MERS®
Municipal Employees' Retirement System

GASB 68

Implementation Guide

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GUIDE OVERVIEW

This guide is provides a general overview of the GASB implementation process based on the year 2022. For data relevant to the current year, please see the appendix on page 23.

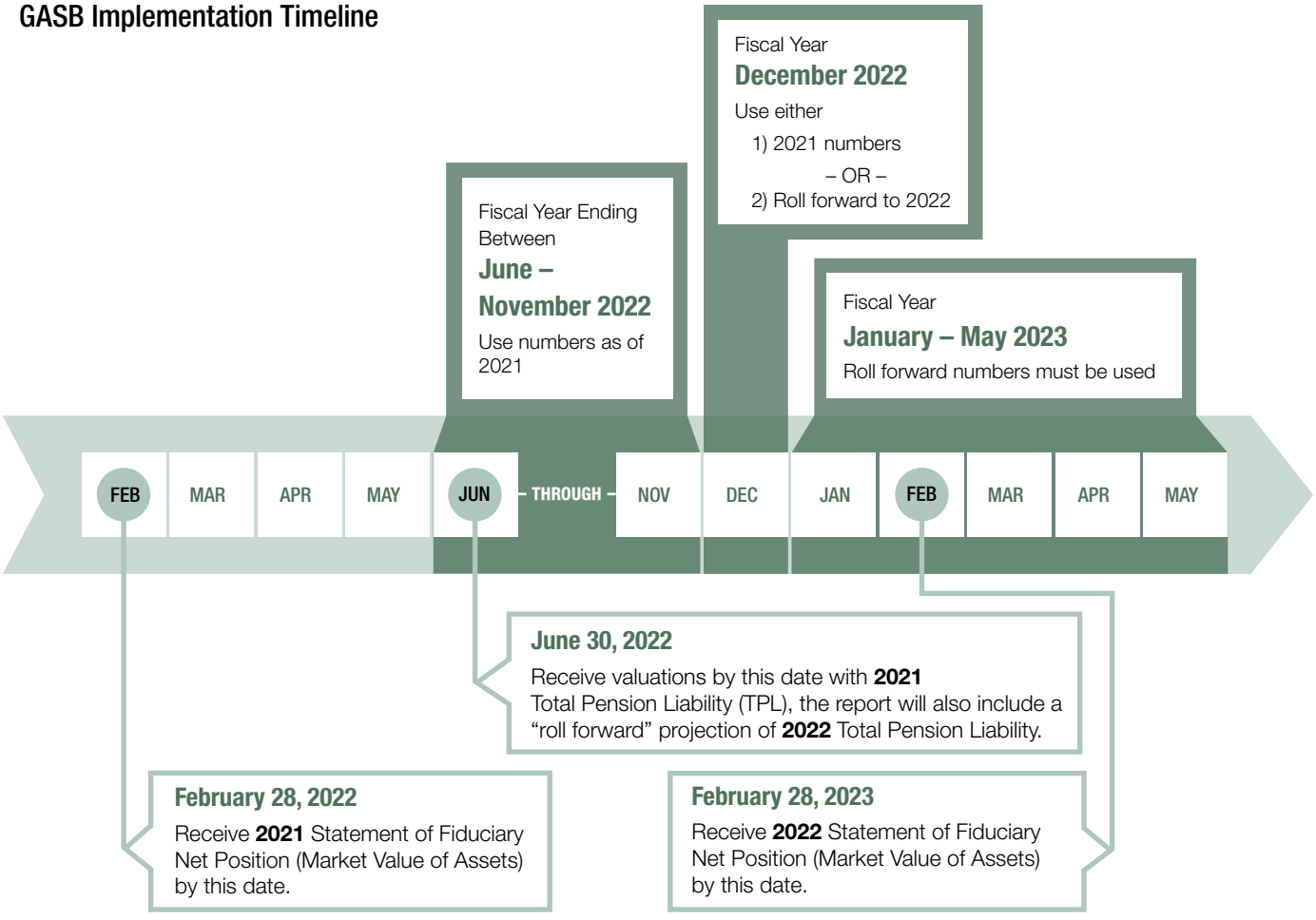
CONTENTS

OVERVIEW & TIMELINE

This implementation guide is intended to assist you in preparing the related financial statements associated with the Government Accounting Standards Board (GASB) Statement 68 relating to pensions. It will provide examples of how to construct the required charts, journal entries, note disclosures and required supplementary information. Excel templates are also available to help you prepare and maintain the financial statements and record keeping. The responsibility for preparing the financial statements resides with the municipality; however we have many helpful resources on our website mersofmich.com. GASB allows for different measurement dates to be used based on each municipality's needs.

- For municipalities with fiscal years ending between June – November 2022, numbers as of December 2021 will be necessary.
- For municipalities with fiscal years ending December 2022, GASB allows an option to use numbers as of December 2021 or "Roll Forward" numbers. A roll forward or projected number for those municipalities whose year-end falls in a time period where it will be difficult to have an actuarial valuation done in sufficient time with the closing of the municipality's books. If you choose to roll forward to December 2022, or if you rolled forward in a previous year, however, you are 'locked in' to using the roll forward numbers going forward. You do not need to notify MERS if you decide to roll forward.
- For municipalities with fiscal years ending January – May 2023, roll forward numbers are necessary to be used.

GASB Implementation Timeline



Net Pension Liability

Net Pension Liability is the difference between the Total Pension Liability and the Fiduciary Net Position (also called Market Value of Assets) as of the measurement date. For MERS municipalities the measurement date is December 31st of each year.

