The regular monthly meeting of the Retirement Board of Allegheny County was held on December 19, 2019, in the Gold Room, 4th floor, Courthouse, Pittsburgh, Pennsylvania. The meeting was called to order at 12:12 pm.

Roll call of the Board members: Ted Puzak, Amy Weise was in attendance representing Chelsa Wagner, Rich Fitzgerald, Jennifer Liptak, Sarah Roka, Frank DiCristofaro, and John Weinstein were recorded as being present.

Also, in attendance: Walter Szymanski, Manager, Retirement Office and Brian Gabriel, Campbell Durrant, Solicitor.

The Board had an Executive Session prior to the regular scheduled RBAC meeting today.

PUBLIC COMMENT
NONE

APPROVAL OF BOARD MINUTES

The Board unanimously approved a motion by Frank DiCristofaro, duly seconded by Sara Roka to approve the minutes of the November 21, 2019 Board meeting.

APPROVAL OF MONTHLY FINANCIAL STATEMENTS

The board unanimously approved a motion to approve the October 2019 Financial Statements. The reports are generated by the Controller’s Office Board Secretary.

- Pension Fund Assets
- Statement of Changes in Plan Net Assets
- RBAC Balance Sheet
APPROVAL OF INVOICES

The board unanimously approved a motion by Frank DiCristofaro; duly seconded by Sarah Roka, to approve the December 2019 invoices.

DECEMBER 2019 INVOICES

<table>
<thead>
<tr>
<th>VENDOR</th>
<th>DATE</th>
<th>AMOUNT</th>
</tr>
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<tbody>
<tr>
<td>ALTAIR MANAGEMENT PARTNERS-FI</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>ALTAIR MANAGEMENT PARTNERS-MA</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>CIM INVESTMENT MANAGEMENT (Fixed Income)</td>
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<td>$</td>
</tr>
<tr>
<td>CIM INVESTMENT MANAGEMENT (Small Cap)</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>CIM INVESTMENT MANAGEMENT (Israel Bonds)</td>
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<td>$</td>
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<tr>
<td>CS MCKEE INVESTMENT MANAGERS</td>
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<tr>
<td>COOKSON PIERCE &amp; CO INC</td>
<td>4/1/19 -9/30/19</td>
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<tr>
<td>EARNEST PARTNERS</td>
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<td>$</td>
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<tr>
<td>EMERALD ADVISERS (All Cap)</td>
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<td>$</td>
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<tr>
<td>EMERALD ADVISERS (Small Cap)</td>
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<td>EMSTONE ADVISERS, LLC</td>
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<td>FEDERATED (Core Broad)</td>
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<td>F.N.B. WEALTH MANAGEMENT</td>
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<td>FIDELITY INVESTMENTS (Select Int’l Plus)</td>
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<td>FRAGASSO FINANCIAL ADVISORS</td>
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<td>HARVEST FUND ADVISORS LLC</td>
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<tr>
<td>iNetworks OF, LLC</td>
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<td>MELLON CAPITAL</td>
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<td>SALIENT</td>
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<tr>
<td>SEGALL, BRYANT &amp; HAMILL</td>
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<td>SINGULAR GUFF(DREOF II)</td>
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<td>STATE STREET GLOBAL ADVISORS (MSCI World)</td>
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<td>STATE STREET GLOBAL ADVISORS (S&amp;P 500)</td>
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<td>$</td>
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<tr>
<td>TWIN CAPITAL MANGEMENT</td>
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<tr>
<td><strong>TOTAL VENDOR INVOICES FOR APPROVAL</strong></td>
<td></td>
<td><strong>$20,229.86</strong></td>
</tr>
</tbody>
</table>
PENSION APPLICATIONS

The Board unanimously approved a motion by Frank DiCristofaro, duly seconded by Sarah Roka to approve the Pension applications filed with the Retirement Office for the month of December. The following applications were filed.

- Early Voluntary - 9
- Full Retirement – 11

INDEPENDENT MEDICAL EXAM OPINION FOR DISABILITY APPLICATIONS

The Board unanimously approved a motion by Frank DiCristofaro, duly seconded by Sarah Roka, to approve the application of member 095644 upon the recommendation of three designated physicians that the applicant is totally and permanently disabled from gainful employment in Allegheny County.

