SAN DIEGO CITY EMPLOYEES' RETIREMENT SYSTEM

MEMORANDUM

DATE: January 13, 2022

TO: Business and Governance Committee

FROM: Gregg Rademacher, Chief Executive Officer

SUBJECT: Deferred Retirement Option Plan (DROP) Interest Rate Review

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At the request of Lou Maggi, the Board directed staff at their November 5, 2021 meeting to review the Deferred Retirement Option Plan (DROP) interest rates used in administering the DROP accounts. Specifically, addressing if the investment market indices used in determining the DROP interest rates remain appropriate today.

DROP Benefit Structure

The DROP is a voluntary retirement benefit program which allows certain retirement eligible workers to retire and continue working for their employer (City, Port and Airport) for up to five years and City firefighters may extend their period by including unused annual leave. The worker's retirement benefit is calculated as of the day they enter the DROP with their monthly retirement benefit, including Cost-of-Living-Adjustments, being accumulated by SDCERS in a separate nominal interest earning DROP account. Although the worker and employer stop making retirement contributions to SDCERS, they both make a 3.05% of payroll DROP contribution to the worker's DROP account each pay period.

The worker may leave employment at any time during their DROP account participation period. Upon leaving employment, SDCERS begins paying the worker's retirement benefit directly to them as a retiree benefit. The worker, now a retiree, then directs SDCERS on how the retiree would like their DROP account distributed.

DROP account distribution options include

- 100% Lumpsum distribution,
- Annuitize the entire DROP account in equal monthly payments over 20 years or a period no greater than the retiree's life expectancy, and
- Partial lumpsum distribution with remaining DROP account balance annuitized in equal monthly payments over 20 years or a period no greater than the retiree's life expectancy.

Should the retiree elect to annuitize all or a portion of their DROP account, the retiree has a future option to convert the present value of any remaining monthly payments to a lumpsum distribution.

Authority to Calculate DROP Interest Rates

The DROP benefit structure is defined in each employer's retirement plan document. For example, the City's retirement plan document is included within the City's municipal code which has a separate section, Chapter 2 Article 4 Division 14, dedicated to their DROP. Within each employer's retirement plan document is a provision which provides the SDCERS Board with the sole authority to determine an interest rate to credit DROP account balances and an interest rate to convert DROP account balances to a monthly annuity, subject to certain interest rate limitations.

DROP Interest Rate Calculation

At the onset of the DROP in 1997, the SDCERS Board set the DROP account interest rate and the DROP annuity interest rate equal to the actuarial investment assumption (commonly called the discount rate). From 1997 through 2008 the actuarial investment assumption was 8%, and therefore by Board rules, the DROP interest rates were 8% during this time. The actuarial investment assumption was lowered in 2009 to 7.75%, and as such, so were the DROP interest rates. Importantly, during 2008 and 2009 the Board reevaluated their DROP interest rate board rules. In July 2009 with the assistance of the plan actuary, Cheiron, the Board revised the DROP interest rates to be based upon a weighted composite of multiple investment indices rather than being based upon the actuarial investment assumption.

<u>DROP Account Interest Rate</u>

The DROP account interest rate was revised in 2009 to be the weighted composite of a 12-month average ending September 30th of the current year of:

- 40% of the five-year US Treasury Rate,
- 20% of the five-year HQC Bond Rate, and
- 40% of the five-year composite IRA CD Rate

The DROP account interest rate calculation was amended by the Board in 2013 as the "five-year composite IRA CD Rate" was no longer being regularly published by the issuer, Bankrate. The Board approved the plan actuary's recommended alternative reweighting of the 5-year US Treasury and the 5-year HQC bond rates to approximate the historical results of the previous weighted composite indices. The following 2013 revised DROP account interest rate calculation is currently in use today.

- 75% of the five-year US Treasury Rate, and
- 25% of the five-year HQC Bond Rate

DROP Annuity Interest Rate

The DROP annuity interest rate calculation methodology approved by the Board in 2009 remains in use today. It is the weighted composite of a 12-month average ending September 30th of the current year of:

- 40% of the 20-year US Treasury Rate,
- 20% of the 20-year High Quality Corporate (HQC) Bond Rate, and
- 40% of the 20-year Pension Benefit Guaranty Corporation (PBGC) Immediate Annuity rate.

DROP Interest Rate Sufficiency

Two key issues addressed by the Board during their 2008 – 2009 review of the DROP interest rates were:

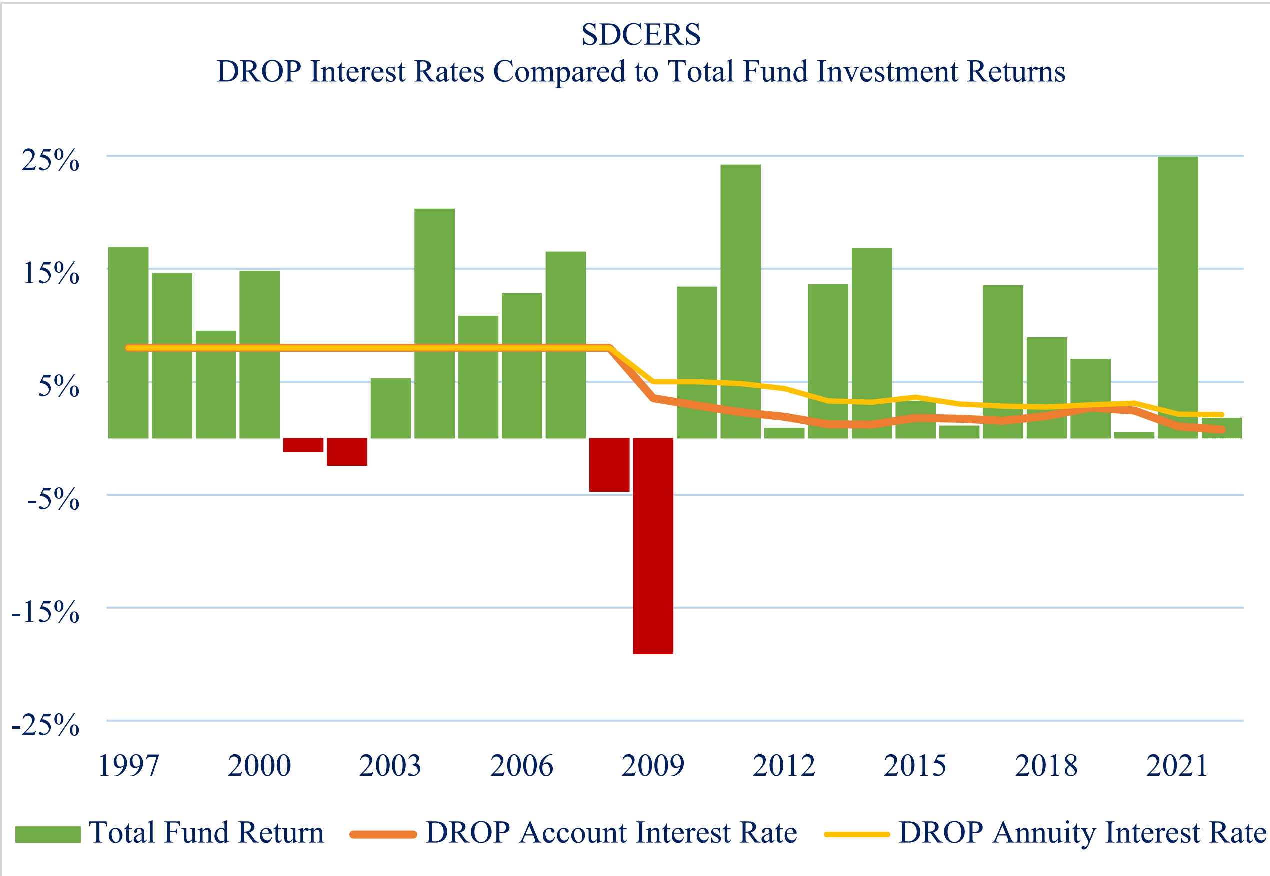
- The mismatch between the investment time horizon and risk tolerance of SDCERS' investment return assumption, and
- The risk that SDCERS' investment returns will be less than the investment return assumption and negatively impact the system's trust fund.

The Board in 2009 made the decision to bifurcate the DROP interest rate in recognition of a DROP account's maximum five-year investment time horizon being significantly shorter than the DROP annuity's maximum investment time horizon of 20 years or the member's life expectancy.

The Board in 2009 was concerned that using the actuarial investment return as the DROP interest rate could inappropriately shift investment risk (losses) from DROP participants to other members not in DROP and to the plan sponsors.

As there is no mechanism in the DROP to mitigate the shifting of investment risk, the Board in 2009 set the policy to use a DROP interest rate methodology using a benchmark with low investment risk. The Board in 2009 avoided risk seeking investment benchmarks, such as, equity, real estate, and private markets, in favor of risk mitigating investment benchmarks, such as, US Treasuries and high-quality corporate bonds.

The following chart compares the DROP interest rates to actual total fund investment returns from 1997 when the DROP began through September 30, 2021 with a fiscal-year-to-date return of 1.8%. The chart highlights the variability of the Total Fund Return (green and red bars) compared to the relative stability of the DROP rates (yellow and orange lines). The instances where the DROP rates are higher than the Total Fund Return represent periods where investment risk may be shifting from DROP participants to the non-participants and plan sponsors.



As of June 30, 2021, the DROP reserve used to account for the DROP accounts and annuities was valued at $576 million which represents approximately 5.6% of the $10.2 billion net assets available to pay DROP distributions and retirement benefits. The plan actuary assumes the long-term funding for the retirement benefits will have periods of investment experience gain greater than the plan's investment return assumption of 6.5%, such as the 24.9% return in fiscal year 2021, and such periods of gain will be used to fund the plan during periods of investment experience loss, such as the 0.5% return in fiscal year 2020. As such, the periods of investment experience gain should not be used for purposes other than funding the plan's retirement benefits.

