

New Castle County Employees' Retirement Plans

2020 Actuarial Review

March, 2020





1/1/2020 Valuation

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- Plan Assets
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2020 Valuation Summary

	2019	2020	Change
<u>Participants</u>			
Active	1,057	1,019	-38
<u>Inactive</u>	<u>1,498</u>	<u>1,502</u>	<u>+14</u>
Total	2,545	2,521	-24
Average Employee Age	51.1	51.2	0.1
Average Service	15.7	16.0	0.3
Benefits Paid (\$mm)	\$42.0	\$43.3	+\$1.3
<u>Funding (\$ millions)</u>			
Assets (Market)	\$415	\$468	+\$53
Assets (Actuarial)	\$437	\$446	+\$9
Actuarial Accrued Liability	\$642	\$656	+\$14
Funding Ratio	68%	68%	0%
Unfunded Liability	\$205	\$210	+\$5
<u>Contributions</u>			
Contribution Rate, Total	35.95%	38.92%	+2.97%
Contribution Rate, Net	36.56%	39.62%	+3.06%



Demographic Changes

	Actives	Terminated Vested	Retired	Disabled	Total	<i>Prior Year Total</i>
County Employees' Pension Plan	125	19	176	13	333	<i>336</i>
Employees' Retirement System						
- Police	9	1	319	1	330	<i>332</i>
- General Personnel	521	56	807	26	1,410	<i>1,452</i>
Alternative Pension Plan (closed plan)	5	1	24	0	30	<i>31</i>
Crossing Guards Pension Plan	72	6	52	1	131	<i>130</i>
County 2011 Pension Plan	287	0	0	0	287	<i>264</i>
Total	1,019	83	1,378	41	2,521	<i>2,545</i>

% of Workforce in County 2011 Plan: 28%
 (% of Payroll = 24%)



Plan Assets

Market Value of Assets 1/1/2019		\$414,618,369
Contributions	\$27,179,010	
Income	5,497,499	
Unrealized Appreciation and Other Investment Proceeds		\$32,676,509
Benefit Payments	(\$43,340,321)	
Expenses	(2,884,713)	
		<u>(\$46,225,034)</u>
Market Value of Assets as of 12/31/2019		\$468,522,522



Plan Assets

	1/1/2019	1/1/2020
Market Value	\$414,618,369	\$468,522,522
Investment Return	(1.6%)	18.0%
Actuarial Value*	\$437,272,779	\$446,093,246
Investment Return	4.8%	7.0%
Unrecognized Gain/(Loss)	(\$22,654,410)	\$22,429,276

