

ARKANSAS STATE HIGHWAY EMPLOYEES'

RETIREMENTSYSTEM

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Arkansas State Highway Employees' Retirement System

The Arkansas State Employees' Retirement System (ASHERS) was established by Act 454 of 1949, as amended.

Board of Trustees

A seven person Board of Trustees and an Executive Secretary administer its operation. The Board of Trustees is composed of the Director of the Arkansas Department of Transportation (ARDOT), the Deputy Director and Chief Engineer of ARDOT, the Treasurer of the State of Arkansas, the Director of the Arkansas Department of Finance and Administration. Two trustees are elected by the active members of the System, and one trustee is elected by the System's retirees. The three elected members serve two-year terms.

The Board of Trustees selects the Executive Secretary who does not vote on Board decisions.

A committee of the Board of Trustees is responsible for investing the funds of the System in securities authorized as Retirement System Investments by Arkansas Law. Investment Counselors are employed by the Board of Trustees to invest the funds on a discretionary basis as defined in the investment policies adopted by the Board.

Membership

Every active employee of ARDOT who is not enrolled in the DROP is a member of the System. Membership also excludes employees of ARDOT on or after July 1, 1997 who are receiving benefits from a reciprocal retirement system.

Membership in the System may be terminated by retirement, disability, death or withdrawal, voluntarily or involuntarily, from active service with the ARDOT.

| MEMBERSHIP | NUMBER OF MEMBERS |
|------------------------|-------------------|
| Actives not in DROP | 3,343 |
| Actives in DROP | 369 |
| Inactives | 211 |
| Retirees/Beneficiaries | 3,436 |
| TOTAL | 7,359 |

SEE APPENDIX A

Contributions

All members are required to contribute 6% of their total earnings to the System. ARDOT, as employer, contributes 12.9% of the total payroll.

PROPOSED LEGISLATIVE CHANGE: Increase employee contributions up to 7% and increase employer contributions up to 14.9%. The employee increase in contributions would be phased in over a 2 year period in half percent increments beginning Fiscal Year 2020. The employer increase would go in effect in its entirety for Fiscal Year 2020.

Based on ArDOT's salary schedule for Fiscal Year 2019, the additional pre-tax contribution per pay period would range from \$3.70 for Grade I to \$24.25 for Grade 20.

SEE APPENDIX B, C

ASHERS Portfolio Statistics

ASHERS currently contracts with three investment firms for money management purposes:

| CastleArk Management Chicago, IL Meridian Investment Advisors Little Rock, AR | | Stock Equities and Fixed Income | |
|--|-------------|---------------------------------|--|
| | | Fixed Income | |
| Garcia-Hamilton and Associates | Houston, TX | Fixed Income (Emerging Manager) | |

The portfolio is comprised of Stock Equities (Domestic/International) and Fixed Income (Corporate, Municipal and Governmental).

| AS OF 06/30/2018 | PERCENT FUND | VALUE |
|------------------|--------------|-------------------|
| Actuarial | 83.51% | \$1,424.2 million |
| Market | 86.34% | \$1,472.4 million |

SEE APPENDIX D:G

Qualifications for Retirement

Before a member of ASHERS is eligible for retirement benefits, the following age and service requirements must be met.

| AGE | CREDITABLE SERVICE TIME |
|----------------------|---|
| 65 | 5 Years |
| 62 | 15 Years |
| 60 | 20 Years |
| 55 with reduction | 5 Years |
| Any | 28 Years* |
| Any | 5 Years If disabled and disability is permanent or of long duration |

When the minimum of five years of creditable service is obtained, the member's retirement benefits are vested and the member may retire upon meeting the age requirement regardless of where employed. The only requirement is that the member must have left their contributions with ASHERS, if no longer employed with ARDOT.

Retirement Benefit Formula

Years of Creditable Service

X 2.2%

Annual Earnings

X (Average of the 3 highest consecutive years)

Annual Retirement Annuity

Annual Retirement Annuity is divided by twelve to determine the monthly benefit.

^{*}To join the DROP, these employees must have 30 years of service.

Health Care Offset

The amounts to be paid to the retirees or beneficiaries are subject to the conditions defined by the Straight Life Annuity, Option A or Option B. A maximum of \$125 is then added to the monthly benefit for each retiree as a health care offset. The amount applied is determined as follows:

| YEARS OF SERVICE | MONTHLY AMOUNT |
|---------------------------------|----------------|
| 10 years but less than 15 years | \$ 75.00 |
| 15 years but less than 20 years | 100.00 |
| 20 years or more | 125.00 |

PROPOSED LEGISLATIVE CHANGE: Revision of the annual COLA computation, to remove the annual health care offset from inclusion in the gross amount used for calculation. Prior benefits would remain as is, but future calculations would not include the health care offset.

