



## MoDOT & Patrol Employees' Retirement System

TO: MPERS' Budget Committee  
FROM: Scott Simon  
DATE: May 12, 2021  
SUBJECT: Fiscal Year 2022 Budget Request – Supplemental Information  
MPERS Budget Committee Meeting – May 19, 2021

This memorandum is supplemental information intended to provide a more complete financial picture for MPERS, specifically as it relates to the budget process and what falls under the Board-approval umbrella and what does not. As noted in the budget request memorandum, the two largest costs to the System, benefit payments and investment fees, are outside of the budgetary process. Nonetheless, both of those costs play a role in developing the operating budget, specifically in regards to personnel costs, consultant services, and information technology, to name a few. Furthermore, for a number of reasons, trustees may focus on investment fees and raise questions about the large dollar amount of fees without regard to the cost to the System of alternative asset allocations. The information that follows is intended to provide a basic look into those matters and how they are interrelated. We will present the broader financial picture in the context of the actuary's basic pension funding equation.

$$C + I = B + E$$

Contributions (C) + Investments (I) = Benefits (B) + Expenses (E)

For this formula to be effective, the underlying assumptions must be thoughtful (reasonably accurate) and current. In order to achieve those assumptions, an experience study is performed at least every five years, or more often when circumstances require it. MPERS' last experience study was completed in 2018. As a result of that study, the Board modified the economic assumptions of the plan, as well as the demographic assumptions (including mortality), in order to make the funding assumptions compatible with modern (current) expectations. The next experience study is scheduled for early 2023. Given the expectations for lower investment returns, the economic assumptions will be reviewed earlier than usual, during the upcoming June meeting. It is important to recognize the following three broad goals associated with funding MPERS:

- Intergenerational equity with respect to plan costs, i.e., the contributions to the plan are equitable for each generation of active employees
- Stable or increasing ratio of assets to liabilities, i.e., an ever-increasing funded status
- Stable pattern of contribution rates (but hopefully decreasing from current levels)

### Benefits + Expenses

MPERS' primary purpose is to pay the benefits earned by our members. During Fiscal Year 2020, MPERS distributed \$267,605,833 in benefit-related payments. That amount includes the following:

Retiree and survivor annuity benefits	\$245,194,376
BackDROP payments	\$15,787,033
Disability benefits	\$2,480,372
Death benefits	\$890,000
Service transfer payments	\$2,457,945
Employee contribution refunds	\$796,107

Total benefit payments for the current year (FY 2021) are unknown because we do not know the number of upcoming retirements or deaths. We can, however, reasonably forecast those payments by assessing the trend over the last few years. For that period, the average increase has been approximately 2.75%. Applying that to last year's total results, the forecasted total is \$274,964,993.

Total investment management expenses were \$21,698,678 for the last fiscal year (FY 2020). Those costs correlate to a net return on assets of -0.44%. The correlation between the total costs and the return on assets is important to understand because many of the investment manager relationships include performance incentives (i.e., profit sharing) or carried interest. In other words, if our investment costs are higher, that would correlate to improved performance which is reflected in higher performance incentives, or carried interest. Likewise, if performance decreases, the profit-sharing also decreases, which is what you see for last year compared to prior years where the fund realized a positive return – a decrease in returns with a correlated decrease in investment fees.

Like the benefit payments above, the investment expenses for the upcoming year are unknown, given that returns are difficult to predict. Given this unpredictability and the low performance in Fiscal Year 2020, we will forecast investment expenses to be similar to Fiscal Year 2019, or \$34.7 million, when the return was closer to the actuarial assumed rate of return.

Contemplating investment fees in a vacuum would not be prudent given all of the important details to consider with each investment decision. Consequently, it may be useful to analyze net-of-fee returns on assets under the present asset allocation relative to a no-cost, passive global 60/40 asset allocation. In order to conduct the analysis in the next paragraph, we will need to make some assumptions. First, there is really no such thing as a no-cost vehicle for that allocation, but for the purposes of this memo we will assume one exists. Second, investment fees are reported in our financial statements on an accrual basis (as opposed to a cash basis). Accrual basis reporting means that the investment management performance fees noted in the financial statements are not the *actual* cash payments to the various investment managers, but are accrued amounts earned as required by generally accepted accounting standards. Also, understand that these fees are typically netted out of returns, rather than noted as a separate expense. Third, this comparison does not measure staff-generated alpha (i.e., performance above policy); it measures the actual asset allocation against the 60/40 allocation. And the last assumption to remember in this analysis is that the industry maintains that a 60/40 portfolio is a diversified portfolio commonly used by both institutional and individual investors. The 60/40 allocation could be utilized without the need for internal investment staff.

