CITY OF ATLANTA DEFINED BENEFIT PENSION INVESTMENT BOARD MEETING September 23, 2020 Teleconference 10:00 A.M. – 12:00 P.M.

BOARD MEMBERS PRESENT

FRANK SIMS JEFFREY NORMAN JOSHUA WILLIAMS REGGIE GRANT NATALYN ARCHIBONG MARCI COLLIER OVERSTREET ROOSEVELT COUNCIL JP MATZIGKEIT BRENT HULLENDER ALFRED BERRY, JR. RICK 'BUD' LIGHT QUENTIN HUTCHINS

BOARD MEMBERS NOT PRESENT

JOYCE SHEPARD HOWARD SHOOK LISA BRACKEN

OTHERS PRESENT MIKE SHEA **INETTA WORTHY MARY SHAH STEPHANIE ATLI** LOUIS AMIS **YOULANDA CARR CARL CHRISTIE** ALICIA THOMPSON **KWEKU OBED JESUS JIMINEZ ED EMERSON AARON MOODY** MARSHA PETZEL LAUREN HILL JEANETTE COOPER CHUCK CARR **GAR CHUNG**

Chairman HR Commissioner, City of Atlanta Vice Chairman - COO, City of Atlanta Appointee, City of Atlanta Councilmember, City of Atlanta CFO, City of Atlanta CFO, City of Atlanta Councilmember, City of Atlanta Fire, City of Atlanta General, City of Atlanta Police, City of Atlanta APS, City of Atlanta

Councilmember, City of Atlanta Councilmember, City of Atlanta CFO, APS City of Atlanta

Zenith American Solutions Zenith American Solutions **Strategic Benefit Advisors Strategic Benefit Advisors City of Atlanta HR City of Atlanta Finance City of Atlanta Law City of Atlanta Law Marquette Associates Marquette Associates** Morris, Manning and Martin Morris, Manning and Martin Wells Fargo Wells Fargo Segal **Southern Actuarial Services Financial Investment News**

I. <u>CALL TO ORDER</u>

Chairman Mr. Frank Sims called the Webex teleconference meeting to order at 10:02 a.m. Chairman Sims noted that a quorum was present for the meeting.

II. ADOPTION OF THE AGENDA

Mr. Shea informed the Board that Ms. Cooper from Segal Advisors was added to the agenda.

A motion was made by Mr. Grant to approve the Agenda as presented and the motion was seconded by Mr. Hullender. The motion unanimously carried and the Agenda was approved as noted.

III. <u>PUBLIC COMMENT</u>

Chairman Sims asked if there were any public comments. It was noted no public comments were made.

IV. APPROVAL OF PREVIOUS MEETING MINUTES

The Board reviewed the Minutes of the August 19, 2020 meeting, which were distributed in advance and reviewed by the Fund Professionals as customary.

Following review of the August 19, 2020 minutes, a motion was made by Ms. Archibong to approve the Minutes the motion was seconded by Mr. Hullender. The motion was unanimously carried and approved.

V. ATTORNEY'S REPORT

Fiduciary Liability Policy

Mr. Christie reviewed with the Board quotes from Hudson Insurance Company in the amount of \$2 million aggregate and \$3 million aggregate with higher sublimits. Mr. Christie advised the Board that he also reached out to Allied Insurance but have not received a quote.

Mr. Christie advised the Board that the \$2 million policy would cost \$73,236.00 and the \$3 million policy would cost \$94,676.00.

Mr. Christie advised the Board that the cost would be split as follows: General Fund -35%Police Fund -35%Fire Fighters Fund -30%

Mr. Berry asked Mr. Christie if they are seeing any higher limits being offered. Mr. Emerson advised the Board that he is only seeing \$2 million to \$3 million policies being offered now.

Ms. Archibong asked if the Board elected the higher amount would they be grandfathered into the higher amount if Hudson decided to reduce policy limits. Mr. Christie advised the Board that they unfortunately could not guarantee they would be grandfathered into a higher amount with Hudson.

Ms. Overstreet asked Mr. Christie if he had a recommendation. Mr. Christie advised the Board that he would be ok with either policy. Chairman Sims informed the Board that they should defer to the three Board members who lead the different committees.

Mr. Light advised the Board that he would recommend obtaining the \$3 million policy.

A motion was made by Mr. Hullender to obtain the \$3 million policy, the motion was seconded by Mr. Berry. The motion was unanimously carried and approved.

Legislation Update

Mr. Hullender informed the Board that it appears the Legislation for the Investment Board appears to have been changed in March 2020 or April 2020 which reduced the number of Council members assigned to the Board.

Mr. Christie informed the Board that he is aware that the legislation did pass but he is currently not aware of the new composition of the Board. He advised the Board that he will review with Mr. Emerson and provide an update at the next Board meeting.

Appeals

Mr. Emerson informed the Board that there are four (4) appeals from the Police Pension Fund that will be presented at the next Board meeting. Mr. Emerson advised the Board that he will provide a brief summary of the issues prior to the next Board meeting.

VI. INVESTMENT CONSULTANT REPORT – Marquette Associates

Mr. Obed opened his presentation by informing the Board that his presentation will be a positive update for all three plans.

Mr. Obed provided the Board with an overview of the U.S. economy. He advised the Board new COVID-19 cases are beginning to decline across the U.S. He informed the Board that schools are back in session both online and in-person and unemployment dropped from 10.2% to 8.4% in August. Mr. Obed informed the Board that analysts are expecting a notable bounce back in 3rd quarter GDP.