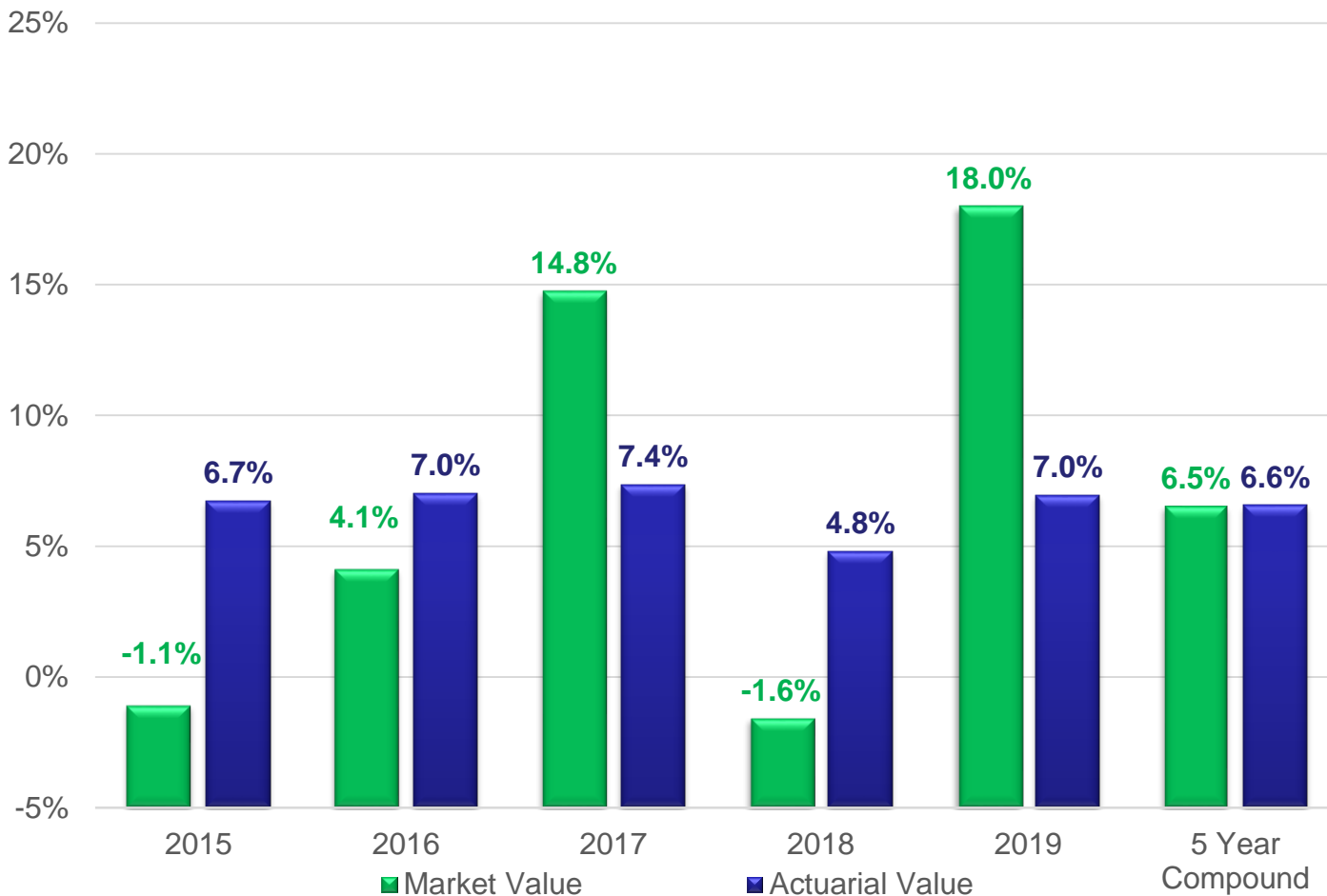
5-Year Average Investment Return

	1/1/2019	1/1/2020
Market Value	4.3%	6.5%
Actuarial Value*	6.9%	6.6%

* Note: Actuarial Value of Assets is based on 5 year averaging method for investment gains/losses.



Rates of Return Market and Actuarial Asset Values





Actuarial Assumptions

Investment Return	7.00%
Salary Increases	7.75% for 10 years, then 2.75%/3.25%
Retirement	Varies by Plan and Group:
General, 2011	20% at 50 up to 100% at 70
County	10% at 50 up to 100% at 66
Police	30% at 20 years svc, up to 100% at 30 years
Crossing Guards	10% at 60 up to 100% at 75
Mortality	RP-2014 Blue Collar (0,1) with generational improvements
Disability	0.1% to 0.2%
Withdrawal	Varies by Group - Tables based on service Rates range from 0.3% to 24.0%, decreasing with service



Valuation Approach

- 1/1/2019 Actuarial Liability (based on 1/1/2019 data)
“Rolled Forward” to 1/1/2020
 - Increased for normal cost
 - Increased for interest
 - Decreased for benefits paid
- Actual Assets and Contributions Recognized through 12/31/2019
- Each year’s investment gain or loss recognized over 5 years



