

SEWERAGE & WATER BOARD OF NEW ORLEANS

PENSION COMMITTEE MEETING

THURSDAY, OCTOBER 7, 2021

9:00 AM

[October 2021 Pension Link](#)

[+1 504-224-8698,,770350173#](#) United States, New Orleans

Phone Conference ID: 770 350 173#

PUBLIC COMMENT WILL BE ACCEPTED VIA EMAIL TO

BOARDRELATIONS@SWBNO.ORG. ALL PUBLIC COMMENTS MUST BE RECEIVED PRIOR TO 9:30 AM ON October 7, 2021. COMMENTS WILL BE READ VERBATIM INTO THE RECORD.

Joseph Peychaud, Chair • Councilmember Jay H. Banks

Ralph Johnson • Alejandra Guzman • Dr. Maurice Sholas

• Kenneth Davis • Mubashir Maqbool

• Latressia Matthews • Harold Heller

FINAL AGENDA

1) **ROLL CALL**

2) **PRESENTATION ITEMS**

- 2021 Pension Committee Election Results and Introduction of New Employee Member Seats – Sonji Skipper
- 2021 Actuarial Report – Rudd & Wisdom
- 2021 Cost of Living Adjustment – Rudd & Wisdom
- 2021 Asset Allocation Study and Market Overview, August 2021 – Marquette Associates, Inc.

3) **ACTION ITEM:**

- Resolution (R-115-2021) – Resolution for the acceptance of the 2021 Actuarial Report of Rudd & Wisdom
- Resolution (R-116-2021) – Resolution for the acceptance of January 1, 2021 Cost of Living Adjustment for Board Pensioners
- Resolution (R-117-2021) – Resolution to authorize transfer of U.S. Large Cap Growth Investment Funds from iShares S&P 500 Growth ETF account to BlackRock Russell 1000 Index Fund, resulting in approximately \$53,000 worth of annual fee savings

4) **INFORMATION ITEMS**

- August 2021 SWBNO Supplemental Report Marquette Associates, Inc.

5) **PUBLIC COMMENT**

Public comments received until 30 minutes after the presentation of the Agenda will be read into the record.

6) **ADJOURNMENT**

This teleconference meeting is being held pursuant to and in accordance with the provisions of Section 4 of Proclamation Number JBE 2020-30, extended by Proclamation 182 JBE 2021, pursuant to Section 3 of Act 302 of 2020.



**EMPLOYEES' RETIREMENT SYSTEM OF THE
SEWERAGE AND WATER BOARD OF NEW ORLEANS**

ACTUARIAL VALUATION

AS OF

JANUARY 1, 2021



Rudd and Wisdom, Inc.

Rudd and Wisdom, Inc.

CONSULTING ACTUARIES

Mitchell L. Bilbe, F.S.A.
Evan L. Dial, F.S.A.
Philip S. Dial, F.S.A.
Charles V. Faerber, F.S.A., A.C.A.S.
Mark R. Fenlaw, F.S.A.
Brandon L. Fuller, F.S.A.
Shannon R. Hatfield, A.S.A.

Christopher S. Johnson, F.S.A.
Oliver B. Kiel, F.S.A.
Dustin J. Kim, A.S.A.
Edward A. Mire, F.S.A.
Rebecca B. Morris, A.S.A.
Amanda L. Murphy, F.S.A.

Michael J. Muth, F.S.A.
Khiem Ngo, F.S.A., A.C.A.S.
Timothy B. Seifert, F.S.A.
Chelsea E. Stewart, A.S.A.
Raymond W. Tilotta
Ronald W. Tobleman, F.S.A.
David G. Wilkes, F.S.A.

May 24, 2021

PERSONAL AND CONFIDENTIAL

Board of Trustees
Sewerage and Water Board of New Orleans
625 St. Joseph Street
New Orleans, Louisiana 70165

Re: Actuarial Valuation as of January 1, 2021

Members of the Board of Trustees:

Enclosed is the Actuarial Valuation of the Employees' Retirement System of the Sewerage and Water Board of New Orleans (the "Plan") as of January 1, 2021. The purpose of this report is to evaluate the funded status of the plan and to determine an actuarially reasonable contribution level that comports with the employer's funding policy for the plan year beginning January 1, 2021.

Note: This report may be provided to third parties only if distributed in its entirety.

Funding Policy

The ultimate goal of a funding policy is to ensure that plan assets will be sufficient to pay all benefits to all plan participants and their beneficiaries as payments come due. A funding policy that requires contributions that are sufficient to pay the plan's Normal Cost and to amortize the plan's Unfunded Accrued Liability (UAL) over a reasonable period of time should be adequate to achieve this goal, subject to the risks inherent in any pension plan as further discussed below in the "Variability in Future Actuarial Measurement and Related Risks" section of this letter.

The Sewerage and Water Board of New Orleans has utilized a funding policy that determines the Normal Cost and Accrued Liability using the Entry Age Normal (EAN) funding method. The UAL is the difference between this Entry Age Normal Accrued Liability and the Actuarial Value of Plan Assets as of the valuation date.

Prior to the 2021 plan year, the employer's funding policy required an annual Actuarially Determined Contribution (ADC) sufficient to fund the sum of the Normal Cost under the EAN funding method and a level dollar amortization of the UAL over an open 30-year period.

On December 21, 2020, the Board of Trustees adopted Resolution R-142-2020 accepting the recommendations from the 2020 Actuarial Experience Study published on February 28, 2020 and presented to the Pension Committee on September 10, 2020. These recommendations included updating several actuarial assumptions and establishing a new funding policy. On December 21, 2020, the Board of Trustees also adopted Resolution R-140-2020 committing to a closed period, layered amortization method in determining the Sewerage and Water Board's annual contribution to the Plan. These Resolutions adopted changes that become effective with the 2021 plan year. Furthermore, on May 19, 2021 the Board of Trustees adopted Resolution R-061-2021 which formally adopted the stand-alone funding policy, which incorporated the funding principles adopted in R-142-2020 and R-140-2020 into a written document and made conforming amendments to the Rules and Regulations of the Plan in order to incorporate the new funding policy by reference.

The new funding policy will continue to require an annual ADC sufficient to fund the sum of the Normal Cost and an amortization of the UAL determined using the EAN funding method, but the amortization method will utilize a closed period, layered amortization approach. The UAL comprises various sources, and under the layered amortization approach each component source of UAL will be amortized over a separate closed period as follows:

Source of UAL Amortization Layers	UAL Closed Amortization Period ¹
Actuarial Experience Gain/Loss	25 years
Assumption and Method Changes	25 years
Plan Amendments	15 years
Transition to New Policy	29 years ²

¹ Each layer will be amortized using the level dollar approach over the specified closed period.

² The Actuarially Determined Contribution for the 2020 plan year was determined using a 30-year open period amortization of the UAL. To determine the Transition UAL Layer to be amortized, the 30-year amortization amount from the January 1, 2020 valuation shall be changed from an open period to a closed period, where such amount is carried forward to January 1, 2021 and amortized over the 29 years remaining on that amount.

The total ADC (i.e., the sum of the Normal Cost and the amortization amounts for each of the UAL layers) is determined as a percentage of total estimated Earnable Compensation, where such term is defined under the Rules and Regulations of the Plan, for the calendar year containing the valuation date. The Employer's portion of the total ADC is equal to the difference between the total ADC and the Employee Members' portion of the ADC and is also expressed as a percentage of total estimated Earnable Compensation. The Employer's contribution each year is determined by applying the percentage so determined to the actual Earnable Compensation paid during the year.

The Employer Contribution reflecting the new funding policy for the 2021 plan year is 21.717% of 2021 Earnable Compensation. This amount is in addition to the Employee Member Contributions of 6.0% of Earnable Compensation. See page III-1 of this report for the development of the Employer Contribution and page VI-11 for the definition of Earnable Compensation.

The table below compares the results of the January 1, 2021 valuation determined: (a) prior to reflecting the above Resolutions (i.e., using the prior year actuarial assumptions and the prior

funding policy) and (b) after reflecting the above Resolutions (i.e., using updated assumptions and the newly adopted Funding Policy).

	January 1, 2021 Valuation Results			
	Prior Assumptions and Prior Funding Policy		Updated Assumptions and Newly Adopted Funding Policy	
	30-year Open Period Amortization of UAL	As a % of Pension Payroll ¹	Layered Closed Period Amortization of UAL	As a % of Pension Payroll ¹
1. Normal Cost ²	\$ 5,048,510		\$ 5,582,391	
2. Amortization of UAL ²	<u>7,377,174</u>		<u>7,964,829</u>	
3. Total ADC	\$ 12,425,684	25.422%	\$ 13,547,220	27.717%
4. Employee Portion of ADC	<u>(2,443,854)</u> ³	<u>(5.000)%</u> ³	<u>(2,932,625)</u> ⁴	<u>(6.000)%</u> ⁴
5. Employer Portion of ADC	\$ 9,981,830	20.422%	\$ 10,614,595	21.717%

¹ Based on projected 2021 Earnable Compensation (i.e., Pension Payroll) of \$48,877,084. Earnable Compensation is not equal to Total Compensation. For example, Earnable Compensation excludes overtime pay. (See page VI-11 of this report for the definition of Earnable Compensation.)

² Includes interest to middle of year to reflect payment of contributions throughout the year.

³ Prior to Board Resolution R-140-2020, when the plan was not 100% funded, the Employer's portion of ADC was determined under Board Resolution R-248-2014 which assumed employees contributed 5% of Earnable Compensation even though actual Employee Contributions were 6% of Earnable Compensation.

⁴ In accordance with Board Resolution R-140-2020, the Employer's portion of the ADC is determined by offsetting the total ADC by the actual Employee Contributions of 6% of Earnable Compensation.

For comparison, the Employer Portion of the ADC was 21.112% of 2020 Earnable Compensation under the prior valuation as of January 1, 2020, which was based on the prior assumptions and prior funding policy. Prior to reflecting the updated assumptions and new funding policy, the year-over-year decrease in the Employer Portion of the ADC from 21.112% to 20.422% of Earnable Compensation is primarily attributable to actuarial experience gains, whereby the Plan's demographic experience was more favorable than assumed under the prior year's assumptions. Similarly, the Employer Portion of the ADC after reflecting the updated assumptions and the new funding policy was estimated to be 22.400% in the 2020 Actuarial Experience Study, but actuarial experience gains resulted in a lower actual Employer ADC of 21.717% of Earnable Compensation for 2021.

Action Items

The following list contains certain action items for company management:

1. Review the Management Summary (Section II) of this report.
2. As soon as administratively possible, change the rate of the Employer Contribution to 21.717% of Earnable Compensation for each payroll period. Furthermore, to the extent that 2021 year-to-date Employer Contributions were less than 21.717% of the year-to-date Earnable Compensation, make a one-time Employer Contribution equal to the shortfall.

3. Notify us of any activities during the remainder of the 2021 plan year that could require updates to the next valuation on January 1, 2022 (e.g., a plan amendment, a change in the funding policy, a change in the investment policy or a material change in employment or compensation practices related to the COVID-19 pandemic, etc.).

Variability in Future Actuarial Measurement and Related Risks

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- Plan experience differing from that anticipated by the current economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements;
- Changes in economic or demographic assumptions; and
- Changes in plan provisions.

Risks that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- Investment Risk (i.e., the potential that investment returns will be different than expected);

Adverse investment experience can increase employer contribution requirements in future years. Favorable investment experience can have the opposite effect.

- Asset/Liability mismatch (i.e., the potential that changes in asset values are not matched by changes in the value of liabilities);

Mismatches can produce effects similar to adverse investment experience, but they can be amplified by assets and liabilities moving in opposite directions. This plan's assets are not matched to its liabilities. Instead, the employer has elected to invest with an asset mix intended to produce higher long-term returns on average than might be expected with an asset/liability matched portfolio, but this will frequently produce short term variances between asset growth and liability growth.

- Longevity and other demographic risks (i.e., the potential that mortality or other demographic experience will be different than expected);

Adverse longevity and other demographic experience can increase employer contribution requirements in future years. Favorable demographic experience can have the opposite effect.

- Contribution risk (i.e., the potential that actual future contributions deviate from expected future contributions).

If employer contributions are made below the level required by the funding policy contemplated in this valuation, the employer contribution requirements will grow in the future, compounded with interest.

We can provide more detailed assessments of one or more of the above risks upon request. Assessment methods may include, but are not limited to, scenario tests and sensitivity tests. We have not been asked to perform and have not performed any stochastic or deterministic sensitivity analyses of the potential ranges of such future measurements, nor any of the more detailed assessments described above. If you have an interest in the results of any such analysis, please let us know.

If you have any questions concerning this information, please do not hesitate to call or write.

Respectfully submitted,

RUDD AND WISDOM, INC.



Mitchell L. Bilbe, F.S.A.



Christopher S. Johnson, F.S.A.

MLB/CSJ:nm

Enclosures

cc: Yolanda Grinstead
Ghassan Korban
E. Grey Lewis
LaBarron McClendon
Sonji Skipper
Chris Williams



**EMPLOYEES' RETIREMENT SYSTEM OF THE
SEWERAGE AND WATER BOARD OF NEW ORLEANS**

ACTUARIAL VALUATION

AS OF

JANUARY 1, 2021



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Section I – Certification of Actuarial Valuation as of January 1, 2021

At the request of the Sewerage and Water Board of New Orleans (SWBNO), we have performed an actuarial valuation of the Employees' Retirement System of the Sewerage and Water Board of New Orleans as of January 1, 2021. The purpose of this report is to evaluate the funded status of the plan and to determine an actuarially reasonable contribution level for the plan year ending December 31, 2021 that comports with the employer's funding policy.

We have based our valuation on current employee, former employee and retiree data as of January 1, 2021 provided by the SWBNO, asset information as of January 1, 2021 provided by Capital One, Whitney Hancock and LAMP, financial statements provided by Postlethwaite & Netterville and plan provisions as of January 1, 2021 provided by the SWBNO. We have used the actuarial methods and assumptions described in Section V of this report. The actuarial valuation has been performed on the basis of the plan benefits described in Section VI.

To the best of our knowledge, all current employees eligible to participate in the plan as of the valuation date and all other individuals who have a remaining vested benefit or a remaining nonvested benefit under the plan have been included in the valuation. Further, all plan benefits have been considered in the development of plan costs.

The plan sponsor remains solely responsible for the accuracy and comprehensiveness of the data provided. However, to the best of our knowledge, no material biases exist with respect to any imperfections in the data provided by these sources. To the extent that any data imperfections exist in the historical compensation database, we have addressed the imperfections by application of the increase assumptions specified in Section V. To the extent any imperfections exist in service records, we have relied on best estimates provided by the employer. We have not audited the data provided, but have reviewed it for reasonableness and consistency relative to previously provided information. We have utilized software licensed from Winklevoss Technologies, LLC in the development of the liabilities summarized in the report.

To the best of our knowledge, the actuarial information supplied in this report is complete and accurate. In our opinion the assumptions used, in the aggregate and individually, are reasonably related to the experience of the plan and to reasonable expectations. The assumptions represent a reasonable estimate of anticipated experience of the plan over the long-term future, and their selection complies with the applicable actuarial standards of practice. We are neither aware of any material inconsistencies among the assumptions nor are we aware of any unreasonable results caused by the aggregation of the assumptions.

We hereby certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Mitchell L. Bilbe, F.S.A.
Enrolled Actuary Number 20-6302
Member of American Academy of Actuaries

Christopher S. Johnson, F.S.A.
Enrolled Actuary Number 20-7100
Member of American Academy of Actuaries



Section II – Management Summary

All employer liabilities presented throughout this report have been determined based upon the actuarial methods and assumptions outlined in Section V and the plan provisions outlined in Section VI.

A. Contribution Amount Under Employer's Funding Policy

	Annual Contribution	
	2020	2021
1. Total Funding Policy Contribution		
a. Normal Cost ¹	\$ 4,947,747	\$ 5,582,391
b. UAL Amortization ¹	7,746,757	7,964,829
c. Total	\$ 12,694,504	\$ 13,547,220
2. Employee Funding Policy Contribution	(2,430,806) ²	(2,932,625) ³
3. Employer Funding Policy Contribution	\$ 10,263,698	\$ 10,614,595
4. Employer Funding Policy Contribution as a Percent of Pension Payroll⁴	21.112%	21.717%

¹ Includes interest to middle of year to reflect payment of contributions throughout the year.

² Prior to Board Resolution R-140-2020, when the plan was not 100% funded, the Employer Contribution was determined under Board Resolution R-248-2014 which assumed employees contributed 5% of Earnable Compensation even though actual Employee Contributions were 6% of Earnable Compensation.

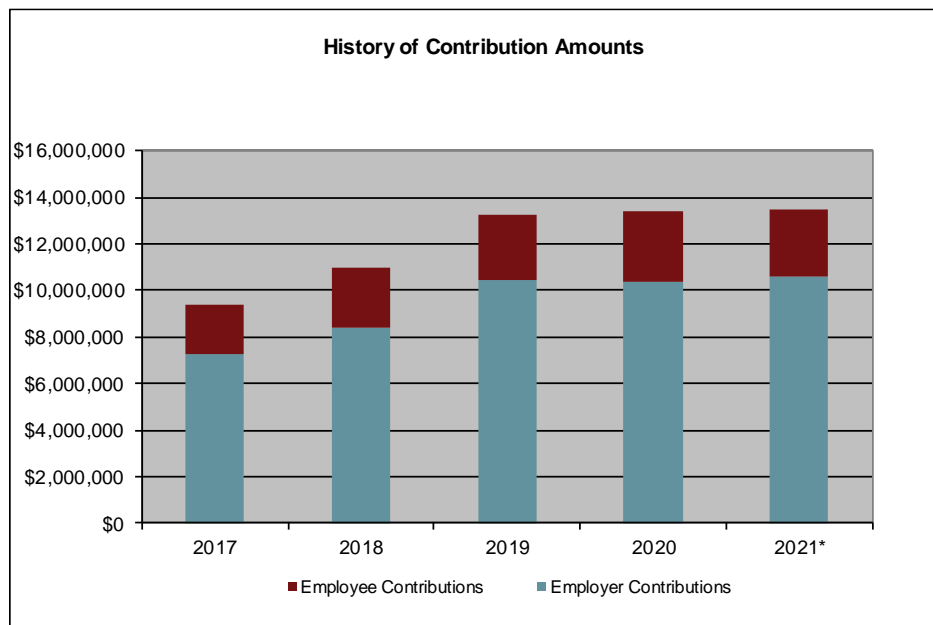
³ In accordance with Board Resolution R-140-2020 the Employer's portion of the ADC is determined by offsetting the total ADC by the actual Employee Contributions of 6% of Earnable Compensation.

⁴ Based on projected Earnable Compensation (i.e., Pension Payroll) of \$48,616,122 for 2020 and \$48,877,084 for 2021.

The employer's Funding Policy determines the annual contribution amount as the sum of the **Normal Cost** and a closed period layered amortization of the **Unfunded Accrued Liability (UAL)**, where the UAL is the difference between the **Actuarial Value of Assets** and the **Actuarial Accrued Liability (AAL)**. (See page III-3 of this report for details about the sources of the amortization layers.) The AAL and the Normal Cost are determined using the **Entry Age Normal (EAN)** actuarial funding method as described in Section V.A. of this report.

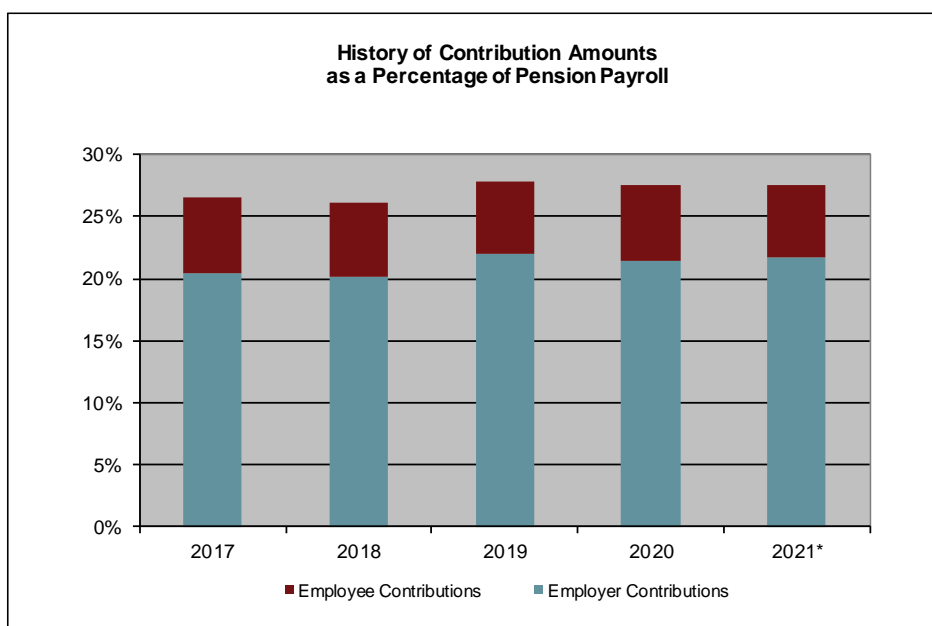
As explained in the cover letter to this report, had the prior year's actuarial assumptions and funding policy remained in place for 2021, the Employer Contribution for 2021 would have been 20.422% of Earnable Compensation. Prior to reflecting the updated assumptions and funding policy, the decrease in the Employer Contribution from 21.112% in 2020 to 20.422% in 2021 is primarily attributable to actuarial experience gains, whereby the Plan's demographic experience was more favorable than assumed under the prior year's assumptions. The updated actuarial assumptions and the newly adopted funding policy increased the Employer Contribution from 20.422% to 21.717% of Earnable Compensation.

A 5-year history of the plan's contribution amounts under the employer's Funding Policy is shown on the following page.



* Assuming the funding policy contribution from this report is contributed by employer.

Below is the Plan's contribution history again but shown as a percentage of Pension Payroll (i.e., estimated Earnable Compensation for the valuation year).



* Assuming the funding policy contribution from this report is contributed by employer.



B. Participant Demographics as of January 1, 2021

Participants	Number	Estimated Earnable Compensation for 2021
Actives	1,177	\$ 48,877,084
Vested Terminated	41	N/A
Nonvested Terminated	165 ¹	N/A
Retirees and Beneficiaries	901 ²	N/A
Total	2,284	\$ 48,877,084

¹ Nonvested Terminated employees whose employee contribution account balances have not yet been refunded as of the valuation date.

² Includes 73 DROP participants whose period of participation in the DROP has not yet expired as of the valuation date.



C. Funding Liabilities and Assets

	As of January 1, 2020	As of January 1, 2021
1. a. Market Value of Assets	\$ 239,677,702	\$ 248,401,024
b. Actuarial Value of Assets	\$ 246,441,104	\$ 244,915,723
2. Discount Rate	7.00%	7.00%
3. Present Value of Future Benefits		
a. Actives	\$ 130,076,226	\$ 133,997,928
b. Retirees ¹ and Beneficiaries	170,174,532	195,063,269
c. DROP ² Retirees	63,410,024	40,349,510
d. Disabled Retirees	9,481,297	8,808,023
e. Vested Terminated	2,832,400	2,892,717
f. Nonvested Terminated	237,291	316,928
g. Total	\$ 376,211,770	\$ 381,428,375
h. Funded Status [1.b./3.g.]	65.51%	64.21%
4. Entry Age Normal Accrued Liabilities		
a. Actives	\$ 99,481,882	\$ 98,485,682
b. Retirees ¹ and Beneficiaries	170,174,532	195,063,269
c. DROP ² Retirees	63,410,024	40,349,510
d. Disabled Retirees	9,481,297	8,808,023
e. Vested Terminated	2,832,400	2,892,717
f. Nonvested Terminated	237,291	316,928
g. Total	\$ 345,617,426	\$ 345,916,129
h. Funded Status [1.b./4.g.]	71.30%	70.80%

¹ Excludes DROP Retirees whose DROP balance has not been paid as of the valuation date.

² DROP Retirees whose DROP balance has not been paid as of the valuation date.

1. Liabilities

The **Present Value of Future Benefits (PVFB)** is the actuarial present value of the cost to finance projected benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

The **Entry Age Normal Accrued Liability** attributes a portion of the PVFB to the past service of each individual, where the amount attributed to each year is spread on a level basis over the earnings of an individual from their plan entry date to their assumed exit dates from the plan.

The liability measurements in this report are not appropriate for assessing the sufficiency of plan assets to cover the cost of settling plan obligations in the event the plan is terminated.

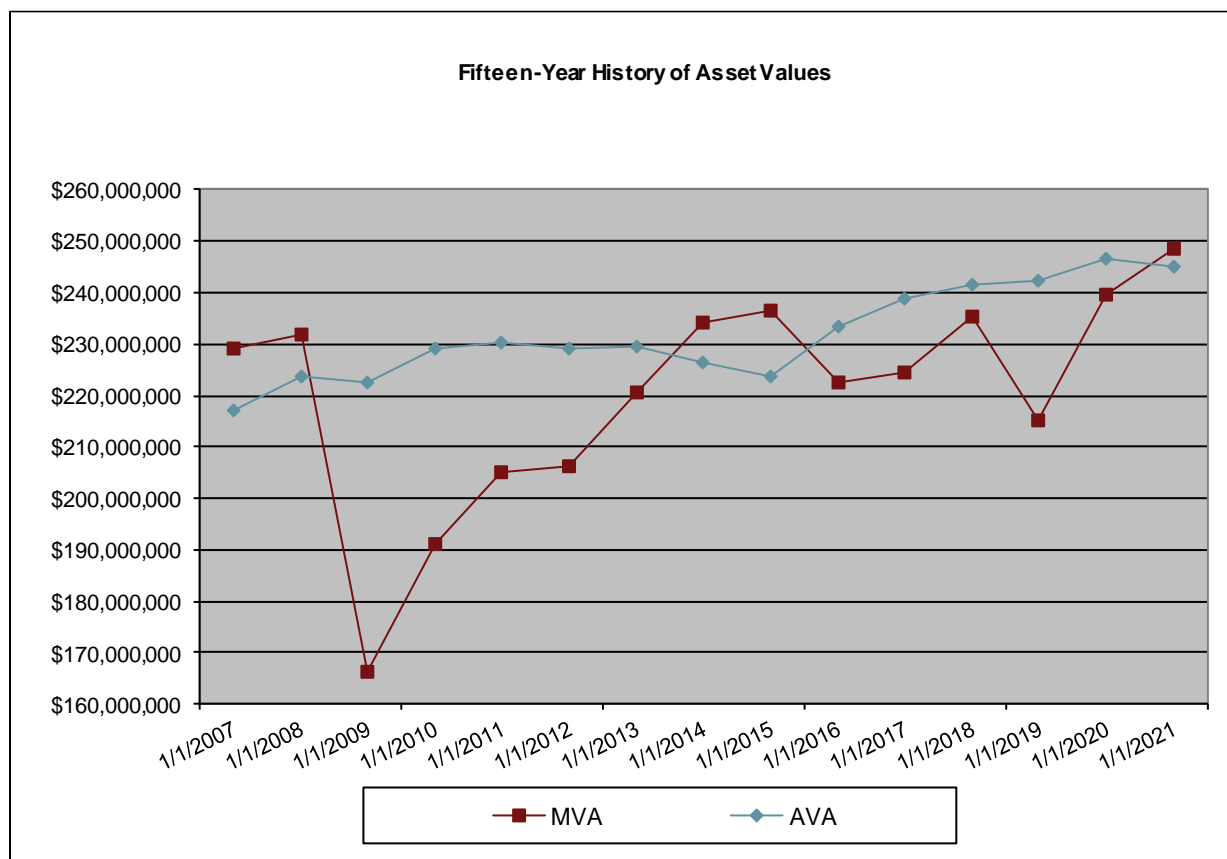
Further, additional contributions from the employer could be needed in the future even if asset values were equal to 100% of liabilities as measured for funding purposes.



