June 14, 2023

Roll Call: Present – Jeff Herb, Morgan Stanley; Joe Scott, PSAB, Chuck Friedlander, Municipal Finance Partners, Inc.; Sgt C. Leidy; Molly Bender; Brian Courtney; Jason Banonis, President of Council; Cathy Gorman, Asst Mgr./Dir. of Finance; Mark Hudson, Township Manager

Meeting opening 11:05

Missing: Jonathan Mull

- 1) PSAB Joe Scott Nothing significant to mention other than the ROC (report of contributions) changes projected with the Secure 2.0. We are on top of it. It is at the solicitor's office being reviewed. She reviews things that involve changes within the Trust. We will get back when we know what changes need to be done, more than likely this is at the Trust level and not the plan level.
- 2) Morgan Stanley Jeff Herb On page 2, from a market and economic standpoint I will discuss what has been taking place from the last six months. 1<sup>st</sup> quarter asset allocation, investment strategies, performance and I will bring you up to date, year to date as of yesterday. From an asset class returns standpoint, after coming off last year the worst performance environment since 2008; last year we experienced a perfect storm from an investment standpoint. We saw significant negative returns from an equity market as well as a fixed income market. As we move now to 2023, again we have experienced a rebound in the equity market, as well as interest rates declining, so we are seeing positive returns in the fixed income market as well. We ended May with the S&P 500 up 9.65% on a YTD basis. The theme this year seems to be the exact opposite of last year. The best place to be is growth-oriented stock. The Russell 1000 growth is up 20% YTD basis. Value stocks are underperforming. Russell 1000 value down 1.43%. Large Cap stocks continue to outperform small cap stocks. Russell 2000 Index is basically flat on a YTD basis, .04%. Domestic stocks are outperforming International Stocks with EFA developed International Index up 6.81% on a YTD basis through May. From a sector standpoint, focusing on the YTD column, reinforcing that it has been completely opposite from last year. If you remember, 2021-2022 was all about energy. Energy was the dominate economic sector. Really the only positive sector last year. This year, completely reinforcing a reversing trend from a sector standpoint. Consumer discretionary stocks, Technology stocks, Communication services stocks, anything growth oriented is where all the return has been on a YTD basis. Consumer discretionary stocks up 18.7%, Technology up 34%. Communication services up 32.8%. It has been a very narrow market. Up until the end of May the majority of the returns experienced in the US Market; S&P 500 has been driven by a narrow group of companies; Nividea, Apple, Microsoft, Google, Facebook, Tesla. As we have moved into June, which is much more healthy market. We have seen a little broad-based participation. Much more economic sectors are contributing to the rally in the equity markets. The equity markets are still be driven by the very narrow group of large cap growth companies. From an interest rate standpoint, interest rates have declined throughout the year. Started at the beginning of the year with a 10-year treasury at 3.9%. We ended through May at 3.6%. As we sit today, we are at 3.7% rate for the 10-year treasury. As interest rates decline, bond prices rise in value. We are, in what it is called now, an inverted yield curve. Where you see short term interest rates are much higher than longer and intermediate interest rates. We never had a recession in the US without having an inverted yield curve. We have had inverted yield curves without having a recession, but never had a recession without having the inverted yield curve. What the fixed income markets are definitely telling you is the economy is slowing, not that we are imminently moving into a recession but the fixed income markets are definitely telling you that the market is slowing. From a return perspective, bond prices have declined, you have seen positive returns, in the bond market on a YTD basis. The overall bond market up 2.46% YTD through May, Intermediate bonds at 2.19%, short term, T-Bills, Money Markets at 1.95%

