

Los Angeles City Employees' Retirement System

Public Safety Tier Study: Tier 1 Enhanced (Safety) Pre-Retirement Death and Disability Benefits Proposed for Five Separate Groups of Active Members

As of June 30, 2021



This report has been prepared for the City of Los Angeles at the request of LACERS. This valuation report may not otherwise be copied or reproduced in any form without the consent of the City of Los Angeles and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.



180 Howard Street, Suite 1100
San Francisco, CA 94105-6147
segalco.com
T 415.263.8200

January 13, 2023

Mr. Matthew W. Szabo
City Administrative Officer
Attention: Mr. Paul Girard
Labor Relations Specialist
City of Los Angeles, Office of the City Administrative Officer
200 North Main Street, Suite 1500
Los Angeles, CA 90012-4137

Dear Matthew:

We are pleased to submit our study of enhanced pre-retirement death and disability benefits proposed for certain active sworn employees at the Los Angeles City Employees' Retirement System (LACERS). The eligible sworn employees were classified into the following five groups by the City: (1) Municipal Police Officers, (2) Port Police Officers, (3) Los Angeles Police Department (LAPD) Officers, (4) Park Rangers, and (5) Airport Peace Officers (APO) who previously opted out of Tier 1 Enhanced (APO Opt Outs). The enhanced pre-retirement death and disability benefits proposed for the sworn employees are the same benefits currently offered under LACERS' Tier 1 Enhanced.

To conduct this study, we have utilized the membership data from the June 30, 2021 LACERS Retirement Plan valuation pertaining to these groups of active members.¹ With the exception of two inactive members as of June 30, 2021 that we were directed by LACERS to include in the study, no current inactive vested members, retirees, or beneficiaries previously employed in any of the five groups have been included in this study. This study uses the same actuarial assumptions and methodologies adopted by the Retirement Board for use in the June 30, 2021 LACERS Retirement Plan valuation and builds on the results of that valuation.¹ The improvement included in this study has no impact on the results of the June 30, 2021 LACERS Retiree Health Plan valuation.

If the enhancement included in this study is approved by the City, we recommend the incremental contribution rate impact calculated in this study for fiscal year 2022/2023 based on the June 30, 2021 valuation be added to the contribution rate that has already been approved by the Board for fiscal year 2023/2024 based on the June 30, 2022 valuation.

¹ This study was started immediately after notification to proceed was provided by LACERS on October 11, 2022, and at that time the June 30, 2021 Retirement Plan valuation was the most recent valuation completed by Segal and adopted by the Board. With that said, we noted in our September 29, 2022 e-mail to LACERS that "we would not expect the enhancement study results to vary much from one fiscal year to the next if similar data were to be used in either year." Also, there has been no change in the actuarial assumptions between the June 30, 2021 and June 30, 2022 valuations.

The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary. The actuarial opinions expressed in this report were prepared by Paul Angelo, FSA, MAAA, FCA, Enrolled Actuary and Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Sincerely,



Paul Angelo, FSA, MAAA, FCA, EA
Senior Vice President & Actuary



Andy Yeung, ASA, MAAA, FCA, EA
Vice President & Actuary

DNA/jl

cc: Edwin Avanesian
Todd Bouey
Dale Wong-Nguyen

Table of Contents

Section 1: Basis for this Study.....	1
General Methodologies.....	1
Assumptions.....	3
Benefit Provisions.....	4
Section 2: Valuation Results	6
A. Discussion of Results	6
B. Demographics as of June 30, 2021	15
C-1. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – Municipal Police Officers	18
C-2. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – Port Police Officers.....	19
C-3. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – LAPD Officers	20
C-4. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – Park Rangers	21
C-5. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – APO Opt Outs	22
C-6. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – All Five Groups Combined	23
D-1. Comparison of Costs – Municipal Police Officers	24
D-2. Comparison of Costs – Port Police Officers	25
D-3. Comparison of Costs – LAPD Officers	26
D-4. Comparison of Costs – Park Rangers	27
D-5. Comparison of Costs – APO Opt Outs	28
D-6. Comparison of Costs – All Five Groups Combined	29
Section 3: Supporting Exhibits	31
Exhibit 1: Actuarial Assumptions for Current and Proposed Benefits	31
Exhibit 2: Plan Summary of Pre-Retirement Death and Disability Benefits for Current Tiers 1 & 3, and Proposed Tier 1 Enhanced for Sworn Employees.....	33

Section 1: Basis for this Study

General Methodologies

- The purpose of this study is to estimate the cost impact as of June 30, 2021 of the enhanced pre-retirement death and disability benefits proposed for certain active sworn employees of LACERS. The eligible sworn employees were classified into the following five groups by the City: (1) Municipal Police Officers, (2) Port Police Officers, (3) LAPD Officers, (4) Park Rangers, and (5) APO Opt Outs². The enhanced pre-retirement death and disability benefits proposed for the sworn employees are the same benefits currently offered under LACERS' Tier 1 Enhanced, with one exception.³ There are no proposed changes in the service retirement benefits under the Retirement Plan or the Health Plan benefits for this study.

We performed a similar study as of June 30, 2020 (see our report dated March 25, 2022); the only difference is that this study has been valued as of June 30, 2021 based on updated membership data as described below.

- To estimate the potential cost impact of the enhanced benefits proposed for the five groups mentioned above, we have utilized the data previously provided for the June 30, 2021 LACERS valuation of the Retirement Plan pertaining to the *specific* active members from these five groups as identified by LACERS. To perform our study, we received a listing of the 107 members to be included and we understand these members to be all of the remaining sworn employees in the five groups noted above who were not receiving Tier 1 Enhanced benefits as of the June 30, 2021 valuation date. However, out of the 107 members, LACERS indicated that three of them were already with LAFPP and instructed us to delete these records. Three additional members were hired after the June 30, 2021 valuation date and were therefore not included in this study. Furthermore, one member was in terminated non-vested status as of the June 30, 2021 valuation date and was also excluded from this study. Lastly, we were anticipating excluding thirteen additional members from this study as they were in inactive vested status as of June 30, 2021, based on the June 30, 2021 valuation data we had been provided. However, LACERS indicated that one of these thirteen members is "still actively employed with Airports and is a contributing member of LACERS" (Segal note: presumably after the June 30, 2021 valuation date). Another of these members "is still an active contributing member of LACERS, however has been off payroll since 2020 due to work comp claim (has not received compensation since 6/1/2020)." Accordingly, we have included these two (out of the thirteen) records in this study pursuant to LACERS' direction. In order to establish the costs of enhanced pre-retirement death and disability benefits for this study, we have reclassified these two members as active members as of June 30, 2021 in our baseline and enhancement results; however we have not included the costs of this status reclassification herein

² APO Opt Outs are the Airport Peace Officers who previously opted out of Tier 1 Enhanced.

