NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 13 - EMPLOYEES' RETIREMENT SYSTEM

Pension Plan Description

Plan Administration

The county sponsors the Macomb County Employees' Retirement System (the "System"), a single employer defined benefit plan covering substantially all of the county's employees. The System was established in accordance with state statutes to provide retirement benefits for the employees of the county and its several offices, boards and departments, including the Department of Roads. The system is administered by a seven member Board of Trustees (the "Pension Board") consisting of the County Executive or his/her designee, the Chair of the Board of Commissioners or his/her designee, the County Treasurer or his/her designee, the Director of the Department of Roads and three (3) active employees elected by the active members of the System on three year staggered terms.

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 13 - EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

Plan Membership

At December 31, 2020 (date of the most recent actuarial valuation), the System's membership consisted of:

	Primary Government	Component Unit	Total
	Government	Onit	Total
Retirees and beneficiaries currently receiving benefits	2,876	188	3,064
Deferred members entitled to benefits but not yet receiving them	470	85	555
Active employees accruing retirement benefits	1,362	78	1,440
Active employees accruing termination benefits	1,141	381_	1,522
	5,849	732	6,581

The plan is closed to new entrants effective January 1, 2016.

Benefits Provided

The System provides retirement, disability and death benefits. Benefit levels and employee contribution rates for union employees are granted through collective bargaining agreements and benefit levels for non-union employees are awarded by the County Executive in accordance with county charter. The Board of Trustees does not have the authority to determine benefit levels. However, the Board of Trustees does have the authority to grant disability retirements. Members become vested in the System after 8 or 15 years of service, depending on their date of hire. The System does not provide for automatic postemployment benefit changes such as cost-of-living adjustments. The following is a summary of the normal retirement benefits provided to the members of the system.

<u>General County</u> – Virtually all employees hired on or before December 21, 2001 may retire if their age plus years of service equals or exceeds 70 and they have attained a minimum age of 50. The annual retirement benefit, payable monthly for life, is computed at 2.4% of final average compensation for the first 26 years of service and 1% for every year thereafter, with a maximum employer pension of 65%. Employees hired on or after January 1, 2002 and certain employees hired before that date not covered by the provisions described above may retire at age 55 with 25 or more years of service or age 60 with 8 years of service. The annual retirement benefit, payable monthly for life, for these employees is computed at 2.2% of final average compensation for each year of service, with a maximum employer pension of 66% of final average compensation.

<u>Sheriff Department</u> – Employees may retire at any age with 25 or more years of service or age 60 with 8 years of service. The annual retirement benefit for the Sheriff and deputies, payable monthly for life, is computed at 2.64% of final average compensation multiplied by credited years of service with a maximum employer pension of 66%. The factor for the undersheriff, captains, jail administrator, command officers, corrections officers and dispatchers is 2.4% for the first 26 years of service and 1% for every year thereafter, with a maximum employer pension of 66% of final average compensation.

<u>Department of Roads</u> – Employees may retire at age 55 with 25 or more years of service, at age 60 with 8 years of service or at age 55 if their age plus years of service equals or exceeds 70. The annual retirement benefit, payable monthly for life, is computed at 2.4% of final average compensation for the first 26 years of service and 1% for every year thereafter, with a maximum employer pension of 65% of final average compensation.

The System also provides death and disability benefits. If an employee leaves covered employment or dies before they are vested, accumulated employee contributions plus interest at the rate of 3.5% per year is refunded to the employee or designated beneficiary.

The System also provides a termination benefit of \$1,000 to all employees hired after January 1, 2016. The benefit is fully vested following five years of service with the county.

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 13 - EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

Contributions

Article 9, Section 24 of the State of Michigan constitution requires that financial benefits arising on account of employee service rendered in each year be funded during that year. Accordingly, the Pension Board retains an independent actuary to determine the annual contribution. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. Contribution requirements of plan members are established by collective bargaining agreement for union members. Contribution rates for nonunion members mirror those of union members with the same benefit levels. The county is required to contribute the difference between the actuarially determined rate and the contribution rate for employees. General county employees contribute 2.5% or 3.5% of their annual salary to the System depending upon classification. Department of Roads employees contribute 3.5% of their annual salary. Sheriff employees contribute 4.0% of their annual salary. The county's required contribution for 2021 was \$13,892,354. The county contributed \$15,560,031 for the year ended December 31, 2021, which represents an excess contribution of \$1,667,677.