A similar factor to consider is the City municipal code's requirement that DROP accounts and annuities shall be credited with interest and all amounts credited to the DROP are fully vested. These plan design requirements infer investment losses may not be credited to a participant's DROP account or reduce a DROP annuity equal monthly payment. Although not explicitly stated in the Board material from 2008-2009, this issue may have the subject of discussion and remains an important aspect to consider today.

DROP Distribution Experience

The DROP benefit structure has two important distribution choice benefits which need consideration when determining the DROP interest rate methodology:

- A worker's ability to end and withdraw their DROP account at any time,
- A retiree's ability to convert their monthly DROP annuity payments back into a lumpsum for withdrawal at any time.

Recently, the plan actuary provided a snapshot of DROP distribution experience for members who entered DROP in calendar year 2016 and prior. Later years were excluded as some members were in their DROP account period and their DROP period and distribution option selections were unknown.

The plan actuary's DROP distribution analysis found:

- The average DROP account investment period: 3.7 years
- DROP account distribution options selected:

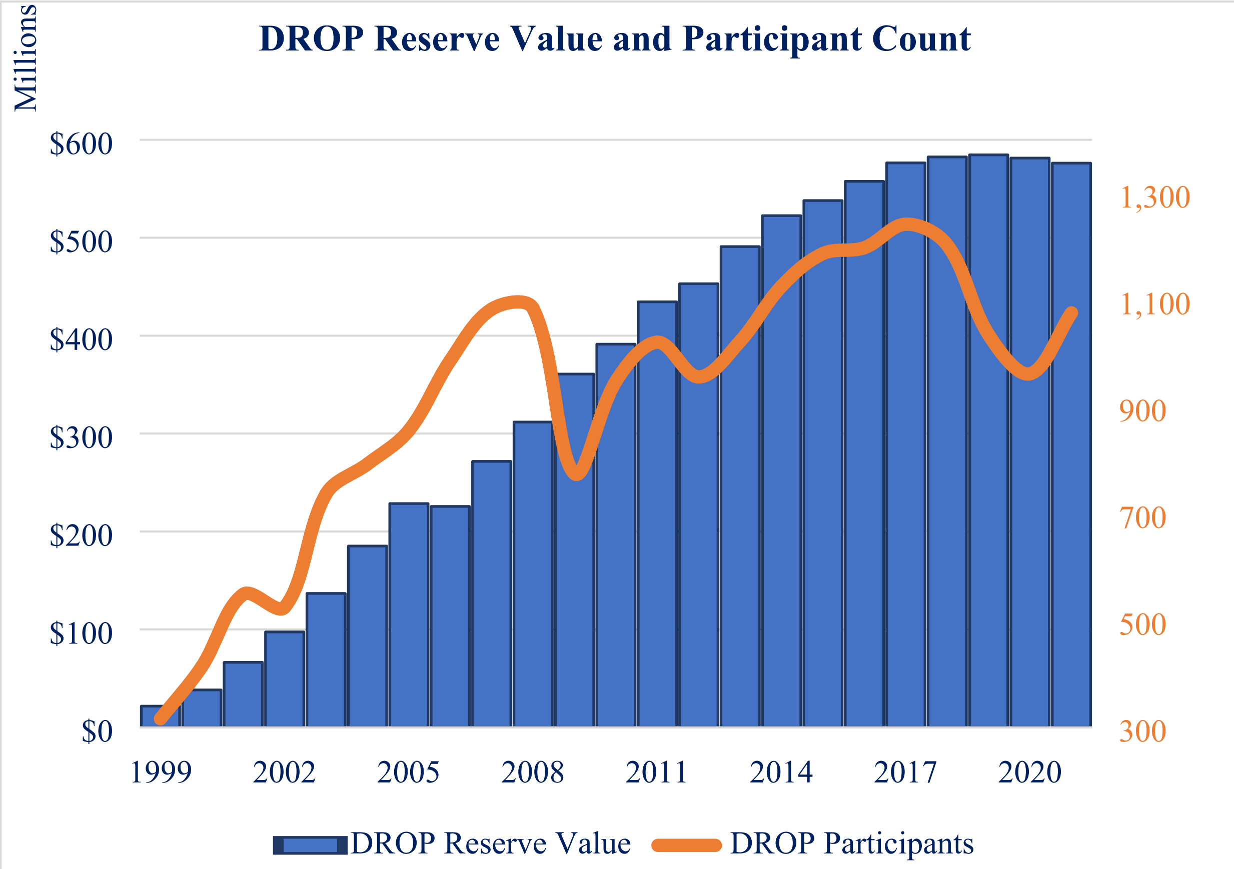
	Withdrawal 100% Lumpsum	20 Year Annuity	Life Expectancy Annuity
10 years prior to 2017	55%	24%	21%
5 years prior to 2017	60%	24%	16%

The DROP account distribution analysis demonstrates over half of DROP participants choose a 100% lump sum withdraw of their DROP account upon leaving employment after spending, on average, between 3 ½ years to 4 years in DROP.

The DROP account distribution analysis also demonstrates that of the retirees choosing to convert their lumpsum to a series of equal monthly payments, most chose the 20-year annuity option.