Total Pension Liability (TPL)

This number is similar to the Actuarial Accrued Liability

−

Fiduciary Net Position

The actual amount of assets held in the pension trust for a plan at the measurement date

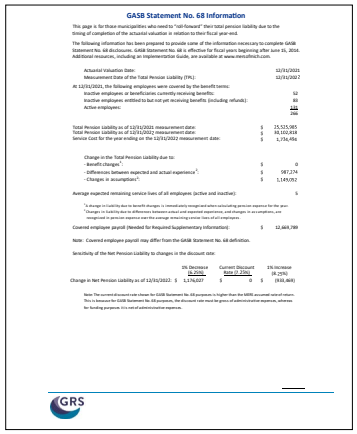
=

Net Pension Liability

Total Pension Liability will be supplied by the actuary in the GASB 68 information section of your annual valuation, see Figure 1. This report is delivered to you by June 30th of each year, and is located on your employer portal.

Market Value of Assets is located on your Statement of Fiduciary Net Position dated December 31, 2021, or 2022 if using roll forward numbers. MERS will email this report in February of each year, see Figure 2. Please also see the annual adjustment process on page 19.

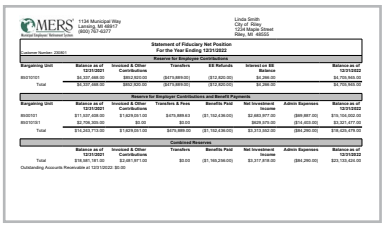
Figure 1



GASB Statement No. 68 Information

Click to open

Figure 2



Click to open

Net Pension Liability does not necessarily need to have its own line in your financial statements; this determination will depend on the size of the liability relative to other items on your financial statements. It is important to note that Net Pension Liability is a long-term liability, and is not immediately payable. The yearly employer contribution that you make to your pension plan is calculated separately by the actuary and is in the executive summary of your annual valuation.

CALCULATING NET PENSION LIABILITY

Step 1: Calculate Interest on Total Pension Liability

To calculate the interest on Total Pension Liability, you'll need the service cost, actual pension benefit payment amount, and amount of any employee refunds. Note that once you calculate the interest on the Total Pension Liability component, you will need to record this number in the Total Pension Liability in Step 2.

Example: Interest on the Total Pension Liability

	Amount (a)	Time Period* (b)	Interest** (c)	Calculation (a) x (b) x (c)
Beginning of year Total Pension Liability	$25,525,985	1.0	0.0725	1,850,634
Located on actuarial valuation GASB 68 page				
Service Cost (positive number)	1,734,494	0.5	0.0725	62,875
Located on actuarial valuation GASB 68 page				
Benefit Payments (negative number)	-1,165,256	0.5	0.0725	-42,241
Located on MERS Statement of Fiduciary Net Position				
Employee Refunds (if any) (negative number)	0	0.5	0.0725	0
Located on MERS Statement of Fiduciary Net Position				
Interest on Total Pension Liability				**1,871,269**

** A half year is used because generally service cost, pension benefits and employee refunds occur throughout the year. Your fiscal year end will not change the time period of calculation because the measurement period is through December 31st.*

*** The interest rate used is the investment rate of return plus 0.25% because for GASB purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes, it is net of administrative expenses. When an assumption in the interest rate occurs, there is a one-year lag in using the new assumption for GASB 68 purposes. For example, MERS changed the assumed rate of return effective 12/31/21 from 7.35% to 7.00% but this was not reflected until the 2022 GASB calculations.*

Click to open Interest on TPL Template

Step 2: Calculate Net Pension Liability

The example below shows the two main parts of the Net Pension Liability, and how it is calculated. Subsequent calculations and journal entries will be derived from this worksheet.

Example: Calculating Net Pension Liability

Changes in Net Pension Liability	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 12/31/21 Total Pension Liability is found in the annual actuarial valuation on the GASB 68 page. Fiduciary Net Position is found on the MERS Plan Fiduciary Net Position. *	$25,525,985	$18,581,181	$6,944,804*
Changes for the Year			
Service Cost Located on the annual actuarial valuation GASB 68 page	1,734,494		1,734,494
Interest on Total Pension Liability *Calculated in Step 1*	1,871,269		1,871,269
Changes in benefits (If any. See also appendix.) Located on the annual actuarial valuation GASB 68 page	0		0
Difference between expected and actual experience Located on the annual actuarial valuation GASB 68 page	987,274		987,274
Changes in assumptions Located on the annual actuarial valuation GASB 68 page	1,149,052		1,149,052
Employer Contributions Located on the MERS Statement of Fiduciary Net Position		1,629,051	(1,629,051)
Employee Contributions Located on the MERS Statement of Fiduciary Net Position		852,920	(852,920)
Net investment income Located on the MERS Statement of Fiduciary Net Position		3,317,818	(3,317,818)
Benefit payments, including employee refunds Located on the MERS Statement of Fiduciary Net Position	(1,165,256)	(1,165,256)	0
Administrative expense Located on the MERS Statement of Fiduciary Net Position		(82,290)	82,290
Other changes**	0		0
Net changes	**4,576,833**	**4,552,243**	**24,590**
Balances as of 12/31/22*** Total Pension Liability is found in the annual actuarial valuation on the GASB 68 page & Plan Fiduciary Net Position is found on the current year MERS Plan Fiduciary Net Position	**$30,102,818**	**$23,133,424**	**$6,969,394**