Mr. Obed reviewed the below GDP Projections:

GDP projections

GDP is expected to significantly contract, then rebound sharply

Firm	1Q Forecest	1Q Actual	2Q Forecast	2Q Actual	3Q Forecast	4Q Forecast	2020 (YoY)
JP Morgan	-10.0	-4.8	-25.0	-32.9	11.0	7.0	-5.3
Goldman	-9.0	-4.8	-34.0	-32.9	19.0	12.0	-6.2
TD	-3.0	-4.8	-25.0	-32.9	15.0	0.0	-3.5
BofA	0.5	-4.8	-12.0	-32.9	3.0	4.0	-0.8
Barclays	-0.5	-4.8	-7.0	-32.9	0.0	1.0	-0.6
MS - Bull	-2.4	-4.8	-22.8	-32.9	35.3	9.1	-0.3
MS - Base	-2.4	-4.8	-30.1	-32.9	29.2	3.0	-3.0
MS - Bear	-2.4	-4.8	-43.4	-32.9	-3.6	29.1	-8.8
Capital Econ	0.0	-4.8	-40.0	-32.9	17.0	22.0	-5.5
DB	-2.3	-4.8	-34.0	-32.9	19.7	= 11.1	-3.8
Nomura		-4.8		-32.9			-9.0
UBS		-4.8		-32.9			-1.0
Citi	-0.5	-4.8	-12.0	-32.9	7.3	5.6	-0.5
Average	-2.9	-4.8	-25.9	-32.9	13.9	9.4	-3.7

Fixed Income

Mr. Obed informed the Board that fixed income for the year-to-date is strong at 6.9% year-to-date. Mr. Obed informed the Board that low interest rates helped fixed income. Mr. Obed reviewed with the Board the below chart.

Fixed income: Pandemic recovery underway

Yield curve steepens for first time after March COVID panic due to vaccine optimism, U.S.-China trade deal progress, and new Fed policy

		Month (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)
Broad Market Indices	Blm BC Aggregate	-0.8	1.3	6.9	6.5	5.1	4.3	3.7
Intermediate Indices	Blm BC Int. Gov./Credit	-0.1	1.2	5.9	5.9	4.3	3.5	3.0
Government Only Indices	Blm BC Long Gov.	-4.3	-0.1	20.7	12.9	10.8	8.4	7.0
	Bim BC Int. Gov.	-0.2	0.2	5.9	5.4	3.8	2.9	2.3
	Bim BC 1-3 Year Gov.	0.0	0.1	3.1	3.5	2.6	1.9	1.3
	Bim BC U.S. TIPS	1.1	4.6	9.6	9.0	5.7	4.6	3.7
Credit Indices	Blm BC U.S. Long Credit	-3.4	5.1	8.5	8.2	8.8	9.0	7.4
	Blm BC High Yield	1.0	6.7	1.7	4.7	4.9	6.5	6.9
	CS Leveraged Loan Index	1.5	4.8	-1.5	0.6	3.1	3.7	4.5
Securitized Bond Indices	Bim BC MBS	0.0	0.1	3.7	4.5	3.6	3.1	3.0
	BIm BC ABS	0.2	1.7	4.0	4.3	3.3	2.7	2.4
	Bim BC CMBS	0.2	3.3	5.9	4.9	4.8	4.4	4.7
Non-U.S. Indices	Blm BC Global Aggregate Hedged	-0.7	0.9	4.3	3.3	4.8	4.4	3.9
	JPM EMBI Global Diversified	0.5	7.9	1.4	2.7	4.1	6.3	5.8
	JPM GBI-EM Global Diversified	-0.3	3.2	-4.4	1.5	0.7	4.6	1.3
Municipal Indices	Blm BC Municipal 5 Year	0.0	1.6	3.3	3.5	3.0	2.9	2.7
	Blm BC HY Municipal	0.3	7.1	0.3	1.0	5.6	6.4	6.0

U.S. Equity

Mr. Obed informed the Board that the U.S. Equity markets made a strong rebound after the 1st quarter of 2020. The market had a correction of over 20% in the first quarter. Mr. Obed advised the Board that the market has had the highest rebound ever at 56.4%.

U.S. equities: Best August in over 30 years

U.S. equity index returns

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
Broad Market Indices							
Dow Jones	7.9	12.6	1.3	10.3	11.6	14.2	13.8
Wilshire 5000	7.3	16.0	9.6	21.8	14.0	14.1	15.0
Russell 3000	7.2	15.9	9.4	21.4	13.9	13.9	14.9
Large-Cap Market Indices							
S&P 500	7.2	15.5	9.7	21.9	14.5	14.5	15.2
Russell 1000	7.3	16.1	10.4	22.5	14.6	14.3	15.2
Russelt 1000 Value	4.1	7.5	-9.3	0.8	4.5	7.5	11.0
Russell 1000 Growth	10.3	24.0	30.5	44.3	24.2	20.7	19.0
Mid-Cap Market Indices							
Russell MidCap	3.5	11.6	-0.4	8.7	8.8	9.8	13.1
Russell MidCap Value	4.0	10.1	-10.8	-1.3	2.5	6.1	10.9
Russell MidCap Growth	2.7	13.5	15.5	23.6	17.9	14.9	16.0
Smell-Cap Market Indices							
Russell 2000	5.6	12.4	-5.5	6.0	5.0	7.7	11.5
Russell 2000 Value	5.4	10.7	-17.7	-6.1	-1.4	4.4	8.7
Russell 2000 Growth	5.9	13.7	6.2	17.3	10.9	10.5	14.1

Source: Morningster Direct as of August 31, 2020

Non-U.S. Equity

Mr. Obed informed the Board that the non-US markets saw tremendous returns for the past three months. He advised the Board measured against the US markets, the US markets have outperformed the International Markets.

Strong performance continued into August

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
MSCI ACWI	6.1	15.3	4.8	16.5	9.0	10.2	9.9
MSCI ACWI ex. U.S.	4.3	13.9	-3.1	8.3	2.6	5.8	5.3
MSCI EAFE	5.1	11.3	-4.6	6.1	2.3	4.7	5.9
MSCI EAFE Local	4.1	4.9	-8.5	-0.4	1.8	4.0	6.9
MSCI Emerging Markets	2.2	19.5	0.5	14.5	2.8	8.7	3.8
MSCI EM Local	2.2	17.8	4.4	16.0	5.6	9.6	6.6
MSCI EAFE Small-Cap	7.5	12.6	-3.5	10.7	2.6	6.8	8.6
MSCI EM Small-Cap	4.1	24.0	-0.8	10.8	-0.5	5.0	2.4
MSCI Frontier	8.2	9.3	-9.5	-5.4	-1.3	3.1	3.6