Funding Progress

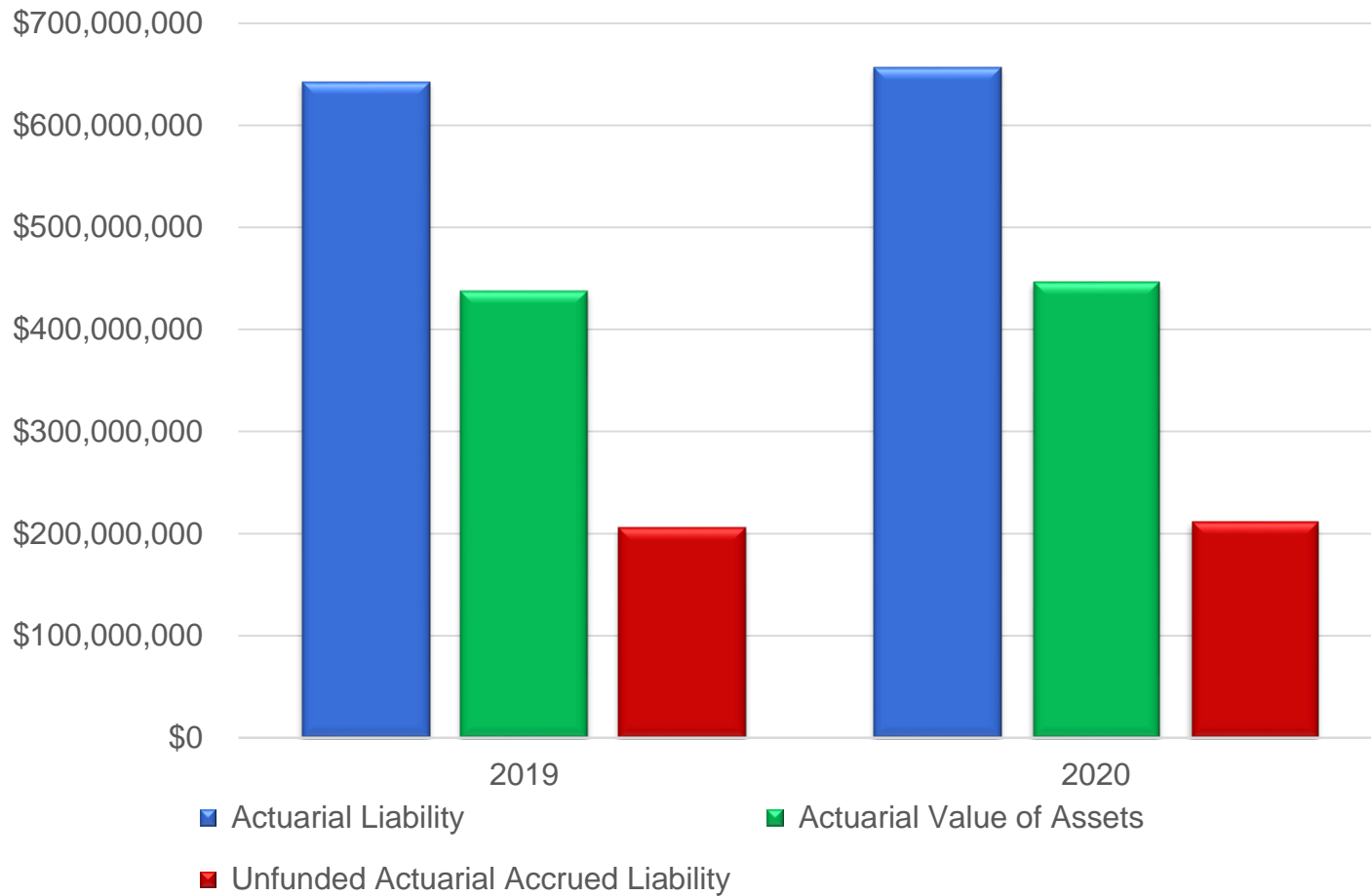
	1/1/2019	1/1/2020
Actuarial Accrued Liability	\$642,055,923	\$656,965,969
Actuarial Value of Assets	437,272,779	446,093,246
Unfunded Actuarial Accrued Liability	\$204,783,145	\$210,872,723
Funded Ratio	68.1%	67.9%

Present Value of Accumulated Benefits*	\$605,150,584	\$620,507,966
Market Value of Assets	414,618,368	468,522,522
Funded Ratio	68.5%	75.5%

