HOWARD COUNTY RETIREMENT PLAN

FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTARY INFORMATION

YEARS ENDED JUNE 30, 2021 AND 2020

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CliftonLarsonAllen LLP
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INDEPENDENT AUDITORS' REPORT

Retirement Plan Committee
Howard County Retirement Plan
Howard County, Maryland

Report on the Financial Statements

We have audited the accompanying financial statements of Howard County Retirement Plan (the Plan) as of June 30, 2021 and 2020 and the related notes of the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Plan as of June 30, 2021 and 2020, and the respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management Discussion and Analysis (MD&A) on pages 3 through 9, the Schedule of Changes in the County's Net pension Liability and Related Ratios, the Schedules of County Contributions, and the Schedule of Investment Returns on pages 26 through 28 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 10, 2021, on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Plan's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Plan's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland
November 10, 2021

Introduction

The Howard County Retirement Plan (the Plan) is a single-employer defined benefit public employee retirement plan administered by Howard County, Maryland, which provides retirement benefits as well as death and disability benefits and cost-of-living adjustments.

Responsibilities for administration and operation of the Plan are vested in a Retirement Committee with seven members (Committee). The Committee has authority to establish and amend the respective benefit and contribution provisions.

Membership Data

	7/1/2020	7/1/2019	7/1/2018
Active	1,869	1,833	1,816
Retired and beneficiaries	897	840	787
Disabled	14	15	15
Terminated vested	213	223	196
Total	2,993	2,911	2,814

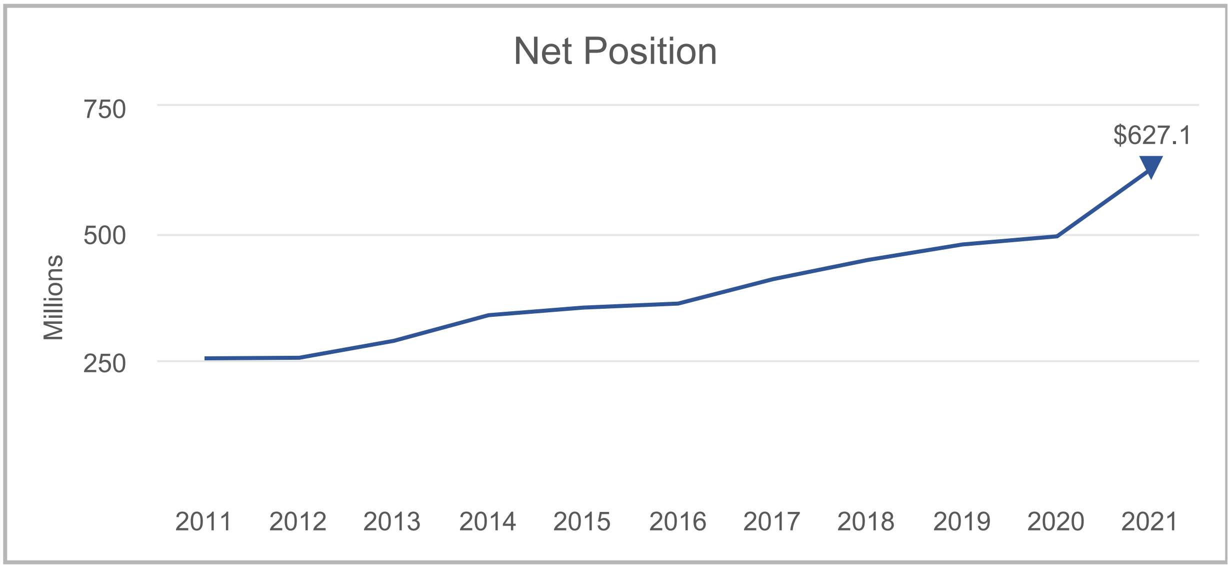
Financial Highlights

The financial statements of the Plan were prepared using the accrual basis of accounting. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Employee and employer contributions are recognized as revenues in the period in which employee services are performed and expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is made. Investments are reported at fair value.

As of June 30, 2021, the net position was $627.1 million as compared to $494.2 million at June 30, 2020. The increase in net position of $132.9 million was mainly attributable to the combination of manager selection and risk assets performing well as the markets have been responding to COVID-19 vaccine rollout and support from monetary and fiscal interventions.

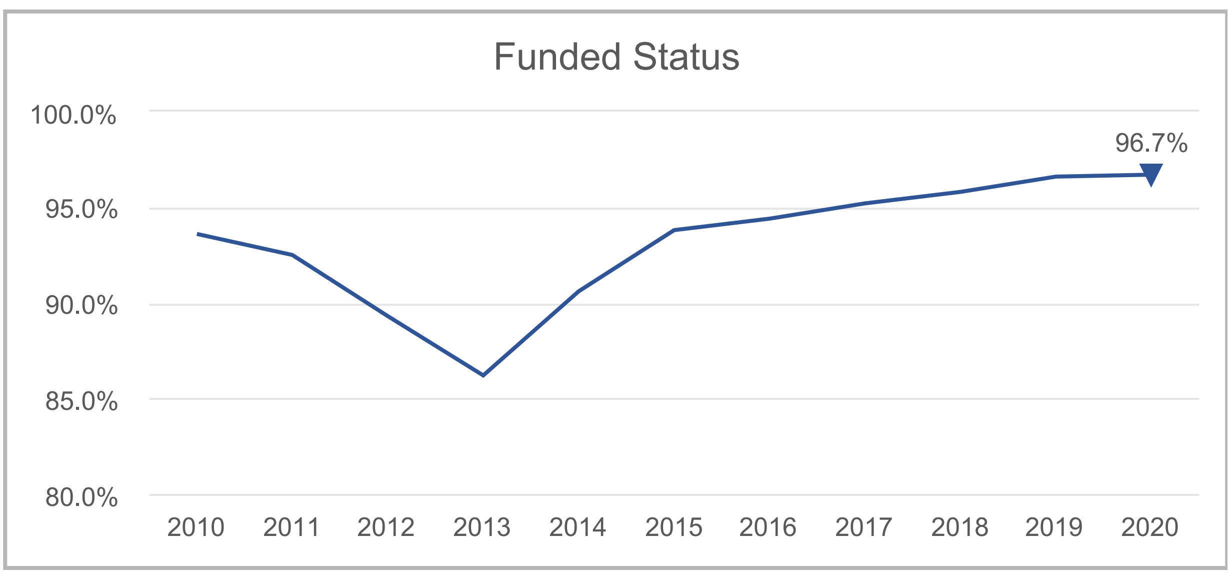
	Fiscal Year*		
	2021	2020	2019
Contributions	$ 20.75	$ 19.78	$ 18.53
Benefit Payments	$ 21.24	$ 20.07	$ 19.01
Contribution rates	11.8 %	11.6 %	11.5 %
# of benefit recipients	950	893	847

*amounts in millions



Funded Status

The Plan's funding objective is to meet long-term benefit obligations through contributions and investment income. The funding ratio, which is the actuarial value of assets divided by the actuarial accrued liability is an estimate of how well the Plan is meeting that objective. A higher ratio indicates the Plan is better funded. The funded ratio of the Plan was 96.7% and 96.6% as of July 1, 2020 and July 1, 2019, respectively.