2. Assets

The **Actuarial Value of Assets (AVA)** smooths the volatility of the Market Value of Assets (MVA) by deferring recognition of asset gains or losses over a seven-year period. This smoothing of the MVA in turn reduces the year over year fluctuation of Employer Contributions and can make it easier for the employer to budget its contribution each year.

Below is a 15-year history of the MVA and the AVA.



The investment policy's targeted weighted-average asset allocations by asset class are as follows:

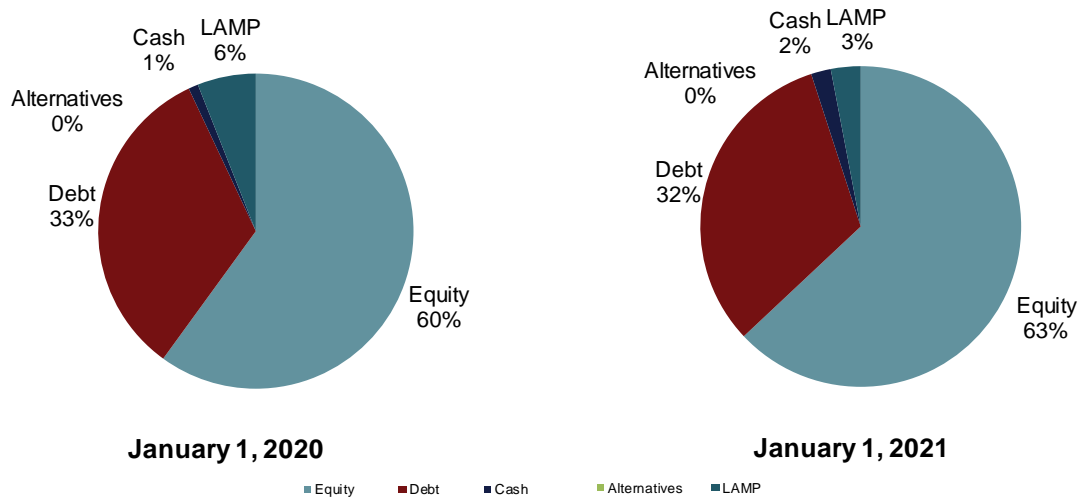
Investment Policy Targeted Asset Allocations			
Asset Class	Minimum Allocation	Target Allocation	Maximum Allocation
Equity Securities	0.0%	47.0%	65.0%
Debt Securities	31.5%	35.0%	38.5%
Alternatives ¹	0.0%	17.0%	21.0%
Cash	0.0%	1.0%	5.0%
Total	N/A	100.0%	N/A

¹ Real Estate/REITs and Hedge Funds.



The target asset allocation above should be reviewed periodically against actual asset allocations as shown below. Furthermore, from time to time the plan's investment policy itself should be reviewed to ensure that the objectives stated in the policy are consistent with the plan sponsor's investment goals and risk tolerance, particularly as the plan approaches the point at which the value of plan assets equals or exceeds PVFB.

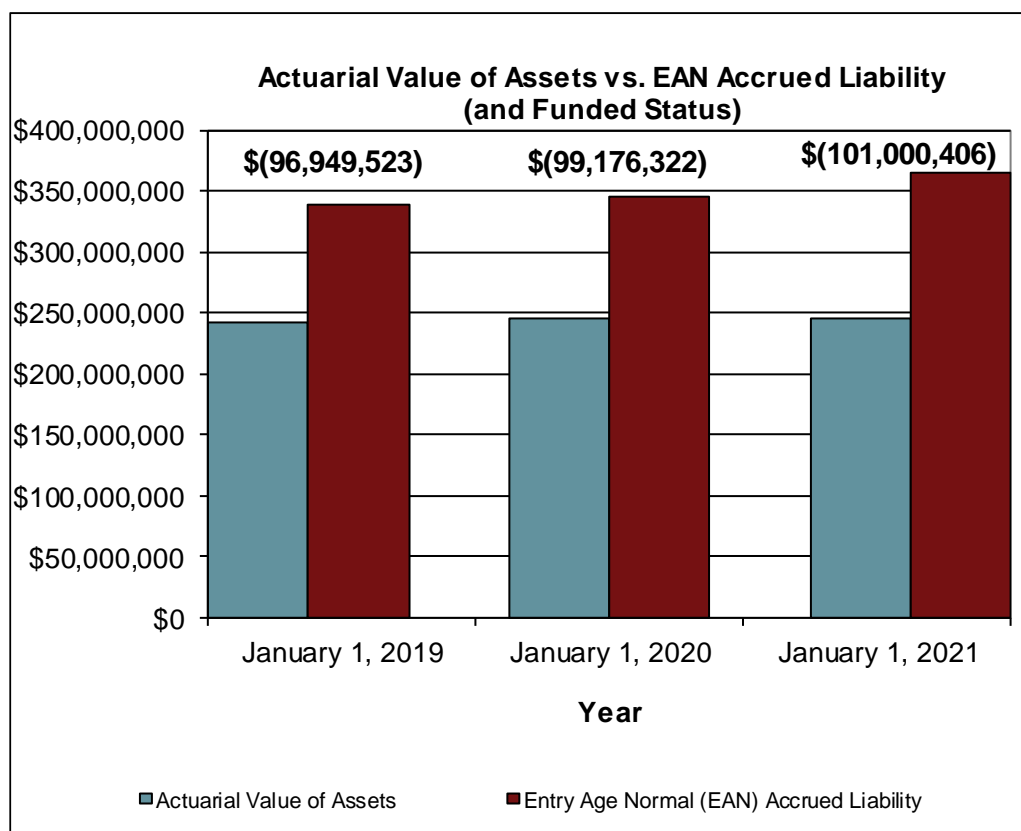
Asset Allocation as of Prior and Current Valuation Dates





D. Funded Status Based on Entry Age Normal Accrued Liability

The **Funded Status** compares a measure of a plan's liabilities to its assets. The graph below compares the Actuarial Value of Assets to the EAN Accrued Liability for each of the last three years. The corresponding Funded Status (or Unfunded Accrued Liability) is shown above each year's column.



E. No Changes in Plan Provisions

This valuation reflects identical plan provisions to those recognized in the prior valuation prepared for the plan. Plan provisions are summarized in Section VI.

F. Changes in Actuarial Methods and Assumptions

This valuation reflects different actuarial methods and assumptions from those recognized in the prior valuation prepared for the plan. The actuarial methods and assumptions were updated to reflect the results of the 2020 Actuarial Experience Study, where the recommendations presented in the study were adopted by the Board of Trustees on December 21, 2020. Actuarial methods and assumptions are summarized in Section V.



G. Plan Maturity Measures

The following measures as of January 1, 2021 may help the employer assess the relative risks associated with a particular asset mix for the trust's portfolio, a particular funding policy, whether to consider or reconsider asset/liability matching for all or a portion of the portfolio, and other risks disclosed in the transmittal letter to this report.

Measure	Calculation	Result
1. Ratio of Retired Life Accrued Liability to Total Accrued Liability	$\frac{244,220,802}{345,916,129}$	70.6%
2. Ratio of Expected Annual Benefit Payments to Market Value of Assets	$\frac{25,160,877}{248,401,024}$	10.1%
3. Ratio of Expected Annual Benefit Payments to Expected Annual Contributions	$\frac{25,160,877}{13,547,220}$	185.7%
4. Duration of Accrued Liability ¹	$[1 - \frac{345,916,129}{354,290,379}] / (0.0025)$	9.5

¹ Modified duration of the plan's Accrued Liability (AL) estimated by examining the impact of a 25 basis point shift in discount rates on AL. We used the following formula for this purpose:

$$[1 - (\frac{AL_1}{AL_2})] / (i_1 - i_2)$$



Section III – Detailed Actuarial Valuation Results

A. Determination of Employer Contribution

	January 1, 2021	As a % of Pension Payroll
1. Projected Participant Earnable Compensation for Current Plan Year (i.e., Pension Payroll)	\$ 48,877,084	
2. Present Value of Future Benefits	\$ 381,428,375	
3. Accrued Liability	\$ 345,916,129	
4. Actuarial Value of Assets	\$ 244,915,723	
5. Unfunded Accrued Liability (UAL) (Item 3. – Item 4.)	\$ 101,000,406	
6. Present Value of Future Normal Costs (Item 2. – Item 3.)	\$ 35,512,246	
7. Normal Cost at Beginning of Year	\$ 5,396,701	
8. Total Funding Policy Actuarially Determined Contribution (ADC)		
a. Normal Cost ¹	\$ 5,582,391	11.421%
b. Amortization of UAL ^{1,2}	7,964,829	16.296%
c. Total	\$ 13,547,220	27.717%
9. Employee Funding Policy Portion of ADC³ (Item 1. x 6%)	\$ 2,932,625	6.000%
10. Employer Funding Policy Portion of ADC (Item 8.c. – Item 9.)	\$ 10,614,595	21.717%

¹ Includes interest to middle of year to reflect payment of contributions throughout the year.

² Calculated using a layered amortization approach with different closed amortization periods for each layer. (See page III-3 for details.)

³ In accordance with Board Resolution R-140-2020, the Employer Portion of the ADC is determined using actual employee contributions of 6% of Earnable Compensation to offset the total ADC.



B. Development of Expected Unfunded Accrued Liability and Actuarial (Gain)/Loss

	January 1, 2021
1. Prior Year Actual Unfunded Accrued Liability	\$ 99,176,322
2. Prior Year Normal Cost as of Beginning of Year	4,795,762
3. Interest on above amounts	7,278,046
4. Employer and Employee Contributions for Prior Year (with credited interest)	<u>(13,123,729)</u>
5. Current Year Expected Unfunded Accrued Liability (prior to adjustments)	\$ 98,126,401
6. Adjustment for Plan Amendments	0
7. Adjustment for Change in Actuarial Assumptions	6,514,569
8. Adjustment for Change in Actuarial Methods	<u>1,663,565</u>
9. Current Year Expected Unfunded Actuarial Liability	\$ 106,304,535
10. Current Year Actual Unfunded Accrued Liability	\$ 101,000,406
11. Actuarial (Gain)/Loss [(10) – (9)]	\$ (5,304,129)



C. Schedule of Unfunded Accrued Liability Layers and Amortization Payments

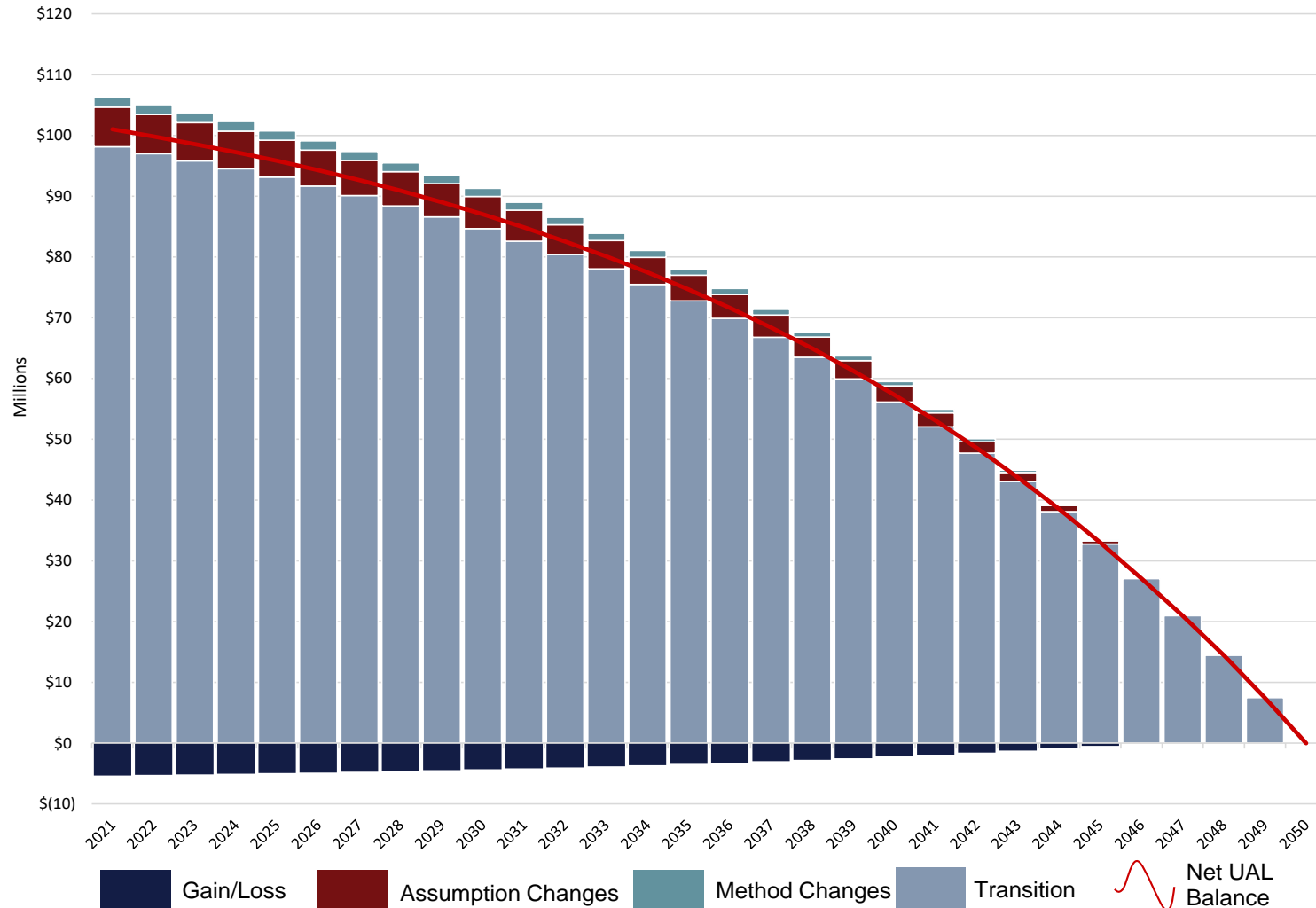
As of January 1, 2021						
UAL Source	Date Established	Initial Amount	Amortization Period		Outstanding Balance	Annual Amortization Payment
			Initial Years	Years Remaining		
Transition to New Policy	January 1, 2020	\$ 99,176,322	30	29	\$ 98,126,401	\$ 7,469,405
Actuarial (Gain)/Loss	January 1, 2021	(5,304,129)	25	25	(5,304,129)	(425,374)
Assumption Changes	January 1, 2021	6,514,569	25	25	6,514,569	522,447
Method Changes	January 1, 2021	1,663,565	25	25	1,663,565	133,413
Total		\$102,050,327			\$101,000,406	\$ 7,699,891 ¹

¹ Amount determined as of beginning of the year. The total Annual Amortization Payment with interest to the middle of the year is \$7,964,829.



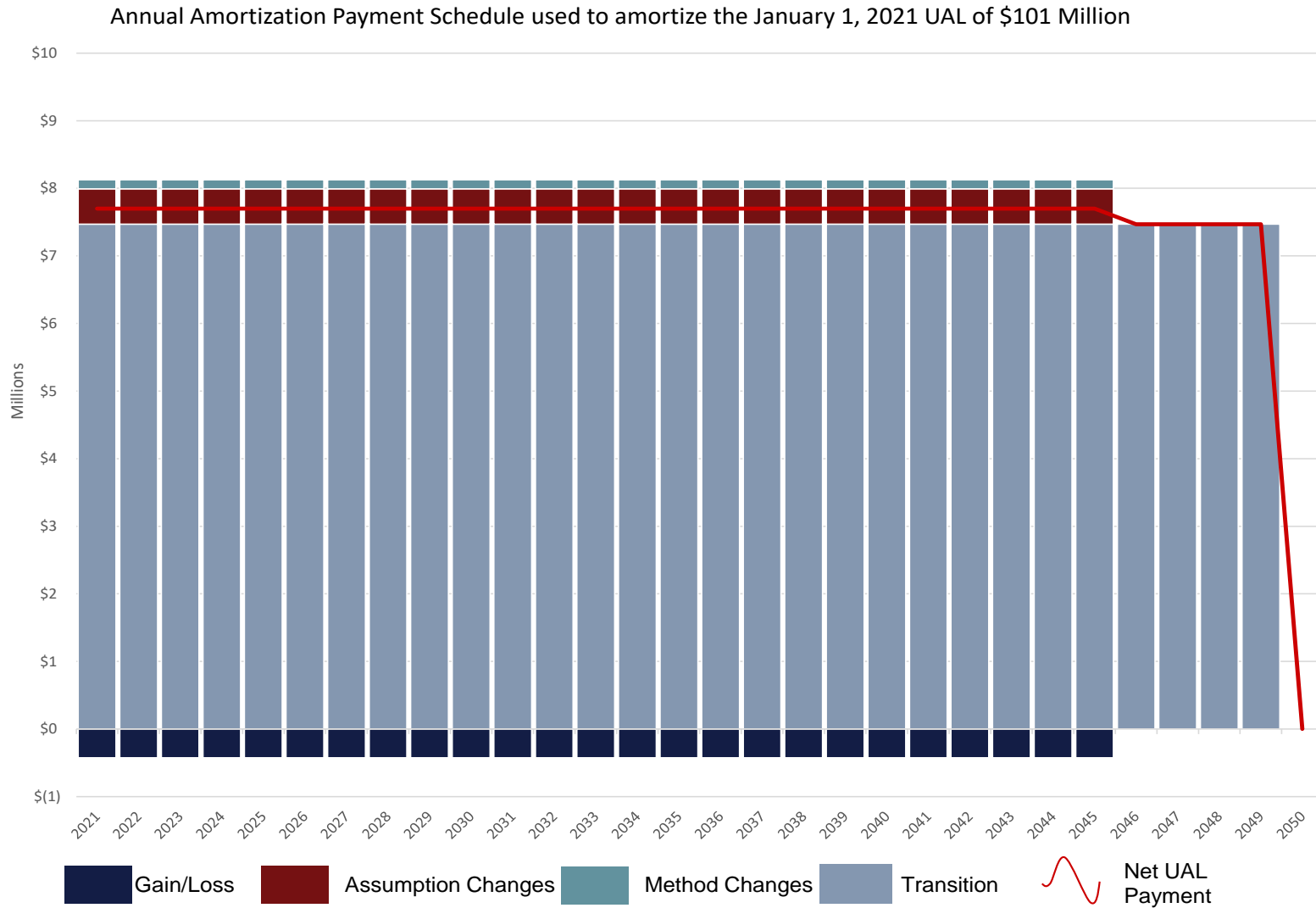
D. Projected Balance of January 1, 2021 UAL

Projected Balance of January 1, 2021 UAL of \$101 Million until UAL is Fully Amortized





E. UAL Annual Amortization Schedule as of January 1, 2021





F. Present Value of Accrued Benefits (PVAB)

The Present Value of Accrued Benefits (PVAB) only considers past service and past pay in the determination of the plan's liabilities. This actuarial cost method would not be as useful as the current cost method (i.e., the Entry Age Normal cost method) for determining the funding policy contribution since it does not consider the effect of future pay and service accruals on the plan's liabilities. However, the PVAB is useful in determining how the funded status of the plan is progressing relative to the current level of accrued benefits since it determines the present value of the plan benefits as if plan benefits were frozen on the valuation date.

	As of January 1, 2020	As of January 1, 2021
1. PVAB	\$ 321,019,096	\$ 319,199,919
2. Actuarial Value of Assets	\$ 246,441,104	\$ 244,915,723
3. Funded Status of PVAB [Item 2. ÷ Item 1.]	76.77%	76.73%



Section IV – Summary of Assets

A. Summary of Market Value of Assets as of January 1, 2021

1. Assets	
a. Cash equivalents	\$ 3,535,423
b. Receivables:	
i. Employee and Employer Contributions	\$ 181,603
ii. Due from broker for investments sold	0
iii. Investment income	37,385
iv. Due from other funds	955,044
v. Total receivables	\$ 1,174,032
c. Investments:	
i. Money Market	\$ 893,427
ii. LAMP	8,496,289
iii. Debt Securities	78,892,473
iv. Hedge Funds	0
v. Equities	155,409,380
vi. Total investments	\$243,691,569
d. Total assets	\$248,401,024
2. Liabilities	
a. Payables:	
i. Investment management fees	\$ 0
ii. Due to broker for investments purchased	0
iii. Due to other fund	0
b. Total liabilities	\$ 0
3. Market Value of Assets as of January 1, 2021	\$248,401,024



B. Income Statement for Market Value of Assets

	2020
1. Additions	
a. Contributions:	
i. Employer	\$ 10,392,532
ii. Member	3,015,231
iii. City annuity and other transfers in	747,818
iv. Total contributions	\$ 14,155,581
b. Investment income:	
i. Net appreciation in market value of investments	\$ 19,987,499
ii. Interest income	91,374
iii. Dividend income	1,682,886
iv. Less investment expenses	(901,324)
v. Net investment income	\$ 20,860,435
c. Other	\$ 0
d. Total additions	\$ 35,016,016
2. Deductions	
a. Benefit payments including refunds of employee contributions	\$ (26,292,694)
b. Administrative expenses	0
c. Other	0
d. Total deductions	\$ (26,292,694)
3. Net increase/(decrease) in Market Value	\$ 8,723,322
4. Market Value of Assets	
a. Beginning of Year	\$ 239,677,702
b. End of Year	\$ 248,401,024



C. Development of Actuarial Value of Assets

1. Calculation of Adjusted Market Value of Assets	01/01/2015 – 12/31/2015	01/01/2016 – 12/31/2016	01/01/2017 – 12/31/2017	01/01/2018 – 12/31/2018	01/01/2019 – 12/31/2019	01/01/2020 – 12/31/2020
a. Market Value of Assets (MVA) at beginning of period	\$ 236,556,671	\$ 222,427,527	\$ 224,356,261	\$ 235,284,317	\$ 215,279,783	\$ 239,677,702
b. Net Cash Flows	(9,985,003)	(10,640,867)	(12,398,217)	(12,136,255)	(9,264,872)	(12,137,113)
c. Expected Investment Return	16,215,403	15,203,795	15,278,340	16,052,317	14,750,799	16,359,825
d. Expected MVA at end of period	\$ 242,787,071	\$ 226,990,455	\$ 227,236,384	\$ 239,200,379	\$ 220,765,710	\$ 243,900,414
e. Actual MVA at end of period	\$ 222,427,527	\$ 224,356,261	\$ 235,284,317	\$ 215,279,783	\$ 239,677,702	\$ 248,401,024
f. Asset (Gain) / Loss [Item 1.d. – Item 1.e.]	\$ 20,359,544	\$ 2,634,194	\$ (8,047,933)	\$ 23,920,596	\$ (18,911,992)	\$ (4,500,610)

2. Calculation of Deferred (Gain)/Loss			
Year Ending	Asset (Gain)/Loss	Fraction Deferred	Deferred (Gain) / Loss
a. December 31, 2020	\$ (4,500,610)	6/7	\$ (3,857,666)
b. December 31, 2019	(18,911,992)	5/7	(13,508,566)
c. December 31, 2018	23,920,596	4/7	13,668,912
d. December 31, 2017	(8,047,933)	3/7	(3,449,114)
e. December 31, 2016	2,634,194	2/7	752,627
f. December 31, 2015	20,359,544	1/7	2,908,506
g. Total			\$ (3,485,301)

3. Calculation of Actuarial Value of Assets	As of January 1, 2021
a. Market Value of Assets (MVA)	\$ 248,401,024
b. Total Deferred (Gain) / Loss [Item 2.g.]	\$ (3,485,301)
c. Preliminary Actuarial Value of Assets (AVA) [Item 3.a. + Item 3.b.]	\$ 244,915,723
d. Corridor for AVA	
i. 70% of Item 3.a.	\$ 173,880,717
ii. 130% of Item 3.a.	\$ 322,921,331
e. AVA [Item 3.c. but not less than Item 3.d.i. nor greater than Item 3.d.ii.]	\$ 244,915,723
f. Ratio of AVA to MVA [Item 3.e. ÷ Item 3.a.]	98.60%



Section V – Actuarial Methods and Assumptions

A. Actuarial Methods

1. Actuarial Funding Method

The Entry Age Normal actuarial funding method is used in determining the contribution requirements for the plan. The actuarial funding method is the procedure by which the actuary annually identifies a series of annual contributions which, along with current assets and future investment earnings, will fund the expected plan benefits. The Entry Age Normal funding method compares the excess of the present value of expected future plan benefits over the current value of plan assets. This difference represents the expected present value of current and future contributions that will be paid into the plan. The contributions are divided into two components: an annual normal cost (or current cost) and an amortization charge for the unfunded accrued liability.

The normal cost for the plan is the sum of individually determined normal costs for each active participant. Each active participant's normal cost is the current annual contribution in a series of annual contributions which, if made throughout the participant's total period of employment, would fund his expected benefits from the plan. Each participant's normal cost is calculated to be an annual constant percentage of his expected compensation in each year of employment.

The plan's current accrued liability is the excess of the present value of expected future benefits over the present value of all future remaining normal cost contributions of active participants.

2. Actuarial Value of Assets

Fair value is equal to the market value of assets as determined by the plan trustee, including any receivable contributions made for a prior plan year after the asset valuation date.

The Actuarial Value of Assets (AVA) is equal to the fair value adjusted by deferred recognition of asset gains and losses over a seven-year period. The asset gains/(losses) are equal to the excess/(shortfall) of actual market value over/(under) expected market value determined using the assumed investment return of 7.00%. The asset gains/(losses) are determined at the end of the year in which they occur. These gains/(losses) are recognized one-seventh ($1/7$) each year over the next seven (7) years beginning in the year in which the gain or loss occurs. The AVA is subject to a 30% corridor such that the fair value adjusted by the deferred asset gains and losses will not be less than 70% nor greater than 130% of the fair value of assets.



B. Actuarial Assumptions

1. **Mortality:** The active, vested terminated and retired members of the plan are expected to exhibit mortality in accordance with the following published mortality tables:

- a. Pre-retirement Mortality: Amount-weighted General Employee Table (i.e., PubG-2010) multiplied by 122% for Males and 119% for Females projected generationally using Scale MP-2019 mortality improvement rates with Male projection factors multiplied by 86% and Female projection factors multiplied by 79%
- b. Post-retirement Mortality:
 - i. Healthy Retirees: Amount-weighted General Table for Healthy Retirees (i.e., PubG-2010) multiplied by 122% for Males and 119% for Females projected generationally using Scale MP-2019 mortality improvement rates with Male projection factors multiplied by 86% and Female projection factors multiplied by 79%
 - ii. Disabled Retirees: Amount-weighted General Table for Disabled Retirees (i.e., PubG-2010) multiplied by 122% for Males and 119% for Females projected generationally using Scale MP-2019 mortality improvement rates with Male projection factors multiplied by 86% and Female projection factors multiplied by 79%
 - iii. Contingent Survivors: Amount-weighted General Table for Contingent Survivors (i.e., PubG-2010) multiplied by 122% for Males and 119% for Females projected generationally using Scale MP-2019 mortality improvement rates with Male projection factors multiplied by 86% and Female projection factors multiplied by 79%

2. **Termination:** The active members are assumed to terminate their employment for causes other than death, disability or retirement in accordance with annual rates as illustrated below.

Terminations Per 100 Members						
Age	Years of Credited Service					
	<1	1-2	2-3	3-4	4-5	5+
<25	30	25	25	25	25	15
25-29	25	18	18	11	11	8
30-34	25	18	18	11	11	8
35-39	25	18	18	11	11	8
40-44	25	18	18	11	11	5
45-49	25	18	18	11	11	5
50-54	25	18	18	11	11	4
55-59	25	18	18	11	11	4
60+	10	10	10	4	4	4



3. **Interest Rate:** 7.00% (net of investment-related expenses) per annum.
4. **Earnings Progression:** The increase in the levels of member compensation is assumed to increase in accordance with annual rates as illustrated below.

