

**ARAPAHOE COUNTY BOARD OF RETIREMENT
MINUTES
January 22, 2020**

The Chairman called the meeting to order at 1:30 P.M.

Board Members Present

Mike Garnsey
Rich Harris
Sue Sandstrom
Dennis Lyon
Erik Burge

Others Present

Dale Connors, Ellwood
Dana Woolfrey, Gabriel Roeder Smith & Co.
Tina Seberg, US Bank
Lew Quigley, Plan Administrator
Mona Goodyear, Plan Assistant

Consent Agenda

MOTION: Mr. Harris made a motion to approve the Consent Agenda; Mr. Burge seconded the motion. The Chair called the vote and the motion carried.

Invoices as follows:

| Vendor | Invoice # | Amount | Purpose |
|----------------------------|-----------|-------------|--------------------|
| Arapahoe County Treasurer | 201912 | \$24,750.81 | Plan Administrator |
| Davis Graham & Stubbs LLP | 782493 | \$983.00 | Plan Matters |
| IMA | 1243392 | \$14,180.00 | Plan Insurance |
| Risk Management, 19-20 | 100 | \$11,395.00 | Plan Insurance |
| Ellwood | | \$20,812.00 | Consulting |
| Davis Graham & Stubbs, LLP | 783222 | \$4,148.50 | Plan Matters |
| Davis Graham & Stubbs LLP | 783223 | \$280.00 | Investment |
| Total Expenditures | | \$76,549.31 | |

Acknowledgement of reimbursement in the amount of \$83.11 for office supplies to Lew Quigley.

- **Vested/Non-Vested Withdrawals**

| Number | Reason | Total |
|--------|------------------------|--------------|
| 7 | Retirements | |
| 1 | Vested Withdrawal | \$245,209.49 |
| 27 | Non Vested Withdrawals | \$280,724.82 |
| | Death Benefits | |
| | Total Expenditures | \$525,934.31 |

1. Ellwood

Mr. Connors brought the Board up to date on the Plan's performance as of December 2019. Stellar returns were experienced in most asset classes. Risky investments fared better than their conservative counterparts. It is unusual to have a negative-return year in an election year. The preliminary 2019 one-year returns are coming in at 16.4%. Plan assets totaled just under \$322

million as of year-end 2019. Plan outflows outpaced inflows by \$8.7 million during 2019. Most of the private equity returns are just entering the reporting cycle. More detail will be provided next month as finalized data becomes available.

2. Gabriel Roeder Smith

Ms. Woolfrey brought before the Board the matter of an “Experience Study”, the last being completed in 2014. The primary focus is to ensure the funding policy continues to adequately fund the Plan. The biggest cost drivers are investment return and mortality rates. It was recommended that the Experience Study be conducted late summer / early fall in order to facilitate it being accomplished prior to year-end 2020.

Ms. Woolfrey demonstrated the experience study software. The project tool is modifiable and is already prepopulated with the Plan’s data. The software is quite powerful and provides an array of customizable scenarios. We are being provided with partial functionality and can get access to additional features upon request.

A discussion ensued regarding the GRS contract extension. There are currently one, two and, three-year options being proposed that would work from the current three-year contract.

MOTION: Ms. Sandstrom motioned to extend the GRS contract three years to December 2022, Mr. Harris seconded. The Chair called the vote and the motion passed unanimously.

3. Board Member Comments

None.

4. Plan Administrator Comments

Ms. Goodyear presented an analysis of 2019 terminations and retirements by tier. The Board requested that the same information for 2018 be presented at February’s meeting.

Mr. Quigley reported that current plan participants will be able to access 2019 statements on the MARC website. Deferred Vested reports will be going out in the US Mail next week.

5. Plan Member Comments and/or Questions

None.

6. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 3:25 p.m.

Michael Garnsey, Chair

ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
February 19, 2020

The Chair called the meeting to order at 1:31 P.M.

Board Members Present

Mike Garnsey
Erik Burge
Sue Sandstrom
Dennis Lyon

Others Present

Dale Connors, Ellwood
Lew Quigley, Plan Administrator
Mona Goodyear, Plan Assistant

Consent Agenda

MOTION: Mr. Lyon made a motion to approve the Consent Agenda, Mr. Burge seconded this; the Chair called the vote and the motion passed unanimously.

Invoices as follows:

| Vendor | Invoice # | Amount | Purpose |
|--------------------|------------------|-------------|----------------|
| Fidelity | 20191231-805-A | \$24,931.67 | Investment Fee |
| JP Morgan | 20191231-26714-A | \$12,393.46 | Investment Fee |
| Milliman | 016ACR0120 | \$7,973.75 | License Fee |
| US Bank | 11976370 | \$17,583.49 | Custodial Fees |
| Total Expenditures | | \$62,882.37 | |

Acknowledgement of reimbursement to Sue Sandstrom in the amount of \$1,466.156 for expenses associated with the attendance to the Opal Group Public Funds Summit.

• **Vested/Non-Vested Withdrawals**

| Number | Reason | Total |
|--------|------------------------|--------------|
| 5 | Retirements | |
| 2 | Vested Withdrawal | \$200,000.00 |
| 12 | Non-Vested Withdrawals | \$107,101.16 |
| 0 | Death Benefits | \$ 0.00 |
| | Total Expenditures | \$307,101.16 |

1. Ellwood

Mr. Connors presented 2019 performance. All major asset classes generated returns above their average. The S&P 500 had the best return since 2013, coming in at 31.5% for the year. Growth stocks have outpaced value stocks for the past ten years, headlined by the technology sector. Cuts in the fed funds rate over the past year contributed in part to the highest annual return for US Fixed Income since 2002.

The Plan is still overweight in the real estate sector due to the Trumbull Property Fund holding. The plan has gotten back \$9 million in the Trumbull fund. Harbert Real Estate Debt Fund is also in the process of liquidating holdings.

The Plan's assets increased \$46 million dollars over the year, with the Plan's annual return at 16.54%. Ten-year numbers are coming in at 7.25%

January 2020 was a flat month, with the annualized number coming in at 10.5%. The international supply chain is basically shut down due to the coronavirus.

2. Other Business

Mr. Quigley discussed the new amendment regarding “on-call pay”. Board members signed the document which was notarized.

MOTION: A Motion was made by Ms. Sandstrom to approve the new Amendment necessitated by the new-created “On-Call” job classification; Mr. Burge seconded the Motion; the Chair called the vote and the motion passed unanimously.

3. Board Member Comments

No comments.

4. Plan Administrator

Mr. Quigley discussed the updated fee schedule released by US Bank. Fees have remained unchanged for over 22 years. We have been working with the auditor on the year-end audit and have implemented updated procedures.

Ms. Goodyear presented data related to 2018 terminations and compared them to the 2019 numbers.

5. Plan Members Questions and Comments

No comments.

6. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 2:25 p.m.

Michael Garnsey, Chair

ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
March 25, 2020

The Chairman called the teleconference meeting to order at 1:29 P.M.

Board Members Present

Mike Garnsey
 Richard Harris
 Sue Sandstrom
 Dennis Lyon
 Erik Burge

Others Present

Dale Connors, Ellwood
 Andrew Fiegel, Ellwood
 Dana Woolfrey, GRS
 Cindy Birley, DGS
 Kent Quidachay, DGS
 Tina Seberg, US Bank
 Lew Quigley, Plan Administrator
 Mona Goodyear, Plan Assistant

Consent Agenda

MOTION: Mr. Harris made a motion to approve the Consent Agenda, Mr. Lyon seconded this; the Chair called the vote and the motion passed unanimously.