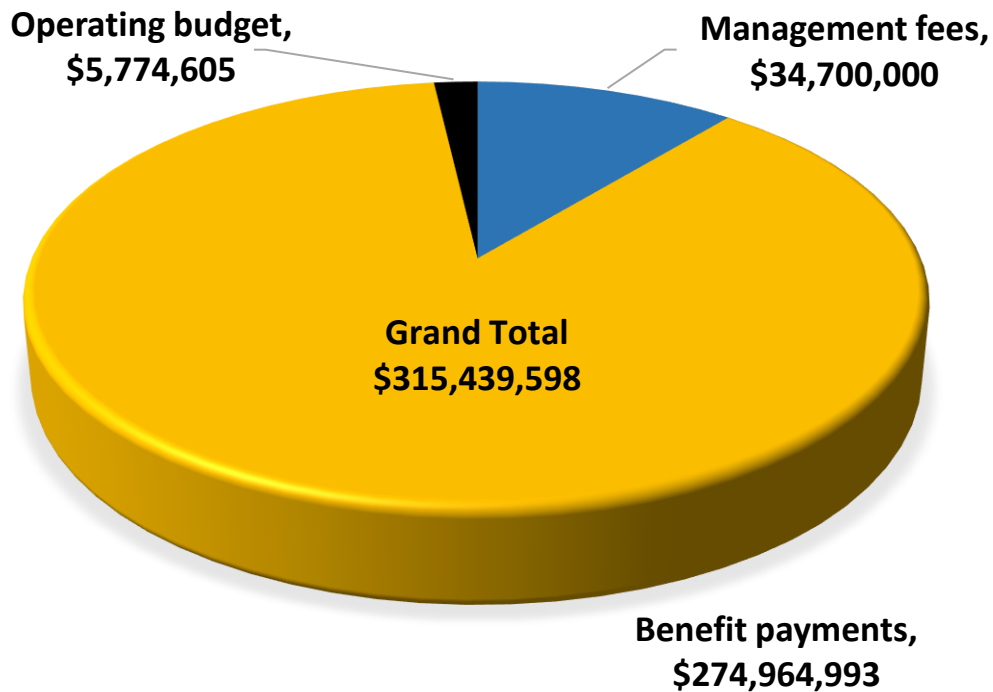
Applying NEPC's updated near-term capital market assumptions to the Board's investment policy, we expect assets to increase by 5.8%, net of fees, for the upcoming fiscal year. The gross-of-fee performance would be 7.1%, resulting in \$197,400,000 in additional income (based on current asset value of \$2.8 billion). Removing the forecasted expenses would leave us with net-of-fee earnings of \$162,400,000. The low-cost 60/40 asset allocation is projected to return 4.53%, which would result in a net income of \$126,840,000. The current allocation is projected to provide an estimated \$35.5 million dollars in additional net-of-fee income to the trust fund relative to the 60/40 allocation. (Note: the amount of investment fees used in this illustration is likely understated relative to what the fund will actually realize this year due to the extraordinary performance experienced for the fiscal year so far.)

The following chart represents the budget proposal for FY 2022 with the other projected costs for the current fiscal year (FY 2021). This illustration is intended to provide a picture of the budget proposal in the context of the System's overall cost structure.

### Contributions + Income

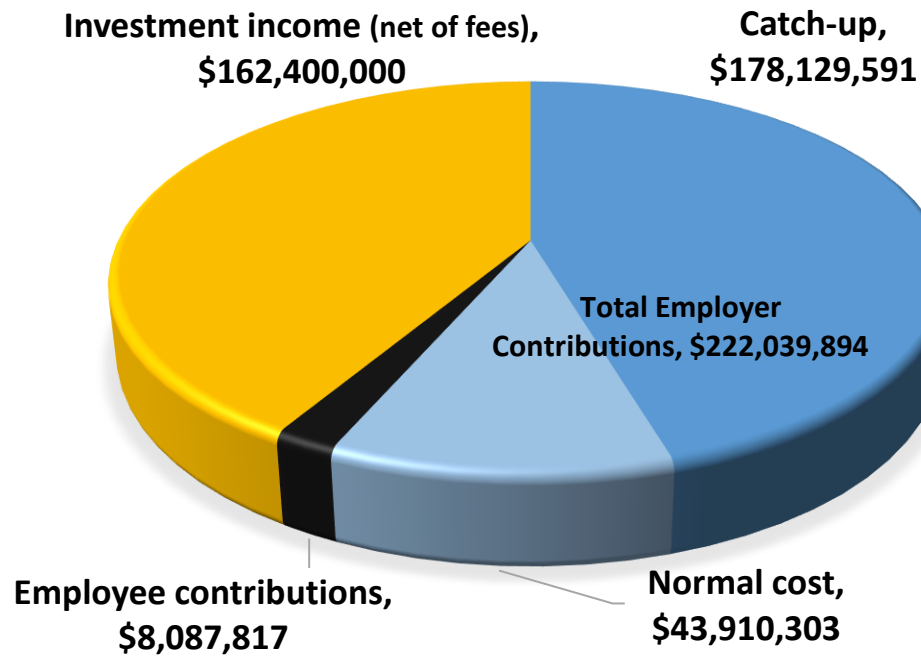
The analysis thus far demonstrates the components on the right side of the pension equation – the benefits and expenses. For the left side of the equation, we must capture the expected employer contributions as well as the investment income. Keep in mind that employee contributions are included in this side of the equation, but given the brief restoration period of these contributions and the limited scale of membership in the 2011 Tier, those contributions are not particularly consequential at this time. That, however, will change significantly over the coming years and will become a material part of this analysis.

**CURRENT FISCAL YEAR (FY 21)  
BENEFIT PAYMENTS & EXPENSES PROJECTED**



Employer contributions are a result of the Board's funding policy and the work of the actuary. To determine the expected employer contributions for the coming fiscal year, we look to the annual valuation. The chart below illustrates the total employer contributions by combining the normal cost and the catch-up payment associated with the unfunded liability. Also noted in the chart is investment income, which was calculated by applying the expected near-term return for our assets as reported using NEPC's capital market assumptions. The result is \$162,400,000 million in net-of-fees investment income.

## NEXT FISCAL YEAR (FY 22) CONTRIBUTIONS & INCOME PROJECTED



As you can see in the chart above, there is a significant distortion with income as a result of the large catch up component to employer contributions. In a plan with a higher funded status, you would expect to see investment income dominating the overall receivables category. This may not be realized each year, but on a long-term basis investment income would usually cover 50-65% of the benefit cost. As MPERS' funded status improves, investment income will cover a greater percentage of our benefit costs.

At best, this additional information will be useful to the decision to finalize/approve the proposed operating budget. At worst, it represents additional financial information that is useful for stakeholders to gain a better understanding of the complexities with overseeing the System.