**Note this number is the Net Pension Liability from prior year and should match the number calculated last year.*

***Other changes is an amount necessary to reconcile the current year Total Pension Liability number from the GASB 68 section of the valuation with the numbers calculated above. It will vary from year to year, but is necessary to get the Total Pension Liability number supplied by the actuary to tie out.*

****Note that you will need to input this number in green shading from the actuarial valuation GASB 68 page. It may seem contradictory but is necessary.*

Click to open NPL Calculation Template

Deferred Outflows and Inflows

GASB 68 requires you to report deferred outflows and inflows in your financial statements. Deferred outflows and inflows are somewhat similar to depreciation in that a dollar amount is spread over a fixed period of time, beginning in the current measurement period using a systematic and rational method. The next steps will show the calculations of the deferred outflows and inflows and the related Deferred Outflows and Inflows Template that will show these amounts and the years that these numbers will be allocated over. GASB requires three items in the deferred outflows and inflows in pension expense calculation:

1) Differences in Experience (calculated in Step 3 below)
2) Differences in Assumptions (calculated in Step 3 below)
3) Differences between Expected and Actual Investment Returns (calculated in Step 4)

The deferred outflows and inflows spreadsheet is updated in Step 5.

Step 3: Calculate the Recognition of Experience & Assumption Changes

This calculation will be used in the pension expense calculation shown in *Step 6*.

Example

		Experience	Assumptions
Amount Located on the annual actuarial valuation GASB 68 page	(a)	$987,274	$1,149,052
Years to amortize Located on the annual actuarial valuation GASB 68 page	(b)	5	5
Calculated amount	**(a) / (b)**	**$197,455**	**$229,810**
Amount to be deferred*		$789,819	$919,242

**Note these amounts will need to be recorded as a journal entry in Step 7 on page 12.*

Click to Open Experience & Assumption Change Template

Step 4: Calculate the Projected Investment Return & Recognition of Investment Gain or Loss

Net Investment Income Projections

	Amount (a)	Time Period* (b)	***Interest (c)	Calculation (a) x (b) x (c)
Beginning of year Fiduciary Net Position Located on Statement of Fiduciary Net Position	18,581,181	1.0	0.0725	1,347,136
Employer Contributions Located on Statement of Fiduciary Net Position	1,629,051	0.5	0.0725	59,053
Employee Contributions Located on Statement of Fiduciary Net Position	852,920	0.5	0.0725	30,918
Benefit Payments Located on Statement of Fiduciary Net Position	(1,165,256)	0.5	0.0725	(42,241)
Employee Refunds, if any Located on Statement of Fiduciary Net Position	0	0.5	0.0725	0
Administrative Expenses Located on Statement of Fiduciary Net Position	(82,290)	0.5	0.0725	(2,983)
Projected Net Investment Income				**$1,391,884**
Actual Net Investment Income for the year** Located on Statement of Fiduciary Net Position				**$3,317,818**
Excess (Deficit) Investment returns Difference between Projected Net Investment Income and Actual Net Investment Income for the year				**$1,925,934**
Excess (Deficit) Investment returns to allocate for year Excess (Deficit) Investment returns divided by 5 (returns are always allocated for 5 years)				**$385,187**
Remaining excess/(deficit) investment returns to be deferred				**$1,540,748**

** A half year is used because, generally, employer and employee contributions, pension payments, and administrative expenses are spread throughout the year.*

***In some years, the actual net investment income amount will be positive or negative depending on market conditions.*

**** The interest rate used is the investment rate of return plus 0.25% because for GASB purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes, it is net of administrative expenses. When an assumption in the interest rate occurs, there is a one-year lag in using the new assumption for GASB 68 purposes. For example, MERS changed the assumed rate of return effective 12/31/21 from 7.35% to 7.00% but this was not reflected until the 2022 GASB calculations.*

Click to open Investment Income Template

Step 5: Update the Deferred Outflows and Infalows Spreadsheet

You will need to maintain this schedule for subsequent years' deferrals. There are different dollar amounts that will come from the actuary each year and those amounts will be seen in the GASB 68 section of your annual actuarial valuation as calculated in Step 3. These amounts are calculated over the remaining service lives of the members, also seen in the GASB 68 section of the annual actuarial valuation. In the case of net investment income returns above or below the expected investment return, the difference is recognized over a period of five years. The expected investment return is calculated in Step 4.

You will add to this spreadsheet an additional set of deferrals each year. We have shown the first year deferrals in the example below.

Deferred Outflows and Inflows Timeline (Layers) Related to Pension Expense Year 1 (Note: The example is from Year 1.)

	Total (O/I) to be Deferred	Amortization Years	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
2015 Excess (Deficit) Investment Returns													
Calculated in Step 4	($125,814)	5	($25,163)	($25,163)	($25,163)	($25,163)	($25,162)						($125,814)
2016 Excess (Deficit) Investment Returns		5											
2017 Excess (Deficit) Investment Returns		5											
Increase/(decrease) in pension expense			(25,163)	(25,163)	(25,163)	(25,163)	(25,162)	0	0	0	0	0	(125,814)
2015 Differences in experience Located on annual actuarial valuation GASB 68 page													
Calculated in Step 3	104,807	8	13,101	13,101	13,101	13,101	13,101	$13,101	$13,101	$13,100			104,807
2016 Differences in experience													0
2017 Differences in experience													0
Increase/(decrease) in pension expense			13,101	13,101	13,101	13,101	13,101	13,101	13,101	13,100	0	0	104,807
2015 Differences in assumptions Located on annual actuarial valuation GASB 68 page													
Calculated in Step 3	(135,344)	8	(16,918)	(16,918)	(16,918)	(16,918)	(16,918)	(16,918)	(16,918)	(16,918)			(135,344)
2016 Differences in assumptions													0
2017 Differences in assumptions													0
Increase/(decrease) in pension expense			(16,918)	(16,918)	(16,918)	(16,918)	(16,918)	(16,918)	(16,918)	(16,918)	0	0	(135,344)
Net increase (decrease) in pension expense			**(28,980)**	**(28,980)**	**(28,980)**	**(28,980)**	**(28,979)**	**(3,817)**	**(3,817)**	**(3,818)**	**0**	**0**	**(156,351)**