Professional Services

| Vendor | Invoice # | Amount | Purpose |
|---------------------------|------------------|---------------|---------------------|
| Arapahoe County Treasurer | 201901 | \$17,062.21 | Plan Administration |
| Arapahoe County Treasurer | 201902 | \$19,751.24 | Plan Administration |
| Davis Graham & Stubbs | 784713 | \$2,688.00 | Plan |
| Davis Graham & Stubbs | 786290 | \$1,721.00 | Plan |
| CliftonLarsonAllen | 2393271 | \$5,000.00 | Audit Services |
| Total Expenditures | | \$46,222.45 | |

Acknowledge the reimbursement for office supplies in the amount of \$362.08 to Lew Quigley

Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|------------------------|--------------|
| 2 | Retirement | |
| 1 | Vested Withdrawal | \$16,181.16 |
| 10 | Non Vested Withdrawals | \$34,742.85 |
| 1 | Death | \$8,689.12 |
| | Total Expenditures | \$59,613.13 |

1. Ellwood

Mr. Connors reported the Plan is generating negative returns through the end of February and year to date. It appears that growth stocks are overperforming value and large cap is faring better than small cap. The markets are very choppy and posting a big rally one day, only to have all gains erased the next day. He and Mr. Fiegel both offered that addressing

anything currently occurring as a result of the global economy's response to the novel coronavirus is just looking at a data point.

Additionally, the US is not leading global markets like in the past. Information Technology services is the best reporting sector, coming in at (15%) year to date. Energy is yielding a (53.3%) return year to date.

The board briefly discussed any type of rebalancing. It appears that the commission costs associated with liquidating the Plan's current bond allocation would generate 3-4% in trading costs. Mr. Connors suggested we look at looking at reallocation no more than quarterly due to trading costs.

2. Other Business

Contingency Operation

Mr. Quigley reported that the Plan staff has been working from home for the past week and will be for the foreseeable future. Staff can perform most normal job duties remotely, with printing to home printers being the exception. Ms. Goodyear offered that last week's payroll and separation packet emailing activities were completed remotely last week without a hitch.

An informational letter was USPS mailed to all retirees and deferred vested employees on March 19, 2020. The same letter was released to all current employees via the AC Weekly.

CLA Engagement Letter

CLA raised their annual fee from \$17,000 to \$18,000. It had been \$17,000 for last four years. Mr. Quigley will check with Trudy Peepgrass about an existing RFP that may have capped the fee. (the fee quoted did match the fee quoted in the 2020 engagement letter)

MOTION: Mr. Burge made a motion to accept the CLA Engagement Letter, Mr. Harris seconded this; the Chair called the vote and the motion passed unanimously.

3. Board Member Comments

No comments.

4. Plan Administrator

The annual vendor/consultant evaluations were sent to all current vendors/consultants in January per the guidelines. All such parties responded in a timely manner, after much review it is the Plan Administrators opinion that all parties are providing the good and services spelled out in the engagement/contract agreements. It was interesting that US Bank after 22 years did announce a fee request, all others are holding the line. The Plan Administrator did recommend continued operation based strictly on the administrative side.

It was noted that estimated forty-five percent of employees have registered on the MARC website. This is the highest total ever to date.

5. Plan Members Questions and Comments

Ms. Birley briefly discussed a new IRS initiative. The Agency is stepping up auditing of Retirement Plans and moving away from in person audits. She feels the Plan is in good shape from a compliance point of view.

6. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 2:18 p.m.

Michael Garnsey, Chair

ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
April 22, 2020

The Chairman called the meeting to order at 1:34 P.M.

Board Members Present

Mike Garnsey
 Richard Harris
 Sue Sandstrom
 Dennis Lyon
 Erik Burge

Others Present

Dale Connors, Ellwood
 Andrew Fiegel, Ellwood
 Dana Woolfrey, GRS
 Cindy Birley, DGS
 Lew Quigley, Plan Administrator
 Mona Goodyear, Plan Assistant

Consent Agenda

MOTION: Mr. Lyon made a motion to approve the Consent Agenda, Ms. Sandstrom seconded this; the Chair called the vote and the motion passed unanimously.

| Vendor | Invoice # | Amount | Purpose |
|---------------------------|------------------|---------------|---------------------|
| Arapahoe County Treasurer | 202003 | \$17,062.20 | Plan Staff Expenses |
| JP Morgan | 200331-26714-A | \$19,630.08 | Investment Fees |
| Fidelity | 20200331-805-A | \$22,020.32 | Investment Fees |
| LifeStatus 360 | 202042449 | \$1.49 | Address Search |
| Gabriel Roeder Smith | 453969 | \$11,779.00 | Actuarial Fee |
| Milliman | 016ACR0420 | \$7,062.50 | Investment Fees |
| Total Expenditures | | \$77,555.59 | |

Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|------------------------|--------------|
| 4 | Retirement | |
| 1 | Vested Withdrawal | \$97,000.00 |
| 8 | Non-Vested Withdrawals | \$126,404.04 |
| | Death | |
| | Total Expenditures | \$223,404.04 |

1. Gabriel Roeder Smith

Ms. Woolfrey discussed the annual valuation report. Current uncertainty in the world's response to the COVID-19 virus has created a situation where returns fluctuate so rapidly that any snapshot in time quickly grows stale. At this point it is hard to determine or formulate a projection analysis for the annual BOCC Study Session. Will need to shape this over the next few months.

The Plan earned 16.5% for calendar year 2019, as compared to losses of (3.8%) for CY 2018. The 30-year projection is still in line with AVA projection from last year. 2018 produced a small liability of (\$500,000) that is comprised of several smaller positive and negative returns. The year also produced a small salary gain over the year, a datapoint that the BOCC has focused on in the past. The Plan's

Funded Ratio rose from 55.69% in 2018 to 60.69% in 2019, partially due to the increase in contributions from 8.5% to 8.75%, and the market value met the actuarial value. This also resulted in a change in the contribution shortfall from 4.32% as of 1/1/19 to 3.93% as of 1/1/20.

Ms. Woolfrey offered that the Plan's future sustainability hinged on the suggested increase of employer/employee contributions from 8.75% to 9.00% even more so with the uncertainty in the entire global market economy. It is expected that the increase will be proposed and approved. Since the smoothed and market values are so close this year, Ms. Woolfrey presented two separate thirty-year projections, one assuming no further change to employee/employer contribution levels, and the second moving from 8.75% to 9.0%, or 18.0% total. No further increase in contributions would result in a 30-year funded ratio of 63.5%, as opposed to 70.4%.

Mr. Lyon questioned whether it is allowable for employees to contribute more than employers. Ms. Birley offered that Adams County amended their Plan last year and now allows the employer to contribute more than the employee. It is possible the Plan Board could petition the legislature to amend the plan to allow for a decrease in new employee benefits from the Plan.

Ms. Woolfrey then presented three different scenarios for CY2020 returns, one flat, one assuming a (12.0%) return, and a third with a (20.0%) return. Even with a flat return for 2020, the plan's 30-year funded ratio is 57.2%, meaning it is still afloat. Our investment horizon is much longer than ten years, but we cannot ignore the impact of the current crisis.

Ms. Woolfrey discussed a graphic from the Wall Street Journal that compared the standard deviation required for investors to earn 7.5%, referencing data points from 1995, 2005, and 2015. The standard deviation in 1995 was 6.0% and the allocation was made up of 100% bonds. The 2015 deviation came in as 17.2% and was made up of six separate asset classes. This demonstrates how extreme and challenging today's climate can be.

Ms. Woolfrey will prepare a "DRAFT" BOCC presentation and send out to the Board for review and comments. Mr. Quigley will have available dates by the May meeting for the annual BOCC Study Session, typically sometime in late July.

2. Ellwood

The month of April appears to be a rebound. Equities fell sharply in March, coming in at (13.0%), or (21.0%) year to date. From February 20, 2020 to March 23, 2020, equities fell 34.0%. March 2020 will be remembered as the worst investment month in most portfolio manager's careers.