Overview of the Basic Financial Statements

In this financial report, the basic financial statements consist of the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position with accompanying notes as of and for the year ended June 30, 2021 with comparative information as of and for the year ended June 30, 2020 and June 30, 2019. The financial position is comprised of assets, which primarily consist of investments less liabilities, including accounts payable and investment commitments payable.

The Statement of Changes in Fiduciary Net Position presents the additions to and deductions from the Plan's net position during the year. The Plan receives contributions from participants and the County as well as income or losses from investments and related activities. The primary deductions are the payments of benefits, which are the Plan's primary objectives. Deductions also include refunds to members who leave the Plan as well as administrative expenses.

Notes to the Basic Financial Statements

The Notes to Financial Statements contain disclosures and discussions which support the data presented in the financial statements. The notes present information about the administration of the Plan, significant accounting policies, and investments. The notes are an integral part of the financial statements and should be considered in conjunction with any review of the financial statements.

Required Supplementary Information (RSI)

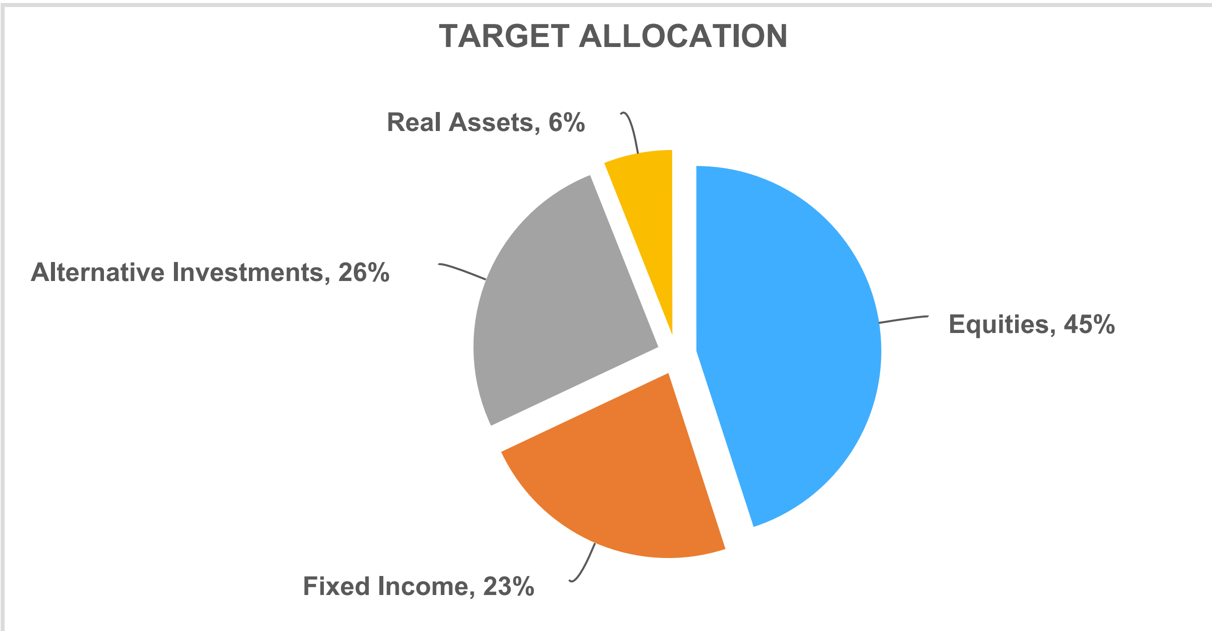
The RSI section provides actuarially determined information about the Plan and displays changes for the Plan's Net Pension Liability (NPL) and related ratios, contributions related to payrolls by the Plan, and money-weighted investment returns.

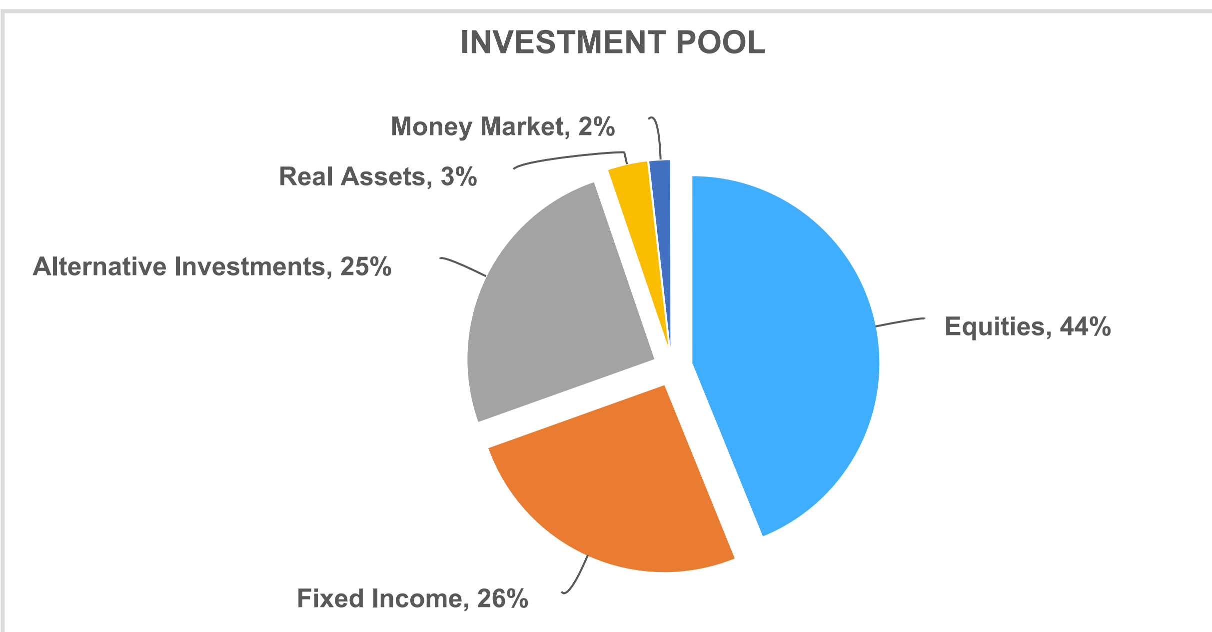
The following Condensed Statements of Fiduciary Net Position and Changes in Fiduciary Net Position present financial information for the Plan and compares fiscal years 2021, 2020, and 2019.