DROP Participation Experience

A factor to consider is the consistency of the number of workers participating in DROP, as participation rates will impact the cashflow into and from the DROP accounts and annuities. SDCERS accounts for the value of the DROP accounts and DROP annuities in the DROP reserve. The DROP reserve value grew consistently from 1999 through 2005. In 2006 when there was significant turmoil in the City government, there was a slight decrease in the DROP reserve value. Since then and through 2019 the DROP reserve value increased year-over-year. This trend ended in 2020 and 2021 where the DROP reserve value decreased slightly year-over-year. Over the past five fiscal years the DROP reserve value has stabilized. The following chart's blue bars present the fiscal year's DROP reserve value for the 1999 through 2021 fiscal years. Included in the chart is an orange line which represents the number of DROP participants at the end of the fiscal year.



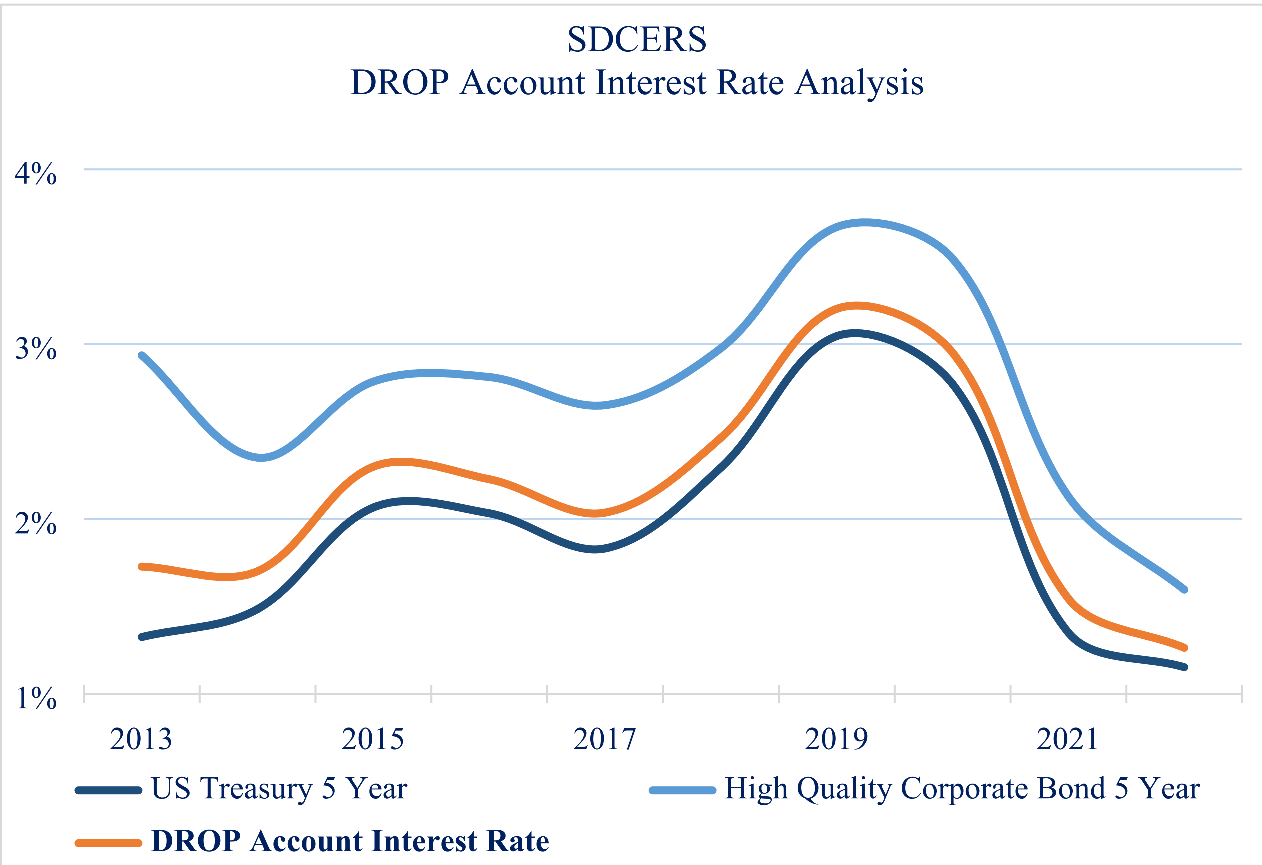
The DROP reserve value has grown consistently up until the most recent years. Interestingly, the number of DROP participants year-over-year appears to be less consistent. This may be influenced by population demographics, employer past hiring practices, and the impact of down economic cycles on workers' retirement decisions. The DROP benefit was created and closed by the three plan sponsors (City, Port, and Airport) at approximately the same time.

