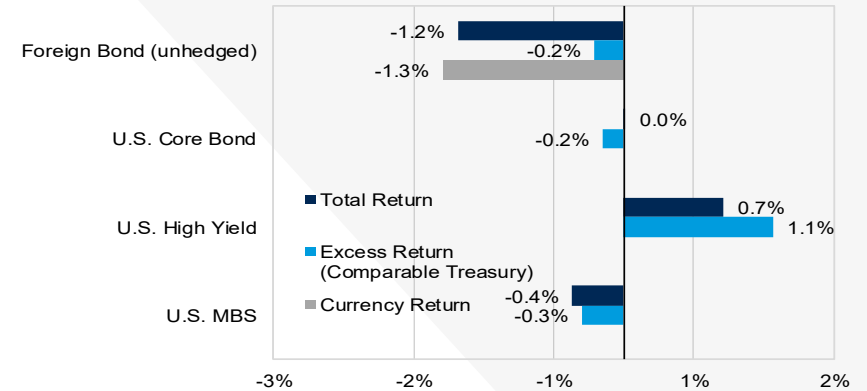
The U.S. curve flattened as the Fed accelerated their tapering program and outlook for rate hikes in 2022 solidified. Concerns about the impact of the omicron variant on the economy put pressure on the long-dated rates.



Source: FactSet

Index Performance Attribution (4Q 2021)

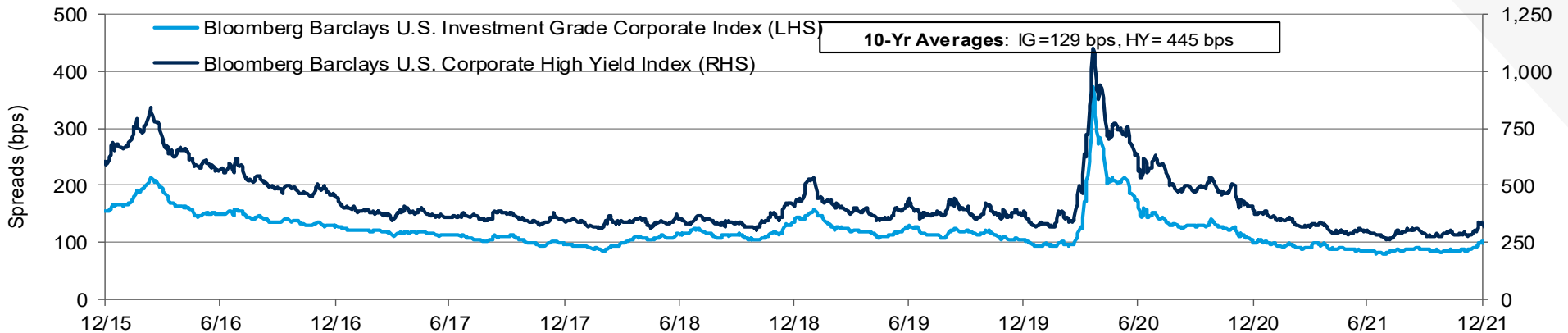
On a duration adjusted basis, high yield outpaced U.S. Treasuries while the mortgage market came under pressure as the Fed began its tapering program. A strengthening U.S. dollar was a major headwind for non-USD debt.



Source: FactSet. As of December 31, 2021

Credit Market Spreads – Trailing 5 Years

Credit spreads ultimately ended the quarter tighter, but the ride through the quarter was bumpy. Investor demand for yield continued to provide a tailwind for credit. Credit spreads sit well within their 10-year averages and, when coupled with heightened rate volatility, we currently favor active management.



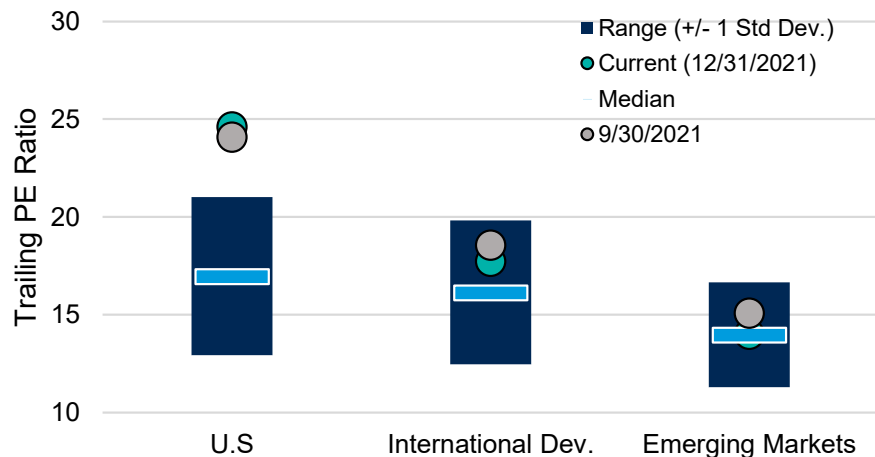
Source: FactSet. As of December 31, 2021



Equity Market Update

Equity Valuations (Trailing 15 Years)

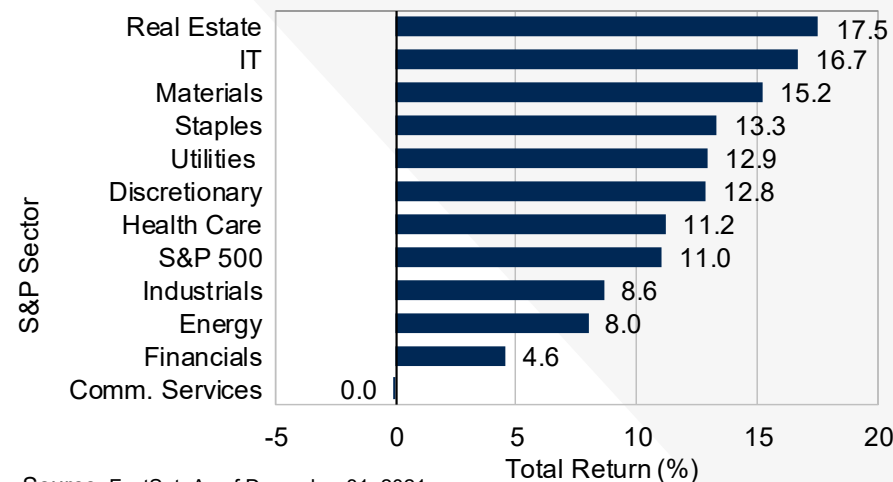
Valuations persist above longer-term averages in the U.S. but are less pronounced elsewhere in the world. Falling equity prices within emerging markets moved valuations lower and in-line with the 15-year median.



Source: FactSet. As of December 31, 2021

U.S. Equities – Return by Sector (4Q 2021)

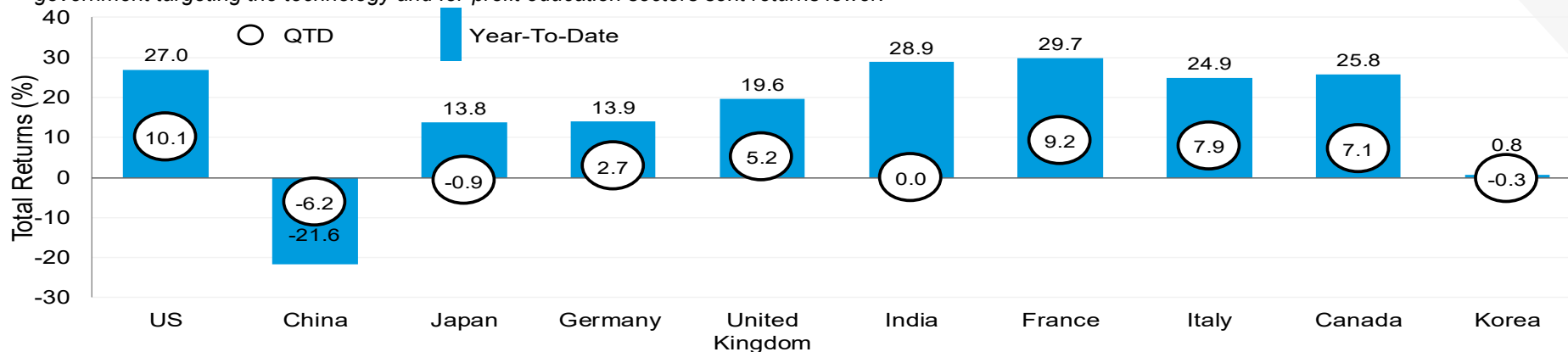
Real Estate and Information Technology led the way as the reopening trade reversed course, while energy and financials lagged the broader equity market.



Source: FactSet. As of December 31, 2021

Country Total Returns (%) – Top 10 Largest Economies

Equities were generally positive within developed regions, with the United States leading the way as COVID precautionary measures domestically were not as intense as those abroad. Chinese equities continued to be a drag on emerging market performance. Lingering concerns about the Chinese government targeting the technology and for-profit education sectors sent returns lower.



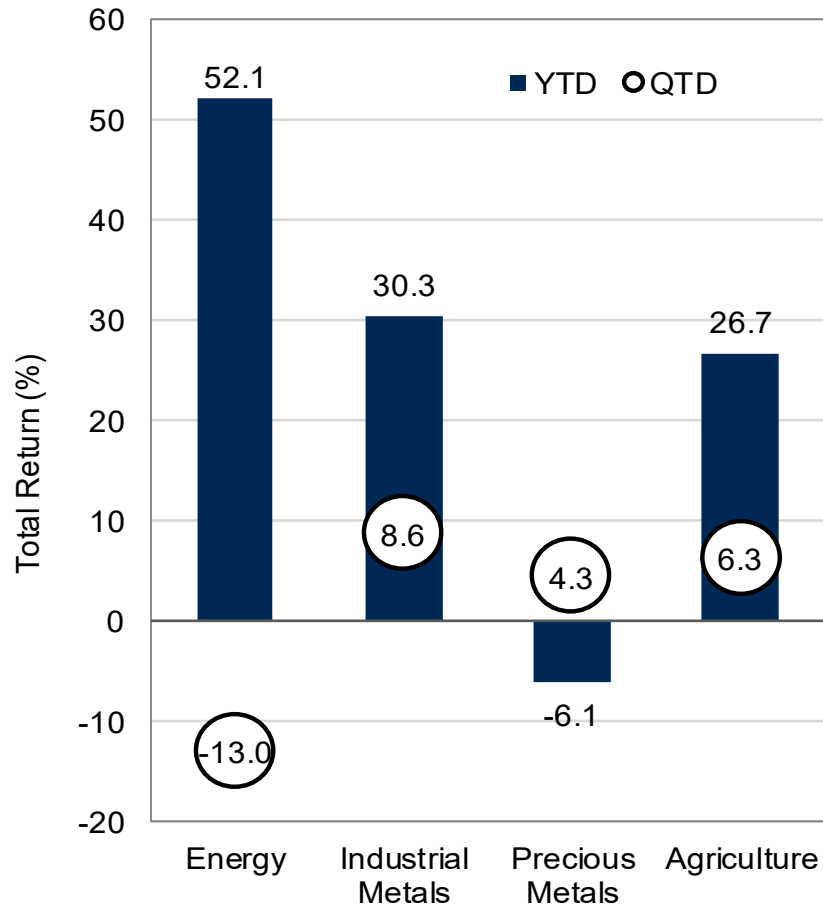
Source: FactSet. As of December 31, 2021.



Alternatives Market Update

Real Assets Performance

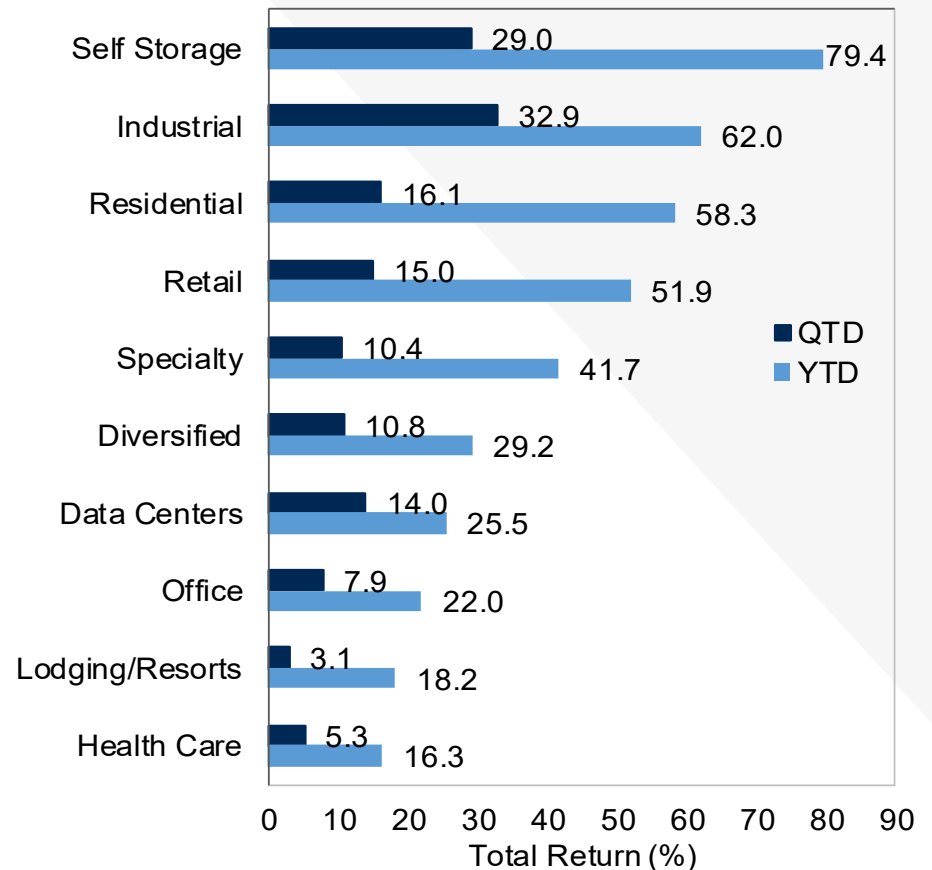
Energy reversed course in the fourth quarter as the breakout of COVID-19 cases weakened demand amid new lockdowns around the globe, while the supply chain backlog pushed industrial metals prices higher.



Source: FactSet. As of December 31, 2021

REIT Sector Performance

The Industrial and Self Storage sectors were the highlights this quarter, driven by the uncertainty generated by the omicron wave. Conversely, Lodging and Office lagged in the quarter. Real Estate, overall, performed well for the 2021 calendar year.



Source: FactSet. As of December 31, 2021



Financials Markets Performance

Financial Markets Performance

Total return as of December 31, 2021

Periods greater than one year are annualized

All returns are in U.S. dollar terms

Global Fixed Income Markets	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Bloomberg 1-3-Month T-Bill	0.0%	0.0%	0.0%	0.9%	1.1%	0.8%	0.6%	0.8%
Bloomberg U.S. TIPS	2.4%	6.0%	6.0%	8.4%	5.3%	4.2%	3.1%	4.7%
Bloomberg Municipal Bond (5 Year)	0.0%	0.3%	0.3%	3.3%	3.0%	2.4%	2.4%	3.5%
Bloomberg High Yield Municipal Bond	1.2%	7.8%	7.8%	7.8%	7.5%	6.0%	6.7%	5.2%
Bloomberg U.S. Aggregate	0.0%	-1.5%	-1.5%	4.8%	3.6%	3.0%	2.9%	4.1%
Bloomberg U.S. Corporate High Yield	0.7%	5.3%	5.3%	8.8%	6.3%	6.1%	6.8%	7.1%
Bloomberg Global Aggregate ex-U.S. Hedged	-1.2%	-1.4%	-1.4%	3.3%	3.1%	3.1%	3.8%	4.0%
Bloomberg Global Aggregate ex-U.S. Unhedged	-1.2%	-7.0%	-7.0%	2.5%	3.1%	1.5%	0.8%	2.6%
Bloomberg U.S. Long Gov / Credit	2.2%	-2.5%	-2.5%	10.6%	7.4%	5.7%	5.7%	7.0%
JPMorgan GBI-EM Global Diversified	-2.5%	-8.7%	-8.7%	2.1%	2.8%	1.0%	0.7%	3.5%
Global Equity Markets	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
S&P 500	11.0%	28.7%	28.7%	26.1%	18.5%	14.9%	16.6%	10.7%
Dow Jones Industrial Average	7.9%	20.9%	20.9%	18.5%	15.5%	13.3%	14.2%	10.1%
NASDAQ Composite	8.4%	22.2%	22.2%	34.3%	25.0%	19.8%	21.0%	14.4%
Russell 3000	9.3%	25.7%	25.7%	25.8%	18.0%	14.5%	16.3%	10.6%
Russell 1000	9.8%	26.5%	26.5%	26.2%	18.4%	14.8%	16.5%	10.7%
Russell 1000 Growth	11.6%	27.6%	27.6%	34.1%	25.3%	19.6%	19.8%	13.7%
Russell 1000 Value	7.8%	25.2%	25.2%	17.6%	11.2%	9.7%	13.0%	7.5%
Russell Mid Cap	6.4%	22.6%	22.6%	23.3%	15.1%	12.2%	14.9%	10.2%
Russell Mid Cap Growth	2.8%	12.7%	12.7%	27.5%	19.8%	14.9%	16.6%	11.7%
Russell Mid Cap Value	8.5%	28.3%	28.3%	19.6%	11.2%	10.0%	13.4%	8.8%
Russell 2000	2.1%	14.8%	14.8%	20.0%	12.0%	10.8%	13.2%	8.7%
Russell 2000 Growth	0.0%	2.8%	2.8%	21.2%	14.5%	11.7%	14.1%	10.0%
Russell 2000 Value	4.4%	28.3%	28.3%	18.0%	9.1%	9.5%	12.0%	7.2%
MSCI ACWI	6.7%	18.5%	18.5%	20.4%	14.4%	10.9%	11.9%	7.1%
MSCI ACWI ex. U.S.	1.8%	7.8%	7.8%	13.2%	9.6%	6.6%	7.3%	3.8%
MSCI EAFE	2.7%	11.3%	11.3%	13.5%	9.5%	6.8%	8.0%	3.6%
MSCI EAFE Growth	4.1%	11.3%	11.3%	19.0%	13.6%	9.7%	10.1%	5.5%
MSCI EAFE Value	1.2%	10.9%	10.9%	7.8%	5.3%	3.6%	5.8%	1.6%
MSCI EAFE Small Cap	0.1%	10.1%	10.1%	15.6%	11.0%	9.5%	10.8%	5.6%
MSCI Emerging Markets	-1.3%	-2.5%	-2.5%	10.9%	9.9%	6.1%	5.5%	4.5%
Alternatives	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Consumer Price Index*	1.7%	6.6%	6.2%	3.3%	2.9%	2.4%	2.1%	2.2%
FTSE NAREIT Equity REITs	16.3%	43.2%	43.2%	18.4%	10.8%	9.3%	11.4%	6.9%
S&P Real Assets	4.8%	15.4%	15.4%	11.0%	7.4%	5.2%	5.9%	5.5%
FTSE EPRA NAREIT Developed	12.5%	36.9%	36.9%	13.1%	7.2%	7.9%	11.0%	5.4%
FTSE EPRA NAREIT Developed ex U.S.	2.1%	8.8%	8.8%	7.4%	7.1%	4.8%	7.8%	2.4%
Bloomberg Commodity Total Return	-1.6%	27.1%	27.1%	9.9%	3.7%	0.1%	-2.9%	-2.6%
HFRI Fund of Funds Composite*	-0.1%	5.7%	9.6%	7.7%	5.8%	4.1%	4.4%	2.8%
HFRI Fund Weighted Composite*	-0.7%	8.9%	13.9%	9.4%	7.0%	5.4%	5.6%	4.6%
Alerian MLP	0.6%	40.2%	40.2%	2.1%	-2.7%	-5.1%	-0.3%	4.3%

*One month lag.

Source: FactSet & Morningstar as of December 31, 2021. Periods greater than 1 year are annualized. All returns are in U.S. dollar terms.