* Unit Credit Basis



Change in Funded Status





Total County Contributions

	Fiscal 2020	Fiscal 2021
Total Normal Cost	\$8,278,000	\$8,062,000
Employee Contributions	(2,761,000)	(2,686,000)
Net County Normal Cost	5,517,000	5,376,000
Amortization Payments	20,420,000	21,579,000
Total as of Beginning of Plan Year	25,937,000	26,955,000
Total as of End of Plan Year	\$27,753,000	\$28,842,000
Expected State Subsidy*	(2,275,000)	(2,025,000)
Total Net of Expected State Contribution	\$25,477,000	\$26,817,000
As a % of Payroll	35.95%	38.92%
As a % of Payroll (4 Primary Plans)**	36.56%	39.62%

*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 of \$85,000 for Fiscal Year 2020 and \$102,000 for Fiscal Year 2021.



County Contributions by Group

	County Pension Plan	Retirement System		Alternate	County 2011	Crossing Guards	Total
		General	Police				
2019							
Contribution as % of Pay	\$2,406,000 24.09%	\$17,209,000 41.15%	\$5,301,000 280.58%	\$31,000 10.18%	\$424,000 2.80%	\$106,000 6.23%	\$25,477,000 35.95%
Subtotal (excluding Crossing Guards) as % of Pay*					\$25,371,000 36.56%		
2020							
Contribution as % of Pay	\$2,464,000 25.98%	\$17,744,000 45.25%	\$5,927,000 521.85%	\$31,000 9.84%	\$547,000 3.21%	\$104,000 5.98%	\$26,817,000 38.92%
Subtotal (excluding Crossing Guards) as % of Pay*					\$26,611,000 39.62%		

* Includes offset for Crossing Guards and expected additional County Contribution for the Police Plan of \$85,000 for Fiscal Year 2020 and \$102,000 for Fiscal Year 2021



