

New Castle County Employees' Retirement Plans

2022 Actuarial Review

March 16, 2022





1/1/2022 Valuation

- Valuation Summary
- Changes in Plan Population
- Plan Assets
- Funding Progress
- Actuarially Determined Contribution
- GASB Summary
- Future Outlook
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- Appendix: Results by Plan, Risk and Maturity



Comparative Valuation Summary

	1/1/2021	1/1/2022	Change
<u>Participants</u>			
Active	1,047	1,046	-1
<u>Inactive</u>	<u>1,517</u>	<u>1,514</u>	<u>-3</u>
Total	2,564	2,560	-4
Average Employee Age	50.7	50.0	-0.7
Average Service	15.5	14.5	-1.0
Benefits Paid (\$mm)	\$44.9	\$46.3	+\$1.4
<u>Funding (\$ millions)</u>			
Assets (Market)	\$515.7	\$565.1	+\$49.3
Assets (Actuarial)	\$473.4	\$514.4	+\$41.0
Actuarial Accrued Liability	\$703.8	\$714.2	+\$10.4
Funding Ratio	67.3%	72.0%	4.7%
Unfunded Liability	\$230.4	\$199.8	-\$30.6
<u>Contributions</u>			
Contribution Rate, Total	38.83%	34.83%	-4.00%
Contribution Rate, Net	39.31%	34.03%	-5.28%



Demographic Changes

	Actives	Terminated Vested	Retired	Disabled	Total	<i>Prior Year Total</i>
County Employees' Pension Plan	103	17	194	14	328	<i>333</i>
Employees' Retirement System						
- Police	5	0	314	1	320	<i>324</i>
- General Personnel	468	56	816	22	1,362	<i>1,390</i>
Alternative Pension Plan (closed plan)	4	1	23	0	28	<i>29</i>
Crossing Guards Pension Plan	67	5	51	0	123	<i>126</i>
County 2011 Pension Plan	399	0	0	0	399	<i>362</i>
Total	1,046	79	1,398	37	2,560	<i>2,564</i>

% of Workforce in County 2011 Plan: 38%
 (% of Payroll = 34%)



Plan Assets

Market Value of Assets 1/1/2021		\$515,711,498
Contributions	\$33,201,578	
Income	4,617,290	
		\$37,818,868
Unrealized Appreciation and Other Investment Proceeds, Net of Investment Fees		58,481,272
Benefit Payments	(\$46,272,178)	
Expenses	(684,718)	
		<u>(\$46,956,896)</u>
Market Value of Assets as of 12/31/2021		\$565,054,742