CURRENT CALCULATION

| | | ANNUAL BENEFIT | | COLA | | RMINED EFIT |
|--|-------------------|-----------------------|------------------|-----------------|-------------|----------------|
| | ASHERS Benefit | Health Care Offset | % for FY 2020 | Annual Total | Annually | Monthly |
| | \$15,000 | \$900 | 1.77% | \$281.43 | \$16,181.43 | \$1,348.45 |
| | \$25,000 | \$1,200 | 1.77% | \$463.74 | \$26.663.74 | \$2,221.98 |
| | \$36,000 | \$1,500 | 1.77% | \$663.74 | \$38,163.75 | \$3,180.31 |

PROPOSED CALCULATION

| ANNUAL BENEFIT | СО | LA | ANNUAL BENEFIT | REDETEI BENE | | DIFFERENCE IN | |
|-------------------|------------------|-----------------|-----------------------|-----------------|------------|------------------------------|--|
| ASHERS Benefit | % for FY 2020 | Annual Total | Health Care Offset | Annually | Monthly | PROJECTED MONTHLY BENEFIT | |
| \$15,000 | 1.77% | \$265.50 | \$900 | \$16,165.50 | \$1,347.13 | (\$1.33) | |
| \$25,000 | 1.77% | \$442.50 | \$1,200 | \$26.642.50 | \$2,220.21 | (\$1.77) | |
| \$36,000 | 1.77% | \$637.20 | \$1,500 | \$38,137.20 | \$3,178.10 | (\$2.21) | |

Cost of Living Adjustment (COLA)

An annual COLA is added on July 1 of each year for those retirees that have been retired or a DROP participant at least one year. The increase is a calculated percentage change of the benefits received as of June 30 each year. To calculate the annual COLA, the Consumer Price Index for Urban Wage Earners & Clerical Workers (CPI-W) for the 1-year period ending December of the previous calendar year is used. The COLA is capped at 3%.

Retirement Options

STRAIGHT LIFE ANNUITY – Full monthly retirement annuity (calculated as shown on page 3) is paid to the retiree until death. Upon death the named beneficiary receives a pro-rated amount of the annuity for the last month of retiree's life. The beneficiary will receive the residual portion of the retiree's contributions, if any remain. If total annuities paid have equaled or exceeded the retiree's contributions, there will be no additional payment to the beneficiary.

OPTION A – A percentage (based on member's age at retirement) of the Straight Life Annuity is paid to the retiree until death. If the retiree dies within 120 months of termination of employment, the beneficiary will receive the remaining payments for the 120 months. At the end of 120 months, all payments will cease. If the retiree lives to receive 120 or more monthly payments, the beneficiary will only receive the pro-rated portion of the last month of the retiree's life. No additional payments will be made.

OPTION B – A percentage (based on the ages of the retiree and their beneficiary) of the Straight Life Annuity is paid to the retiree until death. The surviving beneficiary (a spouse or a dependent with mental or physical disabilities) then receives one-half of that benefit until their death.

Deferred Retirement Option Plan

The System offers a two-tiered DROP plan.

TIER 1 is a 5-year plan where 90% of the employee's retirement benefits are deposited into their individual DROP account. Neither, employee or employer contributions are collected during this five year period.

TIER 2 allows an employee to continue working after the initial 5-year period until the employee is 65 years of age. The employee will resume contributions of 6% and ARDOT will contribute 6.9%. The amount deposited of the employee's retirement benefits will be reduced from 90% to 79%. Under Tier 2, the employee must cease employment the day before their 65th birthday.

Death Benefit

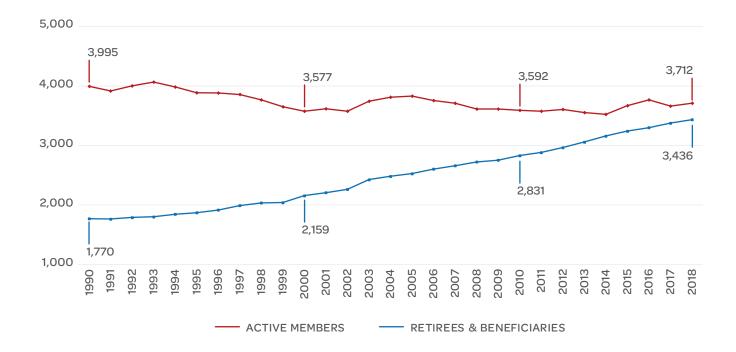
- 1. If a member with less than five years of creditable service dies, their beneficiary receives the balance in the member's contribution account. Interest is paid on the contribution account if the member has contributed to the System for at least one year.
- 2. Upon the death of an active member with five years of service, the beneficiary will receive \$15,000.
- 3. Upon the death of a retired member, the beneficiary will receive \$7,500.

Military Credit

There are two conditions under which the member may purchase credit for military service. ASHERS defines military service as active duty and requires a Federal Form DD-214 "Release from Active Duty" as documentation.