Asset Allocation

As of December 31, 2021

	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Plan	216,734,585	100.0	100.0	0.0
Short Term Liquidity	1,704,534	0.8	0.5	0.3
Allspring Government Money Market	1,704,534	0.8	0.5	0.3
Fixed Income	63,490,354	29.3	32.5	-3.2
Metropolitan West Total Return Bond Pl	26,590,570	12.3	13.8	-1.5
BlackRock Total Return Fund K	26,903,075	12.4	13.8	-1.3
PGIM Global Total Return R6	9,996,709	4.6	5.0	-0.4
Domestic Equity	92,387,145	42.6	40.0	2.6
Vanguard Institutional Index Fund Instl	67,351,590	31.1	28.0	3.1
Jackson Square SMID-Cap Growth IS	10,691,331	4.9	6.0	-1.1
Earnest Partners SMID Cap Value CIT	14,344,223	6.6	6.0	0.6
International Equity	34,536,593	15.9	16.0	-0.1
Causeway International Value Instl	11,552,059	5.3	5.5	-0.2
Vanguard International Growth Adm	11,224,623	5.2	5.5	-0.3
Templeton Instl Foreign Smaller Companies Fund Adv	4,494,078	2.1	2.0	0.1
Cape Ann Global Developing Markets	7,265,833	3.4	3.0	0.4
Real Estate	13,012,505	6.0	6.0	0.0
Barings Core Property Fund LP	13,012,505	6.0	6.0	0.0
Inflation Protection	11,603,454	5.4	5.0	0.4
Vanguard Short-Term Inflation Protection Adm	5,393,908	2.5	2.5	0.0
Parametric Commodity Strategy Instl	3,403,164	1.6	1.3	0.3
iShares Gold Trust	2,806,382	1.3	1.3	0.0

Investments with a zero balance were held in the plan during the reporting period and will be removed once they no longer impact plan performance.
Asset Allocation weightings may not add up to 100% due to rounding.

Total Plan Performance Summary

As of December 31, 2021

Account Reconciliation

	QTR	YTD	Since Inception	Inception Date
Total Plan				01/01/2003
Beginning Market Value	212,474,987	194,895,401	75,547,799	
Net Contributions	-2,405,292	1,937,403	8,888,058	
Total Gain/Loss	6,664,890	19,901,781	132,298,727	
Ending Market Value	216,734,585	216,734,585	216,734,585	

** Data displayed in Since Inception column is as of as start date of 1/1/2010. Historical market value and flow information prior to 1/1/2010 was not available from prior consultant.

The stated inception date of 1/1/2003 is the plan's performance inception date.

Blended Benchmark Composition

Allocation Mandate	Weight (%)
Apr-2021	
90 Day U.S. Treasury Bill	0.50
Blmbg. U.S. Aggregate Index	27.50
Bloomberg Global Aggregate	5.00
Russell 3000 Index	40.00
MSCI AC World ex USA (Net)	16.00
NCREIF Fund Index - ODCE (net)	6.00
Glatonbury Short Term Inflation Protection Benchmark	5.00

Trailing Performance Summary

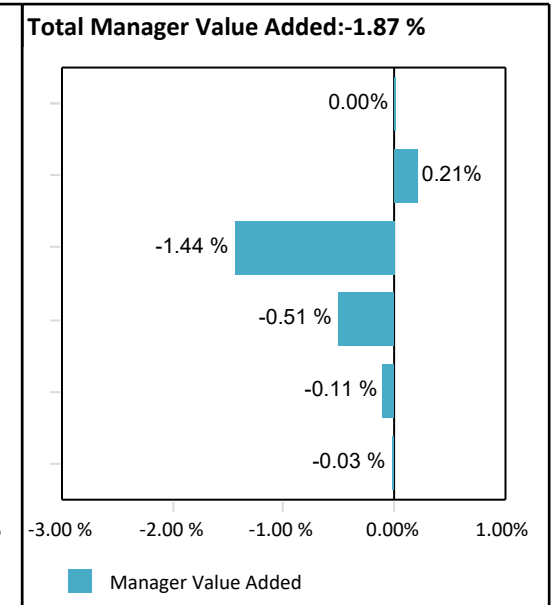
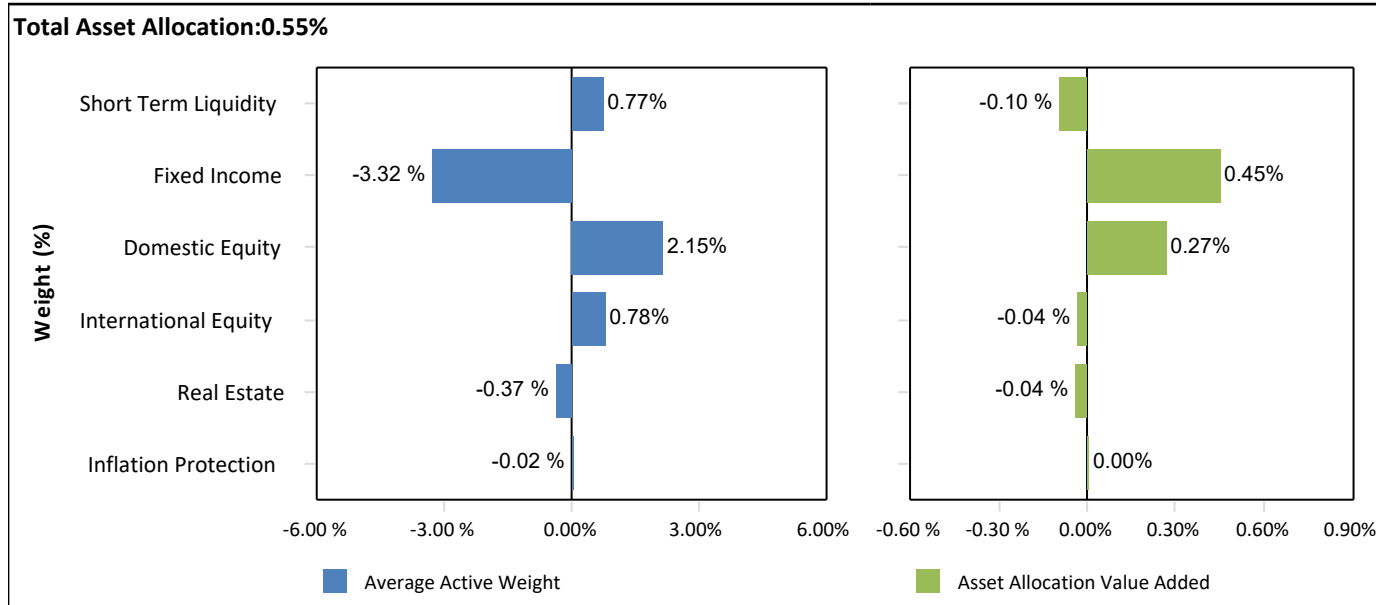
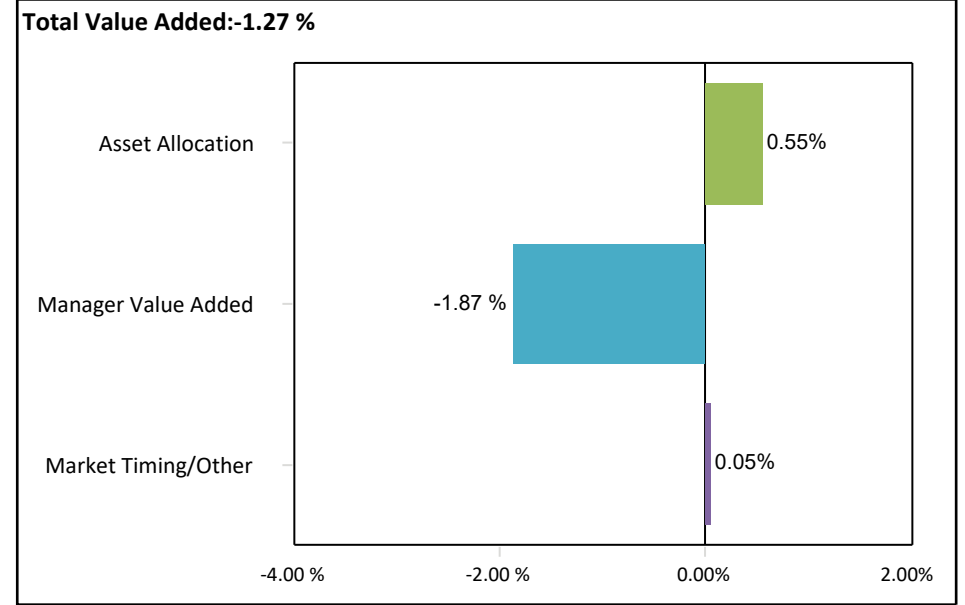
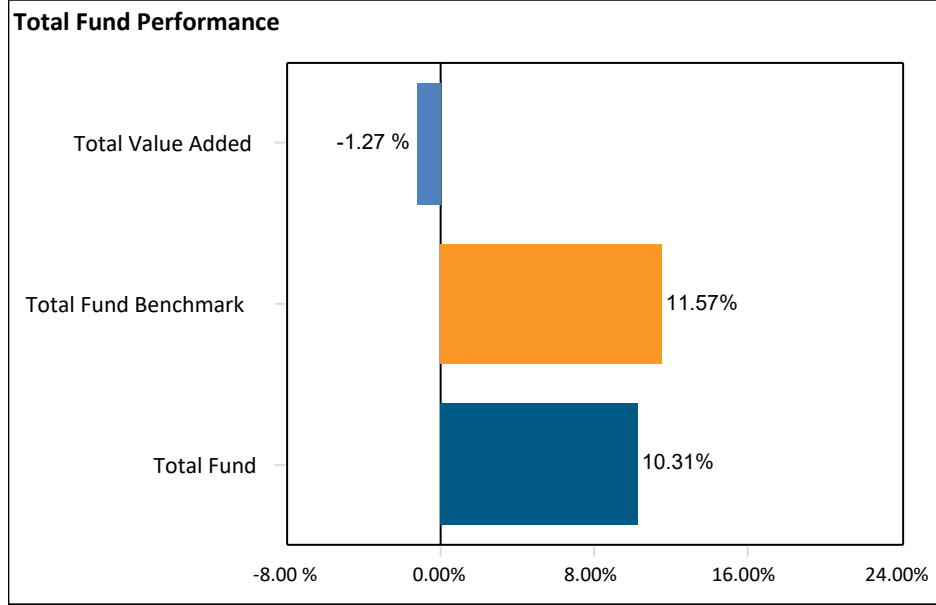
	QTR	Jul-2021 To Dec-2021	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Plan	3.2	2.4	10.3	15.2	10.7	8.3	9.2	7.5	01/01/2003
<i>Blended Benchmark</i>	<i>4.0</i>	<i>4.0</i>	<i>11.6</i>	<i>14.7</i>	<i>10.4</i>	<i>8.2</i>	<i>8.6</i>	<i>7.8</i>	
Difference	-0.8	-1.6	-1.3	0.5	0.3	0.1	0.6	-0.3	

Calendar Year Performance Summary

	2020	2019	2018	2017	2016	2015	2014	2013
Total Plan	16.8	18.8	-6.1	15.9	7.1	-1.8	3.7	15.1
<i>Blended Benchmark</i>	<i>13.7</i>	<i>18.8</i>	<i>-5.3</i>	<i>14.9</i>	<i>7.4</i>	<i>-1.5</i>	<i>4.5</i>	<i>13.8</i>
Difference	3.1	0.0	-0.8	1.0	-0.3	-0.3	-0.8	1.3

Total Portfolio Attribution

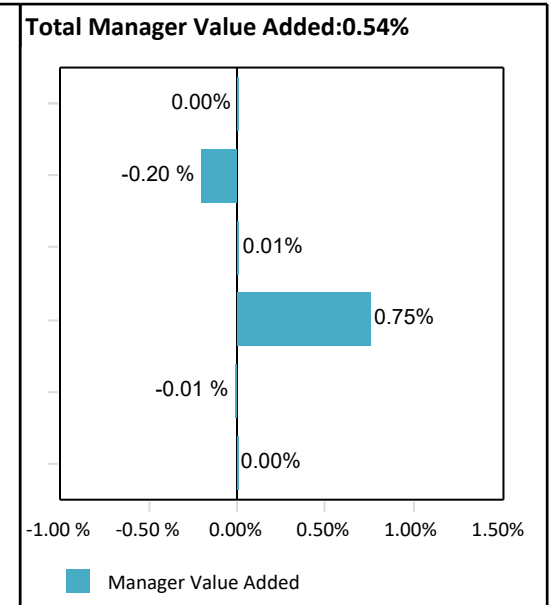
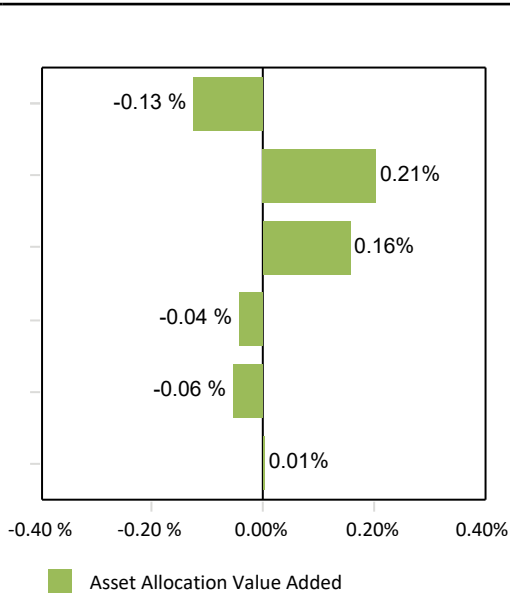
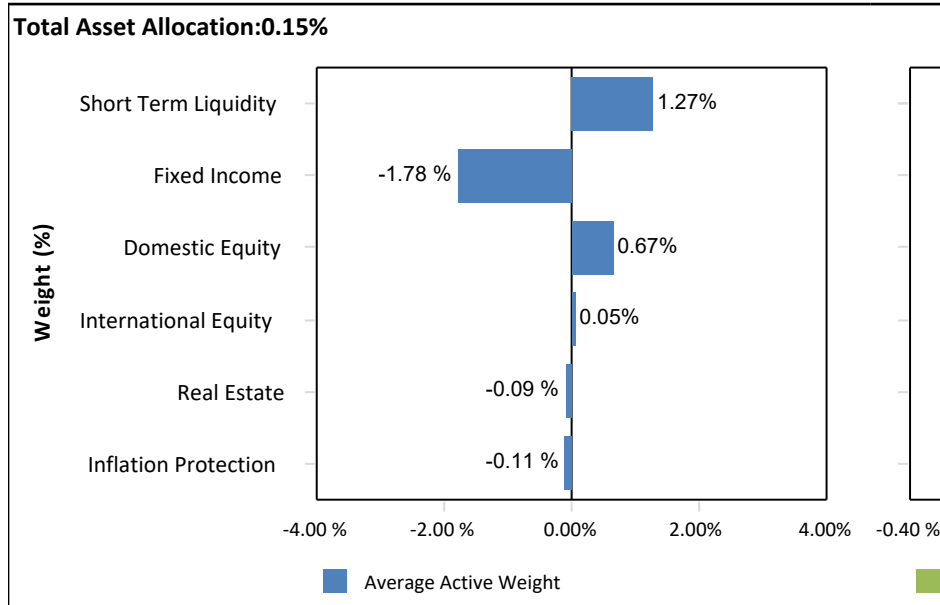
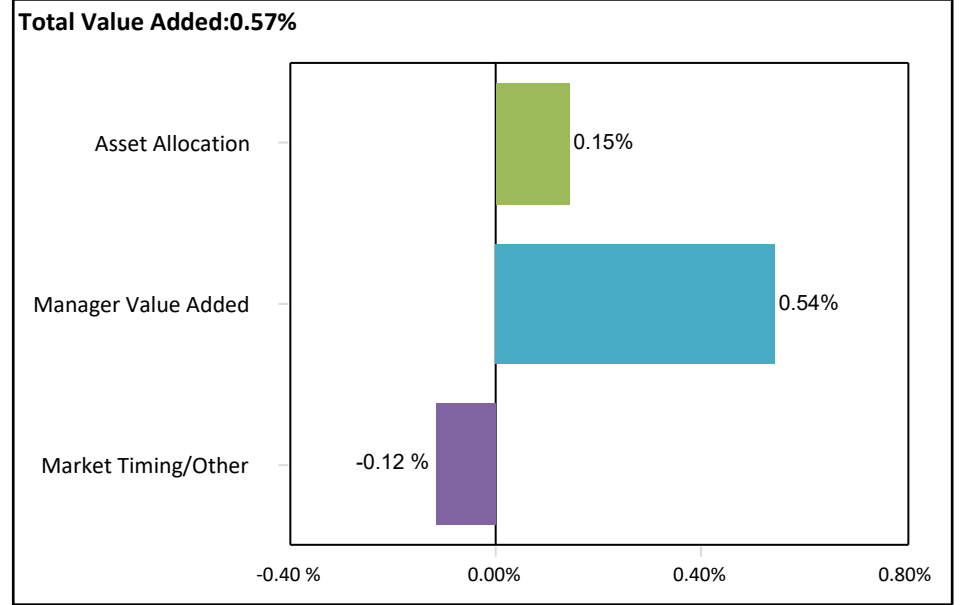
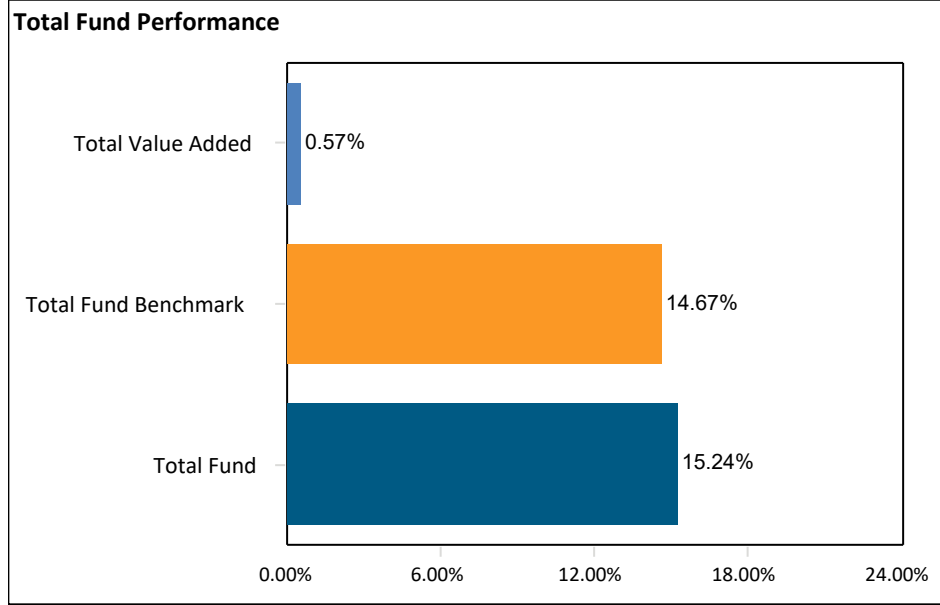
Total Plan vs. Pension Attribution Benchmark
1 Year Ending December 31, 2021



Returns are net of fees unless otherwise noted.