Equities appear to have troughed on March 23rd

Source: eVestment as of August 31, 2020

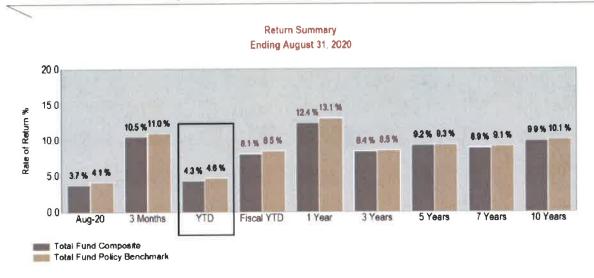
Performance Overview - General Employees' Pension Plan

Mr. Obed provided the Committee with following current preliminary market values (MTD – Month to Date /FYTD – Fiscal Year to Date/YTD – Year to Date) as of August 31, 2020:

COA General <u>MTD Performance (as of 8/31/20)</u> Total Fund Composite: 3.7% Total Fund Policy Benchmark: 4.1%

FYTD Performance (as of 8/31/20) Total Fund Composite: 8.1% Total Fund Policy Benchmark: 8.5% City of Atlanta Pension Investment Board Board Meeting Minutes September 23, 2020 <u>YTD Performance (as of 8/31/20)</u> Total Fund Composite: 4.3% Total Fund Policy Benchmark: 4.6%

COA General Employees' YTD Performance (Net of Fees)



- Fixed Income, International Equity, Global Equity and Real Estate composites added value to the Plan
- U.S. Equity and Emerging Markets Equity composites detracted from the benchmark

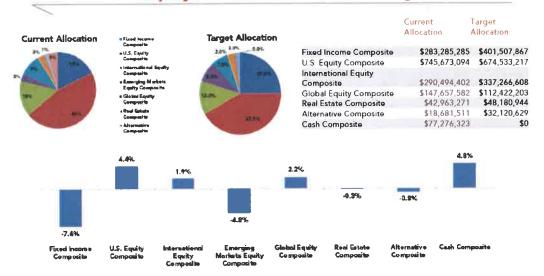
Mr. Obed reviewed with the Board the Top Performers and the Bottom Performers.

COA General Employees' Manager Contribution – YTD Performance

Top Performers	Absolute Performance	Benchmark Performance	Strategy
Mesirow	+7.8%	+6.9%	Fixed Income
Channing Capital	~10.8%	-17.7%	U.S. Equity
Hardman Johnston	+11.7%	-3.1%	International Equity
Globalt Tactical ETF	+7.7%	+4.6%	Global Equity
Bottom Performers	Absolute Performance	Benchmark Performance	Strategy
Legato	+5.2%	+6.2%	U.S. Equity
Artisan Partners	-8.2%	-4.6%	International Equity
Earnest Partners EM	-10.9%	+0.4%	Emerging Markets

Chairman Sims asked Mr. Obed why is Channing Capital showing as a Top Performer when they are down 10.8%. Mr. Obed informed the Board that despite Channing Capital being down 10.8% they beat the index of negative 17.7%.

Mr. Obed reviewed with the Board the current asset allocation vs the Target allocation:



COA General Employees' Asset Allocation vs Target Allocation

Performance Overview – Police Officers' Pension Plan

Mr. Obed provided the Committee with following current preliminary market values (MTD – Month to Date /FYTD – Fiscal Year to Date/YTD – Year to Date) as of August 31, 2020:

COA Police

MTD Performance (as of 8/31/20)

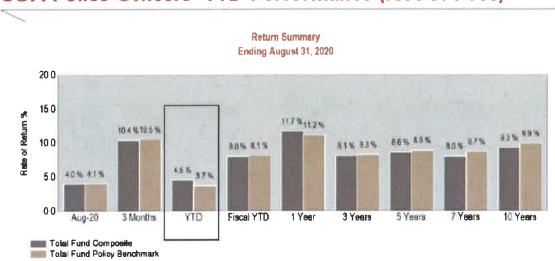
Total Fund Composite: 4.0% Total Fund Policy Benchmark: 4.1%

FYTD Performance (as of 8/31/20)

Total Fund Composite: 8.0% Total Fund Policy Benchmark: 8.1%

YTD Performance (as of 8/31/20)

Total Fund Composite: 4.6% Total Fund Policy Benchmark: 3.7%



COA Police Officers' YTD Performance (Net of Fees)

- U.S. Equity and International Equity composites added value to the Plan
- Fixed Income composite detracted from the benchmark

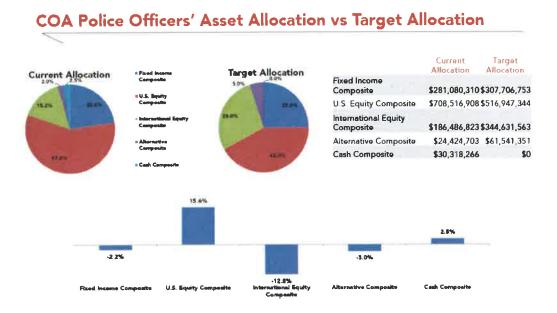
Mr. Obed reviewed with the Board the Top Performers and the Bottom Performers.

COA Police Officers' Manager Contribution – YTD Performance

Top Performers	Absolute Performance	Benchmark Performance	Strategy
Mesirow	+8.0%	+6.9%	Fixed Income
Macquarie SCC	-6.2%	-5.5%	U.S. Equity
LMCG Investments	+16.7%	+6.2%	U.S. Equity
Hardman Johnston	+11.7%	-3.1%	International Equity

Bottom Performers	Absolute Performance	Benchmark Performance	Strategy
Garcia Hamilton	+5.3%	+5.9%	Fixed Income
Artisan Partners	-8.2%	-4.6%	International Equity

Mr. Obed reviewed with the Board the current asset allocation vs the Target allocation:



Performance Overview – Fire Fighters' Pension Plan

Mr. Obed provided the Committee with following current preliminary market values (MTD – Month to Date /FYTD – Fiscal Year to Date/YTD – Year to Date) as of August 31, 2020:

COA Fire

MTD Performance (as of 8/31/20)

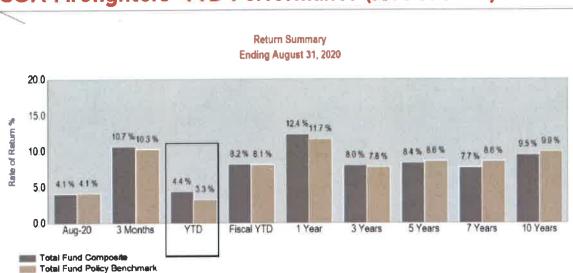
Total Fund Composite: 4.1% Total Fund Policy Benchmark: 4.1%

