

# ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE YEARS ENDED DECEMBER 31, 2023 & 2022



CHISOS MOUNTAINS  
BREWSTER COUNTY, TEXAS





## LOOKING AHEAD

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AT TCDRS, WE HAVE BUILT A STRONG AND STABLE PLAN BY TAKING THE LONG VIEW.

The crowning jewel of Big Bend National Park, the Chisos Mountains were formed through volcanic activity 33 million years ago. Towering 7,825 feet over the desert floor, Emery Peak is the tallest point within the iconic range and offers far-reaching views of the Chihuahuan Desert and the Rio Grande.

The Chisos Mountains have withstood centuries of erosion and natural disasters, providing shelter and stability for more than 1,200 plant species and 650 fauna species and serving as a beacon beckoning adventurers to visit one of the United States' most rugged and isolated wildernesses.

Like these resilient peaks, TCDRS has a long track record of strength and adaptability. Our disciplined funding strategy, diversified investments and savings-based benefits ensure the system's enduring success and protect the financial futures of hardworking Texans.





TEXAS COUNTY & DISTRICT RETIREMENT SYSTEM

# ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the years ended December 31, 2023 & 2022

Prepared by the Actuarial Services, Communications,  
Finance and Investment Divisions

Barton Oaks Plaza IV  
901 S. Mopac Expy. Ste. 500  
Austin, TX 78746

# TCDRS AT A GLANCE

All figures as of Dec. 31, 2023, except where noted.

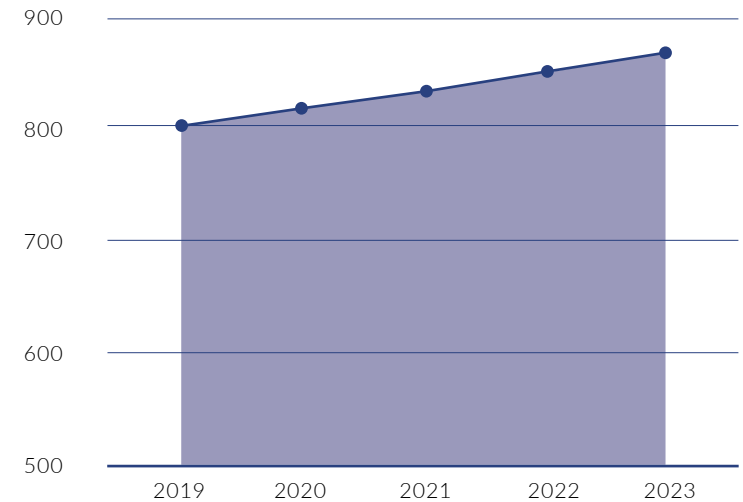
## SERVING OUR MEMBERSHIP

### MEMBERSHIP



We serve a membership of nearly 380,000, including more than 85,000 retirees and beneficiaries.

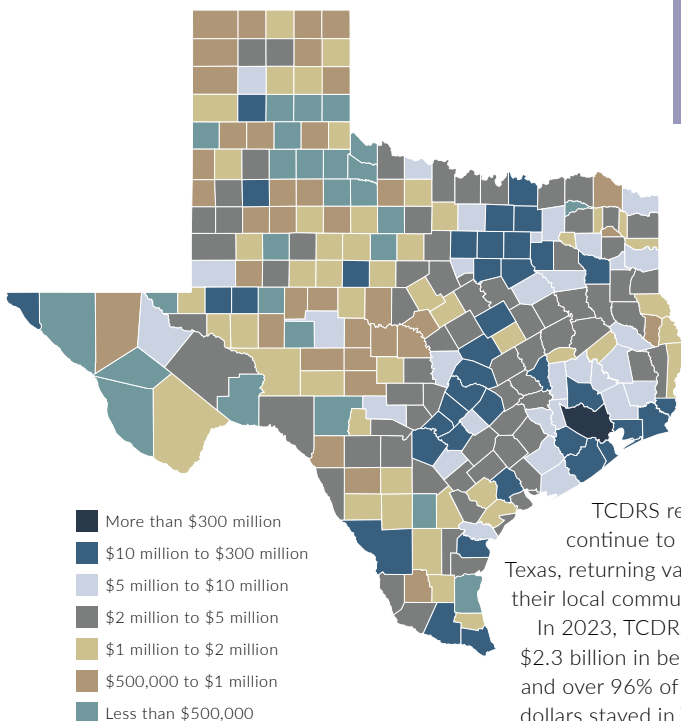
### PARTICIPATING EMPLOYERS



Since 1967, the system has grown to include nearly 870 counties and districts.

