Commission on Government Forecasting and Accountability

PENSION IMPACT NOTE
104th General Assembly

BILL NO: **HB 2796** March 3, 2025

SPONSOR (S): Yang Rohr

SYSTEM: Downstate Fire

FISCAL IMPACT

HB 2796 seeks to create a Deferred Retirement Option Plan (DROP) for eligible members of Downstate Firefighters' Pension Funds. HB 3765, as amended by HA 3, from the 103rd General Assembly, was studied by CGFA's consulting actuary. A summary chart of the impact on employer contributions for the cities of Aurora and Rock Falls is shown below. A flow-chart of the different iterations of DROP legislation from the 103rd General Assembly can be found in Appendix I. The full actuarial study for the DROP plan from HB 3765 can be found in Appendix II.

Impact of DROP on Article 4 Funds Municipal Contribution									
($) in Thousands			Scenario 1 (100% Enter, 5 Years in DROP)			Scenario 2 (80% Enter, 3 Years in DROP)		
Fund	Year	Baseline	DROP	Impact	Impact %	DROP	Impact	Impact %
Aurora Fire	2023	$ 14,277.0	$ 16,436.1	$ 2,159.1	15.1%	$ 16,085.4	$ 1,808.4	12.7%
	2024	$ 14,308.6	$ 16,557.7	$ 2,249.0	15.7%	$ 16,192.3	$ 1,883.7	13.2%
	2025	$ 14,520.0	$ 16,863.4	$ 2,343.3	16.1%	$ 16,482.6	$ 1,962.5	13.5%
	2026	$ 14,749.5	$ 14,436.3	$ (313.2)	-2.1%	$ 14,162.2	$ (587.3)	-4.0%
	2027	$ 15,028.9	$ 14,869.6	$ (159.3)	-1.1%	$ 14,623.4	$ (405.5)	-2.7%
Rock Falls Fire	2023	$ 285.3	$ 323.3	$ 38.0	13.3%	$ 319.0	$ 33.7	11.8%
	2024	$ 288.2	$ 327.7	$ 39.5	13.7%	$ 323.2	$ 35.0	12.2%
	2025	$ 296.2	$ 337.4	$ 41.2	13.9%	$ 332.7	$ 36.5	12.3%
	2026	$ 304.6	$ 288.0	$ (16.6)	-5.5%	$ 285.2	$ (19.5)	-6.4%
	2027	$ 315.1	$ 312.4	$ (2.7)	-0.9%	$ 309.7	$ (5.4)	-1.7%

SUBJECT MATTER: HB 2796 amends the Downstate Firefighters' Article of the Illinois Pension Code to create a Deferred Retirement Option Plan (DROP) for eligible members of Downstate Firefighters' Pension Funds. More detail is provided below.

COMMENT:

DROP Explanation

- Deferred Retirement Option Plans (DROP) are designed to encourage continued employment past the eligible retirement age for a period of time (usually 3-5 years). Below is a summary of the salient features of DROP plans:
    - Workers continue to draw a salary but are considered retired (for annuity purposes);
    - The pension annuity amount the worker is entitled to receive starting on the date they are considered "retired" (DROP date) is credited to the member's individual DROP account; and
    - Upon completion of the DROP period, the member's DROP account balance is available in a lump-sum amount, which can be distributed in any of the following ways:
        - a one-time payment;
        - a payment plan over time;
        - a payment rolled into an IRA.

HB 2796 DROP Provisions

- Beginning January 1, 2026, a DROP plan will be made available for eligible members, regardless of Tier, of the Downstate Firefighters' Pension Fund. Eligible participants must:
    - be in active service;
    - have attained age 50; and
    - have at least 20 years of creditable service in the Fund.
- Participation in the DROP is limited to once per member, and the election to participate must be made by the participant within 3 years after becoming eligible;
- The start date of participation in the DROP shall be the first day of a calendar month and not less than 30 nor more than 90 days after filing the application;
- The DROP duration is 3 years;
- Participation in the DROP shall continue until one of the following occurs:
    - Termination of service;
    - Death of member;
    - Disability for which the member receives a benefit; or
    - Expiration of 3 years from the date the member began participation.
- Individual DROP accounts shall consist of:

  - The monthly retirement annuity the participant would have been eligible to receive if the participant had terminated service on the date of participation in the DROP, as well as any increases the member would be eligible for;
  - Employee contributions paid by the participant during the DROP period; and
  - Interest on the balance of the account will accrue at a rate of 7% per annum, paid and compounded monthly, throughout the DROP participation period.
- Upon expiration or termination of the member's participation in the DROP, the member will receive the retirement annuity that they would have received had they retired on the date they entered the DROP with applicable automatic increases accrued during the DROP duration.
- Members have the option of receiving the balance of their DROP account in a monthly annuity or a lump-sum after expiration of their participation.
  - Lump-sum payments may be rolled over into an IRA or another qualified tax-deferred retirement plan (e.g., 401(k), 457, 403(b)).
  - Annuities shall be a fixed amount and not subject to annual or other increases.
  - If a member receiving a DROP benefit in the form of an annuity re-enters service, said annuity payments shall be suspended until the member's subsequent retirement.
  - If the member dies while participating in the DROP, the DROP benefit shall be paid as a lump-sum to the survivor or the deceased member's estate.
  - If the member dies while receiving a DROP benefit in the form of an annuity and the account balance exceeds the total amount of DROP payments received, the excess shall be refunded to the survivor or the deceases member's estate.
- During participation in the DROP, a member remains eligible to apply for a disability benefit, and upon acceptance of a disability benefit, a member shall:
  - terminate participation within the DROP;
  - be credited with employee contributions and creditable service for the period of participation in the DROP;
  - see their letter of resignation from service voided; and
  - forfeit all DROP account funds, which will be returned to the Downstate Firefighters' Pension Fund.

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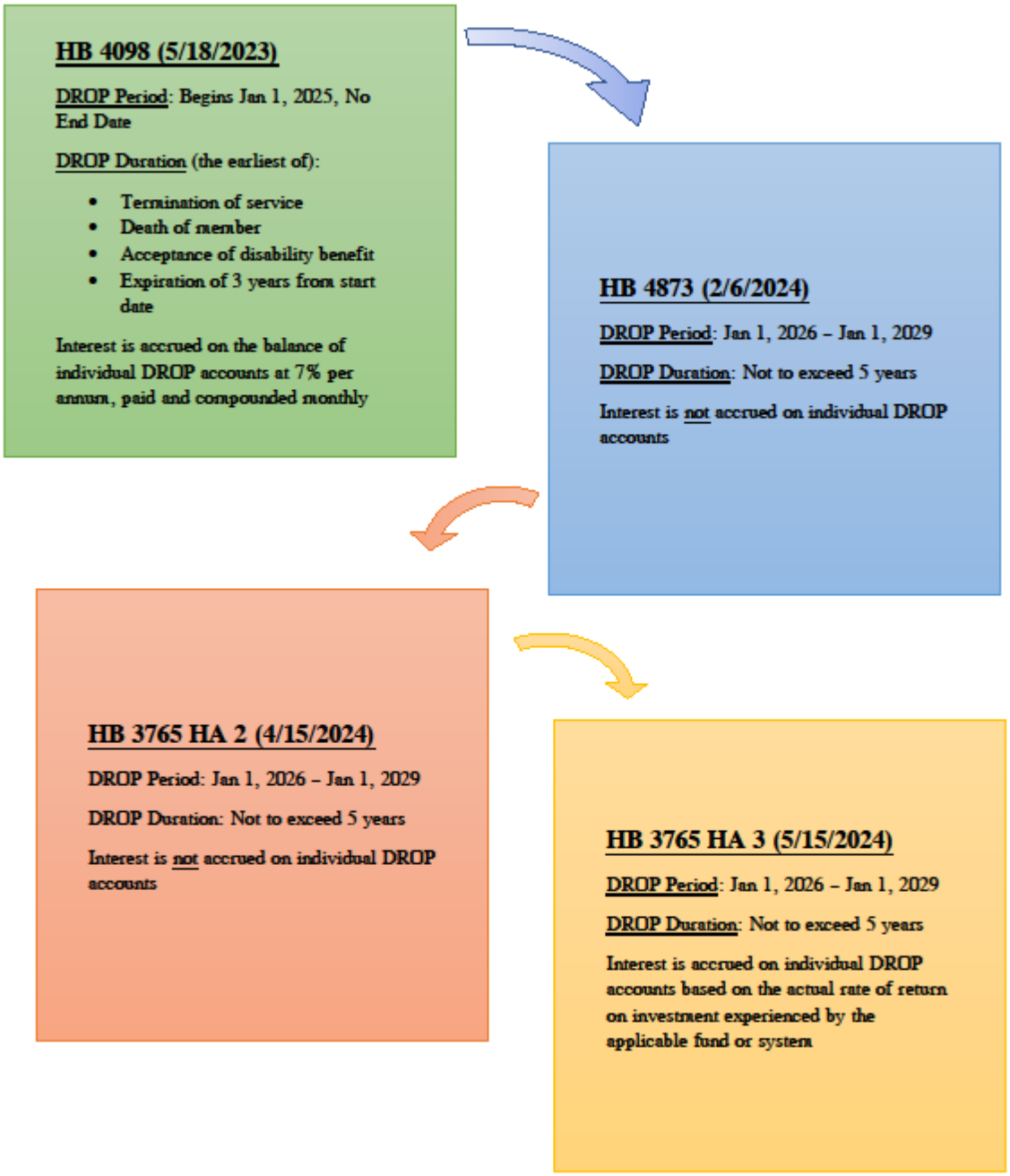
Appendix I