Accounting/Funding Comparison

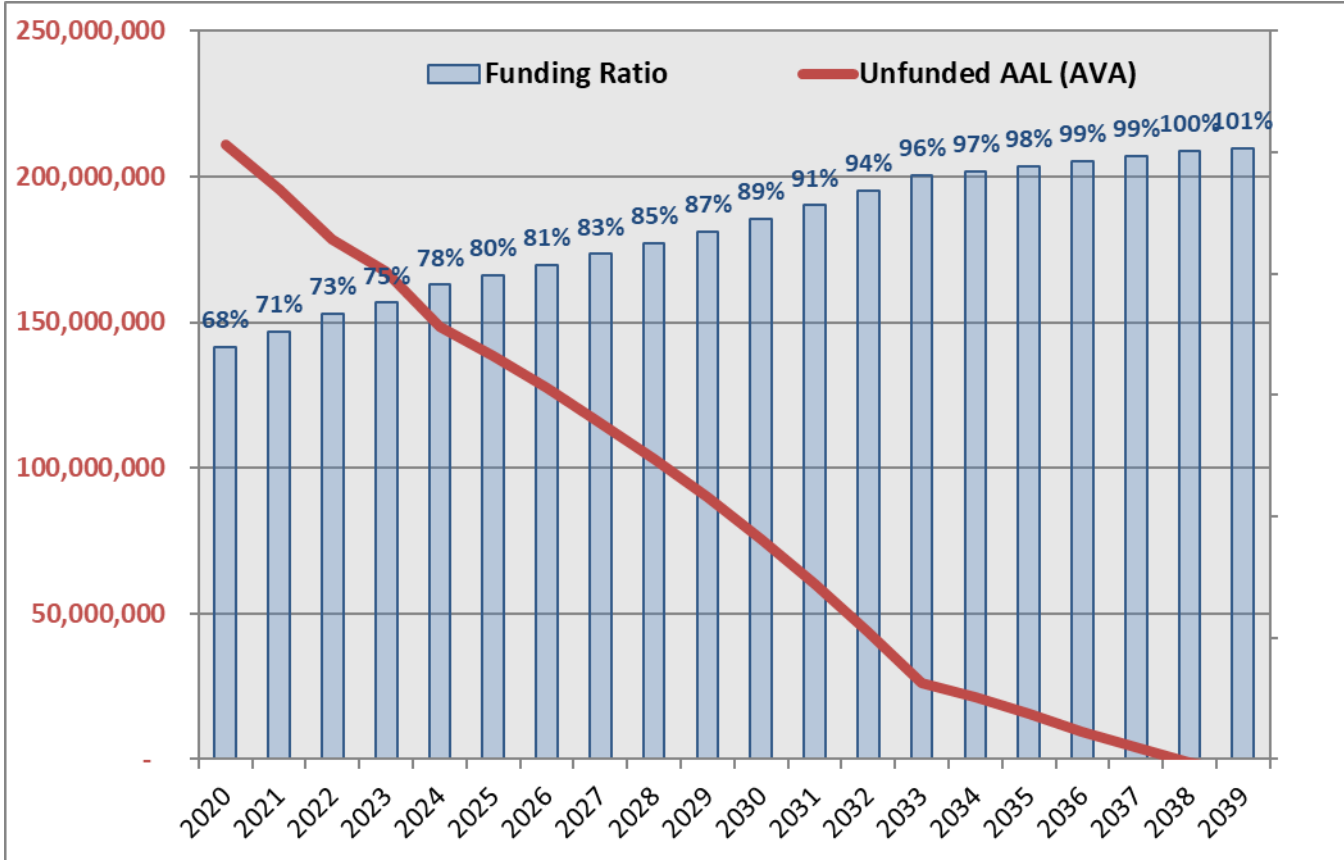
	GASB (6/30/19)	Funding (12/31/19)
Measurement Date	6/30/2019	12/31/2019
Actuarial Liability	\$ 646,646,296 (Total Pension Liability)	\$ 656,965,969 (Actuarial Accrued Liability)
Plan Assets*	\$ 454,154,613	\$ 446,093,246
Funded Ratio: Assets/Liability	70.2%	67.9%
Unfunded Liability	\$ 192,491,683 (Net Pension Liability)	\$ 210,872,723 (Unfunded Actuarial Liability)