Total Portfolio Attribution

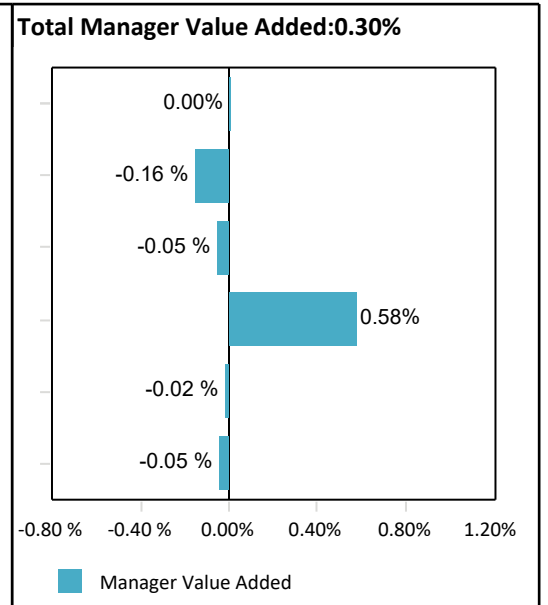
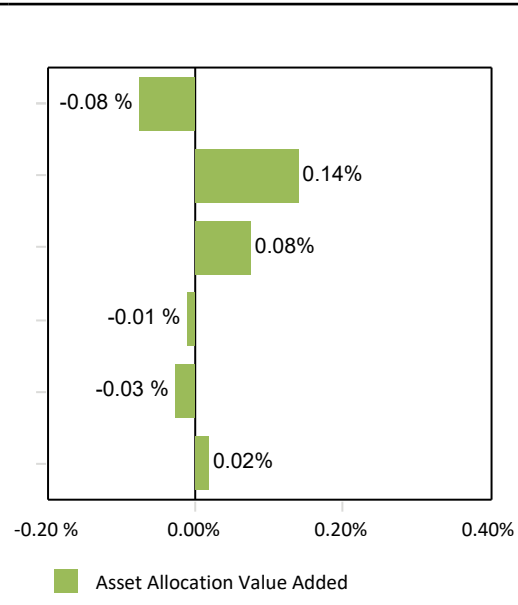
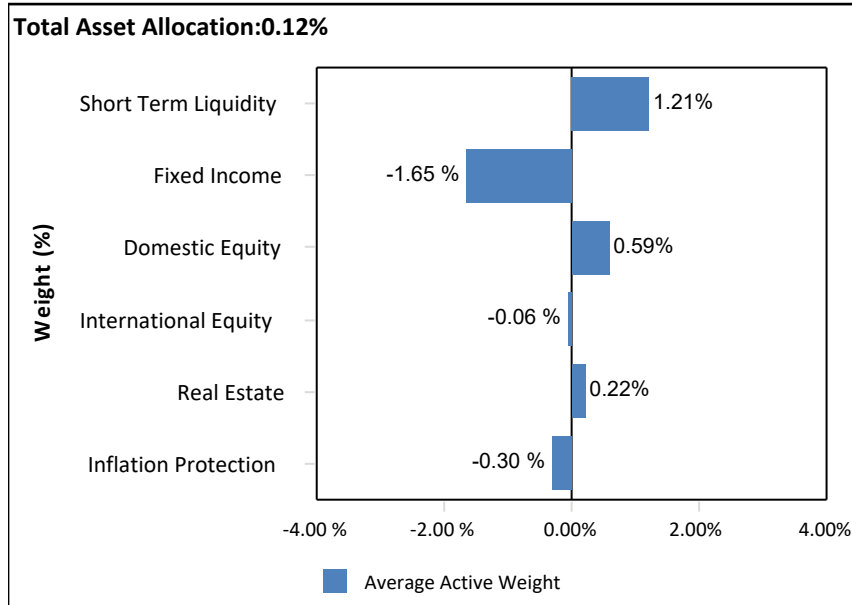
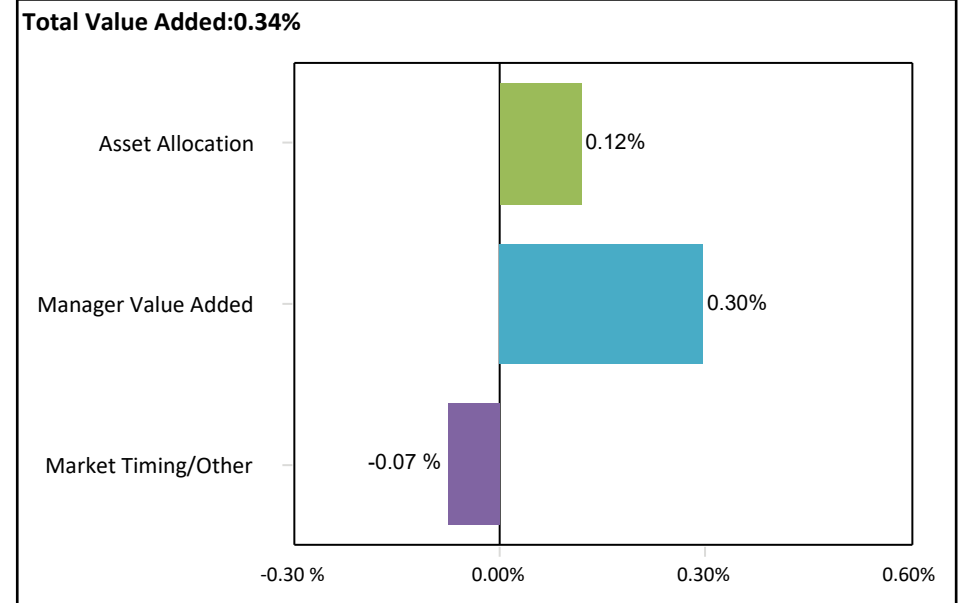
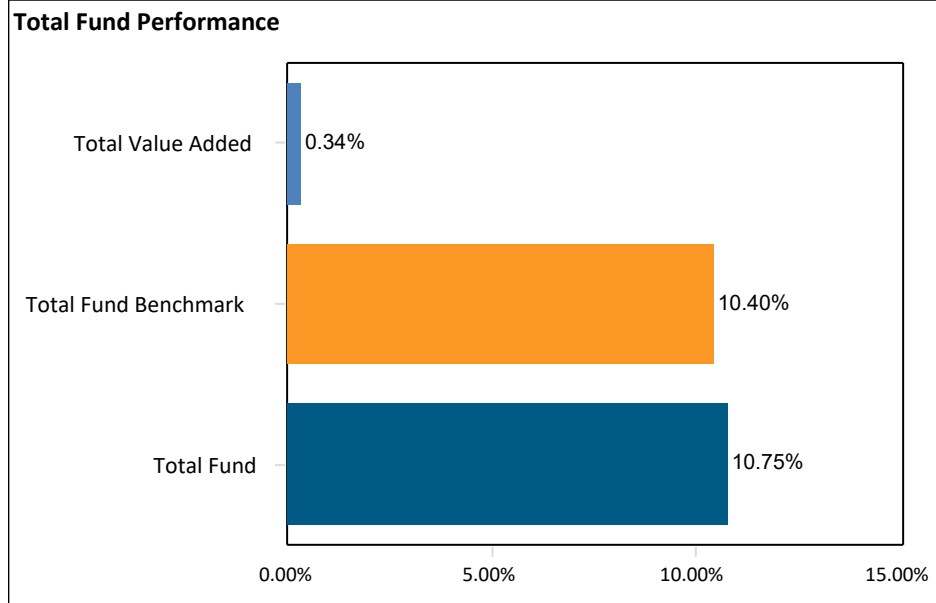
Total Plan vs. Pension Attribution Benchmark
3 Years Ending December 31, 2021



Returns are net of fees unless otherwise noted.

Total Portfolio Attribution

Total Plan vs. Pension Attribution Benchmark 5 Years Ending December 31, 2021



Returns are net of fees unless otherwise noted.

Manager Performance Overview

As of December 31, 2021

	QTR	Jul-2021 To Dec-2021	1 Year	3 Years	5 Years	10 Years	Since Inception	Aug-2011 To Dec-2021	Inception Date
Total Plan	3.2	2.4	10.3	15.2	10.7	9.2	7.5	8.2	01/01/2003
<i>Blended Benchmark</i>	4.0	4.0	11.6	14.7	10.4	8.6	7.8	7.8	
Allspring Government Money Market	0.0	0.0	0.0	0.8	0.9	0.5	0.5	0.5	08/01/2011
<i>90 Day U.S. Treasury Bill</i>	0.0	0.0	0.0	1.0	1.1	0.6	0.6	0.6	
Fixed Income	-0.2	-0.5	-1.5	4.1	3.2	3.6	3.9	3.3	01/01/2010
<i>Fixed Income Benchmark</i>	-0.1	-0.2	-2.1	4.5	3.5	2.5	3.5	2.6	
Metropolitan West Total Return Bond PI	-0.1 (41)	0.0 (41)	-1.1 (55)	5.6 (52)	4.1 (52)	4.2 (20)	4.1 (22)	4.1 (22)	08/01/2011
<i>Blmbg. U.S. Aggregate Index</i>	0.0	0.1	-1.5	4.8	3.6	2.9	3.1	3.1	
IM U.S. Broad Market Core+ Fixed Income (MF) Median	-0.2	0.0	-1.0	5.7	4.1	3.6	3.6	3.6	
BlackRock Total Return Fund K	0.0 (31)	0.1 (38)	-0.7 (39)	6.0 (39)	4.3 (41)	N/A	3.6 (35)	N/A	06/01/2015
<i>Blmbg. U.S. Aggregate Index</i>	0.0	0.1	-1.5	4.8	3.6	2.9	3.0	3.1	
IM U.S. Broad Market Core+ Fixed Income (MF) Median	-0.2	0.0	-1.0	5.7	4.1	3.6	3.4	3.6	
PGIM Global Total Return R6	-0.7 (52)	-1.8 (74)	N/A	N/A	N/A	N/A	1.3 (16)	N/A	04/01/2021
<i>Bloomberg Global Aggregate</i>	-0.7	-1.5	-4.7	3.6	3.4	1.8	-0.3	1.6	
IM Global Fixed Income (MF) Median	-0.7	-1.1	-2.7	4.3	3.4	2.4	0.2	2.1	
Domestic Equity	7.8	6.5	21.8	25.9	17.8	16.2	15.0	15.0	01/01/2010
<i>Domestic Equity Benchmark</i>	9.3	9.2	25.7	25.8	18.0	16.3	15.1	15.3	
Vanguard Institutional Index Fund Instl	11.0 (27)	11.7 (23)	28.7 (24)	26.0 (28)	18.4 (25)	16.5 (15)	15.6 (12)	15.6 (12)	08/01/2011
<i>S&P 500 Index</i>	11.0	11.7	28.7	26.1	18.5	16.6	15.7	15.7	
IM U.S. Large Cap Core Equity (MF) Median	10.0	9.9	26.7	24.2	17.0	15.2	14.1	14.1	
Jackson Square SMID-Cap Growth IS	-9.2 (97)	-16.4 (100)	-12.3 (97)	N/A	N/A	N/A	12.9 (88)	N/A	10/01/2020
<i>Russell 2500 Growth Index</i>	0.2	-3.3	5.0	25.1	17.7	15.7	25.1	14.3	
IM U.S. SMID Cap Growth Equity (MF) Median	1.6	0.6	7.8	26.7	19.2	15.5	28.6	14.0	
Earnest Partners SMID Cap Value CIT	7.8 (49)	5.0 (60)	25.6 (83)	N/A	N/A	N/A	45.6 (54)	N/A	10/01/2020
<i>Russell 2500 Index</i>	3.8	1.0	18.2	21.9	13.8	14.1	38.7	12.8	
IM U.S. SMID Cap Value Equity (MF) Median	7.6	5.9	28.1	17.9	9.9	11.9	46.1	10.8	

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

Manager Performance Overview

As of December 31, 2021

	QTR	Jul-2021 To Dec-2021	1 Year	3 Years	5 Years	10 Years	Since Inception	Aug-2011 To Dec-2021	Inception Date
International Equity	-0.8	-4.1	4.8	17.7	12.8	9.1	6.9	7.0	01/01/2010
<i>MSCI AC World ex USA (Net)</i>	1.8	-1.2	7.8	13.2	9.6	7.3	5.7	5.2	
Vanguard International Growth Adm	-2.8 (98)	-6.7 (98)	-0.7 (96)	27.8 (1)	21.1 (1)	14.0 (1)	11.5 (1)	11.5 (1)	08/01/2011
<i>MSCI AC World ex USA Growth (Net)</i>	2.4	-1.3	5.1	17.8	13.1	9.1	6.9	6.9	
IM International Large Cap Growth Equity (MF) Median	3.0	1.2	8.7	17.7	12.4	8.9	6.7	6.7	
Causeway International Value Instl	0.9 (79)	0.0 (76)	9.1 (91)	11.4 (48)	N/A	N/A	4.2 (43)	N/A	04/01/2018
<i>MSCI EAFE Value Index (Net)</i>	1.2	0.2	10.9	7.8	5.3	5.8	2.3	4.0	
IM International Large Cap Value Equity (MF) Median	2.2	1.9	14.3	11.0	6.6	5.9	3.9	3.9	
Templeton Instl Foreign Smaller Companies Fund Adv	0.5 (46)	-1.8 (91)	10.7 (89)	14.0 (50)	10.1 (39)	8.9 (50)	6.6 (49)	6.6 (49)	08/01/2011
<i>MSCI AC World ex USA Small Cap (Net)</i>	0.6	0.6	12.9	16.5	11.2	9.5	6.8	6.8	
IM International SMID Cap Core Equity (MF) Median	0.4	-0.6	12.9	13.9	8.9	8.9	6.6	6.6	
Cape Ann Global Developing Markets	-1.0 (47)	-7.2 (36)	3.2 (29)	10.1 (75)	N/A	N/A	9.0 (70)	N/A	12/01/2018
<i>MSCI Emerging Markets (Net) Index</i>	-1.3	-9.3	-2.5	10.9	9.9	5.5	9.7	3.2	
IM Emerging Markets Equity (MF) Median	-1.3	-8.8	-1.6	11.8	9.6	5.6	10.3	3.2	
Real Estate	0.0	5.5	10.8	5.4	5.8	7.7	8.2	6.9	01/01/2010
<i>NCREIF Fund Index - ODCE (net)</i>	0.0	6.6	12.6	5.7	6.2	8.7	9.7	8.9	
Barings Core Property Fund LP	0.0	5.5	10.8	5.4	5.8	N/A	7.7	N/A	07/01/2012
<i>NCREIF Fund Index - ODCE (net)</i>	0.0	6.6	12.6	5.7	6.2	8.7	8.6	8.9	
Inflation Protection	2.2	3.9	7.6	9.0	2.4	-0.3	0.2	N/A	10/01/2011
<i>Short Term Inflation Protection Benchmark</i>	1.4	3.4	8.4	9.3	3.4	0.6	1.1	-0.3	
Vanguard Short-Term Inflation Protection Adm	1.1 (84)	2.4 (88)	5.2 (53)	5.0 (93)	3.3 (90)	N/A	2.1 (88)	N/A	10/01/2013
<i>Bloomberg US TIPS 0-5 Year Index</i>	1.2	2.5	5.3	5.1	3.3	1.9	2.2	1.7	
IM U.S. TIPS (MF) Median	1.7	3.3	5.3	7.5	4.6	2.5	2.9	2.6	

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

Manager Performance Overview

As of December 31, 2021

	QTR	Jul-2021 To Dec-2021	1 Year	3 Years	5 Years	10 Years	Since Inception	Aug-2011 To Dec-2021	Inception Date
Parametric Commodity Strategy Instl	2.5 (32)	7.0 (23)	29.8 (55)	N/A	N/A	N/A	20.2 (6)	N/A	12/01/2019
<i>Bloomberg Commodity Index Total Return</i>	-1.6	4.9	27.1	9.9	3.7	-2.9	13.1	-4.1	
IM Commodities General (MF) Median	1.0	6.1	30.5	11.0	4.5	-1.8	15.2	-3.2	
iShares Gold Trust (IAU)	4.4 (34)	3.1 (17)	-4.0 (15)	N/A	N/A	N/A	10.3 (37)	N/A	08/01/2019
<i>LBMA Gold Price PM</i>	4.4	3.2	-3.8	12.4	9.7	1.7	10.5	1.1	
IM Commodities Precious Metals (MF) Median	4.2	-0.9	-7.1	11.9	7.6	-0.7	10.1	-1.8	

The inception date expressed on the Manager Performance Overview page(s) represents the first day of the first full month following the purchase of the investment. Performance figures shown at the fund level begin on this inception date. Your performance may differ slightly if the fund was purchased during the previous month. Actual performance is captured at the total plan level.

Investment returns are derived from custodian valuations and may deviate slightly from fund level returns displayed in other pages in your report which can result in minor differences in universe rankings. Mutual fund performance may differ from the current share class historical performance due to share class exchanges. ETF returns by convention can be different from the product return.

Barings Core Property Fund is valued as of last quarterly available valuation.

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.



Jackson Square SMID Growth

Fiducient Manager Status: Maintain

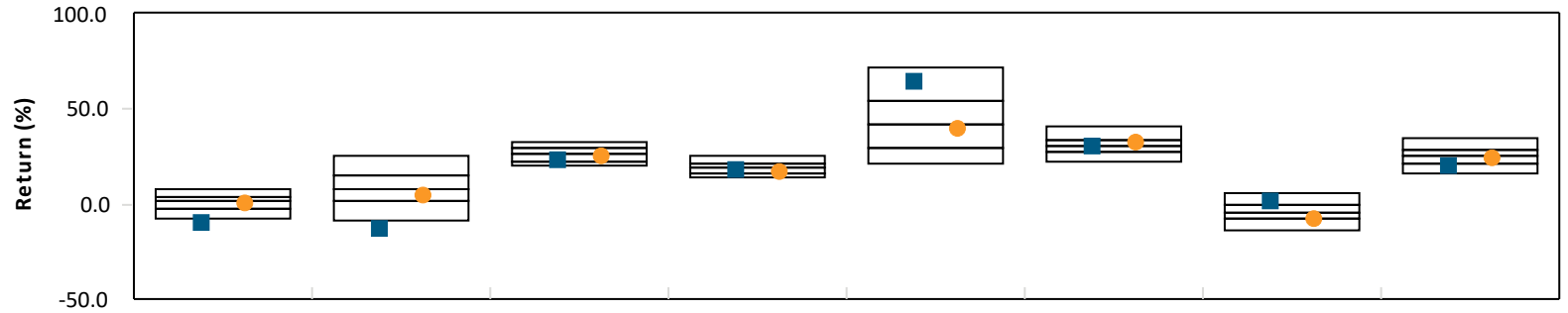
- This strategy tends to exhibit more contrarian tendencies as they often seek to take advantage of disconnects between market consensus and their view on a company (i.e., market's underappreciation of the future earnings power of disruptive businesses)
- Strategy leads to a more interest rate sensitive profile as the value of these companies comes from cash flows well out in the future, so their intrinsic value is more sensitive to changes in interest rates.
- This approach significantly benefitted the strategy in 2020 from a combined impact of sharp increase in demand for the products or services of many of these companies combined with falling treasury yields.
- As a result, the strategy outperformed the Russell 2500 Growth Index by 26% in 2020.
- More recently, as interest rates have increased, the valuation multiples many of the strategy's investments have contracted and performance has suffered.
- The team trimmed holdings that produced strong returns in 2020, such as Wix, Pacific Biosciences, Stitch Fix and Farftech in late 2020 and early 2021
- It's also important to note that one of the portfolio's counter-cyclical holdings that typically acts as a ballast when high valuation, long duration growth stocks sell-off, Grocery Outlet, has seen poor returns as it faces tough comps after a strong 2020.
- While the 2021 underperformance is significant, Jackson Square continues to focus on the longer term, which can be seen when viewed in conjunction with its 2020 outperformance.
- Jackson Square remains committed to their long-term investment approach despite recent performance challenges.