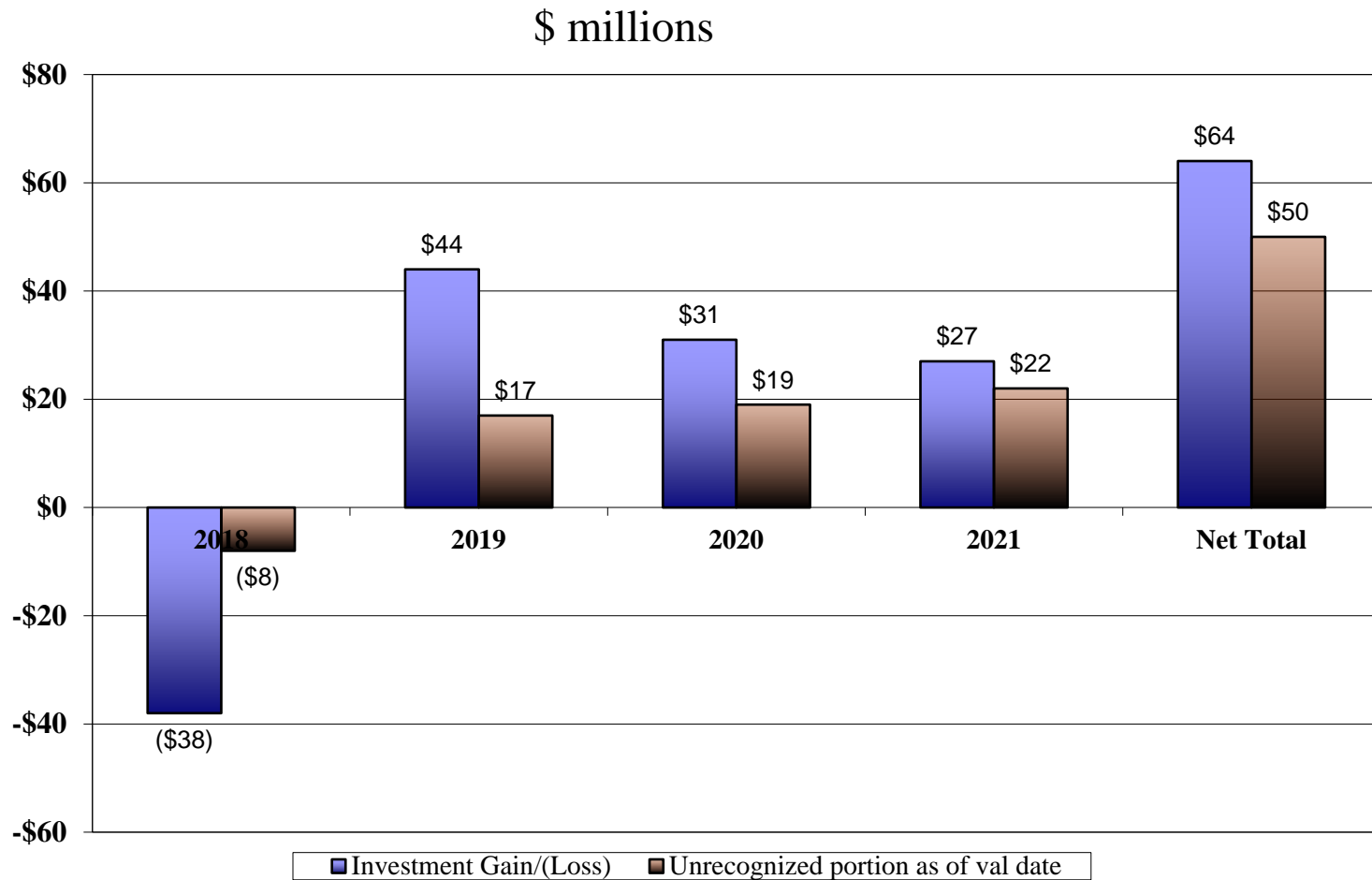
Plan Assets

	1/1/2021	1/1/2022
Market Value	\$515,711,498	\$565,054,742
Investment Return	13.8%	12.9%
Actuarial Value*	\$473,385,898	\$514,386,619
Investment Return	10.0%	12.3%
Unrecognized Gain/(Loss)	\$42,325,600	\$50,668,123

* Note: Actuarial Value of Assets is based on 5-year smoothing of investment gains/losses.