³ For purposes of calculating the service retirement component of the disability benefits under Tier 1 Enhanced for current Tier 3 members included in this study, the current Tier 3 service retirement formula, including the Final Average Monthly Compensation component, is unchanged. Specifically, the three-year average compensation for current Tier 3 members continues to apply to the service retirement formula, rather than the one-year average compensation used for current Tier 1 Enhanced members. This is because service retirement benefits are not being enhanced under this study.

Section 1: Basis for this Study

as that possible action would be reflected in a future valuation if or whenever LACERS includes them as active members in future valuation data.

This leaves a total of 89 active members to be included in our study, which LACERS has confirmed.

- As noted above, aside from the two specific inactive members we discussed, any inactive vested members, retired members, and beneficiaries as of June 30, 2021, and any members hired after June 30, 2021 affiliated with these five groups are not included in this study. The demographic profile of the active members used in this study is provided in *Section 2, Subsection B*.
- In the on-going annual funding valuations, the City is paying the same Normal Cost contribution rates for all active members within their respective Tier, which are calculated based on the demographic profile of current active employees covered in all City departments. As a result, there is a pooling of actuarial experience, particularly the average age at entry into LACERS, in determining the Normal Cost rates. For comparison purposes, we have shown in *Section 2, Subsections C1-C6* the employer and employee Normal Cost rates for the Retirement Plan from the June 30, 2021 valuation compared to the re-calculated Normal Cost contribution rates reflecting only the data for the sworn members included in this study, under the current benefit formulas for Tiers 1 and 3.

For the Retirement Plan, as we have shown on pages 18 - 23, the employer Normal Cost rates (after reflecting enhanced benefits for APO members who did not opt out) that were developed in the June 30, 2021 valuation report based on employees covered in all departments were 8.49% for Tier 1 (made up of 8.42% for Tier 1 plus 0.07% for Tier 1 Enhanced) and 5.28% for Tier 3, if received at the beginning of the year.⁴ The re-calculated employer Normal Cost rates for only the sworn members included in this study were 7.28% for Tier 1 and 5.78% for Tier 3 (see page 23).⁵ For Tier 1, the lower employer Normal Cost rate calculated for the sworn members in this study is mainly attributable to the lower ages at entry, on average, for the sworn members included in this study as compared to employees in all City departments; whereas, the opposite is true for Tier 3 members. On an aggregate basis, the re-calculated, combined Tier 1 and Tier 3 employer Normal Cost rate for only the sworn members included in this study was 7.18%.

Separate normal cost rates for each of the five groups for the Retirement Plan can be found on pages 18 – 22.⁶ The Park Rangers and APO Opt Out groups are the only two of the five groups that had Tier 3 members as of June 30, 2021.

⁴ Note that the employer normal cost rates have remained stable from the June 30, 2021 to June 30, 2022 valuations. Specifically, the Tier 1 employer Normal Cost rate was 8.47% and the Tier 3 employer Normal Cost rate was 5.29% as June 30, 2022, if received at the beginning of the year.

⁵ In our June 30, 2022 valuation report, we noted that 27 members or former members included in our original costing of the APO Tier 1 enhancements as of January 7, 2018 did not ever elect the enhanced benefits. However, recalculation of the employer contribution rates after removing the Tier 1 enhancements for these members resulted in no changes in the Normal Cost and UAAL contribution rates.

⁶ The re-calculated employee Normal Cost rate for the sworn members was 10.63%. (This employee rate has been discounted with interest to the beginning of the year. Before discounting, the rate is 11.00% for both Tier 1 and Tier 3.)

Section 1: Basis for this Study

- For purposes of this study, we have determined the costs associated with providing all of the current sworn members from either Tier 1 or Tier 3 pre-retirement death and disability benefits currently offered under Tier 1 Enhanced. The costs are shown separately for each of the five groups, and on a combined basis, in *Subsections D1-D6*.
- In addition to the employer contribution rates provided in *Section 2, Subsections D1-D6*, it is anticipated that the employer would have to continue to contribute the same Unfunded Actuarial Accrued Liability (UAAL) rate of 21.58% of total payroll for the Retirement Plan⁷ that was determined in the June 30, 2021 valuation. This is because the UAAL rate was determined as a level percent of pay including payrolls for all current active members plus new entrants who enter LACERS after June 30, 2021.

Assumptions

- All of the actuarial assumptions used in this study are the same as those adopted by the Retirement Board for use in the June 30, 2021 Retirement Plan valuation.
- As discussed in the following Benefit Provisions subsection, we have been requested to estimate the cost impact of an enhanced level of pre-retirement death and disability benefits for five groups of sworn employees within LACERS Tier 1. The proposed enhanced pre-retirement death and disability benefits for the sworn employees are the same benefits currently offered under LACERS' Tier 1 Enhanced.

The detailed pre-retirement death and disability assumptions used in this study are provided in *Section 3, Exhibit 1*.

- For Tier 1 and Tier 3, there is no distinction made between service-connected disability and nonservice-connected disability benefits, whereas a distinction is made between those two types of disability benefits under Tier 1 Enhanced. Due to this distinction, we made the same assumption regarding the proportion of disabilities assumed to be service-connected and nonservice-connected as in the June 30, 2021 valuation for Tier 1 Enhanced. This is discussed further in the following Benefit Provisions subsection. Note, however, that we have not made any changes to the rates of disability for this study. Although there were 6 non opt out APO disabilities as of June 30, 2021,⁸ there were no APO disabilities at the time we performed the last experience study for all of LACERS in 2020 (based on System experience from July 1, 2016 through June 30, 2019). The next experience study, based on all System experience from July 1, 2019 through June 30, 2022, will be performed in the first half of 2023, and that study will reflect this recent APO disability experience for the first time in setting the disability rates effective starting with the June 30, 2023 valuation. This is consistent with our past practice in pooling the disability experience of all LACERS members in developing the disability rates for various City departments.

⁷ Assumes contributions are received at the beginning of the year.

⁸ The non opt out APO group is not part of this study.

Section 1: Basis for this Study

- All Tier 1 Enhanced active members who are assumed to be married or with domestic partners at retirement are assumed to elect the unmodified benefit that provides a 70% Joint and Survivor Cash Refund Annuity for nonservice-connected disability, and the unmodified benefit that provides an 80% Joint and Survivor Cash Refund Annuity for service-connected disability. (Under Tiers 1 and 3, the continuance percentage for disability is 50%.) Those members who are assumed to be un-married or without domestic partners are assumed to elect the Single Cash Refund Annuity.