Annual Compensation Increases*	
Age	Annual Rate
20 - 24	6.25%
25 - 29	5.75%
30 - 34	5.25%
35 - 39	4.75%
40 - 44	4.75%
45 - 49	4.75%
50 - 54	4.75%
55 - 59	4.75%
60 - 64	4.75%
65+	4.00%

* Includes a 2.50% inflation component.



5. **Retirement Age:** Active members are assumed to retire in accordance with the annual rates illustrated below.

Age	Retirements per 100 Members												
	Years of Credited Service												
	<5	5 - 19	20	21	22	23	24	25	26	27	28	29	30+
45													
46													
47													
48													5
49													15
50													15
51												15	15
52											25	15	15
53										35	25	15	15
54									35	35	15	15	15
55								50	35	18	18	18	18
56							50	50	18	18	18	18	18
57						50	50	20	20	20	20	20	20
58					50	50	30	30	30	30	30	30	30
59				50	50	25	25	25	25	25	25	25	25
60		25	50	50	25	25	25	25	25	25	25	25	25
61		35	50	35	35	35	35	35	35	35	35	35	35
62		35	35	35	35	35	35	35	35	35	35	35	35
63		15	15	15	15	15	15	15	15	15	15	15	15
64		30	30	30	30	30	30	30	30	30	30	30	30
65		40	40	40	40	40	40	40	40	40	40	40	40
66		25	25	25	25	25	25	25	25	25	25	25	25
67		25	25	25	25	25	25	25	25	25	25	25	25
68		25	25	25	25	25	25	25	25	25	25	25	25
69		25	25	25	25	25	25	25	25	25	25	25	25
70		25	25	25	25	25	25	25	25	25	25	25	25
71	100	100	100	100	100	100	100	100	100	100	100	100	100



6. **Disability:** Active members are expected to become disabled as defined under the plan in accordance with annual rates as illustrated below.

Disability Retirements Per 100 Members	
Age	Rate
20	0.088
30	0.088
40	0.240
50	0.888
55	1.520
60	2.760
65	4.080

7. **Recognition of IRC Benefit and Compensation Limitations:** The limitations under IRC Sections 415(b) and 401(a)(17) have been reflected in the determination of plan costs, and these limits are assumed to increase at the assumed annual rate of inflation of 2.50%.
8. **Cost of Living Increase:** Retirement and Survivor's Benefits are assumed to receive annual Cost of Living Increases at the capped level of 2.00% per year of the first \$10,000 of the original retirement amount for all years after age 65.
9. **Withdrawal of Employee Contributions:** 75% of members terminating with a vested right are assumed to withdraw their accumulated contributions upon termination, while 25% are assumed to retain their vested deferred benefits by leaving contributions on deposit.
10. **Marital Status:** 85% of members are assumed to be married at the time of separation from service. Female spouses are assumed to be two years younger than their male counterparts.
11. **DROP Participation:** Active members are assumed to elect to participate in the DROP in accordance with the rates illustrated below.

Age at Retirement ¹	Percentage of Members Assumed to Elect the DROP upon Retirement
< 60	90%
60-64	60%
65+	30%

¹ Age at commencement of DROP participation period.

All Members assumed to elect the DROP are also assumed to elect a 5-year DROP participation period.



12. Assumed Form of Payment:

- a. Upon separation from service for causes other than death, active members are assumed to elect a form of payment as follows.

Form of Payment	Assumed Percent Elected
Straight Life Annuity	75%
ERISA Joint and Survivor*	<u>25%</u>
Total	100%

* The assumed Joint and Survivor continuation percentage elected is 50%.

- b. Surviving spouses of members who separate from service due to death are assumed to commence payment in the normal form of annuity at the spouse's age 62.
- c. Dependent children of members who separate from service due to death are assumed to receive a temporary annuity for a period of 7 years following the participant's death.
- d. Current deferred vested members who terminated prior to August 1, 2012 are assumed to elect the normal form at age 62.
- e. Current deferred vested members who terminated after July 31, 2012 are assumed to elect the normal form at age 65.

13. Interest on Employee Contributions: Accumulated employee contributions are credited with 2% interest compounded annually in accordance with the terms of the plan.

14. Credited Service for Unused Leave: At the time an active member is within one year of retirement eligibility, Credited Service is assumed to increase by 0.50 years for Unused Leave (i.e., Unused Sick Leave and Unused Annual Leave combined).

15. Changes in Methods and Assumptions: Reflected in this valuation are revised methods and assumptions from the prior valuation as follows:

- a. Actuarial Value of Assets
- i. Current: See item A.2. above.
- ii. Prior: Assets are valued at the average market value as reported by the trustee as of the valuation date, including any receivable contributions made for a prior plan year which were not recognized by the trustee as of the asset valuation date, and the adjusted market value of assets determined for the six immediately preceding valuation dates. The adjusted market value of assets for a prior valuation date is the market value of assets on that date, increased for contributions included in the plan's asset balance on the current valuation date that were not included in the plan's asset balance on the prior valuation date increased by assumed investment return at a rate of 7.00%, and reduced for benefits and administrative expenses paid from plan assets during the same period.



b. Mortality:

- i. Current: See item B.1. above.
- ii. Prior: The active, vested terminated and retired members of the plan are expected to exhibit mortality in accordance with the following published mortality tables:
 - a) Pre-retirement Mortality: 1994 Uninsured Pensioner (UP-94) mortality table, projected to 2002 using Scale AA, gender distinct
 - b) Post-retirement Mortality: 1994 Uninsured Pensioner (UP-94) mortality table, projected to 2002 using Scale AA, gender distinct

c. Termination:

- i. Current: See item B.2. above.
- ii. Prior: The active members are assumed to terminate their employment for causes other than death, disability or retirement in accordance with annual rates as illustrated below.

Rate of Decrement Due to Termination Per 100 Members	
Age	Rate
20	33.29
25	25.07
30	16.91
35	10.61
40	6.68
45	4.78
50	4.12
≥52	4.00

d. Earnings Progression:

- i. Current: See item B.4. above.
- ii. Prior: The increase in the levels of member compensation is assumed to increase at an annual rate of 5.00%.

e. Retirement Age:

- i. Current: See item B.5. above.
- ii. Prior: It has been assumed that members retire at the earliest age at which they would be eligible to retire (with reduced benefits, if applicable) except: (a) if the earliest age of retirement eligibility is prior to age 55 for eligibilities other than the "Rule of 80", the assumed age at retirement is the earliest age plus one year, or (b) if the earliest age of retirement eligibility occurs due to the "Rule of 80" eligibility, the assumed age at retirement is the earliest age plus three years.



f. Disability:

- i. Current: See item B.6. above.
- ii. Prior: Active members are expected to become disabled as defined under the plan in accordance with annual rates as illustrated below.

Annual Disability Retirement Rates Per 100 Members	
Age	Rate
20	0.11
30	0.11
40	0.30
50	1.11
55	1.90
60	3.45
65	5.10

g. Withdrawal of Employee Contributions:

- i. Current: See item B.9. above.
- ii. Prior: 20% of members terminating with a vested right were assumed to withdraw their accumulated contributions upon termination, while 80% were assumed to retain their vested deferred benefits by leaving contributions on deposit.

h. Marital Status:

- i. Current: See item B.10. above.
- ii. Prior: 85% of members are assumed to be married at the time of separation from service. Spouses are assumed to be the same age as the member.

i. DROP Participation:

- i. Current: See item B.11. above.
- ii. Prior: None.

j. Assumed Form of Payment upon Separation for causes other than death:

- i. Current: See item B.12.a. above.
- ii. Prior: Upon separation from service for causes other than death, 100% of active members are assumed to elect the normal form of payment.

k. Credited Service for Unused Leave:

- i. Current: See item B.14. above.
- ii. Prior: None.

The above Methods and Assumptions were updated to reflect the Board of Trustees' adoption of Resolution R-142-2020 at its December 21, 2020 meeting which accepted the recommendations of the Actuarial Experience study for the 5-year period ending December 31, 2018 as published on February 28, 2020 and as presented to the Pension Committee on September 10, 2020.



Section VI – Outline of Principal Plan Eligibility and Benefit Provisions

A. Identifying Data

1. Plan name: Employees' Retirement System of the Sewerage and Water Board of New Orleans
2. Type of plan: Defined Benefit Pension Plan
3. Plan sponsor: Sewerage and Water Board of New Orleans
4. Plan Year: January 1 - December 31
5. Employer: Sewerage and Water Board of New Orleans (the "Board")

B. Membership

1. An Employee enters the plan and becomes a Member on the first day he or she becomes an Employee.
2. An Employee:
 - a. includes any officer or other individual who the Personnel Department classifies as an Employee of the Board, but
 - b. excludes any individual who the Personnel Department classifies as an individual who regularly works less than 17.5 hours per week, a contract employee, a transient employee, a temporary employee (no matter how long the individual works with the Board), an emergency appointment, an independent contractor, or an employee of a contractor or independent contractor.
3. Membership ceases on:
 - a. separation from service, except if a terminated Member leaves his Accumulated Contributions on deposit and becomes an Inactive Member or if an Employee leaves the service of the Board to join the uniformed services and returns to the service of the Board within the applicable timeframe, or
 - b. the Employee enters the DROP program; however, Membership can resume under certain circumstances if the DROP Participant continues employment after the end of the DROP period and is rehired by the Board.
4. An Inactive Member is a Member who terminates employment with the Board and whose Accumulated Contributions remain on deposit in the Retirement System.

C. Contributions

1. Member: each Member shall contribute:
 - a. 4% of Earnable Compensation paid before January 1, 2013,



- b. 5% of Earnable Compensation after December 31, 2012 and before January 1, 2015, and
 - c. 6% of Earnable Compensation paid after December 31, 2014;
 - d. however, any Member who has accumulated 34 years, 4 months and 15 days of Credited Service shall cease contributions to the Retirement System;
 - e. Member contributions shall be accumulated with 2% Credited Interest compounded annually, where the sum of the contributions and credited interest is referred to as Accumulated Contributions.
2. Employer: The annual Total Contribution is an actuarially determined amount expressed as a percentage of Earnable Compensation based on the Normal Cost and an amortization of the Unfunded Accrued Liability (UAL) of the Retirement System determined in accordance with the stand-alone Funding Policy for the Plan; the Employer's Contribution percentage is equal to the Total Contribution percentage offset by the Employee Contribution percentage determined in accordance with the stand-alone Funding Policy for the Plan. The stand-alone Funding Policy determines the Total Contribution as the sum of the Normal Cost and a closed period, layered amortization of the UAL as follows:

Source of UAL Amortization Layers	UAL Amortization Period ¹
Actuarial Experience Gain/Loss	25 years
Assumption and Method Changes	25 years
Plan Amendments	15 years
Transition to New Policy	29 years ²

¹ Determined as a Level Dollar amount using a Closed Period.

² Transition to new funding policy occurred on January 1, 2021.

D. Eligibility for Retirement

1. Normal Retirement: age 65 (first of month coincident with or next following)
2. Retirement Allowance Eligibility:
 - a. 30 or more years of Credited Service regardless of age, or
 - b. age 60 and Vested, or
 - c. age 65 and 5 or more years of Credited Service (effective January 1, 1996), or
 - d. age 70 regardless of the number of years of Credited Service, or
 - e. the sum of age and years of Credited Service is at least 80 years



3. Early Retirement Eligibility: must be eligible for Retirement Allowance, and:
 - a. Unreduced Early Retirement if:
 - 1) age 62, or
 - 2) 30 years of Credited Service, or
 - 3) the sum of age and years of Credited Service is at least 80 years
 - b. Reduced Early Retirement if:
 - 1) age 60 with less than 30 years of Credited Service, or
 - 2) age 60 but the sum of age and years of Credited Service is less than 80 years
4. Disability Retirement: 10 or more years of Credited Service and Pension Committee approves disability application

E. Retirement Benefit Monthly Amounts

1. Normal Retirement Allowance:
 - a. 2.5% of the Member's Average Compensation times years of Credited Service up to 25 years, plus
 - b. 4.0% of the Member's Average Compensation times years of Credited Service in excess of 25 years, where such total is subject to the limit described in (c.) below:
 - c. In no event shall the total Retirement Allowance, including the supplemental Retirement Allowance earned following a rehired employment period, exceed 100% of a Member's Average Compensation.
2. Late Retirement:

Same formula as Normal Retirement Allowance.
3. Early Retirement:

If the Member is eligible for a Retirement Allowance and is age 62, or has 30 years of Credited Service, or their age plus years of Credited Service is at least 80 years then there is no reduction to the Retirement Allowance for early retirement.

If the Member is eligible for a Retirement Allowance but does not meet the above conditions for unreduced early retirement, then the Early Retirement Allowance is equal to the Retirement Allowance determined at the Early Retirement Date reduced 3% for each year his age at Early Retirement rounded to the nearest day precedes age 62.

See "Vested Termination Benefits" below for a summary of early commencement benefits for vested members who terminate prior to Early Retirement Eligibility.



4. Disability:

The Disability Retirement Allowance is equal to the greater of (a) and (b) offset by (c):

- a. A monthly annuity that is actuarially equivalent to the Member's Accumulated Contributions with interest at the time of retirement, or
- b. A monthly annuity based on 75% of the Member's Accrued Benefit determined by crediting the Disabled Member with years and days of Credited Service that would have been credited to the Member had the Member worked until age 62.
- c. The benefit provided above shall be offset by any worker's compensation benefits which the Member receives.

F. Normal Form of Monthly Payment

Life Annuity payable bi-weekly

G. Optional Forms of Payment

Other optional forms of payment are available that are actuarially equivalent to the Normal Form. Optional Retirement Allowance forms of payment include:

- Joint and X% Contingent Annuity^{1,2}, where X% is any multiple of 5% from Joint and 5% up to and including Joint and 100%
- Joint and X% Contingent Annuity^{1,3} with Pop-up, where X% is any multiple of 5% from Joint and 5% with Pop-up up to and including Joint and 100% with Pop-up

- ¹ Only available with the Member's Spouse as the Contingent Annuitant (i.e., non-spouse beneficiaries are not permitted).
- ² Reduces to the contingent survivor percentage only upon the death of the retiree (i.e., does not reduce if the contingent annuitant pre-deceases the retiree).
- ³ Reduces to the contingent survivor percentage only upon the death of the retiree. However, if the contingent annuitant pre-deceases the retiree, the retiree's monthly benefit pops-up to original amount of the Life Annuity.

H. Vested Termination Benefits

1. Vesting Schedule:

Years of Credited Service	Vesting Percent
Less than 5	0%
5 or more	100%

2. Non-Vested Terminations: A Member who terminates not Vested may remain an Inactive Member of the Retirement System for up to 5 years after the termination by not withdrawing his Accumulated Contributions. If the Inactive Participant does not become reemployed before the end of the 5-year period, the Retirement System will pay the Accumulated Contributions with interest.
3. Refund of Contributions for Vested Members: A member who terminates employment may elect to be paid the amount of Accumulated Contributions with interest. A Member who



makes this election shall not be entitled to receive a Retirement Allowance, unless such Member is reemployed and repays the Accumulated Contributions plus additional interest accruals.

4. Separation Retirement Allowance for Vested Terminations:

- a. Pre-August 1, 2012 Terminations: Any Vested Member who terminated employment before August 1, 2012, other than by Retirement, and before attaining age 60 who remained an Inactive Member by not withdrawing his Accumulated Contributions is entitled to receive a Retirement Allowance beginning on or after age 60 based on his Accrued Benefit at the time of termination subject to the pre-62 early retirement reductions.
- b. Post-July 31, 2012 Terminations: Any Vested Member who terminated employment on or after August 1, 2012, other than by Retirement, and before attaining age 60 who remained an Inactive Member by not withdrawing his Accumulated Contributions is entitled to receive a Retirement Allowance beginning at age 65 based on the Accrued Benefit at the time of termination.

I. Pre-retirement Death Benefits

1. Death While Eligible for Retirement: If a Member dies while eligible to begin receiving a Retirement Allowance (whether or not actively at work at the time of death), then:
 - a. if the Member has a Spouse, the Spouse shall be entitled to elect and receive retirement benefits had the Member retired on the date he died and elected the Optional Allowance with the 100% continuation percentage to the Spouse. If the Spouse elects this benefit, then the Accumulated Contributions shall not be refunded.
 - b. If the member has Eligible Dependents but no Spouse, the Eligible Dependents shall have the option of selecting either:
 - i. 65% of the Disability Retirement Allowance which would have been payable had the Member Retired on Disability before his death payable until the last child ceases to be an Eligible Dependent, or
 - ii. 25% of the Member's Earnable Compensation for the last complete calendar year, plus the Member's Accumulated Contributions with interest.
2. Death with 10 Years of Credited Service: If the Member dies while he is still an Employee with at least 10 Years of Credited Service but before he is Eligible for a Retirement Allowance:
 - a. Regular Spousal Benefit: the Spouse, if any, is entitled to receive 80% of the Member's Accrued Benefit determined at death commencing at the later of, the Member's death or the Spouse's age 62, or



- b. Reduced Early Spousal Benefit: if the Member dies before the Spouse attains age 62, in lieu of the Regular Spousal Benefit, the Spouse may elect the Actuarial Equivalent of the Member's Accrued Benefit at death commencing at any time after the Member's death.
 - c. Spouse with Eligible Dependents: If a Member dies before the Spouse reaches age 62 and there are Eligible Dependents, and the Spouse does not elect the Reduced Early Spousal Benefit, the Spouse may receive 65% of the Disability Retirement Allowance which would have been payable had the Member Retired on Disability before his death payable until the earliest of (i) the Spouse attains age 62, (ii) last child ceases to be an Eligible Dependent or (iii) the Spouse applies for or commences the Reduced Early Spousal Benefit.
 - d. Eligible Dependents but no Spouse: If there is no Spouse, the surviving Eligible Dependents shall have the option of selecting:
 - i. 65% of the Disability Retirement Allowance which would have been payable had the Member Retired on Disability before his death payable until the last child ceases to be an Eligible Dependent, or
 - ii. 25% of the Member's Earnable Compensation for the last complete calendar year, plus the Member's Accumulated Contributions with interest.
 - e. Disabled Spouse with No Eligible Dependents: If the Member's Spouse is Disabled and there are no Eligible Dependents and if the Spouse does not elect to receive the Reduced Early Spousal Benefit, then 65% of the Disability Retirement Allowance which would have been payable had the Member Retired on Disability before his death will be payable to the Disabled Spouse until the Spouse attains age 62 or the Spouse applies for or commences the Reduced Early Spousal Benefit. If the Spouse is able to return to gainful employment this benefit shall be discontinued.
 - f. No Spouse and No Eligible Dependents: If there is no Spouse or Eligible Dependents, the Member's Beneficiary shall be entitled to receive 25% of the Member's Earnable Compensation for the last complete calendar year, plus the Member's Accumulated Contributions with interest.
- 3. Death with 3 to 10 Years of Credited Service: If the Member dies while he is still an Employee but before he is Eligible for a Retirement Allowance and the Member has at least 3 but less than 10 years of Credited Service, the Member's Beneficiary shall receive 25% of the Member's Earnable Compensation for the last complete calendar year, plus the Member's Accumulated Contributions with interest.
 - 4. Death with less than 3 Years of Credited Service: If the Member dies while he is still an Employee and with less than 3 years of Credited Service, the Member's Beneficiary shall receive a refund of the Member's Accumulated Contributions with interest.
 - 5. Death while on Active Military Duty: If the death occurs while on a granted leave of absence for the purpose of joining the armed forces, the death occurs during the performance of qualified military service, and the death occurs after January 1, 2007, the Employee's Spouse, Eligible Dependents and/or Beneficiary will be entitled to any death benefits that would be payable had the Employee resumed employment the day before his death.



Furthermore, the qualified military service will be counted as additional years of Service for vesting but not for purposes of calculating his Accrued Benefit.

6. Death of Inactive Member Prior to Retirement Allowance Eligibility (whether or not Vested): Accumulated Contributions with interest shall be paid to the Beneficiary of such an Inactive Member and no other benefits shall be payable.

J. Post-Retirement Death Benefits

1. Regular Retiree (i.e., a retiree who did not retire under the Retirement System's Disability provisions):
 - a. If a Retiree elected an Optional Allowance, then his spouse shall be entitled to receive continued payments based on the continuation percentage provided under the Optional Allowance elected.
 - b. If a Retiree is receiving a Life Annuity, then their Beneficiary shall only be entitled to receive the value of the Retiree's Accumulated Contributions at the time of Retirement less the value of the payments that the Retiree received before death. However, if such Retiree dies within 30 days of retirement and has a Spouse, then the Spouse shall be entitled to the death benefit payable to a Member who is Eligible for Retirement but has not yet retired.
2. Disabled Retiree (i.e., a retiree who retired under the Retirement System's Disability provisions)
 - a. Regular Spousal Benefit: the Spouse is entitled to 80% of the Member's Disability Retirement Allowance commencing at the later of the Member's date of death or the Spouse's attainment of age 62.
 - b. Reduced Early Spousal Benefit: If the Spouse is under age 62 at the time of the Retiree's death, the Spouse can commence an amount that is actuarially equivalent the Member's Accrued Benefit.
 - c. Spouse with Eligible Dependents: if the Disabled Retiree dies before the Spouse reaches age 62 and there are Eligible Dependents, and the Spouse does not elect to receive the Reduced Early Spousal Benefit, then 65% of the Disability Retirement Allowance will continue to the Spouse until the first of the following occurs: the last child ceases to be an Eligible Dependent, the Spouse attains age 62 or the Spouse commences or applies for the Reduced Early Spousal Benefit.
 - d. No Spouse but Eligible Dependents: if there is no Surviving Spouse, the surviving Eligible Dependents (or their legal representatives), if any, may select either:
 - i. The benefit provided to the Spouse with Eligible Dependents, or
 - ii. 25% of the Member's Earnable Compensation for the last complete calendar year, plus the Member's Accumulated Contributions with interest



- e. Disabled Spouse with no Eligible Dependents: if the Disabled Member dies before the Spouse is age 62, the Spouse is Disabled, and there are no Eligible Dependents, then if the Spouse does not elect to receive the Reduced Early Spousal Benefit, 65% of the Disability Retirement Allowance will continue to the Spouse until the Spouse reaches age 62 or until the Spouse commences or applies to receive the Reduced Early Spousal Benefit.
- f. Non-Disabled Spouse with No Eligible Dependents: in lieu of the other benefits available to the Surviving Spouse, the Spouse may elect to receive 25% of the Member's Earnable Compensation for the last complete calendar year, plus the Member's Accumulated Contributions with interest
- g. No Spouse and No Eligible Dependents: if there is no Spouse or Eligible Dependents, the Member's Beneficiary shall be entitled to the Member's Accumulated Contributions with interest in excess of the Disability Retirement Allowance payments made to the Member prior to death.

K. Basis of Actuarial Equivalence

The 1971 Group Annuity Mortality Table using the Male Table for all Members and the Female Table for all Spouses/Beneficiaries, regardless of the actual sex of the Member or Spouse/Beneficiary, and an interest rate of 6.0%.

L. Cost-of-Living Adjustments

The Retirement Allowance for Members over age 65 shall be subject to a Cost-of-Living Adjustment (COLA) each January based on the 12-month change for CPI for Urban Wage Earners utilizing the prior August index; if the change in the CPI is negative or zero, then no COLA shall be given, otherwise if the CPI increase exceeds 2%, then the COLA shall be limited to 2%. The COLA is not compounded annually and is only applied to the first \$10,000 of a Member's original annual Retirement Allowance for periods after age 65. Adjustments for partial years of retirement after age 65 are prorated based on the actual number of days retired over age 65 during the 12-month period ending December 31.

COLAs shall also be applied to optional dependent benefits following the same rules beginning on the first day of the year after the dependent reaches age 65. However, Spouses receiving benefits following the death of a Disabled Retiree shall receive COLAs after the Spouse reaches age 62 rather than age 65 per Section 6.3(b)(1) of the Rules and Regulations.

M. Average Compensation

- 1. For an Employee who became eligible for Retirement on or before December 31, 2014, regardless of whether the Employee actually retires before or after December 31, 2014, the average of Earnable Compensation over 36 consecutive months of service during which Earnable Compensation was the highest.
- 2. For an Employee who became eligible for Retirement on or after January 1, 2015 and retires on or after January 1, 2015 and before January 1, 2017, the average of Earnable Compensation over 36 consecutive months of service during which Earnable Compensation was the highest.



3. For an Employee who became eligible for Retirement on or after January 1, 2015 and retires on or after January 1, 2017 but before January 1, 2018, the average of Earnable Compensation over 48 consecutive months of service during which Earnable Compensation was the highest.
4. For an Employee who became eligible for Retirement on or after January 1, 2015 and retires on or after January 1, 2018, the average of Earnable Compensation over 60 consecutive months of service during which Earnable Compensation was the highest.

N. Credited Service

1. Credited Service is granted for all service an Employee renders and on account of which all contributions have been made as required under the terms of the Retirement System. However, service while on leave without pay shall not count towards Credited Service, unless it is to perform service in the uniformed services (as further enumerated under the terms of the Retirement System) or unless it is compensable under workers compensation laws.
2. Unused Leave
 - a. Unused Sick Leave: A Member shall receive Credited Service for Unused Sick Leave on a proportional basis where one year of Credited Service is granted for each 250 days of Unused Sick Leave. Such credit is used in computing the Retirement Allowance and can be used to satisfy eligibility requirements for Retirement benefits, except for the requirement to become Vested. In applying for a Retirement Allowance, a Member shall be required to use all of his Unused Sick Leave towards meeting the eligibility requirements of Credited Service component of Retirement Allowance condition of 80 years based on the sum of age and years of Credited Service.
 - b. Unused Annual Leave: A Member shall receive Credited Service for Unused Annual Leave subject to a maximum of 111 days of unused leave provided the Member is Vested prior to including this service. Credit is granted on a proportional basis where one year of Credited Service is equivalent to 250 days of Unused Annual Leave. Such credit is used in computing the Retirement Allowance and can be used to satisfy eligibility requirements for Retirement benefits, except for the requirement to become Vested.
3. Purchase of Credited Service
 - a. Military Service: A Member who has not yet Retired and has not yet elected to participate in the DROP program may purchase additional days of Credited Service up to 4 years for each day of Active Duty Military Service subject to the conditions outlined under the terms of the Retirement System, including the payment of missed contributions with interest during the time specified under the terms of the Retirement System. If the Member does not purchase the Credited Service within the required timeframe, the Member may still be eligible to purchase Credited Service provided the Member served in the Armed Forces and meets additional terms of the Retirement System.



- b. **Transfers Between Retirement Systems:** Pursuant to Louisiana Revised Statutes (La. R.S.) 11:141-43 to the extent it does not conflict with La. R.S. 11:3822, transfers of credits and funds between the Retirement System and any other retirement system authorized under these Transfer Statutes, including the Retirement System of the City of New Orleans, is permitted subject to the terms of the Retirement System.
- c. **Repayment After Reemployment:** A former Member, who previously received a distribution of his Accumulated Contributions, becomes reemployed for a period of at least 18 months may repay the Retirement System in a single lump sum the refund previously distributed plus interest at 7% compounded annually in order to have the entire period of Credited Service restored.
- d. **Hurricane Katrina:** Any Member placed on disaster leave by the Employer beginning October 1, 2005 due to Hurricane Katrina and who returned to work prior to April 1, 2006 may purchase days of Credited Service for the period from October 1, 2005 to the date the Member returned to full time employment but for a period no longer than the 6 months ending March 31, 2006. For each day of Credited Service purchased, the Member must contribute an amount equal to 4% of the Member's daily Base Pay as in effect on October 1, 2005 plus interest at 7% compounded annually from October 4, 2005 through the date of purchase.

All Credited Service shall be combined and rounded to the nearest full day for Retirement Allowance purposes.