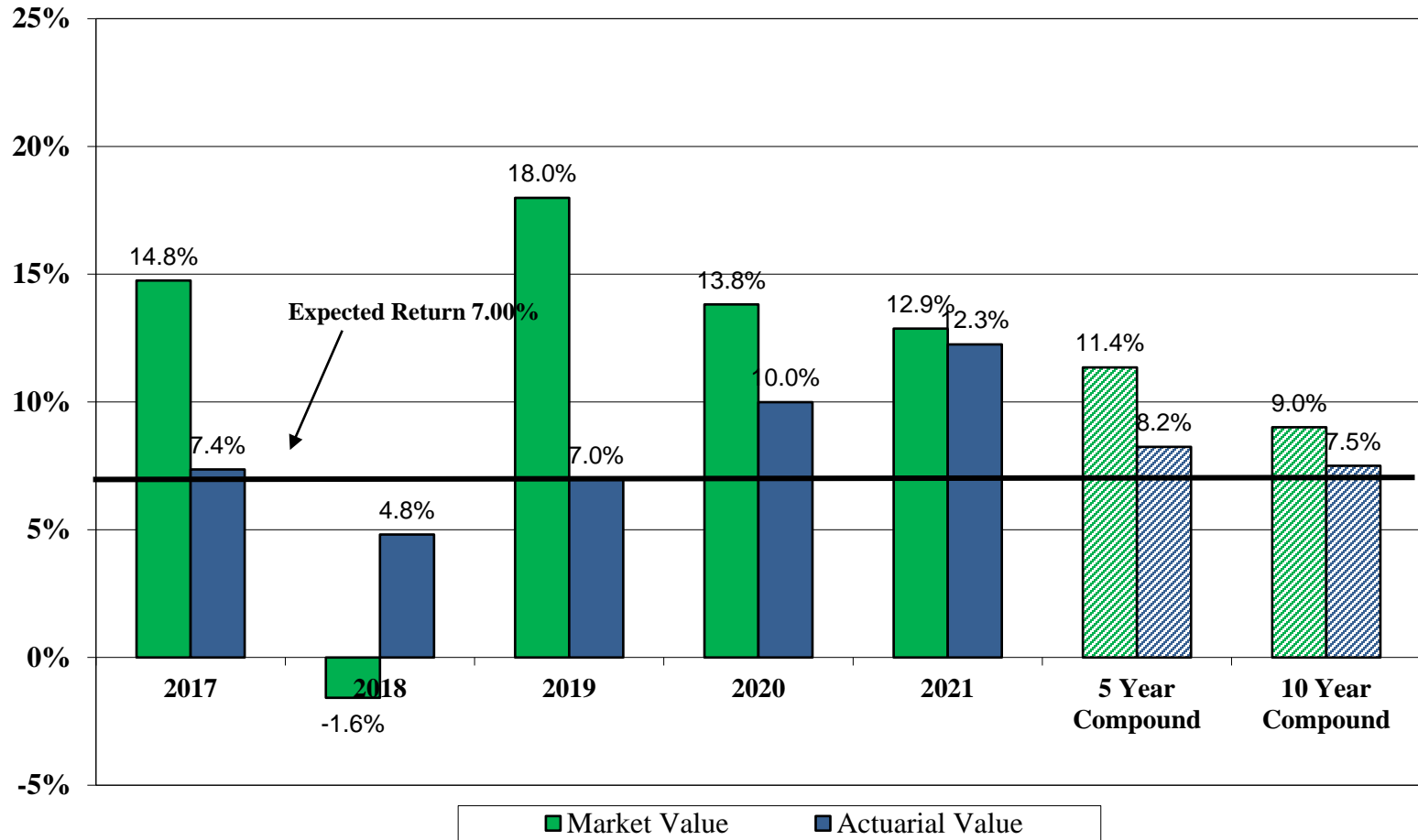


Actuarial Value of Assets





Rates of Return Market and Actuarial Asset Values





Valuation Approach

- 1/1/2021 Actuarial Liability (based on 1/1/2021 data)
“Rolled Forward” to 1/1/2022
 - Increased for normal cost
 - Increased for interest
 - Decreased for benefits paid
- Actual Assets and Contributions Recognized through 12/31/2021
- Each year’s investment gain or loss recognized over 5 years



Funding Progress

	1/1/2021	1/1/2022
Actuarial Accrued Liability (AAL)	\$703,817,614	\$714,175,176
Actuarial Value of Assets (AVA)	473,385,898	514,386,619
Unfunded Actuarial Accrued Liability	\$230,431,716	\$199,788,557
Funded Ratio (AVA/AAL)	67.3%	72.0%

Present Value of Accumulated Benefits (PVAB)*	\$668,906,941	\$677,539,004
Market Value of Assets (MVA)	515,711,498	\$565,054,742
Funded Ratio (MVA/PVAB)	77.1%	83.4%

* Unit Credit Basis: no future accruals



Actuarially Determined Employer Contribution (ADEC)

	Fiscal 2022	Fiscal 2023
Total Normal Cost with Expenses	\$7,885,000	\$7,660,000
% of Valuation Payroll	11.85%	10.48%
Employee Contributions	(2,670,000)	(2,690,000)
Net County Normal Cost	5,215,000	4,971,000
% of Valuation Payroll	7.84%	6.80%
Amortization of UAAL	24,084,000	22,231,000
Total as of Beginning of Plan Year	29,298,000	27,201,000
Total as of End of Plan Year (ADEC)	\$31,349,000	\$29,106,000
Expected State Subsidy*	(4,070,000)	(3,658,000)
Total Net of Expected State Contribution	\$27,279,000	\$25,448,000
% of Payroll	38.83%	34.83%
% of Payroll (4 Primary Plans)**	39.31%	34.03%

*The Expected State contribution amounts are estimated based on a 3-year rolling average

**Includes offset for Crossing Guards and expected additional County Contribution for the Police Plan



County Contributions by Group

	County Pension Plan	Retirement System		Alternate	County 2011	Crossing Guards	Total
		General	Police				
Fiscal Year 2022							
Contribution	\$2,452,000	\$17,427,000	\$6,580,000	\$29,000	\$690,000	\$102,000	\$27,279,000
as % of Pay	27.82%	46.71%	653.56%	9.24%	3.27%	5.95%	38.83%
Subtotal (excluding Crossing Guards)					\$26,944,000		
as % of Pay*					39.31%		
Fiscal Year 2023							
Contribution	\$2,430,000	\$17,243,000	\$4,818,000	\$27,000	\$831,000	\$100,000	\$25,448,000
as % of Pay	27.77%	46.68%	687.92%	9.82%	3.37%	5.70%	34.83%
Subtotal (excluding Crossing Guards)					\$24,270,000		
as % of Pay*					34.03%		

- Includes offset for Crossing Guards and expected additional County Contribution for the Police Plan
- Crossing Guards = \$99,952