FYTD Performance (as of 8/31/20)

Total Fund Composite: 8.2% Total Fund Policy Benchmark: 8.1%

YTD Performance (as of 8/31/20)

Total Fund Composite: 4.4% Total Fund Policy Benchmark: 3.3%



COA Firefighters' YTD Performance (Net of Fees)

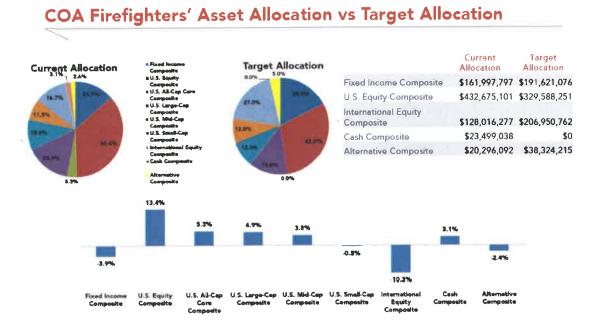
- U.S. Large-Cap, U.S. Small-Cap and International Equity composites added value to the Plan
- Fixed Income composite detracted from its benchmark
- U.S. Mid-Cap composite matched the benchmark

Mr. Obed reviewed with the Board the Top Performers for the plan.

COA Firefighters' Manager Contribution – YTD Performance

	Absolute	Benchmark	
Top Performers	Performance	Performance	Strategy
Mesirow	+7.4%	+6.9%	Fixed Income
LMCG Investments	+16.7%	+6.2%	U.S. Equity
Hardman Johnston	+11.7%	-4.6%	International Equity

Mr. Obed reviewed with the Board the current asset allocation vs the Target allocation.



Ms. Overstreet asked Mr. Obed if he can add a matrix that shows a two quarter year-to-date performance on the Top Performers and Bottom Peformers instead of just for the month of performance. Mr. Obed informed the Board that he will review and update his presentation.

VII. <u>NEW BUSINESS</u>

City of Atlanta General Employees Actuarial Valuation as of July 1, 2019

Ms. Cooper reviewed in detail with the Board the City of Atlanta General Employees Pension Fund actuarial valuation as of July 1, 2019.

Ms. Cooper reviewed in details the below slides from her presentation:

Data Summary

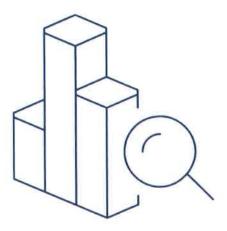
As of July 1	2019	2018	Change
Active Members			
Number	3,674	3,830	-4.1%
Total Payroll	\$183.2M	\$183.4M	-0.1%
Average Pay	\$49,870	\$47,889	+4.1%
Average Age	46.3	46.3	+0.0 years
Average Service	10.3	10.4	-0.1 years
Annuitants (Retirees and Beneficiaries)			
Number	3,991	3,920	+1.8%
Average Monthly Payment	\$2,598	\$2,525	+2.9%
Inactive Participants			
Number of Vested Terminated Participants	125	81	+54.3%
Number of Inactive Participants due a Refund	759	533	+42.4%

Pension Plan Highlights

- The July 1, 2019 valuation is used to determine the recommended (or actuarially determined) contribution for the fiscal year period July 1, 2020 to June 30, 2021 (FY'21). The City sets the method used to calculate the actuarially determined contribution.
 - Under this policy, the annual recommended contribution, or actuarially determined contribution (ADC) for FY'21 is \$48.8 million, or 25.84% of projected payroll.
 - The amortization period (which was reset to 30 years as of July 1, 2010) is 21 years as of July 1, 2019. Thus, we expect assets to exceed liabilities by June 30, 2041.
 - In addition, the plan receives employee contributions of 12% or 13% of base salary for employees hired prior to November 1, 2011 and 8% of base salary for employees hired on or after November 1, 2011.
- The rate of return on a market value basis was 6.1% for the year ended June 30, 2019.
 - The investment rate of return on an actuarial ("smoothed") basis was 7.1% primarily as a result of recognizing a portion of the 2015, 2016 and 2019 market losses, partially offset by recognizing a portion of the 2017 and 2018 market gains.
 - Since the actuarial rate of return was less than the valuation's assumed annual rate of return of 7.25%, there was an investment loss of about \$2.0 million.
 - The smoothed actuarial value of assets is 98.5% of the market value of assets as of the valuation date. Thus, there are about \$19.8 million in deferred gains that will be recognized over the next 4 years.

Pension Plan Highlights

- There was a liability gain of \$2.0 million and an administrative expense gain which on a combined basis represents 0.1% of the actuarial accrued liability (AAL). This is not significant.
- The unfunded actuarial accrued liability (UAAL) decreased about \$16.9 million (details shown on Slide 9).
- Accordingly, the funded percentage on an actuarial value basis increased from 68.06% last year to 69.41%. On a market value basis, the funded percentage increased from 69.72% last year to 70.46% this year.



Key Results

Plan Year	July 1, 2019	July 1, 2018
Unfunded Actuarial Accrued Liability:		
Actuarial Accrued Liability (AAL)	\$1,893,000,000	\$1,865,900,000
Actuarial Value of Assets (AVA)	<u>1,314,000,000</u>	<u>1,270,000,000</u>
Unfunded Actuarial Accrued Liability (UAAL): AAL-AVA	\$579,000,000	\$595,900,000
Funded Ratios:		
Funded Ratio on Actuarial Basis: AVA+AAL	69.41%	68.06%
Funded Ratio on Market Basis*: MVA+AAL	70.46%	69.72%
Fiscal Year	2020	2019
Recommended or Actuarially Determined Contribution (ADC)		
Net normal cost, (offset by expected employee contributions)	\$5,600,000	\$5,100,000
Payment to amortize UAAL	40,100,000	40,100,000
Adjustment for timing**	3,100,000	<u>3,000,000</u>
Total ADC	\$48,800,000	\$48,200,000
Total ADC as % of Payroll	25.84%	25.52%
Remaining Amortization Period	21 years	22 years

Reconciliation of Unfunded Actuarial Accrued Liability

UAAL as of July 1, 2018	\$595,900,000
Gross Normal Cost Ost of benefits accruing during the year for active employees	24,500,000
 2. Interest on prior year UAAL and Normal Cost Based on prior year's assumption of 7.25% 	45,000,000
 3. City and employee contributions, adjusted for interest City contributions of \$47.2 million and employee contributions of \$35.6 million Interest of \$3.1 million 	(85,900,000)
 4. Investment loss and llability gain Actuarial value of assets (i.e. smoothed value) earned 7.1% compared to 7.25% assumption resulted in \$2.0M loss Liability gain of \$2.0M Administrative expense gain of \$0.5M 	(500,000)
UAAL as of July 1, 2019	\$579,000,000

Ms. Cooper reviewed with the Board the services that Segal Provides to the General Fund.