O. Deferred Retirement Option Plan (DROP)

1. **Participation:** In lieu of terminating employment and receiving a Retirement Allowance, any Member who is Eligible for a Retirement Allowance may elect to participate in the DROP program by giving at least 90 days' notice in advance of commencing in the DROP program. The participant must elect the duration of participation for a period not to exceed 5 years. The Member shall be required to make the same type of elections as he would be required had he Retired and such elections shall be irrevocable.
2. **Benefits:** During the period of the DROP, the Member shall remain employed but his Average Compensation and Credited Service shall remain as they existed on the date of commencement in the DROP program, and no further Employee contributions shall be made. The participant's DROP account shall receive a Retirement Allowance based on any optional elections made, and without regard to any cost-of-living adjustments during the period of the DROP. (However, payments following the termination of participation in the DROP shall be subject to the cost-of-living adjustments under the normal terms of the Retirement System.) Each DROP participant's DROP account shall be credited the actual earnings earned on the DROP account as of the last day of each calendar month, where such earnings may be zero but may never be negative.
3. **Termination of Employment:** On termination of employment at the end of the specified DROP period (or for any reason before the end of the DROP period including Disability), the participant shall receive a lump sum equal to the balance of the DROP account.



Furthermore, the participants Retirement Allowance shall commence in lieu of being deposited into the DROP account.

4. Death: If a DROP participant dies during the period of participation in the DROP, a lump sum payment equal to his DROP account balance shall be paid to his DROP Beneficiary. In addition, normal survivor benefits payable to Beneficiaries of retirees shall be payable.
5. Reemployment: A DROP participant may request to continue employment with the Board beyond his elected period of participation in the DROP program by reapplying with the Board. If the DROP participant is rehired by the Board, the DROP participant will receive a lump sum distribution of his DROP account balance as if he had retired. For DROP participants rehired on a full-time basis after April 20, 2005, the Retirement Allowance that had been paid into the DROP participant's DROP account shall be suspended while re-employed, and the provisions of Section 6.6 shall be applicable. For DROP participants rehired on a part-time basis after April 20, 2005, the Retirement Allowance that had been paid into the DROP participant's DROP account shall not be suspended while re-employed and will be paid to the participant as if he had not been rehired. For purposes of this provision, full-time employment shall be defined as working 17.5 hours or more per week. For purposes of this provision, part-time employment shall be defined as working less than 17.5 hours per week.

P. Worker's Compensation Offset

Any amounts paid or payable under the provisions of any worker's compensation statute or similar law to a Member or the dependents of a Member due to any accidental death or accidental disability shall be offset against and payable in lieu of any benefits payable by the Retirement System on account of any accidental disability or death provision, including any benefit paid under the unreduced early commencement provisions of the Retirement System. This offset shall not deprive a Member or his Beneficiary of a right to receive a refund of Accumulated Contributions.

Q. Earnable Compensation

The regular annual compensation paid to an Employee which shall not include on-call pay, stand-by pay, or over-time. For computing retirement benefits only, Earnable Compensation includes shift differential pay and longevity pay as part of an Employee's base pay.

Earnable Compensation shall be limited as required under Code section 401(a)(17); in general, for Plan Years beginning on or after January 1, 1996, Earnable Compensation shall be limited to \$150,000 adjusted annually in accordance with Code Section 401(a)(17), as applicable to governmental plans. The determination period is the calendar year. If the determination period includes a fraction of a calendar year, the annual compensation limit is the otherwise applicable annual limit multiplied by a fraction, the numerator of which is the number of months in the short year and the denominator of which is twelve.

Notwithstanding the above, for any Plan Year beginning after December 31, 2001, Earnable Compensation shall not exceed \$200,000 (adjusted for cost-of-living increases in accordance with Code Section 401(a)(17), as applicable to governmental plans.



R. Reemployment Provisions

1. Retirees: Any Retiree receiving a Retirement Allowance shall become a Member of the Retirement System again on re-employment.
 - a. Retirement Allowance Suspended: During re-employment, no Retirement Allowance payments will be made, but the vesting, the amount and the form of the prior Retirement Allowance will resume upon subsequent retirement in the same amount and form frozen at the original calculation.
 - b. Additional Benefit: Upon subsequent retirement, the Member shall be entitled to an additional separate Retirement Allowance based on additional years of Credited Service and Average Compensation during re-employment. The additional percentage of additional Retirement Allowance earned shall consider prior Credited Service earned during the original period of employment.
 - c. Death While Re-Employed: If a Member dies while re-employed, the Spouse shall be entitled to the Optional Allowance, if any, previously elected by the Member at original retirement, plus any additional benefits under the death benefit terms of the Retirement System based on the Member's Accumulated Contributions and Retirement Allowance earned since re-employment.
2. Other Re-employments
 - a. If re-employed after attaining age 50 and period of non-employment is at least 2 years (5 years if employment was involuntarily terminated due to a Civil Service mandated layoff), then Retirement Allowance shall not exceed the sum of:
 - i. The benefit based on Credited Service and Average Compensation before re-employment (provided Accumulated Contributions previously distributed are repaid with interest, subject to the 18-month required period of re-employment applicable to other re-employments), and
 - ii. The benefit based on Credited Service and Average Compensation accrued after re-employment.
 - b. If re-employed and do not meet the conditions outlined in (a.) immediately above, then:
 - i. if the Member did not previously receive a distribution of Accumulated Contributions, then the entire period of Credited Service is restored
 - ii. if the Member previously received a distribution of his Accumulated Contributions, becomes re-employed for a period of at least 18 months, the Member may repay the Accumulated Contributions previously distributed plus interest in order to have the entire period of Credited Service restored



- iii. if the Member previously received a distribution of his Accumulated Contributions and does not repay the Retirement System the amount of the Accumulated Contributions with interest, then the benefits accrued will be based solely on Earnable Compensation and Credited Service accrued following the re-employment

c. DROP Participants: See Item O.5. above.

S. Eligible Dependent

A dependent who is a child of a Member, either natural or adopted, and who is under age 18 (or age 25 if the child attends school full-time) or who is mentally or physically disabled, as determined by the Pension Committee in its sole discretion, provided such disability occurred before the date the child reached age 18.

T. Pension Supplement

For a closed group of former employees who were hired prior to 1996, a supplemental pension benefit (the Pension Supplement) is provided in addition to the Retirement Allowance from retirement to the earliest of death, attainment of age 65 or the member's receipt of their first Social Security check. This temporary Pension Supplement is only payable to the member and is not subject to the Optional Allowance. For retirees receiving this benefit and Vested Terminated members entitled to this benefit at a future retirement date, the Pension Supplement is based on the records of the employer.



Section VII – Summary of Participant Data

A. Participant Data Reconciliation

	Active Participants	Current Payment Status	Vested Terminated	Nonvested Terminated	Total
1. As of January 1, 2020	1,185	909	40	136	2,270
2. Change of status					
a. retirement	(2)	2	0	0	0
b. DROP retirement	(13)	13	0	0	0
c. disability	0	0	0	0	0
d. death	(2)	(24)	0	0	(26)
e. nonvested termination	(127)	0	0	127	0
f. vested termination	(18)	0	18	0	0
g. completion of payment	0	0	(16)	(97)	(113)
h. rehires	4	(2)	(1)	(1)	0
i. other	<u>0</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
j. net changes	(158)	(8)	1	29	(136)
3. New participants	<u>150</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>150</u>
4. As of January 1, 2021	1,177	901 ¹	41	165 ²	2,284

¹ Includes 73 DROP participants whose DROP participation period had not expired as of January 1, 2021.

² Nonvested terminated members who had not received a refund of their employee contribution account balances as of January 1, 2021.



B. Age/Service Headcount Table for Actives as of January 1, 2021

Current Age	Current Years of Service										Age Totals	Percent of Total
	$t < 1$	$1 \leq t < 5$	$5 \leq t < 10$	$10 \leq t < 15$	$15 \leq t < 20$	$20 \leq t < 25$	$25 \leq t < 30$	$30 \leq t < 35$	$35 \leq t < 40$	$40 \leq t$		
$x < 25$	16	27	0	0	0	0	0	0	0	0	43	3.65%
$25 \leq x < 30$	25	89	16	0	0	0	0	0	0	0	130	11.05%
$30 \leq x < 35$	27	83	66	18	1	0	0	0	0	0	195	16.56%
$35 \leq x < 40$	16	81	38	21	7	0	0	0	0	0	163	13.85%
$40 \leq x < 45$	10	63	25	11	11	3	1	0	0	0	124	10.54%
$45 \leq x < 50$	11	41	23	21	7	8	12	1	0	0	124	10.54%
$50 \leq x < 55$	7	35	15	17	8	15	26	8	0	0	131	11.13%
$55 \leq x < 60$	4	55	25	15	4	11	18	10	7	0	149	12.66%
$60 \leq x < 65$	3	19	21	16	9	3	5	6	1	1	84	7.14%
$65 \leq x < 70$	1	6	11	3	2	2	1	1	0	0	27	2.29%
$x \geq 70$	0	1	0	3	1	1	0	1	0	0	7	0.59%
Service Totals	120	500	240	125	50	43	63	27	8	1	1,177	100.00%
Percent of Total	10.20%	42.49%	20.39%	10.62%	4.25%	3.65%	5.35%	2.29%	0.68%	0.08%	100.00%	

Average Age: 43.49

Average Service: 8.039



C. Age/Service Average Earnable Compensation Table for Actives as of January 1, 2021

Current Age	Current Years of Service										Row Averages	Percent of Total
	$t < 1$	$1 \leq t < 5$	$5 \leq t < 10$	$10 \leq t < 15$	$15 \leq t < 20$	$20 \leq t < 25$	$25 \leq t < 30$	$30 \leq t < 35$	$35 \leq t < 40$	$40 \leq t$		
$x < 25$	\$36,331	\$31,055	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,018	2.87%
$25 \leq x < 30$	35,149	33,372	35,389	0	0	0	0	0	0	0	33,962	8.92%
$30 \leq x < 35$	37,584	39,536	44,881	51,226	53,750	0	0	0	0	0	42,227	16.62%
$35 \leq x < 40$	37,357	37,600	44,457	44,056	50,484	0	0	0	0	0	40,560	13.35%
$40 \leq x < 45$	35,100	39,408	40,901	38,335	45,469	39,369	42,980	0	0	0	39,832	9.98%
$45 \leq x < 50$	45,958	38,957	36,365	39,060	51,109	51,340	52,016	94,006	0	0	42,307	10.60%
$50 \leq x < 55$	35,346	36,819	34,881	41,385	64,844	44,254	57,602	49,645	0	0	44,582	11.80%
$55 \leq x < 60$	54,484	42,567	38,332	44,913	40,930	37,484	56,996	63,804	63,097	0	46,126	13.88%
$60 \leq x < 65$	30,283	64,645	37,629	38,849	45,331	50,755	76,284	52,152	41,926	41,408	48,438	8.22%
$65 \leq x < 70$	87,254	73,758	45,108	37,157	41,134	56,348	53,087	50,513	0	0	53,186	2.90%
$x \geq 70$	0	100,000	0	53,699	46,306	46,306	0	71,526	0	0	60,748	0.86%
Column Averages	\$38,104	\$39,232	\$41,019	\$42,885	\$49,682	\$44,563	\$57,544	\$57,932	\$60,451	\$41,408	\$42,063	100.00%
Percent of Total	9.24%	39.62%	19.88%	10.83%	5.02%	3.87%	7.32%	3.16%	0.98%	0.08%	100.00%	

Average Annual Payrate: \$42,063



D. Summary of Vested Terminated Participants as of January 1, 2021

Age	Count	Sum of Monthly Benefits	Average Monthly Benefits
$x < 35$	3	\$ 1,287	\$ 429
$35 \leq x < 40$	10	6,360	\$ 636
$40 \leq x < 45$	2	2,024	\$ 1,012
$45 \leq x < 50$	4	4,997	\$ 1,249
$50 \leq x < 55$	6	8,494	\$ 1,416
$55 \leq x < 60$	7	8,771	\$ 1,253
$60 \leq x < 65$	6	6,637	\$ 1,106
$x \geq 65$	3	1,991	\$ 664
Total	41	\$ 40,561	\$ 989

E. Summary of Nonvested Terminated Participants as of January 1, 2021

Count ¹	Sum of Employee Contribution Account Balances	Average of Employee Contribution Account Balances
165	\$ 316,928	\$ 1,921

¹ Sewerage and Water Board of New Orleans did not provide dates of birth for all Nonvested Terminated Employees. However, date of birth is not needed for the valuation since the plan liability for these individuals is equal to their employee contribution account balances.



F. Summary of Retirees and Beneficiaries as of January 1, 2021

Age	Count	Sum of Monthly Benefits	Average Monthly Benefits
$x < 45$	2	\$ 2,048	\$ 1,024
$45 \leq x < 50$	5	8,512	\$ 1,702
$50 \leq x < 55$	18	44,219	\$ 2,457
$55 \leq x < 60$	76	248,510	\$ 3,270
$60 \leq x < 65$	166	428,916	\$ 2,584
$65 \leq x < 70$	247	513,462	\$ 2,079
$70 \leq x < 75$	183	377,910	\$ 2,065
$75 \leq x < 80$	101	189,607	\$ 1,877
$80 \leq x < 85$	53	76,550	\$ 1,444
$85 \leq x < 90$	31	37,968	\$ 1,225
$90 \leq x < 95$	16	17,938	\$ 1,121
$95 \leq x$	3	3,626	\$ 1,209
Total	901	\$ 1,949,266	\$ 2,163



Section VIII – Glossary of Actuarial Terms

Actuarial Accrued Liability	This is computed differently under different actuarial cost methods. Generally, the Actuarial Accrued Liability represents the portion of the Present Value of Future Benefits attributed to periods of service preceding the valuation date.
Actuarial Gain (Loss)	A measure of the difference between actual experience and that expected based on the actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with the particular actuarial cost method used.
Actuarial Value of Assets	The value of Plan Assets used by an actuary for an actuarial valuation. <i>(See the Actuarial Methods and Assumptions section of this report for a description of the methodology used to determine the Actuarial Value of Assets used in this report.)</i>
Entry Age Normal Actuarial Cost Method	An actuarial cost method under which the Present Value of Future Benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to the year of service during the valuation year is called the Normal Cost. The portion of this present value not provided for at a valuation date by the Present Value of Future Normal Costs is called the Actuarial Accrued Liability.
Normal Cost	Computed differently under different actuarial cost methods, the Normal Cost generally represents the portion of the Actuarial Present Value of Future Benefits attributed to the current year of service for active employees.
Present Value of Accrued Benefits	The actuarial present value of all accrued benefits (i.e., all benefits attributed by the pension benefit formula to employee service and compensation rendered prior to the valuation date).
Present Value of Future Benefits	Future benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial Present Value of Future Benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Present Value of Future Normal Costs	The difference between the Present Value of Future Benefits and the Actuarial Accrued Liability under a given actuarial cost method.
Unfunded Accrued Liability	The excess, if any, of the Accrued Liability over the Actuarial Value of Assets.



Pension Committee Meeting: January 1, 2021 Actuarial Funding Valuation Results and COLA Update



Rudd and Wisdom, Inc.

September 9, 2021

Prepared for



Mitchell L. Bilbe, FSA, EA
Brandon L. Fuller, FSA, EA
Christopher S. Johnson, FSA, EA

- Adoption of Experience Study
- 2021 Pension Plan Valuation Results
- Recent ADC and Contribution History
- 2021 COLA
- Highlights from 2020/2021 and What's Next?
- Q/A



- R&W completed Experience Study in February 2020
- Board of Trustees adopted new assumptions in December 2020
- Board of Trustees authorized new Funding Policy in December 2020 and officially adopted new stand-alone written Funding Policy in May 2021
- New assumptions and Funding Policy used for January 1, 2021 Funding Valuation



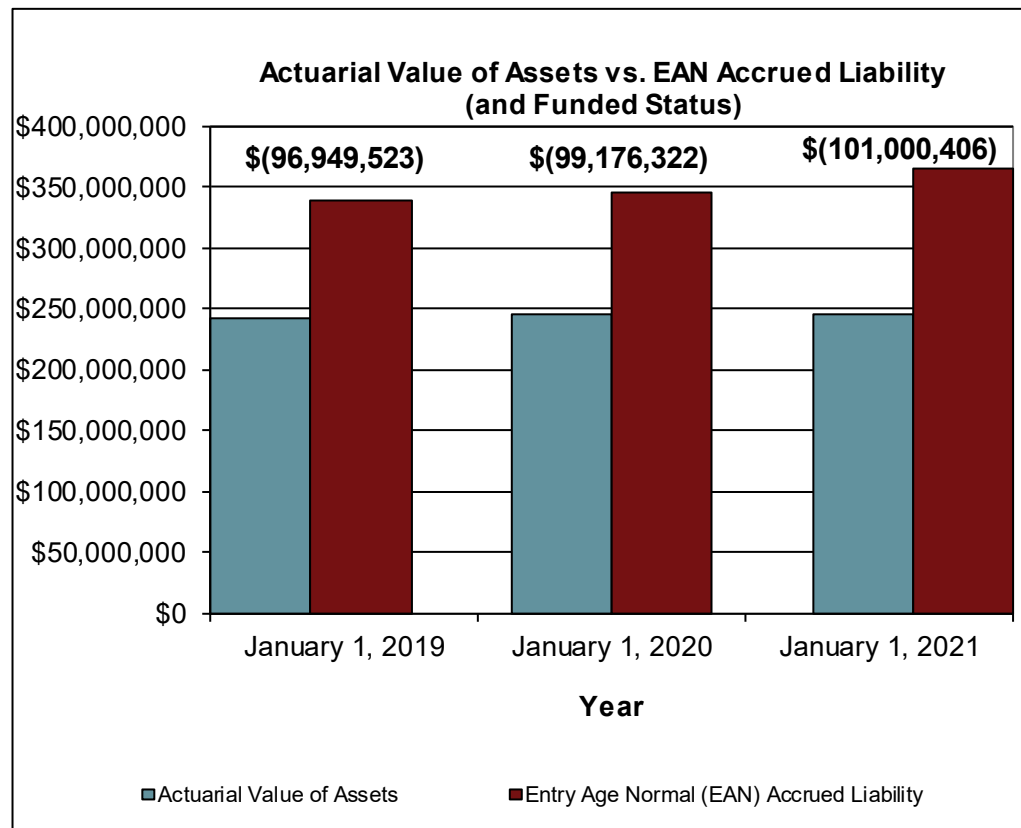
- Updated Demographic Assumptions
 - Retirement Rates - New rates based on Age and Service
 - DROP Elections - New rates based on Age
 - Termination Rates - New rates based on Age and Service
 - Withdrawal of Employee Contributions - Increase assumed election rate
 - Disability Rates - New rates based on Age
 - Mortality Rates - Update to recently published tables with mortality improvement projection scale, adjusted for expected difference in rates for Louisiana mortality experience
 - Credited Service for Unused Leave - Increase Credited Service for expected Unused Leave
 - Other - Spouse Age Difference and Form of Payment assumptions also updated
- Updated Economic Assumptions
 - COLA - 2.00%
 - Compensation Increases - New Rates based on Age
 - Investment Return - No change (7.00%)



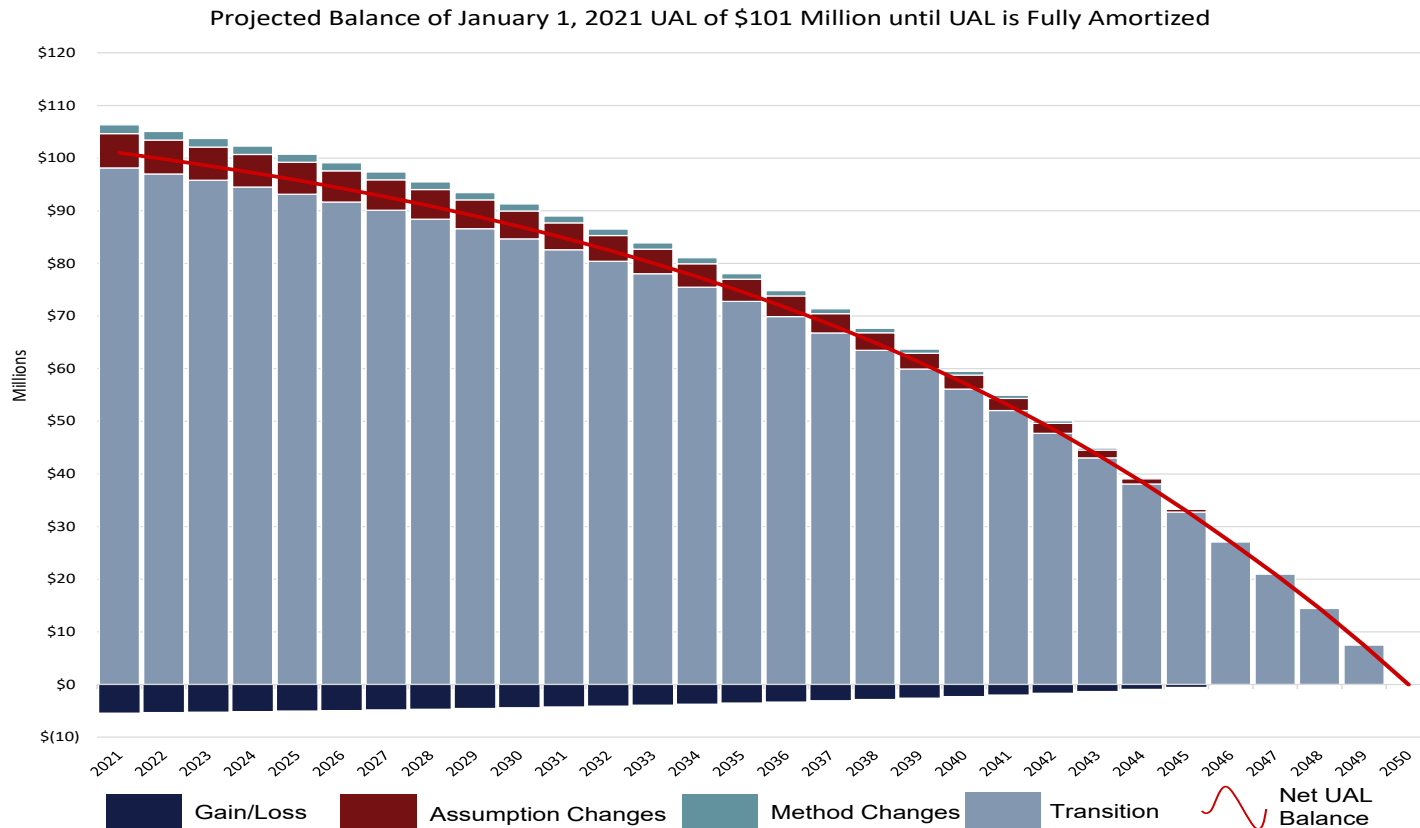
- New Assumptions
 - Increase January 1, 2021 Pension Plan Accrued Liability by \$6.5M (1.9% increase)
- New Methods accelerate funding of Pension Plan
 - Closed period instead of Open period amortization
 - Various amortization periods of different layers but shorter overall than current 30 year period
 - Result:
 - Employer's portion of Actuarially Determined Contribution (ADC) increased by 1.3% of Payroll for 2021 (\$0.6M)
 - Employee portion of ADC remains at 6.0% of pay



- Unfunded Accrued Liability (UAL or Funded Status)
 - Growth of UAL in last year primarily driven by new assumptions



- Projection of Unfunded Accrued Liability (UAL)



- Employer Contribution Comparison of 2020 to 2021
 - *(As presented on page II-1 of 2021 valuation report):*

	Annual Contribution	
	<u>2020</u>	<u>2021</u>
1. Total Funding Policy Contribution		
a. Normal Cost	\$ 4,947,747	\$ 5,582,391
b. UAL Amortization	<u>7,746,757</u>	<u>7,964,829</u>
c. Total	\$12,694,504	\$13,547,220
2. Employee Funding Policy Contribution ^{1,2}	<u>(2,430,806)</u>	<u>(2,932,625)</u>
3. Employer Funding Policy Contribution	\$10,263,698	\$10,614,595
4. Employer Funding Policy Contribution as a Percent of Payroll ³	21.112%	21.717%

¹ For 2020, prior to Board Resolution R-140-2020, when the plan was not 100% funded, the Employer Contribution was determined under Board Resolution R-248-2014 which assumed employees contributed 5% of Earnable Compensation even though actual Employee Contributions were 6% of Earnable Compensation.

² For 2021+, in accordance with Board Resolution R-140-2020 the Employer's portion of the ADC is determined by offsetting the total ADC by the actual Employee Contributions of 6% of Earnable Compensation.

³ Based on projected Earnable Compensation (i.e., Pension Payroll) of \$48,616,122 for 2020 and \$48,877,084 for 2021.

	Employer Contribution as % of Payroll
2020 Employer Contribution	21.1%
Actuarial Gains during 2020	(0.7)%
Changes in Assumptions and Funding Policy	<u>1.3%</u>
2021 Employer Contribution	21.7%



Member Category	Members as of January 1, 2020	Members as of January 1, 2021
Actives	1,185	1,177
Vested Terminated	40	41
Nonvested Terminated	136	165
Retirees and Beneficiaries ²	<u>909</u>	<u>901</u>
Total	2,270	2,284

¹ See page VII-1 of 2021 valuation report for details of changes in membership from 1/1/2020 to 1/1/2021.

² Includes DROP Retirees.

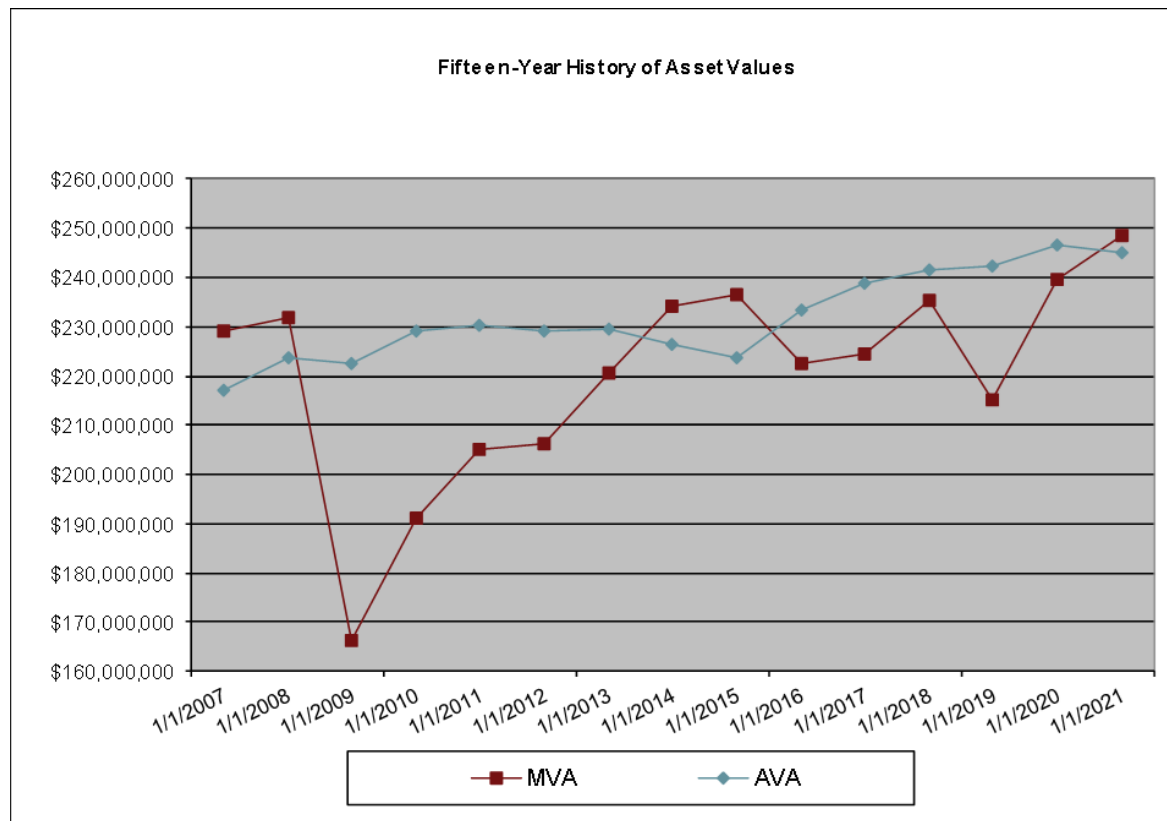


	2019 (in \$millions)	2020 (in \$millions)
1. Market Value of Assets at Beginning of Year	\$215.3	\$239.7
2. Employer Contributions	10.5	10.4
3. Employee Contributions	2.8	3.0
4. Net Investment Income	33.7	20.9
5. Benefit Payments	(22.9)	(26.3)
6. City and other Transfers	<u>0.3</u>	<u>0.7</u>
7. Market Value of Assets at End of Year	\$239.7	\$248.4
8. Rate of Return	16.0%	8.9%

Recent Asset History

Market Value vs. Actuarial Value

- As of 1/1/2021, Cumulative Asset Gains of \$3.5M are deferred and not yet recognized in Actuarial Value of Assets (AVA) due to smoothing
 - (As shown on page II-5 of 2021 valuation report.)