Accounting/Funding Comparison

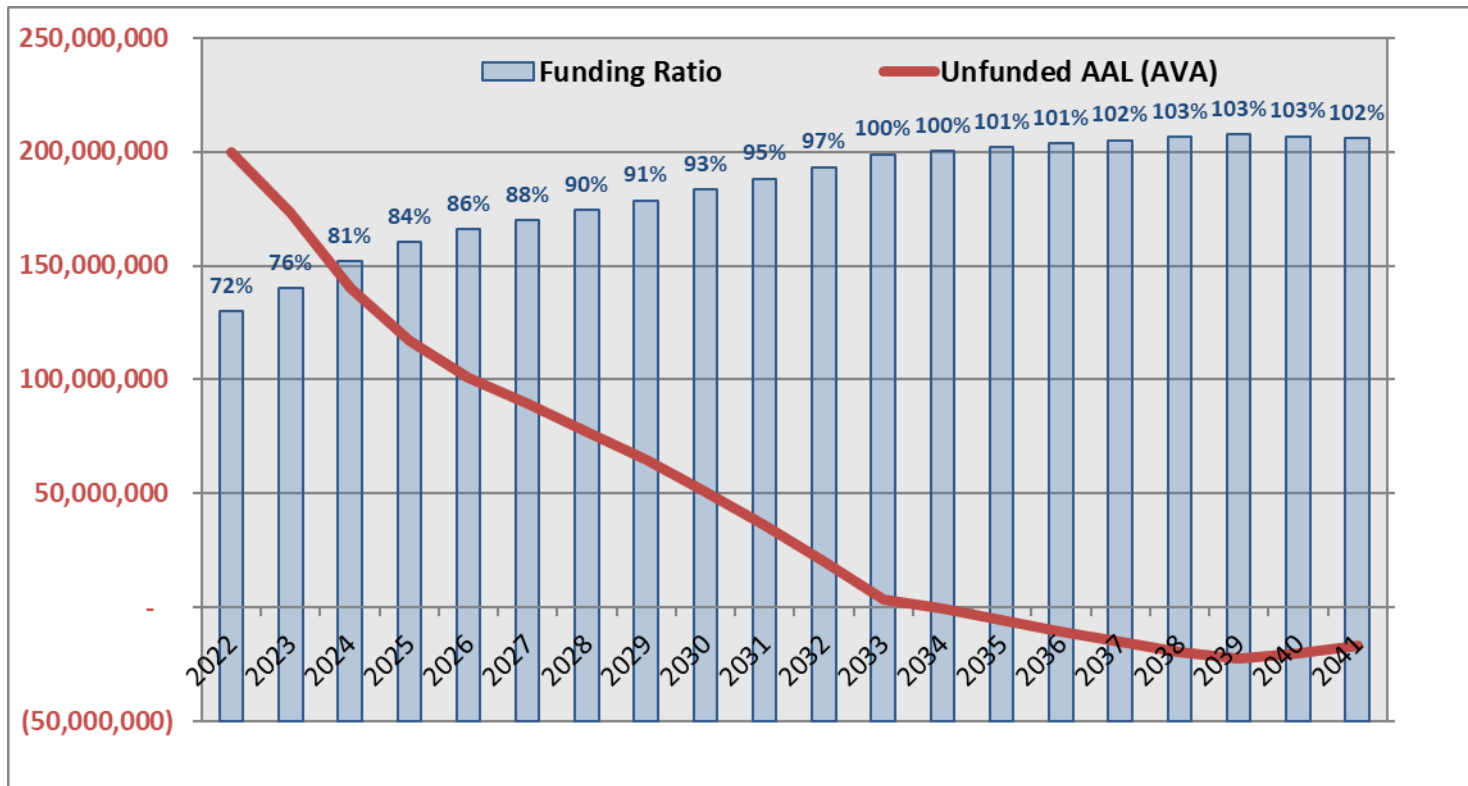
	Funding	GASB 67
Measurement Date	1/1/2022	6/30/2021
Actuarial Liability	\$ 714,175,176 (Actuarial Accrued Liability)	\$ 709,028,826 (Total Pension Liability)
Plan Assets*	\$ 514,386,619 (AVA)	\$ 552,356,443 (MVA)
Funded Ratio: Assets/Liability	72.0%	77.9%
Unfunded Liability	\$ 199,788,557 (Unfunded Actuarial Liability)	\$ 156,672,383 (Net Pension Liability)