Employer	Employees Eligible for DROP if Hired Before
City of San Diego	July 1, 2005
San Diego Unified Port Authority	October 1, 2005
San Diego County Regional Airport Authority	October 2, 2006

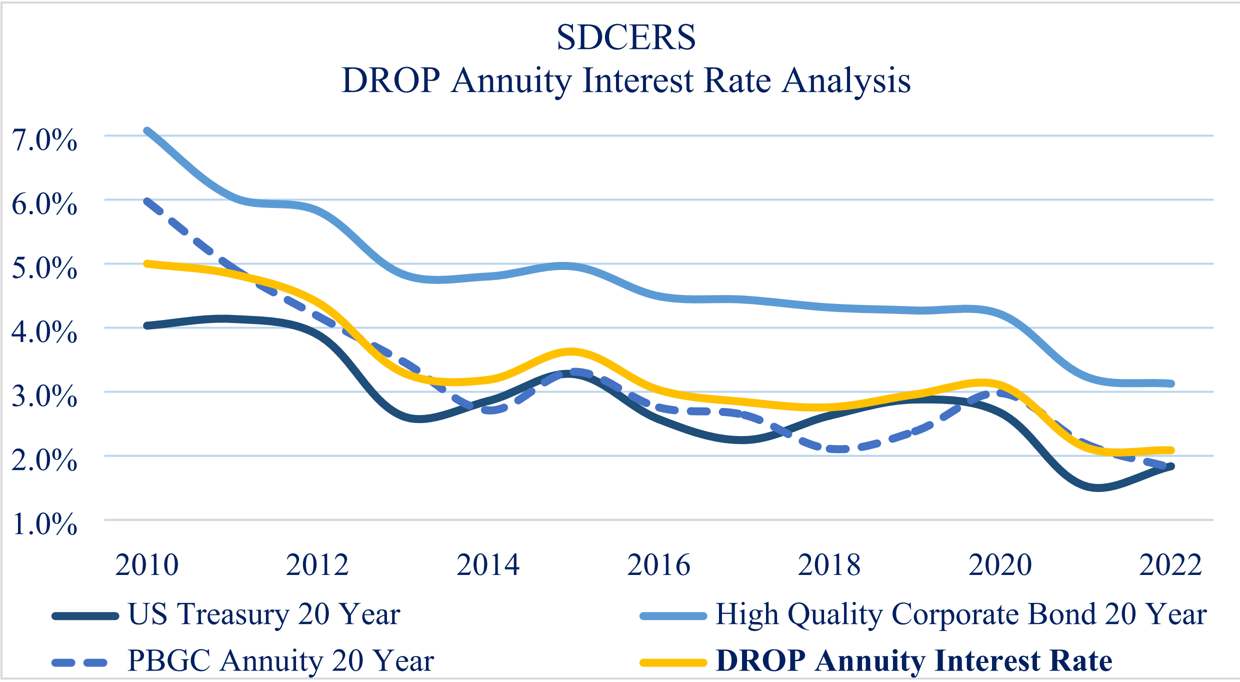
Reviewing the demographics in the actuarial valuation, we can approximate there are 2,600 workers which may enter the DROP in the future from the 5,800 total active members (not counting the 3,800 City workers hired during Prop B which we expect will join the plan and are ineligible for DROP). As most DROP eligible workers choose to participate in the plan, we expect DROP participation experience and the DROP reserve value will increase in the future as the 2,600 workers become DROP benefit eligible and enter the DROP.

DROP Interest Rate Relevance

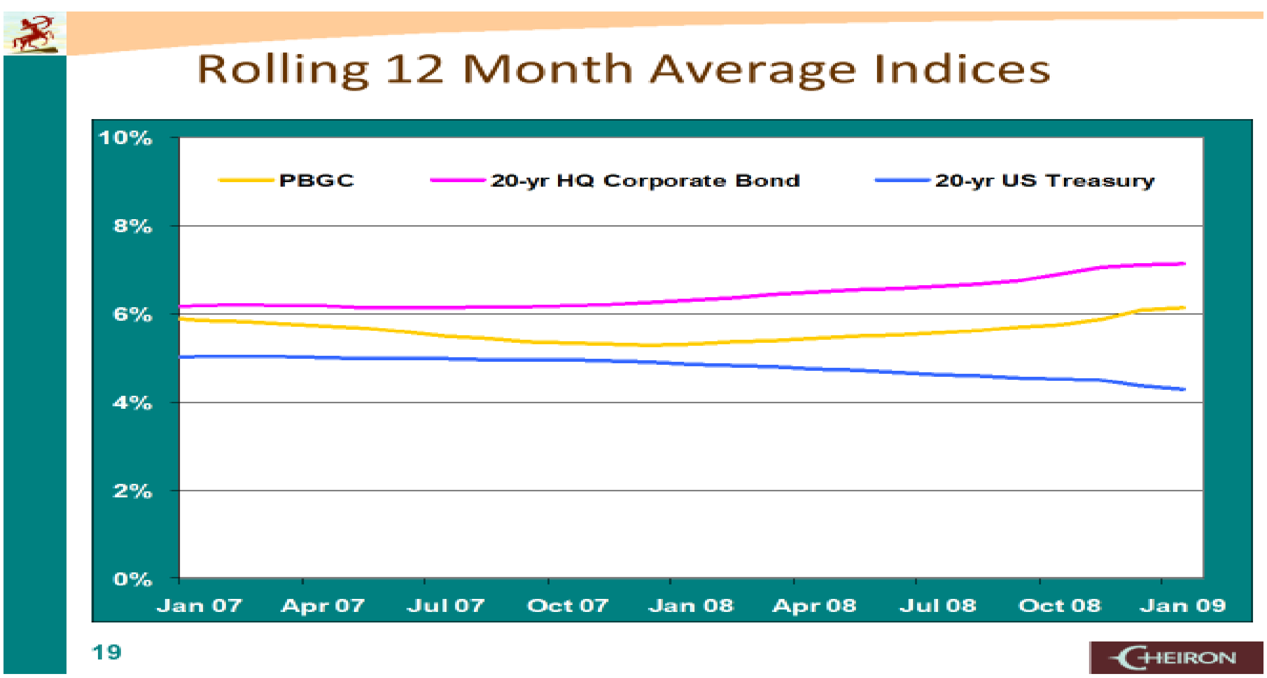
Staff reviewed the current indices used in the DROP account interest rate methodology and found the rates approved the Board's 2013 review remain relevant today. The investment professionals surveyed identified an additional bond index tracking higher quality corporate bonds which would further reduce the possibility of investment risk transfer. However, the current High Quality Corporate Bond index is based on debt rated A through AAA and is sufficient to mitigate this risk; staff does not recommend further conservatism in DROP account interest method. It is possible the Federal Reserve's expected future action to raising its benchmark rate from near zero to approximately 2% over the next two years will raise the DROP account interest rate.