Benefit Provisions

Comparison of Benefits

A comparison of the major benefit provisions under the current Tiers 1 and 3 and the proposed Tier 1 Enhanced for the sworn employees is provided in *Section 3, Exhibit 2*. As previously mentioned, there are no proposed changes in the service retirement benefits under the Retirement Plan or the Health Plan benefits for this study.

Disability Retirement Benefits

For the LACERS Tier 1 and Tier 3 plans, there is no distinction between service-connected disability and nonservice-connected disability benefits.⁹

Under Tier 1 Enhanced, there are no minimum age or service requirements for service-connected disability eligibility. For nonservice-connected disability benefits, members are eligible after five years of service. The service-connected disability benefit is 30% to 90% of Final Average Monthly Compensation depending on the severity of the disability, with a minimum of 2% of Final Average Monthly Compensation per year of Service Credit. The nonservice-connected disability benefit is 30% to 50% of Final Average Monthly Compensation depending on the severity of the disability.

For cost purposes, we have assumed that 90% of disability retirements are service-connected and the remaining 10% are nonservice-connected. In addition, for all disability benefits we have assumed that the benefit calculated using the service retirement formula would be paid if the member is eligible and that benefit is greater than that calculated under the disability retirement formula.

⁹ The current Tier 1 and Tier 3 disability benefit is the greater of 1/3 (or 33.33%) of Final Average Monthly Compensation or 1/70 (or 1.43%) of Final Average Monthly Compensation for each year of service.

Section 1: Basis for this Study

Pre-Retirement Death Benefits

Under Tier 1 Enhanced, there is a distinction for pre-retirement death benefits depending on whether the pre-retirement death is classified as service-connected or nonservice-connected.¹⁰ A comparison of the death benefits is provided in *Section 3, Exhibit 2*. Under Tier 1 Enhanced, all pre-retirement deaths are assumed to be service-connected.

Final Average Monthly Compensation

Under the current Tier 1 plan, Final Average Month Compensation (FAMC) for benefit calculation purposes is defined as the monthly average salary of the highest continuous 12 months (one year) and includes base salary plus regularly assigned pensionable bonuses or premium pay. For the current Tier 3 plan, FAMC is defined as the monthly average salary of the highest continuous 36 months (three years) limited to base salary and any items of compensation that are designated as pension based.

For purposes of calculating the pre-retirement death and disability benefits under Tier 1 Enhanced, except for the service retirement component of such benefits for current Tier 3 members, FAMC is the same one-year average as for current Tier 1 members. For purposes of calculating the service retirement component of the disability benefits under Tier 1 Enhanced for current Tier 3 members, FAMC is the same three-year average as for current Tier 3 members.

A comparison of the FAMC definitions is provided in *Section 3, Exhibit 2*.

¹⁰ Under the current Tier 1 and Tier 3 plans, the distinction between the eligibility for service-connected death benefits and nonservice-connected death benefits is that for a service-connected death, the eligible survivor is eligible for a disability survivorship benefit even if the member did not have five years of continuous service.

Section 2: Valuation Results

A. Discussion of Results

Retirement Plan Costs

Normal Cost

- As shown in *Subsection B*, the average entry age of all the sworn employees included in this study (approximately age 29.5) is about four and a half years younger than the average entry age of all City employees included in the June 30, 2021 valuation for LACERS (approximately age 34). Generally, under the Entry Age actuarial cost method used by LACERS, a lower age at entry leads to a lower Normal Cost calculation.
- For the June 30, 2021 valuation, the Normal Cost rates were calculated based on the combined demographics of all City employees (including the sworn employees included in this study). However, for purposes of this study, we have established a baseline for cost comparison by calculating the separate Tier 1 and Tier 3 Normal Cost rates based only on the demographics of the sworn employees under the current LACERS benefit formulas, and we have aggregated those results. As shown in *Subsections C1-C6* (pages 18 - 23), most of the Normal Cost rates calculated based on the demographics only for sworn employees are lower than the rates previously determined for all City employees, due to the lower average entry ages.
- As of the June 30, 2021 valuation date, sworn employees were enrolled in LACERS' Tier 1 plan if hired before July 1, 2013, or if they became a member of Tier 2 between July 1, 2013 and February 21, 2016 and were subsequently transferred to Tier 1 effective February 21, 2016 (pursuant to Ordinance No. 184134). Sworn employees were enrolled in LACERS' Tier 3 plan if hired on or after February 21, 2016. For purposes of this study, we have included the normal costs associated with transferring all the current sworn employees from either Tier 1 or Tier 3 to Tier 1 Enhanced, so as to receive enhanced pre-retirement death and disability benefits, as opposed to having the members remain in Tier 1 or Tier 3 with just enhanced pre-retirement death and disability benefits under Tier 1 enhanced. However, we note that if all five groups adopt the Tier 1 enhancements, we may need to provide six separate Normal Cost rates (for the four non-APO groups, the active APO group, and the remaining active non-APO group) in our funding valuation reports, and we would work with LACERS on the additional administrative complexity associated with implementing such changes in our future valuations.

Section 2: Valuation Results

AAL and UAAL

- In addition to the changes in the Normal Costs discussed above, we have also determined the increase in the AAL.¹¹ In order to fund the increase in the AAL, we have presented the City with two illustrations for each group. In the first illustration, we amortize the increase in the AAL over a 15-year period, which is the current amortization period used by LACERS for plan changes, expressed as a percentage of total sworn employees' payroll for that particular group. In the second illustration, we amortize the increase in the AAL over a 15-year period, expressed as a percentage of total LACERS payroll for all members in all City departments. These additional AAL costs would need to be paid along with the additional Normal Costs discussed above.
- Increases in the UAAL rates due to changes in benefit provisions are discussed in *Section 2* of this report.

Summary of Total Additional Costs

- Details on the additional costs for the Retirement Plan are provided in *Section 2, Subsections D1-D6*. Below we have provided summaries of the results separately for each group and combined (which is also shown in those Subsections), followed by some brief comments on those results.

¹¹ For active members, the actuarial accrued liability is the accumulated value of the past Normal Costs, assuming that the same Normal Cost rate (expressed as a level percentage of payroll) had always been contributed from the member's age at entry into LACERS through the date of this valuation as of June 30, 2021.

Section 2: Valuation Results

Additional Costs – Municipal Police Officers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

Additional Costs of Tier 1 Enhanced Pre-Retirement Death and Disability Benefits

	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan		
1. Increase in Total Normal Cost	0.80%	
2. Expected Employee Contributions	<u>0.00%</u>	
3. Increase in Employer Normal Cost (1) - (2)	0.80%	\$17,690
4. Increase in Actuarial Accrued Liability	\$115,588	
5. (a) 15-Year Amortization of AAL / Municipal Police Officers Payroll ⁽²⁾	0.44%	\$9,775
(b) 15-Year Amortization of AAL / Total Payroll ⁽²⁾	0.00% ⁽³⁾	\$9,775

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$2,213,185), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ We have presented two illustrations for paying off the additional AAL.