Manager Evaluation

Jackson Square SMID-Cap Growth Fund IS

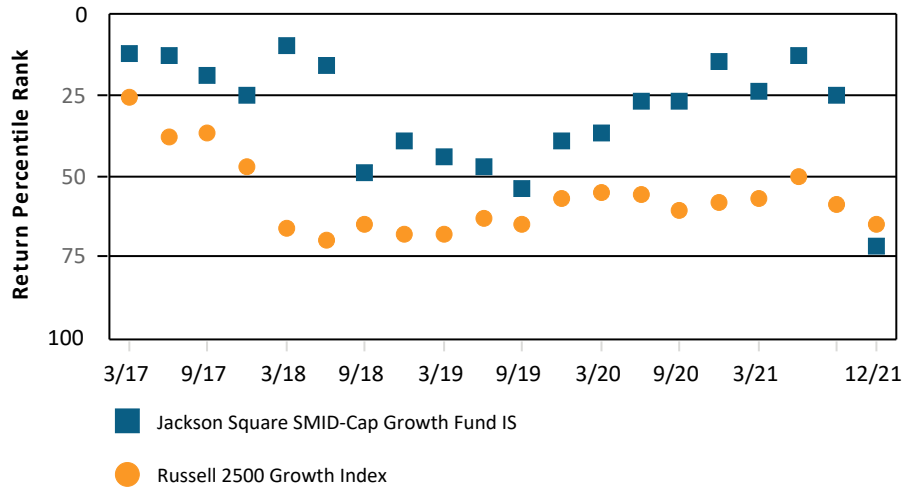
As of December 31, 2021

Peer Group Analysis vs. IM U.S. SMID Cap Growth Equity (MF)

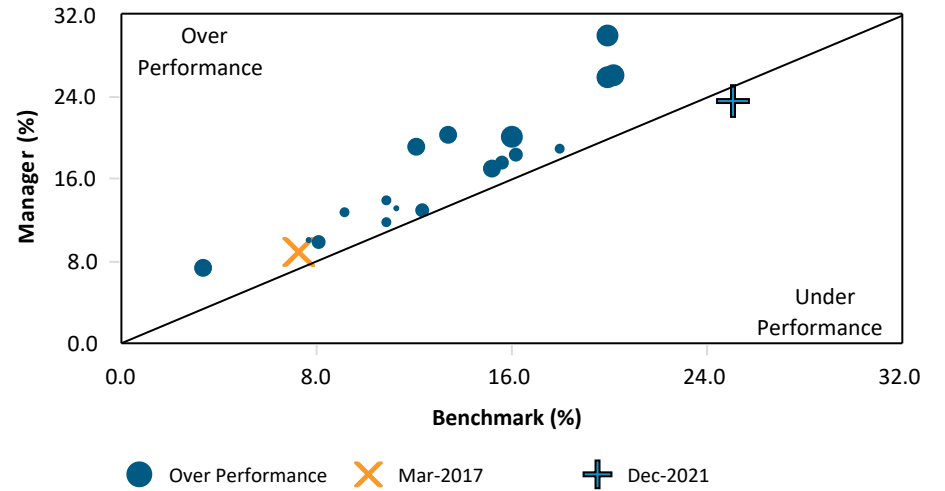


	QTR	1 Year	3 Years	5 Years	2020	2019	2018	2017
■ Jackson Square SMID-Cap Growth Fund IS	-9.2 (97)	-12.3 (97)	23.6 (72)	18.3 (58)	65.0 (14)	30.5 (53)	2.0 (16)	20.4 (78)
● Russell 2500 Growth Index	0.2 (70)	5.0 (71)	25.1 (65)	17.7 (62)	40.5 (55)	32.7 (36)	-7.5 (77)	24.5 (63)
5th Percentile	8.0	25.3	32.9	25.2	72.5	40.8	5.4	34.9
1st Quartile	3.9	15.4	30.0	21.8	54.6	34.2	-0.6	28.4
Median	1.6	7.8	26.7	19.2	42.3	30.8	-4.7	25.3
3rd Quartile	-2.1	1.3	22.9	16.3	29.5	27.6	-7.2	21.8
95th Percentile	-7.4	-8.7	19.9	14.4	21.4	22.9	-13.8	15.7

3 Year Rolling Percentile Ranking vs. IM U.S. SMID Cap Growth Equity (MF)



3 Year Rolling Under/Over Performance vs. Russell 2500 Growth Index



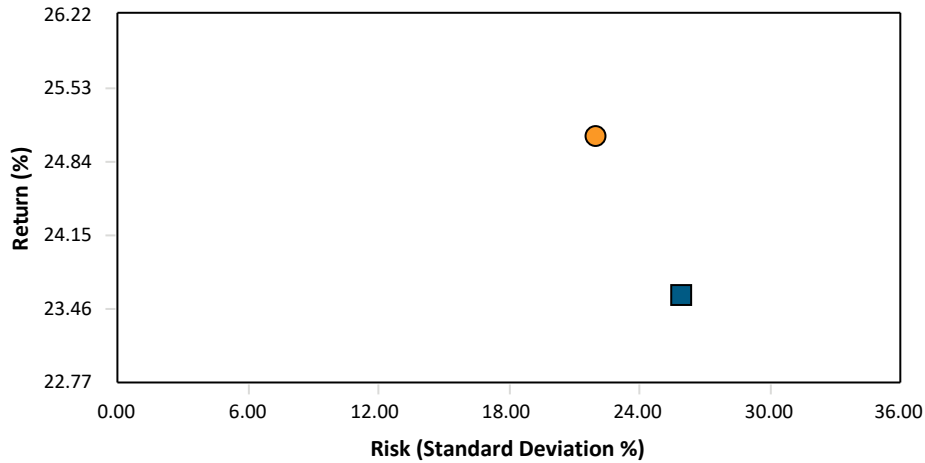
Mutual fund data sourced from Lipper Analytical Services.

Manager Evaluation

Jackson Square SMID-Cap Growth Fund IS

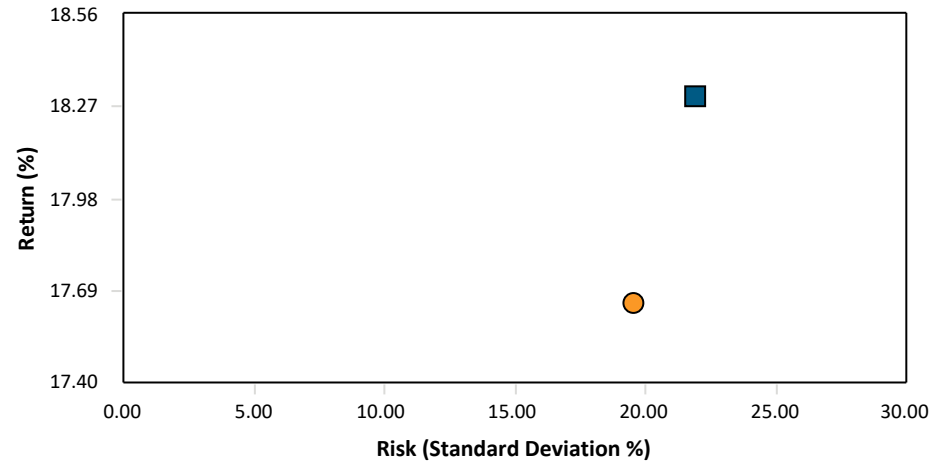
As of December 31, 2021

3 Year Risk and Return



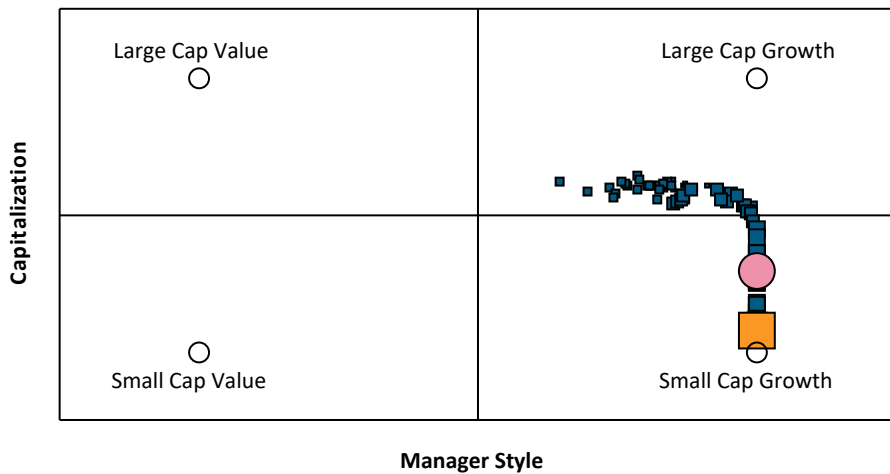
- Jackson Square SMID-Cap Growth Fund IS
- Russell 2500 Growth Index

5 Year Risk and Return



- Jackson Square SMID-Cap Growth Fund IS
- Russell 2500 Growth Index

Style Map - 3 Years



- Style History
- Dec-2021
- Average Style Exposure

MPT Statistics vs. Russell 2500 Growth Index

	3 Years	5 Years
Return	23.6	18.3
Standard Deviation	25.9	21.9
vs. Russell 2500 Growth Index		
Alpha	-2.8	0.3
Beta	1.1	1.0
R-Squared	0.9	0.9
Consistency	47.2	51.7
Up Market Capture	108.0	106.1
Down Market Capture	121.1	106.7
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	0.9	0.8

Mutual fund data sourced from Lipper Analytical Services.

Manager Evaluation

Jackson Square SMID-Cap Growth Fund IS

Report Date December 31, 2021

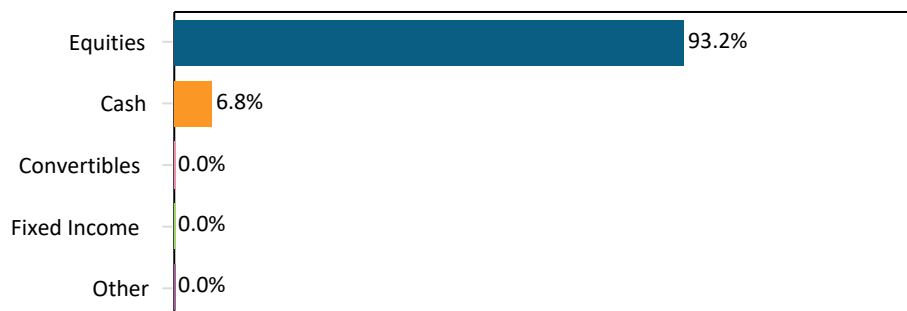
Mutual Fund Information

Fund Name :	Managed Portfolio Series: Jackson Square SMID-Cap Growth Fund; IS Portfolio Assets :	\$2,162 Million
	Class Shares	
Fund Family :	Jackson Square Partners	Fund Assets :
		\$1,016 Million
Ticker :	DCGTX	Portfolio Manager :
		Bonavico/Broad/Ferry
Inception Date :	12/01/2003	PM Tenure :
		2005--2005--2019
Portfolio Turnover :	49%	

Fund Investment Policy

The Portfolio seeks long-term capital appreciation by investing at least 80% of its assets in small-capitalization companies (defined as those which generally represent the smallest 15% in terms of market capitalization of U.S. equity securities listed on a national securities exchange or NASDAQ).

Asset Allocation as of 09/30/21



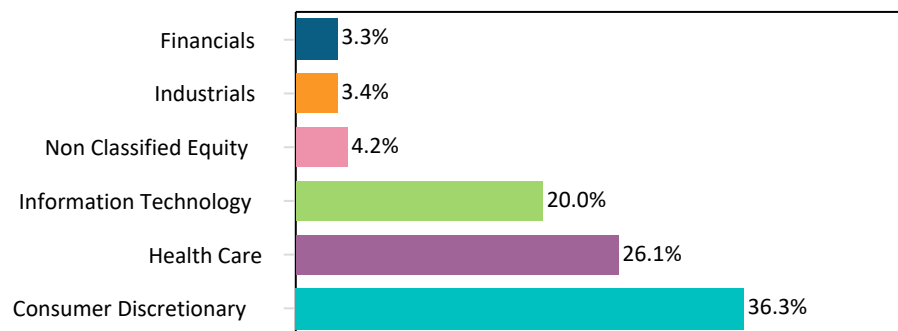
Top 10 Securities as of 09/30/21

Lyft Inc ORD	7.0 %
New York Times Co ORD	6.9 %
Tandem Diabetes Care Inc ORD	6.6 %
Elastic NV ORD	5.6 %
Pacific Biosciences of California	5.6 %
Bio-Techne Corp ORD	5.1 %
Nevro Corp ORD	4.3 %
Varonis Systems Inc ORD	3.9 %
Dolby Laboratories Inc ORD	3.7 %
Wix.Com Ltd ORD	3.4 %

Equity Characteristics as of 09/30/21

Total Securities	27
Avg. Market Cap	\$9,046 Million
P/E	52.7
P/B	13.0
Div. Yield	0.6%
Annual EPS	8.3
5Yr EPS	7.3
3Yr EPS Growth	12.3

Sector Allocation as of 09/30/21

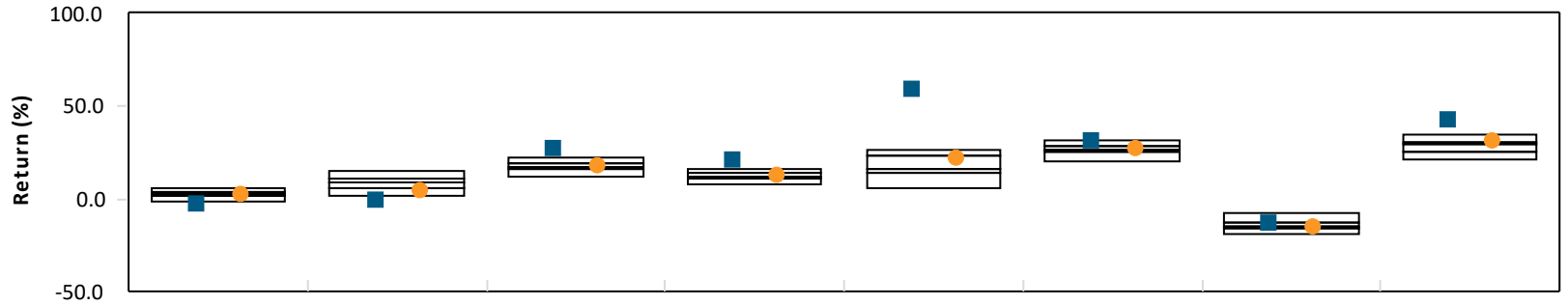


Manager Evaluation

Vanguard International Growth Adm

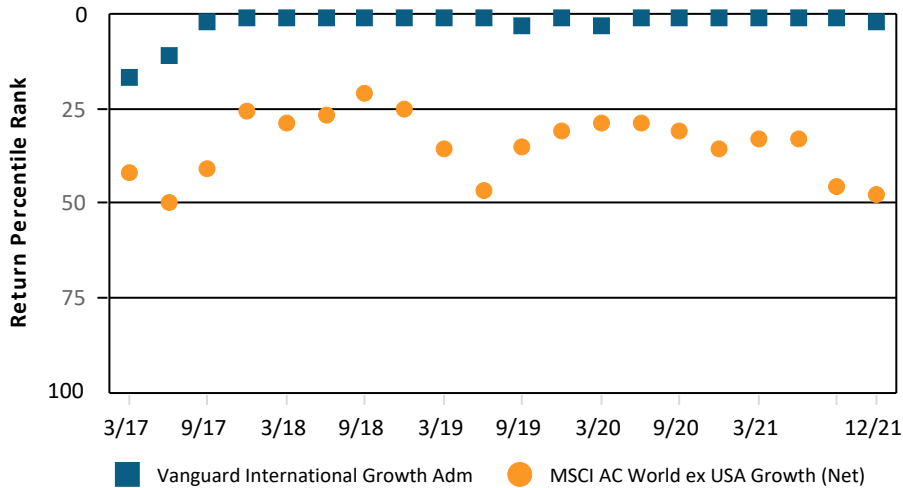
As of December 31, 2021

Peer Group Analysis vs. IM International Large Cap Growth Equity (MF)

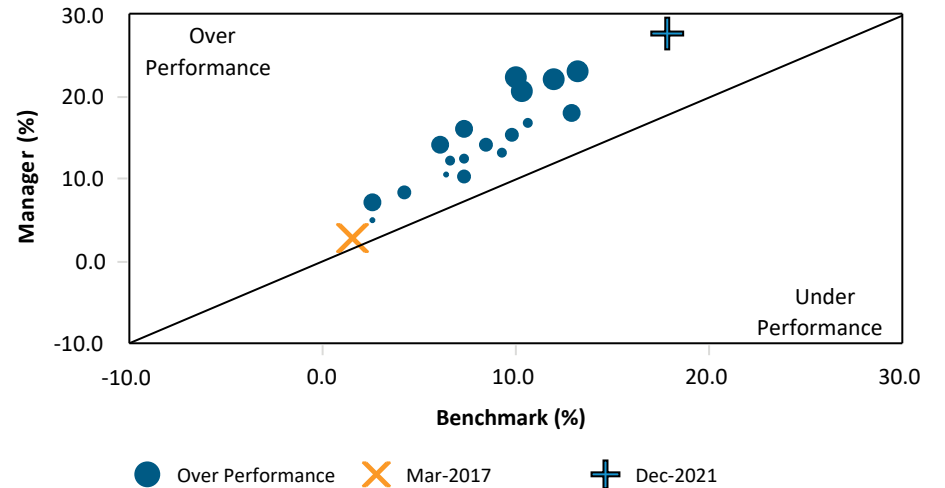


	QTR	1 Year	3 Years	5 Years	2020	2019	2018	2017
■ Vanguard International Growth Adm	-2.8 (98)	-0.8 (96)	27.7 (2)	21.1 (1)	59.8 (1)	31.5 (5)	-12.6 (32)	43.2 (1)
● MSCI AC World ex USA Growth (Net)	2.4 (61)	5.1 (78)	17.8 (48)	13.1 (40)	22.2 (33)	27.3 (43)	-14.4 (44)	32.0 (13)
5th Percentile	5.6	15.0	22.5	16.0	26.8	31.5	-7.6	35.3
1st Quartile	4.2	11.0	19.3	14.2	23.2	28.2	-12.3	31.1
Median	3.0	8.7	17.7	12.4	16.7	27.0	-15.0	29.5
3rd Quartile	1.8	5.7	16.0	10.6	13.8	25.8	-16.3	25.2
95th Percentile	-1.4	1.6	11.6	7.7	6.3	20.6	-19.2	21.8

3 Year Rolling Percentile Ranking vs. IM International Large Cap Growth Equity (MF)



3 Year Rolling Under/Over Performance vs. MSCI AC World ex USA Growth (Net)

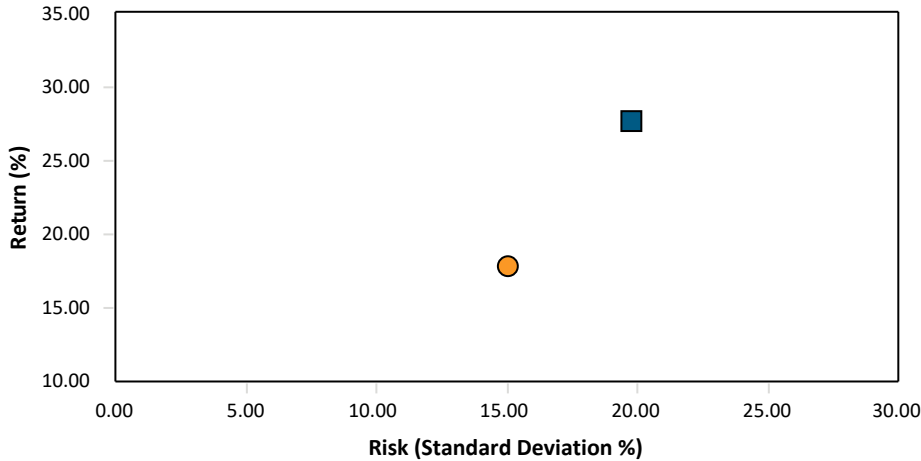


Mutual fund data sourced from Lipper Analytical Services.

Manager Evaluation

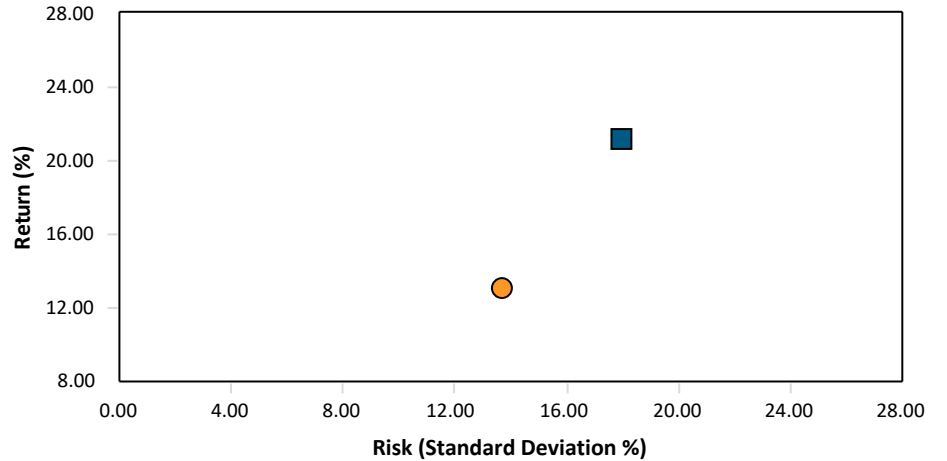
Vanguard International Growth Adm
As of December 31, 2021

3 Year Risk and Return



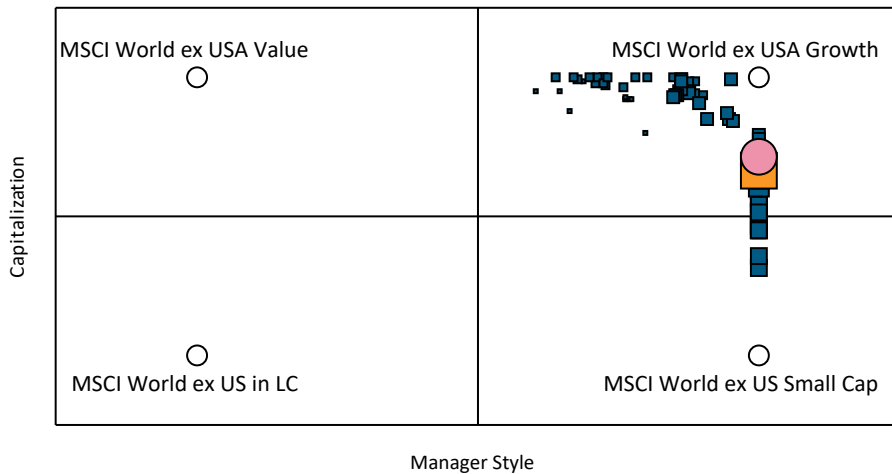
- Vanguard International Growth Adm
- MSCI AC World ex USA Growth (Net)

5 Year Risk and Return



- Vanguard International Growth Adm
- MSCI AC World ex USA Growth (Net)

Style Map - 3 Years



- Style History
- Dec-2021
- Average Style Exposure

MPT Statistics vs. MSCI AC World ex USA Growth (Net)

	3 Years	5 Years
Return	27.7	21.1
Standard Deviation	19.8	17.9
vs. MSCI AC World ex USA Growth (Net)		
Alpha	5.2	4.7
Beta	1.2	1.2
R-Squared	0.9	0.9
Consistency	66.7	63.3
Up Market Capture	139.7	137.6
Down Market Capture	124.3	116.6
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	1.3	1.1

Mutual fund data sourced from Lipper Analytical Services.