The DROP annuity rate is used to convert a DROP account to equal monthly payments over the retiree's life expectancy or a period not to exceed 20 years. When the retiree elects to annuitize all or a portion of their DROP account, the DROP annuity rate in effect at time of election remains constant throughout the annuity period. In addition to the 2009 rate setting methodology approved by the SDCERS Board, the rate is set in accordance with the provisions of the San Diego City Municipal Code which caps the DROP annuity rate at no more than 5% when the DROP account rate is less than 5%. This rate cap was required in setting the 2010 DROP annuity interest rate. In the review of the DROP annuity interest rate indices, staff noted recent volatility in the PBGC index relative to the calculation's two other indices.



The chart shows the underlying investment indices and the resulting weighted composite DROP annuity interest rate for the calendar years 2010 through 2022. Of interest is the dashed line representing the PBGC Immediate Annuity 20 Year index. Over the past ten years, this index has exhibited greater volatility and return trends than when the Board reviewed and selected this index in 2009. The following graph taken from the 2009 Board deliberation material shows a significantly different trend pattern for the gold line PBGC index.



The plan actuary noted in 2009 that the PBGC rates may not always be market rates because of mortality table used to arrive at market annuity values. Staff recommends the Business and

Governance Committee direct staff to work with the plan actuary to further evaluate the role of the PBGC Immediate Annuity index in the DROP annuity interest rate composite calculation and provide a recommendation to the Business and Governance Committee prior to setting next year's 2023 DROP annuity interest rate.

Conclusion

The DROP account's shorter investment period does not lend itself well to using a long-term investment return benchmark such as the plan's actuarial investment return assumption or the pension plan's variable (volatile) predominately risk seeking total fund return due to the real possibility of shifting investment risk (loss) to non-DROP participants and plan sponsors. The current DROP account interest rate methodology based primarily on Treasury returns with a modest risk exposure to high quality corporate bonds is a reasonable approach. Similarly, converting the DROP account lumpsum to a series of equal monthly payments over 20 years or a period no greater than the retiree's life expectancy is well served with an interest crediting method which minimizes the possibility of shifting investment risk (loss) over time. While the current DROP annuity interest rate methodology is reasonable, staff recommends the Business and Governance Committee direct staff to work with the plan actuary to further evaluate the role of the PBGC Immediate Annuity index in the DROP annuity interest rate composite calculation and provide a recommendation to the Business and Governance Committee prior to setting next year's 2023 DROP annuity interest rate.

Rule 6.00 Crediting Quarterly Interest to DROP Accounts

Interest shall be credited to DROP participants' accounts and compounded quarterly based on the average daily balance of the DROP account. Interest shall be credited at the end of each quarter effective on September 30th, December 31st, March 31st, and June 30th only if the Member is actively employed by their plan sponsor and participating in DROP on the last day of the quarter.

Formerly Rule 12.10, renumbered and amended April 17, 2009; amended November 14, 2014; reviewed May 8, 2015; and amended November 9, 2018, and July 9, 2021.