The Plan's assets decreased from \$308.2 million on 3/1/20, totaling \$282.4 million on 3/31/20. Mr. Connors stressed that April has shown a rebound from this baseline. He suggested we increase exposure in the credit area, currently vetting recommendations. It is noted that the equity asset class is under-weighted, partially due to our inability to liquidate the Trumbull Property Fund.

3. Davis Graham & Stubbs

Ms. Birley offered that COVID-related legislation is beginning to become relevant and could potentially allow some participants to avoid the 72t penalties. As a result, some Plans are reducing the 20% early

withdrawal penalty to 10%. She does not recommend a plan amendment currently and does not think this is a good idea.

A short discussion ensued regarding the RMD age change from 70 ½ to 72. It was determined that it makes sense to adopt the change as it allows the Retirement staff an additional year and a half to locate someone qualifying for a plan distribution or benefit. Ms. Birley suggests updating the Tax Notice now and work on updating the Plan documents later (up to four years out).

MOTION: Mr. Lyon made a motion to update the Plan's documents to reference age 72 as the new age of Required Minimum Distributions, Mr. Garnsey seconded this; the Chair called the vote and the motion passed unanimously.

4. Other Business

None.

5. Board Member Comments

None.

6. Plan Administrator

Mr. Quigley will get a date for the upcoming BOCC study session scheduled and forward to date to Board members as it becomes available.

7. Plan Members Questions and Comments

No Comments

8. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 3:02 p.m.

Michael Garnsey, Chair

ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
April 22, 2020

The Chairman called the meeting to order at 1:34 P.M.

Board Members Present

Mike Garnsey
 Richard Harris
 Sue Sandstrom
 Dennis Lyon
 Erik Burge

Others Present

Dale Connors, Ellwood
 Andrew Fiegel, Ellwood
 Dana Woolfrey, GRS
 Cindy Birley, DGS
 Lew Quigley, Plan Administrator
 Mona Goodyear, Plan Assistant

Consent Agenda

MOTION: Mr. Lyon made a motion to approve the Consent Agenda, Ms. Sandstrom seconded this; the Chair called the vote and the motion passed unanimously.

| Vendor | Invoice # | Amount | Purpose |
|---------------------------|------------------|---------------|---------------------|
| Arapahoe County Treasurer | 202003 | \$17,062.20 | Plan Staff Expenses |
| JP Morgan | 200331-26714-A | \$19,630.08 | Investment Fees |
| Fidelity | 20200331-805-A | \$22,020.32 | Investment Fees |
| LifeStatus 360 | 202042449 | \$1.49 | Address Search |
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| Total Expenditures | | \$77,555.59 | |

Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|------------------------|--------------|
| 4 | Retirement | |
| 1 | Vested Withdrawal | \$97,000.00 |
| 8 | Non-Vested Withdrawals | \$126,404.04 |
| | Death | |
| | Total Expenditures | \$223,404.04 |

1. Gabriel Roeder Smith

Ms. Woolfrey discussed the annual valuation report. Current uncertainty in the world's response to the COVID-19 virus has created a situation where returns fluctuate so rapidly that any snapshot in time quickly grows stale. At this point it is hard to determine or formulate a projection analysis for the annual BOCC Study Session. Will need to shape this over the next few months.

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Ms. Woolfrey offered that the Plan's future sustainability hinged on the suggested increase of employer/employee contributions from 8.75% to 9.00% even more so with the uncertainty in the entire global market economy. It is expected that the increase will be proposed and approved. Since the smoothed and market values are so close this year, Ms. Woolfrey presented two separate thirty-year projections, one assuming no further change to employee/employer contribution levels, and the second moving from 8.75% to 9.0%, or 18.0% total. No further increase in contributions would result in a 30-year funded ratio of 63.5%, as opposed to 70.4%.

Mr. Lyon questioned whether it is allowable for employees to contribute more than employers. Ms. Birley offered that Adams County amended their Plan last year and now allows the employer to contribute more than the employee. It is possible the Plan Board could petition the legislature to amend the plan to allow for a decrease in new employee benefits from the Plan.

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Ms. Woolfrey discussed a graphic from the Wall Street Journal that compared the standard deviation required for investors to earn 7.5%, referencing data points from 1995, 2005, and 2015. The standard deviation in 1995 was 6.0% and the allocation was made up of 100% bonds. The 2015 deviation came in as 17.2% and was made up of six separate asset classes. This demonstrates how extreme and challenging today's climate can be.

Ms. Woolfrey will prepare a "DRAFT" BOCC presentation and send out to the Board for review and comments. Mr. Quigley will have available dates by the May meeting for the annual BOCC Study Session, typically sometime in late July.

2. Ellwood

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3. Davis Graham & Stubbs

Ms. Birley offered that COVID-related legislation is beginning to become relevant and could potentially allow some participants to avoid the 72t penalties. As a result, some Plans are reducing the 20% early

withdrawal penalty to 10%. She does not recommend a plan amendment currently and does not think this is a good idea.

A short discussion ensued regarding the RMD age change from 70 ½ to 72. It was determined that it makes sense to adopt the change as it allows the Retirement staff an additional year and a half to locate someone qualifying for a plan distribution or benefit. Ms. Birley suggests updating the Tax Notice now and work on updating the Plan documents later (up to four years out).

MOTION: Mr. Lyon made a motion to update the Plan's documents to reference age 72 as the new age of Required Minimum Distributions, Mr. Garnsey seconded this; the Chair called the vote and the motion passed unanimously.

4. Other Business

None.

5. Board Member Comments

None.

6. Plan Administrator

Mr. Quigley will get a date for the upcoming BOCC study session scheduled and forward to date to Board members as it becomes available.

7. Plan Members Questions and Comments

No Comments

8. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 3:02 p.m.

Michael Garnsey, Chair

**ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
May 27, 2020**

The Chairman called the meeting to order at 1:30 P.M.

Board Members Present

Mike Garnsey
Richard Harris
Sue Sandstrom
Dennis Lyon
Eric Burge

Others Present

Dale Connors, Ellwood
Andy Fiegel, Ellwood
Dana Woolfrey, GRS
Lew Quigley, Plan Administrator
Mona Goodyear, Plan Assistant

Consent Agenda

MOTION: Mr. Burge made a motion to approve the Consent Agenda, Mr. Lyon seconded this; the Chair called the vote and the motion passed unanimously.

A. Approval of Minutes – April 22, 2020 Meeting – minutes were approved with the following changes: 1. Change spelling of surname “Lyons” to “Lyon”.

B. Professional Services Expenditure Approval:

| Vendor | Invoice # | Amount | Purpose |
|---------------------------|------------------|--------------------|--------------------|
| Arapahoe County Treasurer | 202004 | \$25,604.14 | Staff Expenses |
| Clifton Larson Allen | 2482296 | \$5,000.00 | Audit Services |
| Davis Graham & Stubbs | 800575 | \$1,335.00 | Annual Retainer |
| Davis Graham & Stubbs | 800576 | \$1,587.50 | Annual Retainer |
| Gabriel Roeder Smith | 453221 | \$11,332.00 | Actuarial Services |
| Gabriel Roeder Smith | 454721 | \$12,166.00 | Actuarial Services |
| Ellwood | | \$21,288.50 | Investment Fees |
| Total Expenditures | | \$78,313.14 | |

C. Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|---------------------------|--------------------|
| 3 | Retirement | |
| 0 | Vested Withdrawal | |
| 7 | Non Vested Withdrawals | \$27,949.02 |
| 1 | Death | \$46,775.36 |
| | Total Expenditures | \$74,724.56 |

1. Gabriel Roeder Smith

Ms. Woolfrey reviewed minor changes to the BOCC Study Session Presentation resulting from last month's meeting. The discussion resulted in several additional wording tweaks that were done real time and provided to Board members via email. The presentation will be updated through the end of June as information becomes available.