Assets	2021	2020	2019	2021 Percentage Change	2020 Percentage Change
Receivables	$ 5,985,893	$ 2,084,541	$ 1,821,390	187 %	14 %
Investments	626,910,134	493,375,042	479,054,578	27 %	3 %
Prepaid Insurance	21,594	19,687	19,687	10 %	— %
Total Assets	632,917,621	495,479,270	480,895,655	28 %	3 %
Liabilities					
Investment Purchased	5,583,158	906,006	2,378,604	516 %	(62)%
Accounts Payable	265,515	365,935	319,692	(27)%	14 %
Total Liabilities	5,848,673	1,271,941	2,698,296	360 %	(53)%
Net Position Held in Trust for Pension Benefits	$627,068,948	$494,207,329	$478,197,359	27 %	3 %
Additions					
Employer Contributions	$ 15,888,630	$ 15,034,157	$ 14,155,379	6 %	6 %
Employee Contributions	4,857,068	4,748,920	4,378,114	2 %	8 %
Investment Income	133,778,266	16,691,053	31,355,112	701 %	(47)%
Total Additions	154,523,964	36,474,130	49,888,605	324 %	(27)%
Deductions					
Benefit Payments and Refunds	21,237,784	20,067,428	19,012,353	6 %	6 %
Administrative Expense	424,561	396,732	438,403	7 %	(10)%
Total Deductions	21,662,345	20,464,160	19,450,756	6 %	5 %
Net Change	132,861,619	16,009,970	30,437,849	730 %	(47)%
Net Position Held in Trust for Pension Benefits:					
Beginning of Year	494,207,329	478,197,359	447,759,510	3 %	7 %
End of Year	$627,068,948	$494,207,329	$478,197,359	27 %	3 %

Investments

Investments consist of US equities (large cap and non-large cap), international equities (international developed markets and international emerging markets), fixed income, real assets, money market and alternatives (private equities and hedge funds). The Plan is a participant in a combined pension investment pool and it does not own an undivided interest in specific assets of the Pool. The investments presented by category are the Plan's proportionate share of the investments by category of the Pool that are reported at fair value.

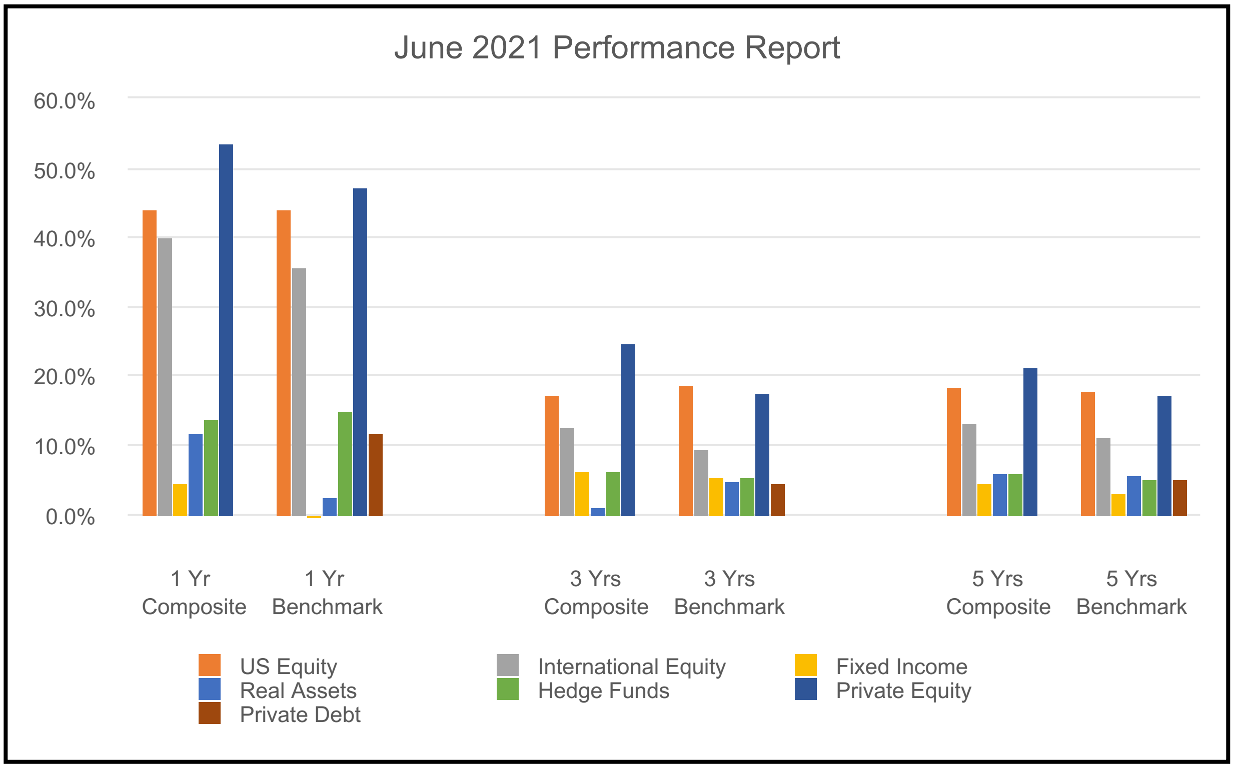




LONG TERM EXPECTED RATE OF RETURN	
Equities	4.60%
Fixed Income	2.20%
Alternative Investments	6.00%
Real Assets	5.10%

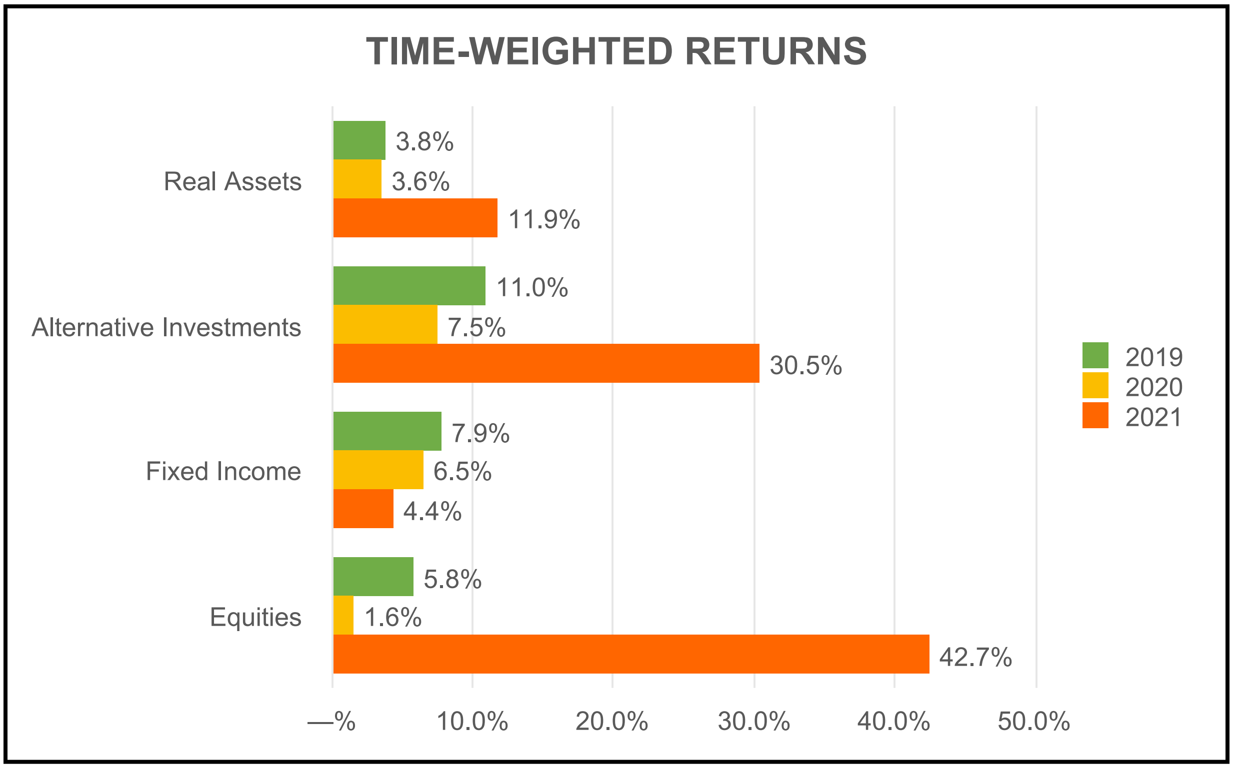
Investment Performance Summary

The retiree’s benefit is paid from investment earnings and contributions. Displayed below is a comparison of the portfolio’s returns (composite) to its policy benchmark in one year, three years and five years:



Note: The performance listed may not reflect final returns as of the date listed as private markets report investment returns on a quarter basis lag.

The investment Pool's time-weighted returns (gross of fees) are displayed by investment type in the following table.



<u>Additional Information</u>

The Plan's financial statements are presented in accordance with accounting principles generally accepted in the United States of America and are available at Howard County's web page www.howardcountymd.gov/Departments/Finance/Financial-Information/Audit-Information.

HOWARD COUNTY RETIREMENT PLAN
STATEMENTS OF FIDUCIARY NET POSITION
JUNE 30, 2021 and 2020

	2021	2020
ASSETS		
Receivables:		
Employer Contributions	$ 1,196,061	$ 1,099,741
Member Contributions	331,939	305,896
Interest and Dividends	389,823	465,094
Due from Sale of Investments	4,058,526	204,220
Other	9,544	9,590
Total Receivables	5,985,893	2,084,541
Investments:		
Money Market	11,475,951	10,369,730
Equities	277,666,862	192,253,334
Fixed Income	162,654,756	149,691,808
Alternative Investments	153,458,261	122,305,616
Real Assets	21,654,304	18,754,554
Total Investments	626,910,134	493,375,042
Prepaid Insurance	21,594	19,687
Total Assets	632,917,621	495,479,270
LIABILITIES		
Investment Purchased	5,583,158	906,006
Accounts Payable	265,515	365,935
Total Liabilities	5,848,673	1,271,941
Fiduciary Net Position Held in Trust for Pension Benefits	$ 627,068,948	$ 494,207,329

See accompanying Notes to Financial Statements.

HOWARD COUNTY RETIREMENT PLAN
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
YEARS ENDED JUNE 30, 2021 AND 2020

	2021	2020
ADDITIONS:		
CONTRIBUTIONS		
Employer	$ 15,888,630	$ 15,034,157
Member	4,857,068	4,748,920
Total Contributions	20,745,698	19,783,077
INVESTMENT INCOME		
Net Appreciation in Fair Value of Investments	115,320,103	5,715,645
Interest	1,625,479	2,123,552
Dividends	18,187,386	10,127,448
Other, Net	19,869	50,034
Total Investment Income	135,152,837	18,016,679
Less: Investment Expense	1,374,571	1,325,626
Net Investment Income	133,778,266	16,691,053
Total Additions	154,523,964	36,474,130
DEDUCTIONS:		
BENEFITS		
Annuities	20,767,365	19,064,298
Death	115,512	381,719
Refunds of Contributions	354,907	621,411
Total Benefits	21,237,784	20,067,428
Administrative Expenses	424,561	396,732
Total Deductions	21,662,345	20,464,160
NET CHANGE	132,861,619	16,009,970
FIDUCIARY NET POSITION HELD IN TRUST FOR PENSION BENEFITS:		
Beginning of Year	494,207,329	478,197,359
End of Year	$ 627,068,948	$ 494,207,329

See accompanying Notes to Financial Statements.

NOTE 1 PLAN DESCRIPTION

Plan Administration

The Howard County Retirement Plan (the Plan) is a single-employer defined benefit public employee retirement system established and administered by Howard County, Maryland (the County), to provide defined pension benefits for those County employees who do not participate in other County and State plans. The Plan was established on July 1, 1995, at which time approximately 73% of the County's employees transferred from the State Retirement and Pension Systems of Maryland to the Plan. The Plan is considered part of the County's financial reporting entity and is included in the County's financial statements as a pension trust fund. The accompanying financial statements present only the operations of the Plan and are not intended to present the financial position and results of operations of the County.

Plan Membership

At July 1, 2020 and 2019, the Plan's membership consisted of the following:

	2020	2019
Active	1,869	1,833
Retired and Beneficiaries	897	840
Disabled	14	15
Terminated Vested	213	223
Total	2,993	2,911

The Plan was established, is operated, and may be amended under the provisions of the Howard County Code, Sections 1.400 and 1.401 to 1.478. Essentially all of the County's full-time benefited and part-time benefited employees (excluding career firefighters and sworn police officers) are eligible to participate in the Plan, with exceptions provided for in Howard County Code Section 1.406. The Retirement Plan Committee established by Howard County Code Section 1.455 has full power and authority to administer and operate the Plan in accordance with its terms and in particular the authority contained in subsection 1.454(a). The Pension Oversight Commission established by Howard County Code, Section 1.482 provides ongoing assessment and evaluation of the Plan's operations.

Benefits Provided

Under the Retirement Plan, participants become vested after five years of eligibility service and are entitled to a benefit beginning at age 62. If an employee leaves employment or dies before five years of eligibility service, accumulated employee contributions plus interest are refunded to the employee or designated beneficiary. A participant who becomes totally and permanently disabled may retire prior to normal retirement and receive a benefit. Both disability and death benefits vary if incurred in the line of duty.

NOTE 1 PLAN DESCRIPTION (CONTINUED)

Benefits Provided (Continued)

Participating general employees with 30 years of eligibility service, regardless of age, or who attain the age of 62 and older, with 2 to 5 years of eligibility service (for a total of 67 years), are entitled to a normal retirement benefit. For creditable service earned prior to June 30, 2012, the benefit is 1.55% of the participant's average compensation times the participant's creditable service; for creditable service after July 1, 2012, the multiplier is 1.66%. The Plan permits early retirement for participants who attain the age of 55 with at least 15 years of Eligibility Service or have 25 years of eligibility service, regardless of age. For early retirement, the benefit is reduced by 0.5% for each month that the benefit begins prior to normal retirement date.

For participating AFSCME Local 3085 the benefit is 1.66% of the participant's average compensation times all years of creditable service.

Participating Corrections employees are entitled to receive a normal retirement benefit of 2.5% of average compensation multiplied by years of creditable service (up to 20 years) plus 1.0% of average compensation multiplied by creditable service greater than 20 years but less than 30 years (excluding sick leave, which is always credited at 1.0% of average compensation). Normal retirement is the attainment of age of 62 and older, with 2 to 5 years of eligibility service (for a total of 67 years), or the completion of 20 years of eligibility service, regardless of age.