Pension Actuarial Services

Annual Recurring Projects

- Valuation reports for General and School Board plans (April to June)
- Two-page summaries of annual valuation results (after reports are final)
- GASB 68 Accounting Information for General and School Board plans (March to May)
- GASB 67 Disclosure Information for General and School Board plans (September to October)
- Review of annual COLA (December)

Recurring Projects

- Experience studies
 - Last set of studies for General and School Board presented in June 2017 for the 5-year period ending June 30, 2016
 - Updated studies for General, School Board, Police and Fire for the 5-year period ending June 30, 2019 in progress
- Cap analysis for General, Police, and Fire plans
 - Done at request of City of Atlanta Finance Department
 - Last analysis was done in May through July of 2017

Special Projects

- Can be requested by the Board or by the City
- In past, if requested by the City, typically paid by the City and not from the pension fund

Ms. Cooper informed the Board that at the request of the City of Atlanta Finance Department the last Cap analysis for the General, Police and Fire plans was done in July 2017. Ms. Cooper informed the Board that a new Cap analysis should be completed but she was not aware if the plans would pay for the Cap analysis or the City of Atlanta. She advised the Board the cost would be \$10,000.00 per plan.

Mr. Hullender informed Ms. Cooper that the request and payment for the Cap analysis should come from the City of Atlanta as it is not a requirement for the different boards.

Mr. Williams informed the Board that he will review the Cap analysis and report back to the Board at the next meeting.

Chairman Sims asked Ms. Cooper what should be the plans funded percentage. Ms. Cooper informed the Board that the ultimate goal would be 100% funded but most plans are not able to reach the goal and 80% funded is considered a well-funded plan.

City of Atlanta School Board Actuarial Valuation as of July 1, 2019

Ms. Cooper reviewed in detail with the Board the City of Atlanta School Board Pension Fund actuarial valuation as of July 1, 2019.

Ms. Cooper reviewed in details the below slides from her presentation:

Data Summary

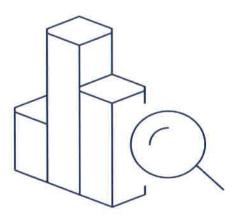
As of July 1	2019	2018	Change
Active Members	1.00		
Number	758	662	+14.5%
Total Pay	\$21.0M	\$18.7M	+12.1%
Average Pay	\$27,663	\$28,262	-2.1%
Average Age	49.6	49.8	-0.2 years
Average Service	10.1	11.4	-1.3 years
Annuitants (Retirees and Beneficiaries)			
Number	1,866	1,926	-3.1%
Average Monthly Payment	\$2,245	\$2,197	+2.2%
Inactive Participants			
Number of Vested Terminated Participants	35	36	-2.8%
Number of Inactive Participants due a refund	164	129	+27.1%

Pension Plan Highlights

- The funding policy adopted on June 2, 2014 increases the FY'14 contribution 3% per year until the plan is fully funded.
 - Under this policy, the recommended or actuarially determined contribution (ADC) for the period July 1, 2020 to June 30, 2021 (FY'21) is \$58.4 million.
 - The effective amortization period decreased 0.9 years from 8.5 last year to 7.6 this year.
 - Thus, we expect assets to exceed liabilities in about 7.6 years during FY'28*.
 - If the School Board contributes \$58.4 million annually (instead of increasing 3% above the prior year's contribution), the effective amortization period would be about 8.5 years.
- The rate of return on a market value basis was 5.5% for the year ended June 30, 2019.
- The investment rate of return on an actuarial ("smoothed") basis was 6.8% primarily as a result of recognizing a portion of the 2015, 2016 and 2019 market losses, partially offset by recognizing a portion of the 2017 and 2018 market gains.
- Since the actuarial rate of return was less than the valuation's assumed annual rate of return of 7,25%, there was an investment loss of about \$0.6 million.
- The smoothed actuarial value of assets is 99.4% of the market value of assets as of the valuation date. Thus, there are about \$1.0 million in deferred gains that will be recognized over the next 4 years.

Pension Plan Highlights

- There was a liability loss of \$2.1 million which represents 0.4% of the actuarial accrued liability (AAL). This is not significant.
- The unfunded actuarial accrued liability (UAAL) decreased about \$25.3 million (details shown on Slide 9).
- Accordingly, the funded percentage on an actuarial value basis increased from 28.89% last year to 32.48%. On a market value basis, the funded percentage increased from 29.45% last year to 32.67% this year.