Manager Evaluation

Vanguard International Growth Adm

Report Date December 31, 2021

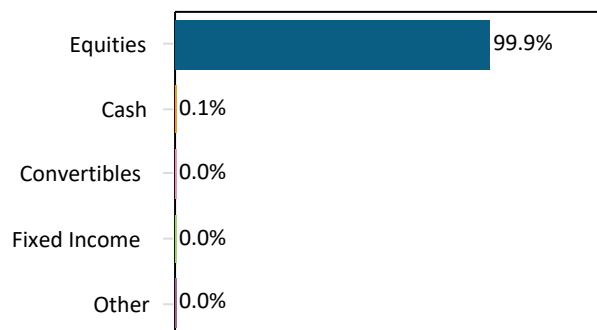
Mutual Fund Information

Fund Name :	Vanguard World Funds: Vanguard International Growth Fund; Admiral Shares	Portfolio Assets :	\$69,305 Million
Fund Family :	Vanguard	Fund Assets :	\$59,334 Million
Ticker :	VWILX	Portfolio Manager :	Team Managed
Inception Date :	08/13/2001	PM Tenure :	
Portfolio Turnover :	20%		

Fund Investment Policy

The Fund seeks long-term capital appreciation by investing in equity securities of companies based outside the United States. In selecting stocks, the Fund's advisor evaluates foreign markets around the world and chooses companies with above-average growth potential.

Asset Allocation as of 06/30/21



Top 10 Securities as of 06/30/21

ASML Holding NV ORD	6.0 %
Tencent Holdings Ltd ORD	4.8 %
Mercadolibre Inc ORD	4.1 %
Moderna Inc ORD	3.6 %
Kering SA ORD	3.5 %
Illumina Inc ORD	3.2 %
Alibaba Group Holding Ltd ORD	3.1 %
Adyen NV ORD	3.1 %
Tesla Inc ORD	3.1 %
M3 Inc ORD	2.4 %

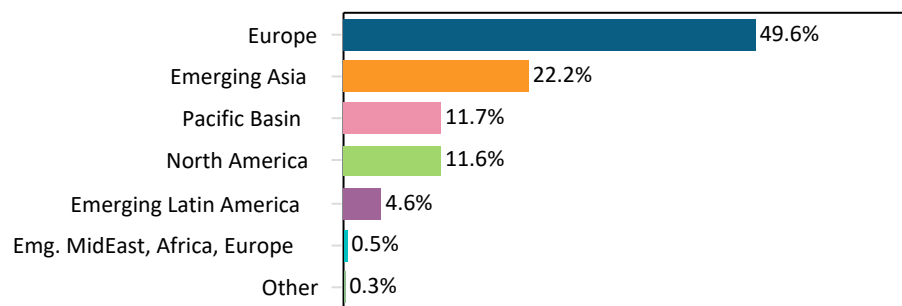
Top 5 Countries as of 06/30/21

China	16.9 %
Netherlands	12.0 %
United States	10.6 %
Germany	8.1 %
Japan	7.9 %

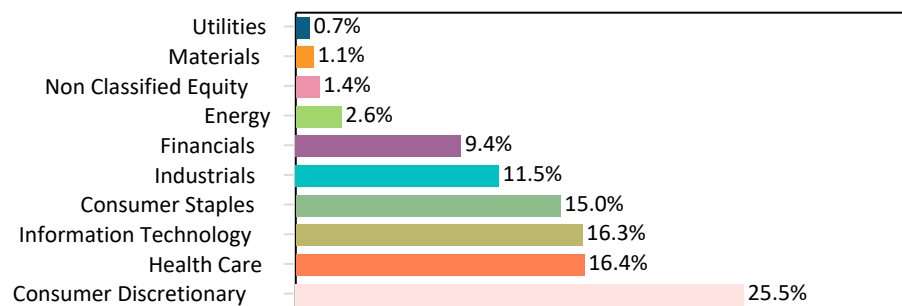
Equity Characteristics as of 06/30/21

Total Securities	137
Avg. Market Cap	\$185,891 Million
P/E	42.9
P/B	11.8
Div. Yield	1.3%
Annual EPS	23.5

Region Allocation as of 06/30/21



Sector Allocation as of 06/30/21



Asset Allocation - New Hires Plan

As of December 31, 2021

	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Plan	1,873,703	100.0	100.0	0.0
Short Term Liquidity	55,628	3.0	0.0	3.0
Allspring Government Money Market	55,628	3.0	0.0	3.0
Fixed Income	1,100,638	58.7	60.0	-1.3
Vanguard Total Bond Market Index Adm	1,100,638	58.7	60.0	-1.3
Domestic Equity	444,852	23.7	25.0	-1.3
Vanguard Total Stock Market Index Adm	444,852	23.7	25.0	-1.3
International Equity	272,584	14.5	15.0	-0.5
Vanguard Total International Stock Index Adm	272,584	14.5	15.0	-0.5

Investments with a zero balance were held in the portfolio during the reporting period and will be removed once they no longer impact portfolio performance. Asset Allocation weightings may not add up to 100% due to rounding.

Total Plan Performance Summary - Glastonbury New Hires Plan

As of December 31, 2021

Account Reconciliation

	QTR	YTD	Since Inception	Inception Date
Total Plan				12/01/2015
Beginning Market Value	1,837,066	1,362,938	14,874	
Net Contributions	-7,961	417,389	1,546,806	
Total Gain/Loss	44,598	93,376	312,023	
Ending Market Value	1,873,703	1,873,703	1,873,703	

New Hires Blended Benchmark Composition

Allocation Mandate	Weight (%)
Jun-2020	
Blmbg. U.S. Aggregate Index	60.00
CRSP US Total Market Spliced Index	25.00
FTSE Global All Cap ex US Spliced Index	15.00

Trailing Performance Summary

	QTR	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Plan	2.4	6.2	11.6	7.7	N/A	N/A	6.8	12/01/2015
<i>New Hires Blended Benchmark</i>	2.6	6.4	11.2	8.1	N/A	N/A	7.3	
Difference	-0.2	-0.2	0.4	-0.4	N/A	N/A	-0.5	

Calendar Year Performance Summary

	2020	2019	2018	2017	2016	2015	2014	2013
Total Plan	13.8	15.0	-3.4	7.6	4.1	N/A	N/A	N/A
<i>New Hires Blended Benchmark</i>	11.6	15.7	-3.8	11.4	5.2	N/A	N/A	N/A
Difference	2.2	-0.7	0.4	-3.8	-1.1	N/A	N/A	N/A

Benchmark Composition

Blended Benchmark

As of December 31, 2021

Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Apr-2021		Aug-2019	
90 Day U.S. Treasury Bill	0.5	90 Day U.S. Treasury Bill	0.5
Blmbg. U.S. Aggregate Index	27.5	Blmbg. U.S. Aggregate Index	26.0
Bloomberg Global Aggregate	5.0	FTSE World Government Bond Index	7.5
Russell 3000 Index	40.0	Russell 3000 Index	40.0
MSCI AC World ex USA (Net)	16.0	MSCI AC World ex USA (Net)	16.0
NCREIF Fund Index - ODCE (net)	6.0	NCREIF Fund Index - ODCE (net)	6.0
Glatonbury Short Term Inflation Protection Benchmark	5.0	Glatonbury Short Term Inflation Protection Benchmark	4.0
Feb-2021		Feb-2019	
90 Day U.S. Treasury Bill	0.5	Blmbg. U.S. Aggregate Index	25.0
Blmbg. U.S. Aggregate Index	28.5	FTSE World Government Bond Index	7.5
Bloomberg Global Aggregate	5.0	Russell 3000 Index	36.5
Russell 3000 Index	40.0	MSCI AC World ex USA (Net)	20.0
MSCI AC World ex USA (Net)	16.0	NCREIF Fund Index - ODCE (net)	5.0
NCREIF Fund Index - ODCE (net)	6.0	Short Term Inflation Protection Index	6.0
Glatonbury Short Term Inflation Protection Benchmark	4.0	Oct-2013	
Jul-2020		Blmbg. U.S. Aggregate Index	25.0
90 Day U.S. Treasury Bill	0.5	FTSE World Government Bond Index	7.5
Blmbg. U.S. Aggregate Index	28.5	Russell 3000 Index	32.5
FTSE World Government Bond Index	5.0	MSCI AC World ex USA (Net)	24.0
Russell 3000 Index	40.0	NCREIF Fund Index - ODCE (net)	5.0
MSCI AC World ex USA (Net)	16.0	Short Term Inflation Protection Index	6.0
NCREIF Fund Index - ODCE (net)	6.0	Jul-2012	
Glatonbury Short Term Inflation Protection Benchmark	4.0	Blmbg. U.S. Aggregate Index	25.0
		FTSE World Government Bond Index	7.5
		Russell 3000 Index	32.5
		MSCI AC World ex USA (Net)	24.0
		NCREIF Fund Index - ODCE (net)	5.0
		Inflation Protection Index	6.0

Benchmark Composition

Blended Benchmark

As of December 31, 2021

Allocation Mandate	Weight (%)
Oct-2011	
Blmbg. U.S. Aggregate Index	25.0
FTSE World Government Bond Index	7.5
Russell 3000 Index	32.5
MSCI AC World ex USA (Net)	24.0
90 Day U.S. Treasury Bill	5.0
Inflation Protection Index	6.0
Aug-2011	
Blmbg. U.S. Aggregate Index	25.0
FTSE World Government Bond Index	7.5
Russell 3000 Index	32.5
MSCI AC World ex USA (Net)	24.0
NCREIF Property Index	5.0
Inflation Protection Index	6.0
Jan-2003	
90 Day U.S. Treasury Bill	5.0
Blmbg. U.S. Aggregate Index	16.0
Blmbg. U.S. Long Government/Credit	14.0
Russell 1000 Index	36.0
Russell Midcap Index	5.0
Russell 2000 Index	5.0
MSCI EAFE (Net) Index	14.0
NCREIF Property Index	5.0



Indices for Past Return & Risk Metrics

Indices used to generate historical risk and return metrics	Most Recent Index	Index Dates			Linked Index 1	Index Dates			Linked Index 2	Index Dates			Linked Index 2	Index Dates		
Cash	FTSE Treasury Bill 3 Mon USD	12/21	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
US Bond	Bloomberg US Agg Bond TR USD	12/21	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
US Bonds - Dynamic	*Custom Blend of Indices	12/21	-	2/90	Bloomberg US Agg Bond TR USD	1/90	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
HY Bond	Bloomberg US Corporate High Yield TR USD	12/21	-	7/83	Bloomberg US Agg Bond TR USD	6/83	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
Global Bonds	Bloomberg Global Aggregate TR Hdg USD	12/21	-	2/90	Bloomberg US Agg Bond TR USD	1/90	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
US Equity (LC)	S&P 500 TR USD	12/21	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
US Equity (SC)	Russell 2000 TR USD	12/21	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
Int'l Dev. Equity	MSCI EAFE GR USD	12/21	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
EM Equity	MSCI EM GR USD	12/21	-	1/88	MSCI EAFE GR USD	12/87	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
Real Estate	Wilshire US RESI TR USD	12/21	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
Broad Real Assets	S&P Real Asset TR USD	12/21	-	5/05	*Custom Real Assets Index	4/05	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
Marketable Alternatives	HFRI Fund of Funds Composite USD	12/21	-	1/90	HFN Hedge Fund Aggregate Average	12/89	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.
Private Equity	Cambridge PE 67% Buyout vs. 33% Venture	12/21	-	4/86	Russell2000 TR USD	3/86	-	1/79	N.A.	N.A.	-	N.A.	N.A.	N.A.	-	N.A.

*US Bonds - Dynamic Index - 1/3 Bloomberg Gbl Agg Ex USD TR Hdg USD, 1/3 FTSE Treasury Bill 3 Mon USD & 1/3 Bloomberg US Corporate High Yield TR USD

Note: Private Equity Index is frequently 3-6 months behind the other indices. For historical return calculation purposes, it is given 0% returns during the most recent period where gaps may exist.

Disclosures



The historical performance information derived from the Frontier Engineer and used or presented in charts, tables, or graphs represent simulated historical performance, which has been derived by retroactively applying an asset allocation modeling process in its most recently developed form with its most recently derived ten-year (forward-looking) capital market assumptions. Such historical return simulations (or back testing) was performed by simulating the combination of actual index returns for the historical period with a buy and hold strategy effective January 1, 1988 through the most recently available month-end date with simulated rebalancing occurring every month-end (with the reinvestment of dividends and capital gains from each index).

Back tested performance is hypothetical and does not reflect actual trades or actual client performance. As with all models, there are inherent limitations which are derived from the retroactive application developed with the benefit of hindsight, including the risk that certain factors such as material economic and market conditions could have contributed to materially different (either higher or lower) performance results than those depicted, or that certain material factors may have been included or excluded from consideration. As such, actual results during the applicable back tested period would have been different than those depicted.

The asset allocation modeling process currently used was initially developed in 2002, and was not offered as a strategy prior to that time. The output of a forward-looking model (or process) is a representation of allocation percentages among specific asset classes. Clients cannot invest directly in a target allocation, but rather, in underlying securities within designated asset classes. Advisor may change its models from time to time, and regularly updates its model as additional capital market assumption information becomes available or to increase or decrease relative weightings or emphasis on certain factors. Consequently, the Advisor may choose to deviate from a stated model over time as the model itself is revised, which could have a materially positive or negative impact on performance.

During the period represented, numerous modelling changes were made, including the regular changes in (ten-year and/or twenty-year basis) forward-looking expected returns, expected volatilities, expected non-normal return distribution assumptions, as well as tracking-error assumptions and risk budgets. Furthermore, such assumptions can be modified client-by-client depending on certain preferences, priorities, constraints or unique considerations applicable to each client.

Other economic and market factors may have impacted decision-making when using the model to manage client funds, including the list of approved asset classes by a client or client type as well as any client-directed or Advisor implemented constraints.

All investments bear the risk of loss, including the loss of principal. Past performance, actual or hypothetical, is no guarantee of future results.

The returns displayed on the preceding pages are gross of fees. Actual performance would be reduced by investment advisory fees and other expenses that may be incurred in the management of the client's portfolio. The collection of fees produces a compounding effect on the total rate of return net of management fees. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) \$1,000,000 investment, (c) portfolio return of 8% a year, and (d) 0.50% annual investment advisory fee would be \$5,228 in the first year, and cumulative effects of \$30,342 over five years and \$73,826 over ten years. Additional information on advisory fees charged by Fiduciant Advisors are described in Part 2 of the Form ADV.

Disclosures



INDEX DEFINITIONS

FTSE Treasury Bill 3 Month measures return equivalents of yield averages and are not marked to market. It is an average of the last three three-month Treasury bill month-end rates.

Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.

Bloomberg Barclays Muni 5 Year Index is the 5 year (4-6) component of the Municipal Bond index.

Bloomberg Barclays High Yield Municipal Bond Index covers the universe of fixed rate, non-investment grade debt.

Bloomberg Barclays U.S. Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

FTSE World Government Bond Index (WGBI) (Unhedged) provides a broad benchmark for the global sovereign fixed income market by measuring the performance of fixed-rate, local currency, investment-grade sovereign debt from over 20 countries,

FTSE World Government Bond Index (WGBI) (Hedged) is designed to represent the FTSE WGBI without the impact of local currency exchange rate fluctuations.

Bloomberg Barclays US Corporate High Yield TR USD covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.

JP Morgan Government Bond Index-Emerging Market Index (GBI-EMI) is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.

JPMorgan EMBI Global Diversified is an unmanaged, market-capitalization weighted, total-return index tracking the traded market for U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

MSCI ACWI is designed to represent performance of the full opportunity set of large- and mid-cap stocks across multiple developed and emerging markets, including cross-market tax incentives.

The S&P 500 is a capitalization-weighted index designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.

Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.

Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.

MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

MSCI Emerging Markets captures large and mid-cap representation across Emerging Markets countries. The index covers approximately 85% of the free-float adjusted market capitalization in each country

The Wilshire US Real Estate Securities Index (Wilshire US RESI) is comprised of publicly-traded real estate equity securities and designed to offer a market-based index that is more reflective of real estate held by pension funds.

Alerian MLP Index is a float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.

Bloomberg Commodity Index (BCI) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.

Treasury Inflation-Protected Securities (TIPS) are Treasury bonds that are indexed to inflation to protect investors from the negative effects of rising prices. The principal value of TIPS rises as inflation rises.

HFRI Fund of Funds Composite is an equal-weighted index consisting of over 800 constituent hedge funds, including both domestic and offshore funds.

Cambridge Associates U.S. Private Equity Index (67% Buyout vs. 33% Venture) is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.

HFN Hedge Fund Aggregate Average is an equal weighted average of all hedge funds and CTA/managed futures products reporting to the HFN Database. Constituents are aggregated from each of the HFN Strategy Specific Indices.

Goldman Sachs Commodity Index (GSCI) is a broadly diversified, unleveraged, long-only composite index of commodities that measures the performance of the commodity market.

Definitions & Disclosures

Please note: Due to rounding methodologies of various data providers, certain returns in this report might differ slightly when compared to other sources

REGULATORY DISCLOSURES

Offer of ADV Part 2A: Rule 204-3 under the Investment Advisers Act of 1940 requires that we make an annual offer to clients to send them, without charge, a written disclosure statement meeting the requirements of such rule. We will be glad to send a copy of our ADV Part 2A to you upon your written request to compliance@fiducient.com.

ASSET CLASS REPRESENTATIONS

All material and information is intended for Fiducient Advisors L.L.C. business only. Any use or public dissemination outside firm business is prohibited. Information is obtained from a variety of sources which are believed though not guaranteed to be accurate. Any forecast represents future expectations and actual returns, volatilities and correlations will differ from forecasts. Past performance does not indicate future performance. This presentation does not represent a specific investment recommendation. Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice.

When referencing asset class returns or statistics, the following indices are used to represent those asset classes, unless otherwise notes. Each index is unmanaged and investors can not actually invest directly into an index:

TIPS: Bloomberg Barclays Global Inflation-Linked: U.S. TIPS Total Return Index Unhedged

Municipals 5-Year: Bloomberg Barclays Municipal Bond 5 Year (4-6) Total Return Index Unhedged USD

Core Bond: Bloomberg Barclays US Agg Total Return Value Unhedged USD

High Yield Municipals: Bloomberg Barclays Muni High Yield Total Return Index Value Unhedged USD

High Yield: Bloomberg Barclays US Corporate High Yield Total Return Index Value Unhedged USD

Foreign Bond: Bloomberg Barclays Global Aggregate ex-USD Total Return Index Value USD (50/50 blend of hedged and unhedged)

EM Debt (unhedged): J.P. Morgan GBI-EM Global Diversified Composite Unhedged USD

U.S. Large Cap: S&P 500 Total Return Index

U.S. Small Cap: Russell 2000 Total Return Index

International Developed: MSCI EAFE Net Total Return USD Index

Emerging Markets: MSCI Emerging Markets Net Total Return USD Index

World: MSCI ACWI Net Total Return USD Index

U.S. Equity REITs: FTSE Nareit Equity REITs Total Return Index USD

S&P Real Assets: S&P Real Assets Total Return Index

Commodities: Bloomberg Commodity Total Return Index

Hedge Funds: Hedge Fund Research HFRI Fund of Funds Composite Index

Balanced: 3% TIPS, 33% Core Bond, 4% High Yield, 2% Foreign Bond, 2% EM Debt (unhedged), 18% U.S. Large Cap, 6% U.S. Small Cap, 16% International, 8% Emerging Markets, 5% U.S. Equity REITs, 3% Commodities

U.S.: MSCI USA Net Total Return USD Index

China: MSCI CHINA Net Total Return USD Index

Japan: MSCI Japan Net Total Return USD Index

Germany: MSCI Germany Net Total Return USD Index

India: MSCI India Net Total Return USD Index

United Kingdom: MSCI UK Net Total Return USD Index

France: MSCI France Net Total Return USD Index

Italy: MSCI Italy Net Total Return USD Index

Brazil: MSCI Brazil Net Total Return USD Index

Canada: MSCI Canada Net Total Return USD Index

INDEX DEFINITIONS

- **Citigroup 3 Month T-Bill** measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- **Ryan 3 Yr. GIC** is an arithmetic mean of market rates of \$1 million Guaranteed Interest Contracts held for three years.
- **Bloomberg Barclays Treasury U.S. T-Bills-1-3 Month Index** includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- **Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index** consists of Inflation-Protection securities issued by the U.S. Treasury.
- **Bloomberg Barclays Muni Index** is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- **Bloomberg Barclays Muni 1 Year Index** is the 1-year (1-2) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 3 Year Index** is the 3-year (2-4) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 5 Year Index** is the 5-year (4-6) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 7 Year Index** is the 7-year (6-8) component of the Municipal Bond index.
- **Bloomberg Barclays Intermediate U.S. Gov't/Credit** is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.