* GASB – Market Value of Assets
 Funding – Actuarial (Smoothed) Value of Assets



Future Outlook - Funding

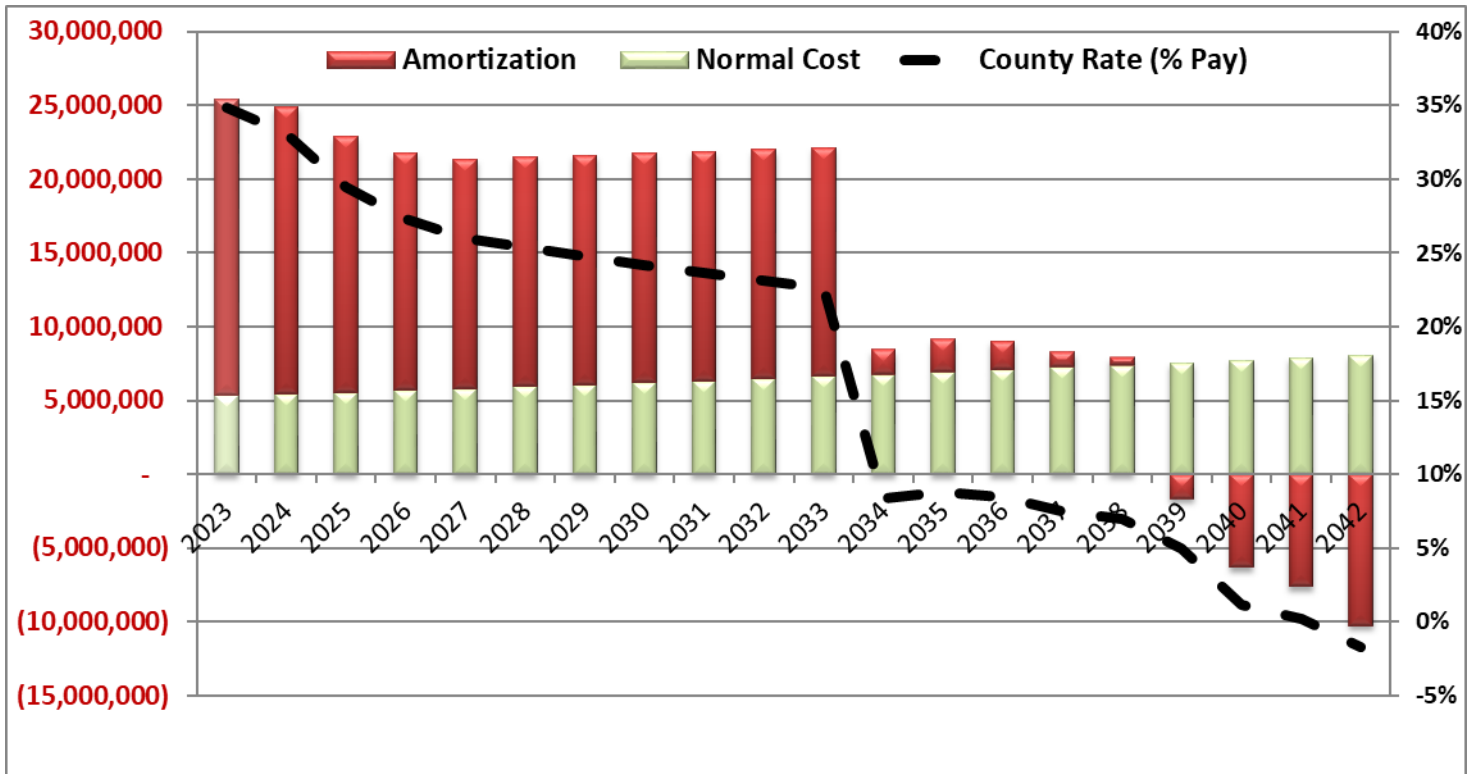