Differences in experience and assumptions are allocated out over the remaining service lives of active and inactive employees (can vary somewhat but usually consistent in years); These numbers and the service lives of the active and inactive employees are found in the GASB 68 section of the valuation.
Above dates are based on a measurement date of December 31.
The annual actuarial valuations will add new layers each year. There will also be a yearly calculation of investment returns different from the expected returns.
Note: deferred inflows are recorded as negative amounts and deferred outflows are recorded as positive amounts.

Subsequent years are also shown for illustrative purposes to show how the different layers of deferrals are added to the example above.

Deferred Outflows and Inflows Timeline (Layers) Related to Pension Expense for Years 1, 2, and 3

	Total to be Deferred	Years	2021	2022	2023	2024	2025	2026	2027	Total
2018 Excess (Deficit) Investment Returns	(125,814)	5	-25,163	-25,162						-25,162
2019 Excess (Deficit) Investment Returns	306,421	5	61,284	61,284	61,284					122,568
2020 Excess (Deficit) Investment Returns	(72,992)	5	-14,598	-14,598	-14,598	-14,598				-43,795
2021 Excess (Deficit) Investment Returns	(1,925,934)	5	-385,187	-385,187	-385,187	-385,187	-385,187			-1,540,747
Increase (decrease in pension expense)			**-363,664**	**-363,663**	**-338,501**	**-399,785**	**-385,187**	**0**	**0**	**-1,487,136**
2018 Differences in experience	104,807	8	13,101	13,101	13,101	13,101	13,100			52,403
2019 Differences in experience	(55,620)	8	-6,953	-6,953	-6,953	-6,953	-6,953	-6,949		-34,759
2020 Differences in experience	16,435	8	2,054	2,054	2,054	2,054	2,054	2,054	2,054	12,326
2021 Differences in experience	987,274	5	197,455	197,455	197,455	197,455	197,455			789,819
Increase (decrease in pension expense)			**205,658**	**205,658**	**205,658**	**205,658**	**205,657**	**-4,895**	**2,054**	**819,789**
2018 Differences in assumptions	(135,344)	8	-16,918	-16,918	-16,918	-16,918	-16,918			-67,672
2019 Differences in assumptions	2,403,119	8	300,390	300,390	300,390	300,390	300,390	300,389		1,501,949
2020 Differences in assumptions	-									0
2021 Differences in assumptions	1,149,052	5	229,810	229,810	229,810	229,810	229,810			919,242
Increase (decrease in pension expense)			**513,282**	**513,282**	**513,282**	**513,282**	**513,282**	**300,389**	**0**	**2,353,518**
Net increase (decrease) in pension expense			**$355,276**	**$355,277**	**$380,439**	**$319,155**	**$333,752**	**$295,494**	**$2,054**	**$1,686,171**

Investment returns in excess of expected are allocated out over 5 years, see also Schedule 7 for the calculation of this amount.

Differences in experience and assumptions are allocated out over the remaining service lives of Active and Inactive employees (can vary somewhat but usually consistent in years); These numbers and the service lives of the active and inactive employee, are found in the GASB 68 section of the actuarial valuation.

Above dates are based on a measurement date of December 31.

The actuarial valuations will add new layers each year. There will also be a yearly calculation of investment returns different from the expected returns that will be added each year.

Note: that deferred outflows are negative and deferred inflows are positive.

Click to Open Deferred Outflows and Inflows Timeline Template

Recording the Yearly Pension Expense

Pension expense is the difference in Net Pension Liability from the previous measurement date to the current measurement date, with some adjustments the calculations will take into account. Unlike prior years, your pension expense will no longer be the same as your required employer contributions.

The GASB 68 standard requires that pension expense calculations be performed and that journal entries be prepared.

Step 6: Calculate Pension Expense

Pension Expense Calculation as of Measurement Period 12/31/22

Service Cost Located on the annual actuarial valuation GASB 68 page	$1,734,494
Interest on Total Pension Liability - over measurement period See calculation from *Step 1*	1,871,269
Benefit Changes (If any. See also appendix.) Located on the annual actuarial valuation GASB 68 page	0
Recognition of Experience Changes See calculation from *Step 3**	205,658
Recognition of Assumption Changes See calculation from *Step 3**	513,282
Recognition of Investment Gain or Loss** See calculation from *Step 4*	(363,664)
Projected Investment Income See calculation from *Step 4*	(1,391,884)
Employee Contributions Located on Statement of Fiduciary Net Position	(852,920)
Administrative Expense Located on Statement of Fiduciary Net Position	82,290
Other Changes See calculation from *Step 2*	0
Total Pension Expense recognized	**$1,798,525**

Note: Employer contributions and benefit payments have NO direct impact on expense.