⁽³⁾ Less than 0.01%.

Section 2: Valuation Results

Additional Costs – Port Police Officers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

Additional Costs of Tier 1 Enhanced Pre-Retirement Death and Disability Benefits

	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan		
1. Increase in Total Normal Cost	0.91%	
2. Expected Employee Contributions	<u>0.00%</u>	
3. Increase in Employer Normal Cost (1) - (2)	0.91%	\$8,828
4. Increase in Actuarial Accrued Liability	\$38,260	
5. (a) 15-Year Amortization of AAL / Port Police Officers Payroll ⁽²⁾	0.33%	\$3,236
(b) 15-Year Amortization of AAL / Total Payroll ⁽²⁾	0.00% ⁽³⁾	\$3,236

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$975,629), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ We have presented two illustrations for paying off the additional AAL.

⁽³⁾ Less than 0.01%.

Section 2: Valuation Results

Additional Costs – LAPD Officers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

Additional Costs of Tier 1 Enhanced Pre-Retirement Death and Disability Benefits

	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan		
1. Increase in Total Normal Cost	0.86%	
2. Expected Employee Contributions	<u>0.00%</u>	
3. Increase in Employer Normal Cost (1) - (2)	0.86%	\$24,360
4. Increase in Actuarial Accrued Liability	\$150,321	
5. (a) 15-Year Amortization of AAL / LAPD Officers Payroll ⁽²⁾	0.45%	\$12,713
(b) 15-Year Amortization of AAL / Total Payroll ⁽²⁾	0.00% ⁽³⁾	\$12,713

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$2,824,831), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ We have presented two illustrations for paying off the additional AAL.

⁽³⁾ Less than 0.01%.

Section 2: Valuation Results

Additional Costs – Park Rangers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

Additional Costs of Tier 1 Enhanced Pre-Retirement Death and Disability Benefits

	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan		
1. Increase in Total Normal Cost	0.89%	
2. Expected Employee Contributions	<u>0.00%</u>	
3. Increase in Employer Normal Cost (1) - (2)	0.89%	\$19,673
4. Increase in Actuarial Accrued Liability	\$62,367	
5. (a) 15-Year Amortization of AAL / Park Rangers Payroll ⁽²⁾	0.24%	\$5,274
(b) 15-Year Amortization of AAL / Total Payroll ⁽²⁾	0.00% ⁽³⁾	\$5,274

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$2,212,441), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ We have presented two illustrations for paying off the additional AAL.

⁽³⁾ Less than 0.01%.

Section 2: Valuation Results

Additional Costs – APO Opt Outs

Contribution rates if received at the beginning of the year, expressed as a % of payroll

Additional Costs of Tier 1 Enhanced Pre-Retirement Death and Disability Benefits

	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan		
1. Increase in Total Normal Cost	1.60% ⁽²⁾	
2. Expected Employee Contributions	<u>0.00%</u>	
3. Increase in Employer Normal Cost (1) - (2)	1.60%	\$27,404
4. Increase in Actuarial Accrued Liability	\$62,412	
5. (a) 15-Year Amortization of AAL / APO Opt Outs Payroll ⁽³⁾	0.31%	\$5,278
(b) 15-Year Amortization of AAL / Total Payroll ⁽³⁾	0.00% ⁽⁴⁾	\$5,278

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$1,720,797), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ This is lowered from the previous study because of the inclusion of 13 Tier 1 employees previously assumed to have elected Tier 1 enhanced.

⁽³⁾ We have presented two illustrations for paying off the additional AAL.

⁽⁴⁾ Less than 0.01%.

Section 2: Valuation Results

Additional Costs –All Five Groups Combined

Contribution rates if received at the beginning of the year, expressed as a % of payroll

Additional Costs of Tier 1 Enhanced Pre-Retirement Death and Disability Benefits

	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan		
1. Increase in Total Normal Cost	0.98%	
2. Expected Employee Contributions	<u>0.00%</u>	
3. Increase in Employer Normal Cost (1) - (2)	0.98%	\$97,955
4. Increase in Actuarial Accrued Liability	\$428,948	
5. (a) 15-Year Amortization of AAL / All Five Groups Combined Payroll ⁽²⁾	0.36%	\$36,276
(b) 15-Year Amortization of AAL / Total Payroll ⁽²⁾	0.00% ⁽³⁾	\$36,276

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$9,946,883 for 89 members vs. \$9,097,021 in the last study for 82 members), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ We have presented two illustrations for paying off the additional AAL.

⁽³⁾ Less than 0.01%.

Section 2: Valuation Results

- The increase in the Normal Cost rate is due to the increase in the pre-retirement death and disability benefit level for the Retirement Plan.
- As illustrated above, there is an increase in the AAL. The increase in the AAL is due to the assumption that the higher Normal Cost rates calculated have been charged from the dates of entry into LACERS for the members included in the study to the date of this valuation, rather than the actual Normal Cost rates that have been charged over that period based on the current Tier 1 and Tier 3 plans.¹²
- As we have mentioned throughout this report, the contribution rates provided herein assume that all contributions will be received at the beginning of the year. If it is desired to consider results based on different timing for receipt of contributions, such as July 15 or at the end of each pay period (similar to the timing scenarios utilized in the LACERS valuations), then the contribution rates provided herein will have to be adjusted. We will provide the adjustment factors if requested to do so by LACERS.

¹² This assumption is an intrinsic feature of LACERS' Entry Age Cost Method and the setting of the Normal Cost rates as a level percentage of payroll.

Section 2: Valuation Results

B. Demographics as of June 30, 2021

Municipal Police Officers	Tier 1	Tier 3	Tiers 1 and 3 Combined
Number of employees	19	0	19
Average entry age	27.97	N/A	27.97
Average employment service	21.94	N/A	21.94
Average attained age	49.91	N/A	49.91
Projected total compensation for FY 2021/2022, assuming each employee stays in employment during the entire fiscal year	\$2,213,185	N/A	\$2,213,185
Projected average compensation	116,483	N/A	116,483

Port Police Officers	Tier 1	Tier 3	Tiers 1 and 3 Combined
Number of employees	7	0	7
Average entry age	29.51	N/A	29.51
Average employment service	24.56	N/A	24.56
Average attained age	54.07	N/A	54.07
Projected total compensation for FY 2022/2022, assuming each employee stays in employment during the entire fiscal year	\$975,629	N/A	\$975,629
Projected average compensation	139,376	N/A	139,376

Note: Average attained age minus average employment service may not total to average entry age exactly, due to rounding.