Rule 6.10 Amount of Interest Credited to DROP Accounts

a. Pursuant to San Diego Municipal Code ("Municipal Code") section 24.1404(c)(5) and section 1203(c)(5) of the Port and Airport Plans, the amount of interest credited to DROP accounts is determined by the Board.

b. The Board has adopted the following rates for crediting interest to DROP accounts, SDCERS shall continue to use the most recent interest rate specified below until the Board sets a different rate:

Effective Date	DROP Interest Crediting Rate
January 1, 2022	0.8%
January 1, 2021	1.00%
January 1, 2020	2.50%
January 1, 2019	2.70%
January 1, 2018	2.00%
January 1, 2017	1.50%
January 1, 2016	1.70%
January 1, 2015	1.80%
January 1, 2014	1.20%
January 1, 2013	1.20%
January 1, 2012	1.90%
January 1, 2011	2.30%
January 1, 2010	2.90%
July 1, 2009	3.54%
January 1, 2009	7.75%
January 1, 2008 – April 1, 1997	8.00%

c. No later than the regularly scheduled November Board meeting of each year, staff shall present updated rates to the Board based upon:

1) The weighted composite of a 12-month average ending September 30th of the current year of:

i. 75% of the five-year US Treasury Rate, and

ii. 25% of the five-year HQC Bond Rate; or

2) Such other rate or rates as the Board deems reasonable.

d. Notwithstanding the above or any other Board Rules, the Board may, consistent with the relevant plan documents, change the interest rate at any time.

This Rule is incorporated into (1) Chapter 2, Article 4 of the San Diego Municipal Code, (2) the Amended and Restated San Diego Unified Port District Retirement Plan and Trust, and (3) the Amended and Restated San Diego County Regional Airport Authority Retirement Plan and Trust as part of the Plan document.

Formerly Rule 12.10(a), renumbered and amended April 17, 2009; amended January 22, 2010, January 21, 2011, January 20, 2012, January 18, 2013, September 20, 2013, May 8, 2015, November 13, 2015, November 4, 2016, November 3, 2017, and November 9, 2018; reviewed July 9, 2021; and amended November 5, 2021.

Rule 6.20 Payment of DROP Benefits to DROP Participants Who Exit DROP After December 31, 2005

a. A Member who exits DROP after December 31, 2005 must elect to receive their DROP account in one of the following benefit forms before their DROP exit date. SDCERS shall make these payments with the normal monthly or weekly payment cycle.

1) Lump Sum: The Member may elect a single lump sum distribution of their entire DROP account, to be paid within 60 days of their exit date. A lump sum distribution may include a rollover to another plan, subject to IRS requirements.

2) Partial Lump Sum and Annuity: The Member may elect a lump sum distribution of a portion of their DROP account with the remainder to be paid in a monthly annuity in accordance with subsection (3).

3) Monthly Payments Over 240 Months or Member's Life Expectancy: The Member may make an irrevocable election to receive their DROP account in substantially equal monthly payments over 240 months or the Member's life expectancy at the time the Member exits DROP, according to the Single Life Table in Treas. Reg. 1.401(a)(9)-9, Q&A-1. This benefit form may not exceed the Member's life expectancy at DROP exit.

b. Payments under the benefit forms described in subsections (a)(2) or (a)(3) shall be calculated using the annuity factor on the date of the Member's exit from DROP, as determined by Board Rule 6.40.

c. If the Member chooses an annuity, the Member may at any time during the distribution period elect to end their annuity and receive the remaining principal balance in a single lump sum.

d. All distributions made to or on behalf of a Member must comply with section 401(a)(9) of the IRC. SDCERS may distribute a Member's DROP account earlier than the Member has elected if necessary to ensure compliance with section 401(a)(9).

e. If a Member fails to make the election required by subsection (a) of this Rule before the effective date of their exit from DROP, the Member's retirement benefit shall be suspended and not paid until the election has been made. Once the election is made, the retirement allowance shall be paid retroactively to the effective date of their exit from DROP.

> Formerly Rule 12.20, renumbered and amended April 17, 2009; reviewed on May 8, 2015; amended November 9, 2018 and March 8, 2019; and reviewed July 9, 2021.

Rule 6.30 Payment of DROP Benefits to DROP Participants Who Exit DROP Before January 1, 2006

a. A Member who exits DROP before January 1, 2006 must elect, before December 1, 2005, to receive their DROP account in one of the following benefit forms. The Member must make this election regardless of whether the Member has previously taken distributions or the form of such previous distributions, except as otherwise noted herein. SDCERS shall make these payments on the normal monthly payment cycle.

   1) Lump Sum: The Member may elect a single lump sum distribution of their entire DROP account, to be paid at any time before April 1 of the year following the year in which the Member turns 70½ (or, age 72 for a Member who reaches 70 ½ after December 31, 2019). A lump sum distribution may include a rollover to another plan, subject to IRS requirements.

   2) Monthly Payments Over 240 Months: The Member may make an irrevocable election to receive their DROP account in equal monthly payments over 240 months.

   3) Monthly Payments over Member's Life Expectancy: The Member may make an irrevocable election to receive their DROP Account in equal monthly payments of a fixed amount and duration over a period equal to the Member's life expectancy as of January 1, 2006, using the Single Life Table in Treas. Reg. 1.401(a)(9)-9, Q&A-1.

   4) Partial Lump Sum at Retirement plus Monthly Payments over Member's Life Expectancy: The Member may make an irrevocable election to receive, effective January 1, 2006, a partial lump sum distribution of a portion of their DROP account, with the

remainder of the account paid to the Member III-51 in equal monthly payments over a period equal to the Member's life expectancy as of January 1, 2006, using the Single Life Table in Treas. Reg. 1.401(a)(9)-9, Q&A-1.