Deferred Retirement Option Program (DROP)

The county offers employees the ability to continue employment and be paid a salary after they are fully vested and also receive credits for the retirement benefit payments that would have been paid to them had they left county employment. Employees may receive up to 60 months of DROP credits. The accumulated credits are paid out, including interest at 3.5%, after the employee has fully retired (discontinued providing employee services to the county). The Plan had \$20,132,130 accumulated in DROP accounts at December 31, 2021.

Pension Plan Investments - Policy and Rate of Return

Investment Policy

The pension plan's policy in regard to the allocation of invested assets is established and may be amended by the Pension Board by a majority vote of its members. It is the policy of the Pension Board to pursue an investment strategy that manages risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes.

The pension plan's investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans.

The Board's adopted asset allocation policy as of December 31, 2021 is presented below.

	Target Allocation
Cash and cash equivalents	2%
Domestic equity	36%
International equity	15%
Domestic fixed income	16%
Real estate	10%
Alternative assets	21%
	100%

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 13 - EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

Pension Plan Investments - Policy and Rate of Return (continued)

Rate of Return

The annual money-weighted rate of return on pension plan investments for the year ended December 31, 2021 was 19.51%. The money-weighted rate of return expressed investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Pension Plan Reserves

In accordance with the provisions of the Plan document, the following reserves are required to be set aside within the pension plan:

The **retiree reserve** account is to be computed annually by the actuary as the present value of estimated benefit payments for all current retirees. The amounts reserved may be used solely to pay monthly retiree benefit payments.

The *employee* reserve account is credited as employee contributions are received throughout the year; the Plan maintains a record of the amount contributed by each employee, and credits interest annually at a rate of 3.5%. For any employee who terminates before vesting in the pension plan, their balance is returned to them; for those who stay until retirement, the balance is transferred into the retiree reserve.

The employer reserve account is used to account for the residual net position balance in the pension plan after funding the above two reserves.

The balances of the reserve accounts at December 31, 2021 are as follows:

Primary Government Reserves

	Required		 Actual		Over (Under) Funded
Retiree reserve	\$	721,811,544	\$ 721,811,544	\$	-
Employee reserve		46,584,095	46,584,095		-
Employer reserve		N/A	520,908,708		N/A
Component Unit Reserves					
					Over (Under)
		Required	 Actual		Funded
Retiree reserve	\$	26,195,313	\$ 26,195,313	\$	-
Employee reserve		1,856,323	1,856,323		-
Employer reserve		N/A			N/A
Total Reserves, Employees' F	Retire	ment System			
, , ,		•			Over (Under)
		Required	Actual		Funded
Retiree reserve	\$	748,006,857	\$ 748,006,857	\$	
Employee reserve		48,440,418	48,440,418	•	**
Employer reserve		N/A	520,908,708		N/A

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 13 - EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

Pension Plan Investments - Policy and Rate of Return (concluded)

Net Pension Asset of the County

The December 31, 2021 total pension asset was determined by an actuarial valuation dated December 31, 2020 and rolled forward to the measurement date. Changes in the net pension asset during the year are presented on the following page:

	Primary Government		•			Total
Total Pension Liability Service cost Interest	\$	12,192,446 70,089,505	\$	428,535 2,760,176	\$	12,620,981 72,849,681
Difference between expected and actual experience of the total pension liability Benefit payments, including refunds		(3,726,172)		(130,966)		(3,857,138)
of member contributions		(70,752,222)		(2,737,735)		(73,489,957)
Net change in total pension liability Total pension liability - beginning of year		7,803,557 1,048,874,183		320,010 15,338,078		8,123,567 1,064,212,261
Total pension liability - end of year (a)	\$_	1,056,677,740	\$	15,658,088	\$	1,072,335,828
Plan Fiduciary Net Position Contributions - employer Contributions - employee Net investment income Benefit payments, including refunds of member contributions Administrative expense	\$	15,560,031 2,915,294 211,922,131 (70,752,222) (706,164)	\$	99,995 7,448,548 (2,737,735) (24,820)	\$	15,560,031 3,015,289 219,370,679 (73,489,957) (730,984)
Net change in plan fiduciary net position Plan fiduciary net position - beginning of year		158,939,070 1,133,089,665		4,785,988 20,541,260		163,725,058 1,153,630,925
Plan fiduciary net position - end of year (b)		1,292,028,735	\$	25,327,248	\$_	1,317,355,983
County's net pension (asset) - end of year (a) - (b)		(235,350,995)	\$	(9,669,160)	\$	(245,020,155)
Plan fiduciary net position as a percent of total pension liability		122.27%		161.75%		122.85%
Covered payroll	\$	93,332,920	\$	4,257,005	\$	97,589,925
County's net pension liability (asset) as a percent of covered payroll		-252.16%		-227.14%		-251.07%