Section 2: Valuation Results

LAPD Officers	Tier 1	Tier 3	Tiers 1 and 3 Combined
Number of employees	22	0	22
Average entry age	28.30	N/A	28.30
Average employment service	20.40	N/A	20.40
Average attained age	48.70	N/A	48.70
Projected total compensation for FY 2021/2022, assuming each employee stays in employment during the entire fiscal year	\$2,824,831	N/A	\$2,824,831
Projected average compensation	128,401	N/A	128,401
Park Rangers	Tier 1	Tier 3	Tiers 1 and 3 Combined
Number of employees	21	6	27
Average entry age	28.47	31.97	29.25
Average employment service	15.08	3.00	12.40
Average attained age	43.55	34.97	41.65
Projected total compensation for FY 2021/2022, assuming each employee stays in employment during the entire fiscal year	\$1,797,701	\$414,740	\$2,212,441
Projected average compensation	85,605	69,123	81,942
APO Opt Outs	Tier 1	Tier 3	Tiers 1 and 3 Combined
Number of employees	13	1	14
Average entry age	32.32	60.78	34.36
Average employment service	10.26	1.53	9.64
Average attained age	42.59	62.31	43.99
Projected total compensation for FY 2021/2022, assuming each employee stays in employment during the entire fiscal year	\$1,480,520	\$240,277	\$1,720,797
Projected average compensation	113,886	240,277	122,914

Note: Average attained age minus average employment service may not total to average entry age exactly, due to rounding.

Section 2: Valuation Results

All Five Groups	Tier 1	Tier 3	Tiers 1 and 3 Combined
Number of employees	82	7	89
Average entry age	29.01	36.08	29.56
Average employment service	18.14	2.79	16.94
Average attained age	47.15	38.88	46.50
Projected total compensation for FY 2021/2022, assuming each employee stays in employment during the entire fiscal year	\$9,291,866	\$655,017	\$9,946,883
Projected average compensation	113,315	93,574	111,763

Note: Average attained age minus average employment service may not total to average entry age exactly, due to rounding.

Section 2: Valuation Results

C-1. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – Municipal Police Officers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Paid by the City for all City Departments		Based on Demographic Profile of Municipal Police Officers Only		
	<u>Tier 1</u>	<u>Tier 3</u>	<u>Tier 1</u>	<u>Tier 3</u>	<u>Combined</u>
Retirement Plan					
1. Total Normal Cost	19.13%	15.91%	17.36%	N/A	17.36%
2. Expected Employee Contributions ⁽¹⁾	<u>10.64%</u>	<u>10.63%</u>	<u>10.63%</u>	N/A	<u>10.63%</u>
3. Employer Normal Cost: (1) - (2)	8.49%	5.28%	6.73%	N/A	6.73%
4. Actuarial Accrued Liability					\$13,431,458

⁽¹⁾ Discounted to beginning of year. The average rates for contributions made at the end of each pay period are actually 11.01% (Tier 1, all City departments), 11.00% (Tier 3, all City departments), 11.00% (Tier 1, Municipal Police Officers only), and 11.00% (combined, Municipal Police Officers only).

Section 2: Valuation Results

C-2. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – Port Police Officers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Paid by the City for all City Departments		Based on Demographic Profile of Port Police Officers Only		
	<u>Tier 1</u>	<u>Tier 3</u>	<u>Tier 1</u>	<u>Tier 3</u>	<u>Combined</u>
Retirement Plan					
1. Total Normal Cost	19.13%	15.91%	18.09%	N/A	18.09%
2. Expected Employee Contributions ⁽¹⁾	<u>10.64%</u>	<u>10.63%</u>	<u>10.63%</u>	N/A	<u>10.63%</u>
3. Employer Normal Cost: (1) - (2)	8.49%	5.28%	7.46%	N/A	7.46%
4. Actuarial Accrued Liability					\$6,642,098

⁽¹⁾ Discounted to beginning of year. The average rates for contributions made at the end of each pay period are actually 11.01% (Tier 1, all City departments), 11.00% (Tier 3, all City departments), 11.00% (Tier 1, Port Police Officers only), and 11.00% (combined, Port Police Officers only).

Section 2: Valuation Results

C-3. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – LAPD Officers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Paid by the City for all City Departments		Based on Demographic Profile of LAPD Officers Only		
	<u>Tier 1</u>	<u>Tier 3</u>	<u>Tier 1</u>	<u>Tier 3</u>	<u>Combined</u>
Retirement Plan					
1. Total Normal Cost	19.13%	15.91%	17.52%	N/A	17.52%
2. Expected Employee Contributions ⁽¹⁾	<u>10.64%</u>	<u>10.63%</u>	<u>10.63%</u>	N/A	<u>10.63%</u>
3. Employer Normal Cost: (1) - (2)	8.49%	5.28%	6.89%	N/A	6.89%
4. Actuarial Accrued Liability					\$15,786,034

⁽¹⁾ Discounted to beginning of year. The average rates for contributions made at the end of each pay period are actually 11.01% (Tier 1, all City departments), 11.00% (Tier 3, all City departments), 11.00% (Tier 1, LAPD Officers only), and 11.00% (combined, LAPD Officers only).

Section 2: Valuation Results

C-4. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – Park Rangers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Paid by the City for all City Departments		Based on Demographic Profile of Park Rangers Only		
	<u>Tier 1</u>	<u>Tier 3</u>	<u>Tier 1</u>	<u>Tier 3</u>	<u>Combined</u>
Retirement Plan					
1. Total Normal Cost	19.13%	15.91%	17.81%	14.77%	17.24%
2. Expected Employee Contributions ⁽¹⁾	<u>10.64%</u>	<u>10.63%</u>	<u>10.63%</u>	<u>10.63%</u>	<u>10.63%</u>
3. Employer Normal Cost: (1) - (2)	8.49%	5.28%	7.18%	4.14%	6.61%
4. Actuarial Accrued Liability					\$8,045,855

⁽¹⁾ Discounted to beginning of year. The average rates for contributions made at the end of each pay period are actually 11.01% (Tier 1, all City departments), 11.00% (Tier 3, all City departments), 11.00% (Tier 1, Park Rangers only), 11.00% (Tier 3, Park Rangers only), and 11.00% (combined, Park Rangers only).