for the first time in a decade due to the significant rise in interest rates. We have seen positive returns in Money Markets and short-term bonds up 1.47% on a YTD basis. Throughout the year during the first-quarter we dealt with the collapse of three banks and significant concerns throughout the month of March that we were moving into a banking crisis. Our thoughts and the markets thoughts were that it was going to be bank specific. More recently is the debt ceiling debate, whether that was going to pass or not. From a Macro standpoint, we have dealing with inflation, interest rates and slowing economic growth. Inflation peaked last June at over 9%. Inflation has continued to decline. We are now at 4%. The Fed target rate for inflation is  $2-2\frac{1}{2}$ %. Core inflation, which is service, shelter, and wage inflation is going to be challenging to get it down to the target rate. Although declining, it will take time to get it down. We are going to be at a higher inflationary rate for the foreseeable future. On the next sheet, green means inflation is cooling and red means inflation is hot. Through April the majority of all components of inflation are turning green or yellow which means slowing. Interest rates were increased 7 times last year, 3 times in 2023. Expectations are that the Fed will pause. Will not raise today but will signal that if they raise further; it will be data dependent. We are at 5% at funds rate, this has been the most aggressive fed rate increase since the 1980's. Recession determinates are next. The NBER or the National Bureau of Economic Research they are the government group that determines when we have been in a recession and when we get out. The determents of a recession if you look at the chart, green means positive and red means significant slowing. The economy is slowing but we are not heading into a recession. All components are slowing. We have seen mixed signals. The labor market has been very strong however slowing. Lastly the valuation of the S&P market, at the end of May markets have been trading at 18 times earnings. Historical average is about 16 ½ times earnings. The US stock market is not inexpensive in any way. We are not overvalued, but we are not inexpensive. Fixed income and bonds are indicating slowing, equity markets sending a mixed signal. Equity is indicating a soft landing. As for asset allocation, returns as of Monday, S&P up 12.81%, overall bonds up 1.7%, international market 10.5%. From an MRT standpoint, for the 1<sup>st</sup> quarter up 4.88%. benchmark is 4.59. As of today, we are up 9.1%. Very good year coming off a challenging 2022. The goal of the MRT is consistent returns hedging against downside protection and reduce volatility. We meet those goals last year. From an asset allocation 351,195,378 asset allocation 61% in equity and 27.5% in fixed income, 8.25% core real estate (multifamily) minimal exposure in office and retail, and 2.67% residual cash. We use active and passive for predictable returns. No new manger changes since the last meeting. Last time the only change in managers was from a Large Cap growth, the active manager was terminated and the Russell 1000 growth index was increased. They are now being passively managed. Under full fixed income, if you look at Wedge short term, 15.65% is the largest allocation and we are overweight, fixed income is in short term fixed income, in this environment, The highest yields are in short term. If does not pay for duration risk or maturity risk. Short term is the highest yield for the lowest risk and lower volatility in the fixed income market. Finally, MRT provides for a comprehensive oversight investment process, there has been no change to the oversight process. Expect further volatility at this point over the next several months until we get more news on inflation and the Federal Reserve.

3) Municipal Finance Partners, Inc. - Chuck Friedlander – We are going to talk about the pension plan, the valuation report, the comparison to the last one and the discussion of risk. I am the actuary and the chief actuary of my firm, Municipal Finance Partners, Inc. I complete the actuarial reports and the filings with the State, assist in the preparation of the MMO's and the AG 385 forms, and when requested provide information to the auditors, financial statements, benefit calculation forms, election forms when someone terminates or retires, and general consulting when Mark or Cathy have a question. Under Act 205 we do actuarial evaluations every other year so the most recent valuation is as of 1/1/2023. The previous one was 1/1/2021 and the next one will be 1/1/2025. There is a snap shot we take every couple of years to see where the liabilities are, where the assets are and to recommend funding levels for the future. Those funding levels then become part of the basis of the MMO (Minimum Monetary Obligation), your pension budget for next September. So, the funding level in 2023 was based on the 2021 valuation. The 2023 valuation will be used for the MMO passed