Benefits in pay status are adjusted annually for a postretirement cost of living adjustment (COLA). The Plan uses the Consumer Price Index (CPI-U) for the Baltimore-Columbia-Towson area as published by the Bureau of Labor Statistics to calculate the change in retiree allowances each July. The maximum annual COLA is 3%.

Contributions

The Plan is authorized to establish or amend the obligation to make contributions under the provisions of Sections 1.423 and 1.465 of the Howard County Code. The Plan's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate assets to pay benefits when due. Participant contributions are 8.5% of base pay for participating Corrections employees with less than 20 years of creditable service, 0% of base pay for participating Correction employees with greater than 20 years of creditable service and effective January 1, 2014, 3% of base pay for other participants. The County funds the remainder of the cost of employees' participation in the Plan which was 11.8% of covered payroll in fiscal year 2021 and 11.6% in fiscal year 2020.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS

Method Used to Value Investments

The Plan's investments are maintained in a combined investment pool. The Plan does not own an undivided interest in specific assets of the Pool. The investments presented by category are the Plan's proportionate share of the investments by category of the Pool and are reported at fair value. Short-term investments such as money market investments are reported at amortized cost, which approximates fair value. Securities traded on national or international exchanges are valued at the last reported sales price at current exchange rates. Securities that do not have an established market are reported at estimated fair value derived from third-party pricing services. Purchases and sales of investments are recorded on a trade date basis. The fair values of real estate investments are based on net asset values (NAV) provided by the investment managers. The fair value of non-pooled investments is determined annually and is based on current market prices. The fair value of investments in open-end mutual funds is determined based on the fund's current share price.

The Plan invests in assets measured at NAV and include private equity, equity hedge, real assets and international equity funds, which are collectively considered alternative investments. Alternative investments include interests in limited partnerships and limited liability companies invested in venture capital, private equities, and other investments. These investments are recorded based on net asset value amounts established by the respective fund managers as a practical approximation of fair value. Because alternative investments are not readily marketable, the estimated value is subject to uncertainty and, therefore, may differ materially from the amount reported.

Basis of Accounting

The Plan's financial statements are prepared using the accrual basis of accounting. Employer and employee contributions are recognized as revenue in the period in which employee services are performed and expenses and refunds are recorded when the corresponding liabilities are incurred, regardless of when payment is made. Benefits are due and payable in accordance with the benefit terms.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates that affect the reported amounts in the financial statements and accompanying notes. Actual results could differ from those estimates.

Income Taxes

The Internal Revenue Service issued a determination letter on September 30, 2016, which stated that the Plan and its underlying trust qualify under the applicable provisions of the Internal Revenue Code and therefore are exempt from Federal income taxes.

NOTE 3 INVESTMENTS

Investment Policy

The Plan's policy in regard to the allocation of invested assets is established and administered by the Retirement Plan Committee. Specific investment goals stated in the policy are reviewed at least annually and, when appropriate, new goals and standards are adopted by the Retirement Plan Committee. The policy is expected to provide diversification of assets in an effort to maximize investment return to the Plan consistent with prudent market and economic risk. All of the Plan's assets are to remain invested at all times in the asset classes as designated by the policy.

The following strategic asset allocation policy was adopted by the Plan on March 21, 2002, last amended on April 29, 2021, and remained in effect as of June 30, 2021:

Asset Class	Target Allocation
Equities	45.0 %
Fixed Income	23.0
Alternative Investments	26.0
Real Assets	6.0
Total	100.0 %

Concentrations

The Plan held investments in the following organizations that represent 5% or more of the pension plan's fiduciary net position: Baillie Gifford (5%), BlackRock (8%), Blackstone (5%), Dodge and Cox (9%), LSV (7%), Magnitude (5%), Mondrian (5%), PIMCO (9%), and Westfield (9%).

Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, foreign currency and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of fiduciary net position.

NOTE 3 INVESTMENTS (CONTINUED)

Risks and Uncertainties (Continued)

Interest Rate Risk

The Plan's investment policy does not place any limits on the professional investment managers with respect to the duration of investments for the Plan. The Plan's fixed income investments by maturity and type at June 30, 2021 were as follows:

Investment Type	Fair Value/ NAV	Weighted Average Maturity (in Years)
Corporate Bonds	$ 20,329,594	14.15
U.S. Government - Sponsored Enterprises	14,719,432	26.00
Government Issued/Treasuries	10,696,738	6.64
Other Asset-Backed Securities	2,338,018	21.12
Collateralized Mortgage Obligations	3,629,008	44.26
Municipal Securities	895,164	14.72
Commingled Funds and Preferred Stock Identified as Fixed Income for Reporting Purposes	110,046,802	Not Available
Total	$ 162,654,756	
Portfolio Weighted Average Maturity of Available Categories		25.61

The Plan's fixed income investments by maturity and type at June 30, 2020 were as follows:

Investment Type	Fair Value/ NAV	Weighted Average Maturity (in Years)
Corporate Bonds	$ 25,370,490	15.33
U.S. Government - Sponsored Enterprises	13,516,222	23.30
Government Issued/Treasuries	3,300,120	1.76
Other Asset-Backed Securities	2,681,144	22.00
Collateralized Mortgage Obligations	4,347,360	44.55
Municipal Securities	1,229,943	15.91
Commingled Funds and Preferred Stock Identified as Fixed Income for Reporting Purposes	99,246,529	Not Available
Total	$ 149,691,808	
Portfolio Weighted Average Maturity of Available Categories		19.47

NOTE 3 INVESTMENTS (CONTINUED)

Risks and Uncertainties (Continued)

Credit Risk

The demand deposit accounts (DDA's) held by State Street Bank are unrated, as are the mutual funds used by the Plans. At fiscal year-end, the Plan's fixed income investments had the following risk characteristics in fiscal years 2021 and 2020:

Standard & Poor's Rating or Comparable	Fiscal Year 2021 Fair Value
AAA to A-	$ 5,111,198
BBB to BB-	18,333,434
Not Rated	139,210,124
Total	$ 162,654,756

Standard & Poor's Rating or Comparable	Fiscal Year 2020 Fair Value
AAA to A-	$ 8,798,302
BBB to BB-	20,349,405
Not Rated	120,544,101
Total	$ 149,691,808

Concentration of Credit Risk

The Plan's investment policy does not establish any limitation on the percentage that the Plan may have with any one issuer, other than to state that the Plan's assets are to be diversified in accordance with Modern Portfolio Theory. At June 30, 2021, the Plan's investments did not exceed 5% with any one issuer other than as identified on page 15.

Custodial Credit Risk

State Street Bank invests in interest bearing DDA's in the name of the Plan for all accounts and pays interest equal to the effective Federal Funds rate, which is included in money markets on the Statements of Fiduciary Net Position. At fiscal year-end, the amount in this fund at amortized cost which approximates fair value was $11,475,951, which was partially used for settlement of open purchases of $5,583,158. All other investments of the fund are held by State Street Bank as trustee in the Plan's names.