Section 2: Valuation Results

C-5. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – APO Opt Outs

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Paid by the City for all City Departments		Based on Demographic Profile of APO Opt Outs Only		
	<u>Tier 1</u>	<u>Tier 3</u>	<u>Tier 1</u>	<u>Tier 3</u>	<u>Combined</u>
Retirement Plan					
1. Total Normal Cost	19.13%	15.91%	19.47%	19.25% ⁽²⁾	19.44%
2. Expected Employee Contributions ⁽¹⁾	<u>10.64%</u>	<u>10.63%</u>	<u>10.63%</u>	<u>10.63%</u>	<u>10.63%</u>
3. Employer Normal Cost: (1) - (2)	8.49%	5.28%	8.84%	8.62%	8.81%
4. Actuarial Accrued Liability					\$3,614,157

⁽¹⁾ Discounted to beginning of year. The average rates for contributions made at the end of each pay period are actually 11.01% (Tier 1, all City departments), 11.00% (Tier 3, all City departments), 11.00% (Tier 1, APO Opt Outs only), 11.00% (Tier 3, APO Opt Outs only), and 11.00% (combined, APO Opt Outs only).

⁽²⁾ Even though the member's salary as reported in the June 30, 2021 valuation has remained unchanged from that reported in the June 30, 2020 valuation, that same salary has not resulted in a decrease in the value of the member's benefit projected in the June 30, 2021 valuation compared to the value of the member's benefit projected in the June 30, 2020 valuation. This occurred because in projecting the member's salary from the June 30, 2021 valuation and the member's salary from the June 30, 2020 valuation to the member's expected date of retirement using salary increase and other assumptions, both sets of salaries were expected to be eventually limited by the IRC Section 401(a)(17) compensation limit. However, the total Normal Cost rate for the member increased from 17.80% in the June 30, 2020 study to 19.25% in the June 30, 2021 study. This anomaly happened because the member's Normal Cost dollar amount from the June 30, 2020 valuation when adjusted with the assumed rate of salary increase at 9.95% under the Entry Age funding method was divided by the member's actual salary that remained unchanged as reported in the June 30, 2021 valuation.

Section 2: Valuation Results

C-6. Current Normal Cost Contribution Rates and Actuarial Accrued Liability as of June 30, 2021 – All Five Groups Combined

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Paid by the City for all City Departments		Based on Demographic Profile of all Five Groups Combined Only		
	<u>Tier 1</u>	<u>Tier 3</u>	<u>Tier 1</u>	<u>Tier 3</u>	<u>Combined</u>
Retirement Plan					
1. Total Normal Cost	19.13%	15.91%	17.91%	16.41%	17.81%
2. Expected Employee Contributions ⁽¹⁾	<u>10.64%</u>	<u>10.63%</u>	<u>10.63%</u>	<u>10.63%</u>	<u>10.63%</u>
3. Employer Normal Cost: (1) - (2)	8.49%	5.28%	7.28%	5.78%	7.18%
4. Actuarial Accrued Liability					\$47,519,602

⁽¹⁾ Discounted to beginning of year. The average rates for contributions made at the end of each pay period are actually 11.01% (Tier 1, all City departments), 11.00% (Tier 3, all City departments), 11.00% (Tier 1, all Five groups combined), 11.00% (Tier 3, all Five groups combined), and 11.00% (combined, all Five groups combined).

Section 2: Valuation Results

D-1. Comparison of Costs – Municipal Police Officers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Tier 1 Formula	Tier 1 Enhanced Formula	Difference	
	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan				
1. Total Normal Cost	17.36%	18.16%	0.80%	
2. Expected Employee Contributions ⁽²⁾	<u>10.63%</u>	<u>10.63%</u>	<u>0.00%</u>	
3. Employer Normal Cost: (1) - (2)	6.73%	7.53%	0.80%	\$17,690
4. Actuarial Accrued Liability (AAL)	\$13,431,458	\$13,547,046	\$115,588	
5. (a) 15-Year Amortization of AAL / Municipal Police Officers Payroll ⁽³⁾			0.44%	\$9,775
(b) 15-Year Amortization of AAL / Total Payroll ⁽³⁾			0.00% ⁽⁴⁾	\$9,775

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$2,213,185), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ The average employee rate for contributions made at the end of each pay period is actually 11.00% for both the Tier 1 and Tier 1 Enhanced formulas.

⁽³⁾ We have presented two illustrations for paying off the additional AAL.

⁽⁴⁾ Less than 0.01%.

Section 2: Valuation Results

D-2. Comparison of Costs – Port Police Officers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Tier 1 Formula	Tier 1 Enhanced Formula	Difference	
	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan				
1. Total Normal Cost	18.09%	19.00%	0.91%	
2. Expected Employee Contributions ⁽²⁾	<u>10.63%</u>	<u>10.63%</u>	<u>0.00%</u>	
3. Employer Normal Cost: (1) - (2)	7.46%	8.37%	0.91%	\$8,828
4. Actuarial Accrued Liability (AAL)	\$6,642,098	\$6,680,358	\$38,260	
5. (a) 15-Year Amortization of AAL / Port Police Officers Payroll ⁽³⁾			0.33%	\$3,236
(b) 15-Year Amortization of AAL / Total Payroll ⁽³⁾			0.00% ⁽⁴⁾	\$3,236

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$975,629), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ The average employee rate for contributions made at the end of each pay period is actually 11.00% for both the Tier 1 and Tier 1 Enhanced formulas.

⁽³⁾ We have presented two illustrations for paying off the additional AAL.

⁽⁴⁾ Less than 0.01%.

Section 2: Valuation Results

D-3. Comparison of Costs – LAPD Officers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Tier 1 Formula	Tier 1 Enhanced Formula	Difference	Estimated Annual Amount ⁽¹⁾
	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>% of Payroll</u>	
Retirement Plan				
1. Total Normal Cost	17.52%	18.38%	0.86%	
2. Expected Employee Contributions ⁽²⁾	<u>10.63%</u>	<u>10.63%</u>	<u>0.00%</u>	
3. Employer Normal Cost: (1) - (2)	6.89%	7.75%	0.86%	\$24,360
4. Actuarial Accrued Liability (AAL)	\$15,786,034	\$15,936,355	\$150,321	
5. (a) 15-Year Amortization of AAL / LAPD Officers Payroll ⁽³⁾			0.45%	\$12,713
(b) 15-Year Amortization of AAL / Total Payroll ⁽³⁾			0.00% ⁽⁴⁾	\$12,713

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$2,824,831), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ The average employee rate for contributions made at the end of each pay period is actually 11.00% for both the Tier 1 and Tier 1 Enhanced formulas.

⁽³⁾ We have presented two illustrations for paying off the additional AAL.

⁽⁴⁾ Less than 0.01%.