** Note: This is located on the Deferred Outflows and Inflows Table for (shown on page 10).*

***The value of the input will be the opposite of the amount you calculate in Step 4 (i.e. If investment returns were lower than projected, this number would be entered as a positive causing an increase in pension expense.)*

Click to open Pension Expense Template

Journal Entries for Pension Expense, Deferred Outflows and Inflows and Ending Balances

	Debit	Credit
Pension Expense		
See calculation from Step 6	1,798,525	
Net Pension Liability		1,798,525
Net Pension Liability	1,540,748	
Deferred inflow invest		1,540,748
Deferred inflow experience	789,819	
Net Pension Liability		789,819
Deferred Outflow assumptions	919,242	
Net Pension Liability		919,242

Click to Open Journal Entries Template

Previous years' deferred outflow/inflows were recorded to recognize a portion of the assumption changes, experience changes and differences between expected and actual investment returns that had not yet been expensed. At the time those amounts were adjusted as either a debit or credit to deferred outflow/inflows and an offset against net pension liability. Now we will need to reclass a portion of those deferrals as follows:

Deferred inflow/outflow investments	25,163	
Deferred inflow/outflow investments		61,284
Deferred inflow/outflow investments	14,598	
Deferred inflow/outflow experience		13,101
Deferred inflow/outflow experience	6,953	
Deferred inflow/outflow experience		2,054
Deferred inflow/outflow assumptions	16,918	
Deferred inflow/outflow assumptions		300,390
Net Pension Liability	313,197	

This entry is necessary to match the net pension liability amount calculated in Step 2, tie to your trial balance and general ledger. These amounts are taken from the prior years' deferrals on page 10. After all the entries are recorded, the ending balances would be as follows:

Balances at Fiscal Year End		
Net Pension Liability *See Step 2*		6,969,394
Deferred inflows investments		1,487,136
Deferred outflows experience	819,788	
Deferred outflows assumptions	2,353,219	

Note: This amount should match the amount calculated in Step 2

Journal Entries for Pension Expense, Deferred Outflows and Inflows and Ending Balances

*Reconciliation of Net Pension Liability**

Beginning Net Pension Liability	$6,944,804
Pension Expense for current year	1,798,525
Deferred I/O investments current year	(1,540,748)
Deferred I/O experience current year	789,819
Deferred I/O assumptions current year	919,242
Employer Contributions	(1,629,051)
Rounding	0
Journal entry needed for previous year deferrals	(313,197)
Ending Net Pension Liability	$6,969,394
Actual Net Pension Liability from Step 2	6,969,394
Difference	0

**Note: This schedule is optional and is designed to help you reconcile your net pension liability. It is not required for either your financial statements or notes.*

Click to open Reconciliation of Net Pension Liability Template

NOTE DISCLOSURES

Note disclosures are required by GASB to help explain the pension plan and Net Pension Liability calculations associated with the plan. These are rather significant and will involve many of the templates that have been completed in previous steps as well as your annual actuarial valuation.

Below are examples of note disclosures that you can customize and then copy and paste into your financial statements. For updated changes that may impact the note disclosures, please see *page 23*.

Summary of Significant Accounting Policies

Pensions. For purposes of measuring the Net Pension Liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Municipal Employees Retirement System (MERS) of Michigan and additions to/deductions from MERS' fiduciary net position have been determined on the same basis as they are reported by MERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

General Information about the Pension Plan

Plan Description. The employer's defined benefit pension plan provides certain retirement, disability and death benefits to plan members and beneficiaries. The employer participates in the Municipal Employees Retirement System (MERS) of Michigan. MERS is an agent multiple-employer, statewide public employee pension plan established by the Michigan Legislature under Public Act 135 of 1945 and administered by a nine member Retirement Board. MERS issues a publicly available financial report that includes financial statements and required supplementary information. This report may be obtained accessing the MERS website at *mersofmich.com*.

Benefits Provided

Table 2

01 – Example Division

	Current Year Valuation
Benefit Multiplier:	2.25% multiplier (80% max)
Normal Retirement Age:	60
Vesting:	6 years
Early Retirement (Unreduced)	55/30
Early Retirement (Reduced)	50/25
	55/15
Final Average Compensation	3 years
COLA for Future Retirees	2.50% (non-compound)
Member Contributions	4%
Act 88:	Yes (adopted 9/24/1996)

Instructions

Copy and paste

Copy and paste

There are several ways to present this data.

Option 1)

Copy Table 2 from your annual valuation.

Benefits provided include plans with multipliers ranging from [ ] to [ ].

Vesting periods range from [ ] to [ ] years.

Normal retirement age is 60 with early retirement at [ ] with [ ] years of service

Final average compensation is calculated based on [ ] years. Member contributions range from [ ] to [ ].

Option 2)

If you have many divisions you can summarize the benefit provisions.

Employees covered by benefit terms. At the December 31st [ ] valuation date, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	[ ]
Inactive employees entitled to but not yet receiving benefits	[ ]
Active employees	[ ]
	[ ]

Refer to the GASB 68 section of the annual valuation report for membership summary numbers.

If the pension plan is closed to new employees, the employer should disclose this fact, as required by paragraph 40b of GASB 68.

Contributions. The employer is required to contribute amounts at least equal to the actuarially determined rate, as established by the MERS Retirement Board. The actuarially determined rate is the estimated amount necessary to finance the cost of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The employer may establish contribution rates to be paid by its covered employees.

Employer contributions range from [ ] to [ ] based on annual payroll for open divisions. One division that is closed to new employees has an annual employer contribution amount of [ ].