2. Ellwood

Mr. Fiegel opened with the preliminary performance update through 4/30/20. April was a month of recovery, with half of the first quarter's losses bouncing back from the previous low on 3/23/20. March of 2020 was the most volatile month for the S&P 500 since 1929.

The S&P is up 2.9% through the month of May thus far, with the year to date return coming in at (6.6%). All underlying sectors of the S&P were down double digits for the year. Rebounding sectors for the Plan are IT, up 5.7% for the year and Consumer Discretionary at 1.2% for the same period. There is a less extent of recovery showing in the Emerging Markets sector. The Fixed Income asset class continues to tread along with Fixed Rate Debt up 2.4% in April alone. Treasuries lead the way with a return of 8.4%.

The present snapshot shows the Plan producing a return of 5.7% for May 2020, with the year to date yielding (6.8%). The Plan's assets totaled about \$299 million, down from \$323 million as of January 1, 2020.

Mr. Connors presented the Asset Allocation Study and Credit Recommendations. He suggested modifying the Investment Objectives and Asset Allocation assumed rate of return downward from the current 7.25% objective to 7.00%. This modification allows for more diversification in investments. The modeling suggests the addition of a high yield bond allocation of 10.0% of assets.

He launched into a discussion and recommendation whereby the approximately \$15 million currently invested in the Parametric Defensive Equity Fund be liquidated and reallocated into the BlackRock High Yield Bond Fund, effectively 5.0% of the portfolio. The Parametric fund is currently experiencing no standard deviation. It is down (11.0%) for the year with no indication of any possible recovery. BlackRock's forte is finding mispriced bonds and appears in upwards of 80% of the top rating.

MOTION: Mr. Harris motioned to liquidate the entire position of the Parametric Defensive Equity Fund, with proceeds of approximately \$15,000,000 invested in the BlackRock High Yield Bond Fund; Mr. Lyon seconded. The Chair called the vote and the motion passed unanimously.

Mr. Connors continued with a discussion on the Private Credit Pricing and Credit Strategies Review. As market conditions have deteriorated over the past two months, many attractive opportunities now exist which exploit outsized dislocations

across liquid credit markets. This condition results in new opportunities in deeper stressed and distressed holdings.

Mr. Connors presented a Profile of Market Cycles that addressed the phases of the current market uncertainty. We are presently experiencing the Early Cycle. This dictates that we hire managers whose expertise is dealing with the fear of the unknown; dealing in the “Stressed” and “Distressed” sector. He presented a condensed list of four investment recommendations. Of the four recommendations, two are of shorter duration (18 months to three years), and two of longer (five years maximum). The recommended funds are as follows:

- Anchorage Illiquid Opportunities Fund VII
- Varde Partners Dislocation Fund
- Oak Hill Advisors Tactical Investment Fund
- Monarch Capital Partners V LP

A detailed discussion ensued related to the attributes and structure of each fund and the fund’s management team. All four funds are global in nature and well respected within their sector of expertise. It was recommended that the new allocation be allocated between a short-term fund and a long-term fund, which will allow the Plan to work out of the liquid debt portfolio in a fiscally responsible manner. Mr. Quigley suggested that any new investments avoid any Unrelated Business Taxable Income (UBTI) issues by investing in the Offshore Fund instead of one Delaware-based.

MOTION: Mr. Burge motioned to invest \$8.5 million in the Varde Partners Dislocation Fund and \$8.5 million in the Oak Hill Advisors Tactical Investment Fund; Mr. Harris seconded. The Chair called the vote and the motion passed unanimously.

3. Other Business

No new business.

4. Board Member Comments

No comments.

5. Plan Administrator

The BOCC Study Session has been scheduled for Monday, July 27, 2020 from 2:00 to 3:00 pm in the West Hearing Room of the Administration Building. We are exploring the feasibility of recording this year’s annual Retirement/Social Security session without any attendees and make it available on the MARC website.

Mr. Quigley polled the Board to determine if the Plan should purchase a Zoom Video Conference Business License. Mr. Connors offered to provide continued use Ellwood’s license as it incurs no additional cost.

Ms. Goodyear will be processing the next batch of automatic IRA rollovers to Millennium Trust at the close of June. It currently appears that close to \$200,000 of distributions would be removed from the Plan's books with this transaction.

6. Plan Members Questions and Comments

No Comments.

7. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 3:40 p.m.

Michael Garnsey, Chair

ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
June 24, 2020

The Chairman called the meeting to order at 1:30 P.M.

Board Members Present

Mike Garnsey
 Richard Harris
 Sue Sandstrom
 Dennis Lyon
 Erik Burge

Others Present

Dale Connors, Ellwood
 Dana Woolfrey, GRS
 Lew Quigley, Plan Administrator
 Mona Goodyear, Plan Assistant

Consent Agenda

MOTION: Mr. Harris made a motion to approve the Consent Agenda, Ms. Sandstrom seconded this; the Chair called the vote and the motion passed unanimously.

- A. Approval of Minutes – May 27, 2020 Meeting
- B. Professional Services Expenditure Approval:

| Vendor | Invoice # | Amount | Purpose |
|---------------------------|------------------|--------------------|--------------------|
| Arapahoe County Treasurer | 202005 | \$17,064.63 | Plan Administrator |
| Gabriel Roeder Smith | 455142 | \$7,312.00 | Actuarial Services |
| Davis Graham & Stubbs | 802063 | \$3,839.00 | Plan |
| Davis Graham & Stubbs | 802062 | \$1,780.00 | Annual Retainer |
| Davis Graham & Stubbs | 802064 | \$3,398.50 | Investments |
| CliftonLarsonAllen | 2512176 | \$5,000.00 | Audit Fees |
| LifeStatus360 | 20201960 | \$820.00 | Annual License |
| | | | |
| Total Expenditures | | \$39,314.13 | |

- C. Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|---------------------------|---------------------|
| 5 | Retirement | |
| 1 | Vested Withdrawal | \$100,000.00 |
| 9 | Non Vested Withdrawals | \$77,087.02 |
| 1 | Death | \$36,345.06 |
| | Total Expenditures | \$213,432.08 |

1. GRS

Ms. Woolfrey offered to give a final review the BOCC slide presentation discussed in detail at last month's meeting. The main takeaway is the Plan's sustainability requires a long-term funding commitment. Similar to investing, overseeing the Plan is likened to steering a large cruise liner; while it doesn't require constant correction, small well-timed adjustments are critical.

At this point, minor edits are all that remains to finalize the presentation. Mr. Connors expects that most final year-end and June 2020 numbers will be available prior to the July 10th BOCC presentation materials deadline.

The Board launched into a discussion of how current the investment returns will be at the time they are presented to the BOCC. Due to the uncertainty of the long-term effects of the COVID-19 pandemic, an emphasis will be placed on what would happen to the Plan in the event of multiple down years.

2. Ellwood

The Plan's assets were down -4.4% for the year as of May 31, 2020. So far this month, returns are up just under 3%. On a market level, mid cap and small cap stocks are both down double digits for the year (-13.9% and -15.9% respectively). Double digit negative returns are pervasive throughout the non-U.S. equity markets. Fixed income/credit markets are coming back, with US Government Treasuries boasting an 8.5% YTD return.

From an asset allocation standpoint, the Plan is still light in the public equities sector, due to inability to divest from the Trumbull Property Fund. Varde Partners Dislocation Fund has had their first capital call of \$425,000. Oak Hill Advisors Tactical Investment Fund follows on 6/30/20 with a 10 % capital call of \$850,000. Delaying this process is Oak Hill's insistence of having a signed Anti Money Laundering Certification letter on file. Ellwood is working with Davis, Graham, Stubbs to determine which entity can legally sign this document.