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 13 - EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended December 31, 2021, the county recognized a reduction in pension expense of \$52,360,746 and reported deferred outflows and inflows of resources related to pensions from the following sources:

Primary Government						
·	Defe	rred Outflows	Deferred Inflows of			
	of	of Resources		Resources		
Differences between expected and actual						
liability experience	\$	2,456,980	\$	7,613,972		
Differences between projected and actual earnings	*	2, 100,000	•	,,0.0,0.2		
on pension plan investments		_		163,217,452		
on ponelon plan interest in	***************************************	<u> </u>		100,211,102		
Totals, Primary Government	\$	2,456,980	\$	170,831,424		
,	······································					
Component Unit						
Component office	Defe	rred Outflows	Def	ferred inflows of		
		Resources	Resources			
		1100001000		1 tooodi ooo		
Differences between expected and actual						
liability experience	\$	86,357	\$	267,613		
Differences between projected and actual earnings	•	00,00	•	207,010		
on pension plan investments		_		5,736,696		
		******	***************************************	0,, 00,000		
Totals, Component Unit	\$	86,357	\$	6,004,309		
Totals, Employees' Retirement System						
rotalo, Employoco Rotalononi Oyotom	Defe	rred Outflows	Def	erred Inflows of		
		Resources		Resources		
Differences between expected and actual						
liability experience	\$	2,543,337	\$	7,881,585		
Differences between projected and actual earnings	,	_,,	•	.,,		
on pension plan investments		-		168,954,148		
•						
Totals	\$	2,543,337	\$	176,835,733		

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 13 - EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

<u>Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions</u> (concluded)

Amounts reported as deferred outflows and inflows of resources related to pensions will be recognized as a reduction (or increase) of pension expense as follows:

Year Ending December 31,	(Primary Government	Cor	nponent Unit	(tal Reduction (Increase) in asion Expense
2022 2023	\$	38,457,043 64,266,340	\$	1,351,672 2,258,806	\$	39,808,715 66,525,146
2024 2025		37,541,395 27,652,064		1,319,489 971,903		38,860,884 28,623,967
2026		457,602		16,082		473,684
Totals	\$	168,374,444	\$	5,917,952	\$	174,292,396

Actuarial Assumptions

The December 31, 2021 total pension liability was determined by an actuarial valuation as of December 31, 2020, which was then rolled forward to December 31, 2021. The actuarial valuation used the following assumptions, applied to all periods included in the measurement: (a) inflation of 3.0%, (b) salary increases of 3.0% to 18.0% including inflation and (c) investment rate of return of 7.00%, net of pension plan investment expense and adjusted for inflation. Mortality rates were based on the RP-2014 (Base 2006) for all divisions. All divisions used the MP-2018 mortality improvement scale. The actuarial assumptions in the roll forward of the December 31, 2020 valuation were based on the results of an actuarial experience study for the period from December 31, 2012 to December 31, 2017.

Discount Rate

A single discount rate of 7.00% was used to measure the total pension liability. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and employer contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the employee rates.

Projected Cash Flows

Based on those assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Had there been a point where assets were projected to be depleted, a municipal bond rate of 2.25% would have been used in the development of the blended GASB discount rate after that point. The 2.25% is based on the S&P Municipal Bond 20 Year High Grade Rate Index.

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. Best estimates of real rates of return as of December 31, 2021 for each major asset class included in the System's target asset allocation, are summarized in the table on the following page and are presented as geometric means.