this fall for 2024 and the following year. Act 205 of 1984, imposes funding requirements to municipal pension plans. Despite these rules plans can still become underfunded, when there are actuarial losses such as when the market goes down, when benefits are increased; plans can become underfunded. We have funding rules that can make it worse, the State pension plan and plans from other states are in very bad shape because they did not required contributions. The philosophical concept I operate under is called intergenerational equity. Basically, the benefits earned by today's officers and employees should not be kicked down the road to the next generation to fund. The idea behind pension funding is to fund people's benefits while they are working. The information presented here is based upon the fund information provided by the Township and PSAB as of 1/1/2023. I am using the same actuarial assumptions as the prior actuarial report which I will refer to you to explain plan benefits, the actuarial assumptions and my qualifications to present this information. The MMO history and the 2023 based on the most recent valuation. The 2024-2026 are based on the current valuation you can see a big decrease. The amortization payment for the Police Pension plan has gone away. Keep in mind what is showing on the charts for the plan; the size of the police pension plan in assets and liabilities is three to four times the non-Uniform. The contribution levels were getting close to the ½ million dollars. Now we are looking at three to four hundred thousand. This is how the MMO was funded, generally state aid is what is given by the State and it is slit up between the two plans. As you can see in 2024, 2025 and 2026 not only do you not have that amortization payment with the excess we have a funding adjustment. Between the member contributions, the reductions from the funding adjustments and state aid; we are looking at decreases in the Township's obligations in the next couple of years. Non-Uniform did not have quite the gains of the Police. You are seeing as steady increase over the years which is based on what we would expect to have. The Non-Uniform plan as we can see, when the number goes up the Township's obligation goes up, we assume State Aid stays the same. State Aid goes up, the Township has to contribute the balance. In terms of funding percentage, we look at market value of assets and the actuarial smooth value. The market is a lot more volatile, on the actuarial basis we have grown over the last couple of valuations. We are now over 100% funded where assets exceed actuarial liability. We see a similar pattern for the Non-Uniform, we have seen growth over the last couple of years and we are at 93.8%. Based on the current actuarial assumptions the plans are pretty well funded even after this market down turn. The police fund has grown from 2010 about 4,000,000 to over 10,000,000; market value now it is a little over 9,000,00. You can see by the end of 2020 we are actually smoothing down; the market is greater than the actuarial value. At the end of 2022 it was smoothing up. Actuarial smoothing is when instead of recognizing the market value, if the fund does better than expected, there is a gain compared to the 6.5% assumption; we recognize 20% of that gain each year over a four-year period. If we have gains, we spread them out and you can see that at the end of 2022, we got losses that are spread out and we have to cope with those losses over the next couple of valuations. The investment yield history, the market is very volatile, we had three very good years 16, 8.5 and 13% in 2019, 2020 and 2021 followed by a negative 12.4 in 2022. You can see when we smooth that out over a five-year period, the yields are in the 5.5 - 7% range. The charts are going to look the same for the non-Uniform plan because they are invested in the same fund. So, we were smoothing down before, we are smoothing up. The gains have been around 6-6.5% over time. We had an actuarial gain of 9.2%, 9.1% in 2021. We had three really good years, so we get to keep recognizing those gains. We are dealing with about 10.2 million in assets and 9.5 million in liability. Since the prior valuation we had a large experience gain. About \$900,000.00; that is about 9.5% of liabilities, more than I am used to seeing. Mostly due to the death of retired officers, they have survivor benefits but once the officer passes away that is only ½ the benefit; the liabilities shrink quite a bit. We also had some of the surviving spouses die. This was offset by fewer terminations, fewer active deaths than expected. Big gain on the liability side, and a 2% gain on the investment side that was due to the smoothing. We smoothed away most of the 2022 loss, we were smoothing away the previous years' gains. There is a small contribution loss due to the delay of the MMO process as cost increase. For instance, 2021 contribution was based on the 2019 valuation. If it was based on the 2021 valuation, it would be higher. In the Non-Uniform we have about 3.1 million in assets, and 3.2 million in liability. We have 2.5% asset gain, \$78,000.00 small experience gain, \$34,000.00. That is what we expect the gains and losses to be. We had a few retirements, more terminations than expected, few retiree deaths than expected. 8 new members that come in with little liability, but when there is 8 it tends to add up along with salary increases. 2021-2022 a lot of turn-over in the Non-Uniform Plan, that is going to cause a small gain because we are funding people who are not getting a benefit because they are not vested, or a smaller benefit and newer people come in with smaller liabilities and small contributions. For the Police we are looking at a higher normal cost with more people, that is the regular annual cost. As a percentage of payroll that is going to remain fairly constant. We will have an increase in administrative and investment expenses and the amortization payment goes away because the plan is better funded. That excess gives you about \$63,000.00 to fund liabilities. Assuming the state aid stays the same we are dropping close to \$195,000.00 in the Township contribution. In the Non-Uniform it is pretty consistent. All the gains and losses offset each other. We are looking at a contribution about where it was before. The actual MMO offset by state aid was about 348,000.00, if based on this valuation it would have been \$154,000.00. We are saving almost \$200,000.00 a year due to the favorable experience. We know what the risks are going forward in that we need a market recovery; we had a big investment loss in 2022. We put about 80% of that aside in the smoothing that we will recognize in future years. If we have a robust recovery in 2023 and 2024, we will probably be ok. If we don't, we are going to have to recognize 40% more of that loss. That might kick the contributions up higher. If we had big gains like this, I might suggest changing assumptions, like dropping the investment return, to get the contribution in the middle to be more conservative, I am concerned if we do that and do not have a market recovery, and we go into a recession which will hurt the market, things will be worse two years down the road. We are in a volatility area not only in the market but in employment. Because of COVID we have volatility in the mortality rate. We are not in danger of loosing State Aid. Talking about Risk, there are five. First there is investment risk, that is if we get a return of investment different than what we expect, it is the largest risk in the plan. We moderate this risk in two ways; by smoothing and moderate the actuarial rate of return and by amortizing gains and losses. When you are unfunded; we amortize gains over future service and participants. We recognize 10% if it is over funded. We are not recognizing all the gains and losses just 10%. Then there is liability risk. Pension promised are fixed rate liabilities like bonds. A fixed amount that the Township owes to people. Now that the fixed amount with the cost-of-living increases (Police). If we were a corporate plan, corporate bond rates are used to value the plan. You have moving targets. If you invest in those bonds; your liabilities and assets move in the same direction. We do not do that. A lot of our investments are in equity, which achieves larger returns and there is risk involved in that. Those larger returns are called the risk premium. You can defeat that risk at the cost of lower returns. You can take a lot of the volatility out by investing in risk free assets. But we cannot afford to fund the plan at that rate. There is a new actuarial standard of practice that requires us to give you the low default risk obligation which states after 2023. In financial economics, economist and actuaries want you to value the plan based on the low default risk measures like Treasury. That is the true value of the liabilities. I calculated what the liabilities would look like, if we based the valuation on risk free investments. If the end of 2022 the 10-year treasury bond is 3.88%, this is for the police, this is what it does, the column of value of assets and the column of accrued liabilities, those are the numbers we are looking at to determine funding and to calculate the MMO. The last two numbers are what the financial economists are more interested in. The low default level is 6.6 million, the market value of assets is a little under 4 million. They would be interested in funding that gap. If we invested in risk free investments, and used that rate, the regular normal cost of the plan increases from 142 to 287, we have about \$200,000 in amortization, we are looking at a half million in contribution for the police. What that tells you is that the difference between that \$500,000 and to what we contribute now, that is the value of taking risks in investing in equities and smoothing, amortizing liabilities. Similar picture for the Non-Uniform Plan. The normal cost doubles, the amortization payments about \$100,000 and we are looking at about \$300,000 to fund that plan. Assuming we invested just in treasury bills and took all the risks out of the assets. The risk is that you would have to contribute a Interest rate risk, we have seen this in 2022. As interest lot more. That is why we do not do that. rates increase typically bond yields increase. High bonds are good for new investments especially when we have the inverted yield curve, that new investments in short term bonds are great because