You will need to enter the contribution rates (in dollars or as a percentage of covered payrolls) made during the reporting period, then copy and paste.

Net Pension Liability. The employer's Net Pension Liability was measured as of December 31, [ ], and the total pension liability used to calculate the Net Pension Liability was determined by an annual actuarial valuation as of that date.

Enter the date of the annual valuation, then copy and paste.

Actuarial assumptions. The total pension liability in the December 31, [ ] annual actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation: 2.5%

Salary increases 3% plus merit and longevity: 3.0% in the long-term

Investment rate of return: 7.00%, net of investment and administrative expense including inflation

Enter the date of the annual valuation, then copy and paste. Assumptions can change annually, so be sure to update this section each year.

Although no specific price inflation assumptions are needed for the valuation, the 3.0% long-term wage inflation assumption would be consistent with a price inflation of 3-4%.

Mortality rates used were based on a version of Pub-2010 and fully generational MP-2019.

The actuarial assumptions used in valuation were based on the results of the most recent actuarial experience study.

The long-term expected rate of return on pension plan investments was determined using a model method in which the best-estimate ranges of expected future real rates of return (expected returns, net of investment and administrative expenses 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 best estimates of geometric real rates of return for each major asset class are summarized in the following table:

If the employer includes an ad hoc post-employment benefit change (commonly referred to as COLA) that information needs to be disclosed. Note that this applies to very few employers, and MERS has contacted them directly.

Asset Class	Target Allocation	Target Allocation Gross Rate of Return	Long-Term Expected Gross Rate of Return	Inflation Assumption	Long-Term Expected Real Rate of Return
Global Equity	60.0%	7.00%	4.20%	2.50%	2.70%
Global Fixed Income	20.0%	4.66%	0.93%	2.50%	0.43%
Private Investments	20.0%	9.00%	1.80%	2.50%	1.30%
TOTAL	**100.00%**		**6.93%**		**4.43%**

Discount rate. The discount rate used to measure the total pension liability can vary. See *page 23* for the current discount rate used. The current discount rate shown for GASB 68 purposes is higher than the MERS assumed rate of return. This is because, for GASB 68 purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes, it is net of administrative expenses. The projection of cash flows used to determine the discount rate assumes that employer and employee contributions will be made at the rates agreed upon for employees and the actuarially determined rates for employers. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to pay 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.

Changes in Net Pension Liability

Calculating the Net Pension Liability			
Changes in Net Pension Liability	**Increase (Decrease)**		
Balances Prior Year	**Total Pension Liability (a)**	**Plan Fiduciary Net Position (b)**	**Net Pension Liability (a) - (b)**
Changes for the Year			
Service Cost			
Interest on Total Pension Liability			
Changes in benefits			
Difference between expected and actual experience			
Changes in assumptions			
Employer Contributions			
Employee Contributions			
Net investment Income			
Benefit payments, including employee refunds			
Administrative expense			
Other changes			
Net changes			
Balances Current Year			

Insert table from Step 2

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the Net Pension Liability of the employer, calculated using the discount rate of 7.25% as well as what the employer's Net Pension Liability would be using a discount rate that is 1 percentage point lower (6.25%) or 1% higher (8.25%) than the current rate.

	1% Decrease 6.25%	**Current Discount Rate 7.25%**	**1% Increase 8.25%**
Net Pension Liability From *Step 2 Excel Calculation*		7,059,731	
Change in Net Pension Liablity (NPL) *From actuarial valuation GASB 68 page*	1,176,027		(933,469)
Calculated NPL for your Notes	**$8,235,758**	**$7,059,731**	**$6,126,262**

You will need to do this calculation. Total Pension Liability and current discount rate are located on the GASB 68 page of your annual actuarial valuation, and your Fiduciary Net Position is located on your Statement of Fiduciary Net Position.

Rates shown are subject to change. Please see page 23 for current rates.

Note: The current discount rate shown for GASB 68 purposes is higher than the MERS assumed rate of return. This is because for GASB purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes, it is net of administrative expenses.

Click to Open Sensitivity to Changes in Discount Rate Template

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

For the year ended [ ] the employer recognized pension expense of [ ]. The employer reported deferred outflows and inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences in experience	$	$
Differences in assumptions	$	$
Excess (Deficit) Investment Returns	$	$
Contributions subsequent to the measurement date*	$	$
Total	$	$

*The amount reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized as a reduction in the Net Pension Liability for the year ending [ ].

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

Year ended	
2022	[ ]
2023	[ ]
2024	[ ]
2025	[ ]
2026	[ ]
Thereafter	[ ]

REQUIRED SUPPLEMENTARY INFORMATION

Required supplementary information schedules are required with GASB 68. The Schedule of Employer Contributions shows the employer's required annual contributions from the annual actuarial valuation, compared with the actual contributions remitted over the past ten years. This schedule can be filled out prospectively but many employers will have the information from prior years.

The Schedule of Changes In Employer's Net Pension Liability and Related Ratios shows the changes in total pension liability less the statement of changes in fiduciary net position resulting in the Net Pension Liability calculation for the employer. There are ratios calculated, as well, involving covered employee payrolls. Note that this is a 10 year schedule prospectively.

- Schedule of Changes in Employer's Net Pension Liability and Related Ratios
- Schedule of Employer Contributions

Enter your fiscal year end and pension expense (calculated in *Step 6*).

Then using the numbers you calculated in *Step 5* complete the table of deferred outflows and inflows.