HB 4098 (5/18/2023)
DROP Period: Begins Jan 1, 2025, No End Date
DROP Duration (the earliest of):
Termination of service
Death of member
Acceptance of disability benefit
Expiration of 3 years from start date
Interest is accrued on the balance of individual DROP accounts at 7% per annum, paid and compounded monthly
HB 4873 (2/6/2024)
DROP Period: Jan 1, 2026 – Jan 1, 2029
DROP Duration: Not to exceed 5 years
Interest is not accrued on individual DROP accounts
HB 3765 HA 2 (4/15/2024)
DROP Period: Jan 1, 2026 – Jan 1, 2029
DROP Duration: Not to exceed 5 years
Interest is not accrued on individual DROP accounts
HB 3765 HA 3 (5/15/2024)
DROP Period: Jan 1, 2026 – Jan 1, 2029
DROP Duration: Not to exceed 5 years
Interest is accrued on individual DROP accounts based on the actual rate of return on investment experienced by the applicable fund or system

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

November 8, 2024

Mr. Dan Hankiewicz
Illinois Commission on Government Forecasting and Accountability
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E. DanH@ilga.gov

Re: Article 3 & 4 Illinois Pension Funds Cost Impact of Extending the Amortization Period and Adding a Deferred Retirement Option Program

Dear Mr. Hankiewicz,

This letter provides you with cost estimates for extending the amortization period of the unfunded actuarial accrued liability (UAAL) and implementing a Deferred Retirement Option Program (DROP) on Article 3 and 4 pension funds.

Cost Impact of Extending the Amortization Period

Based on HB 5843, we have estimated the impact of extending the amortization period of the UAAL on the selected Article 3 and 4 Illinois Pension Funds from the year 2040 to 2050. The results are shown in the attached exhibits:

- **Exhibit 1:** This displays the first-year impact on the pension contribution of changing the amortization period from a 2040 to a 2050 end date on the selected Article 3 funds.
- **Exhibit 2:** This shows two graphs, the first one illustrating how the amortization payment changes over time under each funding policy and the second displaying the impact on the funded status of pushing this date out the additional ten years. Aurora Police was selected as the sample fund for display, but the shape of this graph is similar for the other funds.
- **Exhibit 3:** This displays the first-year impact on the pension contribution of changing the amortization period from a 2040 to a 2050 end date on the selected Article 4 funds.
- **Exhibit 4:** This shows two graphs, the first one illustrating how the amortization payment changes over time under each funding policy and the second displaying the impact on the funded status of pushing this date out the additional ten years. Aurora Fire was selected as the sample fund for display, but the shape of this graph is similar for the other funds.

Cost Impact of DROP Enhancements

We have estimated the impact of implementing the DROP provisions as defined in HB 3765 on the following Article 3 and 4 Illinois Pension Funds:

- Aurora Police (See Exhibit 5)
- Rock Falls Police (See Exhibit 6)
- Aurora Fire (See Exhibit 7)
- Rock Falls Fire (See Exhibit 8)

Below is a summary of the provisions and assumptions included in the costing:

1. **Scenario 1** - Full DROP participation:
    a. Eligible to participate in DROP upon reaching age 50 and 20 years of service for Tier 1 and age 55 and 10 years of service for Tier 2. Members are only eligible to enter DROP between January 1, 2026 and January 1, 2029. Note, no Tier 2 members in the selected funds are eligible to enter DROP during this window.
    b. Assume DROP participation period – 5 years (maximum allowable).
    c. DROP balance is paid to the participant as a lump sum once the participant exits DROP.
    d. Member contributions are required while in DROP but are returned to the members as part of their DROP balance when they leave DROP.
    e. Assumed interest on DROP balance – Assumed Fund Investment Earnings Rate plus 200 basis points. This reflects the fact that DROP accounts will not be credited with negative returns; therefore, on average, these accounts will return higher rates than the fund assets.
    f. Assumed DROP participation rate – 100% of those eligible. Members are assumed to enter DROP upon first eligibility.

2. **Scenario 2** - Same as the first scenario, with the following exceptions:
    a. Assumed DROP participation rate – 80% of those eligible. Members are assumed to enter DROP upon first eligibility.
    b. Assumed DROP participation – 3 years.

The costs were projected through the year 2040. For the projections, we assumed that new entrants came into the fund with the following profiles:

	Age	Pay (2024) [1]	% Male
Aurora Police	27	98,000	85%
Rock Falls Police	28	53,000	90%
Aurora Fire	27	102,000	98%
Rock Falls Fire	26	48,000	100%

[1] Adjusted annually for inflation.

Please see Exhibit 9 for more detailed information about DROP programs, including how they work and potential considerations when implementing DROP.

Assumptions and Methods

The assumptions and methods employed for the purpose of this measurement were consistent with the assumptions that the Firefighters' Pension Investment Fund (FPIF) and Illinois Police Officers Pension Investment Fund (IPOPIF) used for the 2023 actuarial valuation reports, without regard to phasing in the assumptions for the IPOPIF funds. When the plan changes are considered, we did revise the retirement rates to assume that 100% of members enter DROP upon reaching age 50 and 20 years of service. A summary of the assumptions can be found in Exhibits 10 (Article 3) and 11 (Article 4).

Data

In conducting this analysis, we have relied on personnel data supplied to us by the Illinois Department of Insurance with permission from the FPIF and IPOPIF to employ the data for purposes other than in the issuance of reports on behalf of the FPIF and IPOPIF. The effective date of the data varies by sample fund and is noted in the attached exhibits. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness.

Discussion of Risk and Third-Party Software

These calculations were determined for the purpose of estimating the cost impact of this proposed legislation. Use of the results for other purposes may not be applicable and produce significantly different results. Future actuarial measurements may differ significantly from the current measurements presented in this letter for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations.

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position. Measurement of the impact of potential deviation from the actuarial assumptions is outside the scope of this assessment, however, it is important to note that the estimate provided is produced at a single point in time and subject to the demographics as they exist on the valuation date and the actuarial assumptions used to determine the cost impact.

In performing the analysis, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models to generate the costs. All internally developed models are reviewed as part of the process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

Statement of Actuarial Opinion

The undersigned are familiar with the immediate and long-term aspects of pension calculations and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. To the best of our knowledge, the results are complete and accurate, and in our opinion, the techniques and assumptions used are reasonable.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the programs has any direct financial interest or indirect material interest in the Article 3 or 4 funds included in this analysis, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of these funds. Thus, there is no relationship existing that might affect our capacity to prepare and certify this estimate of the cost impact of the proposed legislation.

Respectfully submitted,

Foster & Foster, Inc.