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



Future Outlook - Funding

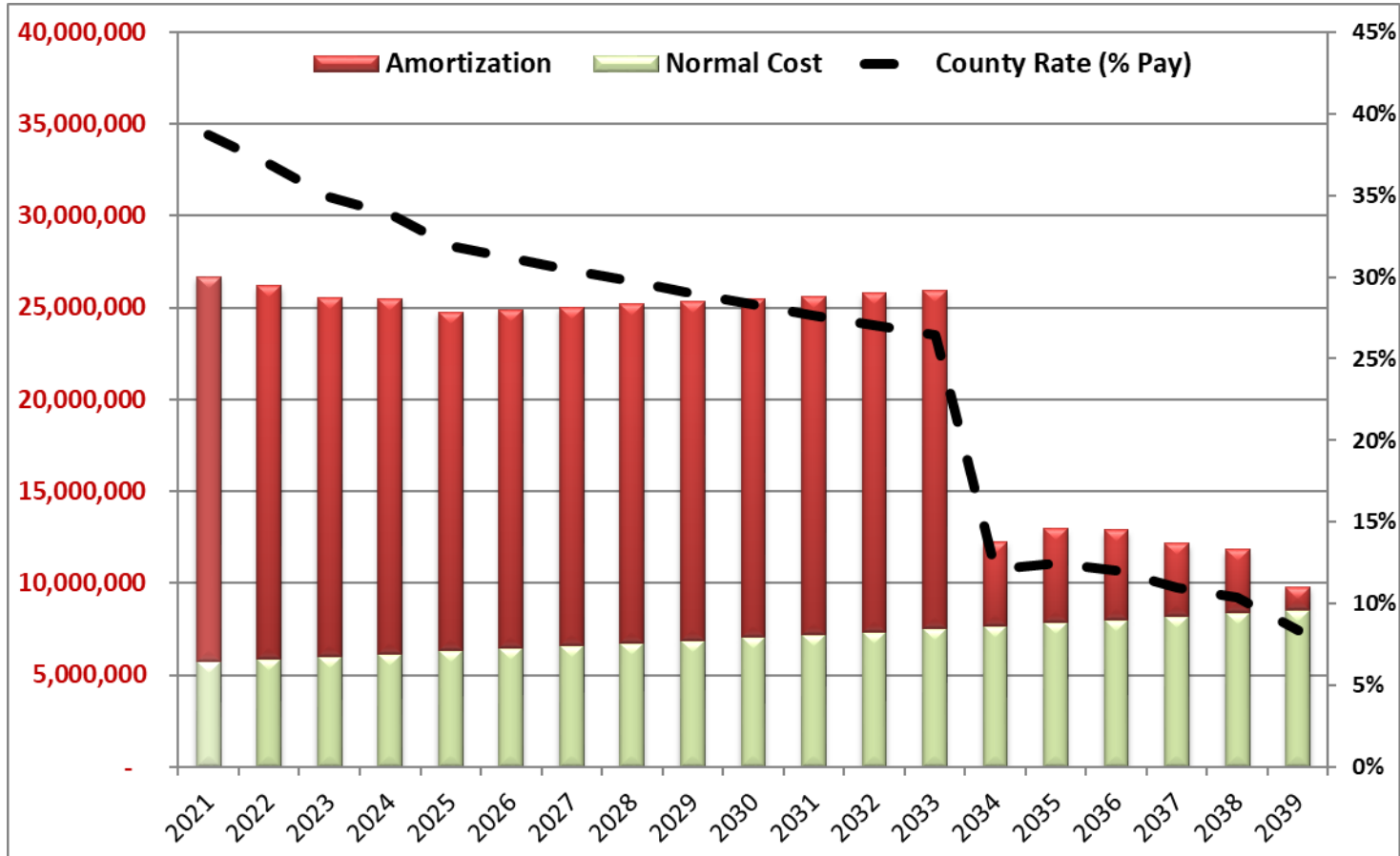
1. BASELINE: NO GAINS OR LOSSES