As of 6/23/20, the Plan's assets were valued at \$307.4 million, up from \$298.5 million in May, and down from the \$323 million valuation at 12/31/19. Approximately \$8 million of May's growth can be attributed to earnings. The Plan is up 8.6% for the quarter, and down -4.4% for the year. It cannot be stressed enough that future outbreaks of the pandemic and/or the creation of a vaccine may jumpstart or stall the economy even further.

Mr. Harris questioned the feasibility of pulling together representatives from Human Resources, Finance, and Budgeting to meet with the Retirement Board prior to the BOCC presentation. The Board needs to understand the County's financial response to the COVID-19 pandemic and any affects it may have on future hiring, retirements, layoffs or furloughs. Mr. Quigley suggested that Ms. Dusty Sash of HR be invited to attend the June Retirement Board Meeting and that she be aware she may be invited to speak or present at the BOCC meeting on the Plan's behalf. Mr. Burge suggested Mr. Todd Weaver, Finance/Budgeting Manager speak to the challenges the County may be facing over the next few years. After much discussion, it was decided the two named individuals would be emailed the BOCC Presentation and could provide feedback or additional information during July's scheduled meeting.

3. Other Business

None.

4. Board Member Comments

None.

5. Plan Administrator

Mr. Quigley reaffirmed Human Resources is undecided whether to hold a virtual version of the Annual Retirement Workshop. The largest obstacle is the inability to record anything related to the Social Security Administration per agency guidelines. There is a possibility it could be rescheduled sometime this fall if restrictions are lifted. At the present time, up to 50 people are permitted in the East Hearing Room per social distancing guidelines set forth by the State. The main benefit of it being held in person is the ability to share and answer questions.

He is noticing an uptick in the number of prospective retirees he is meeting with. Many of these individuals are Sheriff's employees now very concerned about the personal liability required to be a law enforcement officer in today's state of upheaval. Both vested and non-vested withdrawals are down for the year. Retirees are on track for a normal year.

The audit is complete, and responses been forwarded on to Clifton Larson Allen. Mr. Quigley praised Mr. Burge's efforts in this activity.

Ms. Goodyear reported the third batch of automatic rollover disbursements to Millennium Trust will be transmitted the middle of July. This allows the Plan to remove those unresponsive accounts off the Plan's books at six-month intervals.

6. Plan Members Questions and Comments

No Comments.

7. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 2:19 p.m.

Michael Garnsey, Chair

**ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
July 22, 2020**

The Chairman called the meeting to order at 1:32 P.M.

Board Members Present

Mike Garnsey
Richard Harris
Sue Sandstrom
Erik Burge
Dennis Lyon

Others Present

Dale Connors, Ellwood
Andrew Fiegel, Ellwood
Tim Rawal, CLA
Thomas Rey, CLA
Dan Perkins, _____
Lauren Albanese, Financial Investment News
Lew Quigley, Retirement Plan Administrator
Mona Goodyear, Retirement Plan Assistant

Consent Agenda

MOTION: Mr. Lyon made a motion to approve the Consent Agenda, Ms. Sandstrom seconded this; the Chair called the vote and the motion passed unanimously.

- A. Approval of Minutes – June 24, 2020 Meeting
- B. Professional Services Expenditure Approval:

| Vendor | Invoice # | Amount | Purpose |
|---------------------------|------------------|--------------------|--------------------|
| Arapahoe County Treasurer | 202006 | \$17,064.60 | Plan Administrator |
| Fidelity | 20200630-805-A | \$21,371.21 | Investment Fee |
| Davis Graham & Stubbs | 803689 | \$3,333.50 | Plan |
| Davis Graham & Stubbs | 803690 | \$89.00 | Annual Retainer |
| Davis Graham & Stubbs | 803783 | \$1,900.00 | Investments |
| Gabriel Roeder Smith | 456150 | \$1,911.00 | Actuarial Services |
| Ellwood | | \$21,288.50 | Quarterly Fee |
| Total Expenditures | | \$63,957.81 | |

Acknowledgement of reimbursement of \$367.16 to Lew Quigley for Office Supplies

Acknowledgement of reimbursement of \$31.49 to Mona Goodyear for Office Supplies

- C. Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|---------------------------|--------------------|
| 7 | Retirement | |
| 0 | Vested Withdrawal | |
| 11 | Non Vested Withdrawals | \$70,795.90 |
| | Death | |
| | Total Expenditures | \$70,795.90 |

1. CliftonLarsonAllen LLP – 2019 Audit Report

Mr. Rawal gave a short overview of the 2019 audit findings. There are no material changes from the previous year and year-end financial statements have not yet been filed. Illiquid real estate and private equity investments tend to lag in their reporting cycle. As we know, 2019 was a good market year for the plan with year-end valuations increasing from \$284 million to \$321.7 million as of 12/31/19.

The Plan Design Change of 2014, which eliminated the refund of matching contributions has helped the Plan's financial health, but it is still dependent on the cyclical nature of employee turnover.

The Board briefly touch on the mention of the COVID-19 virus under the "Subsequent Events" section in the writeup. It was suggested that the pandemic be addressed but also acknowledge that the market has experienced normal fluctuation irrespective of a global situation.

Mr. Quigley commended the ease in this year's audit, directly attributing it to the work of Mr. Rawal and board member Mr. Burge.

2. Ellwood

The S&P 500 Index had its best quarter in over twenty-five years, coming in at 20.5%, according to Mr. Fiegel. As of this meeting, the market has recovered 77% of the year to date losses so far, further underlining why our approach needs to be disciplined. The second quarter's returns bolstered the rolling three-year (from 2.2% to 4.8%) and five-year (from 3.3% to 5.3%) returns for the Plan. He reiterated the goal is for the Plan to achieve a 7.5% return.

The third quarter is off to a good start. The Plan's assets were valued at approximately \$307 million the end of May 2020 and \$310 million the end of June 2020.

Liquidation of the \$15 million position of the Parametric Defensive Equity Fund did not occur until 6/30/20. As a result, the intended reinvestment opportunity in the Blackrock position was not available. Mr. Connors present the following positions replace this investment:

- JP Morgan Core Bond Fund - \$4 million
- Western Asset Core Plus Bond Fund - \$8 million
- Vanguard Total International Stock Index - \$2 million
- Dodge & Cox Global Stock - \$1 million

MOTION: A Motion was made by Mr. Burge to disregard the previous motion to invest in the Blackrock _____ and instead approve the purchase of \$4 million JP Morgan Core Bond Fund, \$8 million in Western Asset Core Plus Bond Fund, \$2 million in Vanguard Total International Stock Index, and \$1 million in Dodge & Cox Global Stock; Mr. Lyon seconded the Motion; the Chair called the vote and the motion passed unanimously.

3. Other Business

US Bank is launching a retiree portal that will allow individuals to perform self-service on their accounts in the areas of change of address, change of checking account, printing out prior year tax documents, etc. The Retirement Administration offices will be notified of any changes so our internal systems will match. The cost is \$.50 per retiree month per month, billed quarterly, or about \$2,000 annually. Mr. Quigley will work on creating a communication to inform retirees of the new features.

4. Board Member Comments

Mr. Lyon suggested the Board request a Historical Review of Prior Investment Managers be performed by Ellwood that analyzes the performance of our previous investment managers. A discussion ensued regarding the relevance of this exercise and what would be accomplished through the exercise. The Board ultimately agreed that we table the request due to a perceived benefit.

5. Plan Administrator

Mr. Quigley reported that the annual Retirement Seminar is being cancelled and may not happen until next year due to the pandemic. A virtual session is being considered, and he will report back next month.

The MARC employee portal (actreg.org) is currently offline due to the death of an outdated piece of software (Dreamweaver). Liz Ellis is working on re-programming the site and he expects it up in thirty days.

The annual BOCC Study Session is being held via Microsoft Teams on Monday, July 27, 2020 at 2pm.

6. Plan Members Questions and Comments

No Comments

7. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 2:50 p.m.