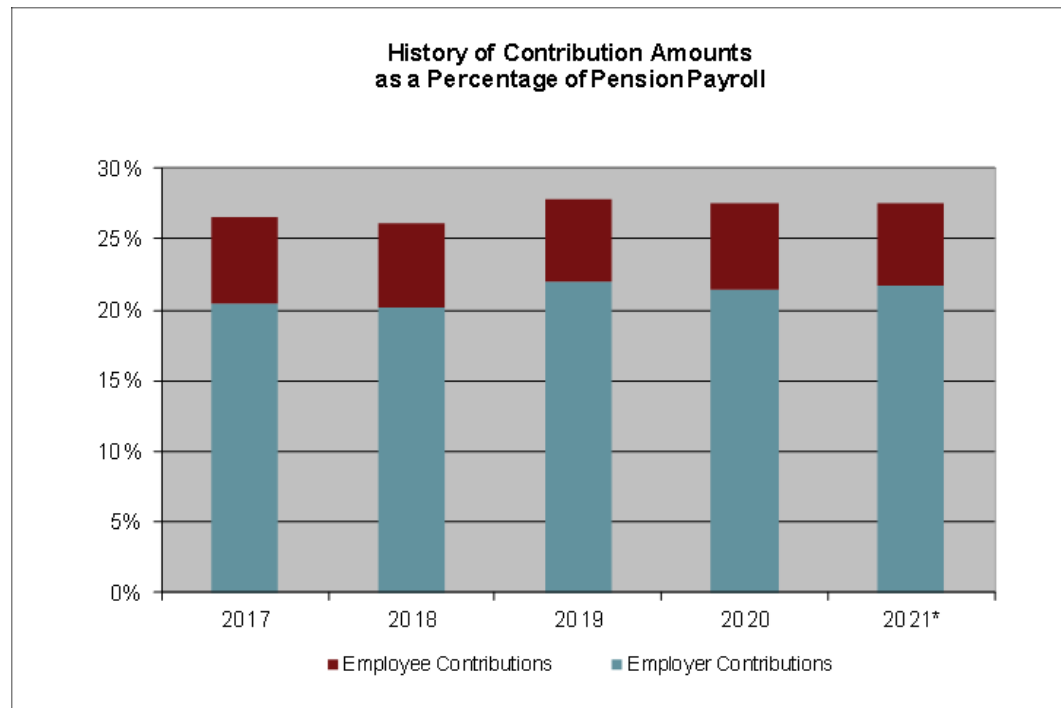
Pension Plan Funding History

(As shown on page II-2 of 2021 Valuation Report)



Rudd and Wisdom, Inc.

- From 2020 to 2021, Employer Contribution increased 0.6% of payroll (increase due to new assumptions and new funding policy offset in part by liability gains during the year)
 - (As shown on page II-2 of 2021 valuation report.)



* Based on employer funding policy contribution of 21.717% of Pension Payroll (estimated to be \$10.6M based on estimated Pension Payroll) for 2021.



Year	Employer Portion of Actuarially Determined Contribution (ADC) ¹	Employer Contribution	Employee Contribution
2017	\$7,155,787	\$7,239,467	\$2,139,705
2018	\$8,435,598	\$8,419,441	\$2,535,027
2019	\$10,156,701	\$10,466,009	\$2,793,158
2020	\$10,263,698	\$10,392,532	\$3,015,231
2021	\$10,614,595	\$10,614,595 ²	\$2,932,625 ²

¹ Prior to 2021, based on 30-year open period, level dollar amortization of Unfunded Accrued Liability. For 2021+, based on Layered Closed Period Amortization (Layers over 15, 25 and 30 years).

² Assumed contributions based on estimated payroll for 2021.



- **Cost-of-Living Adjustment (COLA) defined in Sec. 6.1(d) of Rules and Regulations**
 - Inflation as measured by CPI for Urban Wage Earners (CPI-W)
 - Based on inflation for 12-month period ending in August preceding year of application
 - 2% maximum
 - If CPI exceeds 2% → COLA capped at 2%
 - 0% minimum
 - If CPI is negative → COLA is 0% (i.e., payments are not reduced)
 - Age 65+
 - Only available to Retirees and Surviving Optional Dependents who are over age 65*
 - Pro-rata COLA applied in year in which age 65 is reached
 - Only applied to first \$10,000 of original annual annuity amount (Retirement Allowance) at retirement
 - Result is that there is no compound interest (i.e., COLA always based on original annuity amount at retirement)
 - Not applicable during DROP period
 - Commences after end of DROP period or when Retiree reaches age 65, if later

*Surviving spouses of Disabled Retirees receive COLA beginning at spouse's age 62 rather than spouse's age 65 per Sec. 6.3(b)(1).



- For both examples assume Retiree is Age 65 at beginning of year, Year 1 CPI-W change is 2.5% and Year 2 CPI-W change is 1.0%
- Example 1 - Assume Annual Retirement Allowance is \$9,000 at date of retirement
 - Year 1:
 - COLA capped at 2.0%
 - COLA is $2.0\% \times \$9,000 = \180
 - Annuity increased to $\$9,000 + \$180 = \$9,180$
 - Year 2:
 - COLA is $1.0\% \times \$9,000 = \90 (i.e., COLA is not applied to \$9,180)
 - Annuity increased to $\$9,180 + \$90 = \$9,270$
- Example 2 - Assume Annual Retirement Allowance is \$15,000 at date of retirement
 - Year 1:
 - COLA capped at 2.0% and COLA only applied to first \$10,000 of annuity
 - COLA is $2.0\% \times \$10,000 = \200
 - Annuity increased to $\$15,000 + \$200 = \$15,200$
 - Year 2:
 - COLA is $1.0\% \times \$10,000 = \100
 - Annuity increased to $\$15,200 + \$100 = \$15,300$



CPI Period	COLA Effective Date	CPI Change	COLA Percentage
8/2001 to 8/2002	January 1, 2003	1.610%	1.610%
8/2002 to 8/2003	January 1, 2004	2.095%	2.000%
8/2003 to 8/2004	January 1, 2005	2.607%	2.000%
8/2004 to 8/2005	January 1, 2006	3.894%	2.000%
8/2005 to 8/2006	January 1, 2007	3.904%	2.000%
8/2006 to 8/2007	January 1, 2008	2.140%	2.000%
8/2007 to 8/2008	January 1, 2009	5.930%	2.000%
8/2008 to 8/2009	January 1, 2010	-1.900%	0.000%
8/2009 to 8/2010	January 1, 2011	1.444%	1.444%
8/2010 to 8/2011	January 1, 2012	4.258%	2.000%
8/2011 to 8/2012	January 1, 2013	1.670%	1.670%
8/2012 to 8/2013	January 1, 2014	1.455%	1.455%
8/2013 to 8/2014	January 1, 2015	1.594%	1.594%
8/2014 to 8/2015	January 1, 2016	-0.284%	0.000%
8/2015 to 8/2016	January 1, 2017	0.659%	0.659%
8/2016 to 8/2017	January 1, 2018	1.934%	1.934%
8/2017 to 8/2018	January 1, 2019	2.877%	2.000%
8/2018 to 8/2019	January 1, 2020	1.533%	1.533%
8/2019 to 8/2020	January 1, 2021	1.393%	1.393%



As of January 1, 2021	Number	Annual Benefits in effect before COLA	1.393% COLA	Annual Benefits in effect after COLA
1. Annuitants Under Age 65	202	\$6,258,395	\$0	\$6,258,395
2. DROP Annuitants of any age	73	\$2,801,008	\$0	\$2,801,008
3. Annuitants Over Age 65				
a. Annuity < \$10,000	139	\$868,134	\$9,885	\$878,019
b. Annuity ≥ \$10,000	<u>488</u>	<u>\$13,524,695</u>	<u>\$64,161</u>	<u>\$13,588,856</u>
4. Total	902	\$23,452,232	\$74,046*	\$23,526,278

*For comparison, 2020 COLA at 1.533% was \$75,096.



- Historically,
 - Pension Committee recommends COLA increase
 - Annual Resolution is adopted by Board of Trustees to enact COLA
- COLA that was effective January 1, 2020
 - Resolution R-113-2020
 - Executed on November 18, 2020
 - COLA increase paid retroactively to beginning of year based on number of bi-weekly payments year-to-date
 - Bi-weekly payments increased prospectively
- Similar action should be followed for January 1, 2021 COLA



- February 2020 – published Actuarial Experience Study
- December 2020 – Board of Trustees adopted new assumptions and Funding Policy
- May 2021 – Drafted Stand-Alone Funding Policy adopted by Board of Trustees
- May 2021 – Completed 2021 valuation reflecting new assumptions and funding policy
- June 2021 – issued annual employee benefit statements using updated template and various benefit projection dates for each active member
- Next on the horizon
 - Pension Portal?
 - Web-based pension benefit calculation tool for both administrators and Members
 - Next Experience Study not scheduled until 2024

The Sewerage & Water Board of New Orleans

Systems Review



Presented by

Marquette Associates, Inc.

Agenda

- Executive summary
- Proposed asset allocation
- Looking ahead

Executive Summary

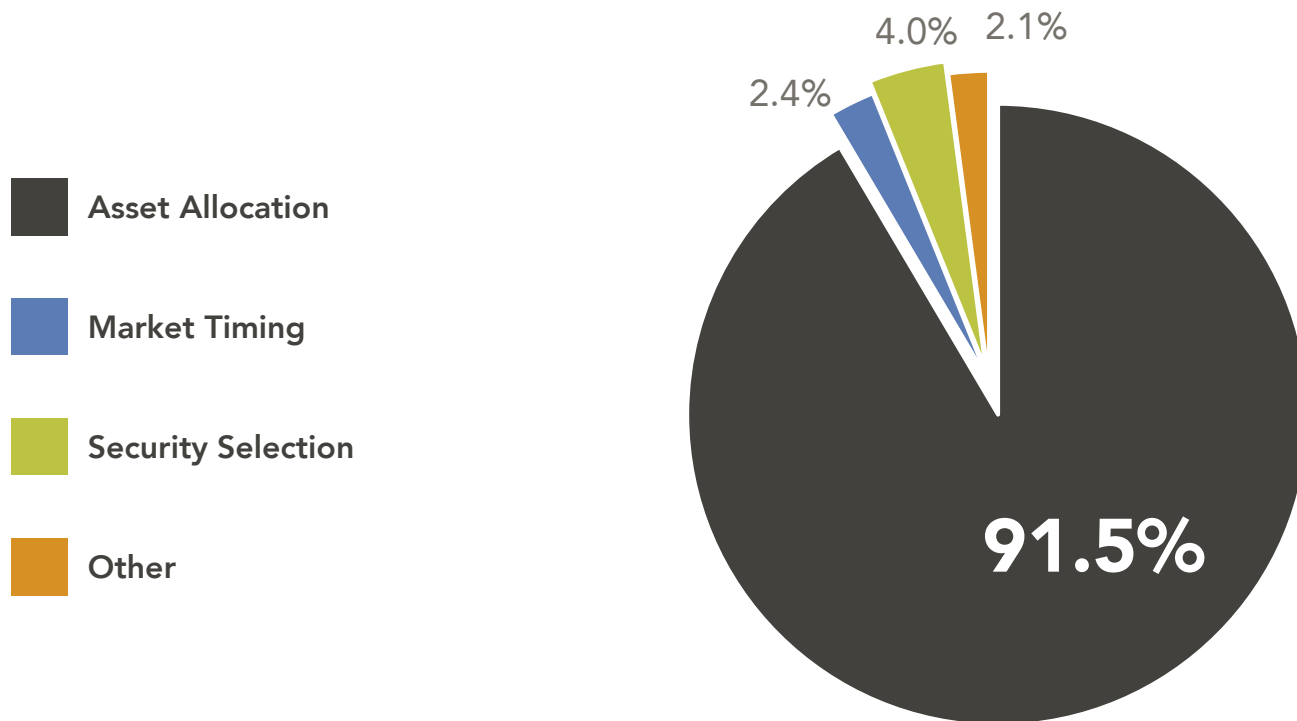
Executive summary of recommendations

Recommendation	Goals
Asset allocation: Portfolio E	<ul style="list-style-type: none">▪ Reduce fixed income exposure to enhance expected risk/return trade-offs▪ Revisit the U.S./Non-U.S. equities allocation split▪ Reduce equity style biases in favor of a core approach▪ Evaluate efficacy of hedge funds allocation (cost and performance)▪ Optimize real estate allocation by adding a core open ended private real estate allocation vs a “proxy” allocation (REITs)▪ Consider global infrastructure and private equity allocations to reduce public market volatility and enhance diversification

Asset Allocation Study

Asset allocation controls portfolio risk

Portfolio return variability (%)



Source: Gary P. Brinson, L. Randolph Hood, and Gilbert L. Beebower, "Determinants of Portfolio Performance," Financial Analysts Journal, July/August 1986. Gary P. Brinson, Brian D. Singer, and Gilbert L. Beebower, "Determinants of Portfolio Performance II: An Update," Financial Analysts Journal, May/June 1991.

Commodities and equities continue to lead in 2021

2021 YTD	2020	2019	2018	2017	2016	2015	2014	2013	2012	5yr	10yr
Commodities 31.4%	Broad U.S. Equities 20.9%	Large Cap 31.5%	Real Estate 6.7%	Emerging Markets 37.3%	Small Cap 21.3%	Real Estate 13.3%	Large Cap 13.7%	Small Cap 38.8%	Intl Small Cap 20.0%	Broad U.S. Equities 17.9%	Large Cap 14.8%
Small Cap 17.5%	Small Cap 20.0%	Broad U.S. Equities 31.0%	Bank Loans 1.1%	Intl Small Cap 33.0%	High Yield 17.1%	Intl Small Cap 9.6%	Mid Cap 13.2%	Mid Cap 34.8%	Emerging Markets 18.2%	Large Cap 17.6%	Broad U.S. Equities 14.7%
Mid Cap 16.2%	Large Cap 18.4%	Mid Cap 30.5%	Core Bond 0.0%	Broad Intl Equities 27.2%	Mid Cap 13.8%	Large Cap 1.4%	Broad U.S. Equities 12.6%	Broad U.S. Equities 33.6%	Intl Large Cap 17.3%	Small Cap 16.5%	Mid Cap 13.2%
Large Cap 15.3%	Emerging Markets 18.3%	Small Cap 25.5%	High Yield -2.1%	Intl Large Cap 25.0%	Broad U.S. Equities 12.7%	Core Bond 0.5%	Real Estate 11.8%	Large Cap 32.4%	Mid Cap 17.3%	Mid Cap 15.6%	Small Cap 12.3%
Broad U.S. Equities 15.1%	Mid Cap 17.1%	Intl Small Cap 25.0%	Hedge Funds -4.0%	Large Cap 21.8%	Large Cap 12.0%	Broad U.S. Equities 0.5%	Core Bond 6.0%	Intl Small Cap 29.3%	Broad Intl Equities 16.8%	Emerging Markets 13.0%	Real Estate 8.8%
Broad Intl Equities 9.2%	Intl Small Cap 12.3%	Intl Large Cap 22.0%	Large Cap -4.4%	Broad U.S. Equities 21.1%	Commodities 11.4%	Hedge Funds -0.3%	Small Cap 4.9%	Intl Large Cap 22.8%	Broad U.S. Equities 16.4%	Intl Small Cap 12.0%	Intl Small Cap 8.4%
Intl Small Cap 9.0%	Hedge Funds 10.9%	Broad Intl Equities 21.5%	Broad U.S. Equities -5.2%	Mid Cap 18.5%	Emerging Markets 11.2%	Bank Loans -0.4%	Hedge Funds 3.4%	Broad Intl Equities 15.3%	Small Cap 16.4%	Broad Intl Equities 11.1%	High Yield 6.7%
Intl Large Cap 8.8%	Broad Intl Equities 10.7%	Emerging Markets 18.4%	Mid Cap -9.1%	Small Cap 14.6%	Bank Loans 9.9%	Intl Large Cap -0.8%	High Yield 2.5%	Real Estate 11.0%	Large Cap 16.0%	Intl Large Cap 10.3%	Intl Large Cap 5.9%
Emerging Markets 7.4%	Intl Large Cap 7.8%	Commodities 17.6%	Small Cap -11.0%	Hedge Funds 7.8%	Real Estate 8.0%	Mid Cap -2.4%	Bank Loans 2.1%	Hedge Funds 9.0%	High Yield 15.8%	High Yield 7.5%	Broad Intl Equities 5.4%
Hedge Funds 4.5%	Core Bond 7.5%	High Yield 14.3%	Intl Large Cap -13.8%	High Yield 7.5%	Broad Intl Equities 4.5%	Small Cap -4.4%	Emerging Markets -2.2%	High Yield 7.4%	Real Estate 10.5%	Hedge Funds 5.9%	Bank Loans 4.5%
High Yield 3.6%	High Yield 7.1%	Core Bond 8.7%	Commodities -13.8%	Real Estate 7.0%	Core Bond 2.6%	High Yield -4.5%	Broad Intl Equities -3.9%	Bank Loans 6.2%	Bank Loans 9.4%	Real Estate 5.8%	Emerging Markets 4.3%
Bank Loans 3.5%	Bank Loans 2.8%	Hedge Funds 8.4%	Broad Intl Equities -14.2%	Commodities 5.8%	Intl Small Cap 2.2%	Broad Intl Equities -5.7%	Intl Large Cap -4.9%	Commodities -1.2%	Hedge Funds 4.8%	Bank Loans 5.0%	Hedge Funds 3.7%
Real Estate 1.7%	Real Estate 1.6%	Bank Loans 8.2%	Emerging Markets -14.6%	Bank Loans 4.2%	Intl Large Cap 1.0%	Emerging Markets -14.9%	Intl Small Cap -4.9%	Core Bond -2.0%	Core Bond 4.2%	Core Bond 3.0%	Core Bond 3.4%
Core Bond -1.6%	Commodities -23.7%	Real Estate 6.4%	Intl Small Cap -17.9%	Core Bond 3.5%	Hedge Funds 0.5%	Commodities -32.9%	Commodities -33.1%	Emerging Markets -2.6%	Commodities 0.1%	Commodities 1.7%	Commodities -6.5%

Source: Bloomberg; hedge funds as of May 31, 2021, real estate as of March 31, 2021. Please see end of document for benchmark information.

Marquette's approach to asset allocation

Holistic approach contributes to optimal portfolios for each client's unique circumstances

Asset allocation studies encompass:

Cashflow and liability projections

Risk budgeting & value at risk

Rigorous suite of risk analytics

Stress tests to gauge portfolio sensitivity

Client-specific return goals and risk tolerances



Asset allocation study assumptions

SWBNO Employees' Pension Trust Fund:

- Market Value: \$260 million
 - Target Return: 7.0%
-

Marquette Asset Allocation Software:

- Forward-looking
- Monte Carlo simulation
- 10-year holding period
- Updated quarterly

Forward-looking asset class returns

Asset Class	12/31/18 Avg. 10 Year	3/31/21 Avg. 10 Year	
	Annualized Return	Annualized Return	Annualized Volatility
Broad Fixed Income	3.3%	2.0%	3.2%
US Large-Cap Core	7.3%	7.4%	17.9%
US Large-Cap Value	7.3%	7.3%	21.6%
US Mid-Cap Core	7.7%	7.7%	18.7%
US Small-Cap Core	8.1%	8.2%	18.3%
Developed Large-Cap Core	7.2%	7.4%	22.5%
Non-US Small-Cap	8.2%	7.7%	29.1%
Emerging Market	7.9%	8.4%	34.1%
Hedge Funds	6.0%	5.6%	8.0%
Real Estate – Core	7.2%	5.8%	5.2%
Public REITs	6.5%	6.1%	15.6%
Global Infrastructure	7.5%	7.0%	8.7%
Private Equity	10.8%	11.4%	12.5%

	Returns	Risk
Fixed Income	Low	Low
Global Equities	High	High
Hedge Funds	Moderate	Moderate
Real Estate	Moderate	High
Private Assets	High	Low

Source: Marquette Associates Asset Allocation Study; as of March 31, 2021

Historical Performance

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Fund Composite	10.5%	18.8%	-3.6%	11.6%	6.4%	-1.7%	5.6%	11.0%	11.7%	3.5%	9.4%
<i>Total Fund Composite Benchmark</i>	11.0%	18.9%	-3.8%	12.8%	6.4%	-2.8%	4.2%	11.5%	10.5%	2.2%	12.5%
Actuarial Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
InvMetrics Public DB Net Rank	81	60	30	95	78	78	47	85	53	6	90

Source: Marquette Associates Quarterly Performance Report; Net of Fees

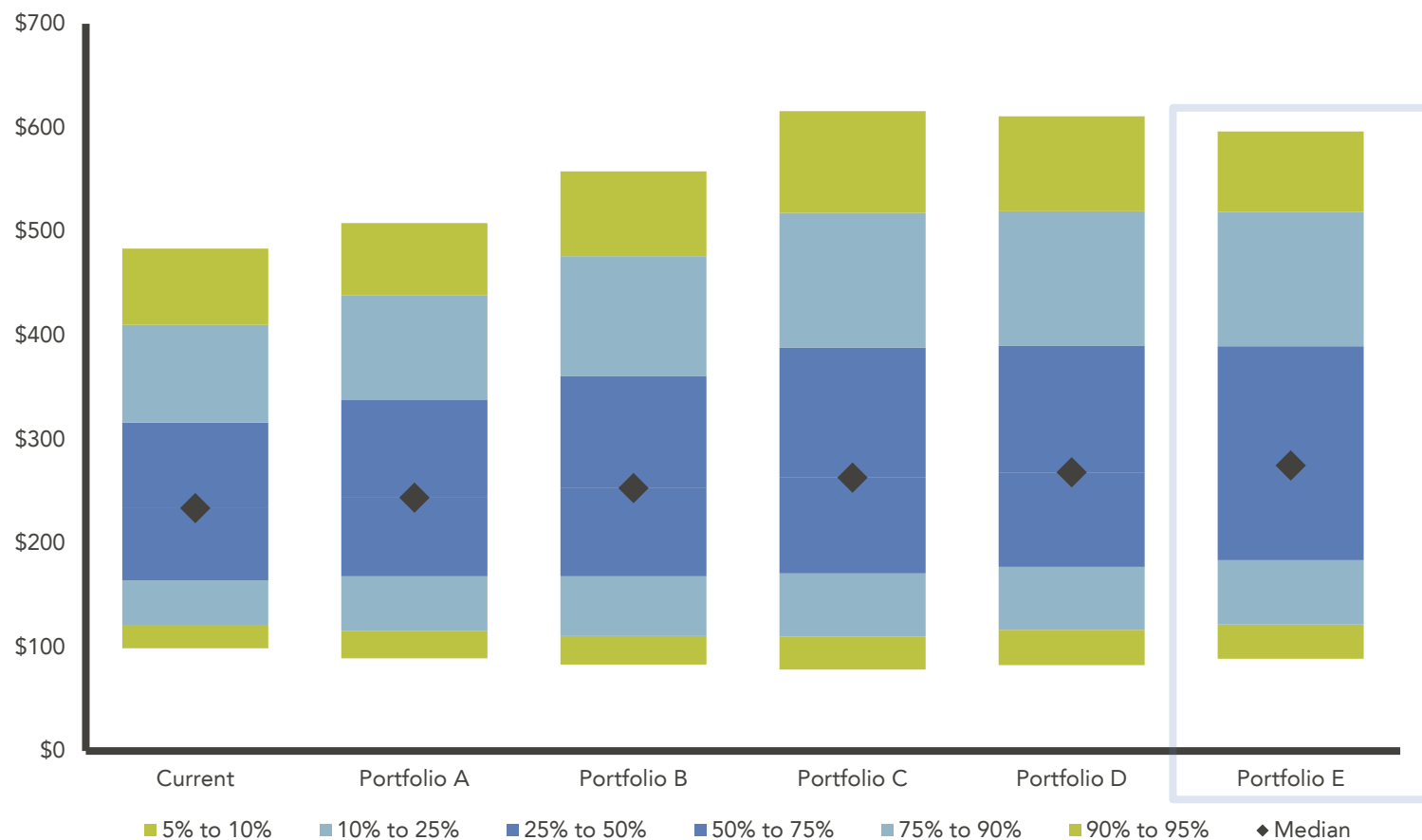
Portfolio scenarios

Asset Class	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E	
Broad Fixed Income	35.0%	35.0%	30.0%	25.0%	25.0%	25.0%	
91 Day T-Bills	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Fixed Income	36.0%	35.0%	30.0%	25.0%	25.0%	25.0%	▼
Broad U.S. Equity (All Cap Core)	27.0%	27.0%	0.0%	0.0%	0.0%	0.0%	
US Large-Cap Core	0.0%	0.0%	25.0%	25.0%	23.0%	25.0%	
US Mid-Cap Core	0.0%	4.5%	5.0%	7.0%	7.0%	4.0%	
US Small-Cap Core	0.0%	4.5%	5.0%	7.0%	7.0%	5.0%	
Total U.S. Equity	27.0%	36.0%	35.0%	39.0%	37.0%	34.0%	▲
Broad Non-US Equity	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Developed Large-Cap	0.0%	10.0%	16.0%	16.0%	14.0%	15.0%	
Non-US Small-Cap	0.0%	5.0%	5.0%	5.0%	5.0%	3.0%	
Emerging Market	0.0%	5.0%	5.0%	5.0%	5.0%	3.0%	
Total Non-U.S. Equity	20.0%	20.0%	26.0%	26.0%	24.0%	21.0%	▲
Hedge Fund - FOF	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Hedge Funds	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	▼
Real Estate - Core	0.0%	9.0%	9.0%	5.0%	5.0%	3.0%	
Public REITs	9.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Real Assets	9.0%	9.0%	9.0%	5.0%	5.0%	3.0%	▼
Global Infrastructure	0.0%	0.0%	0.0%	5.0%	5.0%	7.0%	
Private Equity - Fund of Funds	0.0%	0.0%	0.0%	0.0%	4.0%	10.0%	
Total Illiquid Assets	0.0%	0.0%	0.0%	5.0%	9.0%	17.0%	▲
	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E	
Avg. Annualized 10 Yr. Return	5.91%	6.17%	6.42%	6.73%	6.88%	7.01%	
Avg. Annualized 10 Yr. Volatility	9.42%	10.45%	11.44%	12.41%	12.07%	11.61%	

Source: Marquette Associates Asset Allocation Study; as of March 31, 2021. Blue highlighting depicts new asset classes.