Future Outlook - Cost

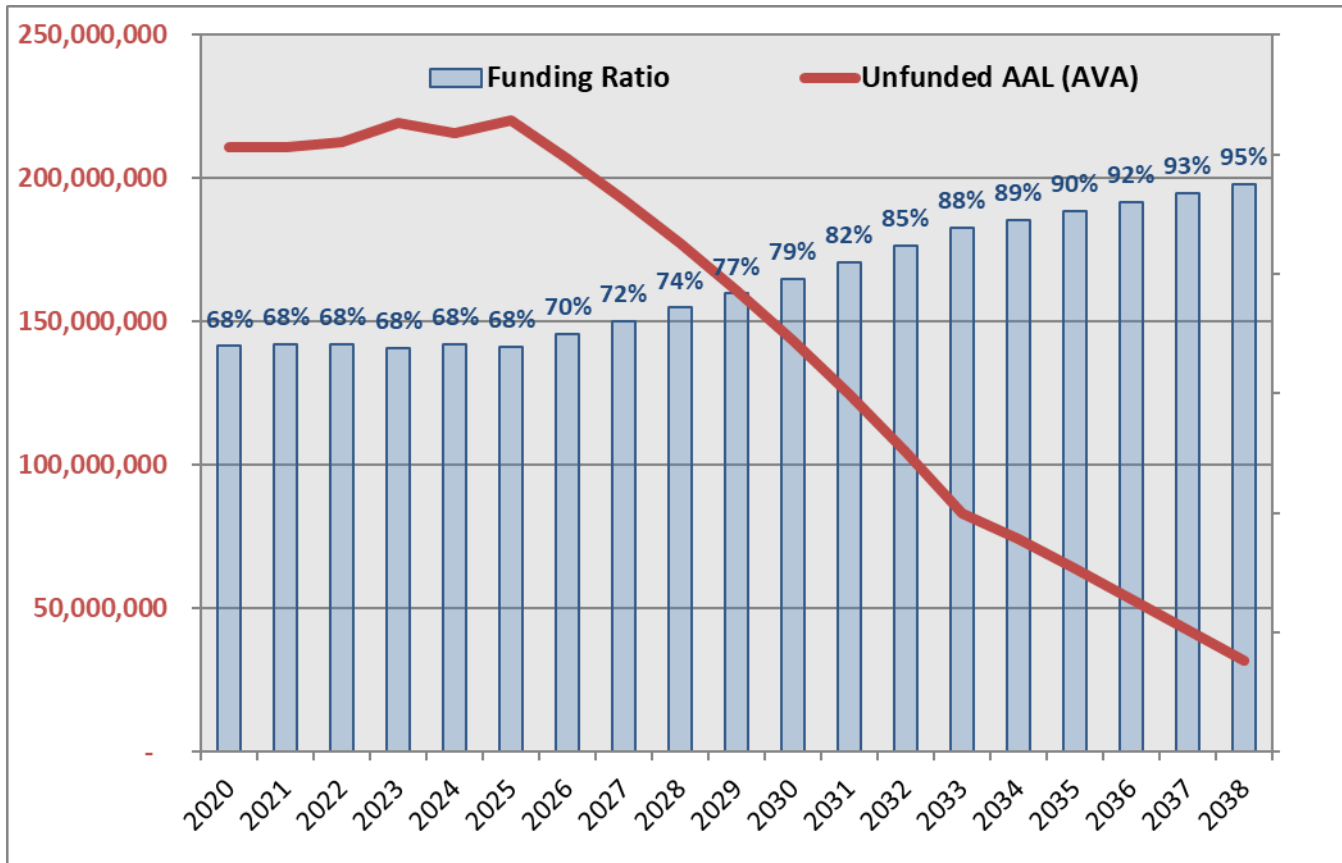
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Future Outlook - Funding