Section 2: Valuation Results

D-4. Comparison of Costs – Park Rangers

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Combined Tier 1 & Tier 3 Formulas	Tier 1 Enhanced Formula	Difference	
	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan				
1. Total Normal Cost	17.24%	18.13%	0.89%	
2. Expected Employee Contributions ⁽²⁾	<u>10.63%</u>	<u>10.63%</u>	<u>0.00%</u>	
3. Employer Normal Cost: (1) - (2)	6.61%	7.50%	0.89%	\$19,673
4. Actuarial Accrued Liability (AAL)	\$8,045,855	\$8,108,222	\$62,367	
5. (a) 15-Year Amortization of AAL / Park Rangers Payroll ⁽³⁾			0.24%	\$5,274
(b) 15-Year Amortization of AAL / Total Payroll ⁽³⁾			0.00% ⁽⁴⁾	\$5,274

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$2,212,441), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ The average employee rate for contributions made at the end of each pay period is actually 11.00% for both the Tier 1 and Tier 1 Enhanced formulas.

⁽³⁾ We have presented two illustrations for paying off the additional AAL.

⁽⁴⁾ Less than 0.01%.

Section 2: Valuation Results

D-5. Comparison of Costs – APO Opt Outs

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Combined Tier 1 & Tier 3 Formulas	Tier 1 Enhanced Formula	Difference	
	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan				
1. Total Normal Cost	19.44%	21.04%	1.60%	
2. Expected Employee Contributions ⁽²⁾	<u>10.63%</u>	<u>10.63%</u>	<u>0.00%</u>	
3. Employer Normal Cost: (1) - (2)	8.81%	10.41%	1.60%	\$27,404
4. Actuarial Accrued Liability (AAL)	\$3,614,157	\$3,676,569	\$62,412	
5. (a) 15-Year Amortization of AAL / Park Rangers Payroll ⁽³⁾			0.31%	\$5,278
(b) 15-Year Amortization of AAL / Total Payroll ⁽³⁾			0.00% ⁽⁴⁾	\$5,278

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$1,720,797), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ The average employee rate for contributions made at the end of each pay period is actually 11.00% for both the Tier 1 and Tier 1 Enhanced formulas.

⁽³⁾ We have presented two illustrations for paying off the additional AAL.

⁽⁴⁾ Less than 0.01%.

Section 2: Valuation Results

D-6. Comparison of Costs – All Five Groups Combined

Contribution rates if received at the beginning of the year, expressed as a % of payroll

	Combined Tier 1 & Tier 3 Formulas	Tier 1 Enhanced Formula	Difference	
	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>% of Payroll</u>	<u>Estimated Annual Amount⁽¹⁾</u>
Retirement Plan				
1. Total Normal Cost	17.81%	18.79%	0.98%	
2. Expected Employee Contributions ⁽²⁾	<u>10.63%</u>	<u>10.63%</u>	<u>0.00%</u>	
3. Employer Normal Cost: (1) - (2)	7.18%	8.16%	0.98%	\$97,955
4. Actuarial Accrued Liability (AAL)	\$47,519,602	\$47,948,550	\$428,948	
5. (a) 15-Year Amortization of AAL / All Five Groups Combined Payroll ⁽³⁾			0.36%	\$36,276
(b) 15-Year Amortization of AAL / Total Payroll ⁽³⁾			0.00% ⁽⁴⁾	\$36,276

⁽¹⁾ Based on projected fiscal year 2021/2022 payroll (\$9,946,883), except for item 5(b) which is based on payroll for all LACERS members in all City departments (\$2,254,165,029) as of June 30, 2021.

⁽²⁾ The average employee rate for contributions made at the end of each pay period is actually 11.00% for both the Tier 1 and Tier 1 Enhanced formulas.

⁽³⁾ We have presented two illustrations for paying off the additional AAL.

⁽⁴⁾ Less than 0.01%.

Section 2: Valuation Results

D. Comparison of Costs (continued)

In addition to the employer contribution rates provided above, it is anticipated that the employer would continue to contribute the same UAAL rate of 21.58% of total payroll for the Retirement Plan¹³ (including 0.11% in the UAAL rate for Tier 1 Enhanced) that was determined in the June 30, 2021 valuation. This is because the UAAL rate was determined as a level percent of pay including payrolls for all current members plus new entrants who enter LACERS after June 30, 2021.

¹³ Assumes contributions received at the beginning of the year.

Section 3: Supporting Exhibits

Exhibit 1: Actuarial Assumptions for Current and Proposed Benefits

Actuarial Assumptions:

The service-connected disability, nonservice-connected disability, pre-retirement death benefit, and form of payment assumptions used in determining the results under the Tier 1 Enhanced proposed for the sworn employees included in this study are shown on the following page. Note that all of these assumptions for the Tier 1 Enhanced proposed for the sworn employees included in this study are the same as the assumptions for the current Tier 1 Enhanced for APO members.

Except as noted in this Exhibit, all other actuarial assumptions are the same as those adopted for Tier 1 or Tier 3, as applicable, by the Retirement Board for use in the June 30, 2021 actuarial valuation.

Section 3: Supporting Exhibits

Service-connected Disability Benefits:

*Tier 1 Enhanced for
Sworn Employees*

90% of disability retirements are assumed to be service-connected with service-connected disability benefits based on years of service, as follows:

Years of Service	Benefit
Less than 20	55% of Final Average Monthly Compensation
20 - 30	65% of Final Average Monthly Compensation
More than 30	75% of Final Average Monthly Compensation

Nonservice-connected Disability Benefits:

*Tier 1 Enhanced for
Sworn Employees*

10% of disability retirements are assumed to be nonservice-connected with nonservice-connected disability benefits equal to 40% of Final Average Monthly Compensation.

Pre-Retirement Death Benefits:

*Tier 1 Enhanced for
Sworn Employees*

100% of pre-retirement death benefits are assumed to be service-connected.

Form of Payment:

*Tier 1 Enhanced for
Sworn Employees*

All active members who are assumed to be married or with domestic partners at retirement are assumed to elect the 70% Joint and Survivor Cash Refund Annuity for nonservice-connected disability and the 80% Joint and Survivor Cash Refund Annuity for service-connected disability. Those members who are assumed to be un-married or without domestic partners are assumed to elect the Single Cash Refund Annuity.

Section 3: Supporting Exhibits

Exhibit 2: Plan Summary of Pre-Retirement Death and Disability Benefits for Current Tiers 1 & 3, and Proposed Tier 1 Enhanced for Sworn Employees

Plan Provisions:

In the following table, we have provided a high-level comparison of the pertinent pre-retirement death and disability benefits for the current Tier 1 and the Tier 1 Enhanced proposed for the sworn employees. Unless included in the table, all the other plan provisions are assumed to be the same as those used in the June 30, 2021 valuation for Tier 1 or Tier 3, as applicable.