1. BASELINE: NO GAINS OR LOSSES





Future Outlook - Cost

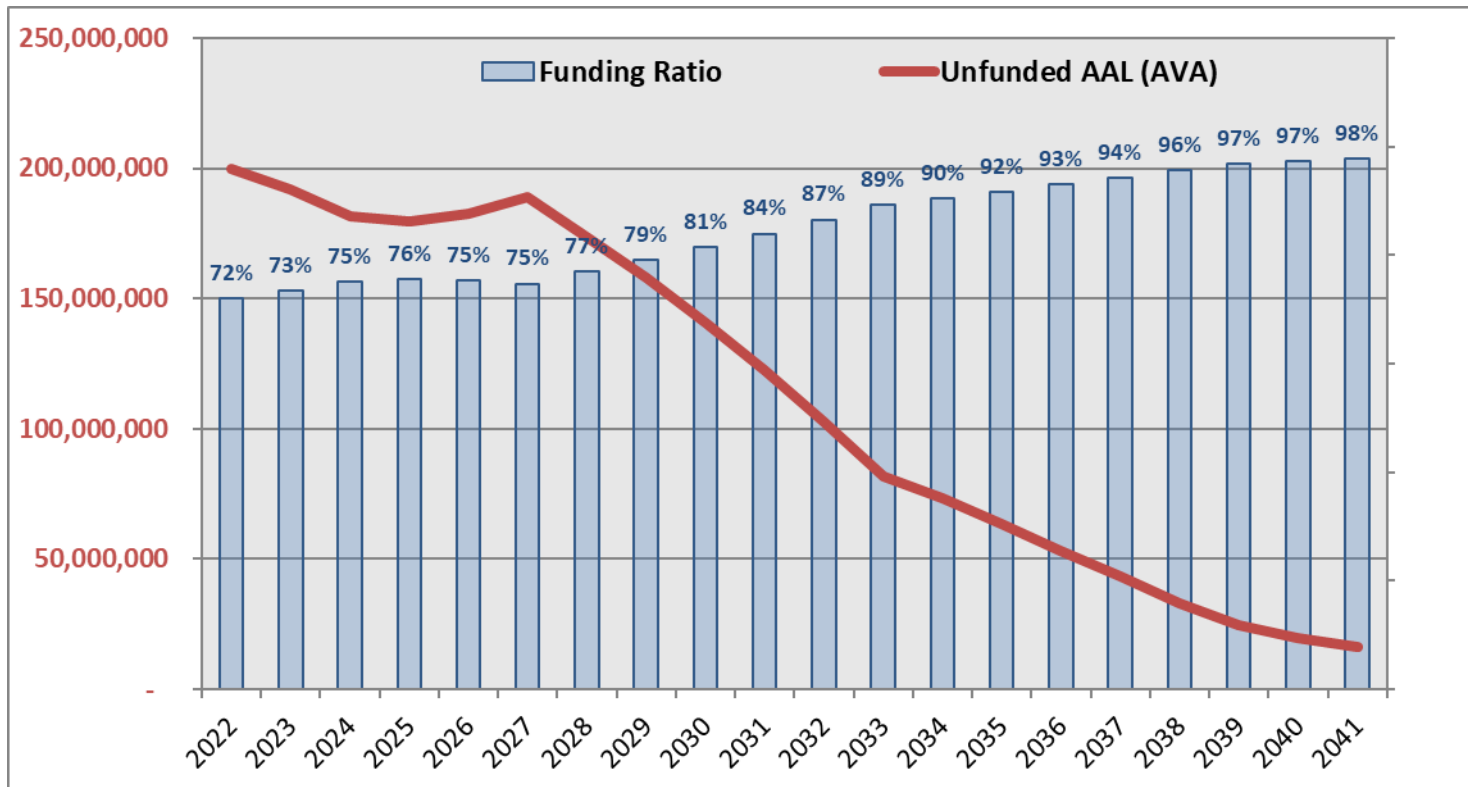
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Future Outlook - Funding