## BENEFITING TEXAS

TCDRS Payments to Retirees by Texas County



TCDRS retirees continue to live in Texas, returning value to their local communities. In 2023, TCDRS paid \$2.3 billion in benefits, and over 96% of those dollars stayed in Texas.

### RETIREE PROFILE

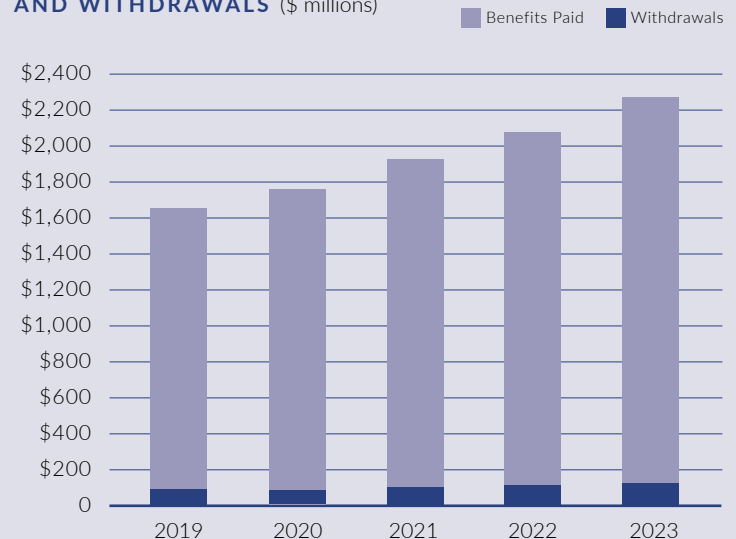
AVERAGE AGE AT RETIREMENT **61**

AVERAGE YEARS OF SERVICE **18**

AVERAGE ANNUAL BENEFIT **\$27,816**

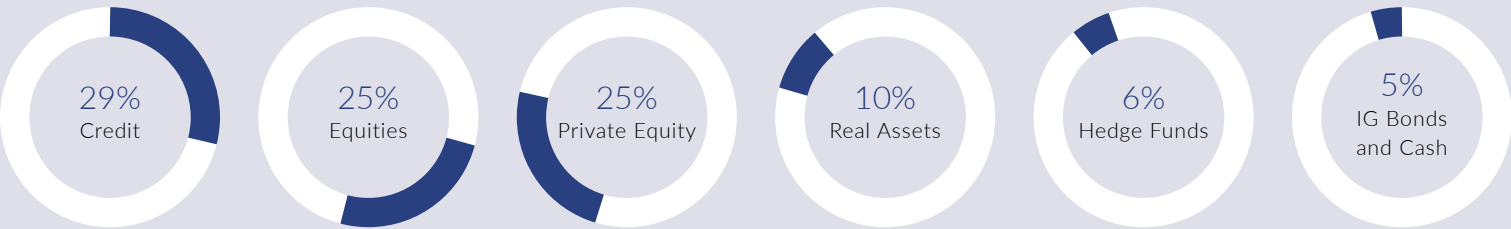
### BENEFITS PAID

AND WITHDRAWALS (\$ millions)