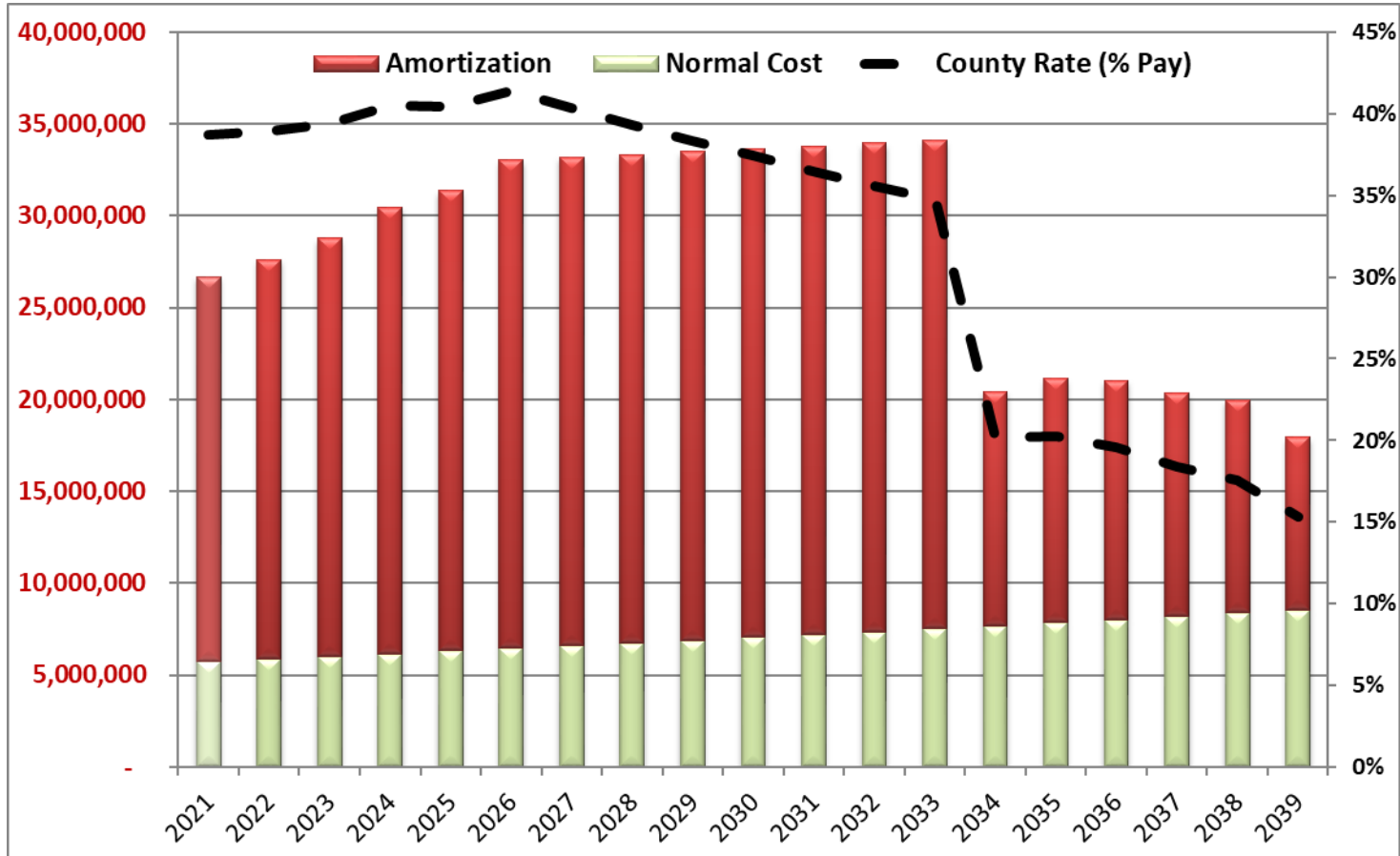
2. STRESS TEST: -10% in 2020





Future Outlook - Cost

2. STRESS TEST: -10% in 2020





Conclusions

- **Funded Status**
 - Investment gain in 2019 helped, but still recognizing 2018 loss
 - Demographic experience hurt a little (about 1% increase in AAL)
 - Net impact, same ratio as prior year (68%)
- **Actuarial Contributions**
 - County Rate: increased by about 3% of pay (largely due to lower payroll)
 - Estimated amount increased by \$1.2 million
- **Future Outlook**
 - 2019 investment gains may drive costs down, without subsequent losses going forward
 - 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)



Appendix



Contribution Development

ACTUARIALLY DETERMINED CONTRIBUTION							
	County Employees Pension Plan	ERS: General Personnel	ERS: Police	Alternate Pension Plan	Crossing Guards	County 2011	Total
Total Normal Cost	\$693,793	\$5,839,844	\$582,157	\$2,811	\$42,669	\$900,473	\$8,061,746
Expected Employee Contributions	235,281	1,856,986	78,229	0	17,986	497,425	2,685,907
Net County Normal Cost							
(a) Dollar Amount	458,512	3,982,858	503,928	2,811	24,683	403,048	5,375,839
(b) Percentage of Payroll	4.83%	10.16%	44.37%	0.89%	1.41%	2.37%	7.80%
Amortization Payment							
(a) Dollar Amount	\$1,844,107	\$12,600,798	\$6,927,371	\$26,109	\$72,806	\$107,924	\$21,579,116
(b) Percentage of Payroll	19.44%	32.13%	609.95%	8.30%	4.17%	0.63%	31.32%
County Contribution, Beginning of Year (less Expected State Amt)							
(a) Dollar Amount	\$2,302,619	\$16,583,656	\$5,539,126	\$28,920	\$97,489	\$510,972	\$25,062,782
(b) Percentage of Payroll	24.28%	42.29%	487.71%	9.20%	5.59%	3.00%	36.37%
County Contribution, End of Year (less Expected State Amt)							
(a) Dollar Amount	\$2,463,802	\$17,744,512	\$5,926,865	\$30,944	\$104,313	\$546,740	\$26,817,176
(b) Percentage of Payroll	25.98%	45.25%	521.85%	9.84%	5.98%	3.21%	38.92%