By: Jason L. Franken

Jason L. Franken, FSA, EA, MAAA

By: Heidi Andorfer

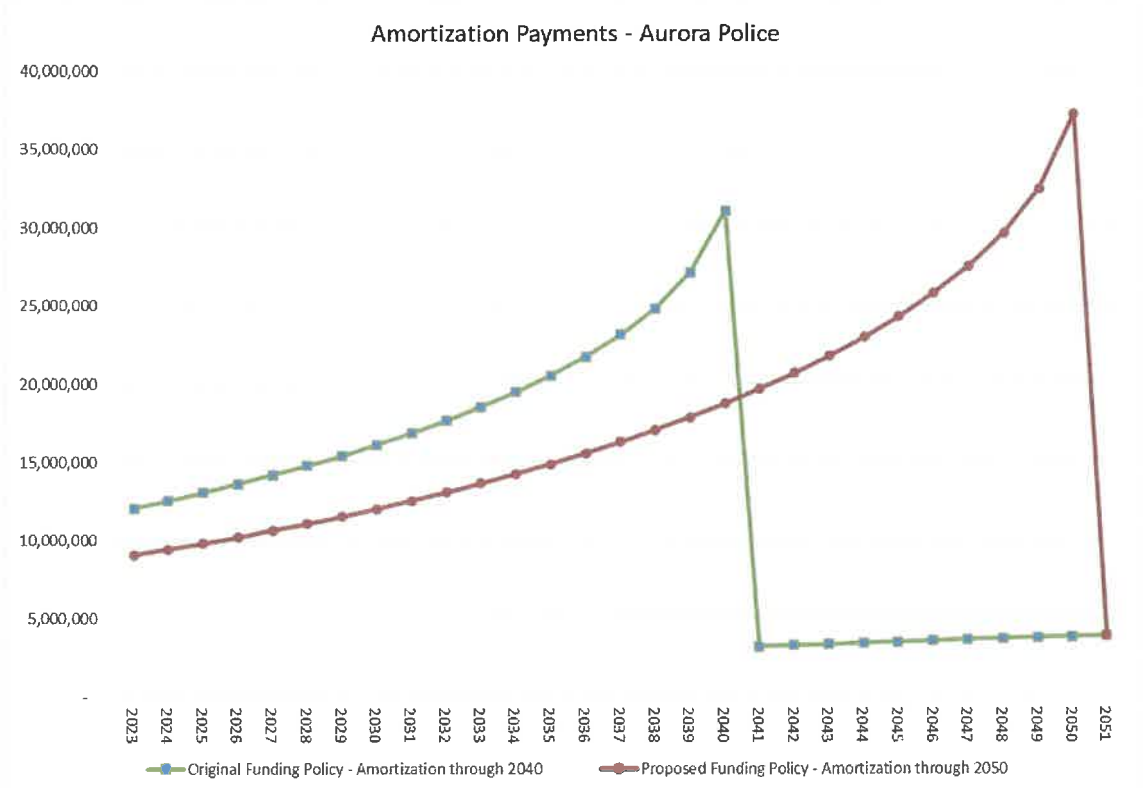
Heidi E. Andorfer, FSA, EA, MAAA

Exhibit 1

Article 3 Funding Policy Impact

	Aurora Police		Crystal Lake Police		Rock Falls Police	
	Original Funding Policy - Amortization through 2040	Proposed Funding Policy - Amortization through 2050	Original Funding Policy - Amortization through 2040	Proposed Funding Policy - Amortization through 2050	Original Funding Policy - Amortization through 2040	Proposed Funding Policy - Amortization through 2050
Funded Status						
Total Actuarial Accrued Liability (AL)	$526,040,040	$526,040,040	$91,373,110	$91,373,110	$17,544,950	$17,544,950
Actuarial Value of Assets (AVA)	310,851,034	310,851,034	52,409,956	52,409,956	8,947,716	8,947,716
Unfunded Actuarial Accrued Liability (UAAL)	215,189,006	215,189,006	38,963,154	38,963,154	8,597,234	8,597,234
90% Funded Ratio Target	473,436,036	473,436,036	82,235,799	82,235,799	15,790,455	15,790,455
Funded Ratio (AVA / AL)	59.1%	59.1%	57.4%	57.4%	51.0%	51.0%
Pension Cost						
Normal Cost, Including Expense Load	$10,285,927	$10,285,927	$1,909,220	$1,909,220	$354,691	$354,691
Payment Required to Amortize UAAL	12,896,561	9,693,108	2,464,725	1,816,301	565,465	416,701
Total Recommended Contribution	23,182,488	19,979,035	4,373,945	3,725,521	920,156	771,392
Expected Member Contributions	(3,942,892)	(3,942,892)	(721,587)	(721,587)	(151,078)	(151,078)
Expected Village Contribution	19,239,596	16,036,143	3,652,358	3,003,934	769,078	620,314
Change from Baseline		*(3,203,453)*		*(648,424)*		*(148,764)*
Assumptions and Methods						
Interest Rate	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%
Funded Target	90%	90%	90%	90%	90%	90%
Amortization Years	18	28	17	27	17	27
Payroll Growth Assumption	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cost Method	EAN	EAN	EAN	EAN	EAN	EAN
Valuation Date	1/1/2023	1/1/2023	5/1/2023	5/1/2023	5/1/2023	5/1/2023
Applicable to Fiscal Year Ending	12/31/2023	12/31/2023	4/30/2024	4/30/2024	4/30/2024	4/30/2024

Exhibit 2
Article 3 Funding Policy Impact



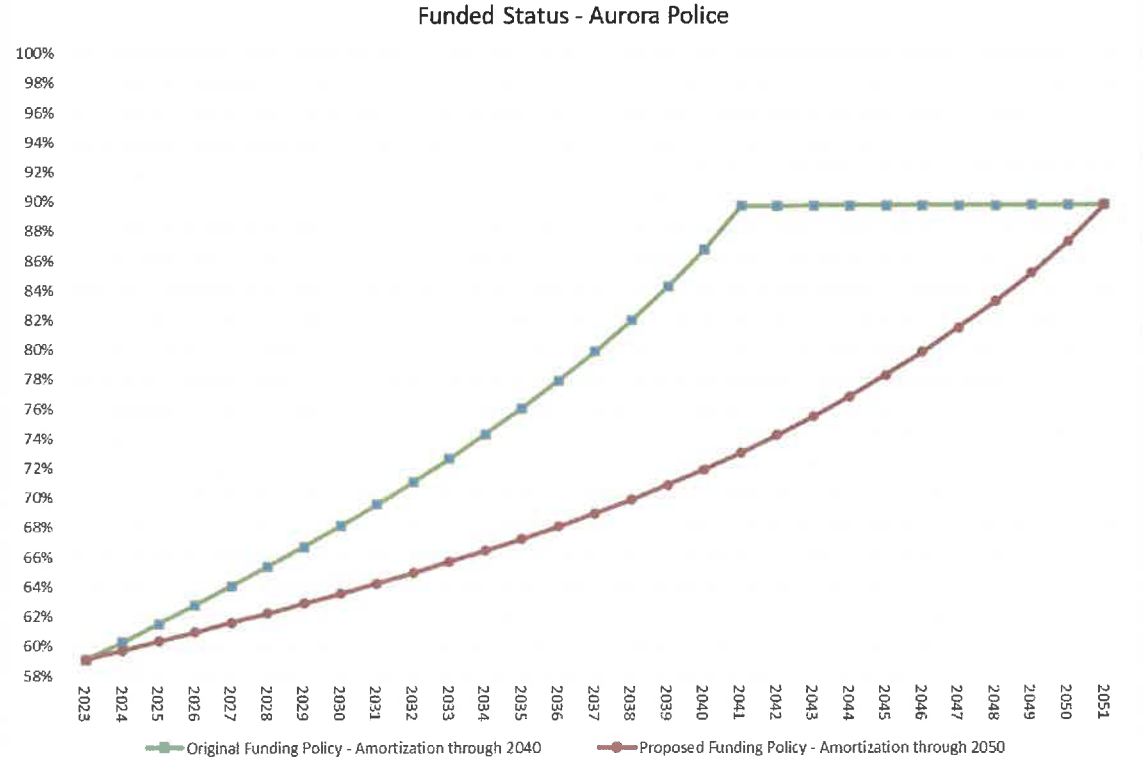
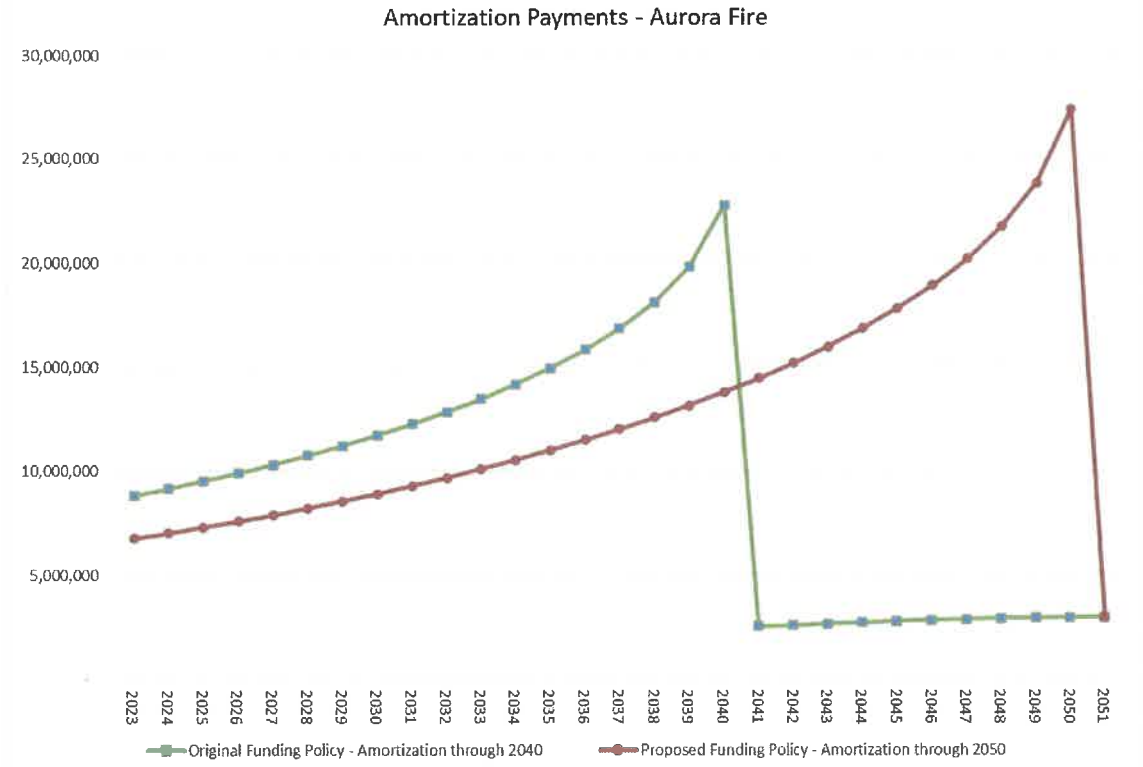