we have higher yields, and a lot less risk than long term bonds. Higher interest rates lower the value of the fixed income investments you already own. What causes change in interest rates, inflation over the long term will increase to stock prices. Economic downturn, US government bond prices increase due to flight to safety. When we had a potential government shut down, the agencies lowered the ranking of government bonds. It through a little panic in the market, oddly people flocked to them as people still feel they are safe. If there had been a shut down, would people still go there to safety, it would be interesting to know. Lower rates increase liabilities, high rates decrease liabilities. Longevity and demographics risks. We have seen this happen. The deaths in the police plan, I do not know if they were COVID related, has caused large gains on the plan. We update the mortality table periodically to recognize increased longevity. We did that at the most recent valuation in 2021. Each valuation we review the experience of each assumption. For larger clients we usually do studies every five years to see the experience compared to the tables being used. Finally, there is contribution risk, because of Act 205, there is not large risk of deviations. But there will be small deviations due to the MMO process. For County and State plans where there are no requirements, there is agency risk or moral hazard. The people with the decision don't budget the proper amount. That is not much of a risk for municipal plans that have a contribution requirement. In terms of risk, as an actuary that measures the risk in the plan; it is the ratio of the market level of assets of the plan divided by payroll. This is a measure of how big the pension fund is compared to the municipality. Over time, the police plan has gotten more mature; it has gone from three to over seven times payroll. It is down to five and a half mostly because of the market value dropped. But we are looking at a much more mature plan. You were in the three and four area fifteen years ago. We are seeing the same thing for the non-Uniform plan. It used to be assets and payroll were about the same and now we are looking at three times payroll. Another risk is cash flow. It is not uncommon for mature plans to be in the negative cash flow situation, which means you have a large retiree group. As that grows and the active employees go into retirement, you are going to get to a point where cash flow is negative. That is not necessarily a bad thing, because we plan for that. It means that any growth in the plan will need to come from investment returns because we are not putting in that much more than we are spending. I will be putting together the Actuarial Valuations and getting the Act 205 reports ready that are due March of next year. Mark noted that we have three new officers since 2023. Chuck said new officers do not have a liability. Normal costs will go up; however, we will get about \$10,000.00 in state aid. We should be ok going forward. They will be added in the next valuation. Jason asked, if we were to use the ASOP 51 standard we would be contributing \$800,000.00 total correct, there is no requirement correct? Chuck said no requirement. Sometimes you will see actuary's using crazy investment rates in larger plans and someone is going to pick up on it. It is going to make your plan look less funded than it is. It is something that needs to be explained and not taken out of context. Jason said that Sgt Leidy posted a message; is the Police Fund currently funded at 100%. Jason said based on your presentation we are funded at 106%. Chuck said yes 106.6% on an actuarial basis. Market value it is about 95%. Cathy said that she thinks the question is about contributions on their part, if it is 106% funded. Chuck said it is not like the Township is not still putting in over twice what the participants are putting in. Cathy said I think what needs to be explained is if it is 106.6% funded, why would they need to put in. Chuck said the funding of pension benefits is basically three pieces, the regular annual normal costs, which if you look at as a house, it is the cost of maintenance and upkeep, those numbers are fairly stable. Then there are the administrative and investment expenses. We have to fund those and the amortization. The amortization payment went away. They paying off the debt has gone away, State aid and a sizable amount, \$76,000 from the Township is still required. Yes, we paid the mortgage, we still have to pay for upkeep. Cathy said so the contributions from the officers would lessen when State Aid covers the normal costs? Chuck said yes generally that is how that is done. Cathy said; And fees if it comes to that? Chuck said contributions would be reduces based on the need of state aid and what is dictated in the collective bargaining agreement. Jason said there is another note from Sgt. Leidy, saying thank you. So, Chuck, it appears you answered his question. Chuck thanked him for his question. Jason said thank you. He had no other questions. He thanked him for his guidance and looks forward to talking to him about these issues. Chuck said thank you for having me.