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 13 - EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

Projected Cash Flows (concluded)

	Long-Term
	Expected Real
	Rate of Retum
Cash and cash equivalents	0.00%
Domestic equity	7.50%
International equity	8.50%
Domestic fixed income	2.50%
Real estate investment trusts	4.50%
Alternative assets	6.27%

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

The following presents the net pension liability (asset) of the county, calculated using the discount rate of 7.00% percent, as well as what that same liability or asset would be if it were calculated using a discount rate that is one percentage-point lower (6.00%) or one percentage-point higher (8.00%) than the current rate:

	 1% Decrease (6.00%)	Current Rate (7.00%)		1% increa: (8.00%)		
Primary Government Net						
Pension Liability (Asset)	\$ (123,325,628)	\$	(235,350,995)	\$	(329,850,466)	
Component Unit Net						
Pension Liability (Asset)	(5,004,890)		(9,669,160)		(13,386,231)	
• • •						
Total Net Pension Liability (Asset)	\$ (128,330,518)	\$	(245,020,155)	\$	(343,236,697)	

Accounting Principles and Financial Reporting

The System follows accounting principles generally accepted in the United States of America (GAAP) as applicable to governmental units. Accounting and financial reporting pronouncements are promulgated by the Governmental Accounting Standards Board (GASB). The financial statements of the System are included in these financial statements as Employee Retirement and Other Postemployment Benefits Trust funds.

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 13 - EMPLOYEES' RETIREMENT SYSTEM (CONCLUDED)

Accounting Principles and Financial Reporting (concluded)

The System does not issue separate independently audited financial statements; therefore, financial statements as of and for the year ended December 31, 2021 are presented below.

Statement of Fiduciary Net Po	osition	Statement of Changes in Fiduciary	Net Position
ASSETS		ADDITIONS	
Cash and pooled investments	\$ 58,787,318	Investment income (loss):	
Investments, at fair value		Interest and dividends	\$ 9,568,493
Common stock	493,374,964	Net change in fair value of investments	218, 197, 417
Preferred stock	1,563,755	Less investment expenses	(8,395,231)
Foreign stock	94,970,054		
Limited partnership	343,097,070	Net investment income (loss)	219,370,679
Fixed income common collective trusts	107,979,434		
Equity common collective trusts	223,302,146	Contributions	
	\$,	Employer	15,560,031
Total investments	1,264,287,423	Employee	3,015,289
Receivables		Total contributions	18,575,320
Accrued interest	411,577		
Other	280,557	TOTAL ADDITIONS	237,945,999
Due from primary government	•		
Other assets	40,196		
		DEDUCTIONS	
TOTAL ASSETS	1,323,807,071	Benefit payments	73,093,602
		Withdrawals and refunds of contributions	396,355
LIABILITIES		Administrative expenses	730,984
Accounts payable	934,832		
Accrued compensation and benefits	5,478,865	TOTAL DEDUCTIONS	74,220,941
Due to primary government	37,391		
TOTAL LIABILITIES	6,451,088		V.A.
		CHANGE IN NET POSITION	163,725,058
		Net position - beginning of year	1,153,630,925
NET POSITION RESTRICTED FOR			
PENSION BENEFITS	\$ 1,317,355,983	Net position - end of year	\$ 1,317,355,983

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 15 - POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS - DEPARTMENT OF ROADS

Plan Description

The county's Department of Roads sponsors a defined benefit postretirement healthcare plan (the "Plan") that provides certain health care benefits for department of roads retirees and their spouses so long as the retiree is currently receiving a pension from the Macomb County Employees' Retirement System. The Plan is a single employer defined benefit plan administered by the Municipal Employees' Retirement System (MERS). Assets of the Plan are held by MERS.

Benefit provisions are established by the County Board of Commissioners and may be amended in accordance with county policy. Hospitalization insurance is provided through insurance companies, whose premiums are based on the benefits paid during the year.

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 15 - POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS - DEPARTMENT OF ROADS (CONTINUED)

Plan Description (concluded)

The county Department of Roads finances these expenditures through the Department of Roads Special Revenue Fund. At December 31, 2020 (date of the most recent actuarial valuation), membership consisted of:

Retirees and beneficiaries currently receiving benefits	327
Deferred members entitled to benefits but not yet receiving them	19
Active employees covered by the plan	124
	470

Funding Policy

It is the policy of the Department of Roads to fund the annual required contribution (ARC) to the Plan each year. There are no employee contributions to the Plan. The Department of Roads contributed \$6,657,013 to the Plan for the year ended September 30, 2021. Of this amount, \$2,657,013 was for payment of current healthcare invoices, while \$4,000,000 was a contribution to MERS. The total cost of retiree health care benefits, administrative expenses of the plan and investment management fees for the year ended September 30, 2021 was \$2,830,098.

Net OPEB Liability

The September 30, 2021 fiscal year end reported net OPEB liability was determined using a measure of the total OPEB liability and the OPEB net position as of the September 30, 2021 measurement date. The September 30, 2021 measurement date total OPEB liability was determined by an actuarial valuation performed as of December 31, 2020.