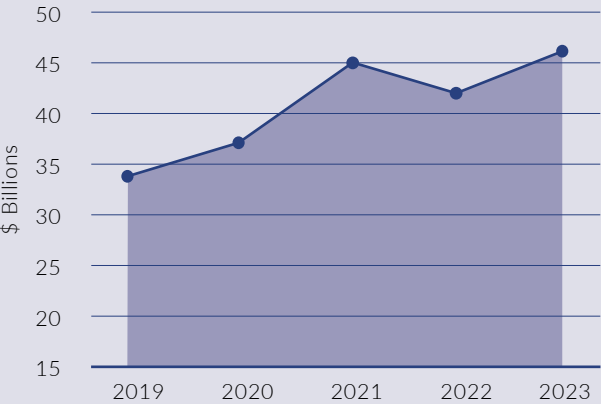


# INVESTING FOR THE LONG TERM

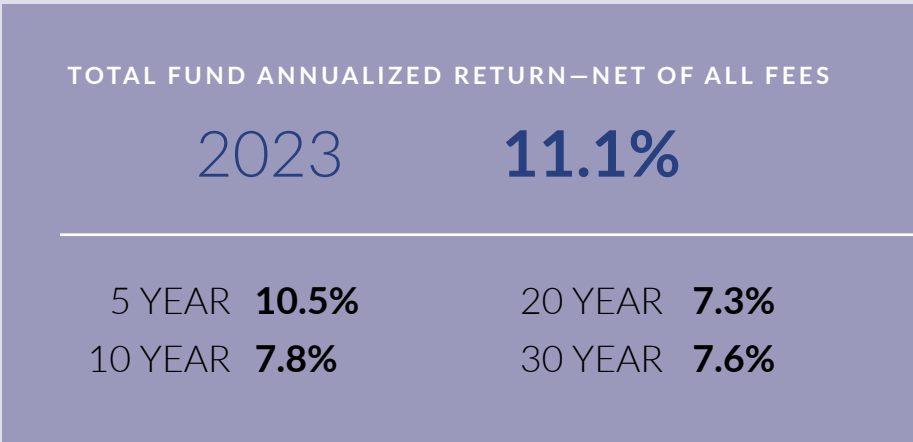
## ASSET ALLOCATION TARGETS AS OF MARCH 2023



## FIDUCIARY NET POSITION

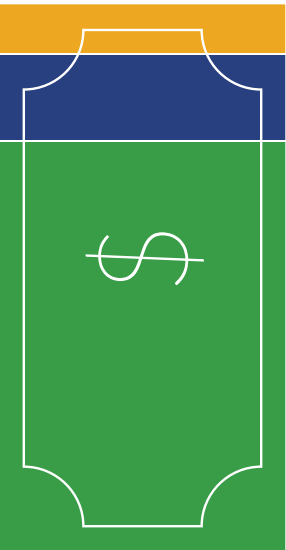


Fiduciary net position totaled \$46.2 billion in 2023.



# RESPONSIBLE PLAN FUNDING

## BENEFIT FUNDING

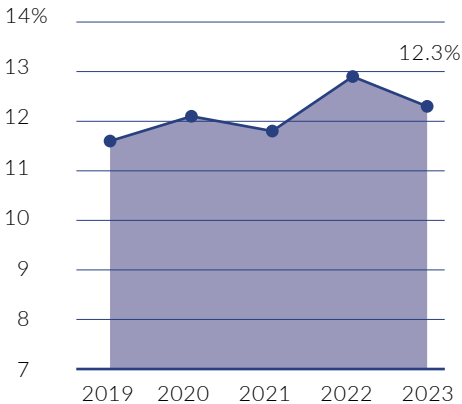


11¢ Employee Deposits

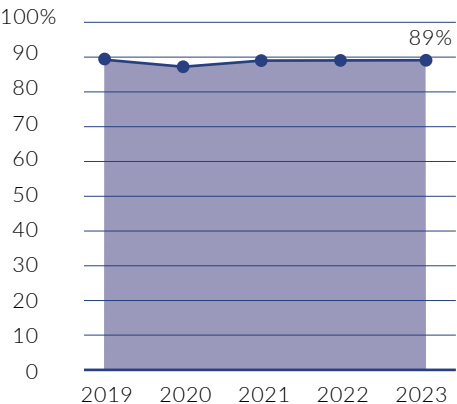
15¢ Employer Contributions

74¢ Investment Earnings

## AVERAGE REQUIRED EMPLOYER CONTRIBUTIONS RATES



## FUNDED RATIO



Investment earnings fund approximately 74¢ of every dollar of benefits. Employers must pay 100% of their required contributions every year. Each plan is funded independently by a county or district and its employees. Our conservative funding methods ensure any debt is paid down to zero within 20 years. This means money is there when needed, and debt is not pushed to future generations. *All figures as of Dec. 31, 2023, except where noted.*



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# INTRODUCTORY

# 1



## SAVINGS-BASED BENEFITS

TCDRS receives no funding from the state of Texas. Members save for their own retirement over the length of their careers. The benefit they receive is based on their total final savings balance and employer matching.