Exhibit 3

Article 4 Funding Policy Impact

	Aurora Fire		Crystal Lake Fire		Rock Falls Fire	
	Original Funding Policy - Amortization through 2040	Proposed Funding Policy - Amortization through 2050	Original Funding Policy - Amortization through 2040	Proposed Funding Policy - Amortization through 2050	Original Funding Policy - Amortization through 2040	Proposed Funding Policy - Amortization through 2050
Funded Status						
Total Actuarial Accrued Liability (AL)	$386,970,577	$386,970,577	$70,392,034	$70,392,034	$11,688,948	$11,688,948
Actuarial Value of Assets (AVA)	234,445,183	234,445,183	54,157,162	54,157,162	8,882,051	8,882,051
Unfunded Actuarial Accrued Liability (UAAL)	152,525,394	152,525,394	16,234,872	16,234,872	2,806,897	2,806,897
90% Funded Ratio Target	348,273,519	348,273,519	63,352,831	63,352,831	10,520,053	10,520,053
Funded Ratio (AVA / AL)	60.6%	60.6%	76.9%	76.9%	76.0%	76.0%
Pension Cost						
Normal Cost, Including Expense Load	$7,684,199	$7,684,199	$2,023,506	$2,023,506	$237,389	$237,389
Payment Required to Amortize UAAL	9,433,661	7,229,261	792,271	595,470	141,125	106,070
Total Recommended Contribution	17,117,860	14,913,460	2,815,777	2,618,976	378,514	343,459
Expected Member Contributions	(2,840,892)	(2,840,892)	(669,095)	(669,095)	(93,205)	(93,205)
Expected Village Contribution	14,276,968	12,072,568	2,146,682	1,949,881	285,309	250,254
Change from Baseline		*(2,204,400)*		*(196,801)*		*(35,055)*
Assumptions and Methods						
Interest Rate	7.125%	7.125%	7.125%	7.125%	7.125%	7.125%
Funded Target	90%	90%	90%	90%	90%	90%
Amortization Years	18	28	17	27	17	27
Payroll Growth Assumption	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%
Cost Method	EAN	EAN	EAN	EAN	EAN	EAN
Valuation Date	1/1/2023	1/1/2023	5/1/2023	5/1/2023	5/1/2023	5/1/2023
Applicable to Fiscal Year Ending	12/31/2023	12/31/2023	4/30/2024	4/30/2024	4/30/2024	4/30/2024