Plan Design

Final Average (Monthly) Compensation

Current Tiers 1 & 3

Tier 1: Equivalent of monthly average salary of highest continuous 12 months (one year); includes base salary plus regularly assigned pensionable bonuses or premium pay.⁽¹⁾

Tier 3: Equivalent of monthly average salary of highest continuous 36 months (three years); limited to base salary and any items of compensation that are designated as pension based.⁽¹⁾

⁽¹⁾ IRC Section 401(a)(17) compensation limit would apply to all employees who began membership in LACERS after June 30, 1996.

Tier 1 Enhanced Proposed for Sworn Employees

(a) For purposes of calculating the pre-retirement death and disability benefits, except for the service retirement component of such benefits for current Tier 3 members: Equivalent of monthly average salary of highest continuous 12 months (one year); includes base salary plus regularly assigned pensionable bonuses or premium pay.⁽¹⁾

(b) For purposes of calculating the service retirement component of the disability benefits for current Tier 3 members: Equivalent of monthly average salary of highest continuous 36 months (three years); limited to base salary and any items of compensation that are designated as pension based.⁽¹⁾

⁽¹⁾ IRC Section 401(a)(17) compensation limit would apply to all employees who began membership in LACERS after June 30, 1996.

Service-connected Disability

There is no distinction between service-connected and nonservice-connected disability.

Age and Service Requirement:
5 years of continuous service

Benefit:⁽¹⁾
1/70 (1.43%) of the Final Average Monthly Compensation per year of service or 1/3 of Final Average Monthly Compensation, if greater.

⁽¹⁾ The benefit calculated using the service retirement formula will be paid if the member is eligible and that benefit is greater than that calculated under the disability retirement formula.

Age and Service Requirement:
No age or service requirements

Benefit:⁽¹⁾
30% to 90% of Final Average Monthly Compensation depending on severity of disability with a minimum of 2% of Final Average Monthly Compensation per year of service.

⁽¹⁾ The benefit calculated using the service retirement formula will be paid if the member is eligible and that benefit is greater than that calculated under the disability retirement formula.

Section 3: Supporting Exhibits

Plan Design

Nonservice-connected Disability

Death before Retirement

Current Tiers 1 & 3

See Service-connected Disability

Greater of:

Option #1:

- (i) Eligibility – None.
- (ii) Benefit – Refund of employee contributions plus a limited pension benefit equal to 50% of monthly salary paid, according to the following schedule:

Service Credit	Total Number of Monthly Payments
Less than 1 year	0
1 year	2
2 years	4
3 years	6
4 years	8
5 years	10
6+ years	12

Option #2:

- (i) Eligibility – Duty-related death or after 5 years of continuous service.
- (ii) Benefit – Deferred, service, optional, or disability survivorship benefit payable under 100% joint and survivor option to an eligible spouse or qualified domestic partner. (Limited pension waived.)
- (iii) Refund of accumulated contributions. No survivorship benefit payable with refund.

Tier 1 Enhanced Proposed for Sworn Employees

Age and Service Requirement:

5 years of continuous service

Benefit:⁽¹⁾

30% to 50% of Final Average Monthly Compensation depending on severity of disability.

⁽¹⁾ The benefit calculated using the service retirement formula will be paid if the member is eligible and that benefit is greater than that calculated under the disability retirement formula.

Greater of:

Option #1:

- (i) Eligibility – None.
- (ii) Benefit – Refund of employee contributions plus a limited pension benefit equal to 50% of monthly salary paid, according to the following schedule:

Service Credit	Total Number of Monthly Payments
Less than 1 year	0
1 year	2
2 years	4
3 years	6
4 years	8
5 years	10
6+ years	12

Option #2:

Service-connected Death

- (i) Eligibility – None.
- (ii) Benefit – 80% of member's Final Average Monthly Compensation.

Nonservice-connected Death

- (i) Eligibility – 5 years of service (unless on military leave and killed while on military duties).
- (ii) Benefit – 50% of member's Final Average Monthly Compensation.

Section 3: Supporting Exhibits

Plan Design

*Death before Retirement
(continued)*

Death after Retirement

Current Tiers 1 & 3

- (i) 50% of retiree's unmodified allowance continued to an eligible spouse or a domestic partner; or a modified continuance to an eligible spouse or a domestic partner at the time of member's death (or a designated beneficiary selected by member at the time of retirement);⁽¹⁾
- (ii) \$2,500 lump sum death benefit paid to a designated beneficiary; and
- (iii) Any unused contributions if the member has elected the cash refund annuity option.

⁽¹⁾ The retiree may elect at the time of retirement to take a reduced allowance in order to provide for a higher continuance percentage pursuant to the provisions of Section 4.1015

Tier 1 Enhanced Proposed for Sworn Employees

- (iii) Eligibility – Less than 5 years of service.
- (iv) Benefit – The Basic Death Benefit shall consist of: (1) the return of a deceased Member's accumulated contributions to the Retirement System with accrued interest thereon, subject to the rights created by virtue of the Member's designation of a beneficiary as otherwise provide din the Retirement System; and (2) if the deceased Member had at least one year of service, the deceased Member's Final Compensation multiplied by the number of completed years of Service, not to exceed six years, provided that said amount shall be paid in monthly installments of one-half of the deceased Member's Final Compensation.

While on service-connected disability

- (i) 80% of retiree's unmodified allowance continued to an eligible spouse or a domestic partner; or a modified continuance to an eligible spouse or a domestic partner at the time of member's death (or a designated beneficiary selected by member at the time of retirement)^{(1),(2)}
 - (ii) \$2,500 lump sum death benefit paid to a designated beneficiary; and
 - (iii) Any unused contributions if the member has elected the cash refund annuity option.
- ⁽¹⁾ If the death occurs within three years of the retiree's retirement, the eligible survivor shall receive 80% of the Final Average Monthly Compensation (adjusted with Cost of Living benefit).
- ⁽²⁾ The retiree may elect at the time of retirement to take a reduced allowance in order to provide for a higher continuance percentage pursuant to the provision of Section 4.1010.1(c).

Section 3: Supporting Exhibits

Plan Design

*Death after Retirement
(continued)*

Current Tiers 1 & 3

Tier 1 Enhanced Proposed for Sworn Employees

While on nonservice-connected disability

- (i) 70% of retiree's unmodified allowance continued to an eligible spouse or a domestic partner; or a modified continuance to an eligible spouse or a domestic partner at the time of member's death (or a designated beneficiary selected by member at the time of retirement)⁽³⁾
 - (ii) \$2,500 lump sum death benefit paid to a designated beneficiary; and
 - (iii) Any unused contributions if the member has elected the cash refund annuity option.
- ⁽³⁾ The retiree may elect at the time of retirement to take a reduced allowance in order to provide for a higher continuance percentage pursuant to the provision of Section 4.1010.1(c).

5745540v4/05806.133