MANAGER’S REPORT

Walter Szymanski

Retiree payroll for the month was up by 7.47%, it was 9.3 million as opposed to last year 8.5 million. Contributions made are up 6.06%, 9.1 million as compared to 8.9 last year. Total retirements of the year are up 11.78%, 351 as compared to 314. Pension estimates were up by 5.28%, 1336 this year as compared to 1269 last year. Capital calls were up 26.55%, there’s a total this year for 108 for 28,932,132 as compared to last year there were 99 for 22,861,472. Capital calls as of the prior board meeting were 1.5 million, and the office budget is listed.

No questions were presented regarding the budget

BOARD APPROVAL REQUESTS

Walter Szymanski

Board approval requests for the 2020 operating year. First, I'll be requesting the board's approval of the 2020 office budget. The budget includes an allocation for a staff of five with corresponding fringe benefits and a 3% increase. In addition, increased money is on credit for other services based on the history of spending, and with these increases included the total budget will not have an overall increase and will remain the same as the 2019 total amount.

The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve the 2020 Office budget.

Requesting the Boards approval to continue the maintenance agreement with Koryak Consulting for the Capital Call Portal. The contract period would be for two years from 1/1/2020 to 12/31/2021 and the cost would be $30,000.00 per year.

The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve the Koryak agreement.
Requesting the Boards approval to contract with Koryak Consulting to perform research and a needs assessment for the new pension software. The cost of the proposals is $50,000.00 for a 1-year contract. In January or February of 2020, we will begin seeing what we have vs. what we’re going to need to continue operating with an entirely other software or something new.

*The Board unanimously approved a motion by Sarah Roka, duly seconded by Ted Puzak, to approve the Koryak agreement.*

Requesting the approval to extend the contract with Duncan Financial, this is to provide the educational workshops to members. The current contract amount is $2,000 per quarter or $8,000 for the year, the new contract would be for $3,500 per quarter, and this includes 8 workshops but also in addition 4 remote half-day locations. We’ve done two of these this year with CCAC. It was a success, the employees were happy, they’re going to come on a non-work day, on a Saturday, and can still get the same education and understanding of their pension benefit without having to come into town. This contract would be in effect from January 1, 2020 and would run until December 31, 2020.

*The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve the Duncan Financial contract.*

Requesting approval of the $2,000,000 Public Official Policy Bond, this is for a 4-year term. The current policy was $9,297 and expires on 12/31/19, the new policy would be effect from January 1, 2020 to December 31, 2023. I do not have the new policy amount yet but will email it to the board once I have it. It has been $9,297 for the last two policies, we do not anticipate a large increase.

*The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve the Public Official Policy Bond.*

### 2020 Public Meeting Dates

The retirement board meets the third Thursday of each month, in the Gold Room of the Allegheny County Courthouse, 436 Grant Street. Dates will be advertised, and are as follows: on January 16th, February 20th, March 19th, April 16th, May 21st, June 18th, July 16th, August 20th, September 17th, October 15th, November 19th, and December 17th. The dates will be posted on the website and advertised in the Post-Gazette.

*The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve the 2020 RBAC meeting dates.*

### 2020 Refund Rate

The 2020 Refund Rate, and working with the treasurer’s office, based on the average 3-month T-Bill Rate for 2019, the recommended rate to be paid on refunds is 213 bases points, or 2.13% for 2020.

*The Board unanimously approved a motion by Frank DiCristofaro, duly seconded by Sarah Roka, to approve the 2020 Refund Rate.*
Contribution Rates

**Jen Liptak** - Jen Liptak chaired the Contributions sub-committee.

Thank you, Mr. Chairman, the contributions sub-committee appointed by the chairman met twice to discuss the findings from the actuary, and based upon the recommendations as presented at the last board meeting of the actuary, the contribution rate sub-committee recommends maintaining the rate at a total amount of 20%, which would be a 10% employee, 10% employer contribution rate. Thank you, Mr. Chair, for the opportunity to be the chair of the sub-committee again, and I thank the members of the committee for their work.

*The Board unanimously approved a motion by Jen Liptak, duly seconded by Sarah Roka, to approve the contribution rate.*

SOLICITOR’S REPORT

**Brian Gabriel**

Three items for the board to consider. The first is that the board consider the reappointment of the three current hearing officers for 2020 under the same terms as the preceding year, and those three hearing officers are Sabrina Korbel, RaKeisha Foster, and Gino Floro.