Exhibit 4
Article 4 Funding Policy Impact



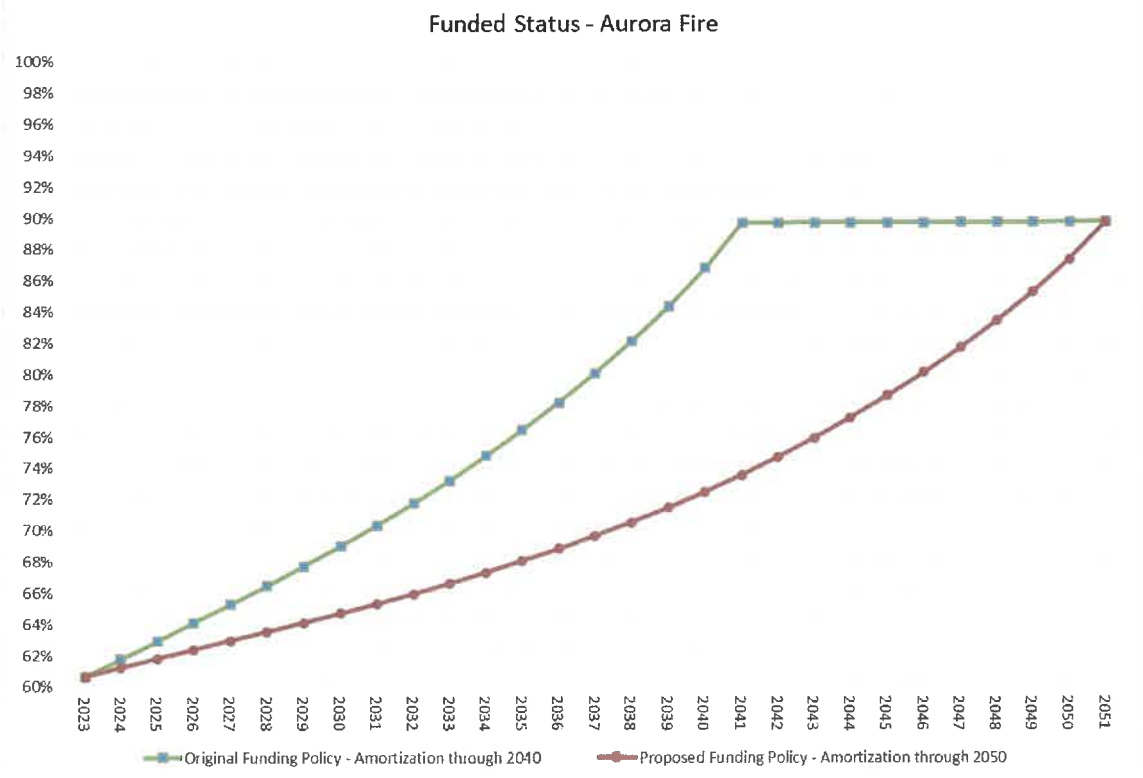


Exhibit 5

Article 3 DROP Impact - Aurora Police

		Scen 1: 100% Enter, 5 Years in DROP			Scen 2: 80% Enter, 3 Years in DROP		
	Baseline	DROP	Impact, $	Impact, %	DROP	Impact, $	Impact, %
Municipal Contribution							
2023	19,239,596	21,174,654	1,935,058	10.1%	20,727,044	1,487,448	7.7%
2024	19,512,128	21,528,412	2,016,284	10.3%	21,061,847	1,549,719	7.9%
2025	20,080,503	22,181,720	2,101,217	10.5%	21,695,329	1,614,826	8.0%
2026	20,606,297	20,691,298	85,001	0.4%	20,316,516	(289,781)	-1.4%
2027	21,117,430	20,896,238	(221,192)	-1.0%	20,578,506	(538,924)	-2.6%
2028	21,687,673	21,502,462	(185,211)	-0.9%	21,219,856	(467,817)	-2.2%
2029	22,319,155	22,488,710	169,555	0.8%	22,209,945	(109,210)	-0.5%
2030	22,968,469	23,392,831	424,362	1.8%	23,254,797	286,328	1.2%
2031	23,701,396	24,319,233	617,837	2.6%	24,279,868	578,472	2.4%
2032	24,518,629	25,601,308	1,082,679	4.4%	25,332,075	813,446	3.3%
2033	25,405,409	26,764,125	1,358,716	5.3%	26,399,040	993,631	3.9%
2034	26,430,284	28,007,351	1,577,067	6.0%	27,575,298	1,145,014	4.3%
2035	27,634,214	29,351,650	1,717,436	6.2%	28,901,823	1,267,609	4.6%
2036	29,049,780	30,882,119	1,832,339	6.3%	30,412,974	1,363,194	4.7%
2037	30,768,082	32,689,527	1,921,445	6.2%	32,198,978	1,430,896	4.7%
2038	32,940,759	34,926,814	1,986,055	6.0%	34,411,712	1,470,953	4.5%
2039	35,981,710	38,002,256	2,020,546	5.6%	37,456,855	1,475,145	4.1%
2040	41,428,845	43,413,782	1,984,937	4.8%	42,822,172	1,393,327	3.4%
Present Value Of Impact	262,469,639		12,664,240	4.8%		8,577,586	3.3%
Normal Cost							
2023	9,442,175	10,154,969	712,794	7.5%	9,984,992	542,817	5.7%
2024	9,589,684	10,350,948	761,264	7.9%	10,169,413	579,729	6.0%
2025	9,738,857	10,551,887	813,030	8.3%	10,358,008	619,151	6.4%
2026	9,818,982	8,159,113	(1,659,869)	-16.9%	8,073,532	(1,745,450)	-17.8%
2027	9,840,096	8,076,551	(1,763,545)	-17.9%	8,045,286	(1,794,810)	-18.2%
2028	9,867,165	8,234,700	(1,632,465)	-16.5%	8,234,601	(1,632,564)	-16.5%
2029	9,910,616	8,734,231	(1,176,385)	-11.9%	8,734,231	(1,176,385)	-11.9%
2030	9,921,493	9,040,241	(881,252)	-8.9%	9,040,241	(881,252)	-8.9%
2031	9,937,548	9,296,569	(640,979)	-6.5%	9,296,569	(640,979)	-6.5%
2032	9,958,646	9,510,382	(448,264)	-4.5%	9,510,382	(448,264)	-4.5%
2033	9,948,837	9,652,276	(296,561)	-3.0%	9,652,276	(296,561)	-3.0%
2034	9,951,196	9,770,437	(180,759)	-1.8%	9,770,437	(180,759)	-1.8%
2035	9,986,656	9,893,381	(93,275)	-0.9%	9,893,381	(93,275)	-0.9%
2036	10,040,414	10,013,819	(26,595)	-0.3%	10,013,819	(26,595)	-0.3%
2037	10,117,414	10,140,737	23,323	0.2%	10,140,737	23,323	0.2%
2038	10,215,076	10,275,909	60,833	0.6%	10,275,909	60,833	0.6%
2039	10,356,658	10,446,474	89,816	0.9%	10,446,474	89,816	0.9%
2040	10,566,569	10,679,778	113,209	1.1%	10,679,778	113,209	1.1%
Present Value Of Impact	107,689,171		(3,924,591)	-3.6%		(4,528,876)	-4.2%

Exhibit 6

Article 3 DROP Impact - Rock Falls Police

		Scen 1: 100% Enter, 5 Years in DROP			Scen 2: 80% Enter, 3 Years in DROP		
	Baseline	DROP	Impact, $	Impact, %	DROP	Impact, $	Impact, %
Municipal Contribution							
2023	769,078	825,718	56,640	7.4%	808,650	39,572	5.1%
2024	789,754	848,789	59,035	7.5%	830,999	41,245	5.2%
2025	822,214	883,750	61,536	7.5%	865,203	42,989	5.2%
2026	853,086	901,774	48,688	5.7%	883,216	30,130	3.5%
2027	878,515	883,145	4,630	0.5%	868,203	(10,312)	-1.2%
2028	901,350	882,816	(18,534)	-2.1%	871,850	(29,500)	-3.3%
2029	928,255	925,085	(3,170)	-0.3%	914,278	(13,977)	-1.5%
2030	960,561	966,002	5,441	0.6%	956,818	(3,743)	-0.4%
2031	995,998	1,007,904	11,906	1.2%	1,002,887	6,889	0.7%
2032	1,033,427	1,053,822	20,395	2.0%	1,050,435	17,008	1.6%
2033	1,076,725	1,109,957	33,232	3.1%	1,100,394	23,669	2.2%
2034	1,128,010	1,174,431	46,421	4.1%	1,157,075	29,065	2.6%
2035	1,187,342	1,238,653	51,311	4.3%	1,220,562	33,220	2.8%
2036	1,257,043	1,312,126	55,083	4.4%	1,293,224	36,181	2.9%
2037	1,339,311	1,396,891	57,580	4.3%	1,377,063	37,752	2.8%
2038	1,445,192	1,503,900	58,708	4.1%	1,482,933	37,741	2.6%
2039	1,610,953	1,668,358	57,405	3.6%	1,645,665	34,712	2.2%
2040	395,910	395,425	(485)	-0.1%	394,302	(1,608)	-0.4%
Present Value Of Impact	10,587,234		366,796	3.5%		210,666	2.0%
Normal Cost							
2023	325,594	347,230	21,636	6.6%	340,645	15,051	4.6%
2024	338,074	361,181	23,107	6.8%	354,149	16,075	4.8%
2025	351,458	376,136	24,678	7.0%	368,625	17,167	4.9%
2026	362,229	369,683	7,454	2.1%	362,378	149	0.0%
2027	366,223	321,079	(45,144)	-12.3%	317,294	(48,929)	-13.4%
2028	365,344	298,597	(66,747)	-18.3%	298,525	(66,819)	-18.3%
2029	365,722	320,942	(44,780)	-12.2%	320,942	(44,780)	-12.2%
2030	369,794	335,620	(34,174)	-9.2%	335,620	(34,174)	-9.2%
2031	374,980	349,379	(25,601)	-6.8%	349,379	(25,601)	-6.8%
2032	379,243	360,741	(18,502)	-4.9%	360,741	(18,502)	-4.9%
2033	385,506	373,175	(12,331)	-3.2%	373,175	(12,331)	-3.2%
2034	395,638	388,431	(7,207)	-1.8%	388,431	(7,207)	-1.8%
2035	408,792	405,532	(3,260)	-0.8%	405,532	(3,260)	-0.8%
2036	425,076	424,750	(326)	-0.1%	424,750	(326)	-0.1%
2037	443,204	444,900	1,696	0.4%	444,900	1,696	0.4%
2038	463,351	466,400	3,049	0.7%	466,400	3,049	0.7%
2039	485,198	489,193	3,995	0.8%	489,193	3,995	0.8%
2040	507,996	512,762	4,766	0.9%	512,762	4,766	0.9%
Present Value Of Impact	4,145,570		(95,544)	-2.3%		(124,256)	-3.0%