- 4) Pension Audit Cathy said we have not received the final report yet however, I feel confident enough to report that the Police plan was fine. No observations or findings. The Non-Uniform plan we did have an issue with calculating an employee in the AG 385 that was not eligible, to be counted in state aid due to issues regarding workers comp and short-term disability. They are requesting that money back, which Chuck had calculated at \$5,948.34 which was the state unit value at that time back in 2019 plus interest. We will be reimbursing the State that money shortly. Chuck asked if he should recalculate based on reimbursement date. Mark said this was an employee out 2018-2019? Cathy said yes. He was still an employee, there was a back and forth with workers comp and short-term disability which was right at the time where he qualified or didn't. The state determined that he did not qualify. Mark asked if these audits only take place every five years? Cathy said they are supposed to be two but due to COVID and staffing it was a while since they came in. Chuck said the AG's budget is not what it should be to do the job. Chuck said they are doing every four years now unless they think you are risky. In that case they will do it every three. Chuck said this was a very gray area. He even thought we may have been able to argue and pushed a little further but it became a logistical nightmare redoing a couple of benefit calculations. Cathy said at the end it came down to a legal opinion. I thought we were supposed to wait for the report. She will call to see why the Township should be pay more to wait on them.
- 5) Financial reports We contributed administrative fees and monthly contributions to the MMOs. We put in \$255,708.89 to the Uniform Plan and into the \$99,902.47 to the non-Uniform plan.
- 6) No Colas
- 7) No settlements

Will post the March minutes on the website. Next meeting is September 13. Next Council meeting is September 20<sup>th</sup>. We will be providing the MMO at that meeting for the committee to review and for Council to approve on time. Chuck will get it to us in the next week or so. Chuck asked if he was recertified. Cathy said she will do so if not.

12.01 Meeting adjourned.