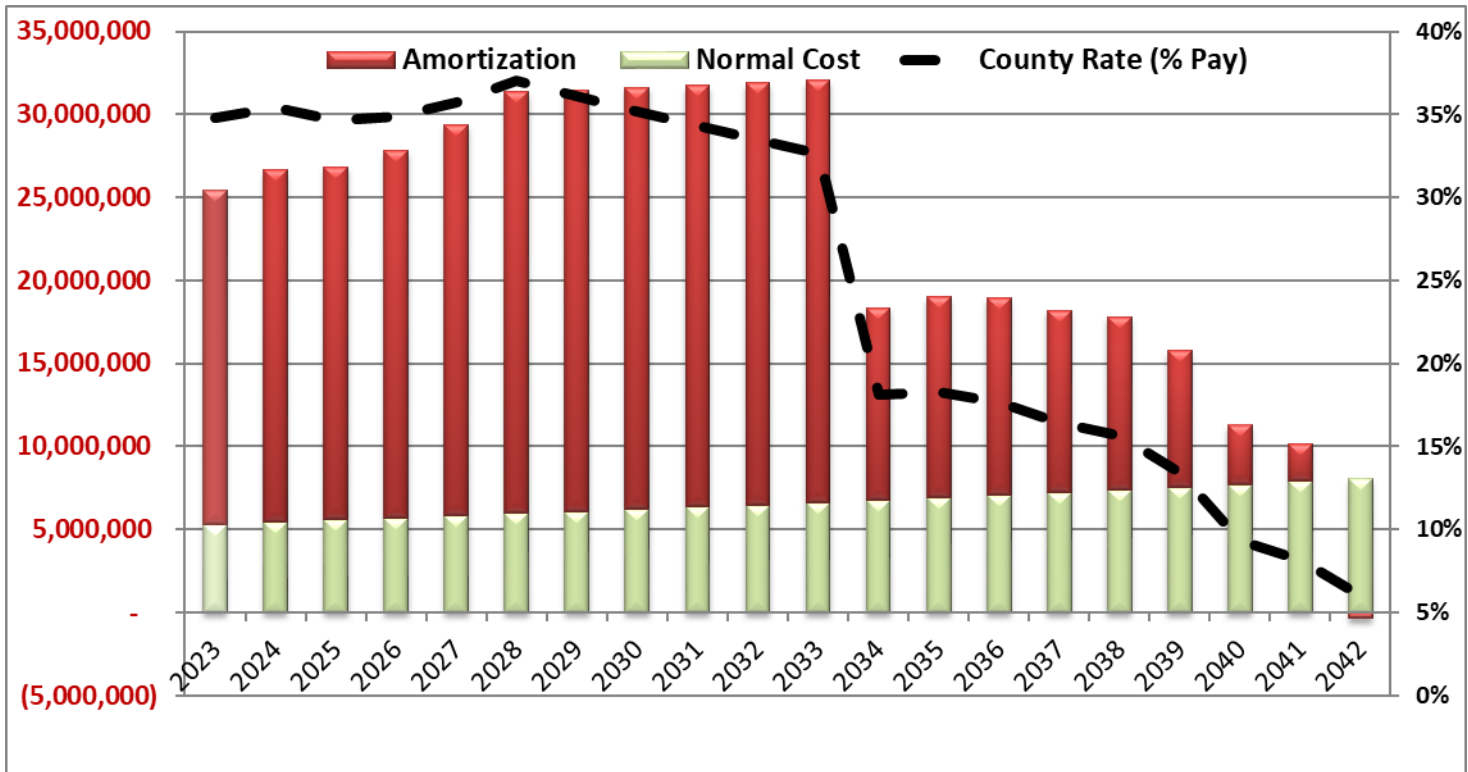
2. STRESS TEST: -10% in 2022 (then 7%/yr)





Future Outlook - Cost

2. STRESS TEST: -10% in 2022 (then 7%/yr)





Conclusions

- Funded Status
 - Investment gains are still helping
 - Demographic experience improved funding slightly
 - Net impact, UAAL is lower and funding ratio has improved
- Actuarial Contributions
 - County Rate: decreased % of pay
 - Estimated amount decreased by about \$2 million
- Future Outlook
 - Recent investment gains will buffer possible future losses
 - Significant funding improvement in base case, and about a decade of contributions near the current amount
 - Growth of 2011 Plan population continues to decrease the overall Normal Cost rate (% of payroll), County rate is currently about 7% of payroll



Appendix:

Risk Assessment & Plan Maturity Valuation Results by Plan



Risk Assessment

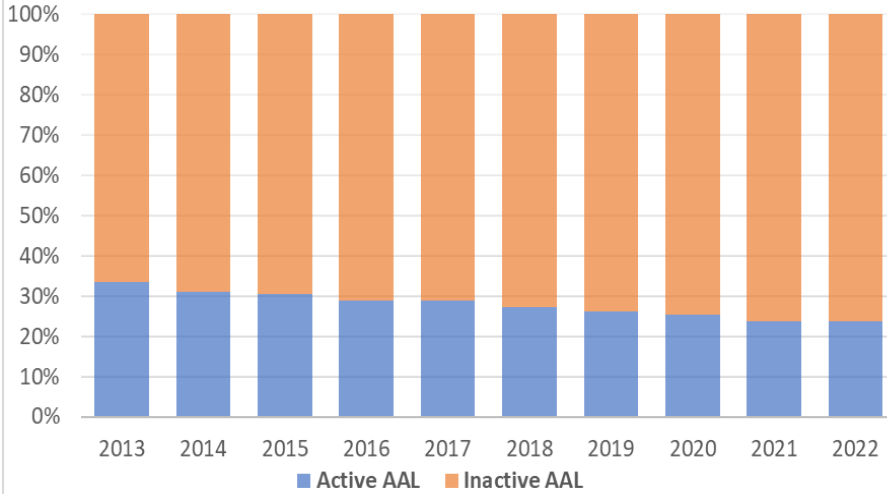
<i>As of 1/1/2022 (\$ mm)</i>	Current Return Assumption	2% Lower Per Year
Actuarial Liability (AAL)	\$714.2	\$878.1
Plan Assets (AVA)	514.4	514.4
Unfunded Liability	\$199.8	\$363.8
Funding Ratio	72%	59%
Employer Contribution	\$25.4	\$45.2
Total Contribution Rate	34.83%	59.95%