Exhibit 7

Article 4 DROP Impact - Aurora Fire

		Scen 1: 100% Enter, 5 Years in DROP			Scen 2: 80% Enter, 3 Years in DROP		
	Baseline	DROP	Impact, $	Impact, %	DROP	Impact, $	Impact, %
Municipal Contribution							
2023	14,276,968	16,436,053	2,159,085	15.1%	16,085,373	1,808,405	12.7%
2024	14,308,612	16,557,655	2,249,043	15.7%	16,192,269	1,883,657	13.2%
2025	14,520,033	16,863,351	2,343,318	16.1%	16,482,552	1,962,519	13.5%
2026	14,749,456	14,436,301	(313,155)	-2.1%	14,162,171	(587,285)	-4.0%
2027	15,028,887	14,869,560	(159,327)	-1.1%	14,623,395	(405,492)	-2.7%
2028	15,353,789	15,143,299	(210,490)	-1.4%	14,930,982	(422,807)	-2.8%
2029	15,753,634	15,856,945	103,311	0.7%	15,651,500	(102,134)	-0.6%
2030	16,218,742	16,578,341	359,599	2.2%	16,543,719	324,977	2.0%
2031	16,763,354	17,343,727	580,373	3.5%	17,393,530	630,176	3.8%
2032	17,394,843	18,551,061	1,156,218	6.6%	18,309,150	914,307	5.3%
2033	18,117,008	19,537,269	1,420,261	7.8%	19,257,267	1,140,259	6.3%
2034	18,944,054	20,608,760	1,664,706	8.8%	20,271,783	1,327,729	7.0%
2035	19,885,495	21,713,811	1,828,316	9.2%	21,364,493	1,478,998	7.4%
2036	20,985,515	22,948,760	1,963,245	9.4%	22,586,126	1,600,611	7.6%
2037	22,308,808	24,375,583	2,066,775	9.3%	23,998,318	1,689,510	7.6%
2038	23,975,149	26,116,846	2,141,697	8.9%	25,722,968	1,747,819	7.3%
2039	26,290,764	28,467,454	2,176,690	8.3%	28,053,354	1,762,590	6.7%
2040	30,420,038	32,544,262	2,124,224	7.0%	32,099,937	1,679,899	5.5%
Present Value Of Impact	184,554,247		13,054,597	7.1%		10,052,090	5.4%
Normal Cost							
2023	7,032,465	7,826,625	794,160	11.3%	7,695,207	662,742	9.4%
2024	6,990,973	7,841,716	850,743	12.2%	7,700,934	709,961	10.2%
2025	6,904,162	7,815,521	911,359	13.2%	7,664,709	760,547	11.0%
2026	6,800,406	4,548,400	(2,252,006)	-33.1%	4,499,246	(2,301,160)	-33.8%
2027	6,703,690	4,967,920	(1,735,770)	-25.9%	4,941,362	(1,762,328)	-26.3%
2028	6,611,145	4,841,086	(1,770,059)	-26.8%	4,840,994	(1,770,151)	-26.8%
2029	6,546,551	5,165,269	(1,381,282)	-21.1%	5,165,269	(1,381,282)	-21.1%
2030	6,500,636	5,411,779	(1,088,857)	-16.8%	5,411,779	(1,088,857)	-16.8%
2031	6,477,022	5,642,672	(834,350)	-12.9%	5,642,672	(834,350)	-12.9%
2032	6,482,052	5,859,633	(622,419)	-9.6%	5,859,633	(622,419)	-9.6%
2033	6,502,613	6,054,992	(447,621)	-6.9%	6,054,992	(447,621)	-6.9%
2034	6,540,292	6,233,252	(307,040)	-4.7%	6,233,252	(307,040)	-4.7%
2035	6,582,568	6,387,266	(195,302)	-3.0%	6,387,266	(195,302)	-3.0%
2036	6,631,836	6,526,998	(104,838)	-1.6%	6,526,998	(104,838)	-1.6%
2037	6,696,141	6,662,148	(33,993)	-0.5%	6,662,148	(33,993)	-0.5%
2038	6,775,169	6,797,562	22,393	0.3%	6,797,562	22,393	0.3%
2039	6,876,770	6,942,807	66,037	1.0%	6,942,807	66,037	1.0%
2040	6,995,530	7,094,147	98,617	1.4%	7,094,147	98,617	1.4%
Present Value Of Impact	71,806,381		(4,874,481)	-6.8%		(5,328,951)	-7.4%

Exhibit 8

Article 4 DROP Impact - Rock Falls Fire

		Scen 1: 100% Enter, 5 Years in DROP			Scen 2: 80% Enter, 3 Years in DROP		
	Baseline	DROP	Impact, $	Impact, %	DROP	Impact, $	Impact, %
Municipal Contribution							
2023	285,309	323,297	37,988	13.3%	318,966	33,657	11.8%
2024	288,169	327,703	39,534	13.7%	323,194	35,025	12.2%
2025	296,208	337,363	41,155	13.9%	332,668	36,460	12.3%
2026	304,649	288,024	(16,625)	-5.5%	285,189	(19,460)	-6.4%
2027	315,084	312,392	(2,692)	-0.9%	309,697	(5,387)	-1.7%
2028	327,682	331,618	3,936	1.2%	329,086	1,404	0.4%
2029	341,134	350,517	9,383	2.8%	348,180	7,046	2.1%
2030	353,479	367,050	13,571	3.8%	369,008	15,529	4.4%
2031	367,688	383,880	16,192	4.4%	387,515	19,827	5.4%
2032	384,512	412,278	27,766	7.2%	407,679	23,167	6.0%
2033	404,017	434,718	30,701	7.6%	429,992	25,975	6.4%
2034	427,263	460,393	33,130	7.8%	455,536	28,273	6.6%
2035	449,688	484,923	35,235	7.8%	479,932	30,244	6.7%
2036	479,538	516,443	36,905	7.7%	511,315	31,777	6.6%
2037	519,610	557,734	38,124	7.3%	552,463	32,853	6.3%
2038	577,831	616,451	38,620	6.7%	611,036	33,205	5.7%
2039	684,358	721,764	37,406	5.5%	716,200	31,842	4.7%
2040	242,837	243,116	279	0.1%	243,114	277	0.1%
Present Value Of Impact	3,898,018		239,148	6.1%		204,929	5.3%
Normal Cost							
2023	217,256	230,458	13,202	6.1%	228,930	11,674	5.4%
2024	220,906	235,049	14,143	6.4%	233,412	12,506	5.7%
2025	223,013	238,164	15,151	6.8%	236,410	13,397	6.0%
2026	224,686	169,821	(54,865)	-24.4%	169,821	(54,865)	-24.4%
2027	227,757	195,783	(31,974)	-14.0%	195,783	(31,974)	-14.0%
2028	232,261	208,014	(24,247)	-10.4%	208,014	(24,247)	-10.4%
2029	236,892	219,257	(17,635)	-7.4%	219,257	(17,635)	-7.4%
2030	239,541	227,233	(12,308)	-5.1%	227,233	(12,308)	-5.1%
2031	242,220	233,985	(8,235)	-3.4%	233,985	(8,235)	-3.4%
2032	246,172	240,894	(5,278)	-2.1%	240,894	(5,278)	-2.1%
2033	250,990	248,031	(2,959)	-1.2%	248,031	(2,959)	-1.2%
2034	256,975	255,720	(1,255)	-0.5%	255,720	(1,255)	-0.5%
2035	258,970	259,167	197	0.1%	259,167	197	0.1%
2036	261,492	262,751	1,259	0.5%	262,751	1,259	0.5%
2037	266,253	268,468	2,215	0.8%	268,468	2,215	0.8%
2038	272,623	275,600	2,977	1.1%	275,600	2,977	1.1%
2039	280,362	283,856	3,494	1.2%	283,856	3,494	1.2%
2040	289,512	293,322	3,810	1.3%	293,322	3,810	1.3%
Present Value Of Impact	2,563,668		(70,575)	-2.8%		(75,159)	-2.9%

Exhibit 9

Drop Background

In its simplest terms, a DROP affords eligible participants (who are otherwise eligible to retire) the opportunity to continue employment (and earn wages) in conjunction with commencing their pension benefits that they would have received had they retired (directed to a notional, deferred account). Upon election to participate in DROP, a participant's pension benefit is frozen (based upon service, salary, and age) and calculated as if the participant were retiring on the effective DROP date. After the effective DROP date, such benefits are credited to a notional DROP account while the participant continues employment earning regular compensation. At the time of termination of employment, participants receive their accumulated DROP account balance in the form of a lump-sum and begin collecting the monthly benefit in retirement. Note that the participant is forfeiting future benefit accruals in exchange for the DROP lump-sum, which is typically perceived to be of approximate equivalent value.