Portfolio E expands upside potential

Distribution of year 10 market values (\$millions)



Source: Marquette Associates Asset Allocation Study; as of March 31, 2021.

Portfolio E

Portfolio E: observations & recommendations

Asset Class	Current	Portfolio E	
Broad Fixed Income	35.0%	25.0%	
91 Day T-Bills	1.0%	0.0%	
Total Fixed Income	36.0%	25.0%	▼
Broad U.S. Equity (All Cap Core)	27.0%	0.0%	
US Large-Cap Core	0.0%	25.0%	
US Mid-Cap Core	0.0%	4.0%	
US Small-Cap Core	0.0%	5.0%	
Total U.S. Equity	27.0%	34.0%	▲
Broad Non-US Equity	20.0%	0.0%	
Developed Large-Cap	0.0%	15.0%	
Non-US Small-Cap	0.0%	3.0%	
Emerging Market	0.0%	3.0%	
Total Non-U.S. Equity	20.0%	21.0%	▲
Hedge Fund - FOF	8.0%	0.0%	
Total Hedge Funds	8.0%	0.0%	▼
Real Estate - Core	0.0%	3.0%	
Public REITs	9.0%	0.0%	
Total Real Assets	9.0%	3.0%	▼
Global Infrastructure	0.0%	7.0%	
Private Equity - Fund of Funds	0.0%	10.0%	
Total Illiquid Assets	0.0%	17.0%	▲

	Current	Portfolio E
Avg. Annualized 10 Yr. Return	5.91%	7.01%
Avg. Annualized 10 Yr. Volatility	9.42%	11.61%

Fixed Income

- Align fixed income exposure with annual cash needs
- Review and consider opportunistic fixed income mandates to take advantage of market dislocations

Equities

- Global equity mix of 60% U.S. and 40% non-U.S. for better expected risk-adjusted returns
- Increase passive allocation in large cap core and add a U.S. small- and mid-cap allocation
- Establish allocation to non-U.S. small-cap
- Establish allocation to emerging markets

Hedge Funds

- Eliminate hedge funds due to structural headwinds that have resulted in disappointing annualized returns and high fees

Real Estate

- Eliminate Public REITs (an equity "proxy" for real estate)
- Add a core open ended private real estate strategy that focuses on yield and a lower correlation to traditional asset classes

Global Infrastructure

- Consider adding private global infrastructure to improve portfolio diversification and enhance returns to have an additional inflation protection component in the portfolio

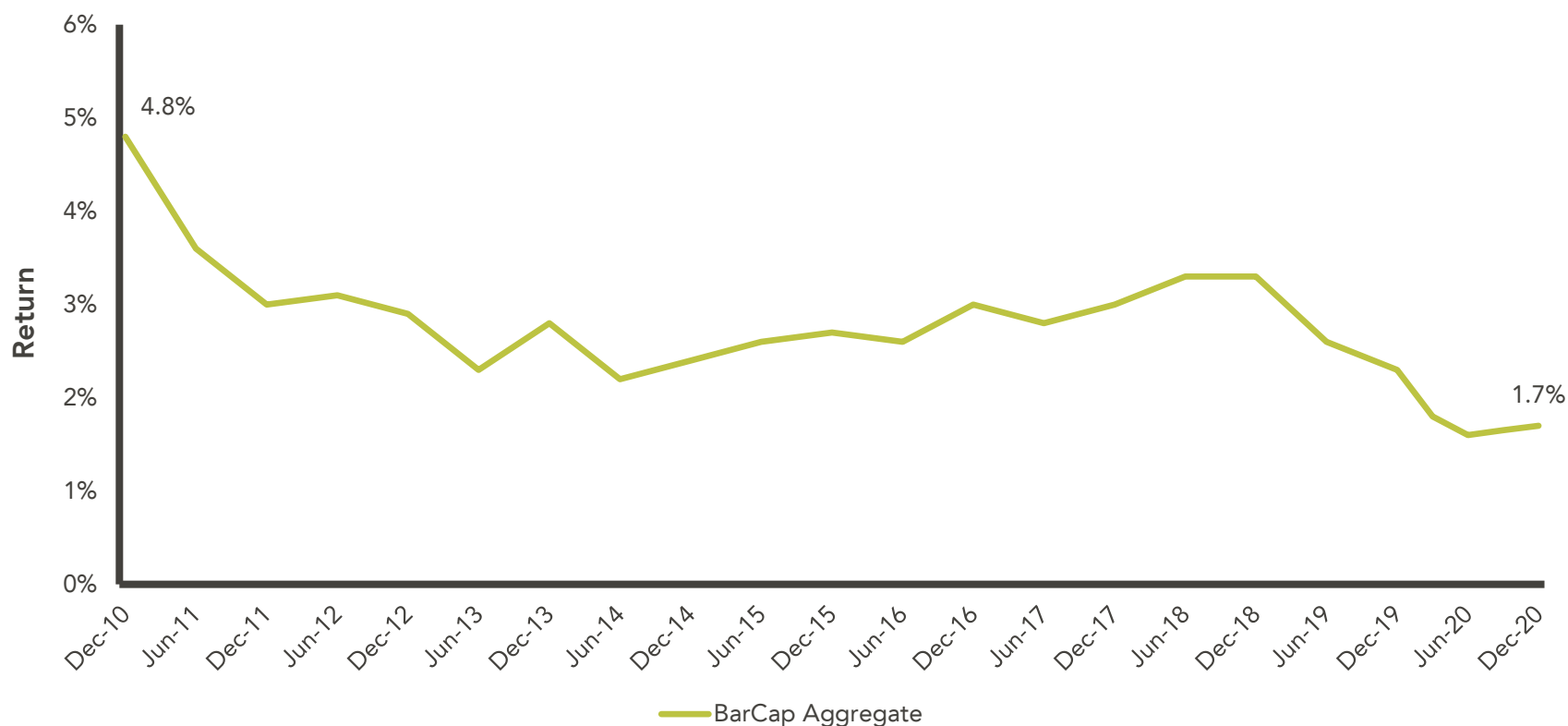
Private Equity

- Consider private equity to high quality small buyout FOFs and lower-middle market direct exposure

Source: Marquette Associates Asset Allocation Study; as of March 31, 2021. Blue highlighting depicts new asset classes.

Bond returns have declined over time

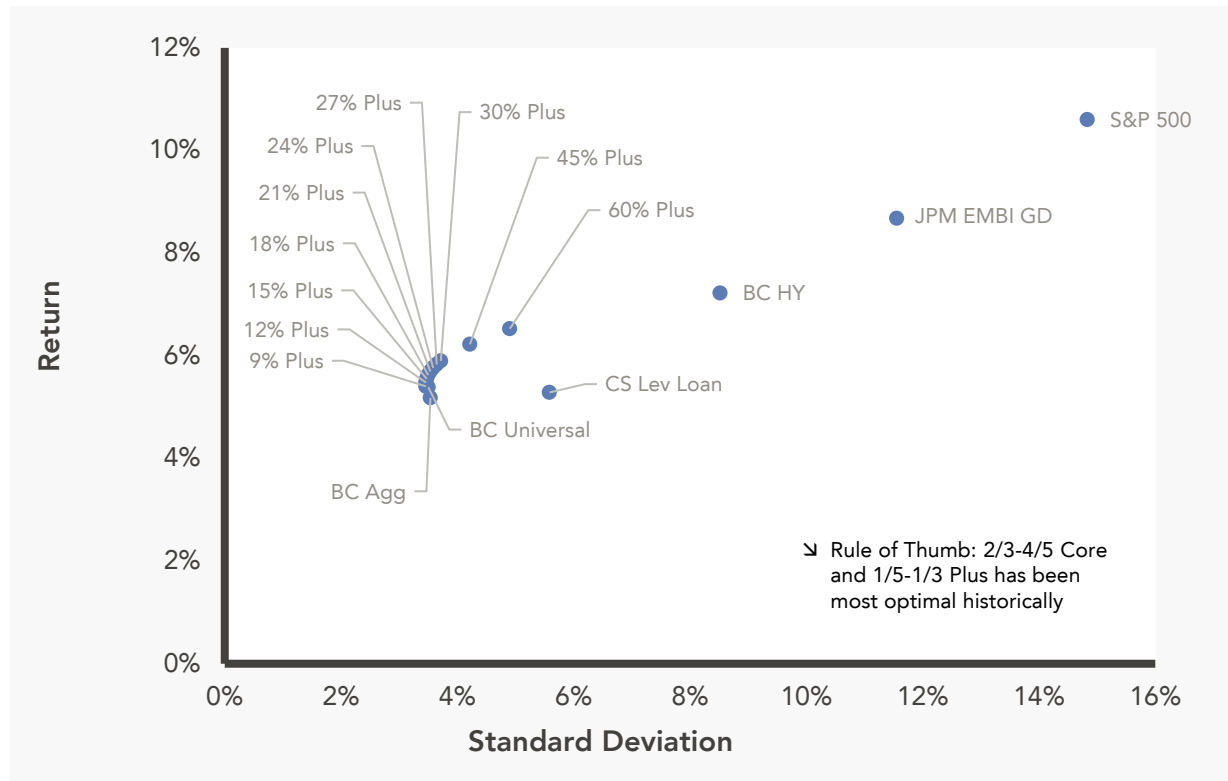
Declining bond returns are a headwind to achieving target rates of return with lower levels of risk



Source: Marquette Associates Asset Allocation Software

Core plus exhibits the optimal fixed income structure

Optimal Historical Portfolio (Core and % Plus Sectors)



Sharpe Ratio 1/1994-7/2021	
9% Plus	0.89
12% Plus	0.92
15% Plus	0.93
18% Plus	0.95
21% Plus	0.96
24% Plus	0.96
27% Plus	0.97
30% Plus	0.97
45% Plus	0.93
60% Plus	0.86
BC Universal	0.88
BC Agg	0.81
CS Lev Loan	0.53
BC HY	0.58
JPM EMBI GD	0.55
S&P 500	0.56

Source: eVestment monthly data January 1994 – July 2021. Note: Plus sectors BL/HY/EMD have equal weight for all portfolios, all portfolios rebalanced annually

Source: CS Leveraged Loan Index, BC HY Index, JPM EMBI GD Index

Note: Overweight/underweight points based on backtests yielding most optimal tactical approach that outperforms static approach and entire history of each respective index with spread levels producing most optimal historical go-forward returns

Opportunities and risks for fixed income

Opportunities

Still a lot of runway for vaccinations

Fully vaccinated level is only 47% for U.S. and 11% for world. More vaccinations until 70% herd immunity is reached may mean more GDP growth and potential further credit spread compression.

Possible additional fixed income total return

The yield curve has not (yet?) inverted. Credit fundamentals such as leverage, coverage, and use of proceeds are still benign. As the economy continues recovering, fixed income asset classes across the board may continue to produce strong returns.

Bank loans may benefit from rising rates

As the economy continues to rebound, rates may rise again, benefiting bank loans' floating rate feature. But bank loan spreads are already tighter than long-term averages, which may limit price appreciation.

Lagged value

EMD, which has lagged behind U.S. fixed income in the recovery due to lagged vaccine access and the delta variant resurgence, may see wider spreads relative to other fixed income plus sectors such as bank loans and high yield.

Risks

Liftoff

With the Fed growing more hawkish by the month, a rate hike as well as QE tapering may occur in 2H21 or 2022. Higher rates may be a headwind for sovereign/corporate/securitized issuers across the board, having borrowed large quantities at low rates over past year. With tight spreads, the potential for a spread-widening event increases.

Inflation persists

Inflation is expected to rise as the economy continues reopening, but there are early signs certain commodity prices are already falling and normalizing. In the short term, inflation will eat into real income rates. Inflation is expected to persist for the short term, but fixed income plus sectors such as bank loans, high yield, and EMD have historically benefited in inflationary environments.

Rising rates headwind for short-term but tailwind for long-term

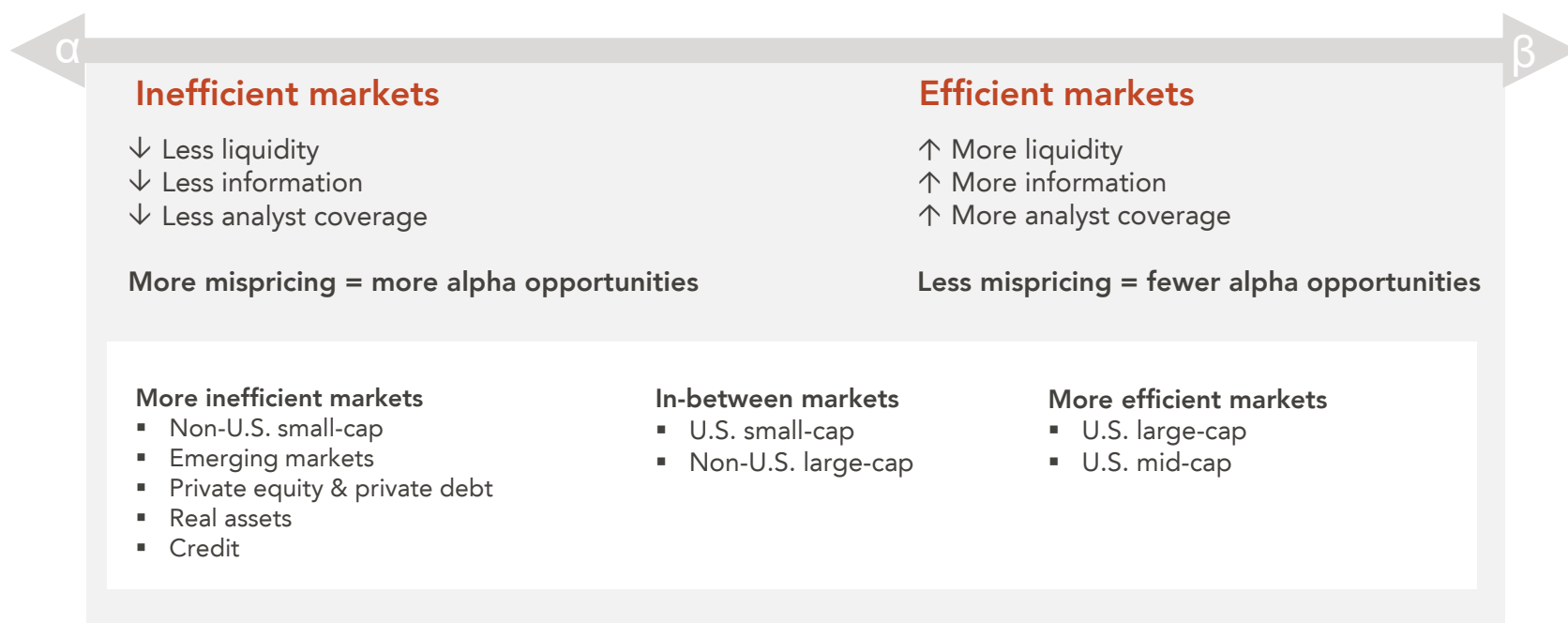
Higher interest rates may cut into government, corporate and consumer earnings and depreciate existing outstanding bonds, but will provide for greater yield and income return going forward.

Transition from LIBOR to SOFR

The reference rate used for floating-rate instruments continues to undergo a transition, but authorities and market participants are focused on a smooth process to avoid market distortion.

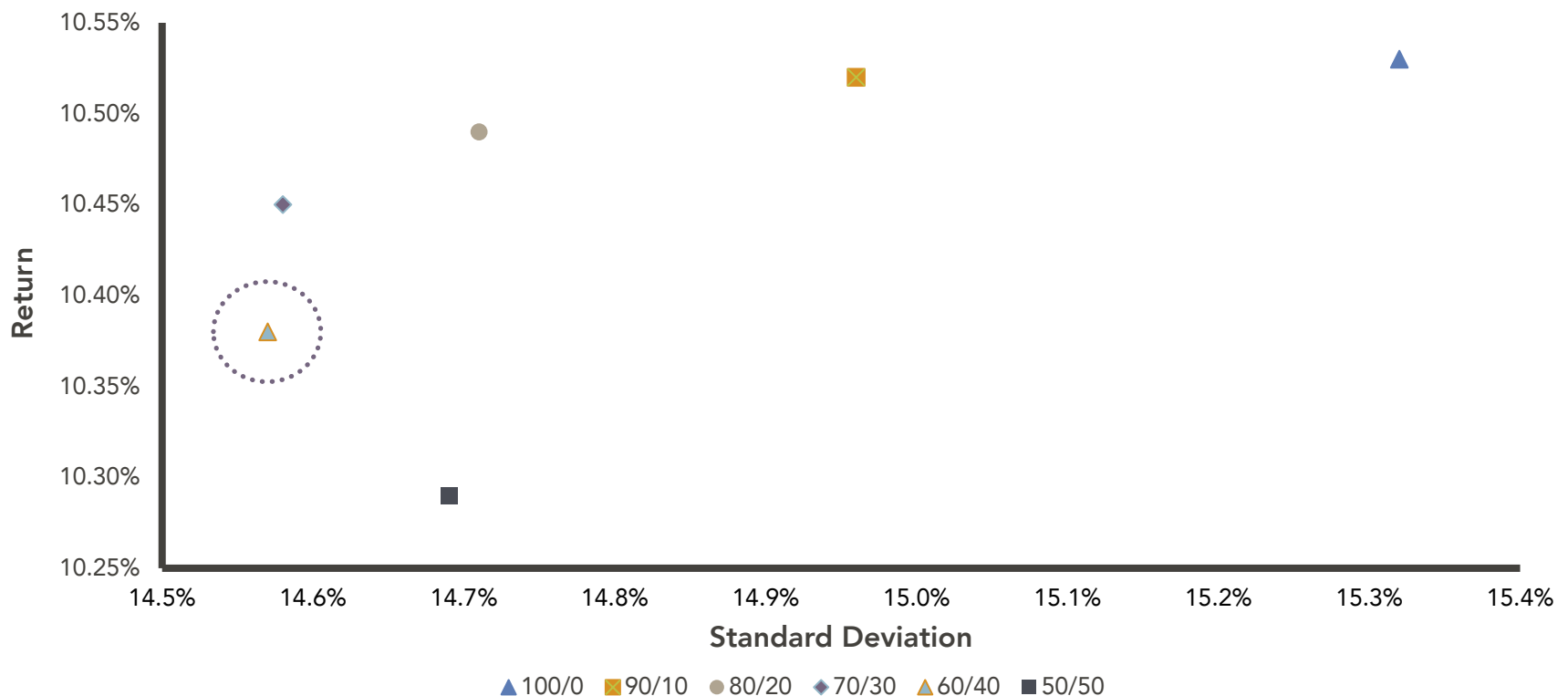
Inefficient & efficient markets

Market efficiency measures the degree to which market prices reflect all available and relevant information, allowing investors to strategically maximize the impact of active and passive management



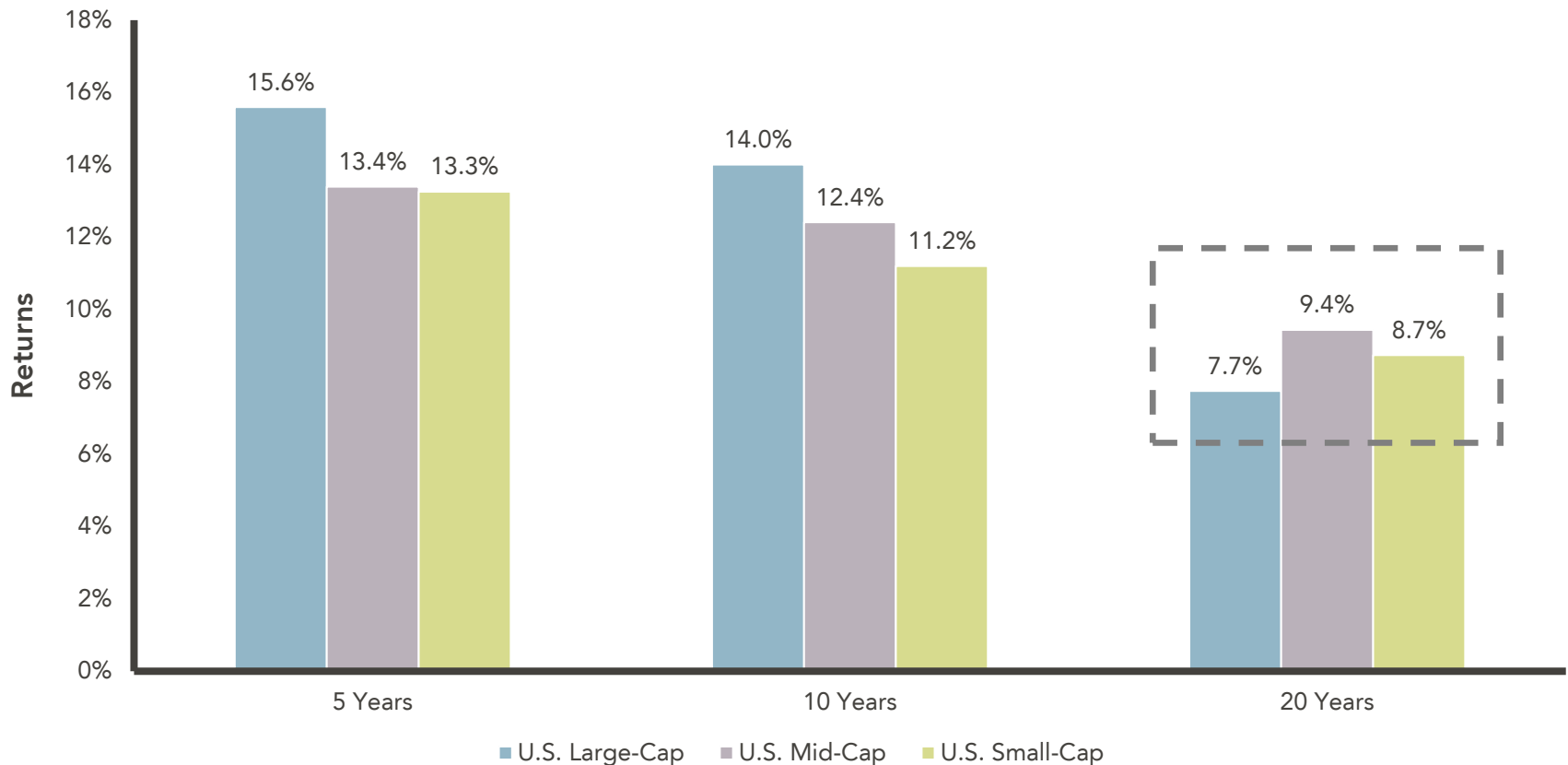
A bias towards U.S. equities has worked over time

A 30% to 40% allocation to non-U.S. has produced the best risk/return profile



Source: Data goes back to 1970, MSCI U.S. was used throughout. MSCI EAFE was used through 1988 and was replaced with MSCI ACWI ex U.S.; data as of December 2020.

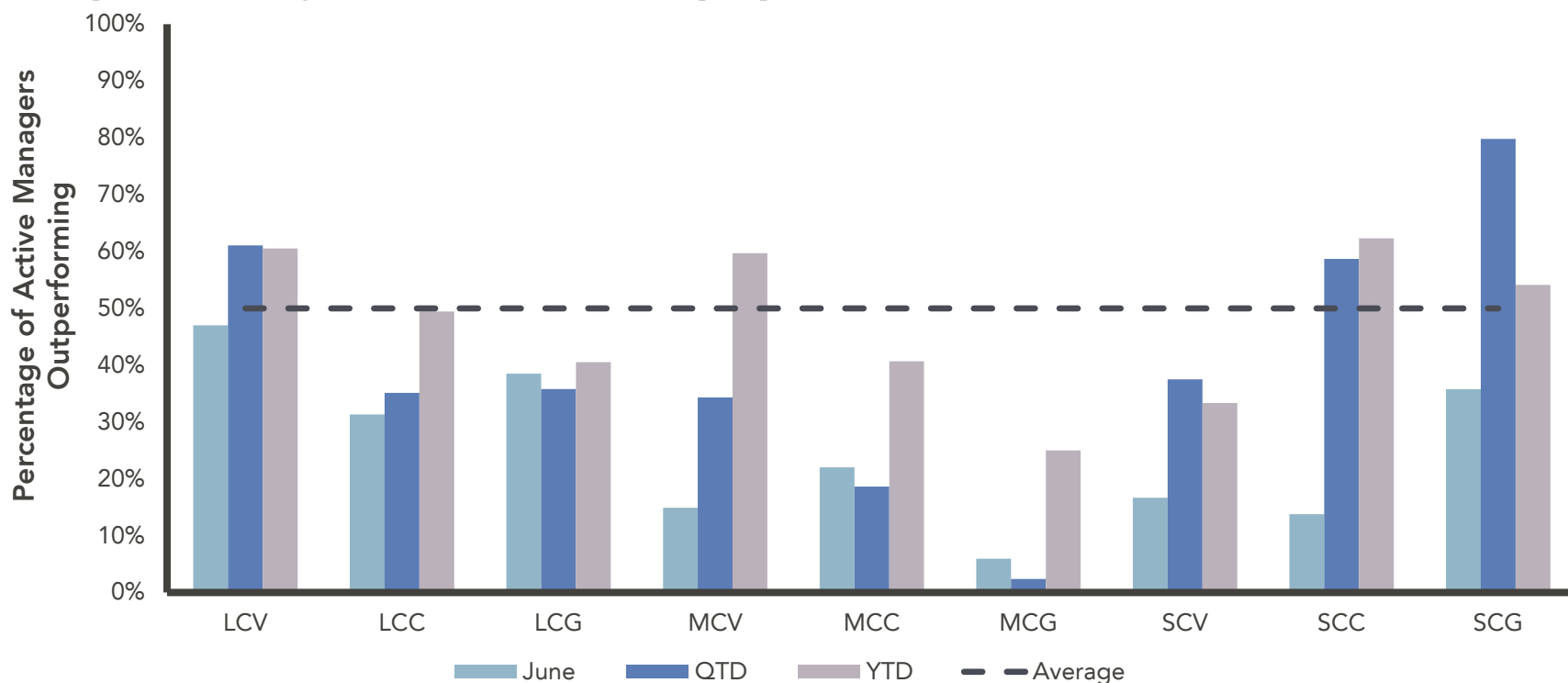
Small- and mid-cap equities outperform in long term



Source: eVestment, annualized returns through December 31, 2020. Past performance is not indicative of future results. Investors may experience a loss.

Growth managers struggle to keep up in June

Strong performance from many growth indices during the month and quarter led to poor relative returns by most active managers, particularly within the mid-cap space



Source: Morningstar Direct as of June 30, 2021

Trailing and calendar year performance

International small-cap has outperformed international large-cap

	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
MSCI EAFE SC	9.0%	41.0%	8.4%	12.0%	8.4%	9.2%
MSCI EAFE	8.8%	32.4%	8.3%	10.3%	5.9%	5.8%

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
MSCI EAFE SC	12.3%	25.0%	-17.9%	33.0%	2.2%	9.6%	-5.0%	29.3%	20.0%	-15.9%	22.0%
MSCI EAFE	7.8%	22.0%	-13.8%	25.0%	1.0%	-0.8%	-4.9%	22.8%	17.3%	-12.1%	7.8%

Source: eVestment as of June 2021. Past performance is not indicative of future results. Investors may experience a loss.