Michael Garnsey, Chair

ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
August 26, 2020

Due to the COVID-19 pandemic, the meeting was held via Zoom remote.

The Chairman called the meeting to order at 1:32 P.M.

Board Members Present

Mike Garnsey
 Richard Harris
 Sue Sandstrom
 Erik Burge
 Dennis Lyon

Others Present

Dale Connors, Ellwood
 Andrew Fiegel, Ellwood
 Dan Perkins, County Attorney
 Lauren Albanese, Financial Investment News
 Lew Quigley, Retirement Plan Administrator
 Mona Goodyear, Retirement Plan Assistant

Consent Agenda

MOTION: Mr. Harris made a motion to approve the Consent Agenda, Ms. Sandstrom seconded this; the Chair called the vote and the motion passed unanimously.

- A. Approval of Minutes – July 22, 2020 Meeting
- B. Professional Services Expenditure Approval:

| Vendor | Invoice # | Amount | Purpose |
|---------------------------|-------------------|---------------|--------------------|
| Arapahoe County Treasurer | 202007 | | Plan Administrator |
| IFEBP | INV-589090-Q4H8Z9 | \$1,265.00 | Membership |
| Davis Graham & Stubbs | 804645 | \$118.50 | Plan |
| Davis Graham & Stubbs | 804646 | \$5,494.00 | Investments |
| Milliman | 016ACR0720 | \$7,062.50 | License Fee |
| CliftonLarsonAllen | 2578751 | \$3,000.00 | Audit Services |
| J.P. Morgan | 20200630-26714-A | \$20,035.08 | Investment Fees |
| Total Expenditures | | \$36,975.08 | |

- C. Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|------------------------|--------------|
| 4 | Retirement | |
| 0 | Vested Withdrawal | |
| 26 | Non Vested Withdrawals | \$262,754.28 |
| | Death | |
| | Total Expenditures | \$262,754.28 |

1. Ellwood

Mr. Fiegel reviewed second quarter results. US stocks experienced their best quarter since 1998, with the S&P 500 posting 20.5% returns. Investors now appear to be optimistic that the COVID-

19 related downturn will be relatively brief given the stimulus measures taken. This is only the fourth time since 1945 that the index has produced a quarterly return upwards of 20%. In each of the previous instances, the next quarter was also a positive one. Through June 20, 2020, the S&P 500 had recovered 77% of its YTD losses.

The Plan's assets were valued at \$310 million as of 6/30/20, down from \$323 million on 12/31/19. Assets appreciated further in July, with 7/31/20 Plan valuation at \$318 million.

July returns were up just over 3%, with the annual returns coming in just shy of zero and the five-year at 5.8%. Mr. Harris questioned what the Plan would need to generate for August through December 2020 in order to move the annualized five-year and ten-year returns to the actuarial assumed rate of 7.25%. Mr. Connors was not able to provide the number real-time but followed up on 8/27/20 via email with his findings. The Plan would need to return 3.8% for the remainder of the year in order to move the five-year annualized return to 7.25% and 11.2% for the remainder of the year in order for the ten-year return number to yield 7.25%.

2. Other Business

Mr. Quigley presented two MARC system programming options associated with the Plan Design Change Estimate addressing the unusual situation of a deferred vested Rule of 75 person that left the County and left their money in the Plan, only to be rehired after January 1, 2017. The first option is a quote of \$1,800 to \$2,000 to program the software to only show a Warning when this extremely rare situation is encountered. The system will abort any calculation, will need to be completed outside the system. The current cost to perform these infrequent calculations is \$300 to \$500 per occurrence.

The second option is priced from \$10,000 to \$12,500 and would perform the calculations within the system and post updates to the participant website.

MOTION: Mr. Harris motioned that expenses of \$1,800 to \$2,000 be authorized to update the MARC system to display a warning message due to changes to Article VI, Section 2(b)(ii), Special Early Retirement Provisions. Mr. Burge seconded and the motion passed unanimously.

3. Board Member Comments

No comments.

4. Plan Administrator

Mr. Quigley reports the department will take part in a virtual version of open enrollment. The annual Retirement Planning Seminar has been postponed to 2021 due to the pandemic.

An analysis was done on the average age of retirees. Of the current living 1,100 retirees, 50 are over the age of 85 and average a monthly pension of \$900. Additionally, 220 individuals are over the age of 75 and average a monthly pension of \$1,400 (this figure includes the 50 over age 85).

5. Plan Members Questions and Comments

No comments.

6. **Adjournment**

There being no further business to come before the Board, the Chairman adjourned the meeting at 2:27p.m.

Michael Garnsey, Chair

ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES

September 23, 2020

ZOOM Meeting

The Chairman called the virtual meeting to order at 1:33 P.M.

Board Members Present

Michael Garnsey
Richard Harris
Sue Sandstrom
Dennis Lyon
Erik Burge

Others Present

Dale Connors, Ellwood
Dana Woolfrey, GRS
Lauren Albanese, Financial Investment News
Lew Quigley, Plan Administrator
Mona Goodyear, Retirement Plan Assistant

Consent Agenda

MOTION: Mr. Harris made a motion to approve the Consent Agenda, Ms. Sandstrom seconded this; the Chair called the vote and the motion passed unanimously.

- A. Approval of Minutes – August 26, 2020 Meeting
- B. Professional Services Expenditure Approval:

| Vendor | Invoice # | Amount | Purpose |
|----------------------------|------------------|---------------|--------------------|
| Arapahoe County Treasurer | 202007 | \$17,064.60 | Plan Staff |
| Arapahoe County Treasurer | 202008 | \$17,064.62 | Plan Staff |
| Davis Graham & Stubbs, LLP | 805972 | \$1,922.50 | Plan Matters |
| Davis Graham & Stubbs, LLP | 805973 | \$383.00 | Investment Matters |
| Total Expenditures | | \$36,467.72 | |

- C. Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|------------------------|--------------|
| 2 | Retirement | |
| 2 | Vested Withdrawal | \$153,476.62 |
| 15 | Non Vested Withdrawals | \$284,042.42 |
| | Deaths | |
| | Total Expenditures | \$437,519.04 |

1. Ellwood

Mr. Connors stated that August 2020 was a very strong month with US stocks out pacing foreign stock. Growth stocks are outpacing value-oriented stocks year to date 28.9% to (9.9%). The one-year numbers are even more dispersed, with growth yielding 42.6% for the one year, compared to 0.4% annual for value. This appreciation has positively affected the ten-year numbers.

Returns through August have the Plan returning 3.1%, or 2.7% year to date. Five-year Plan returns are now yielding 7.2%, which is very close to the actuarial assumed return we are using. If the last four months of the year return 0.7%, the Plan's five-year return number would be 7.2%. The Plan's assets were valued at \$327.3 million, up from the \$323.6 as of 1/1/2020. Stocks are down across the board for the month of September, and some instability looms with the upcoming Presidential election and the continuing COVID-19 crisis impacting the markets.

2. Experience Study

Ms. Woolfrey reviewed the most recent Experience Study for the six-year period ending January 1, 2020. A major finding showed the [recommended demographic changes](#) of the Plan were of minimal impact to the expected costs. In the actuarial world of experience, this is very rare and considered a “win”. Ms. Woolfrey reiterated the purpose of the Experience Study is to confirm [that contributions as recommended by the actuary remain are](#) adequate to fund the Plan. She also stressed that the adopted demographic or economic assumptions must not be biased in any way.

She reported that initial termination losses have been very modest. Headcounts were more than expected [indicating that liability weighted experience should be used](#). She recommends keeping the age-based rates in place, as opposed to being service-based rates. [Slight modifications were recommended to the Male pre-50 rates. and sVery slight modifications to the Male and Female post-50 rates were recommended table in the ratio of actuals/expected. The Female table wasn't modified](#) as there wasn't much actual experience to base it on.