Key Results

Plan Year	July 1, 2019	July 1, 2018
Unfunded Actuarial Accrued Liability:		
Actuarial Accrued Liability (AAL)	\$517,300,000	\$526,700,000
Actuarial Value of Assets (AVA)	168,000,000	<u>152,200,000</u>
Unfunded Actuarial Accrued Liability (UAAL): AAL-AVA	\$349,300,000	\$374,500,000
Funded Ratios:		
Funded Ratio on Actuarial Basis: AVA+AAL	32.48%	28,89%
Funded Ratio on Market Basis*: MVA+AAL	32.67%	29.45%
Fiscal Year Ending	2021	2020
Recommended or Actuarially Determined Contribution (ADC)		
Net normal cost, (offset by expected employee contributions)	\$2,200,000	\$1,900,000
Payment to amortize UAAL	52,600,000	51,200,000
Adjustment for timing**	3,600,000	<u>3,600,000</u>
Total ADC	\$58,400,000	\$56,700,000
Effective Amortization Period	7.6 years	8.5 years

Reconciliation of Unfunded Actuarial Accrued Liability

UAAL as of July 1, 2018	\$374,500,000
 Gross Normal Cost Cost of benefits accruing during the year for active employees 	3,400,000
 2. Interest on prior year UAAL and Normal Cost Based on prior year's assumption of 7.25% 	27,400,000
 3. School Board and employee contributions, adjusted for interest School Board contributions of \$55.0 million and employee contributions of \$1.7 million Interest of \$2.0 million 	(58,700,000)
 4. Investment loss and liability loss Actuarial value of assets (i.e. smoothed value) earned 6.8% compared to 7.25% assumption resulted in \$600,000 loss Liability loss of \$2,100,000 	\$2,700,000
UAAL as of July 1, 2019	\$349,300,000

Based on total contributions exceeding the Normal Cost and interest on the UAAL, the UAAL was expected to decrease \$28.0 million (Items #1, #2 and #3). Actual plan experience was close to expected.

Chairman Sims asked the Board who has the responsibility to ensure the plan is properly funded. Mr. Hullender informed the Board it is there responsibility to ensure we are doing our Fiduciary responsibilities in reviewing investments and ensuring the plans are operating properly.

Mr. Carr informed the Board that it is ultimately the responsibility of the City Council to ensure the different funds are funded. Chairman Sims asked the Fund Attorney from a governance standpoint are we are responsible for reporting back to City Council.

Mr. Emerson informed the Board that looking at the responsibility of the Investment Board it does not state the Board reports back to City Council but in regards to the actuarial valuation the board is responsible for knowing the current status. Mr. Berry informed the Board that the Investment Board is constructed so that everyone is aware of what is happening with each fund. Mr. Hullender agreed with Mr. Berry that responsibility falls on the Board. Mr. Emerson advised the Board that he will review and report back at the next Board meeting.

City of Atlanta Fire Fighters Actuarial Valuation as of July 1, 2019

Mr. Carr reviewed in detail the City of Atlanta Fire Fighters actuarial valuation report as of July 1, 2019. Mr. Carr informed the Board that there was an update to the mortality tables for 2019. He advised the Board that the Public Safety (Pub 10) tables were used. Mr. Carr advised the Board that he will work with Ms. Cooper on providing updated assumptions for all plans. Mr. Carr reviewed in detail the below slides with the board:

	Market		
Plan	Value	Value	Assumed
Year	Return	Return	Return
2010	16.33%	16.00%	7.75%
2011	6.52%	6.52%	3.80%
2011/12	1 49%	1 49%	7.75%
2012/13	14.70%	14.70%	7.75%
2013/14	20/29%	20.29%	7.50%
2014/15	0.41%	0.41%	7.50%
2015/16	-1.54%	-1.54%	7.50%
2016/17	13.00%	13.00%	7.50%
2017/18	10.37%	10,37%	7,50%
2018/19	4.55%	4 55%	7.25%
9.5yr, Avg,	8.84%	8.81%	7.57%

Annual Investment Returns

Assets

Table II-B

Market Value of Assets

	As of July 1, 2019
Market Value of Assets	\$727.344.000
Cash	\$10,786,000
Domestic fixed income	\$194,898,000
International fixed income	\$631,000
Domestic equity	\$462,803,000
International equity	\$30 619,000
Alternative investments	\$18,731.000
Real estate	\$5,562,000
Income receivable	\$946,000
Employer contribution receivable	\$1,140,000
Employee contribution receivable	\$190.000
Net due from brokers	\$1,603,000
Net accounts payable	(\$565.000)

Resident	
Attemative Investments 3%	Cash 192
3% J Real upter 1%	ne J
HD	

Historical Market	Value of Assets	- B-
January 1. 2011	\$481,640,221	100
July 1, 2011	\$509,590,000	
July 1, 2012	\$505,692,000	
July 1, 2013	\$561,450,000	
July 1, 2014	\$658,508,000	2
July 1, 2015	\$644,649,000	1.00
July 1, 2016	\$612,637,000	10
July 1, 2017	\$669,508,000	8
July 1, 2018	\$718,133,000	
July 1, 2019	\$727.344.000	

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Funding Results

Gain and Loss Analysis		Table I-C
Source of Change in the Contribution Rate		
Previous minimum required contribution rate	31.83%	
Increase (decrease) due to investment gains and losses	2 67%	
increase (decrease) due to demographic experience	5.74%	
Increase (decrease) due to plan amendments	0.00%	
Increase (decrease) due to actuarial assumption changes	7 18%	
increase (decrease) due to actuanal mothod changes	0.00%	
Current minimum required contribution rate	47 42%	
Source of Change in the Unfunded Liability		
Previous unfunded liability	\$134 739 824	
Increase due to interest	\$9,768.637	
Decrease due to amortization payments	(\$8,049,375)	
Increase (decrease) due to plan experience	\$71.081.137	

changes \$44,908,468	Increase (decrease) due to par amendments increase (decrease) due to actuarial assumption changes Increase (decrease) due to actuarial method changes
1 liability \$252,448,691	Current unfunded liability

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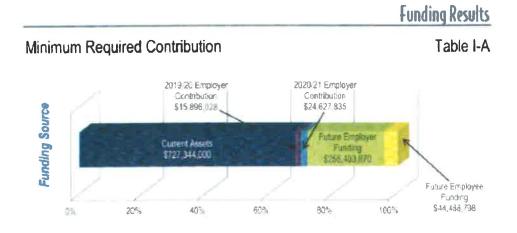
Funding Results