NOTE 3 INVESTMENTS (CONTINUED)

Risks and Uncertainties (Continued)

Credit Risk - Currency Forward Contract

One of the Plan’s investment objectives is to diversify assets in accordance with the Modern Portfolio Theory (MPT) in order to reduce overall risk. Consistent with this objective, the Plan has invested in some funds that hold three-month currency forward contracts. This strategy is undertaken to protect the dollar value of underlying international investments. At fiscal year-end, there were no hedges in place.

Foreign Currency Risk

The Plan’s exposure to foreign currency risk derives from its investments in foreign currency or instruments denominated in foreign currency. Investments in such securities are limited to a maximum net currency exposure of 36.5% at any given time. These pool of assets may also include hedged assets, therefore, reducing the overall currency risk. The Plan was also exposed to foreign currency risk through the Pools investment in Euro denominated alternative investments. The Pool total of these investments was $21,246,284 and $16,295,302 at June 30,2021 and June 30, 2020, respectively. The Plan's proportionate share was $9,164,698 and $7,062,689 at June 30, 2021 and June 30, 2020, respectively.

Rate of Return

For fiscal years ended June 30, 2021 and June 30, 2020, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, were 25.9% and 4.10%, respectively The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amount actually invested.

Investments Purchased and Due from Sales of Investments

Investment transactions are recorded on a trade plus three days or less timetable resulting in an amount due to and due from State Street Bank (the "Plan’s Trustee") at year-end.

NOTE 4 FAIR VALUE MEASUREMENT

The Plan investments are reported at fair value. The Plan categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles, as follows:

- *Level 1* – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

- *Level 2* – Inputs to the valuation methodology include: quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in inactive markets; inputs other than quoted prices that are observable for the asset or liability; inputs that are derived principally from or corroborated by observable market data by correlation of other means. If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

NOTE 4 FAIR VALUE MEASUREMENT (CONTINUED)

- *Level 3* – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The assets or liabilities fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs. The table below reflects the Plan's proportionate share of the Pool's investments by type and fair value hierarchy established by accounting principles generally accepted in the United States of America as of June 30:

		Fair Value Measurement Using		
	June 30, 2021	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Debt Securities:				
Collateralized Mortgage Obligations				
(Fannie Mae and Freddie Mac and GNMA)	$ 3,629,008	$ —	$ 3,629,008	$ —
Corporate Bonds	20,329,594	—	20,329,594	—
Commingled Funds (Fixed Income)	77,750,681	21,285,390	56,465,291	—
FHLMC and FNMA Bonds	14,719,432	—	14,719,432	—
U.S. Treasury Securities	10,696,738	—	10,696,738	—
Municipal Bonds	895,164	—	895,164	—
Other Asset Backed Securities	2,338,018	—	2,338,018	—
Preferred Stock	504,259	504,259	—	—
Total Debt Securities	130,862,894	21,789,649	109,073,245	—
Equity Securities:				
Common Stocks	163,309,600	163,309,600	—	—
Small Company Portfolio	8,541,553	8,541,553	—	—
Emerging Market Equity Portfolio	51,241,900	51,241,900	—	—
Real Estate Investment Trusts (REITS)	1,166,409	1,166,409	—	—
Total Equity Securities	224,259,462	224,259,462	—	—
Total Investment by Fair Value Level	355,122,356	$ 246,049,111	$ 109,073,245	$ —
Investments Measured at the Net Asset Value (NAV):				
Private Equity Funds	91,713,283			
Private Credit Funds	1,785,099			
Hedge Funds	59,959,879			
Real Assets Funds	21,654,304			
International Equity Funds	33,500,326			
Commingled fund within International Equities	19,907,074			
Commingled fund within International Fixed Income	20,595,117			
Commingled fund within Domestic Fixed Income	11,196,745			
Total Investments Measured at the NAV	260,311,827			
Total investments Measured at Fair Value*	$ 615,434,183			

* Net of money market funds totaling $11,475,951 which includes securities that have remaining maturities of less than 1 year and may be measured at amortized cost.

NOTE 4 FAIR VALUE MEASUREMENT (CONTINUED)

		Fair Value Measurement Using		
	June 30, 2020	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Debt Securities:				
Collateralized Mortgage Obligations				
(Fannie Mae, Freddie Mac and GNMA)	$ 4,347,360	$ —	$ 4,347,360	$ —
Corporate Bonds	25,370,490	—	25,370,490	—
Commingled Funds (Fixed Income)	69,219,603	16,971,218	52,248,385	—
FHLMC and FNMA Bonds	13,516,222	—	13,516,222	—
U.S. Treasury Securities	3,300,120	—	3,300,120	—
Municipal Bonds	1,229,943	—	1,229,943	—
Other Asset Backed Securities	2,681,145	—	2,681,145	—
Preferred Stock	481,246	481,246	—	—
Total Debt Securities	120,146,129	17,452,464	102,693,665	—
Equity Securities:				
Common Stocks	109,606,701	109,606,701	—	—
Small Company Portfolio	5,174,751	5,174,751	—	—
Emerging Market Equity Portfolio	35,529,918	35,529,918	—	—
Real Estate Investment Trusts (REITS)	687,220	687,220	—	—
Total Equity Securities	150,998,590	150,998,590	—	—
Total Investment by Fair Value Level	271,144,719	$ 168,451,054	$ 102,693,665	$ —
Investments Measured at the Net Asset Value (NAV):				
Private Equity Funds	68,459,972			
Private Credit Funds	543,579			
Hedge Funds	53,302,064			
Real Assets Funds	18,754,554			
International Equity Funds	22,640,334			
Commingled Fund within intl. equities	18,614,410			
Commingled Fund within International Fixed Income	18,971,820			
Commingled Fund within Domestic Fixed Income	10,573,860			
Total Investments Measured at the NAV	211,860,593			
Total investments Measured at Fair Value*	483,005,312			

* Net of money market funds totaling $10,369,730 which includes securities that have remaining maturities of less than 1 year and may be measured at amortized cost.

NOTE 4 FAIR VALUE MEASUREMENT (CONTINUED)

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy refers to securities not traded on an active market but for which observable market inputs are readily available. Fixed income securities are priced on a daily basis, market to market, using a variety of third-party pricing sources, market data and methodologies.

The valuation method for investments measured at the net asset value ("NAV") per share (or its equivalent) is presented on the following table:

	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Private Equity	$ 91,713,283	$ 24,605,316	Illiquid	N/A
Private Credit	1,785,099	9,166,300	Illiquid	N/A
Hedge Fund 1	29,755,984	—	Quarterly	65 days
Hedge Fund 2	30,203,895	—	Semi Annually	95 days
Real Asset Funds	21,654,304	10,123,589	Illiquid	N/A
International Equity Funds	33,500,326	—	Monthly	15 days
Commingled Fund within International Equities	19,907,074	—	Weekly	3 days
Commingled Fund within International Fixed Income	20,595,117	—	Bi-monthly	5 days
Commingled Fund within Domestic Fixed Income	11,196,745	—	Daily	1 day
Total	$ 260,311,827			

1. Private Equity Funds: Private equity investment strategies include buyout, venture capital, growth capital, and special situations. Investments in the asset class are achieved primarily through commingled funds and may also include direct and co-investment opportunities. The objective of the asset class is to provide high long-term returns. Exposures are diversified by manager, region, strategy, and vintage year. Private equity investments are illiquid and distributions are received over the life of the investments, which can range between 10 and 15 years. These investments do not have set redemption schedules therefore options for exit are limited to sale on the secondary market. Capital commitments are made to these types of investments and funds are invested through a call down structure.