Risks and opportunities in U.S. equities

Opportunities

Value-oriented and small-cap stocks still relatively attractive

Despite high valuations in certain pockets, smaller, more cyclical segments of the market appear attractive relative to their larger and growth-oriented peers, and have historically outperformed in periods of strong economic growth

Equity risk premium remains positive

Given the fall in rates during the second quarter, U.S. stocks appear more attractive relative to fixed income securities now than at the beginning of the period

Q2 earnings season expected to be strong

The estimated earnings growth rate for the S&P 500 is 63.6% for Q2, which would mark the highest year-over-year figure for the index in over a decade, and, if realized, may provide investors with increased confidence going forward

Risks

The Fed may overshoot its inflation target

Price levels have largely increased in recent months, and further upticks could hinder the performance of Consumer Discretionary stocks and income-oriented equities like Utilities, as dividends often do not keep up with inflation

Valuations remain elevated

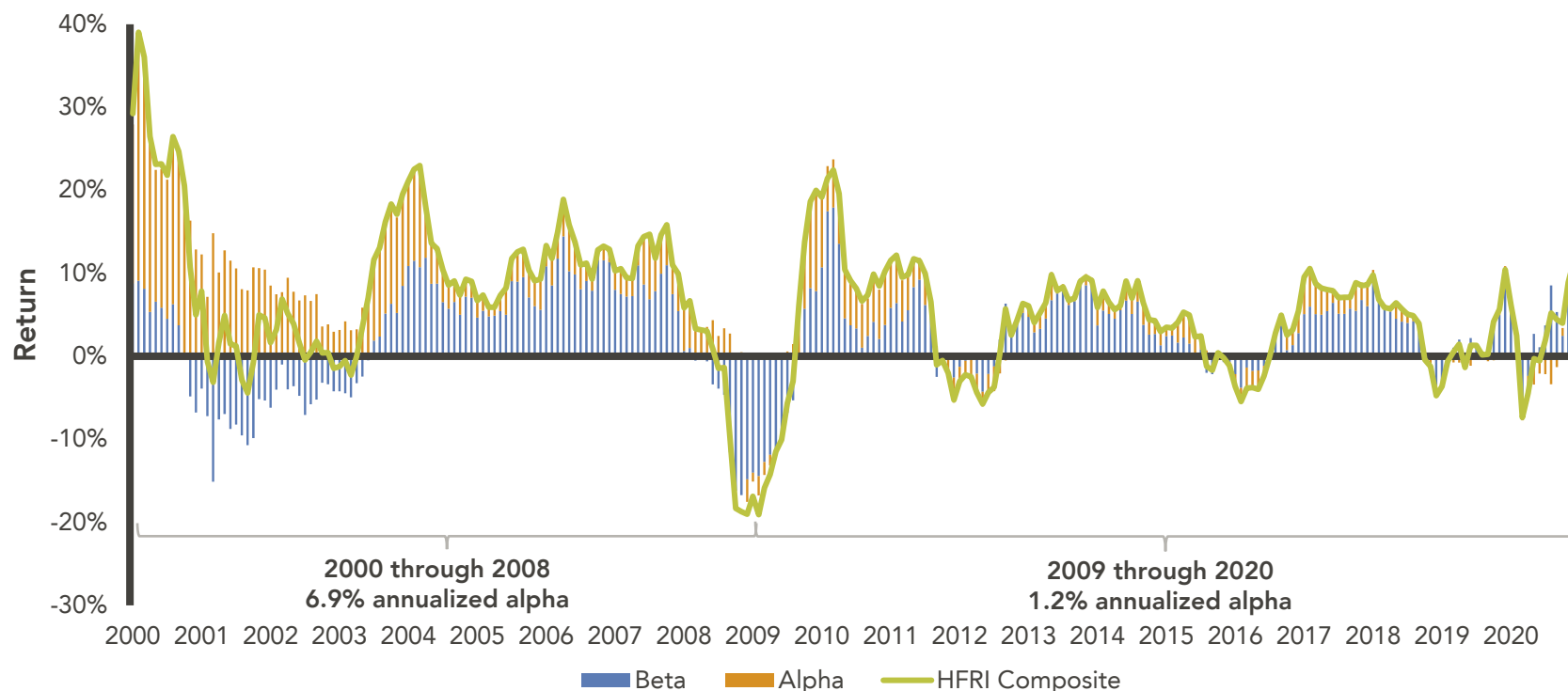
Despite recent multiple compression within the value and core spaces, most U.S. equity valuations remain at historically high levels across the size and style spectrums

Continued supply chain disruption

Transportation shortages, demand imbalances, and other bottlenecks could have negative impacts on companies via rising input costs (e.g., commodities and semiconductors), and ongoing labor market dislocations could inhibit businesses from maintaining necessary employee levels

Beta exposure is a key driver of HF returns

Hedge fund rolling 1-year alpha & beta attribution vs. MSCI ACWI



Source: Bloomberg, HFR, Marquette Associates as of December 31, 2020

Hedge funds have been disappointing

Hedge funds have underperformed U.S. equities on a risk-adjusted basis

TRAILING RETURNS

	1 Year	3 Year	5 Year	10 Year	20 Year
BB Aggregate	7.5%	5.7%	4.4%	3.8%	4.6%
Russell 3000	20.9%	14.5%	15.4%	13.8%	9.0%
MSCI ACWI ex. U.S.	10.7%	4.9%	8.9%	4.9%	6.8%
HFRI Equity Hedge	17.9%	7.6%	8.3%	5.4%	5.8%

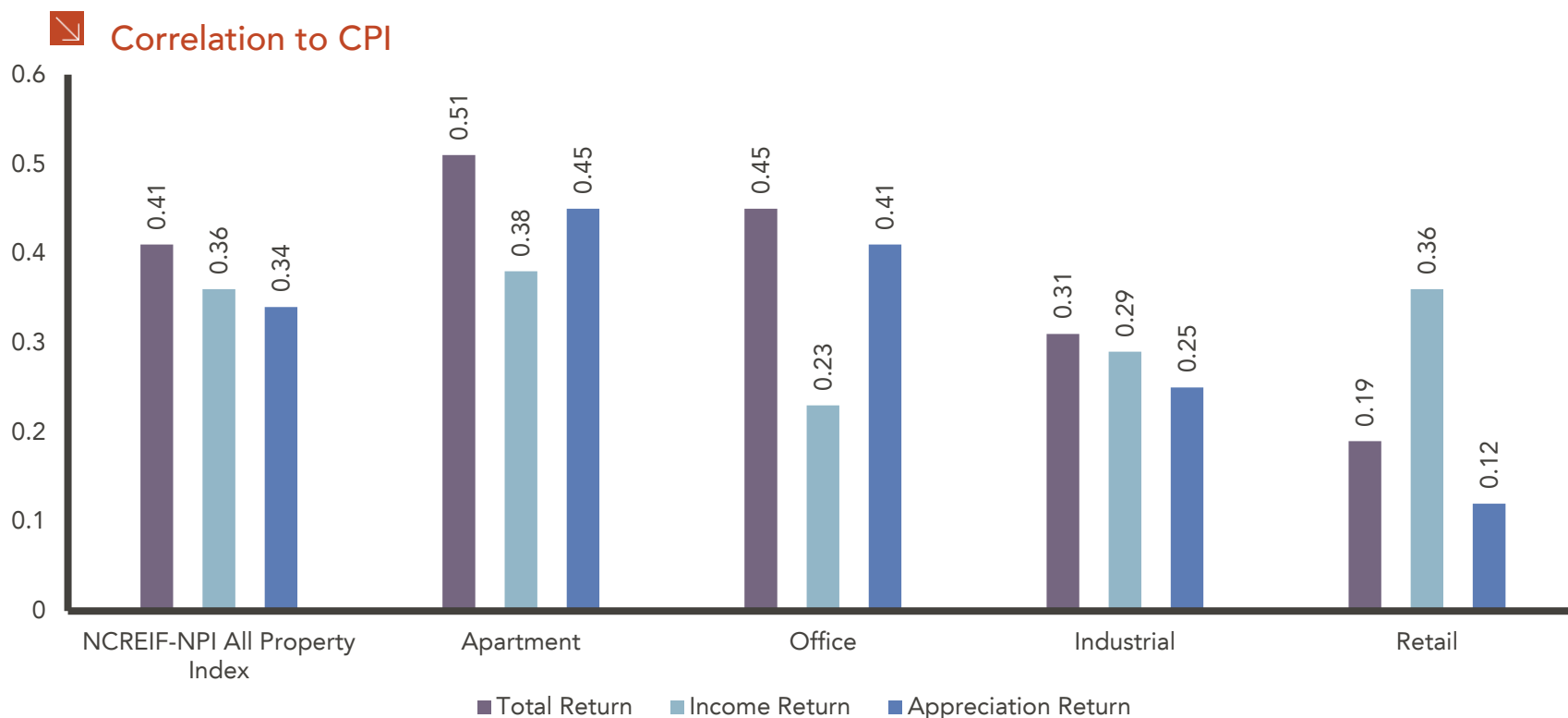
ANNUAL SHARPE RATIO

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
BB Aggregate	2.03	1.89	-0.59	1.78	0.64	0.18	2.57	-0.65	2.06	3.30
Russell 3000	0.74	2.14	-0.46	5.28	1.11	0.03	1.43	3.86	1.53	0.06
MSCI ACWI ex. U.S.	0.39	1.52	-1.26	6.80	0.32	-0.38	-0.39	1.33	1.00	-0.69
HFRI Equity Hedge	0.18	0.14	-0.07	0.13	0.05	-0.01	0.02	0.14	0.07	-0.08

Source: eVestment; data as of March 31, 2021.

Real estate as a reliable inflation hedge

Recent inflationary fears may increase demand for apartments, which have historically provided the best protection against rising commodity prices, labor shortages, and supply chain disruptions



Sources: NCREIF, MSCI-IPD, Moody's Analytics, Principal Real Estate, CBRE; correlation coefficients are run from Jan 1979 - August 2020. Correlations run using an annual percent change at a quarterly frequency.

Private equity offers long term growth

Private equity has consistently outperformed public equity

	3 Year (%)	5 Year (%)	10 Year (%)	15 Year (%)
Private Equity: Global Buyout & Growth Equity Index	12.6	12.1	14.2	12.4
Public Equity: MSCI World Index	6.7	6.9	10.0	6.6

Source: Cambridge Associates Private Equity index as of June 30, 2020.

Looking ahead

- Approval of asset allocation
- Investment manager searches and selection
- Revise and review the investment policy statement
- Implementation

Preliminary Transition Outline

Task	Short-Term (Tentative: 3Q21-4Q21)	Medium-Term (Tentative: 1Q22-2Q22)
Systems Review	✓	
Asset Allocation Study	✓	
Investment Policy Update	✓	
Fixed Income Search		✓
Equity Searches		✓
Real Estate Searches		✓
Infrastructure Searches		✓
Private Equity Search		✓

THE 2021 SEWERAGE AND WATER BOARD'S CONTRIBUTION TO THE EMPLOYEES' RETIREMENT SYSTEM OF THE SEWERAGE AND WATER BOARD OF NEW ORLEANS

WHEREAS, the Employees' Retirement System of the Sewerage and Water Board of New Orleans ("Plan") is an actuarially funded qualified government defined benefit pension plan under the Internal Revenue Code; and

WHEREAS, an annual 2021 Actuarial Valuation report of the Plan was presented as of October 7, 2021; and

WHEREAS, the report reflects an actuarial valuation using the Entry Age Normal funding method; and

WHEREAS, the adopted "minimum contribution" for a plan year equals the Normal Cost plus the amount necessary to amortize the Unfunded Actuarial Liability; and

WHEREAS, the Normal Cost for the plan year beginning January 1, 2021 is \$5,582,391; and

WHEREAS, the net annual charge required for amortization of the Unfunded Actuarial Liability beginning January 1, 2021 is \$7,964,829; and

WHEREAS, the total Plan contribution as of January 1, 2020 is \$13,547,220 (Normal Cost - \$5,582,391 plus Unfunded Actuarial Liability - \$7,964,829), which is 27.717% of the projected Earnable Compensation of \$48,877,084; and

WHEREAS, the annual estimated employee plan contribution as of January 1, 2021 is \$2,932,625, which is 6% of the projected Earnable Compensation based on Board Resolution R-140-2020; and

WHEREAS, the annual Employer Contribution reflecting the continued utilization of the Entry Age Normal funding method less the Plan determined employee contribution is \$10,614,595 for 2021, which has been displayed as a percentage contribution of 21.717% of the projected Earnable Compensation; and

WHEREAS, the Actuarial Valuation report includes the required "amortization" contribution for the Plan to amortize the Unfunded Actuarial Liability of \$101,000,406 over the next 29-year amortization period, effective on each valuation date at 7% annual interest; and

NOW, THEREFORE, BE IT RESOLVED, that the Board of Trustees of the Sewerage & Water Board of New Orleans hereby approves the employer contribution of the projected Earnable Compensation to be \$10,614,595 for the Plan Year beginning January 1, 2021 and will be collected through active payroll based on a percentage of 21.717% for the remainder of Plan Year 2021; and

BE IT FURTHER RESOLVED, the Employees' Retirement System of the Sewerage and Water Board of New Orleans accepts the 2021 Actuarial Valuation Report as submitted by Rudd & Wisdom, the Retirement System's actuary, in the presentation to the Pension Committee on October 7, 2021

I, Ghassan Korban, Executive Director,
Sewerage and Water Board of New Orleans, do hereby
certify that the above and foregoing is a true and
correct copy of a resolution adopted at the Regular
Monthly Meeting of said Board of Trustees duly called and held,
according to law, on October 20, 2021.

GHASSAN KORBAN, EXECUTIVE DIRECTOR
SEWERAGE AND WATER BOARD OF NEW ORLEANS

JANUARY 1, 2021 COST OF LIVING ADJUSTMENT FOR BOARD PENSIONERS

WHEREAS, Article VI, Section 6.1(d)(1) of the Rules and Regulations of the Employees' Retirement System of the Sewerage and Water Board of New Orleans, provides for a Cost of Living Adjustment to pensioners over age 65 based on the change in inflation for the 12-month period ending in August of the preceding year, with a maximum increase of no more than 2%; and

WHEREAS, the change in inflation Consumer Price Index (CPI) for Urban Wage Earners for the period of August 2019 to August 2020 was 1.393%; and

WHEREAS, the total annual increase to the Pension Fund of the Sewerage and Water Board of New Orleans to implement the January 1, 2021 Cost of Living Adjustment to 829 eligible pensioners is \$74,046.48; and

WHEREAS, such funds to provide for a Cost of Living Adjustment to eligible pensioners are to be made available by the Pension Fund of the Sewerage and Water Board of New Orleans; and

NOW, THEREFORE, BE IT RESOLVED, by the Board of Trustees, that the Pension Fund of the Sewerage and Water Board of New Orleans implement a 1.393% Cost of Living Adjustment increase on the first ten-thousand dollars (\$10,000) of eligible pensioners' original Retirement Allowance (that is, the annual pension benefit paid at the time of retirement), effective January 1, 2021, for eligible pensioners who attained age 65 on or before December 31, 2020. The Cost of Living Adjustment increase for a partial year of retirement after age 65 shall be pro-rated based on the actual number of days retired and over age 65 during the twelve-month period ending December 31, 2020 (that is, the number of days elapsed between attainment of age 65 and December 31, 2020).

I, Ghassan Korban, Executive Director,
Sewerage and Water Board of New Orleans, do hereby
certify that the above and foregoing is a true and
correct copy of a resolution adopted at the Regular
Monthly Meeting of said Board of Trustees duly called and held,
according to law, on October 20, 2021.

GHASSAN KORBAN, EXECUTIVE DIRECTOR
SEWERAGE AND WATER BOARD OF NEW ORLEANS

**AUTHORIZATION FOR MARQUETTE ASSOCIATES, INC. TO REALLOCATE
LARGE CAP EQUITY FUNDS FROM iSHARES S&P 500 GROWTH ETF TO
BLACKROCK RUSSELL 1000 INDEX FUND**

WHEREAS, the Pension Committee of the Sewerage and Water Board of New Orleans (“Board”), is entrusted with the fiduciary responsibility to properly oversee the investment and management of the pension fund of the Employees’ Retirement System of the Sewerage and Water Board of New Orleans (“Board Pension Plan”) ; and

WHEREAS, Marquette Associates performed an initial assessment of the Board Pension Plan investments as part of a larger review of the plan’s asset and manager allocations at the request of and on behalf of the Board; and

WHEREAS, on October 7, 2021, Marquette Associates, Inc.’s recommendation that the \$32.9 million Large Cap Equity Growth assets being held in the iShares S&P 500 Growth ETF fund be reallocated to the BlackRock Russell 1000 Index Fund, was presented to the Pension Committee; and

WHEREAS, the result of the reallocation would maintain the same relative annual returns, while providing \$55,900 in annual fee savings for the Board Pension Plan; and

WHEREAS, the Board relies upon the financial investment consulting services of Marquette Associates, Inc. and has confidence in its professional expertise.

NOW THEREFORE, BE IT RESOLVED, the Board authorizes Marquette Associates, Inc, to liquidate and reallocate the Large Cap Equity Growth portfolio holdings of approximately \$32.9 million (as of 8/31/21) from the iShares S&P 500 Growth ETF to the BlackRock Russell 1000 Index Fund as soon as feasible.

I, GHASSAN KORBAN, Executive Director,
Sewerage and Water Board of New Orleans, do hereby
certify that the above and foregoing is a true and
correct copy of a Resolution adopted at the
Meeting of said Board of Trustees, duly called and held,
according to law, on October 20, 2021.

**GHASSAN KORBAN, EXECUTIVE DIRECTOR
SEWERAGE AND WATER BOARD OF NEW ORLEANS**



(Preliminary, Subject to Change)



Employees' Retirement System

The Sewerage & Water Board of New Orleans

Employees' Retirement System

Monthly Performance Report

August 31, 2021

Total Fund Composite

Manager Status

Market Value: \$261.9 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
Fidelity (Pyramis Global Advisors)	Core Plus Fixed Income	In Compliance	---
Barrow, Hanley, Mewhinney, & Strauss	Large-Cap Value	In Compliance	---
iShares S&P 500 Growth ETF	Large-Cap Growth	In Compliance	---
NewSouth Capital	Smid-Cap Value	In Compliance	---
Earnest Partners	Non-U.S. Large-Cap Core	In Compliance	---
Prisma Capital Partners LP	Multi-Strat. Hedge FoF	In Compliance	---
Vanguard Real Estate ETF	U.S. REIT	In Compliance	---

Investment Manager Evaluation Terminology

The following terminology has been developed by Marquette Associates to facilitate efficient communication among the Investment Manager, Investment Consultant, and the Plan Sponsor. Each term signifies a particular status with the Fund and any conditions that may require improvement. In each case, communication is made only after consultation with the Trustees and/or the Investment Committee of the Plan.

In Compliance – The investment manager states it is acting in accordance with the Investment Policy Guidelines.

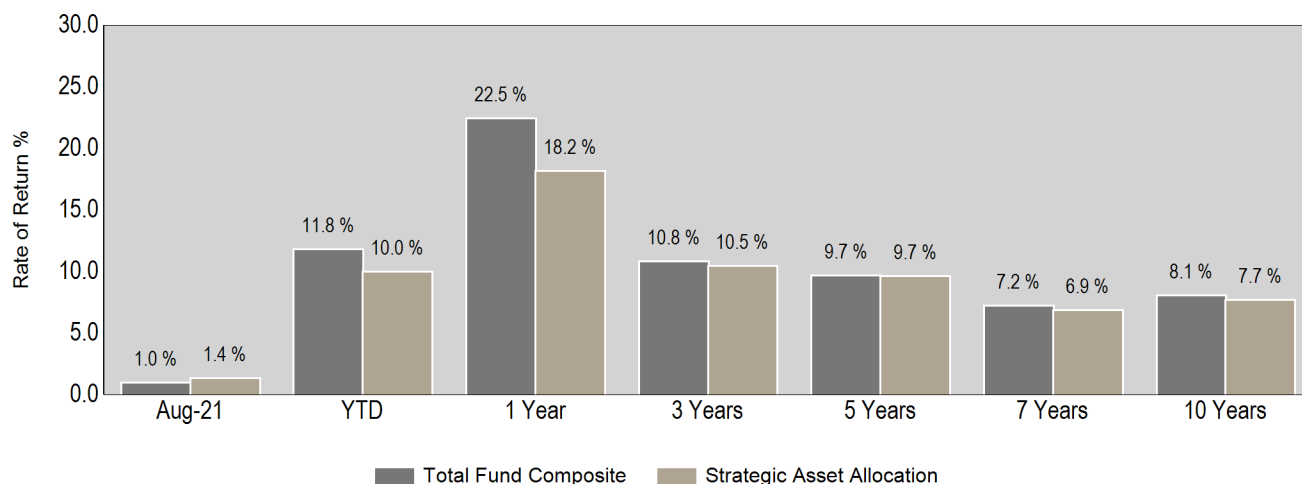
Alert – The investment manager is notified of a problem in performance (usually related to a benchmark or volatility measure), a change in investment characteristics, an alteration in management style or key investment professionals, and/or any other irregularities.

On Notice – The investment manager is notified of continued concern with one or more Alert issues. Failure to improve upon stated issues within a specific time frame justifies termination.

Termination – The Trustees have decided to terminate the investment manager. The investment manager is notified and transition plans are in place.

Total Fund Composite

Return Summary Ending August 31, 2021



Return Summary - 1 Year

	Total Return
Total Fund Composite	22.5%
Fixed Income Composite	2.9%
Equity Composite	34.5%
Alternative Asset Composite	11.4%
Real Estate Composite	37.7%

Asset Allocation vs. Target

	Current	Current	Policy	Difference	%
Fixed Income	\$79,586,030	30.4%	35.0%	-\$12,086,998	-4.6%
U.S. Equity	\$82,419,363	31.5%	27.0%	\$11,700,170	4.5%
Non-U.S. Equity	\$57,955,405	22.1%	20.0%	\$5,570,818	2.1%
Hedge Funds	\$18,627,500	7.1%	8.0%	-\$2,326,335	-0.9%
Real Assets	\$22,997,691	8.8%	9.0%	-\$575,373	-0.2%
Other	\$336,948	0.1%	1.0%	-\$2,282,281	-0.9%
Total	\$261,922,938	100.0%	100.0%		

Summary of Cash Flows

	Last Month	Last Three Months	Year-To-Date	One Year
Beginning Market Value	\$259,173,112	\$257,397,853	\$240,197,824	\$222,695,493
Net Cash Flow	-\$15,352	-\$3,147,516	-\$7,150,777	-\$9,433,728
Net Investment Change	\$2,765,178	\$7,672,601	\$28,875,891	\$48,661,173
Ending Market Value	\$261,922,938	\$261,922,938	\$261,922,938	\$261,922,938

Total Fund Composite

Market Value: \$261.9 Million and 100.0% of Fund

Ending August 31, 2021

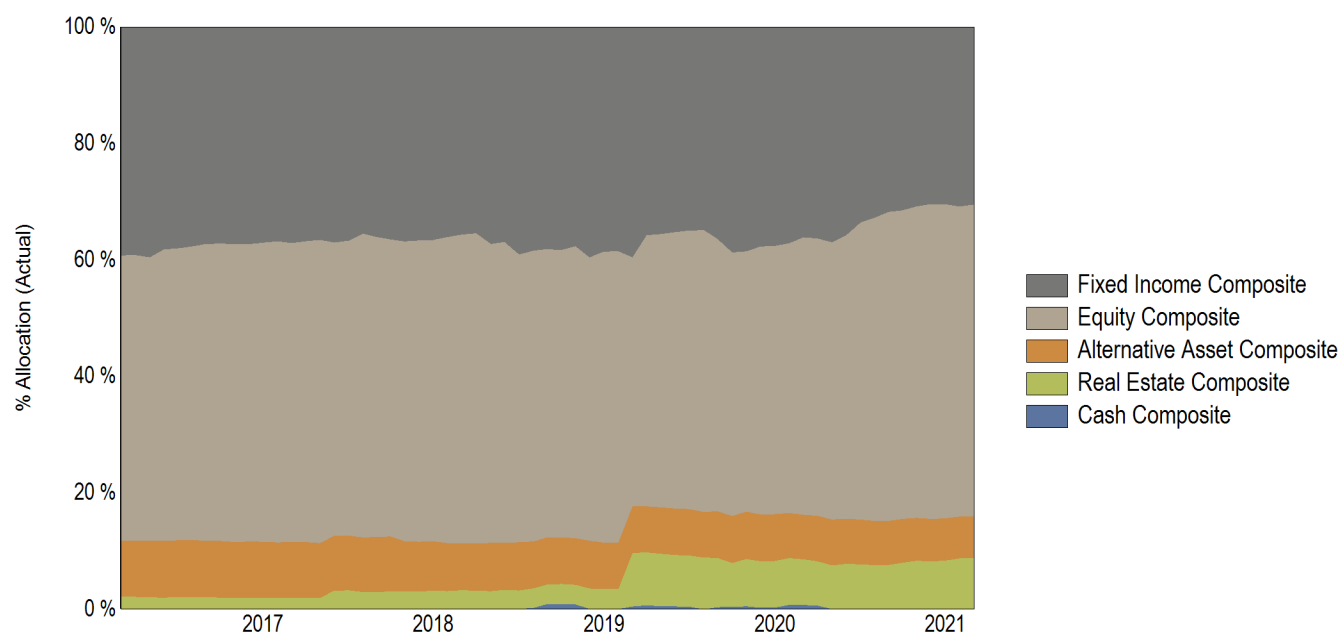
	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		261,922,938	-3,147,516	100.0	100.0	0
Fixed Income Composite		79,586,030	-341	30.4	35.0	-12,086,998
Fidelity (Pyramis Global Advisors)	Core Plus Fixed Income	79,533,279	0	30.4		
Equity Composite		140,374,769	-3,105,176	53.6	47.0	17,270,988
Barrow, Hanley, Mewhinney, & Strauss	Large-Cap Value	14,901,358	-3,028,372	5.7		
iShares S&P 500 Growth ETF	Large-Cap Growth	32,913,459	-77,528	12.6		
NewSouth Capital	Smid-Cap Value	34,604,546	724	13.2		
Earnest Partners	Non-U.S. Large-Cap Core	57,955,405	0	22.1		
Alternative Asset Composite		18,627,500	-15,418	7.1	8.0	-2,326,335
Prisma Capital Partners LP	Multi-Strat. Hedge FoF	18,608,267	-15,418	7.1		
Real Estate Composite		22,997,691	-268,266	8.8	9.0	-575,373
Vanguard Real Estate ETF	U.S. REIT	22,997,691	-268,266	8.8		
Cash Composite		336,948	241,685	0.1	1.0	-2,282,281
Cash	Cash & Equivalents	336,948	241,685	0.1		