Present Value of Future Benefits	S		Table I-D
	Old Assumptions wio Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
<u>Actively Employed Participants</u> Retirement benefits Termination benefits Disability benefits Death benefits Relund of employee contributions Sub-total	\$291.046.187 \$14.118.344 \$14.422.306 \$3.475,687 \$272.627 \$323,335,151	\$291.046,187 \$14.118.344 \$14,422,306 \$3.475,687 \$272,627 \$323,335,15 1	\$303,002,361 \$14,586,628 \$14,412,982 \$2,741,241 \$272,647 \$335,015,859
Deferred Vested Parts parts Refirement benefits Termination benefits Disability benefits Death benefits Refund of employee contributions Sub-total	\$3,249,325 \$0 \$0 \$0 \$3,249,325	\$3,249,325 \$0 \$0 \$0 \$3,249,325	\$3.378_974 \$0 \$0 \$0 \$0 \$0 \$3.378.974
Due a Refund of Contributions	\$0	\$0	\$0
Defensed Beneficiaries	\$0	\$0	\$0
Retired Participants Service retirements Disability retirements Beneficiaries receiving DROP participants Sub-total	\$569,428,888 \$69,061,046 \$50,219,945 \$0 \$688,709,879	\$569.428.888 \$69.061.046 \$50.219,945 \$0 \$688.709.879	\$599,368,311 \$72,153,708 \$53,524,357 \$0 \$725,046,376
Grand Total	\$1,015,294,355	\$1.015,294,355	\$1,063,441,209

Funding Results

Present Value of Accrued Bene	fits		Table I-E
	Old Assumptions	Old Assumptions w/ Amendment	New Assumptions
Actively Employed Participants			
Retirement benefits	\$170,206,315	\$170,206.315	\$176,561,470
Termination benefits	\$8,016,983	\$8,016,983	\$8,270.072
Disability benefits	\$10 015 737	\$10,015,737	\$10,001,013
Death benefits	\$2,171.827	\$2,171,827	\$1,787.422
Refund of employee contributions	\$142,835	\$142.835	\$142,839
Sub-total	\$190,553,697	\$190,553,697	\$196,762,816
Defensed United Distancesty			
Deferred Vested Participants Retirement benefits	63 340 335	69.310.305	CO 070 071
Termination benefits	\$3 249 325	\$3,249,325 \$0	\$3,378,974
	\$0 \$0	02 02	50 \$0
Disability benefits Death benefits	\$0 \$0	50 \$0	50 S0
	50 S0	50	50 S0
Refund of employee contributions Sub-total	\$3,249,325	\$3,249,325	\$3,378,974
Sub-Iota	33,249,323	\$3,248,323	49,910,914
Due a Refund of Contributions	\$0	\$0	\$0
Deferred Baneficiaries	\$0	\$0	\$0
Retired Perticipants			
Service retirements	\$569.428.888	\$569,428.888	\$599,368,311
Disability retirements	\$69.061.046	\$69,061,046	\$72,153,708
Beneficiaries receiving	\$50.219,945	\$50,219,945	\$53,524,357
DROP participants	\$0	\$0	\$0
Sub-total	\$688,709,879	\$688,709,879	\$725,046,376
Grand Total	\$882,512,901	\$882,512,901	\$925,188,166
Funded Percentage	82 42%	82.42%	78.62%
	(Note: Funded percents	ge is equal to the rate of t	he unstrie portion of the

(Note: Funded percentage is equal to the rateo of the unstrice portion of the market value of assists divided by the present value of accrued benefits.)



For the 2020/21 Fiscal Year

47 400/	Million Devile (Contribution Data
+ \$51,938.011	Expected Payroll for the 2020/21 Fiscal Year
\$24,627,835	Preliminary Employer Contribution for the 2020/21 Fiscal Year
004 007 005	D. C. L. D. L. D. L. L. L. L. D. D. D. D. C. T
\$590.262	One Year's Interest Charge/(Credit) on the Remaining Contribution
x 0.0725	
\$8,141,545	Remaining Contribution Due/(Credit) for the 2019/20 Plan Year
(\$15.896,028)	Expected Employer Contribution for the 2019/20 Plan Year
\$24,037,573	
\$855.772	Adjustment to Reflect Semi-Monthly Employer Contributions
(\$5,143,861)	Expected Employee Contribution for the 2019/20 Plan Year
\$499.404	Expense Allowance for the 2019/20 Plan Year
\$15,553,476	Unfunded Liability Amortization Payment for the 2019/20 Plan Year
\$12,272,782	Entry Age Normal Cost for the 2019/20 Plan Year

Minimum Required Contribution Rate 47.42%

(The actual contribution should be based on the minimum required contribution rate multiplied by the actual payroll for the fiscal year.)

Additional Disclosures

Present Value of Future Compensation	\$431,932,231
Present Value of Future Employer Contributions	\$295,927,733
Present Value of Future Employee Contributions	\$44,488,798

City of Atlanta Police Offices Actuarial Valuation as of July 1, 2019

Mr. Carr reviewed in details with the Board the below slides:

Market Actuarial Value Plan Value Assumed Year Return Return Return 2010 12.93% 17.21% 7.75% 2011 5.37% 5.37% 3.80% 2011/12 0.51% 0.51% 7.75% 2012/13 15.03% 15.03% 7.75% 2013/14 20.81% 7.50% 20.81% 2014/15 0.89% 0.89% 7.50% 2015/16 -1.03% 7.50% -1.03% 2016/17 13.43% 13.43% 7.50% 2017/18 9.67% 9.67% 7.50% 2018/19 5.42% 5.42% 7.25% 9.5yr. Avg. 8.53% 8.96% 7.57%

Annual Investment Returns

Assets

Table II-B

Market Value of Assets

	As of July 1, 2019
Market Value of Assets	\$1.163.140.000
Cash	\$23,245,000
Domestic fixed income	\$255,731,000
International fixed income	\$3,633,000
Domestic equity	\$762,409,000
International equity	\$86 152,000
Alternative investments	\$24,464,000
Real estate	\$5,562,000
income receivable	\$1,640,000
Employer contribution receivable	\$348,000
Employee contribution receivable	\$447,000
Net due from brokers	\$907,000
Net accounts payable	(\$1,398,000)

Historical Marke	t Value of Assets
January 1, 2011	\$697,667_506
July 1, 2011	\$735,470,000
July 1, 2012	\$733,546,000
July 1, 2013	\$828,815,000
July 1, 2014	\$987,507.000
July 1, 2015	\$983,385,000
July 1. 2016	\$950,415,000
July 1, 2017	\$1,051,671,000
July 1, 2018	\$1,130,389,000
July 1, 2019	\$1,163,140,000