EXAMPLE based on implementation guide*

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences in experience**	$819,789	
Differences in assumptions**	2,353,518	
Excess (Deficit) Investment Returns**		1,487,136
Contributions subsequent to the measurement date***	112,000	
Total	**$3,173,307**	**$1,487,136**

Year ended		
	2022	355,277
	2023	380,439
	2024	319,155
	2025	333,752
	2026	295,494
	Thereafter	2,054
		$1,686,171

* Your numbers will vary. This is only meant as an illustration. These numbers come from the timeline on page 10.

** Note that these 3 numbers will figure into pension expense in the years from 2022 through 2026 and thereafter.

*** Note that this number will ***not*** figure into pension expense calculation in the years to come.

Click to Open Schedule of Changes in Employer's NPL

Click to Open Schedule of Employer Contributions

STATEMENT OF FIDUCIARY NET POSITION ANNUAL ADJUSTMENT PROCESS

In February of each year, MERS sends out a quarterly and annual Statement of Fiduciary Net Position for the period ending December 31st. As part of our normal process, MERS continues to receive updated investment valuations for private equity investments in March and April, which must be booked as income for the prior year-end. To account for these private equity valuations, earnings are held in reserve and allocated the following quarter to each employer. MERS includes an alternatives adjustment column in the Schedule of Changes in Fiduciary Net Position by Employer – Defined Benefit Pension Plan, which allocates the adjustment to each employer as of year-end.

Because of the difference this causes between the quarterly statements and the audited Schedule of Changes in Fiduciary Net Position by Employer, after discussing with your auditor, you can decide if the amount attributed to your municipality is material enough that it should be reflected in the year's pension assets. If the decision is to do so, employers should be using the **Adjusted Ending Net Position** column from Schedule of Changes in Fiduciary Net Position by Employer – Defined Benefit Pension Plan. In addition, total investment income to use for GASB 68 accounting purposes should be the sum of the net investment income and alternatives adjustment columns.

Keep in mind that if the decision is made to use the Adjusted Ending Net Position number, you will need to reverse out the alternatives adjustment amount in the following year, when calculating the assets from the Statement of Fiduciary Net Position.

APPENDIX DISCUSSION FOR GASB 68

Primary Governments and Component Units

The subject of allocation of the Net Pension Liability when component units are involved is one that needs to be addressed by each individual municipality's management and discussed with their auditors. The allocation of the Net Pension Liability can be done by several methods. One could be by divisional liability if that liability is broken out in the actuarial valuation. Another method could be by employee covered payroll, a third could be by employer contributions, or even another method that is applicable to the individual municipality's situation. These considerations must be weighed in the context of the municipality's circumstances. Paragraphs 18 and 39 in the GASB 68 Standard may supply additional information as well as paragraphs 33-35 in the GASB 68 Implementation Guide available at gasb.org.

Employers with More Than One Defined Benefit Plan Outside of MERS

If an employer participates with MERS Defined Benefit plan and also has another defined benefit plan that is separate from MERS (possibly an Act 345 plan) with a different measurement date than MERS December 31st measurement date, that second Net Pension Liability can be combined with the MERS Net Pension Liability as long as both plans' measurement dates fall within the employer's fiscal year. As an example, the City participates with MERS with a measurement date of December 31st, and a separate public safety plan with a March 31st year end. The City has a December 31st year end, both MERS and the 2nd plan may be combined for financial statement purposes as long as both dates are no earlier than the end of the employer's prior fiscal year. Notes Disclosure and Required Supplementary Information can be found in Paragraphs 21, and 38-45 in the GASB 68 Standard as well as paragraph 38 in the GASB 68 Implementation Guide available at gasb.org.

If you are a non-MERS municipality you will need to enter your plan's discount rate.

Blended Discount Rate

There are very few employers for whom the blended discount rate will apply. These employers will be contacted directly by MERS concerning their management of the total pension liability. For the vast majority of members in MERS this section will not apply to them.

Benefit Changes under GASB 68 Effective for 2021 and 2022 Roll Forwards

Benefit changes made by municipalities require a supplemental valuation to be prepared and then adopted by the local government's governing body. In most cases the benefit change occurs during the year and the actuary reflects it with the actuarial valuation that is done at the end of the year. For those benefit changes adopted with an effective date in 2021, an adjustment is necessary to be made to the GASB 68 information provided in your annual actuarial valuation due to the actuarial processes that were conducted for GASB 68 implementation. If a benefit change is effective after the measurement date of December 31, 2021, in the actuarial valuation used in the calculation of the municipality's net pension liability, and you are not rolling your NPL calculation forward to 2022, no adjustment is necessary, rather the prospective benefit changes will be picked up in the next actuarial valuation and pension expense will then be adjusted accordingly on the December 31, 2022 valuation.

The adjustment process needed to be taken will depend on if the new benefit is reflected in the 2021 AAV or not. (If you are not sure if a benefit change is reflected in the actuarial valuation please check Benefit Provisions Table 2 or the section titled "Benefit Provision History" in the actuarial valuation, these sections show benefit changes and when they were effective.)

If the newly adopted benefits are ***not included*** in the 2021 AAV and you are not rolling forward to 2022, see Process A. If the newly adopted benefits ***are*** included in the 2021 AAV and you are rolling forward to 2022, please see Process B. If the newly adopted benefits are ***not included*** in the 2021 AAV and you ***are rolling*** forward to 2022, see Process C.