- **Bloomberg Barclays U.S. Aggregate Index** covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.
- **Bloomberg Barclays Global Aggregate ex. USD Indices** represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- **Bloomberg Barclays U.S. Corporate High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- **JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index** is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- **The S&P 500** is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- **The Dow Jones Industrial Index** is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- **The NASDAQ** is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- **Russell 3000** is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- **Russell 1000** consists of the largest 1000 companies in the Russell 3000 Index.
- **Russell 1000 Growth** measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 1000 Value** measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- **Russell Mid Cap** measures the performance of the 800 smallest companies in the Russell 1000 Index.
- **Russell Mid Cap Growth** measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- **Russell Mid Cap Value** measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.
- **Russell 2000** consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- **Russell 2000 Growth** measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 2000 Value** measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- **Russell 2500** consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- **Russell 2500 Growth** measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 2500 Value** measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- **MSCI World** captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- **MSCI ACWI (All Country World Index) ex. U.S. Index** captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- **MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index** captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- **MSCI EAFE** is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- **MSCI EAFE Value** captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- **MSCI EAFE Growth** captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- **MSCI Emerging Markets** captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- **Consumer Price Index** is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- **FTSE NAREIT Equity REITs Index** contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- **S&P Developed World Property** defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **S&P Developed World Property x U.S.** defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **Fund Specific Broad Real Asset Benchmarks:**
 - **DWS Real Assets:** 30%: Dow Jones Brookfield Infrastructure Index, 30%: FTSE EPRA/NAREIT Developed Index, 15%: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 10%: Barclays U.S. Treasury Inflation Notes Total Return Index
 - **PIMCO Inflation Response Multi Asset Fund:** 45% Barclays U.S. TIPS, 20% Bloomberg Commodity Index, 15% JP Morgan Emerging Local Markets Plus, 10% Dow Jones Select REIT, 10% Bloomberg Gold Subindex Total Return
 - **Principal Diversified Real Assets:** 35% BBgBarc U.S. Treasury TIPS Index, 20% S&P Global Infrastructure Index NTR, 20% S&P Global Natural Resources Index NTR, 15% Bloomberg Commodity Index, and 10% FTSE EPRA/NAREIT Developed Index NTR
 - **Wellington Diversified Inflation H:** 50% MSCI ACWI Commodity Producers Index, 25% Bloomberg Commodity Index, and 25% Bloomberg Barclays US TIPS 1 – 10 Year Index
- **Bloomberg Commodity Index** is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- **HFRI Fund Weighted Composite Index** is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- **The Alerian MLP Index** is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- **The Adjusted Alerian MLP Index** is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.
- **Cambridge Associates U.S. Private Equity Index** is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.

- **Cambridge Associates U.S. Venture Capital Index** is based on data compiled from over 1,600 institutional-quality venture capital funds formed between 1986 and 2015.
- **Vanguard Spliced Bloomberg Barclays US1-5Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 1–5 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 1–5 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US5-10Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 5–10 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 5–10 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Agg Flt Adj Index:** Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Long Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. Long Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. Long Government/Credit Float Adjusted Index thereafter.
- **Vanguard Balanced Composite Index:** Made up of two unmanaged benchmarks, weighted 60% Dow Jones U.S. Total Stock Market Index (formerly the Dow Jones Wilshire 5000 Index) and 40% Bloomberg Barclays U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Intermediate-Term Tax-Exempt Index:** Bloomberg Barclays 1–15 Year Municipal Bond Index.
- **Vanguard Spliced Extended Market Index:** Dow Jones Wilshire 4500 Index through June 17, 2005; S&P Transitional Completion Index through September 16, 2005; S&P Completion Index thereafter.
- **Vanguard Spliced Value Index:** S&P 500 Value Index (formerly the S&P 500/Barra Value Index) through May 16, 2003; MSCI US Prime Market Value Index through April 16, 2013; CRSP US Large Cap Value Index thereafter.
- **Vanguard Spliced Large Cap Index:** Consists of MSCI US Prime Market 750 Index through January 30, 2013, and the CRSP US Large Cap Index thereafter.
- **Vanguard Spliced Growth Index:** S&P 500 Growth Index (formerly the S&P 500/Barra Growth Index) through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index thereafter.
- **Vanguard Spliced Mid Cap Value Index:** MSCI US Mid Cap Value Index through April 16, 2013; CRSP US Mid Cap Value Index thereafter.
- **Vanguard Spliced Mid Cap Index:** S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter.
- **Vanguard Spliced Mid Cap Growth Index:** MSCI US Mid Cap Growth Index through April 16, 2013; CRSP US Mid Cap Growth Index thereafter.
- **Vanguard Spliced Total Stock Market Index:** Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005; MSCI US Broad Market Index through June 2, 2013; and CRSP US Total Market Index thereafter.
- **Vanguard Spliced Small Cap Value Index:** SmallCap 600 Value Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Value Index through April 16, 2013; CRSP US Small Cap Value Index thereafter.
- **Vanguard Spliced Small Cap Index:** Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter.
- **Vanguard Spliced Small Cap Growth Index:** S&P SmallCap 600 Growth Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index through April 16, 2013; CRSP US Small Cap Growth Index thereafter.
- **Vanguard Spliced Total International Stock Index:** Consists of the Total International Composite Index through August 31, 2006; the MSCI EAFE + Emerging Markets Index through December 15, 2010; the MSCI ACWI ex USA IMI Index through June 2, 2013; and FTSE Global All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Developed Markets Index:** MSCI EAFE Index through May 28, 2013; FTSE Developed ex North America Index through December 20, 2015; FTSE Developed All Cap ex US Transition Index through May 31, 2016; FTSE Developed All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Emerging Markets Index:** Select Emerging Markets Index through August 23, 2006; MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; and FTSE Emerging Markets All Cap China A Transition Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard REIT Spliced Index:** MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through January 31, 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

Additional:

- Equity sector returns are calculated by Russell and MSCI for domestic and international markets, respectively. MSCI sector definitions correspond to the MSCI GICS® classification (Global Industry Classification System); Russell uses its own sector and industry classifications.
- MSCI country returns are calculated by MSCI and are free float-adjusted market capitalization indices that are designed to measure equity market performance in each specific country.
- Currency returns are calculated using Bloomberg's historical spot rate indices and are calculated using the U.S. dollar as the base currency.
- The Index of Leading Economic Indicators, calculated by The Conference Board, is used as a barometer of economic activity over a range of three to six months. The index is used to determine the direction and stability of the economy. The composite index of leading indicators, which is derived from 10 leading indicators, helps to signal turning points in the economy and forecast economic cycles. The leading indicators are the following: average weekly hours, average weekly initial claims, manufacturers' new orders, both consumer and non-defense capital goods, vendor performance, building permits, stock prices, money supply (M2), the interest rate spread and the index of consumer expectations.
- S&P Target Date Indexes are constructed using a survey method of current target date investments with \$100 million or more in assets under management. Allocations for each vintage are comprised of exchange-traded funds that represent respective asset classes used in target date portfolios. The indexes are designed to represent a market consensus glide path.

DEFINITION OF KEY STATISTICS AND TERMS

- **Returns:** A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- **Universe Comparison:** The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- **Returns In Up/Down Markets:** This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up market capture ratio is the ratio of the fund's return in up markets to the index. The down market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.

- **Standard Deviation:** Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- **R-Squared:** This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- **Beta:** This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse than the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- **Alpha:** The Alpha is the nonsystematic return, or the return that can't be attributed to the market. It can be thought of as how the manager performed if the market's return was zero. A positive alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- **Sharpe Ratio:** The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The higher the Sharpe ratio, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- **Treynor Ratio:** The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns rather than the standard deviation of portfolio returns. High values mean better return for risk taken.
- **Tracking Error:** Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- **Information Ratio:** The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- **Consistency:** Consistency shows the percent of the periods the fund has beaten the index and the percent of the periods the index has beat the fund. A high average for the fund (e.g., over 50) is desirable, indicating the fund has beaten the index frequently.
- **Downside Risk:** Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.
- **M-Squared:** M-squared, or the Modigliani risk-adjusted performance measure is used to characterize how well a portfolio's return rewards an investor for the amount of risk taken, relative to that of some benchmark portfolio and to the risk-free rate.

DEFINITION OF KEY PRIVATE EQUITY TERMS

- **PIC (Paid in Capital):** The amount of committed capital that has been transferred from the limited partner to the general partner.
- **TVPI (Total Value to Paid in Capital):** Money returned to limited partners plus the fund's unrealized investments, divided by money paid-in to the partnership. The TVPI should equal RVPI plus DPI.
- **DPI (Distribution to Paid In Capital):** Money returned (distributions) to limited partners divided by money paid in to the partnership. Also called cash-on-cash multiple.
- **RVPI (Residual Value to Paid In Capital):** The value of a fund's unrealized investments divided by money paid-in to the partnership.
- **Internal rate of return (IRR):** This is the most appropriate performance benchmark for private equity investments. It is a time-weighted return expressed as a percentage. IRR uses the present sum of cash drawdowns (money invested), the present value of distributions (money returned from investments) and the current value of unrealized investments and applies a discount.
- **Commitment:** Every investor in a private equity fund commits to investing a specified sum of money in the fund partnership over a specified period of time. The fund records this as the limited partnership's capital commitment. The sum of capital commitments is equal to the size of the fund.
- **Capital Distribution:** These are the returns that an investor in a private equity fund receives. It is the income and capital realized from investments less expenses and liabilities. Once a limited partner has had their cost of investment returned, further distributions are actual profit. The partnership agreement determines the timing of distributions to the limited partner. It will also determine how profits are divided among the limited partners and general partner.
- **Carried Interest:** The share of profits that the fund manager is due once it has returned the cost of investment to investors. Carried interest is normally expressed as a percentage of the total profits of the fund.
- **Co-Investment:** Co-Investments are minority investments made alongside a private equity investor in an LBO, a recapitalization, or an expansion capital transaction. It is a passive, non-controlling investment, as the private equity firm involved will typically exercise control and perform monitoring functions.
- **General Partner (GP):** This can refer to the top-ranking partners at a private equity firm as well as the firm managing the private equity fund.
- **GP Commitments:** It is normal practice for the GP managing a private equity fund to also make a financial commitment to the fund on the same basis as the LPs in the fund, and this is seen as an important factor driving the alignment of GP and LP interests. The historic benchmark for GP commitments has been 1% of the total fund size, but this is by no means universal, and many GPs commit significantly larger amounts. Furthermore, there has been a marked trend towards GPs making larger commitments to their funds over recent years.
- **Leveraged Buy-Out (LBO):** The acquisition of a company using debt and equity finance.
- **Limited Partner (LP):** Institutions or high-net-worth individuals/sophisticated investors that contribute capital to a private equity fund.
- **Public Market Equivalent (PME):** Performance measure used to evaluate performance relative to the market. It is calculated as the ratio of the discounted value of the LP's inflows divided by the discounted value of outflows, with the discounting performed using realized market returns.
- **Primaries:** An original investment vehicle that invests directly into a company or asset.

VALUATION POLICY

Fiducient Advisors does not engage an independent third-party pricing service to value securities. Our reports are generated using the security prices provided by custodians used by our clients. Our custodial pricing hierarchy is available upon request. If a client holds a security not reported by the first custodian within the hierarchy, the valuation is generated from the next custodian within the hierarchy, and so forth. Each custodian uses pricing services from outside vendors, where the vendors may generate nominally different prices. Therefore, this report can reflect minor valuation differences from those contained in a custodian's report. In rare instances where Fiducient Advisors overrides a custodial price, prices are taken from Bloomberg.

REPORTING POLICY

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss. Performance calculated net of investment fees. Certain portfolios presented may be gross of Fiducient Advisors' fees and actual performance would be reduced by investment advisory fees. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.

Custodian reports are the reports that govern the account. There will be different account values between Fiducient Advisors' reports and the custodian reports based on whether the report utilizes trade date or settlement date to calculate value. Additionally, difference between values contained on reports may be caused by different accrued income values. Any forecasts represent future expectations and actual returns, volatilities and correlations will differ from forecasts. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice. Past performance does not indicate future performance and there is a possibility of a loss.

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Unless specified otherwise, all returns are net of individual manager fees, represent total returns and are annualized for periods greater than one year. The deduction of fees produces a compounding effect that reduces the total rate of return over time. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) \$1,000,000 investment, (c) portfolio return of 8% a year, and (d) 0.50% annual investment advisory fee would be \$5,228 in the first year, and cumulative effects of \$30,342 over five years and \$73,826 over ten years. Additional information on advisory fees charged by Fiducient Advisors are described in Part 2 of the Form ADV.

OTHER

By regulation, closed-end funds utilizing debt for leverage must report their interest expense, as well as their income tax expense, as part of their total expense ratio. To make for a useful comparison between closed-end funds and both open-end funds and exchange-traded funds, adjusted expense ratios excluding interest and income tax expenses are utilized for closed-end funds within this report. See disclosure on closed-end fund fact sheets for information regarding the total expense ratio of each closed-end fund.

Please advise us of any changes in your objectives or circumstances.

CUSTODIAN STATEMENTS

Please remember to review the periodic statements you receive from you custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact Fiducient Advisors or your custodian immediately.

**GLASTONBURY BOARD OF FINANCE
REGULAR MEETING MINUTES
WEDNESDAY, DECEMBER 15, 2021**

The Glastonbury Board of Finance, along with Finance Director, Julie Twilley, and Town Manager, Richard J. Johnson, held a regular meeting at 4:00 p.m. via Zoom video conferencing. The video was broadcast in real time and via a live video stream.

Also present was Narae McManus, Controller, and Chris Kachmar from Fiducient Advisors.

Roll Call

Members

Mr. Constantine "Gus" Constantine, Chairman
Ms. Jennifer Sanford, Vice Chairman
Mr. James McIntosh
Mr. Walter Cusson
Mr. Robert Lynn
Mr. James Zeller

1. Public Comment Session: Comments pertaining to the call. *None*
2. Communication: Chris Kachmar from Fiducient Advisors

Mr. Kachmar explained that they are finalizing efforts on capital market assumptions across output classes. In the next few weeks, they will present to the Board the metrics they have run across different asset allocations. Ms. Sanford finds it helpful to look at the efficient frontier work in January, before the budget season begins. She asked if there is a reason why information is being provided later this year. Mr. Kachmar explained that this has generally been the timeframe they have operated on, but they can have the efficient frontier work done for the Board by their January meeting.

Mr. Zeller noted that, in previous years, the Board used to receive the information sooner in the year, typically in October. He asked if, moving forward, they could have it earlier to get more detail earlier in the budget cycle. He also noted that the reports they have received are one fiscal year behind, with information closed out in June 2020. He asked if there is a reason why they cannot have all reports as of the close of the current fiscal year. Mr. Johnson stated that, historically, the Town received the valuation from the actuaries in November. However, in recent years, that information has arrived later. He will talk to Milliman about having a November publication date for the valuation. Ms. Sanford remarked that Mr. Kachmar's reports would be more meaningful if they had Milliman's Glastonbury reports on time.

On the funded status, Mr. Kachmar stated that the Town is in good working order when looking at broad comparisons versus state averages. Regarding pension return, Ms. Sanford complimented Mr. Kachmar's team for their efforts in getting Glastonbury to outperform the largest pensions in the country. Mr. McIntosh was shocked to see that accrued liabilities increased by \$26 million in one year. This is one example of why he is uncomfortable with the actuarial results, and he would like to examine the reasons for such a large increase with

Milliman. Mr. Kachmar pointed out that the new mortality tables accounted for a couple of the percentage points, but he defers the details of that question to the Milliman team.

Mr. Lynn asked if other towns are receiving information on a timelier basis. Mr. Kachmar stated that there is variability, but the Town's plan is well attended to. For the technical details around some of the numbers, he suggested that the Board discuss that with Milliman. Ms. Karp suggested putting together an educational packet for the BOE, the Town Council, and other bodies to review during the budget process which would help inform them of the work that the BOF has been doing.

Mr. Kachmar noted that it has been a mixed bag in the markets lately. Bonds are down through the end of November. US equities have fared better than the international markets. A couple of the managers have struggled recently, most notably, Jackson Square. He explained that Jackson Square has trimmed their portfolio a bit and done some repositioning. Their long-term track record is exceptional, so they still recommend maintaining the fund and staying the course. Mr. Zeller asked if it might be helpful to send out a communication about Jackson Square to members of the Town Council, so that they are not caught off guard when they see the numbers. Mr. Lynn asked if, in the long-term, they would be better off indexing. Mr. Kachmar agreed that the dynamic of mixing and matching is an important one, but he pointed out that the active managers have performed 50 basis points above the benchmark, net of manager fees.

Ms. Sanford noted that the last time the Board received manager performance reviews was in August. She asked if they could get that information monthly. During that period, Jackson Square was in the bottom 100th percentile. She did not see that until a month into the underperformance. Mr. Kachmar explained that they can run a monthly flash report, which would include manager performance, and send it to Ms. Twilley. Ms. Sanford asked to include a quarterly report, as well. Mr. Kachmar agreed to do so.

Ms. Sanford asked how Mr. Kachmar and his team feel about placing a watch on Jackson Square. Mr. Kachmar explained that the magnitude of underperformance has set off alarm bells on their research team. It does not elevate to a formal watch status, but there is an ongoing weekly dialogue with the manager on where their performance is going. Ms. Sanford then noted that, on the international side, Vanguard was one of the top three funds, but they have since moved down to 80. She asked what drove the decline. Mr. Kachmar noted that Vanguard has a heavy orientation into some of the growth names, namely Tesla, which makes it more susceptible to volatility.

3. Communication:

a. Minutes of November 17, 2021 Regular Meeting

Mr. McIntosh noted that under Item 15, the third line, which reads "...out over the next five", the word "years" should follow.

Minutes accepted as amended.

b. Minutes of November 29, 2021 Special Meeting

Mr. McIntosh noted that "New Run Mall" should instead read "Fox Run Mall.

Minutes accepted as amended.

4. Communication: Pension Report – October 2021

Ms. Twilley reviewed the report dated November 18, 2021.

5. Communication: Month End Investments – October 2021

Ms. McManus reviewed the report dated November 12, 2021.

6. Communication: Financial Summary (Expenditures) for 5 months - November 2021

Ms. Twilley reviewed the report dated December 9, 2021.

7. Communication: Capital Projects – November 2021

Ms. Twilley reviewed the report dated December 8, 2021.

8. Communication: Self Insurance Reserve Fund – November 2021

Ms. Twilley reviewed the report dated December 6, 2021. There have been no large loss claims. Mr. Lynn asked what the total aggregate stop loss is per year. Ms. Twilley explained that there is no aggregate stop loss for the town. The stop loss per incident is \$150,000 for the Town and \$200,000 for the BOE.

9. Communication: Bank Collateralization Report

Ms. Twilley reviewed the report as of September 30, 2021.

10. Communication: Transfers Approved by Town Manager Since Last Meeting *None*

11. **Action:** Transfers over \$5,000

a. \$8k Capital Reserve Projects – Land Acquisition

Mr. Johnson explained that there is a capital projects fund for land acquisition, which is allocated to small land purchases. The Town sold a small parcel of land at 210 Griswold Street, and the intersection was realigned through grant monies. A small strip was still under Town ownership. The Chabad Center is interested in acquiring the strip because it would provide an access point for a house for their rabbi. They purchased the strip from the Town for \$8,000. Mr. Johnson explained that the intention is for the Town to reallocate that money to fund future land purchases.