Funding Results

Gain and Loss Analysis

Table I-C

Source of Change in the Contribution Rate

Previous minimum required contribution rate	23.37%
Increase (decrease) due to investment gains and losses	1.50%
Increase (decrease) due to demographic experience	5.57%
Increase (decrease) due to plan amendments	0.00%
Increase (decrease) due to actuarial assumption changes	5.72%
Increase (decrease) due to actuarial method changes	0.00%
Current minimum required contribution rate	36.16%

Source of Change in the Unfunded Liability

Previous unfunded liability	\$167,081.523
Increase due to interest	\$12,113,410
Decrease due to amortization payments	(\$9,981,473)
Increase (decrease) due to plan experience	\$99,744,014
Increase (decrease) due to plan amendments	\$0
Increase (decrease) due to actuarial assumption changes	\$66,387,897
Increase (decrease) due to actuarial method changes	\$0
Current unfunded liability	\$335,345,371

Funding Results

Present Value of Future Benefit	S		Table I-D
	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	\$553,780,505	\$553,780,505	\$576,453,025
Termination benefits	\$25.914.464	\$25,914,464	\$26,722,728
Disability benefits	\$26,075,893	\$26,075,893	\$26,050,703
Death benefits	\$6,487,487	\$6.487.487	\$5,160,730
Refund of employee contributions	\$881,375	\$881.375	\$881,459
Sub-total	\$613,139,724	\$613,139,724	\$635,268,645
Deferred Vested Participants			
Retinement banefits	\$1.541.746	\$1,541,746	\$1,616,162
Termination benefits	\$0	\$1,041,140 \$0	\$1,010,102 \$0
Disability benefits	\$0	\$0 \$0	50 \$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0 \$0	\$0 \$0
Sub-total	\$1,541.746	\$1,541,746	\$1,616,162
Due a Refund of Contributions	\$0	\$0	\$0
Deferred Benefictaries	\$0	\$0	\$0
Retired Participants			
Service retirements	\$843,445,481	\$843,445,481	\$887,025.614
Disability retirements	\$51,830,476	\$51,830,476	\$54,028,571
Beneficiaries receiving	\$65,592,609	\$65,592,609	\$69,792,291
DROP participants	\$0	\$0	\$0
Sub-total	\$960,868,566	\$960,868,566	\$1,010,846,476
Grand Total	\$1,575,550,036	<u>\$1,575,550,036</u>	<u>\$1,647,731,283</u>

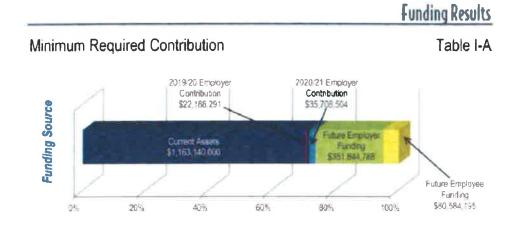
Funding Results

Present Value of Accrued Benefits

Table I-E

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	\$325,299.002	\$325.299,002	\$337,546,306
Termination benefits	\$15,433,121	\$15,433,121	\$15,875,756
Disability benefits	\$17,715,573	\$17,715,573	\$17,684,292
Death benefits	\$4,182,475	\$4, 182,475	\$3,445,592
Refund of employee contributions	\$459,407	\$459 407	\$459 432
Sub-total	\$363,089,578	\$363,089,578	\$375,011,378
Deferred Vested Participants			
Retirement benefits	\$1,541,746	\$1,541,746	\$1,616,162
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$1,541,746	\$1,541,746	\$1,616,162
Due a Refund of Contributions	\$0	\$0	\$0
Deferred Beneficiaries	\$0	\$0	\$0
Retired Participants			
Service retirements	\$843,445,481	\$843,445,481	\$887.025.614
Disability retirements	\$51,830,476	\$51,830,476	\$54,028,571
Beneficiaries receiving	\$65,592,609	\$65,592,609	\$69,792,291
DROP participants	\$0	\$0	\$0
Sub-total	\$960,868,566	\$960,868,566	\$1,010,846,476
<u>Grand Total</u>	\$1,325,499,890	\$1,325,499,890	<u>\$1.387.474.016</u>
Funded Percentage	87.75%	87.75%	83.83%
	(Note: Fundart comenta-	to it actual to the ratio of th	a unable parties of the

(Note: Funded percentage is equal to the ratio of the usable portion of the market value of assets divided by the present value of accrued benefits.)



For the 2020/21 Fiscal Year

Minimum Required Contribution Rate	36.16%
Expected Payroll for the 2020/21 Fiscal Year	÷ \$98,741,219
Preliminary Employer Contribution for the 2020/21 Fiscal Year	\$35,708,504
One Year's Interest Charge/(Credit) on the Remaining Contribution	\$913,954
	x 0.0725
Remaining Contribution Due/(Credit) for the 2019/20 Plan Year	\$12.606,259
Expected Employer Contribution for the 2019/20 Plan Year	(\$22,188,291)
	\$34,794,550
Adjustment to Reflect Semi-Monthly Employer Contributions	\$1,238,735
Expected Employee Contribution for the 2019/20 Plan Year	(\$10,007,043)
Expense Allowance for the 2019/20 Plan Year	\$712,076
Unfunded Liability Amortization Payment for the 2019/20 Plan Year	\$20.660.777
Entry Age Normal Cost for the 2019/20 Plan Year	\$22,190,005

(The actual contribution should be based on the minimum resured contribution rate multiplied by the actual payroli for the fiscal year)

Additional Disclosures	
Present Value of Future Compensation	\$764,599,274
Present Value of Future Employer Contributions	\$409,741,583
Present Value of Future Employee Contributions	\$80.584,195

Mr. Hullender informed the Board that there are some Committees that should have been established that have not. Chairman Sims asked the Fund Attorney to review if any additional Boards are to be created.

VIII. OLD BUSINESS

The Board noted there was no old business to discuss.

IX. QUESTIONS AND COMMENTS FROM AUDIENCE

It was noted there were no questions or comments from the audience.

X. DATE OF NEXT MEETING

The next Board meeting will be held on October 21, 2020.

XI. <u>ADJOURNMENT</u>

There being no further business to be brought before the Board at this time at 12:08 p.m. Chairman Sims called for adjournment.

Respectfully Submitted,

Chairman, Frank Sims

Vice Chairman, Joshua Williams

These Minutes were adopted on _____, 2020