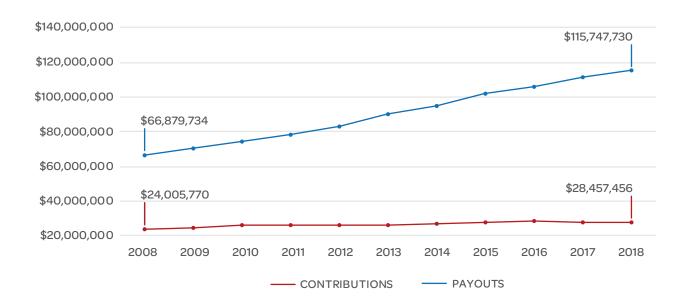
- 1. MILITARY PRIOR A member of ASHERS, who was discharged from active service in the Armed Forces of the United States prior to being employed by a State of Arkansas supported retirement system, is entitled to purchase up to 5 years of military time as creditable service in the System.
- 2. MILITARY LEAVE WITHOUT PAY A member of ASHERS, who entered active service in the Armed Forces of the United States after having previously been employed by a position covered by a State of Arkansas supported retirement system, is entitled to purchase military time as creditable service in the System.

Appendix A
Active Members (includes DROP) vs. Retirees and Beneficiaries



Appendix B

Contributions vs. Payouts by Fiscal Year



Appendix C

ASHERS Rates vs. Other Arkansas Retirement System Rates

FY2019 RETIREMENT CONTRIBUTION RATES

| System | Employee | Employer |
|--------------------|---|---------------------------|
| APERS | 5.00 | 15.32 |
| ASPRS ¹ | - | 22.00 |
| AJRS ² | 5.00 - Tier 1 6.00 - Tier 2 | 12.00 |
| ATRS* | 6.00 | 14.00 |
| LOPFI | 2.50 - with Social Security 8.50 - without Social Security | 22.44 - 23.5 ³ |
| ASHERS | 6.00 | 12.90 |
| * Arkansas | Teachers Retirement System for ne | ext 4 years |
| FY2020 | 6.25 | 14.25 |
| FY2021 | 6.50 | 14.50 |
| FY2022 | 6.75 | 14.75 |
| FY2023 | 7.00 | 15.00 |

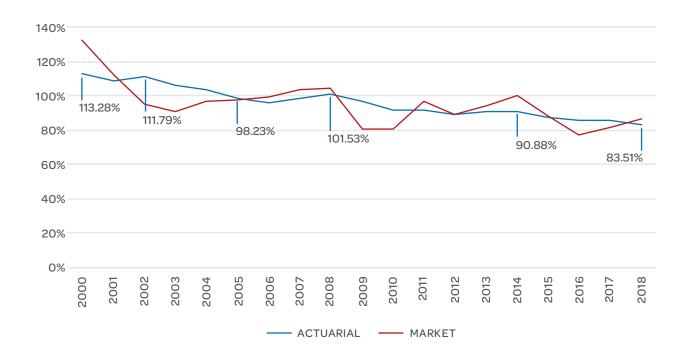
¹ ASPRS also receives approximately \$8-9 million, annually from court cost and traffic tickets.

² AJRS receives approximately \$5 million, annually from the Constitutional and Fiscal Agencies Fund, as well as an additional \$0.6 million in Court fees. Tier 1 employee contribution is 6% until 20 years of service. Tier 2 employee contribution is 5% for 25 years and nothing thereafter.

³ Roughly 40% of the employer contribution cost is funded by Premium Tax.

Appendix D

Actuarial vs. Market



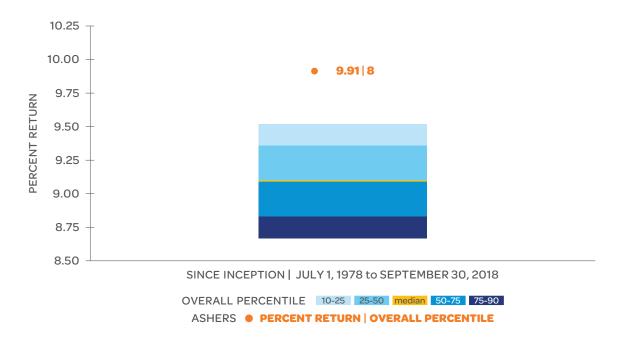
Appendix E
ASHERS Performance vs. Peers

September 30, 2018

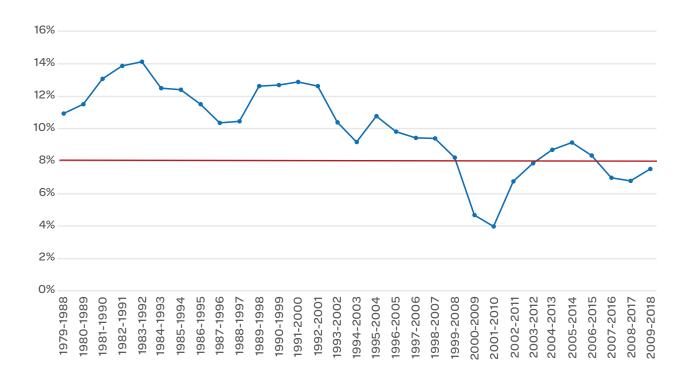


Appendix F
ASHERS Performance vs. Peers | Since Inception

September 30, 2018



Appendix G
Rolling 10 Year – Historical Rate of Return



Appendix H

ASHERS Benefit Payments by County

Calendar Year 2018