Motion by: Mr. Zeller

Seconded by: Mr. McIntosh

BE IT RESOLVED, that the Glastonbury Board of Finance hereby recommends to the Town Council the transfer of \$8,000 from the General Fund - Unassigned Fund Balance to the Capital Reserve Projects - Land Acquisition Fund as presented, without changes.

Result: Motion passed unanimously {6-0-0}.

b. \$30k Information Technology fiber repairs and other needs

Ms. Twilley explained that the Town has \$30,000 to fund various IT needs. There were two different incidents in Town where tree branches came down and damaged the fiber, so this action is to make fiber repairs. She noted that the annual maintenance cost is higher than what they had estimated. A switch management system will replace the current system which is at its end of life. They have funds available in other areas, mostly in open positions with turnover, so that is how these needs will be funded. Mr. McIntosh asked if this is storm related. Ms. Twilley does not think that the tree branches came down in a storm. They are simply tree branches that came down and damaged the network. Mr. McIntosh asked if this is not covered by insurance. Mr. Johnson does not believe that it is, but he can check to make certain.

Motion by: Mr. Zeller

Seconded by: Mr. McIntosh

BE IT RESOLVED, that the Glastonbury Board of Finance hereby transfers \$30,000 from the General Fund - Accounting, Town Clerk, and Financial Administration Funds to the General Fund - Information Technology - Equipment Maintenance and Data Processing Funds as presented, without changes.

Result: Motion passed unanimously {6-0-0}.

12. Board of Finance Committee Reports, comments, and remarks (no action to be taken)

Mr. Constantine stated that the PBC has not yet met. Mr. Zeller asked about the issue of special revenue funds. He stated that the Board was directed to look at the Comprehensive Annual Financial Report (CAFR), which he did. There were 16 special revenue funds in the last CAFR; there are now 17, but only 5 show up in the Town of Glastonbury budget. He asked where he could find the balances or relevant information for the 12 other special revenue funds. Ms. Twilley stated that pages 102 to 106 of last year's financial report lists the revenues and expenditures. Mr. Zeller countered that, in the regular budget, only 5 of the 17 show up. He asked if there is any reason why they are not in the regular budget document. Mr. Johnson stated that they generally do not budget for these funds. He listed a few examples of the funds in question which are usually unpredictable or largely just accept donations.

Ms. Sanford asked if there could be an appendix note of things that are outside of the budget. Ms. Twilley stated that they are listed in the budget on page 33. A lot of those funds do not change materially from year to year, and the money is restricted, which is why in practice there is not more reporting on this. If the Board would like more detail, it is available within the annual comprehensive financial report.

Ms. Karp noted that a tour was conducted of the Naubuc School this week by the BOE and the Council. As far as she knows, the BOF was not included, but Mr. Zeller attended. She is strongly committed to the fact that if the BOF is asked to decide on an issue, then all members should have the opportunity to access the same information. Going forward, she requests that there be a more coordinated policy on this. If a body like the Council invites the BOF as an entity, then all members are invited. If the BOF is not invited, then no member attends. She also stated that a tour set up for the BOE/Town Council/the BOF is very different from a tour for the public. Ms. Sanford countered that she believes in an all-inclusive approach. The BOF should be invited to all events.

Mr. Zeller explained that a council member had asked him if he were going to attend the meeting. He replied that he was not officially invited, but the council member told him to go anyway. Had there been an objection to Mr. Zeller's appearance, he would have left. He noted that questions relevant to the BOF were raised, such as regarding construction costs, but overall, it was a short tour. Mr. Johnson explained the purpose of the meeting, which was that the BOE is seeking to convert the open space at Naubuc School to a more traditional space. A member of the Town Council asked to look at the area that is to be changed and reconfigured. Council members and the BOE toured the space yesterday. He noted that if the BOF would like to tour it, he can talk to the Superintendent and the Council to arrange a tour for the Board.

Mr. McIntosh stated that the underlying problem goes to what is the function of the BOF. He believes that their function is to test the fiscal capacity of the community to go forward on matters which are brought to them by those who were elected to make those decisions — in this case, the Town Council and the BOE. The Board's mandate is not to go into the question of whether a project is a good idea or not, but whether the Town can afford it and where the money should come from. There are two exceptions to this: cases in which there is wasteful expenditure or where the expenditure is outside the mission of the agency which proposes the expenditure. In those two cases, he believes that the BOF should get involved.

13. Adjournment

Motion by: Mr. Zeller

Seconded by: Mr. Lynn

BE IT RESOLVED, that the Glastonbury Board of Finance moves to adjourn their meeting of December 15, 2021, at 5:31 p.m.

Result: Motion passes unanimously {6-0-0}.

Respectfully submitted,

Lilly Torosyan
Lilly Torosyan
Recording Clerk

For anyone seeking more information about this meeting, a video on demand is available at www.glastonbury-ct.gov/video; click on Public Broadcast Video On Demand, and an audio recording is available in the Finance and Administrative Services Office.

DEPARTMENT OF FINANCE & ADMINISTRATIVE SERVICES

BOF 1/24/22
Item # 5

December 22, 2021

TO: Board of Finance & Richard J. Johnson, Town Manager
 FROM: *QST* Julie Twilley, Director of Finance & Administrative Services
 RE: Pension Investment Review – **November 2021**

As of November 30, 2021 the pension asset value is \$214,523,105, a net increase of \$7,072,980 from July 1, 2021. Through the month of November, the fund experienced an unrealized loss of \$811,500, which is indicative of the current market and there were realized gains of \$168,047. Investment income through November totaled \$901,871.

July 1, 2020 Balance	\$	207,450,125
Revenues:		
Employer Contributions	\$	10,762,848
Employee Contributions	\$	905,658
Total Contributions	\$	11,668,506
Investment Income	\$	901,871
Realized Gains/Losses	\$	168,047
Unrealized Gains/Losses	\$	(811,500)
Total Revenues	\$	11,926,924
Expenditures:		
Benefit Payments	\$	4,783,016
Administrative Fees	\$	15,304
Investment Management Fees	\$	55,624
Total Expenditures	\$	4,853,944
Net Increase/Decrease	\$	7,072,980
Ending Balance November 30, 2021	\$	214,523,105

Assuming a 6.25% long-term return on the plan's investments, the July 1, 2020 Unfunded Accrued Liability is \$80.3 million and the corresponding funded ratio is 67.1%. The Town's policy for paying off the unfunded liability is such that there are 13 years remaining in our amortization schedule.

cc: Narae McManus, Controller
 Karen Bonfiglio, Finance Manager, Glastonbury Public Schools

Town of Glastonbury

Administrative Services
Accounting Division

December 17, 2021

To: Board of Finance
Richard J. Johnson, Town Manager

From: Narae L. McManus, Controller

Subject: Monthly Investment Status

Pooled Investments

The Town's pooled cash investment balances at November 30, 2021 were \$93,645,375. As of month-end, the investment balances for all funds combined were as follows:

Type of Investment	Amount	Rate	
STIF	\$12,918,968	0.09	
Citizens Bank	1,224,561	0.10	
Northern Capital Investment Account	11,769,645	0.15-3.40	Est. current accrued interest \$14,528
Northern Capital Sewer Funds	9,497,897	0.20-3.15	Est. current accrued interest \$7,536
People's United Investments	26,689,134	0.12	
Liberty Bank Investments	21,047,443	0.15	
TD Bank Investments	2,497,727	0.10	
Liberty CD	<u>8,000,000</u>	0.15	Matures 12/26/21
Total	<u>\$93,645,375</u>		

General Fund Earnings

- The General Fund portion of pooled investments at November 30 was \$57.8 million.
- As of November 30, the General Fund has realized investment earnings of \$52,176.
- As of November 30, Sewer Sinking funds totaling \$9,451,000 were invested in fully-insured CDs with terms varying from 6 months to seven years, with current-year realized investment earnings of \$35,628.

Comparative information concerning General Fund earnings follows.

Fiscal Year	Budget	Realized Investment	
		Earnings July-November	Percent of Budget
2021	\$838,000	80,190	9.57 %
2022	195,000	52,176	26.76

cc: Julie B. Twilley, Director of Finance

TOWN OF GLASTONBURY
 ADMINISTRATIVE SERVICES - Financial Administration

BOF 1/24/22 Item # 7

January 12, 2022

TO: Board of Finance and
 Richard J. Johnson, Town Manager

FROM: *QBT* Julie Twilley, Director of Finance & Administrative Services

RE: Financial Summary for the Six Months Ended December 31, 2021 (FY 2021/22)

Note that some variances to budget and prior year are a result of the COVID-19 pandemic.

Revenues & Transfers Summary:

Following is a comparison of revenues received to date, percent of budget collected and percent of revenue category to the total Town budget for the current and previous fiscal year.

Fiscal Year	Revised Budget	Actual Through December	Actual % of Budget Collected	Category as % of Total Town Budget
Tax Revenues				
2020/2021	157,985,075	104,013,064	66%	92%
2021/2022	160,940,802	105,823,082	66%	93%
Licenses & Permits				
2020/2021	1,280,600	817,392	64%	1%
2021/2022	1,313,100	1,105,733	84%	1%
Intergovernmental				
2020/2021	8,320,378	2,524,034	30%	5%
2021/2022	6,945,258	2,374,512	34%	4%
Charges for Services				
2020/2021	1,441,663	817,129	57%	1%
2021/2022	1,400,303	984,070	70%	1%
Other Revenues				
2020/2021	1,843,251	291,063	16%	1%
2021/2022	1,148,867	655,510	57%	1%

At the end of the second quarter, the Town collected \$111.3m in revenues, which represents an increase of \$2.9m when compared to the previous year for the same period. The majority of the year-over-year change is related to:

- Tax Revenues collected were approximately \$1.8m higher than the prior year. The majority of this increase was on the Current Levy and Prior Years.
- Other Revenues were \$0.4m higher than the prior year, driven by higher Educational Vo Ag Tuition and Auction Sales.
- Licenses & Permits were \$0.3m higher largely due to Building Inspection Fees.
- Charges for Services were \$0.2m higher driven by Town Clerk Conveyance Fees.
- This was partially offset by lower Intergovernmental revenues, which were \$0.1m lower due to Coronavirus Relief Fund monies that were received in December 2020.
- In addition, \$0.4m was reimbursed to the General Fund for the Fire Department Self-Contained Breathing Apparatus.

cc: Karen Bonfiglio, Finance Manager; Narae McManus, Controller

To finance the 2021/22 revised budget, a revenue budget of \$172.7m was established and comprised of revenues, transfers and an appropriation from Fund Balance. Actual collections booked thus far total \$111.3m, or \$61.4m below budget. The biggest drivers of the variance include:

- Tax revenues: \$55.1m below budget (largely Current Levy and Auto Supplemental).
- Intergovernmental: \$4.6m below budget (\$4.0m ECS grant and \$0.2m Housing Authority).
- Other Revenues: \$0.5m below budget (\$0.2m Educational Vo Ag Tuition, \$0.1m Property Rentals and \$0.1m interest on investment).
- Charges for Services: \$0.4m below budget (\$0.1m Solid Waste Tip Fees, \$0.1m Parks & Rec Fees and \$0.1m Senior Fees).
- Licenses & Permits: \$0.2m below budget (\$0.1m Building Inspection Fees and \$0.1m Health).
- Budgeted General Fund Appropriation from Fund Balance of \$975k not yet booked, offset by \$400k reimbursement for Fire Department Self-Contained Breathing Apparatus.

Expenditure Summary:

Through December 31, 2021, encumbrances total \$65.5m and expenditures total \$82.5m. Combined, this represents 85% of the Town's revised general fund budget of \$173.5m. This compares to \$62.3m and \$80.4m respectively, or 83%, for the same period in the prior year.

The expenditure increase of \$2.1m is driven by the Town (+\$1.5m) and BOE (+\$1.2m), offset by a reduction in Debt/Transfers of \$0.6m. The increase is largely attributable to the annual Pension contribution. This year's pension contribution of \$10.76m is \$0.9m higher (\$0.7m Town / \$0.2m BOE) than the prior year's annual contribution. Note that the assumed long-term rate of return on investments was reduced from 6.5% to 6.25% in FY2021/2022 and the amortization period is 12 years (as of July 1, 2021 Actuarial Valuation). Also contributing to the increase in expenditures by the Town and BOE is summer programming that was held in 2021, but not in 2020, as well as general wage increases. The reduction in Debt/Transfers is driven by the reduction in the Capital Transfer from \$5.75m in FY2021 to \$5.25m in FY2022.

Below is an Expenditure & Transfer summary report through December 31, 2021.

FINANCIAL COMPARISONS

The below comparison includes Education encumbrance amounts not reflected in the Town's system Reports.

Fiscal Year	Amend/Budget	Expended	Encumbered	Comit %
<u>2020/2021</u>				
Town	\$ 45,731,755	\$ 23,669,662	\$ 11,254,423	76%
Education	111,754,046	47,114,190	46,706,013	84%
Debt/Transfers	14,331,799	9,583,085	4,356,362	97%
<u>2021/2022</u>				
Town	\$ 46,761,394	\$ 25,133,633	\$ 12,134,969	80%
Education	113,549,684	48,348,651	49,704,324	86%
Debt/Transfers	13,198,742	9,015,030	3,650,916	96%

Expenditure comparisons of the three major Town Departments are presented below:

	2020/2021	%	2021/2022	%
ADMIN SERVICES	\$ 3,976,180	59%	\$ 3,751,342	58%
PUBLIC SAFETY	8,695,433	55%	9,301,271	57%
PHYSICAL SERVICES	3,363,280	45%	3,472,224	47%

TOWN OF GLASTONBURY
CURRENT YEAR EXPENDITURES BY DIVISION
FY 2022 THROUGH DECEMBER 31 2021

FUND 010 - GENERAL FUND

Description	2022 ORIGINAL BUDGET	2022 REVISED BUDGET	FY2022 THRU DECEMBER	2022 ENCUMB	AVAILABLE BALANCE	2022 % USED
GENERAL GOVERNMENT						
TOWN COUNCIL	149,007	150,232	104,730	13,536	31,966	78.7%
CUSTOMER SERVICE	63,659	63,659	26,535	563	36,561	42.6%
TOWN MANAGER	710,745	759,108	408,891	225,113	125,104	83.5%
HUMAN RESOURCES	702,268	702,268	323,604	160,573	218,091	68.9%
FACILITIES MAINTENANCE	1,936,856	1,968,489	958,700	443,211	566,577	71.2%
TOTAL GENERAL GOVERNMENT	3,562,535	3,643,756	1,822,461	842,996	978,299	73.2%
COMMUNITY DEVELOPMENT						
COMMUNITY DEVELOPMENT	700,343	761,543	499,261	252,380	9,902	98.7%
BUILDING INSPECTION	633,127	669,747	404,344	265,918	(516)	100.1%
FIRE MARSHAL	376,333	376,333	191,632	101,166	83,535	77.8%
HEALTH	796,843	796,843	436,116	228,201	132,526	83.4%
TOTAL COMMUNITY DEVELOPMENT	2,506,646	2,604,466	1,531,354	847,665	225,448	91.3%
ADMINISTRATIVE SERVICES						
FINANCIAL ADMINISTRATION	746,119	757,515	432,884	243,356	81,275	89.3%
INFORMATION TECHNOLOGY	916,190	991,126	563,900	239,679	187,546	81.1%
ACCOUNTING	506,666	486,666	263,832	154,401	68,433	85.9%
PROPERTY ASSESSMENT	650,837	650,837	357,616	174,145	119,076	81.7%
REVENUE COLLECTION	517,508	517,508	275,237	158,349	83,923	83.8%
TOWN CLERK	547,806	546,306	299,716	176,818	69,772	87.2%
VOTER REGISTRATION	176,863	176,863	81,595	1,395	93,873	46.9%
LEGAL SERVICES	300,000	300,000	86,251	-	213,749	28.8%
PROBATE SERVICES	24,800	24,800	6,253	12,277	6,271	74.7%
INSURANCE/PENSIONS	1,968,268	1,968,268	1,384,057	189,944	394,267	80.0%
TOTAL ADMINISTRATIVE SERVICES	6,355,057	6,419,889	3,751,342	1,350,363	1,318,184	79.5%
PUBLIC SAFETY						
POLICE	14,659,602	14,820,076	8,693,732	3,856,250	2,270,094	84.7%
VOLUNTEER AMBULANCE	2,500	2,500	1,007	-	1,493	40.3%
FIRE	1,319,854	1,325,389	593,361	191,887	540,141	59.2%
CIVIL PREPAREDNESS	32,762	32,762	13,170	2,046	17,546	46.4%
TOTAL PUBLIC SAFETY	16,014,718	16,180,727	9,301,271	4,050,182	2,829,274	82.5%
PHYSICAL SERVICES						
ENGINEERING	1,792,824	1,794,835	1,023,955	551,348	219,532	87.8%
HIGHWAY	4,428,930	4,428,930	1,931,213	1,408,936	1,088,781	75.4%
FLEET MAINTENANCE	1,224,959	1,224,959	517,056	353,580	354,323	71.1%
TOTAL PHYSICAL SERVICES	7,446,713	7,448,724	3,472,224	2,313,864	1,662,636	77.7%

TOWN OF GLASTONBURY
CURRENT YEAR EXPENDITURES BY DIVISION
FY 2022 THROUGH DECEMBER 31 2021

FUND 010 - GENERAL FUND

Description	2022 ORIGINAL BUDGET	2022 REVISED BUDGET	FY2022 THRU DECEMBER	2022 ENCUMB	AVAILABLE BALANCE	2022 % USED
SANITATION						
REFUSE DISPOSAL	906,340	993,672	455,847	297,974	239,850	75.9%
TOTAL SANITATION	906,340	993,672	455,847	297,974	239,850	75.9%
HUMAN SERVICES						
CONTRIBUTORY GRANTS	34,077	34,077	34,077	-	-	100.0%
YOUTH/FAMILY SERVICES	1,576,528	1,576,528	859,371	454,206	262,952	83.3%
SENIOR & COMMUNITY SERVICES	1,529,020	1,540,724	708,896	333,358	498,471	67.6%
TOTAL HUMAN SERVICES	3,139,625	3,151,329	1,602,343	787,563	761,422	75.8%
LEISURE/CULTURE						
PARKS/RECREATION	4,284,254	4,432,707	2,195,256	1,171,743	1,065,708	76.0%
WELLES TURNER LIBRARY	1,869,016	1,871,125	986,535	472,617	411,972	78.0%
SOUTH GLASTONBURY LIBRARY	7,500	7,500	7,500	-	-	100.0%
EAST GLASTONBURY LIBRARY	7,500	7,500	7,500	-	-	100.0%
TOTAL LEISURE/CULTURE	6,168,270	6,318,832	3,196,792	1,644,361	1,477,680	76.6%
OTHER:Debt & Transfers						
DEBT SERVICE	7,036,742	7,036,742	2,854,367	3,650,916	531,459	92.4%
TRANSFERS	6,037,000	6,162,000	6,160,663	-	1,337	100.0%
TOTAL OTHER:Debt & Transfers	13,073,742	13,198,742	9,015,030	3,650,916	532,796	96.0%
EDUCATION						
EDUCATION	113,549,684	115,919,582	49,189,780	750	66,729,052	42.4%
TOTAL EDUCATION	113,549,684	115,919,582	49,189,780	750	66,729,052	42.4%
TOTAL 010 - GENERAL FUND	172,723,330	175,879,718	83,338,443	15,786,635	76,754,640	56.4%

TOWN OF GLASTONBURY

ADMINISTRATIVE SERVICES - Financial Administration

January 11, 2022

TO: Board of Finance
FROM: *ABT* Julie Twilley, Director of Finance & Administrative Services
RE: Capital Projects Fund Expenditures Report
For the Period Ended December 31, 2021 (FY 2021/2022)

The funding presented on this statement has been authorized by referendum, the annual Capital Improvement Program and additional appropriations from the Capital Reserve Fund balance as noted below. The Capital Program designation includes funding resources of the Capital Reserve Fund, Sewer Assessments Fund, or Sewer Operating Fund and grants. In some cases, funding resources may also be provided from General Fund fund balance.

Current appropriated funding for all Capital projects as indicated on the December 31, 2021 report is **\$91.3m**.