A primary objective of a DROP surrounds employee retention. It can provide members with an attractive financial benefit to extend their anticipated retirement age while minimizing costs associated with recruiting and training new employees. DROPs were first introduced in the early 1980s and spread in material fashion starting in the mid-1990s by public-sector employers and have become a highly attractive and utilized benefit design feature for public pension programs across the country. DROPs are most common for uniformed employees and are less common for non-public safety employees. DROPs are typically implemented by local and state governments to meet human resource management and financial objectives and are viewed as a benefit enhancement to plan participants. During the 1990s, pension plans were in strong financial shape thanks to favorable investment returns. Many plan sponsors added DROP at that time to provide an enhanced benefit for its members and help them manage their workforce.

During the 2000s, the public perception of DROP changed. This was driven by a combination of poor investment returns and a few horror stories. First, positive investment returns were nearly non-existent because of the tech bubble bursting and then the financial crisis of 2008. The funded ratio of nearly every pension plan was decreasing rapidly. DROP was viewed as a benefit enhancement and was often the first cut to be made as people tried to find ways to stabilize their sky-rocketing pension contributions. Finally, there were a few cases where the DROP benefits were so lucrative to the members that it put the long-term viability of the pension plan in jeopardy. In these cases, the DROP provisions were guaranteeing excessive returns for the members and drastically increasing the investment risk for the plan sponsor. Some members were withdrawing DROP balances that were millions of dollars while the plan sponsor was struggling to make the annual contributions.

As a result of this changed perception, many plan sponsors eliminated DROP for future members and very few plan sponsors decided to add the DROP provision during the 2010s. Most places continued to find ways to manage their pension contributions by decreasing benefits for current members, creating new tiers of benefits for future members and adopting new funding policies. Very few places looked to provide any sort of benefit enhancement (including DROP) during the decade.

In the past few years, the interest in DROP has once again started to increase. For a variety of reasons, fewer people have been interested in pursuing a career in public safety, so the candidate pool has decreased dramatically. We hear stories from people across the country about how they used to get hundreds of applicants when they had openings but now, they only have a few dozen candidates. This has made people find new ways to keep these positions filled. One way to do that is to incentivize people near retirement to stay longer, and DROP helps achieve that goal. Many municipalities have either implemented a new DROP or are currently considering the implementation of DROP. The plan sponsors going down this path are being much more judicious with the DROP provisions to minimize the negative impact on the long-term health of the pension fund.

Implementing a DROP comes with opportunities and challenges from both an employer and employee perspective. Evaluating whether a DROP design adds cost to a retirement system is an extremely difficult task because it requires assumptions about participant behavior with and without existence of DROP. In fact, the true cost of any DROP cannot be fully recognized until each DROP participant ultimately becomes deceased and all payments are made. Before implementing a DROP, all parties should understand the risks and variables that arise with this benefit.

Drop Design: Cost-Neutral Parameters and Considerations

Do DROP programs add long-term costs to retirement systems? This is a difficult question to answer since there are so many variables that need to be considered when evaluating the potential cost of a program. This section will discuss the factors that need to be considered when determining if a DROP is cost-neutral.

The costs associated with implementing a DROP program encompass factors external to the retirement system which makes examining the financial impact of DROP programs difficult to quantify when considering all interrelationships that exist within and outside the normal operation of the system. One of the most difficult questions to answer is "how will the existence of a DROP impact employee behavior?" Also, to the extent that DROPs do affect behavior, this can affect other human resource considerations outside of the pension plan, such as medical benefits or recruiting and training costs.

We have seen some historical evidence that would suggest that the existence of DROP increases the ultimate retirement age due to the financial advantages perceived to be offered by a DROP. Typically, later retirement ages affect more than just pension costs, including:

- Cost of health benefits - Having an older workforce generally increases the cost of health care benefits for active members. However, if retiree medical coverage is available, that cost will go down since the DROP participants will be drawing retiree medical benefits for a shorter period of time since they are retiring later.
- New employee training costs – Generally, employee training costs go down since people are working longer and there are fewer new employees.
- Upward mobility of membership – It is difficult for people to earn promotions if people are working longer.
- Retention of experienced workers – Many people work longer to accrue a lump sum benefit that is paid out when they decide to leave employment.
- Department payroll costs – Total payroll typically increases with a DROP since the higher paid employees are working longer and are not being replaced by lower paid employees.

There are also offsetting cost impacts to the pension plan which, while difficult to measure, should also be considered. An example is that the pension plan does not add additional pension costs for a new hire, who would be accruing a pension benefit, to replace an employee who would have retired had DROP not existed. This is because under the notion that DROP extends the ultimate retirement age, the tenured employee will continue working and will not need to be replaced during those extra years, so there will be no added pension cost for a new hire (because the new hire won't yet exist).

If the cost of the retirement system goes up with the implementation of a DROP, adjustments to the DROP benefit design may be required to achieve cost neutrality. Below, we explore some design alternatives that are typically viewed as cost-neutral parameters.

- Reduce the percentage of the benefit credited to the DROP account. For example, 90% of the accrued benefit is credited during DROP participation which reverts to the full amount at the time of actual retirement.
- Increase the final compensation period (i.e., from 3 years to 5 years) only for purposes of calculating DROP benefits.
- Withhold, suspend, or reduce application of COLA increases during DROP participation.
- Provide low interest crediting on DROP accounts below the system's actual or expected rate of return.
- Shorten the maximum DROP participation period.
- Retain the amount (or a portion thereof) of member contributions made during DROP to the participant's DROP account.

Drop Design: Additional Considerations

Actuarial Standards of Practice (ASOP) No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions*, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition. As previously introduced, any actuarial analysis to evaluate whether a DROP program is deemed to be cost neutral will be predicated on a set of actuarial assumptions based on the premise that all future experience will align with this set of actuarial assumptions. However, we have established that participant behavior is uncertain, and it is possible that actual experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan. As a reminder, the true cost of any DROP cannot be fully recognized until each DROP participant ultimately becomes deceased and all payments are made; actuarial assumptions and methods are just tools to estimate and allocate costs.

Below we have included a non-exhaustive list of potential risks or additional factors that must be considered when evaluating whether DROP has a financial impact on the retirement system.

- ***Adverse Selection*** – Whenever participants are given a choice (for example, to elect DROP, to retire, or to remain active without electing DROP), it is important to consider that adverse selection is likely to occur periodically on an individual basis. That is, participants are likely to make strategic decisions which will be most beneficial to them, affecting the amount and duration of anticipated benefit payments, resulting in higher overall plan costs. For example, a member may not elect to enter DROP if they are in line for a promotion or are expecting a significant increase in pay, or individuals with awareness of health conditions may elect DROP for greater immediate payouts.

- ***Administrative Expenses*** – Implementing new benefit features such as DROP comes with an increase in the level of administrative expenses required by the system. Typically, participants are required to receive a DROP benefit statement annually and each member, before electing to participate in DROP, may be given written information regarding how benefits under DROP would be calculated and a comparison of the member's anticipated benefits at retirement with and without DROP participation. Complying with these requirements will either require additional staff, investment in administrative software, or both, along with an expected increase in IT costs.

- ***Impact on Retiree Healthcare (OPEB) Liability*** – It is likely that the existence of DROP will result in a decrease to the OPEB liability of the system. Members in DROP are considered 'active' employees from an OPEB perspective and implementation of DROP results in higher retirement ages which means the overall OPEB liability will likely be less than it would have if DROP did not exist. It is also likely due to pooling in determining healthcare premiums, there would be an increase in active health costs.

- ***Investment / Liquidity*** – Many DROPS often include fixed interest credit rates that are near the assumed valuation rate which are well above money market rates, introducing investment risk. It is important to recognize the difference in duration between the system trust as a whole (long-term) and DROP accounts (short-term) which can result in periods of losses due to crediting interest which is greater than the return realized by the system. It should be considered whether crediting a return that includes a risk premium is appropriate when the employee is not taking the investment risk. Another investment consideration is the need for liquid assets to pay DROP lump sums.