Process A: (Not rolling forward to 2022)

For benefits adopted with an effective date in 2021 and were NOT reflected in the 2021 AAV results, an adjustment will need to be made to the total pension liability as of 12/31/21 as shown in the following step. (An example would be a retroactive benefit change with an ***effective*** date of October 1st 2021 that is not signed until August 2022. The actuarial valuation measurement date while dated December 31, 2021, does ***not*** reflect the new benefit change as the 2021 actuarial valuation was prepared before the contract was signed in August 2022 in our example. If you are not sure if a benefit change is reflected in the actuarial valuation please check the section titled "Benefit Provision History" in the back section of the valuation, this shows benefit changes and when they were effective.)

Example of adjustment needed for 2021 Benefit Change not reflected in 2021 valuation

(a)	Change in benefits	(359,219)	From Supplement Valuation
	AAL 12/31/2021	7,529,745	Total Actuarial Accrued Liability from Table 6 in 2021 valuation
(b)	New AAL	7,170,526	
(c)	TPL 12/31/2021	7,336,107	Total Pension Liability (TPL) as of 12/31/21 from GASB 68 page in 2021 actuarial valuation
(a/b)*c	Change in Expense/TPL	(367,514)	You will adjust the 2021 Total Pension Liability by this amount and also record this amount as a change in total pension liability due to benefit changes

If you choose to make this adjustment for 2021, you will need to make adjustments in the following year as the benefit change will be picked up in the 2022 actuarial valuation and this should not be double counted. (The actuary will not have adjusted the 2021 total pension liability so your ending 2021 total pension liability will be different from what the actuary has for 2021 in the GASB 68 page of the 2022 actuarial valuation.)

Process B: (Rolling forward to 2022)

For benefits adopted with an effective date in 2021 and reflected in the 2021 AAV results and you are rolling forward to 2022, no adjustment will need to be made to the total pension liability as of 12/31/21 as the actuary has already included the change in liabilities with the 2022 roll forward numbers.

Process C: (Rolling forward to 2022)

For benefits adopted with an effective date in 2021 and were NOT reflected in the 2021 AAV results, an adjustment will need to be made to the total pension liability as of 12/31/21 and 12/31/22 as shown in the following step. (An example would be a retroactive benefit change with an effective date of October 1st 2021 that is not signed until August 2022. The actuarial valuation measurement date while dated December 31, 2021, does not reflect the new benefit change as the 2021 actuarial valuation was prepared before the contract was signed in August 2022 in our example. If you are not sure if a benefit change is reflected in the actuarial valuation please check the section titled "Benefit Provision History" in the back section of the valuation, this shows benefit changes and when they were effective.)

Example of adjustment needed for 2021 Benefit Change not reflected in 2021 valuation

(a)	Change in benefits		(359,219)	From Supplement Valuation
	AAL	12/31/2021	7,529,745	Total Actuarial Accrued Liability from Table 6
(b)	New AAL		7,170,526	
(c)	TPL	12/31/2021	7,336,107	Total Pension Liability (TPL) as of 12/31/21 from GASB 68 page in 2021 actuarial valuation
(a/b)*c	Change in Expense/TPL		(367,514)	You will need to adjust the 2021 and 2022 Total Pension Liability by this amount and also record this amount as a change in total pension liability due to benefit changes for both years

If you choose to make this adjustment for 2021 and 2022, you will need to make adjustments in the following year as the benefit change will be picked up in the 2022 actuarial valuation and this should not be double counted. (The actuary will not have adjusted the 2021 total pension liability so your ending 2021 total pension liability will be different from what the actuary has for 2021 in the GASB 68 page of the 2022 actuarial valuation.)

APPENDIX

CURRENT YEAR GASB DATA

2025 Financial Reporting based on 2024 Total Pension Liability

Changes in Calculations

The GASB interest rate used changed from 7.25% to 7.18.

Changes in Note Disclosures

a. Actuarial Assumptions. The total pension liability in the December 31, 2024 Annual Actuarial Valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

- Inflation: 2.5%
- Salary increases 3% plus merit and longevity: 3.0% in the long-term
- Investment rate of return: 6.93%, net of investment and administrative expense including inflation
- Mortality rates used were based on a version of Pub-2010 and fully generational MP-2021.

The actuarial assumptions used in valuation were based on the results of the most recent actuarial experience study of 2019-2023. The long-term expected rate of return on pension plan investments was determined using a model method in which the best estimated ranges of expected future real rates of return (expected returns, net of investment and administrative expenses 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 best estimates of geometric real rates of return for each major asset class are summarized in the following table: A green and white table with numbers:

Asset Class	Target Allocation	Long-Term Expected Return	Contribution to Total Return	Inflation Assumption	Contribution to Total Real Return
Global Equity	60.00%	7.00%	4.20%	2.50%	2.70%
Global Fixed Income	20.00%	4.66%	0.93%	2.50%	0.43%
Private Investments	20.00%	9.00%	1.80%	2.50%	1.30%
Total	**100.00%**		**6.93%**		**4.43%**

b. Discount rate. The discount rate used to measure the total pension liability is 6.93%. The current discount rate shown for GASB 68 purposes is higher than the MERS assumed rate of return. This is because, for GASB 68 purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes, it is net of administrative expenses. The projection of cash flows used to determine the discount rate assumes that employer and employee contributions will be made at the rates agreed upon for employees and the actuarially determined rates for employers. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to pay 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.

c. Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the Net Pension Liability of the employer, calculated using the discount rate of 7.18% as well as what the employer's Net Pension Liability would be using a discount rate that is 1 percentage point lower (6.18%) or 1% higher (8.18%) than the current rate.

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