Changes in the net OPEB liability during the measurement year were as presented below:

	Increase (Decrease)						
	7	Total OPEB					
Changes in Net OPEB Liability (Asset)	_	Liability	Pla	n Net Position	Net	OPEB Liability	
Balance, beginning of year	\$	89,668,842	\$	80,358,112	\$	9,310,730	
Changes for the year:							
Service cost		727,413		-		727,413	
Interest		5,987,523				5,987,523	
Difference between expected and actual							
experience of the total OPEB liability		(21,851,634)		-		(21,851,634)	
Contributions - employer		-		6,657,013		(6,657,013)	
Net investment income		_		18,393,318		(18,393,318)	
Employer paid benefits		-		(2,657,013)		2,657,013	
Administrative expense		-		(67,729)		67,729	
Changes of assumptions		2,480,594		-		2,480,594	
Benefit payments		(2,657,013)		_		(2,657,013)	
Net changes		(15,313,117)		22,325,589		(37,638,706)	
Balance, end of year	\$	74,355,725	\$	102,683,701	\$	(28,327,976)	

The following changes in assumptions impacted the calculation of the net OPEB liability as of September 30, 2021: The health care trend rates were lowered by 0.75 percent, from 8.25 percent to 7.5 percent, as well as the introduction of a Medicare trend rate at an initial rate of 6.25 percent, decreasing 0.25 percent per year to a 3.5 percent long-term rate.

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 15 - POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS - DEPARTMENT OF ROADS (CONTINUED)

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended December 31, 2021, the Department of Roads recognized a reduction in OPEB expense of \$12,177,169 and reported deferred outflows and inflows of resources related to OPEB from the sources on the following page:

	Deferred Outflows of Resources			Deferred Inflows of Resources		
Differences between expected and actual liability experience Differences between projected and actual earnings	\$	-	\$	11,243,805		
on OPEB plan investments Changes in assumptions	·	- 1,241,474		9,209,902		
Totals	\$	1,241,474	<u>\$</u>	20,453,707		

Amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense as follows:

	Total OPEB			
		Expense		
Year Ending	(I	Reduction in		
September 30,	Expense)			
2022	\$	(11,867,117)		
2023		(2,147,587)		
2024		(2,644,245)		
2025		(2,553,284)		
Total	\$	(19,212,233)		

Actuarial Assumptions for Determining the Total OPEB Liability

The total OPEB liability was calculated as of September 30, 2021 using the Department of Roads Retiree Health Care Plan valuation as of December 31, 2020. Key actuarial assumptions are as follows:

Expected Point in Time at Which Benefit Payments will Begin to be Made	Age-based table of rates specific to the type of eligibility condition.					
Marital Status and Dependency Status	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.					
Mortality						
Healthy Pre-Retirement	RP-2014 Healthy Annuitant Mortality Table, adjusted for mortality improvements with MP-2018.					
Healthy Post-Retirement	105% of the male and 110% of the female RP-2014 Healthy Annuitant Mortality Table, adjusted for mortality improvements with MP-2018.					
Disability Retirement	106% of the male and 114% of the female RP-2014 disabled mortality table, adjusted for mortality improvements with MP-2018.					

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 15 - POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS - DEPARTMENT OF ROADS (CONTINUED)

Actuarial Assumptions for Determining the Total OPEB Liability (concluded)

Turnover / Withdrawal Rates	Experienced-based table of rates. Assumed turnover rates are based on years of service for members with less than 5 years' service and are based on age for members with
Healthcare Cost Trend Rate	more than 5 years' service. Non-Medicare: Initial rate of 7.50%, reduced by 0.25% per year to a 3.50% long-term rate after 12 years. Medicare: Initial rate of 6.25%, reduced by 0.25% per year to a 3.50% long-term rate after 12 years.
Coverage Options	Determined by union membership and original date of hire at the date of retirement. 80% of retirees were assumed to elect two-person health care coverage at retirement.
Inflation Rate	2.50%
Payroli Growth Rate	3% - 15% Percentages include inflation
Investment Rate of Return	6.75%, net of OPEB plan expenses

Inactive plan members do not share in the cost of OPEB. The actuarial assumptions in the roll forward of the December 31, 2020 valuation were based on the results of an actuarial experience study for the period from December 31, 2012 to December 31, 2017.