A trend exists where the highest paid workers are exiting the Plan at their first eligibility dates, as they can afford to do so. This places an additional liability that needs to be accounted for. This scenario will require a modification to the Special Early Liability-weighted Age-based return table in the age 52 to 55 range (from 0.20 to 0.25).

Current mortality assumptions were reviewed. Males were a perfect fit. The Females appear to be living a little longer than expected. She recommends [updating to more current mortality tables, blended based on plan demographics and](#) using the 105% multiplier to bring [this variablethe actual/expected](#) back to 100%. Mortality [projection scale rate](#) tables are released annually and quickly become outdated. She suggests using the Ultimate Rates, which do not ever change, thereby providing stability of the results.

Economic assumptions are currently extremely difficult to predict. It may make sense to wait until sometime in 2021, or when the pandemic ends / vaccine developed. In addition, the current 2.5% inflation rate is on the high side of acceptable.

MOTION: A Motion was made by Ms. Sandstrom to adopt the demographic assumptions, with inflation at 2.5%, 4.75% real return (7.25% nominal) and reassess in 2021; Mr. Burge seconded the Motion; the Chair called the vote and the motion passed unanimously. Economic assumptions will be addressed at a later date, possibly first quarter of 2021.

3. Other Business

None.

4. Board Member Comments

None.

5. Plan Administrator

The 2021 meeting was presented with the assumption that in 2021 all meetings will be ZOOM Meetings, with subject to change. Mr. Quigley has requested any changes be passed on no later than October 16, 2020.

6. Plan Members Questions and Comments

No Comments.

7. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 2:52 p.m.

Michael Garnsey, Chair

ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
October 28, 2020

The Chairman called the meeting to order at 1:32 P.M.

Board Members Present

Mike Garnsey
 Rich Harris
 Sue Sandstrom
 Dennis Lyon
 Erik Burge

Others Present

Dale Connors, Ellwood
 Andy Fiegel, Ellwood
 Dana Woolfrey, GRS
 Tina Seberg, US Bank
 Lauren Albanese, Financial Investment News
 Dan Perkins, Attorney's Office
 Lew Quigley, Retirement Plan Adm
 Mona Goodyear Retirement Plan Asst

Consent Agenda

MOTION: Mr. Lyon made a motion to approve the Consent Agenda, Mr. Burge seconded this; the Chair called the vote and the motion passed unanimously.

- A. Approval of Minutes –September 23, 2020 Meeting
- B. Professional Services Expenditure Approval:

| Vendor | Invoice # | Amount | Purpose |
|---------------------------|------------------|---------------|--------------------|
| Arapahoe County Treasurer | 202009 | | Plan Administrator |
| Davis Graham & Stubbs | 807347 | \$743.00 | Participant |
| Davis Graham & Stubbs | 807348 | \$253.00 | Annual Retainer |
| Gabriel Roeder Smith | 457523 | \$35,350.00 | Investment Fee |
| Ellwood | | \$21,288.50 | Consulting Service |
| NCPERS | | \$260.00 | Membership |
| Total Expenditures | | \$58,494.50 | |

- C. Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|------------------------|--------------|
| 1 | Retirement | |
| 0 | Vested Withdrawal | 0.00 |
| 9 | Non Vested Withdrawals | \$121,411.57 |
| | Total Expenditures | \$121,411.57 |

1. Ellwood

Mr. Fiegel opened the meeting stating that September was a negative month as the markets are reacting to the resurgence of Covid-19 and the upcoming Presidential election. The S&P 500 was down 3.8% for the month of September but still up 5.6% for the year. These are very strong

returns given the volatility of the current financial markets. There continues to be a discrepancy between the Russell 3000 Value returns (12.2%) year to date versus the Russell 3000 Growth 23.0%. Fixed income returns fell slightly but are still yielding 6.8% YTD for Barclay's US Aggregate versus 8.8% Barclay's US Government. The Plan's fixed income return is up over 16% for the past twenty-one months.

Mr. Connors stated the most recent five-year returns are currently at 7.3%, in line with the rolling five-year actuarial assumptions. The Plan started the year at \$323.6 million and assets were valued at \$321.4 as of September 30, 2020.

Ellwood is merging two performance systems and the current reporting package has several charts that are not reconciled. Mr. Connors offered that their analysts were working to rectify these inconsistencies prior to the next reporting month.

2. GRS

Ms. Woolfrey shared a memorandum written to the Board regarding the interest rate and mortality assumptions being used in calculating actuarial equivalence under the Plan.

The Plan has historically used interest rates published by the Pension Benefit Guaranty Corporation (PBGC), which will no longer be published after 2020. The PBGC has provided guidance in a final rule for employers to determine interest rates for this purpose, suggesting the use of a table provided in the PBGC's final rule and a 12-year Corporate Bond Rate.

The mortality rates referenced are dated 1994 and she recommends consulting Ms. Birley to determine the need to be updated.

After a short discussion, it was determined the Board could proceed with a Motion to amend the Plan for its interest rate assumptions and to consult with Ms. Birley regarding mortality rate assumptions.

GRS would provide the interest rate calculations annually free of charge and Milliman will confirm those results as part of their services.

MOTION: A motion was made by Ms. Sandstrom to update the Plan Document by amending its definition of Actuarial Equivalent, to replace the reference to the PBGC rate to an interest rate determined by the method set forth in the PBGC's final rule. Mr. Harris seconded the motion, the Chair called the vote and the motion passed unanimously.

3. Other Business

None.

4. Board Member Comments

No comments.

5. Plan Administrator

Mr. Quigley has met with the BOCC regarding the replacement of Mr. Dennis Lyon's board member seat. The BOCC is utilizing a public website where prospective applicants can see the 23 different board and 158 board positions available for appointment. The open position will be posted this month. Mr. Garnsey and Mr. Quigley will review applicants, but the BOCC makes the final decision. Mr. Lyon's last meeting will be the January 2021.

6. Plan Members Questions and Comments

No Comments

7. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 2:30 p.m.

Michael Garnsey, Chair

ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
November 18, 2020
VIA ZOOM Meeting Due To Covid-19 Restrictions

The Chairman called the meeting to order at 1:30 P.M.

Board Members Present

Mike Garnsey
 Rich Harris
 Sue Sandstrom
 Dennis Lyon
 Erik Burge

Others Present

Dale Connors, Ellwood
 Andy Fiegel, Ellwood
 Dana Woolfrey, GRS
 Cindy Birley, DGS
 Lauren Albanese, Financial Investment News
 Dan Perkins, Attorney's Office
 Lew Quigley, Retirement Plan Adm
 Mona Goodyear Retirement Plan Asst

Consent Agenda

MOTION: Mr. Lyon made a motion to approve the Consent Agenda, Ms. Sandstrom seconded this; the Chair called the vote and the motion passed unanimously.

- A. Approval of Minutes – October 28, 2020 Meeting
- B. Professional Services Expenditure Approval:

| Vendor | Invoice # | Amount | Purpose |
|-----------------------|------------------|---------------|--------------------|
| Davis Graham & Stubbs | 808754 | \$3,757.00 | Plan |
| Davis Graham & Stubbs | 808755 | \$1,124.00 | Participant |
| Fidelity | 20200930-805-A | \$23,113.43 | Investment Fees |
| Milliman | 016ACR1020 | \$7,062.50 | License Fee |
| Gabriel Roeder Smith | 458267 | \$700.00 | Actuarial Services |
| Total Expenditures | | \$35,756.93 | |

- C. Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|------------------------|--------------|
| 5 | Retirement | |
| 0 | Vested Withdrawal | |
| 10 | Non Vested Withdrawals | \$94,668.44 |
| | Total Expenditures | \$94,668.44 |

1. Ellwood

Mr. Fiegel launched the meeting with third quarter market updates. Most of this information has been touched upon the past two meetings. He reiterated the recovery in equity markets is

unevenly distributed in a handful of stocks (Amazon, Apple, Facebook, Google, and Microsoft) which represent 22.6% of the S&P 500, yet have contributed to 42% of the benchmark's market value. Fourth quarter returns are not as bad as we were preparing for at the onset of the pandemic, with returns being inconclusive since the presidential election.