- ***Negative Publicity*** – Outside of general cost concerns, DROP plans have received significant negative remarks from the public eye due to the large amounts distributed in the form of a lump sum to its participants. Even though the actuarial value may be approximately equivalent, the public tends to focus on a large lump sum compared to a larger monthly benefit amount. In our view, we believe a lot of the negative publicity surrounding DROP resulted from a few extreme examples.

- ***Longevity Risk*** – Providing significant lump sum payments at the time of retirement is likely viewed as a benefit to plan participants, but this introduces an element of longevity risk to the participant in the event of imprudent use of the lump sum amount.

- ***Human Resource Considerations*** – Under the presumption that incorporating DROP affects retirement behavior, human resource issues will present themselves and estimating these non-pension costs or savings is difficult. Consider the following:
    - Long tenured employees will work longer than they otherwise would have, prohibiting promotional opportunities for younger employees.
    - Active and retiree health care costs may be impacted.
    - Department hiring/training costs for replacements may be reduced.
    - Department payroll costs may be higher since more senior employees may work longer and delay their replacement with a lower-wage new hire.
    - Particular attention should be given to employees who would be eligible to enter DROP coincidentally with the implementation date.

- ***Sunset Provisions*** – A sunset provision allows the employer to evaluate the DROP after a specified period to determine if it is operating in its intended fashion and to determine if it has resulted in increased costs to the system. Reviewing the program within 3 to 5 years after implementation to verify the cost of the program will be an important exercise to determine if the DROP needs to be modified or removed from the system.

Exhibit 10
Article 3 Assumptions

Interest Rate	6.80% per year compounded annually, net of investment related expenses.
Mortality Rate	***Active Lives:*** PubS-2010 Employee mortality, unadjusted, with generational improvements with most recent projection scale (currently Scale MP-2021). 10% of active deaths are assumed to be in the line of duty. ***Inactive Lives:*** PubS-2010 Healthy Retiree mortality, adjusted by a factor of 1.15 for male retirees and unadjusted for female retirees, with generational improvements with most recent projection scale (currently Scale MP-2021). ***Beneficiaries:*** PubS-2010 Survivor mortality, unadjusted for male beneficiaries and adjusted by a factor of 1.15 for female beneficiaries, with generational improvements with most recent projection scale (currently Scale MP-2021). ***Disabled Lives:*** PubS-2010 Disabled mortality, adjusted by a factor of 1.08 for male disabled members and unadjusted for female disabled members, with generational improvements with most recent projection scale (currently Scale MP-2021). The mortality assumptions sufficiently accommodate anticipated future mortality improvements.
Retirement Age	See table at end of this section. This is based on a 2022 experience study performed for the Illinois Police Officers' Pension Investment Fund.
Disability Rate	See table at end of this section. 60% of the disabilities are assumed to be in the line of duty. This is based on a 2022 experience study performed for the Illinois Police Officers' Pension Investment Fund.
Termination Rate	See table at end of this section. This is based on a 2022 experience study performed for the Illinois Police Officers' Pension Investment Fund.

Salary Increases	See table below. This is based on a 2022 experience study performed for the Illinois Police Officers' Pension Investment Fund.

Salary Scale

Service	Rate
0	11.00%
1	9.50%
2	8.00%
3	7.50%
4	7.00%
5	6.00%
6	5.00%
7 - 11	4.00%
12 - 29	3.75%
30+	3.50%

Inflation	2.50%.
Cost-of-Living Adjustment	Tier 1: 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55. Tier 2: 1.25% per year after the later of attainment of age 60 or first anniversary of retirement.
Marital Status	80% of Members are assumed to be married.
Spouse's Age	Males are assumed to be three years older than females.
Funding Method	Projected Unit Credit Cost Method.
Actuarial Asset Method	Investment gains and losses are smoothed over a 5-year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of the Market Value of Assets.
Funding Policy Amortization Method	The UAAL is amortized according to a Level Percentage of Payroll method over a period ending in 2040. The initial amortization amount is 90% of the Accrued Liability less the Actuarial Value of Assets.
Payroll Growth	3.00% per year.

Decrement Tables

% Terminating During the Year	
Service	Rate
0	13.00%
1	8.00%
2	7.00%
3	6.00%
4	5.00%
5	4.50%
6	4.00%
7	3.50%
8	3.00%
9	2.50%
10	2.25%
11	2.00%
12	1.75%
13	1.50%
14+	1.25%

% Becoming Disabled During the Year	
Age	Rate
20	0.000%
25	0.029%
30	0.133%
35	0.247%
40	0.399%
45	0.561%
50	0.675%
55	0.855%
60	1.093%

% Retiring During the Year (Tier 1)	
Age	Rate
50 - 54	20%
55 - 62	25%
63	33%
64	40%
65 - 69	55%
70+	100%

% Retiring During the Year (Tier 2)	
Age	Rate
50 - 54	5%
55	40%
56 - 62	25%
63	33%
64	40%
65 - 69	55%
70+	100%

Exhibit 11
Article 4 Assumptions

Interest Rate	7.125% per year compounded annually, net of investment related expenses.
Mortality Rate	***Active Lives:*** PubS-2010 Employee mortality, unadjusted, with generational improvements with the most recent projection scale (currently Scale MP-2021). 20% of active deaths are assumed to be in the line of duty. ***Inactive Lives:*** PubS-2010 Healthy Retiree mortality, adjusted by a factor of 1.081 for male retirees and unadjusted for female retirees, with generational improvements with the most recent projection scale (currently Scale MP-2021). ***Beneficiaries:*** PubS-2010 Survivor mortality, unadjusted for male beneficiaries and adjusted by a factor of 1.098 for female beneficiaries, with generational improvements with the most recent projection scale (currently Scale MP-2021). ***Disabled Lives:*** PubS-2010 Disabled mortality, adjusted by a factor of 1.178 for male disabled members and unadjusted for female disabled members, with generational improvements with the most recent projection scale (currently Scale MP-2021). The mortality assumptions sufficiently accommodate anticipated future mortality improvements.
Retirement Age	See table later in this section. This is based on a 2021 experience study performed for the Illinois Firefighters' Pension Investment Fund.
Disability Rate	See table later in this section. 80% of the disabilities are assumed to be in the line of duty. This is based on a 2021 experience study performed for the Illinois Firefighters' Pension Investment Fund.
Termination Rate	See table later in this section. This is based on a 2021 experience study performed for the Illinois Firefighters' Pension Investment Fund.
Inflation	2.25%.

Cost-of-Living Adjustment	Tier 1: 3.00% per year after age 55. Those that retire prior to age 55 receive an increase of 1/12 of 3.00% for each full month since benefit commencement upon reaching age 55. Tier 2: 1.125% per year after the later of attainment of age 60 or first anniversary of retirement.
Salary Increases	See table below, inclusive of inflation. This is based on a 2021 experience study performed for the Illinois Firefighters' Pension Investment Fund.

Salary Scale

Service	Rate
0	12.50%
1	10.50%
2	9.50%
3	8.50%
4	7.50%
5	6.50%
6	5.00%
7	4.50%
8+	4.00%

Marital Status	80% of Members are assumed to be married.
Spouse's Age	Males are assumed to be three years older than females.
Funding Method	Projected Unit Credit Cost Method.
Actuarial Asset Method	Investment gains and losses are smoothed over a 5-year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of the Market Value of Assets.
Funding Policy Amortization Method	The UAAL is amortized according to a Level Percentage of Payroll method over a period ending in 2040. The initial amortization amount is 90% of the Accrued Liability less the Actuarial Value of Assets.
Payroll Growth	2.75% per year.

Decrement Tables

% Terminating During the Year		% Becoming Disabled During the Year		% Retiring During the Year (Tier 1)		% Retiring During the Year (Tier 2)	
Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	10.00%	20	0.010%	50-51	12%	50-54	3%
25	8.00%	25	0.016%	52-53	15%	55	30%
30	4.00%	30	0.068%	54-55	20%	56-59	20%
35	2.50%	35	0.220%	56-59	20%	60-62	25%
40	1.20%	40	0.420%	60-62	25%	63-64	33%
45+	1.00%	45	0.650%	63-64	33%	65-69	50%
		50	0.900%	65-69	50%	70+	100%
		55	1.240%	70+	100%		
		60	1.580%				