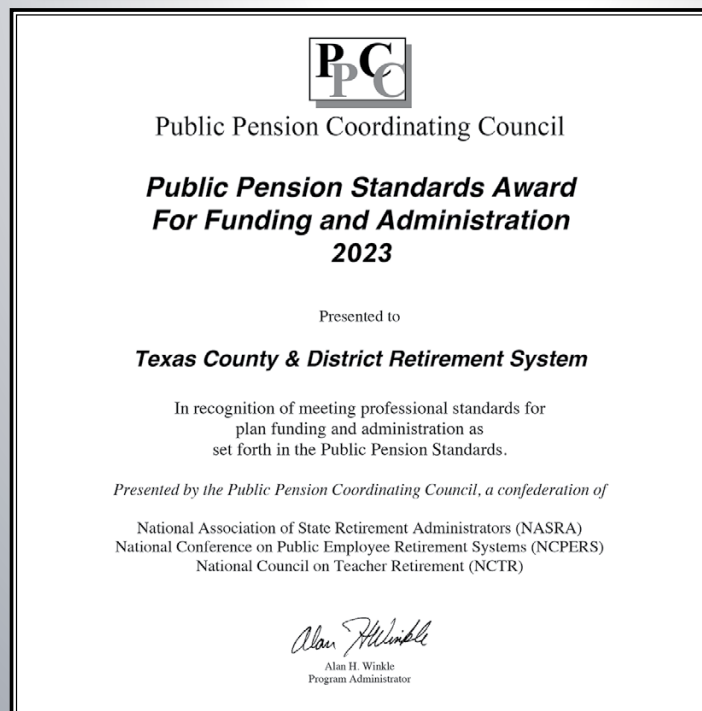
FIELD OF SORGHUM  
WEST TEXAS







The Certificate of Achievement for Excellence in Financial Reporting was presented by the Government Finance Officers Association of the United States and Canada for the fiscal year ended Dec. 31, 2022. This was the 31st consecutive year that TCDRS has received this prestigious award, which recognizes comprehensive annual financial reports that have achieved the highest standards in government accounting and reporting.



TCDRS was awarded the Public Pension Coordinating Council's Public Pension Standards award for the 21st consecutive year. This award is in recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.





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TCDRS.org

## LETTER OF TRANSMITTAL

June 4, 2024

Dear Board of Trustees, Members, and Participating Employers:

We are pleased to present the Annual Comprehensive Financial Report of the Texas County & District Retirement System (TCDRS) for the year ending Dec. 31, 2023.

The theme of our annual report this year is Texas Horizons, which celebrates the beauty of our state. At TCDRS, we have built a strong and stable plan by taking the long-term view. This perspective allows us to explore new opportunities and navigate challenges in a way that ensures a stable and sustainable financial future for hundreds of thousands of Texans.

Since 1967, TCDRS has grown into a \$46 billion trust. Today, we partner with nearly 870 counties and governmental districts to provide reliable retirement, disability and survivor benefits. Our employers value their TCDRS benefit plans in helping them recruit and retain quality staff. The number of participating employers continues to grow and, for the 10-year period ended Dec. 31, 2023, has increased by 32%.

Over the past decade, our membership has risen by 53% as well. We now serve nearly 380,000 Texans. These public servants make our Texas local communities better and safer places to live as they plan for one of the most important decisions of their life: retirement.

At TCDRS, we are committed to providing our members a secure benefit. Savings-based benefits that are responsibly funded in advance, as well as flexibility and local control, contribute to the system's success.

The TCDRS Board of Trustees provides leadership for the system. Our nine-person board is appointed by the governor and confirmed by the Texas Senate. The board appoints an executive director, who

is responsible for all day-to-day operations, and a chief investment officer, who manages investment operations.

## WE DO RETIREMENT RIGHT

Our savings-based plan helps employers provide reliable benefits at a predictable cost. Members save for their own retirements over the length of their careers. At retirement, benefits are based on a member's final savings balance and employer matching.

In 2023, we paid \$2.3 billion in benefits to retirees and former members. Over 96% of these benefits went to Texas addresses. That income serves as an economic engine to our Texas local economies, creating jobs and generating economic activity.