The Federal Reserve Board's primary goal is to maximize employment. Interest rates will be low for the foreseeable future, with no plans to raise the funds rate until 2023 at the earliest. It is uncertain if additional stimulus measures may be required to prop up the economy.

Mr. Connor provided the Board with total fund performance figures. Plan assets were valued at \$311 million at the onset of the fourth quarter. Latest available returns are \$323.6 million.

The Plan was up 4.5% for the third quarter, which matched the benchmark. The rolling five-year number is now at 7.4%, which is above the 7.25% five-year actuarial smoothed rate. Mr. Harris questioned what the Plan would need to yield for the remainder of the year to realize the five-year rate. Mr. Connors stated the assets are yielding 0.3% YTD through October 2020. November and December would need to yield 3.12%, or an annualized 2020 return of 3.43% to achieve the 7.25% target. The Plan lost ground in October but appears to be making it up thus far in November.

Our two new placements in the Floating Rate Debt category, Oak Hill Tactical Opportunities Fund and Varde Dislocation Fund are doing well, yielding 8% and 9% net of fees respectively for the fourth quarter. The Plan will continue to deal with exiting the Trumbull Property Fund. According to Mr. Connors, it could take more than three years to exit the fund as the \$14 billion fund has \$8.5 billion in investors waiting to leave.

Mr. Lyon noted the Parametric Defense Fund has lost \$1.2 million in 2020 and questioned what the fund's inception-to-date return figure was. Mr. Lyon provided email after the conclusion of the meeting that confirmed an inception-to-date return of \$585,345 that was derived from information previously supplied by Ellwood.

2. Cindy Birley/Dana Woolfrey, PBCG Rate

Ms. Birley addressed the presence of Lauren Albanese, from the publication Financial Investment News, a recurring listener on the Board's monthly Zoom meetings. She addressed the fact that this Board does not allow the recording and/or subsequent posting of minutes online or for resale to any party. Ms. Albanese confirmed her understanding for public record.

A Plan Amendment addressing the updated employee/employer contribution rate and the update to the PBCG rate will require signature by Board Members next month. A discussion ensued regarding the possibility of a virtual notarization or the use of DocuSign. Remote notarization due to the pandemic appears to be doable but very complicated, requiring the filming of document signing and digital preservation for ten years, according to Ms. Birley. The Plan's documents don't specifically require notarization, which opens the door for DocuSign.

Ms. Birley recommends running several mortality assumptions on the different benefit payments, testing our theory and the effect on calculated payments as part of our due diligence.

Ms. Woofrey agreed and stated we needed to keep in line with the mortality tables per the recent experience study since our partial lump sum distributions are already being subsidized by the actions of previous Boards. The study of these assumptions should be a brief process. As a baseline, Mr. Quigley offered there have been a total of seven partial lump sum distributions paid out this year.

MOTION: A motion was made by Mr. Harris to authorize Gabriel Roeder Smith to study a select sample of scenarios regarding the affect an update to the source of our mortality tables and the utilized interest rates. Mr. Burge seconded the motion; the Chair called the vote and the motion passed unanimously.

3. Other Business

None.

4. Board Member Comments

None.

5. Plan Administrator

Mr. Quigley stated that approximately 50% of current employees have registered to view their retirement accounts on the MARC website, the highest amount ever. An announcement is scheduled to run on Friday, December 11, 2020 in the AC Weekly informing current employees of the increase to 9% to the employee/employer contributions starting with the first pay period in 2021.

6. Plan Members Questions and Comments

None.

7. EXECUTIVE SESSION to discuss Personnel Issues

Consent Agenda – Executive Session

MOTION: Mr. Garnsey made a motion to approve the Executive Session Consent Agenda, Mr. Lyon seconded this; the Chair called the vote and the motion passed unanimously.

8. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 2:43 p.m.

Michael Garnsey, Chair

**ARAPAHOE COUNTY BOARD OF RETIREMENT MINUTES
December 16, 2020**

The Chairman called the meeting to order at 1:30 P.M.

Board Members Present

Michael Garnsey
Richard Harris
Sue Sandstrom
Dennis Lyon
Erik Burge

Others Present

Dale Connors, Ellwood
Dana Woolfrey, GRS
Cindy Birley, DGS
Lauren Albanese, Financial Investment News
Dan Perkins, Attorney's Office
Lew Quigley, Plan Administrator
Mona Goodyear, Plan Assistant

Consent Agenda

MOTION: Mr. Harris made a motion to approve the Consent Agenda, Mr. Lyon seconded this; the Chair called the vote and the motion passed unanimously.

- A. Approval of Minutes – November 18, 2020 Meeting
- B. Professional Services Expenditure Approval:

| Vendor | Invoice # | Amount | Purpose |
|-----------------------|------------------|---------------|-------------------|
| Davis Graham & Stubbs | 809639 | \$418.50 | Plan |
| Davis Graham & Stubbs | 809638 | \$1,709.00 | Investments |
| Lew Quigley | Office Depot | \$63.67 | Office Supplies |
| Lew Quigley | Executive Shoppe | \$99.00 | Recognition Award |
| Total Expenditures | | \$2,290.17 | |

- C. Vested/Non-Vested Withdrawals

| Number | Reason | Total |
|---------------|------------------------|--------------|
| 5 | Retirement | |
| 1 | Vested Withdrawal | \$152,731.63 |
| 6 | Non-Vested Withdrawals | \$182,524.44 |
| | Total Expenditures | \$335,256.07 |

1. Ellwood

Mr. Connors launched into performance for the month of November. It was a great month, with a year's worth of gains in a month. Growth is still outperforming Value. Emerging markets are coming in at 10.5%. All the Bloomberg indices are positive for both the month of November and year to date, with investment grade leading the way. Energy is leading the charge for month-to-date and year-to-date. The Plan's assets grew to \$339.6 million.

2. Other Business

Ms. Birley reviewed the changes made resulting from the PBGC rate calculation. Each board member received a form to sign via the program DocuSign. Ms. Birley confirmed the e-signature process.

Ms. Woolfrey reviewed several examples with the Board, illustrating the impact of taking a lump sum distribution with the new funding assumptions. Mr. Quigley will forward the new assumptions to Milliman.

MOTION: Mr. Harris called the motion to update the PBGC rate calculation, Ms. Sandstrom seconded the motion, the Chair called the vote and the motion passed unanimously.

3. Board Member Comments

No comments.

4. Plan Administrator

Mr. Quigley conducted the annual Election of Officers.

MOTION: Mr. Harris made the motion to elect Mr. Garnsey as the Chairman, Ms. Sandstrom seconded the motion, the vote was called and passed unanimously.

Mr. Quigley conducted the annual Election of Officers, Chairman Pro Tem. **MOTION: Mr. Garnsey made the motion to elect Mr. Harris as Chairman Pro Tem, Mr. Lyon seconded the motion, the vote was called and passed unanimously.**

Mr. Quigley conducted the annual Election of Officers, Secretary Treasurer. **MOTION: Ms. Sandstrom made the motion to elect Mr. Burge as Secretary Treasurer, Mr. Garnsey seconded the motion, the vote was called and passed unanimously.**

Mr. Quigley offered that there have been six retiree's that have passed from Covid-19.

5. Plan Members Questions and Comments

Ms. Goodyear offered to run the Retirement Board opening being vacated by Mr. Lyon on her LinkedIn profile and will work with Luc Hatlestad.

6. Adjournment

There being no further business to come before the Board, the Chairman adjourned the meeting at 3:03 p.m.

Michael Garnsey, Chair