Discount Rate

A single discount rate of 6.75% was used to measure the total OPEB liability. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and employer contributions will be made at rates equal to the actuarially determined contribution rates.

Based on these assumptions, the OPEB 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 OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Investment Rate of Return and Investment Policy

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates or return (expected returns, net of 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 Plan's investment policy in regard to the allocation of invested assets is established and may be amended by amending the agreement with MERS, which requires approval by the County Executive and a majority vote of the Board of Commissioners. For the year ended September 30, 2021, there were no changes to the Plan's investment policy.

Best estimates of arithmetic real rates of return for each major asset class as well as the board's adopted asset allocation policy as of September 30, 2021 are summarized in the following table.

	Long-Term Expected Real Rate of Return	Targeted Asset Allocation Policy		
International fixed income	0.48%	20.00%		
International equities	2.97%	60.00%		
Real assets	1.40%	20.00%		

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 15 - POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS - DEPARTMENT OF ROADS (CONTINUED)

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability of the county related to the Department of Roads OPEB plan, calculated using the discount rate of 6.75% percent, as well as what that same liability would be if it were calculated using a discount rate that is one percentage-point lower (5.75%) or one percentage-point higher (7.75%) than the current rate:

	1% Decrease		Current Rate		1% Increase		
	(5.75%)		(6.75%)		(7.75%)		
Net OPEB liability (asset)	\$	(19,369,548)	\$	(28,327,976)	\$	(35,780,360)	

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend

The table on the following page presents the net OPEB liability of the county related to the Department of Roads OPEB plan, calculated using the healthcare cost trend rate of 9% percent, as well as what that same liability would be if it were calculated using a healthcare trend rate that is one percentage-point lower (8%) or one percentage-point higher (10%) than the current rate.

-	1	1% Decrease (7.25%)		Current Rate (8.25%)		1% Increase (9.25%)	
Net OPEB liability (asset)	\$	(36,415,207)	\$	(28,327,976)	\$	(18,568,473)	

Rate of Return

The annual money-weighted rate of return on Plan investments for the year ended September 30, 2021 was 20.30%. The money-weighted rate of return expressed investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Basis of Accounting and Financial Reporting

The financial statements of the Roads Retiree Health Care Trust Fund are prepared using the accrual basis of accounting. Employee and employer contributions are recognized in the period that the contributions are due. Benefits and refunds are recognized when due and payable according to the terms of the plan.

Separate independently audited financial statements are not issued for the Plan. Therefore, financial statements as of and for the year ended September 30, 2021 are presented on the following page.

NOTES TO THE BASIC FINANCIAL STATEMENTS

December 31, 2021

NOTE 15 - POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS - DEPARTMENT OF ROADS (CONCLUDED)

Basis of Accounting and Financial Reporting (concluded)

Statement of Fiduciary Net Po	sition	Statement of Changes in Fiduciary	Net Position
	Roads Retiree Health Care Investment Trust Fund		Roads Retiree Health Care Investment Trust Fund
ASSETS Investments, at fair value Interest in pooled investment	\$ 102,683,701	ADDITIONS Investment income (loss): Net change in fair value of investments Less investment expenses	\$ 18,498,674 (105,356)
		Net investment income (loss)	18,393,318
	ų	Contributions Employer TOTAL ADDITIONS	6,657,013 25,050,331
		DEDUCTIONS Benefit payments Administrative expenses	2,657,013 67,729
		TOTAL DEDUCTIONS	2,724,742
NET POSITION RESTRICTED FOR		CHANGE IN NET POSITION Net position - beginning of year	22,325,589 80,358,112
OTHER POSTEMPLOYMENT BENEFITS	\$ 102,683,701	Net position - end of year	\$ 102,683,701

NOTE 16 - AGGREGATE PRIMARY GOVERNEMNT POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS INFORMATION

The county reported primary government totals related to its OPEB plans as detailed below:

Ger		Footnote 14 neral and Sheriff OPEB Plan		Footnote 15 Department of Roads OPEB Plan		Primary emment Totals
Net OPEB Asset	\$, -	\$	28,327,976	\$	28,327,976
Net OPEB Liability	4	5,432,527		-		45,432,527
Deferred inflows	17	8,202,781		20,453,707		198,656,488
Deferred outflows	6	8,082,565		1,241,474		69,324,039
OPEB expense	(3	4,819,686)		(12,177,169)		(46,996,855)
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