Expenditures for current projects since inception through December 31, 2021 total **\$70.4m**. Encumbrances outstanding total **\$4.3m**. The most significant encumbrances are for Welles Turner Library Renovation (\$1.5m), GHS Fieldhouse (\$0.9m), Splash Pad (\$0.2m), Multi-School Locker Replacement (\$0.2m) and Hebron Ave/House St. Improvements (\$0.2m).

Capital expenditures through the month of December totaled **\$5.5m** and were for the Welles Turner Library Renovation, Road Overlay, GHS Field House, Smith Middle School Gym Floor and other capital projects.

Attachment

Cc: Richard J. Johnson, Town Manager
Narae McManus, Controller
Karen Bonfiglio, Business Manager, Board of Education

TOWN OF GLASTONBURY
CAPITAL PROJECTS FUND
FY 2022 THROUGH DECEMBER 31 2021

Description	REVISED BUDGET	EXPENDITURES INCEPTION TO DATE	FY2022 THRU DECEMBER	2022 ENCUMB	AVAILABLE BALANCE
FUND 301 - CAPITAL RESERVE PROJECTS					
GenGovt/Public Safety (31006)					
51827 Town Buildings Security	700,000	544,817	1,811	40,719	114,464
51828 Facilities Study	70,000	-	-	-	70,000
51833 Disaster Prep/Recovery Resourc	1,134,000	883,866	-	-	250,134
51835 Fire Co Renovations/Code Compl	510,960	293,641	5,955	852	216,466
51836 Self Containd Breath Apparatus	520,000	520,788	-	-	(788)
51849 Public Safety Communications	1,270,000	397,516	-	-	872,484
51854 Police Building Windows	142,500	88,301	-	55,852	(1,653)
51854 Police Building Windows (Pol Bthrm Ren)	110,000	99,249	-	1,065	9,686
51855 Fiber Optic Network-School/Twn	1,192,000	1,124,420	7,311	-	67,580
51873 Land Acquisition	1,253,639	1,209,568	39,000	-	44,071
51875 Town Facilities Shop/Storage	1,195,000	1,090,481	43,021	76,400	28,119
51888 Property Revaluation	1,981,500	1,604,740	23,118	-	376,760
51892 Document Management System	460,000	362,511	31,150	80,890	16,599
51912 Tn Hall Improvements	1,718,849	1,714,150	-	-	4,699
51914 Townwide Roof Replacement	830,000	672,858	-	-	157,142
51915 Clean Renewable Energy In	1,487,044	1,350,167	22,079	31,735	105,142
51918 Design Guidelines	125,000	-	-	-	125,000
Total GenGovt/Public Safety	14,700,492	11,957,074	173,446	287,512	2,455,905
PhyServices Sanitation (31007)					
52828 Main Street Reconstruction	1,860,600	-	-	-	1,860,600
52829 Gateway Corp Park Bicyc Pedst	940,700	-	-	-	940,700
52830 Bridge Replacement/Rehabil	5,150,000	4,647,965	61,572	192,969	309,066
52831 Undergrd Fuel Strg Tank Replac	375,000	-	-	-	375,000
52847 Douglas/Sycamore Str Alignment	235,000	28,811	-	1,089	205,100
52848 Main Street Sidewalks Phase 3	1,420,000	653,094	22,780	15,281	751,625
52871 Parking/Access Drive Improvmt	1,000,000	825,045	228,155	-	174,955
52872 Hebron Avenue Resurfacing	1,276,806	1,072,994	-	28,459	175,353
52879 Sidewalk Construction Townwide ()	5,477	5,477	-	-	-
52879 Sidewalk Construction Townwide ()	494,045	-	-	-	494,045
52881 Cedar Ridge Public Water	250,000	250,000	-	-	-
52882 Sidewalk Repair and Maintenanc	600,000	580,734	231,091	-	19,266
52883 Townwide Drainage Solutions	300,000	212,164	95,005	995	86,841
52884 Town Center Streetscape Improv	206,186	-	-	-	206,186
52886 Old Maids Lane-Public Water	175,000	-	-	-	175,000
52946 Road Overlay ()	1,387,096	1,387,096	-	-	-
52946 Road Overlay ()	1,609,639	1,260,836	1,260,836	117,557	231,246
52949 Gen Bicycle/pedestrian Imprvmt	164,262	-	-	-	164,262
52951 Heavy Equipment	649,021	435,820	272,118	192,733	20,468
52958 Glastonbury Blvd Paving	2,200,000	1,893,488	-	93,892	212,620

TOWN OF GLASTONBURY
CAPITAL PROJECTS FUND
FY 2022 THROUGH DECEMBER 31 2021

Description	REVISED BUDGET	EXPENDITURES INCEPTION TO DATE	FY2022 THRU DECEMBER	2022 ENCUMB	AVAILABLE BALANCE
52959 Traffic Calming	100,000	-	-	-	100,000
52960 Renovation andSite Restoration	1,573,189	1,576,344	-	-	(3,155)
52960 Renovation andSite Restoration (Slocumb Dam)	275,000	232,901	10,900	-	42,099
52963 Hebron Ave/House St Improvemen	1,975,000	1,518,629	2,763	229,731	226,640
52964 Public Water Service - Uranium	50,000	28,450	1,910	6,550	15,000
52965 Mill St Bridge Replacement	180,000	-	-	-	180,000
Total PhyServices Sanitation	24,452,020	16,609,848	2,187,131	879,255	6,962,917
Culture/Parks &Recreation (31008)					
53825 Addison Park Renovations	295,000	29,382	20,000	3,830	261,789
53832 Aquatics Facility	125,000	112,896	-	-	12,104
53837 Minnechaug Golf Improvements	512,500	391,294	1,692	50	121,156
53838 Library Exterior Renovations	94,624	-	-	-	94,624
53839 Multi-Use Trail	1,228,000	1,043,768	-	35,717	148,515
53841 Splash Pad	550,013	326,388	130,575	221,765	1,861
53842 PICKLEBALL COURTS	80,000	3,840	3,840	2,160	74,000
53843 Riverfront Park and Boathouse	90,000	19,038	19,038	18,000	52,962
53853 Mower 16' Rotary Mower Rplcmnt	113,415	113,415	-	-	-
53856 Parks Facility Renov/Expansion	1,067,500	1,006,331	-	23,391	37,778
53856 Parks Facility Renov/Expansion ()	-	925	-	-	(925)
53857 Riverfront Park Extension	803,973	777,023	-	-	26,950
53860 Library Upgrade/Redesign	412,000	247,561	-	-	164,439
53874 Tree Management	503,205	397,807	154,320	90,179	15,218
53875 Cider Mill	80,000	39,926	-	-	40,074
53920 Open Space Access	540,000	337,861	-	1,000	201,139
53921 Winter Hill	235,000	133,078	17,310	4,750	97,172
Total Culture/Parks &Recreation	6,730,230	4,980,534	346,776	400,841	1,348,855
Education (31009)					
55836 HVAC/Boilers (CAP RES-GID WEL)	1,414,178	1,392,276	-	17,000	4,902
55839 Energy Audit--All Schools	260,500	241,303	-	-	19,197
55847 GHS Fieldhouse	2,328,004	1,607,918	877,958	860,658	(140,572)
55860 GHS Kitchen Upgrades	1,675,000	1,649,688	-	-	25,312
55863 GHS Parking and Access Drives	365,000	365,616	-	-	(616)
55868 Smith Middle School Gym Floor	621,664	621,343	311,680	-	321
55870 School Roofs	50,000	14,788	-	-	35,212
55871 Multi-School Locker Replacemnt	460,000	27	27	231,773	228,200
55872 Gideon Welles Design-Roof Repl	50,000	-	-	35,350	14,650
55873 EDU-Feasibility Analysis/Cost	100,000	-	-	-	100,000
Total Education	7,324,346	5,892,960	1,189,665	1,144,781	286,605
TOTAL 301 - CAPITAL RESERVE PROJECTS	53,207,088	39,440,416	3,897,017	2,712,389	11,054,282
FUND 302 - SEWER SINKING PROJECTS					

TOWN OF GLASTONBURY
CAPITAL PROJECTS FUND
FY 2022 THROUGH DECEMBER 31 2021

Description	REVISED BUDGET	EXPENDITURES INCEPTION TO DATE	FY2022 THRU DECEMBER	2022 ENCUMB	AVAILABLE BALANCE
PhySer Sewer Sinking (32007)					
52887 Eastbury Pump Statn Generator	75,000	-	-	-	75,000
52888 WPC Emergency Power	202,500	154,104	-	-	48,396
52889 WPC Energy Conservation Prog	315,000	92,247	-	12,021	210,731
52893 Cider Mill Pump Station	1,791,000	1,670,692	-	-	120,308
52937 Sewer System Force Main Evalua	150,000	-	-	-	150,000
Total PhySer Sewer Sinking	2,533,500	1,917,043	-	12,021	604,435
TOTAL 302 - SEWER SINKING PROJECTS	2,533,500	1,917,043	-	12,021	604,435
FUND 303 - LAND ACQUISITION					
Land / Open Space (33157)					
78830 Land 2017	4,000,000	3,805,247	-	-	194,753
78831 Land 2020	3,000,000	-	-	-	3,000,000
Total Land / Open Space	7,000,000	3,805,247	-	-	3,194,753
TOTAL 303 - LAND ACQUISITION	7,000,000	3,805,247	-	-	3,194,753
FUND 304 - TOWN AID					
PhySer Conn Grant (33207)					
52942 Town Aid Improved Rds ()	207,928	207,928	-	-	-
52942 Town Aid Improved Rds ()	866,886	291,347	291,347	45,078	530,462
52943 Town Aid Unimproved Rds ()	5,510	5,510	-	-	-
52943 Town Aid Unimproved Rds ()	25,314	-	-	-	25,314
Total PhySer Conn Grant	1,105,638	504,785	291,347	45,078	555,776
TOTAL 304 - TOWN AID	1,105,638	504,785	291,347	45,078	555,776
FUND 314 - RIVERFRONT PARK					
Riverfront Park - Phase I (34560)					
66805 Administrative	147,738	147,737	-	-	1
66810 Engineering	121,418	121,417	-	-	1
66824 Machinery & Equipment	196,373	196,373	-	-	-
66825 Construction	3,784,471	3,784,470	-	-	1
66829 Contingency	-	-	-	-	-
Total Riverfront Park - Phase I	4,250,000	4,249,998	-	-	2
RIVERFRONT PARK - PHASE II (34561)					
66805 Administrative	18,000	17,962	-	-	38
66810 Engineering	863,500	844,120	-	74	19,306
66825 Construction	14,680,000	14,712,305	-	-	(32,305)
66829 Contingency	48,500	30,833	-	-	17,668
Total RIVERFRONT PARK - PHASE II	15,610,000	15,605,220	-	74	4,706
TOTAL 314 - RIVERFRONT PARK	19,860,000	19,855,218	-	74	4,708

TOWN OF GLASTONBURY
CAPITAL PROJECTS FUND
FY 2022 THROUGH DECEMBER 31 2021

Description	REVISED BUDGET	EXPENDITURES INCEPTION TO DATE	FY2022 THRU DECEMBER	2022 ENCUMB	AVAILABLE BALANCE
FUND 316 - GATEWAY PROJECT					
Gateway Corporate Park (35357)					
52845 Gateway Corp. Park	888,541	869,410	-	-	19,131
Total Gateway Corporate Park	888,541	869,410	-	-	19,131
TOTAL 316 - GATEWAY PROJECT	888,541	869,410	-	-	19,131
FUND 318 - LIBRARY RENOVATION					
Welles Turner Library Renov (34509)					
66805 Administrative	110,515	107,716	45,399	13,008	(10,209)
66810 Engineering	500,000	455,895	36,590	36,731	7,374
66824 Machinery & Equipment	550,000	4,071	4,071	525,602	20,328
66825 Construction	5,000,000	3,446,273	1,265,759	946,233	607,494
66829 Contingency	350,000	-	-	-	350,000
Total Welles Turner Library Renov	6,510,515	4,013,955	1,351,818	1,521,574	974,986
TOTAL 318 - LIBRARY RENOVATION	6,510,515	4,013,955	1,351,818	1,521,574	974,986
FUND 319 - BULKY WASTE CLOSURE FUND					
BULKY WASTE CLOSURE FUND (34519)					
66829 Contingency	160,000	-	-	-	160,000
Total BULKY WASTE CLOSURE FUND	160,000	-	-	-	160,000
TOTAL 319 - BULKY WASTE CLOSURE FUND	160,000	-	-	-	160,000
GRAND TOTAL	91,265,282	70,406,074	5,540,181	4,291,136	16,568,072

TOWN OF GLASTONBURY

MEMORANDUM

DEPARTMENT OF ADMINISTRATIVE SERVICES

FINANCIAL ADMINISTRATION

TO: Board of Finance
Richard J. Johnson, Town Manager

FROM: *JBT* Julie Twilley, Director of Finance & Administrative Services
DATE: January 7, 2022
SUBJECT: Self Insurance Reserve Update December 2021

The attached report summarizes the Self Insurance Reserve fund through December 31, 2021. The total reserve is \$15,172,028 allocated \$3,802,895 and \$11,369,132 between Town and Board of Education, respectively. As of December the fund is experiencing a \$698,272 gain for the fiscal year.

As of December, we are expecting to receive reimbursement of \$20,306 from CT Prime for FY2021 large loss claims for the BOE. This balance due is not reflected in the financial summary.

There are currently no large loss claims for FY2021/2022, which are defined as any claims that exceed \$50,000.

Enc.

cc: Dr. Alan Bookman, Superintendent
Karen Bonfiglio, Business Manager

SELF INSURANCE RESERVE FUND

YTD Balances As of: December 31, 2021

	Town	Education	Total
Contributions			
Employer	\$2,936,543	\$5,536,764	\$8,473,307
Employee	667,070	1,535,869	2,202,939
Stop Loss Reimbursement	63,056	69,737	132,793
Total Revenues	\$3,666,669	\$7,142,370	\$10,809,039
Expenditures			
Anthem			
ASO Fees	\$60,940	\$231,743	\$292,683
Claims	1,796,266	6,716,547	8,512,814
	\$1,857,206	\$6,948,291	\$8,805,497
CTCare			
ASO Fees	-	-	-
Claims	23,714	238,507	262,221
	23,713.76	\$238,507	\$262,221
Delta Dental			
ASO Fees	\$8,525	-	\$8,525
Claims	91,637	-	91,637
	\$100,161	-	\$100,161
Bank Fees/PCORI Fee	\$1,168	\$3,815	\$4,983
CT Prime	235,381	662,523	\$897,904
OneDigital Consultant Fees	9,000	36,000	45,000
	\$245,549	\$702,338	\$947,887
Total Expenditures	\$2,226,630	\$7,889,136	\$10,115,766
Current Year Revenues Less Expenses	\$1,440,039	(\$746,766)	\$693,272
Reserve July 1, 2021	\$2,362,857	\$12,115,899	\$14,478,755
Reserve at end of month	\$3,802,895	\$11,369,132	\$15,172,028

Note: The Reserve formula will be updated at the end of each quarter. The next update will be provided in February 2022.

TOWN OF GLASTONBURY
BUDGET TRANSFERS AND AMENDMENTS

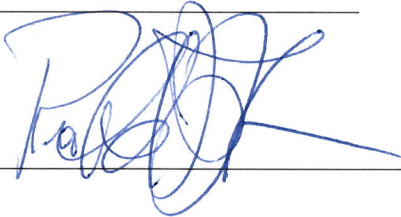
FUND	GENERAL FUND
SOURCE OF FUNDS	GENERAL FUND – INTRA DEPARTMENT
ACTION REQUIRED	TOWN MANAGER

REASON FOR TRANSFER

Due to a change in submission deadlines by the Glastonbury Citizen, legal notices must now be published in the Journal Inquirer, which charges a higher fee than previously incurred when posting in the Citizen.

TRANSFER FROM	ACCOUNT CODE	AMOUNT
GENERAL FUND		
Community Development – Training & Dues	01215-42580	\$ 2,000.00

TRANSFER TO	ACCOUNT CODE	AMOUNT
GENERAL FUND		
Community Development – Legal / Advertising	01215-43649	\$ 2,000.00

Date 1-11-2022 Town Manager 

TOWN OF GLASTONBURY
BUDGET TRANSFERS AND AMENDMENTS

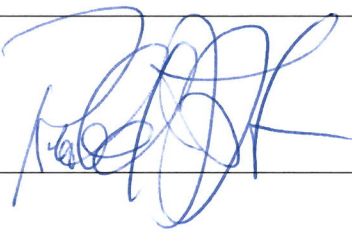
FUND	GENERAL FUND
SOURCE OF FUNDS	GENERAL FUND – INTRA DEPARTMENT
ACTION REQUIRED	TOWN MANAGER

REASON FOR TRANSFER

Data processing costs slightly higher than budgeted due to Vision and Quality Data cost increases.

TRANSFER FROM	ACCOUNT CODE	AMOUNT
GENERAL FUND		
Property Assessment – Office Supplies	01523-42540	\$250

TRANSFER TO	ACCOUNT CODE	AMOUNT
GENERAL FUND		
Property Assessment – Data Processing	01523-43635	\$250

Date 1-5-2021 Town Manager 

TOWN OF GLASTONBURY
BUDGET TRANSFERS AND AMENDMENTS

BOF 1/24/22
Item # 11a

FUND	GENERAL FUND
SOURCE OF FUNDS	GENERAL FUND – INTRA DEPARTMENT
ACTION REQUIRED	TOWN MANAGER, BOARD OF FINANCE

REASON FOR TRANSFER

The Governmental Accounting Standards Board (GASB) issued Statement No. 87, which must be implemented by all municipalities effective July 1, 2021. According to GASB, this Statement was created to increase the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases. In short, what previously was accounted for simply as an operating expense or revenue, must now be recorded by the lessee as an asset and lease liability and by the lessor as a lease receivable and a deferred inflow of resources. Such recognition must be adjusted throughout the life of the lease. In addition, the definition of a lease has been broadened such that many more contractual arrangements now fall under GASB No. 87.

This transfer will fund Lease Accounting and Management Software to assist with implementation and maintenance of lease arrangements in adherence to GASB 87.

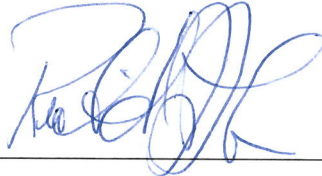
Funding is available from favorable excess liability insurance premium rates compared to budgeted rates.

TRANSFER FROM	ACCOUNT CODE	AMOUNT
GENERAL FUND		
Insurance/Pensions – Casualty Insurance	01535-43632	\$16,250

TRANSFER TO	ACCOUNT CODE	AMOUNT
GENERAL FUND		
Financial Admin – Data Processing	01519-43635	\$16,250

Date 1-12-2022

Date _____


 Town Manager _____
 Board of Finance _____

TOWN OF GLASTONBURY

MEMORANDUM

**DEPARTMENT OF ADMINISTRATIVE SERVICES
Financial Administration**

TO: Board of Finance
FROM: Julie Twilley, Director of Finance
DATE: January 19, 2022
SUBJECT: Dates for FY 2022/2023 Budget Meetings

***Note that all of the following meetings will be held in person, via Zoom, or Hybrid Video Conferencing. The meeting format will be confirmed closer to the meeting dates.**

The Regular BOF Meeting scheduled for Thursday, January 20 at 4:00 PM in Council Chambers has been canceled. A Special Meeting has been scheduled for Monday, January 24 at 4:00 PM via Zoom.

Budget times and dates for the Capital Improvement Workshop, Annual Town Meeting and Final Budget Action are as follows:

- Annual Capital Improvement Workshop - Thursday, January 20 at 6:00 PM via Zoom.
- Annual Town Meeting – Wednesday, January 26 or Thursday, January 27 (Time TBD).
- Final Budget Public Hearing and Action – [Tentatively Tuesday, March 15 or 22 at 7:00 PM].

The following meeting times are available for Board of Finance Budget Workshops:

- Town Operating Budget and CIP:
 - Tuesday, February 1 from 3:30 – 6:30 PM
- Board of Education and Public Hearing (Select one of the following dates/times):
 - Wednesday, February 2 from 3:30 – 6:30 PM, or
 - Thursday, February 3 from 3:30 – 6:30 PM
- BOF Public Hearing
 - Monday, February 7 (Time TBD)
- BOF Recommends Budget to Town Council (Select one of the following dates/times):
 - Monday, February 7 at 3:30 – 6:30 PM, or
 - Wednesday, February 9 at 3:30 – 6:30 PM