<i>As of 1/1/2022 (\$ mm)</i>	Current Mortality Assumption	20% Lower Mortality Rates
Actuarial Liability (AAL)	\$714.2	\$738.3
Plan Assets (AVA)	514.4	514.4
Unfunded Liability	\$199.8	\$223.9
Funding Ratio	72%	70%
Employer Contribution	\$25.4	\$28.0
Total Contribution Rate	34.83%	37.11%

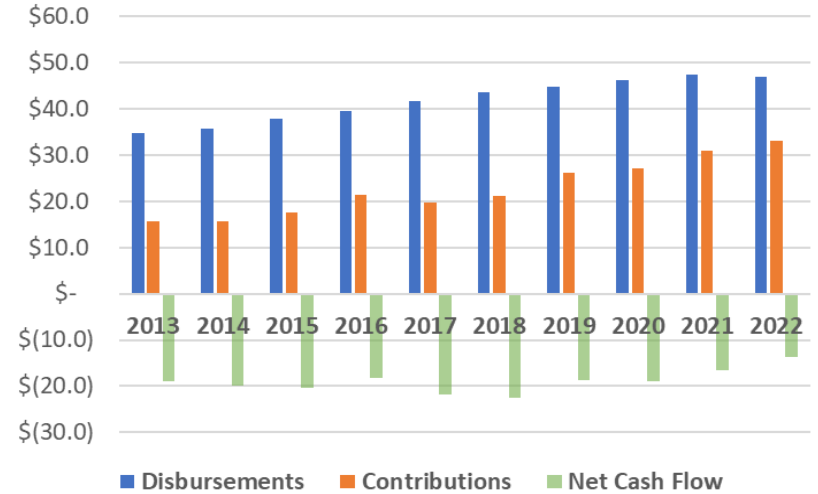


Plan Maturity

PROPORTION OF LIABILITY



PENSION FUND CASH FLOW (\$mm)





Allocation of Assets

EMPLOYEES' RETIREMENT PLANS

	County Employees Pension Plan	General Personnel	Police	Alternate Pension Plan	Crossing Guards	County 2011	Total
Actuarial Accrued Liability	\$60,032,086	\$400,329,021	\$244,314,316	\$591,736	\$2,130,632	\$6,777,385	\$714,175,176
Actuarial Value of Assets*	43,238,274	288,338,071	175,968,053	426,199	1,534,594	4,881,430	514,386,619
Unfunded Accrued Liability	\$16,793,812	\$111,990,950	\$68,346,263	\$165,537	\$596,038	\$1,895,955	\$199,788,557

* Allocated based on proportion of total Actuarial Accrued Liability, for the purpose of assigning costs to groups



Contribution Development

ACTUARIALLY DETERMINED CONTRIBUTION							
	County Employees Pension Plan	General Personnel	Police	Alternate Pension Plan	Crossing Guards	County 2011	Total
Total Normal Cost	\$592,264	\$5,338,140	\$365,318	\$2,753	\$40,675	\$1,321,345	\$7,660,495
Expected Employee Contributions	203,839	1,715,880	30,017	0	16,376	723,804	2,689,916
Net County Normal Cost							
(a) Dollar Amount	388,425	3,622,260	335,301	2,753	24,299	597,541	4,970,579
(b) Percentage of Payroll	4.44%	9.81%	47.88%	1.02%	1.38%	2.42%	6.80%
Amortization Payment							
(a) Dollar Amount	\$1,882,731	\$12,492,429	\$7,585,811	\$21,989	\$69,114	\$178,826	\$22,230,899
(b) Percentage of Payroll	21.52%	33.82%	1083.18%	8.16%	3.94%	0.73%	30.42%
County Contribution, Beginning of Year							
(a) Dollar Amount	\$2,271,156	\$16,114,689	\$4,502,519*	\$24,742	\$93,413	\$776,367	\$23,782,886*
(b) Percentage of Payroll	25.96%	43.63%	642.92%	9.18%	5.32%	3.15%	32.55%
Net County Contribution, End of Year							
(a) Dollar Amount	\$2,430,137	\$17,242,718	\$4,817,695*	\$26,474	\$99,952	\$830,712	\$25,447,689*
(b) Percentage of Payroll	27.77%	46.68%	687.92%	9.82%	5.70%	3.37%	34.83%

* Reflects expected contributions from the State to offset County amounts