Total Fund Composite

Asset Allocation

Market Value: \$261.9 Million and 100.0% of Fund

Historic Asset Allocation

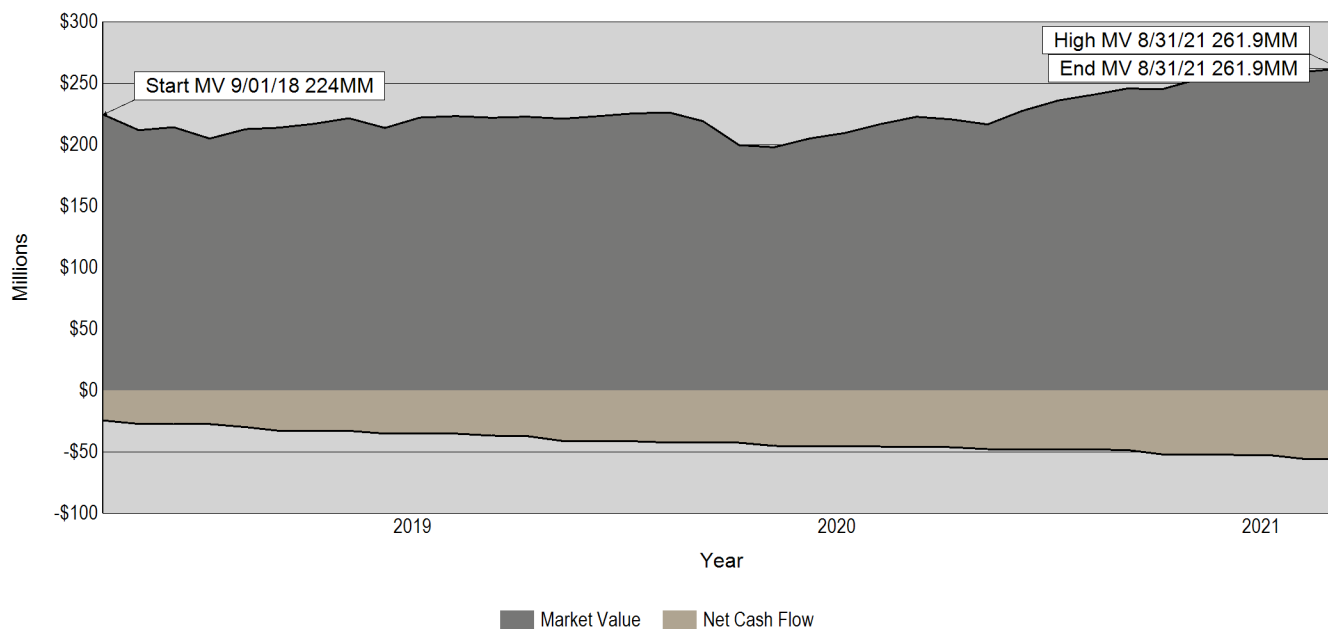


	Current	Policy	Difference	%
Fixed Income	\$79,586,030	\$91,673,028	-\$12,086,998	-4.6%
U.S. Equity	\$82,419,363	\$70,719,193	\$11,700,170	4.5%
Non-U.S. Equity	\$57,955,405	\$52,384,588	\$5,570,818	2.1%
Hedge Funds	\$18,627,500	\$20,953,835	-\$2,326,335	-0.9%
Real Assets	\$22,997,691	\$23,573,064	-\$575,373	-0.2%
Other	\$336,948	\$2,619,229	-\$2,282,281	-0.9%
Total	\$261,922,938	\$261,922,938		

Total Fund Composite

Market Value History

Market Value: \$261.9 Million and 100.0% of Fund



Summary of Cash Flows

	Last Month	Last Three Months	Year-To-Date	One Year
Beginning Market Value	\$259,173,112	\$257,397,853	\$240,197,824	\$222,695,493
Net Cash Flow	-\$15,352	-\$3,147,516	-\$7,150,777	-\$9,433,728
Net Investment Change	\$2,765,178	\$7,672,601	\$28,875,891	\$48,661,173
Ending Market Value	\$261,922,938	\$261,922,938	\$261,922,938	\$261,922,938

Total Fund Composite

Annualized Performance (Gross of Fees)

Market Value: \$261.9 Million and 100.0% of Fund

Ending August 31, 2021

	1 Mo	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	1.1%	3.0%	12.2%	23.0%	11.2%	10.0%	7.4%	8.2%	7.3%	Jul-02
<i>Strategic Asset Allocation</i>	1.4%	3.3%	10.0%	18.2%	10.5%	9.7%	6.9%	7.7%	6.9%	Jul-02
Fixed Income Composite	0.0%	2.1%	0.9%	3.1%	6.9%	--	--	--	5.8%	Jan-18
<i>Fixed Income Balanced Index</i>	-0.2%	1.6%	-0.7%	0.4%	5.6%	--	--	--	4.6%	Jan-18
Equity Composite	1.6%	3.1%	18.2%	35.1%	17.3%	16.5%	12.4%	14.4%	9.5%	Jun-06
<i>Equity Balanced Index</i>	2.5%	2.8%	17.1%	34.0%	15.3%	15.7%	13.0%	15.2%	10.4%	Jun-06
Alternative Asset Composite	0.4%	-0.5%	3.7%	12.0%	5.1%	4.8%	3.1%	3.9%	3.4%	May-07
<i>HFRI Fund of Funds Composite Index</i>	1.1%	0.9%	5.3%	13.7%	6.3%	5.8%	4.1%	4.1%	2.4%	May-07
Real Estate Composite	2.2%	9.4%	29.4%	37.7%	13.4%	8.5%	9.5%	11.0%	11.0%	Apr-10
<i>MSCI US REIT</i>	1.9%	9.5%	29.5%	39.1%	9.9%	6.3%	7.6%	9.2%	9.3%	Apr-10

Please note: Returns through inception for the alternative asset composite were calculated and verified using information from the investment manager rather than the Plan's custodian.

Total Fund Composite

Calendar Performance (Gross of Fees)

Market Value: \$261.9 Million and 100.0% of Fund

	Calendar Year										
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Fund Composite	10.9%	19.1%	-3.3%	11.6%	6.4%	-1.7%	5.6%	11.0%	11.7%	3.5%	9.4%
<i>Strategic Asset Allocation</i>	11.0%	18.9%	-3.8%	12.8%	6.4%	-2.8%	4.2%	11.5%	10.5%	2.2%	12.5%
Fixed Income Composite	9.7%	10.2%	--	--	--	--	--	--	--	--	--
<i>Fixed Income Balanced Index</i>	7.6%	9.3%	-0.3%	--	--	--	--	--	--	--	--
Equity Composite	21.1%	29.2%	-5.6%	19.0%	11.0%	-0.3%	9.0%	23.8%	16.9%	0.0%	17.9%
<i>Equity Balanced Index</i>	20.0%	28.6%	-7.6%	17.3%	16.0%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%
Alternative Asset Composite	8.9%	8.0%	-4.6%	7.0%	-1.1%	0.0%	2.3%	11.0%	7.5%	-3.3%	7.4%
<i>HFRI Fund of Funds Composite Index</i>	10.9%	8.4%	-4.0%	7.8%	0.5%	-0.3%	3.4%	9.0%	4.8%	-5.7%	5.7%
Real Estate Composite	-4.4%	29.3%	-5.8%	4.7%	8.4%	2.6%	30.5%	2.4%	17.7%	8.3%	--
<i>MSCI US REIT</i>	-8.7%	24.3%	-5.8%	3.7%	7.1%	1.3%	28.8%	1.3%	16.5%	7.5%	27.0%

Investment Manager

Annualized Performance (Gross of Fees)

Market Value: \$261.9 Million and 100.0% of Fund

Ending August 31, 2021

	1 Mo	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	1.1%	3.0%	12.2%	23.0%	11.2%	10.0%	7.4%	8.2%	7.3%	Jul-02
<i>Strategic Asset Allocation</i>	1.4%	3.3%	10.0%	18.2%	10.5%	9.7%	6.9%	7.7%	6.9%	Jul-02
Fixed Income Composite	0.0%	2.1%	0.9%	3.1%	6.9%	--	--	--	5.8%	Jan-18
<i>Fixed Income Balanced Index</i>	-0.2%	1.6%	-0.7%	0.4%	5.6%	--	--	--	4.6%	Jan-18
Fidelity (Pyramis Global Advisors)	0.0%	2.0%	0.8%	3.1%	6.9%	4.5%	4.4%	4.5%	5.3%	Apr-07
<i>Bloomberg US Aggregate TR</i>	-0.2%	1.6%	-0.7%	-0.1%	5.4%	3.1%	3.3%	3.2%	4.2%	Apr-07
Equity Composite	1.6%	3.1%	18.2%	35.1%	17.3%	16.5%	12.4%	14.4%	9.5%	Jun-06
<i>Equity Balanced Index</i>	2.5%	2.8%	17.1%	34.0%	15.3%	15.7%	13.0%	15.2%	10.4%	Jun-06
Barrow, Hanley, Mewhinney, & Strauss	1.7%	-0.2%	20.3%	40.8%	12.2%	13.0%	10.6%	13.5%	8.7%	Sep-06
<i>Russell 1000 Value</i>	2.0%	1.6%	20.3%	36.4%	11.5%	11.7%	9.5%	13.0%	7.8%	Sep-06
iShares S&P 500 Growth ETF	4.1%	14.1%	23.4%	30.2%	23.1%	22.7%	--	--	21.6%	Mar-16
<i>S&P 500 Growth</i>	4.2%	14.3%	23.6%	30.4%	22.9%	22.7%	18.2%	18.9%	22.0%	Mar-16
NewSouth Capital	0.3%	1.5%	23.0%	42.6%	15.8%	14.5%	11.5%	14.0%	14.0%	Aug-11
<i>Russell 2500 Value</i>	2.1%	-0.7%	23.4%	52.5%	9.3%	11.2%	9.0%	12.4%	12.4%	Aug-11
Earnest Partners	1.0%	-0.5%	12.3%	39.0%	11.5%	12.1%	7.2%	8.0%	9.1%	Jun-10
<i>MSCI ACWI ex USA</i>	1.9%	-0.4%	9.4%	24.9%	9.4%	9.9%	5.4%	6.6%	7.4%	Jun-10
Alternative Asset Composite	0.4%	-0.5%	3.7%	12.0%	5.1%	4.8%	3.1%	3.9%	3.4%	May-07
<i>HFRI Fund of Funds Composite Index</i>	1.1%	0.9%	5.3%	13.7%	6.3%	5.8%	4.1%	4.1%	2.4%	May-07
Prisma Capital Partners LP	0.4%	-0.7%	3.5%	11.8%	5.1%	4.7%	3.1%	3.9%	3.4%	May-07
<i>HFRI Fund of Funds Composite Index</i>	1.1%	0.9%	5.3%	13.7%	6.3%	5.8%	4.1%	4.1%	2.4%	May-07
Real Estate Composite	2.2%	9.4%	29.4%	37.7%	13.4%	8.5%	9.5%	11.0%	11.0%	Apr-10
<i>MSCI US REIT</i>	1.9%	9.5%	29.5%	39.1%	9.9%	6.3%	7.6%	9.2%	9.3%	Apr-10
Vanguard Real Estate ETF	2.2%	9.4%	29.4%	37.7%	13.4%	8.5%	9.5%	11.0%	11.0%	Apr-10
<i>MSCI US REIT</i>	1.9%	9.5%	29.5%	39.1%	9.9%	6.3%	7.6%	9.2%	9.3%	Apr-10

Investment Manager

Calendar Performance (Gross of Fees)

Market Value: \$261.9 Million and 100.0% of Fund

	Calendar Year										
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Fund Composite	10.9%	19.1%	-3.3%	11.6%	6.4%	-1.7%	5.6%	11.0%	11.7%	3.5%	9.4%
Strategic Asset Allocation	11.0%	18.9%	-3.8%	12.8%	6.4%	-2.8%	4.2%	11.5%	10.5%	2.2%	12.5%
Fixed Income Composite	9.7%	10.2%	--	--	--	--	--	--	--	--	--
Fixed Income Balanced Index	7.6%	9.3%	-0.3%	--	--	--	--	--	--	--	--
Fidelity (Pyramis Global Advisors)	9.7%	10.2%	-0.3%	4.7%	5.6%	0.1%	6.2%	-0.7%	7.6%	7.8%	10.0%
Bloomberg US Aggregate TR	7.5%	8.7%	0.0%	3.5%	2.6%	0.6%	6.0%	-2.0%	4.2%	7.8%	6.5%
Equity Composite	21.1%	29.2%	-5.6%	19.0%	11.0%	-0.3%	9.0%	23.8%	16.9%	0.0%	17.9%
Equity Balanced Index	20.0%	28.6%	-7.6%	17.3%	16.0%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%
Barrow, Hanley, Mewhinney, & Strauss	4.2%	26.8%	-4.6%	15.2%	14.2%	-1.3%	12.8%	32.4%	15.2%	2.6%	11.2%
Russell 1000 Value	2.8%	26.5%	-8.3%	13.7%	17.3%	-3.8%	13.5%	32.5%	17.5%	0.4%	15.5%
iShares S&P 500 Growth ETF	33.8%	31.1%	-0.1%	26.9%	--	--	--	--	--	--	--
S&P 500 Growth	33.5%	31.1%	0.0%	27.4%	6.9%	5.5%	14.9%	32.8%	14.6%	4.7%	15.1%
NewSouth Capital	8.9%	29.7%	-0.4%	12.2%	10.2%	-0.5%	12.2%	28.8%	16.8%	--	--
Russell 2500 Value	4.9%	23.6%	-12.4%	10.4%	25.2%	-5.5%	7.1%	33.3%	19.2%	-3.4%	24.8%
Earnest Partners	13.9%	23.3%	-15.7%	31.6%	5.5%	-5.5%	-1.6%	13.5%	19.5%	-9.7%	--
MSCI ACWI ex USA	10.7%	21.5%	-14.2%	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%	-13.7%	11.2%
Alternative Asset Composite	8.9%	8.0%	-4.6%	7.0%	-1.1%	0.0%	2.3%	11.0%	7.5%	-3.3%	7.4%
HFRI Fund of Funds Composite Index	10.9%	8.4%	-4.0%	7.8%	0.5%	-0.3%	3.4%	9.0%	4.8%	-5.7%	5.7%
Prisma Capital Partners LP	8.9%	8.0%	-4.7%	7.0%	-1.1%	0.0%	2.3%	11.0%	7.5%	-3.3%	7.4%
HFRI Fund of Funds Composite Index	10.9%	8.4%	-4.0%	7.8%	0.5%	-0.3%	3.4%	9.0%	4.8%	-5.7%	5.7%
Real Estate Composite	-4.4%	29.3%	-5.8%	4.7%	8.4%	2.6%	30.5%	2.4%	17.7%	8.3%	--
MSCI US REIT	-8.7%	24.3%	-5.8%	3.7%	7.1%	1.3%	28.8%	1.3%	16.5%	7.5%	27.0%
Vanguard Real Estate ETF	-4.4%	29.3%	-5.8%	4.7%	8.4%	2.6%	30.5%	2.4%	17.7%	8.3%	--
MSCI US REIT	-8.7%	24.3%	-5.8%	3.7%	7.1%	1.3%	28.8%	1.3%	16.5%	7.5%	27.0%

Total Fund Composite

Annualized Performance (Net of Fees)

Market Value: \$261.9 Million and 100.0% of Fund

Ending August 31, 2021

	1 Mo	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	1.0%	2.9%	11.8%	22.5%	10.8%	9.7%	7.2%	8.1%	7.3%	Jul-02
<i>Strategic Asset Allocation</i>	1.4%	3.3%	10.0%	18.2%	10.5%	9.7%	6.9%	7.7%	6.9%	Jul-02
Fixed Income Composite	0.0%	2.0%	0.7%	2.9%	6.7%	--	--	--	5.6%	Jan-18
<i>Fixed Income Balanced Index</i>	-0.2%	1.6%	-0.7%	0.4%	5.6%	--	--	--	4.6%	Jan-18
Equity Composite	1.6%	2.9%	17.7%	34.5%	15.5%	17.1%	12.9%	14.7%	9.7%	Jun-06
<i>Equity Balanced Index</i>	2.5%	2.8%	17.1%	34.0%	15.3%	15.7%	13.0%	15.2%	10.4%	Jun-06
Alternative Asset Composite	0.3%	-0.7%	3.1%	11.4%	4.9%	4.6%	3.0%	3.8%	3.4%	May-07
<i>HFRI Fund of Funds Composite Index</i>	1.1%	0.9%	5.3%	13.7%	6.3%	5.8%	4.1%	4.1%	2.4%	May-07
Real Estate Composite	2.2%	9.4%	29.4%	37.7%	13.4%	8.5%	9.5%	10.9%	11.0%	Apr-10
<i>MSCI US REIT</i>	1.9%	9.5%	29.5%	39.1%	9.9%	6.3%	7.6%	9.2%	9.3%	Apr-10

Total Fund Composite

Calendar Performance (Net of Fees)

Market Value: \$261.9 Million and 100.0% of Fund

	Calendar Year										
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Fund Composite	10.5%	18.8%	-3.6%	11.6%	6.4%	-1.7%	5.6%	11.0%	11.7%	3.5%	9.4%
Strategic Asset Allocation	11.0%	18.9%	-3.8%	12.8%	6.4%	-2.8%	4.2%	11.5%	10.5%	2.2%	12.5%
InvMetrics Public DB Net Rank	81	60	30	95	78	78	47	85	53	6	90
Fixed Income Composite	9.5%	10.0%	--	--	--	--	--	--	--	--	--
Fixed Income Balanced Index	7.6%	9.3%	-0.3%	--	--	--	--	--	--	--	--
InvMetrics Public DB US Fix Inc Net Rank	15	9	--	--	--	--	--	--	--	--	--
Equity Composite	21.1%	24.3%	1.2%	19.0%	11.0%	-0.3%	9.0%	23.8%	16.9%	0.0%	17.9%
Equity Balanced Index	20.0%	28.6%	-7.6%	17.3%	16.0%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%
InvMetrics Public DB Total Eq Net Rank	7	96	1	97	7	16	19	88	44	13	30
Alternative Asset Composite	8.9%	8.0%	-4.7%	7.0%	-1.1%	0.0%	2.3%	11.0%	7.5%	-3.3%	7.4%
HFRI Fund of Funds Composite Index	10.9%	8.4%	-4.0%	7.8%	0.5%	-0.3%	3.4%	9.0%	4.8%	-5.7%	5.7%
InvMetrics Public DB Hedge Funds Net Rank	47	48	81	40	93	45	85	59	46	70	45
Real Estate Composite	-4.4%	29.2%	-5.8%	4.7%	8.4%	2.6%	30.5%	2.4%	17.7%	8.3%	--
MSCI US REIT	-8.7%	24.3%	-5.8%	3.7%	7.1%	1.3%	28.8%	1.3%	16.5%	7.5%	27.0%
InvMetrics Public DB Real Estate Pub Net Rank	61	1	50	77	11	48	12	99	15	79	--

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$261.9 Million and 100.0% of Fund

Ending August 31, 2021

	1 Mo	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	1.0%	2.9%	11.8%	22.5%	10.8%	9.7%	7.2%	8.1%	7.3%	Jul-02
<i>Strategic Asset Allocation</i>	1.4%	3.3%	10.0%	18.2%	10.5%	9.7%	6.9%	7.7%	6.9%	Jul-02
Fixed Income Composite	0.0%	2.0%	0.7%	2.9%	6.7%	--	--	--	5.6%	Jan-18
<i>Fixed Income Balanced Index</i>	-0.2%	1.6%	-0.7%	0.4%	5.6%	--	--	--	4.6%	Jan-18
Fidelity (Pyramis Global Advisors)	0.0%	2.0%	0.7%	2.9%	6.9%	4.5%	4.4%	4.5%	5.3%	Apr-07
<i>Bloomberg US Aggregate TR</i>	-0.2%	1.6%	-0.7%	-0.1%	5.4%	3.1%	3.3%	3.2%	4.2%	Apr-07
Equity Composite	1.6%	2.9%	17.7%	34.5%	15.5%	17.1%	12.9%	14.7%	9.7%	Jun-06
<i>Equity Balanced Index</i>	2.5%	2.8%	17.1%	34.0%	15.3%	15.7%	13.0%	15.2%	10.4%	Jun-06
Barrow, Hanley, Mewhinney, & Strauss	1.6%	-0.4%	19.8%	39.9%	11.4%	12.3%	9.9%	12.8%	8.0%	Sep-06
<i>Russell 1000 Value</i>	2.0%	1.6%	20.3%	36.4%	11.5%	11.7%	9.5%	13.0%	7.8%	Sep-06
iShares S&P 500 Growth ETF	4.1%	14.1%	23.4%	30.2%	23.0%	22.7%	--	--	21.6%	Mar-16
<i>S&P 500 Growth</i>	4.2%	14.3%	23.6%	30.4%	22.9%	22.7%	18.2%	18.9%	22.0%	Mar-16
NewSouth Capital	0.2%	1.3%	22.3%	41.2%	14.6%	13.5%	10.5%	13.0%	13.0%	Aug-11
<i>Russell 2500 Value</i>	2.1%	-0.7%	23.4%	52.5%	9.3%	11.2%	9.0%	12.4%	12.4%	Aug-11
Earnest Partners	0.9%	-0.7%	11.6%	37.8%	10.6%	11.1%	6.3%	7.1%	8.1%	Jun-10
<i>MSCI ACWI ex USA</i>	1.9%	-0.4%	9.4%	24.9%	9.4%	9.9%	5.4%	6.6%	7.4%	Jun-10
Alternative Asset Composite	0.3%	-0.7%	3.1%	11.4%	4.9%	4.6%	3.0%	3.8%	3.4%	May-07
<i>HFRI Fund of Funds Composite Index</i>	1.1%	0.9%	5.3%	13.7%	6.3%	5.8%	4.1%	4.1%	2.4%	May-07
Prisma Capital Partners LP	0.3%	-0.7%	3.1%	11.4%	4.9%	4.6%	3.0%	3.8%	3.4%	May-07
<i>HFRI Fund of Funds Composite Index</i>	1.1%	0.9%	5.3%	13.7%	6.3%	5.8%	4.1%	4.1%	2.4%	May-07
Real Estate Composite	2.2%	9.4%	29.4%	37.7%	13.4%	8.5%	9.5%	10.9%	11.0%	Apr-10
<i>MSCI US REIT</i>	1.9%	9.5%	29.5%	39.1%	9.9%	6.3%	7.6%	9.2%	9.3%	Apr-10
Vanguard Real Estate ETF	2.2%	9.4%	29.4%	37.7%	13.4%	8.5%	9.5%	10.9%	11.0%	Apr-10
<i>MSCI US REIT</i>	1.9%	9.5%	29.5%	39.1%	9.9%	6.3%	7.6%	9.2%	9.3%	Apr-10

Investment Manager

Calendar Performance (Net of Fees)

Market Value: \$261.9 Million and 100.0% of Fund

	Calendar Year										
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Fund Composite	10.5%	18.8%	-3.6%	11.6%	6.4%	-1.7%	5.6%	11.0%	11.7%	3.5%	9.4%
Strategic Asset Allocation	11.0%	18.9%	-3.8%	12.8%	6.4%	-2.8%	4.2%	11.5%	10.5%	2.2%	12.5%
InvMetrics Public DB Net Rank	81	60	30	95	78	78	47	85	53	6	90
Fixed Income Composite	9.5%	10.0%	--	--	--	--	--	--	--	--	--
Fixed Income Balanced Index	7.6%	9.3%	-0.3%	--	--	--	--	--	--	--	--
InvMetrics Public DB US Fix Inc Net Rank	15	9	--	--	--	--	--	--	--	--	--
Fidelity (Pyramis Global Advisors)	9.7%	10.2%	-0.3%	4.7%	5.6%	0.1%	6.2%	-0.7%	7.6%	7.8%	10.0%
Bloomberg US Aggregate TR	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%
eV US Core Plus Fixed Inc Net Rank	24	34	34	52	28	44	26	45	69	19	33
Equity Composite	21.1%	24.3%	1.2%	19.0%	11.0%	-0.3%	9.0%	23.8%	16.9%	0.0%	17.9%
Equity Balanced Index	20.0%	28.6%	-7.6%	17.3%	16.0%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%
InvMetrics Public DB Total Eq Net Rank	7	96	1	97	7	16	19	88	44	13	30
Barrow, Hanley, Mewhinney, & Strauss	3.4%	25.9%	-5.2%	14.5%	13.6%	-1.9%	12.1%	31.6%	14.5%	2.0%	10.5%
Russell 1000 Value	2.8%	26.5%	-8.3%	13.7%	17.3%	-3.8%	13.5%	32.5%	17.5%	0.4%	15.5%
eV US Large Cap Value Equity Net Rank	50	53	21	78	53	37	41	60	57	30	92
iShares S&P 500 Growth ETF	33.8%	31.0%	-0.1%	26.9%	--	--	--	--	--	--	--
S&P 500 Growth	33.5%	31.1%	0.0%	27.4%	6.9%	5.5%	14.9%	32.8%	14.6%	4.7%	15.1%
Large Growth MStar MF Rank	54	67	37	64	--	--	--	--	--	--	--
NewSouth Capital	8.0%	28.5%	-1.3%	11.2%	9.2%	-1.4%	11.1%	27.7%	15.8%	--	--
Russell 2500 Value	4.9%	23.6%	-12.4%	10.4%	25.2%	-5.5%	7.1%	33.3%	19.2%	-3.4%	24.8%
eV US Small-Mid Cap Value Equity Net Rank	32	29	1	61	97	24	12	94	41	--	--
Earnest Partners	12.9%	22.2%	-16.4%	30.5%	4.6%	-6.3%	-2.5%	12.5%	18.5%	-10.5%	--
MSCI ACWI ex USA	10.7%	21.5%	-14.2%	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%	-13.7%	11.2%
eV ACWI ex-US Large Cap Core Eq Net Rank	49	56	61	21	15	86	28	97	39	7	--

Investment Manager

Calendar Performance (Net of Fees)

Market Value: \$261.9 Million and 100.0% of Fund

	Calendar Year										
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Alternative Asset Composite	8.9%	8.0%	-4.7%	7.0%	-1.1%	0.0%	2.3%	11.0%	7.5%	-3.3%	7.4%
<i>HFRI Fund of Funds Composite Index</i>	10.9%	8.4%	-4.0%	7.8%	0.5%	-0.3%	3.4%	9.0%	4.8%	-5.7%	5.7%
<i>InvMetrics Public DB Hedge Funds Net Rank</i>	47	48	81	40	93	45	85	59	46	70	45
Prisma Capital Partners LP	8.9%	8.0%	-4.7%	7.0%	-1.1%	0.0%	2.3%	11.0%	7.5%	-3.3%	7.4%
<i>HFRI Fund of Funds Composite Index</i>	10.9%	8.4%	-4.0%	7.8%	0.5%	-0.3%	3.4%	9.0%	4.8%	-5.7%	5.7%
<i>InvMetrics Public DB Hedge Funds Net Rank</i>	47	48	81	40	93	45	85	59	46	70	45
Real Estate Composite	-4.4%	29.2%	-5.8%	4.7%	8.4%	2.6%	30.5%	2.4%	17.7%	8.3%	--
<i>MSCI US REIT</i>	-8.7%	24.3%	-5.8%	3.7%	7.1%	1.3%	28.8%	1.3%	16.5%	7.5%	27.0%
<i>InvMetrics Public DB Real Estate Pub Net Rank</i>	61	1	50	77	11	48	12	99	15	79	--
Vanguard Real Estate ETF	-4.4%	29.2%	-5.8%	4.7%	8.4%	2.6%	30.5%	2.4%	17.7%	8.3%	--
<i>MSCI US REIT</i>	-8.7%	24.3%	-5.8%	3.7%	7.1%	1.3%	28.8%	1.3%	16.5%	7.5%	27.0%
<i>Real Estate MStar MF Rank</i>	55	37	48	61	19	67	36	36	38	54	--

Total Fund Composite

Fee Schedule

Market Value: \$261.9 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Median ²
Core Plus Fixed Income	Fidelity (Pyramis Global Advisors)	0.25% on the first \$50,000,000 0.22% on the next \$50,000,000 0.20% on the next \$100,000,000 0.17% on the balance	0.24% \$189,973	0.30%
Large-Cap Value	Barrow, Hanley, Mewhinney, & Strauss	0.75% on the first \$10,000,000 0.50% on the next \$15,000,000 0.25% on the next \$175,000,000 0.20% on the next \$600,000,000 0.15% on the next \$200,000,000 0.125% on the balance	0.67% \$99,507	0.60%
Large-Cap Growth	iShares S&P 500 Growth ETF	0.18% on the balance	0.18% \$59,244	0.75%
Smid-Cap Value	NewSouth Capital	0.90% on the first \$25,000,000 0.85% on the next \$25,000,000	0.89% \$306,639	0.88%
Non-U.S. Large-Cap Core	Earnest Partners	0.85% on the balance	0.85% \$492,621	0.65%
Multi-Strat. Hedge FoF	Prisma Capital Partners LP	1.0% on the balance	1.00% \$186,083	1.00%
U.S. REIT	Vanguard Real Estate ETF	0.12% on the balance	0.12% \$27,597	1.19%
Total Investment Management Fees			0.52% \$1,361,664	0.66%

¹ Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

² Source: 2019 Marquette Associates Investment Management Fee Study.

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