*The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve the reappointment of the existing hearing officers.*

The second item is that the board consider and approve authorization for the board president to sign a one-year extension term to the CCA Green LP, that’s a 10-year LP that was due to expire July 22, 2019. This is just a consent form that recognizes a 1-year period for purposes of winding down.

*The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve the CCA Green LP wind down agreement (extension) until July 2020.*

The third item comes to the Board with a written recommendation from Bernstein, Litowitz, Berger, and Grossman, one of our class-action counsels. This was also discussed in executive session. This item would be a motion to authorize representation of the RBAC by BLB&G in securities class action litigation brought against Energy Transfer LP, which would allow BLB&G to file a motion for lead plaintiff status in the United States District Court for Northern District of Texas, and possibly to file an action in a Pennsylvania District Court if deemed advisable or necessary. This involves a significant potential loss to the Fund of approximately 2.4 million dollars.

*The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve participation in the class action lawsuit.*

CONSTULTANT REPORTS

**WILSHIRE**
Craig Morton
October flash report, total assets ended the month of October at 940 million, up 6 million from the end of September. Cash ended the month at about 10.4 million, we’re down about 6 and a half million now, so we’ll keep bringing a cash flow recommendation to get back to that 10, 11 million level that we’ve been maintaining to cover capital calls and benefit payments. Now, the main story to take away from this page hasn’t changed much, equity remains over weight, given strong performance, so that’s where we’ll be recommending the cash flow come from. Underweight to fixed income, which is somewhat offset by the catch position. Core Fixed Income lagging by one basis point was the only asset class composite that lagged its benchmark, so a strong month. The total fund was up .92%, while the benchmark was up about three quarters of a percent, so 16 basis points of performance. If we jump over to the year-to-date column, we can see that the drivers of performance this year have been non-US equity outperforming by about 3.5%. MLPs outperforming by nearly 5% through October. The total return for the total fund, 11.34% for the year to date period through October, that compares pretty right on top of the benchmark 11.37. So strong outperformance by the managers in those segments, offset somewhat by underperformance in high yield, where the managers were up 10.15 and the benchmark was up 11.13, so about 1% underperformance year-to-date in high yield. And then some of the out-of-policy allocations – hedge funds, life settlements, those returns didn’t keep up with the broad equity markets this year, and not surprising given the equity returns in the US are over 20%. So those factors offset each other and the policy and the total fund were both up about 11 and a third percent this year, so strong returns compared to your actuarial returns rate.

I just want to touch briefly on the managers of a few of those composites that added significant value so far this year, if we focus on the year-to-date-column on page 5. The small cap space, the funds policy is to have about 20% small cap, which is slightly higher than the benchmark, and small cap has slightly underperformed large cap this year, but your managers were able to offset that underperformance, Earnest and Emerald in particular on the small cap side are outperforming by 6 and a quarter and almost 2 and a half percent, so active management overcoming the headwinds that small caps faced. On the next page, Baille Gifford again has been the real stand-out story this year, after an uncharacteristic 2018 where they underperformed, in 2019 through October outperforming their benchmark by almost 8%, and we’ve seen a rebound in the Fidelity International performance as well. So those two had strong performance outperforming the underperformance by the small cap managers, so the non-US composite outperforming by 3.5% for the year.

I wanted to touch on the MLP managers on page 10, outperforming by 5.4 and 4.6 percent, the total MLP composite outperforming by nearly 5% for the year. And despite this being a challenging market segment since it was introduced in the beginning of 2018, the managers have done well to mitigate the losses in the MLP market.