2. Comingled Fund within Private Credit: This strategy will focus on identifying market dislocations and credit-intensive assets, specifically in loan portfolios, corporate securities, structured credit, hard assets and special opportunities. The objective of the fund is to return a 1.5-1.7X multiple and a net IRR of 15% over the life of the fund, which can range between 6 and 8 years. The fund employs a flexible and opportunistic mandate allowing for investments in an assortment of securities which allows it to remain an active investor in a variety of transactions irrespective of market conditions and geographies. The fair value of the partnership interest is based on NAV provided by the General Partner. The partnership's financial statements are audited annually as of December 31 and the NAV is adjusted quarterly by additional contributions to and distributions from the partnership, the net earnings and losses, and unrealized gains and losses resulting from changes in fair value, as determined by the General Partner.

NOTE 4 FAIR VALUE MEASUREMENT (CONTINUED)

3. Equity Hedge Funds: This represents investments in two Hedge FOF managers. Each FOF manager invests in underlying hedge funds to provide a broadly diversified portfolio. One invests with 10-20 underlying managers/funds to execute its global market strategy. The other invests in 20-40 underlying managers/funds in a relative value mandate. The hedge fund strategy is designed to diversify by manager/fund to reduce single manager/ fund risk while offering portfolio diversification and provide a return profile that is uncorrelated to the rest of the assets in the portfolio. The fair values of the investments are determined using the NAV per share (or its equivalent) of the investments. These funds have liquidity restrictions of 3 to 6 months.

4. Real Asset Funds: This represents funds that invest in institutional real estate (office, multi-family, industrial, and retail) and natural resources strategies. The fair values of the investments in these strategies are determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partnership's capital. The real estate strategies deployed include a US focused property strategy (core to core plus) and a global FOF strategy. The global FOF manager invests in 20-30 underlying managers/ funds. The natural resources investments are through FOF strategies. The natural resource managers invest in 10-25 underlying relationships as they build a diversified portfolio with exposure to oil, natural gas, agriculture, timber and other natural resources. Capital commitments are made to these types of investments and funds are invested through a call down structure. These funds have liquidity restrictions for the life of the investment, 7-10 years. Options for exit are limited to sale on the secondary market.

5. International Equity Funds: This represents investments primarily in value oriented equity securities of international developed markets (non-U.S. issuers; e.g., MSCI EAFE) with the objective of achieving a long-term return above a passive benchmark (EAFE). This manager focuses on a dividend discount model value based philosophy for publicly traded equity. All securities are recorded at fair value. Foreign securities are valued on the basis of quotations from the primary market in which they are traded and translated at each valuation date from the local currency into U.S. dollars using current exchange rates. The Fund may enter into forward foreign currency exchange contracts primarily to hedge against foreign currency exchange rate risks on its non-U.S. dollar-denominated investment securities.

6. Commingled Fund within International Equities: This represents investments made in predominantly listed large and mega capitalization securities in emerging markets. The objective of this fund is to achieve a long-term return above a passive benchmark (e.g. MSCI EM Index). The manager employs a flexible, research intensive investment approach to own high quality businesses over the long term. NAVs are normally calculated as of 4:00pm Eastern Time for each business day the relevant exchange is open. Securities for which market quotations are readily available and reliable are to be valued using the applicable market quotations.

NOTE 4 FAIR VALUE MEASUREMENT (CONTINUED)

7. Commingled Fund within International Fixed Income: This represents investments primarily in a globally diversified portfolio of high quality sovereign bonds and currencies in emerging markets (non U.S. issuers; e.g. MSCI EM). The objective of this fund is to generate income, preserve capital, and enhance principal above a passive benchmark (JP Morgan GBI-EM Global Diversified Index). NAV for the Fund is only calculated twice a month on the last business day and the 15th (or next business day if the 15th is a nonbusiness day). The ownership interest is only in the units of the Fund, not the underlying holding or securities of the Fund.

8. Commingled Fund within Domestic Fixed Income: The strategy is managed using an "indexing" investment approach, by which the manager attempts to approximate, before expenses, the performance of the Index (e.g. Bloomberg Barclays U.S. Treasury Inflation Protected Securities Index) over the long term. The manager expects that it will typically seek to replicate Index returns for the Portfolio through investments in the "cash" markets – actual holdings of debt securities and other instruments – rather than through "notional" or "synthetic" positions achieved through the use of derivatives, such as futures contracts or swap transactions (except in the unusual case where the manager believes that use of derivatives is necessary to achieve an exposure that is not readily available through the cash markets). NAVs are normally calculated as of 4:00pm Eastern Time for each business day the relevant exchange is open. Securities for which market quotations are readily available and reliable are to be valued using the applicable market quotations.

NOTE 5 NET PENSION (ASSET) LIABILITY OF THE COUNTY

The components of the net pension (asset) liability of the County at June 30 were as follows:

	2021	2020
Total Pension Liability	$ 575,977,127	$ 542,985,287
Plan Fiduciary Net Position	(627,068,948)	(494,207,329)
County's Net Pension (Asset) Liability	$ (51,091,821)	$ 48,777,958
Plan Fiduciary Net Position as a Percentage of the Total Pension (Asset) Liability	108.87 %	91.02 %

Actuarial Assumptions

The total pension liability in the July 1, 2020 actuarial valuation rolled forward to June 30, 2021 was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.60%
Salary Increases	Varies by service, 3.75% to 6.50%, including inflation
Investment Rate of Return	7.35%, net of pension plan investment expense, including inflation
Mortality	RP-2014 Combined Healthy tables with generational projection from 2006 base year using scale MP-2017.

NOTE 5 NET PENSION LIABILITY OF THE COUNTY (CONTINUED)

Actuarial Assumptions (Continued)

The actuarial assumptions used in this valuation, for GASB 67 purposes, were generally based on the 2018 Experience Study covering the period from July 1, 2013 through June 30, 2017. Economic assumptions and the demographic assumptions were updated to reflect the 2013-2017 experience study.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and estimates of arithmetic real rates of return for each major asset class are reviewed no less frequently than every four years.

Best estimates of geometric real rates of return for each major asset class, included in the Plan's target allocation as of June 30, 2021 (see Note 3), are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Equities	4.60%
Fixed Income	2.20%
Alternative Investments	6.00%
Real Assets	5.10%

Discount Rate

The discount rate used to measure the total pension liability was 7.35%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that the County contributions will be made at rates equal to the difference between total actuarially determined contribution rates and the employee rate. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The discount rate was reduced from 7.40% to 7.35% for fiscal year ended June 30, 2021.