5) Monthly Payments over a Fixed Period Less than Member's Life Expectancy: The Member may make an irrevocable election to receive their DROP Account in equal monthly payments over a fixed period less than the Member's life expectancy as of January 1, 2006, using the Single Life Table in Treas. Reg. 1.401(a)(9)-9, Q&A-1.

b. Notwithstanding subsections (a)(1) through (a)(5) of this Rule, the retired Members who selected either the single life annuity or the joint and survivor annuity benefit, which were available under the Municipal Code before June 18, 2002, shall continue to receive payments under their chosen benefit forms.

c. Payments under the benefit forms described in subsections (a)(2) through (a)(5) shall be calculated using an annuity factor of 8%.

d. Notwithstanding any language to the contrary in subsection (a) of this Rule, if the Member chooses a benefit form described in subsection (a)(2), (a)(3), (a)(4), or (a)(5), the Member may at any time during the distribution period elect to receive the remaining principal balance in a single lump sum.

e. All distributions made to or on behalf of a Member must comply with the final regulations issued under section 401(a)(9) of the IRC. SDCERS may distribute a Member's DROP account earlier than the Member has elected if necessary to ensure compliance with section 401(a)(9). f. A Member who did not make the election required by subsection (a) by December 1, 2005, is deemed to have elected the lump sum option set forth in subsection (a)(1).

Formerly Rule 12.21, renumbered and amended April 17, 2009; reviewed May 8, 2015; and amended November 9, 2018, March 8, 2019, March 13, 2020, and July 9, 2021.

Rule 6.40 DROP Annuity Factor

a. The Board has adopted the following annuity factors to calculate DROP annuities under Board Rule 6.20(b). SDCERS shall continue to use the most recent annuity rate specified below until the Board sets a different rate.

Effective Date	DROP Annuity Rate
January 1, 2022	2.10%
January 1, 2021	2.10%
January 1, 2020	3.10%
January 1, 2019	3.00%

January 1, 2018	2.80%
January 1, 2017	2.80%
January 1, 2016	3.00%
January 1, 2015	3.60%
January 1, 2014	3.20%
January 1, 2013	3.30%
January 1, 2012	4.40%
January 1, 2011	4.80%
January 1, 2010	5.00%
July 1, 2009	5.00%
January 1, 2009	7.75%
January 1, 2008 – April 1, 1997	8.00%

b. No later than the regularly scheduled November Board meeting of each year, staff shall present updated rates to the Board based upon:

1) The weighted composite of a 12-month average ending September 30th of the current year of:

i. 40% of the 20-year US Treasury Rate,

ii. 20% of the 20-year High Quality Corporate (HQC) Bond Rate, and

iii. 40% of the 20-year Pension Benefit Guaranty Corporation (PBGC) Immediate Annuity rate; or,

2) Such other rate or rates as the Board deems reasonable.

c. Notwithstanding the above or any other Board Rules, the Board may change the annuity rate at any time.

This Rule is incorporated into (1) Chapter 2, Article 4 of the San Diego Municipal Code, (2) the Amended and Restated San Diego Unified Port District Retirement Plan and Trust, and (3) the Amended and Restated San Diego County Regional Airport Authority Retirement Plan and Trust as part of the Plan document.

Formerly Rule 12.20(a), renumbered and amended April 17, 2009; amended January 22, 2010, November 5, 2010, January 21, 2011, January 20, 2012, January 18, 2013, September 20, 2013, January 10, 2014, May 8, 2015, November 13, 2015, November 4, 2016, November 3, 2017, November 9, 2018, July 9, 2021, and November 5, 2021.

Rule 6.50 Election to Extend DROP Period

a. If a Member in DROP is eligible to extend their five-year DROP participation period under Municipal Code section 24.1402(b)(8), the Member must file with SDCERS a written election setting forth the Member's decision to extend their DROP participation period and the date through which the DROP period is extended. This written election must be filed with SDCERS before the end of their designated five-year DROP participation period, but not more than 90 days before the end of such period.

b. If the written election is not received by SDCERS as required by subsection (a), the Member's participation in DROP shall terminate on the last day of the designated five-year DROP period.

This Rule is incorporated into Chapter 2, Article 4 of the San Diego Municipal Code as part of the Plan document.

> Adopted May 9, 2014; reviewed May 8, 2015; amended November 9, 2018; May 14, 2021; and reviewed July 9, 2021.

Rule 6.60 Member to Enter DROP at Beginning of Pay Period

a. A Member must enter DROP on the first day of a pay period so that the Member's DROP contribution includes the entire pay period.

b. To avoid unintended financial consequences to a Member, this Rule may be waived at the CEO's discretion. III-54

This Rule is incorporated into (1) Chapter 2, Article 4 of the San Diego Municipal Code, (2) the Amended and Restated San Diego Unified Port District Retirement Plan and Trust, and (3) the Amended and Restated San Diego County Regional Airport Authority Retirement Plan and Trust as part of the Plan document.

> Adopted July 8, 2016, amended September 8, 2017 and November 9, 2018; and reviewed July 9, 2021.

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