David Lindberg
Perspectives report, this is just the market data returns through the end of November, and as Craig said its been a really strong year, and equity markets particularly in the US – the top table of this shows US equity – the first column in the top line, the Wilshire 5000 index, the US equity market was up 3.7% in the month of November. If you go over to the year-to-date column, the next-to-last column, that’s over 27%, so US equity has been a huge driver
of returns. It’s been a great environment from a returns standpoint for the year. If we look at equity markets and then we look at rates and where rates are today, our ten-year treasury is at 1.9%, so we’ve been back and forth between 1.5 and 2%, and in recent times we’ve had the Fed change course, down from a rate rising program to a reducing rates, and reducing rates three times, and are now on hold, with that program expected to be on hold. And so overall around the globe, the US has better rates than anywhere, and that continues to drive a lot of capital wind to our markets. US equity up over 27% year-to-date, non-US- equity markets year-to-date are up 16.5% through the end of November, and over 19 now year to date. And then bonds have also been strong on a year-to-date basis, if you go down to the US fixed-income section, where the top line shows Bloomberg… US aggregate index, that’s up 8.97% year-to-date for the end of November. We would not generally expect that kind of a return of fixed income, and that is from our rates following throughout the year where we’ve had strong price appreciation. It has really been a great environment this year for the fund to earn that 11 percent return that Craig was talking about through the end of November. If these markets continue over the remaining trading days, we’ll lock in a really strong return for 2019. In terms of this US equity market environment over five years, it’s been up over 11% annualized, that’s double what we project for those markets on a forward-looking, ten-year basis. So that’s where we are today, its been a long, extended recovery period from the end of the credit crisis, and we continue to enjoy the returns from that.

We have some recommendations to touch on quickly. The first one of those, we have a memo on a cash flow recommendation, this is a general cash flow raising, you need to raise 5 million dollars. We always look at this relative to your policy targets, and our recommendation on the bottom of that memo is 3 million from the US equity index fund and 2 million from Twin Capital. Those are both large cap US equity areas where the returns are up, in the high 20s year-to-date, so not a bad place to be peeling off some of those gains. Cash flow recommendation for 5 million total.

*The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve to raise cash, 3 million from the State Street index fund, and 2 million from Twin Capital.*

**David Lindberg**

Two more items to discuss.

First is Salient, one of your two MLP managers is requesting a change of their benchmark from the Alerian MLP total return index to the Alerian mid-stream energy total return index, which broadens the universe to include other corporate structures beyond just MLPs, primarily Seacorps, and that’s in keeping with what we’ve seen in the mid-stream energy market. With the change of benchmark, which they’re requesting as of January 1, 2020, we would also amend the IMA to allow for investments in Canada, because this benchmark is a North America benchmark, so it adds Canada to the mix whereas you’re invested in just the US now. The other change would be to change the limits on individual positions to the greater of 10% or 1.5 times the benchmark weight, which is just a slight change from what it is now in the IMA. We think these changes are reasonable and we recommend that you approve them.
The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to approve Salient to amend their IMA, which will allow them the flexibility to achieve objectives to adopting a more appropriate benchmark.

The second item for approval from us today would be to approve the transfer of your investment management agreement from CS Mckee to CSM Advisors LLC, which is the new structure set up for CS Mckee within North Square Investments, which is acquiring CS McKee. The process and team that are managing the core fixed income would stay the same, they would be acquired by North Square, who as discussed in executive session, would be more involved with the operations and marketing side of the business. No change on the investments side, just a transfer of your agreement from the current CS Mckee to this new holding company that they’re transforming into.

John Weinstein
Ted may remember this, being here as long as he and I have been here – CS Mckee has been a manager, if you look at the reports, since 1983, with this fund. We’re going on 37 years. That’s a long time, and they’ve done a great job for us over all those years. Mr. Rob Rossi is here for us from CS Mckee, and I just want to thank you for your diligence in working with us all these years as a local manager.

The Board unanimously approved a motion by Sarah Roka, duly seconded by Frank DiCristofaro, to change from CS MCKee’ to CSM Advisors LLC.

COWDEN
Brad Rigby
No report given

Asset Strategy
Ed Boyer
Good afternoon. Just to highlight that we’ve had some distributions which have come in in the fourth quarter about $675,000 thousand dollars from [unrecognizable]. We expect distributions to pick up in the Q1, with numerous companies that are in the process of being sold in the private equity portfolio, along with the return of the Corey Green funds, hopefully by June 30th of next year of 12 to 13 million dollars.

NEW BUSINESS
No new business

ADJOURNMENT
The Board unanimously approved a motion by Mr. Weinstein to adjourn at 12:40 pm.

John Weinstein
I would like to wish everyone a Merry Christmas and a blessed holiday season on behalf of the board and all of our staff. Thank you, and we look forward to seeing everyone in 2020. Thank you very much.
Respectfully submitted,

[Signature]

Chelsa Wagner, Secretary