NOTE 5 NET PENSION LIABILITY OF THE COUNTY (CONTINUED)

Sensitivity of the Net Pension Liability (Asset) to Changes in the Discount Rate

As of June 30, 2021:

The following presents the net pension liability (asset) of the County, calculated using the discount rate of 7.35%, as well as what the County's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.35%) or 1 percentage point higher (8.35%) than the current rate:

	1% Decrease (6.35%)	Current Discount Rate (7.35%)	1% Increase (8.35%)
County's Net Pension Liability/(Asset)	$ 24,592,397	$ (51,091,821)	$ (114,099,772)

As of June 30, 2020

The following presents the net pension liability (asset) of the County, calculated using the discount rate of 7.40%, as well as what the County's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.40%) or 1 percentage point higher (8.40%) than the current rate:

	1% Decrease (6.40%)	Current Discount Rate (7.40%)	1% Increase (8.40%)
County's Net Pension Liability/(Asset)	$ 120,532,953	$ 48,777,958	$ (10,931,639)

HOWARD COUNTY RETIREMENT PLAN
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN THE COUNTY'S NET PENSION LIABILITY AND RELATED RATIOS
LAST 10 FISCAL YEARS
(SEE INDEPENDENT AUDITORS' REPORT)

	2021	2020	2019	2018	2017	2016	2015	2014*
TOTAL PENSION LIABILITY								
Service Cost	$ 19,359	$ 18,342	$ 17,330	$ 16,919	$ 15,861	$ 15,093	$ 14,073	$ 12,727
Interest	39,129	37,417	34,964	32,786	30,959	29,046	27,198	24,974
Changes of Benefit Terms	—	—	—	—	—	—	—	3,534
Differences Between Expected and Actual Experience	(5,043)	(9,115)	(5,973)	379	(6,369)	(4,093)	(2,741)	—
Changes of Assumptions	785	743	9,529	—	—	—	(851)	10,918
Benefit Payments, Including Refunds of Member Contributions	(21,238)	(20,067)	(19,013)	(16,809)	(15,379)	(13,700)	(12,375)	(11,139)
Net Change in Total Pension Liability	32,992	27,320	36,837	33,275	25,072	26,346	25,304	41,014
Total Pension Liability - Beginning	542,985	515,665	478,828	445,553	420,481	394,135	368,831	327,817
Total Pension Liability - Ending (a)	$ 575,977	$ 542,985	$ 515,665	$ 478,828	$ 445,553	$ 420,481	$ 394,135	$ 368,831
PLAN FIDUCIARY NET POSITION								
Contributions - Employer	$ 15,889	$ 15,034	$ 14,155	$ 14,841	$ 14,179	$ 13,428	$ 13,967	$ 12,778
Contributions - Member	4,857	4,749	4,378	4,156	3,904	3,757	3,573	2,979
Net Investment Income	133,778	16,691	31,355	35,808	45,447	4,743	9,983	45,956
Benefit Payments, Including Refunds of Member Contributions	(21,238)	(20,067)	(19,012)	(16,809)	(15,379)	(13,700)	(12,375)	(11,139)
Administrative Expense	(424)	(397)	(439)	(351)	(336)	(341)	(311)	(283)
Net Change in Plan Fiduciary Net Position	132,862	16,010	30,437	37,645	47,815	7,887	14,837	50,291
Plan Fiduciary Net Position - Beginning	494,207	478,197	447,760	410,115	362,300	354,413	339,576	289,285
Plan Fiduciary Net Position - Ending (b)	$ 627,069	$ 494,207	$ 478,197	$ 447,760	$ 410,115	$ 362,300	$ 354,413	$ 339,576
County's Net Pension (Asset)/ Liability - Ending (a)-(b)	$ (51,092)	$ 48,778	$ 37,468	$ 31,068	$ 35,438	$ 58,181	$ 39,722	$ 29,255
Plan Fiduciary Net Position as a Percentage of the Total Pension (Asset)/ Liability	108.87 %	91.02 %	92.73 %	93.51 %	92.05 %	86.16 %	89.92 %	92.07 %
Covered Payroll	$ 134,649	$ 129,605	$ 123,090	$ 119,686	$ 114,349	$ 108,292	$ 103,462	$ 97,542
County's Net Pension (Asset)/ Liability as a Percentage of Covered Payroll	(37.94)%	37.64 %	30.44 %	25.96 %	30.99 %	53.73 %	38.39 %	29.99 %
Expected Average Remaining Service Years of all Participants	7	7	7	7	7	7	7	7

*Information for FY2013 and Earlier is not Available.

Notes to Schedule:

Benefit Changes. None

Changes of Assumptions. The valuation interest rate assumption changed from 7.40% to 7.35% and the post retirement COLA was changed from 2.65% to 2.60%

HOWARD COUNTY RETIREMENT PLAN
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF COUNTY CONTRIBUTIONS
(DOLLAR AMOUNTS IN THOUSANDS)
LAST 10 FISCAL YEARS
(SEE INDEPENDENT AUDITORS' REPORT)

	2021	2020	2019	2018	2017	2016	2015	2014*
Actuarially Determined Contribution[1]	$ 15,889	$ 15,034	$ 14,155	$ 14,003	$ 13,265	$ 13,428	$ 13,967	$ 12,778
Contributions in Relation to the Actuarially Determined Contribution	15,889	15,034	14,155	14,841	14,179	13,428	13,967	12,778
Contribution Deficiency (Excess)	—	—	—	(838)	(914)	—	—	—
Covered Payroll	134,649	129,605	123,090	119,685	114,349	108,292	103,462	97,542
Contributions as a Percentage of Covered Payroll	11.80 %	11.60 %	11.50 %	12.40 %	12.40 %	12.40 %	13.50 %	13.10 %

[1] ADC rates for FY18 and FY17 were 11.7% & 11.6%, respectively.

* Information for FY2013 and Earlier is not Available.

Notes to Schedule

Valuation Date and Actuarial Assumptions:

The actuarially determined contribution amounts are calculated as of the beginning of the fiscal year (July1). The assumptions shown below are those used in the 7/1/2019 actuarial valuation to calculate the FY 2021 ADC and the assumptions used to determine all contributions in the past would not have been the same.

Actuarial Cost Method	Projected Unit Credit (Entry Age Used for GASB 67 purposes)
Amortization Method	Level percent of pay increasing 2.75% per year
Remaining Amortization Period	Remaining amortization periods range from 3 to 20 years.
Asset Valuation Method	5-year smoothed market
Inflation	2.65%
Salary Increases	Varies by service. 3.75% to 6.50%, including inflation
Investment Rate of Return	7.40%, before expenses, including inflation
Retirement Age	Rates vary by participant age and service
Mortality	RP-2014 Combined Healthy tables with generational projection From 2006 base year using scale MP-2017
Cost of Living Increases	2.65%

HOWARD COUNTY RETIREMENT PLAN
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF INVESTMENT RETURNS
LAST 10 FISCAL YEARS
(SEE INDEPENDENT AUDITORS' REPORT)

Fiscal Year Ending	Annual Money-Weighted Rate of Return, Net of Investment Expenses
6/30/2021	25.92 %
6/30/2020	4.10 %
6/30/2019	7.50 %
6/30/2018	8.55 %
6/30/2017	12.18 %
6/30/2016	1.38 %
6/30/2015	2.95 %
6/30/2014	15.62 %
6/30/2013	11.33 %
6/30/2012	(1.21)%