On average, TCDRS retirees start their benefit payments at age 61 after working 18 years. The average annual benefit for current retirees is \$27,816, as of Dec. 31, 2023. The number of retirees has increased over the past decade by 71%.

## INVESTMENTS

Because members and employers are saving in advance for retirement, they are getting the maximum power of investment earnings over time. Investment earnings fund approximately 74 cents of every benefit dollar our members receive.

TCDRS is a long-term investor with a fully diversified portfolio. The TCDRS Board of Trustees constructs the investment portfolio to maximize return within an acceptable level of risk. In 2023, the TCDRS portfolio returned 11.1%, net of all fees. Our 30-year return was 7.6% for the period ended Dec. 31, 2023.

The board has adopted, and periodically reviews, an investment policy that defines and restricts

# LETTER OF TRANSMITTAL

investment authority. The policy also emphasizes the importance of a long-term investment philosophy with minimization of risk.

## MAJOR INITIATIVES

Over the past few years, TCDRS has made great strides in our continuing digital transformation. In 2023, TCDRS delivered enhancements to our technology and services to allow us to better serve our members and employers with fast and convenient account management, a complete digital experience and secure and efficient processes that are fully paperless.

These enhancements included:

- Implemented technology to provide our members and employers with a digital-first experience with the ability to manage their accounts and apply for benefits from the web or via our contact center, and employers have also been empowered to assist their employees with basic account updates.
- Significantly improved payment timeliness by moving to daily payment processing, with the average time from service request to payment receipt decreasing from over 28 days to under four days.
- Expanded digital work optimization features such as electronic document signatures, automated communications, automated data and identity verification and automatically triggered secure URLs to collect documentation necessary to complete processes.
- Implemented risk-based authentication practices to support secure automation. Adopted a multi-faceted identification approach using best-in-class authentication tools and business intelligence to improve security while reducing friction for customers.
- Implemented work optimization that uses business rules to generate exceptions, promotes auto processing when validations pass, automates work routing and applies programmed service levels to drive follow-up and performance.
- Strengthened security maturity by completing and progressing projects on our information security roadmap, including a cloud security gateway project to secure cloud data and prevent data loss; implementation of real-time network penetration scanning; expansion of our privileged access management strategy; and encrypted automatic file transfer services for high-risk data files.

## FUNDING

As of Dec. 31, 2023, TCDRS was 89% funded in aggregate. The actuarial value of assets and liabilities totaled \$43.61 billion and \$48.92 billion, respectively. When reserves are considered, TCDRS is over 94% funded.

The system maintains a reserves position to help keep rates stable and offset future adverse experience. TCDRS' reserves are more than 5% of assets.

TCDRS does not receive funding from the State of Texas. Each plan is funded by our employers, members and investment earnings. TCDRS has one of the most conservative funding policies in the nation, ensuring that our employers fund their plans responsibly.

By paying 100% of their required contribution rate every year, employers are funding their current employees' future benefits and are on track to pay down any liabilities within 20 years.

The average employer contribution rate decreased from 12.9% in 2022 to 12.3% in 2023, primarily due to the recognition of investment earnings and payroll increases that were higher than assumed.

In 2023, nearly 40% of TCDRS' participating employers made additional contributions over the required amounts to prefund benefits, pay down liabilities faster or build up reserves within their plan. Each year, employers can adjust benefits and costs prospectively based on their local workforce needs and budgets. This level of flexibility and local control is unique among public pension plans.

Cash flow from deposits and contributions is slightly less than the amounts required to make benefit payments to retirees, withdrawals to former members and administrative expenses. Negative net cash flow is expected as the system matures. Investment returns and changes in employer plans also affect annual cash flow and the change in net position.

To help better understand TCDRS' financial strength, the recent history of net investment income, contributions and deposits, benefit payments and administrative costs is shown in the Statistical Section of this report, which begins on page 81. Information on funding progress for all employers as a group is in the Actuarial Section within Table 6: Funding Progress (see page 71).



## MANAGEMENT RESPONSIBILITY FOR FINANCIAL REPORTING

This report fulfills the requirements established by the Texas Government Code for public retirement systems to publish an annual financial report. TCDRS management is responsible for the accuracy of the data, as well as the completeness and fairness of its presentation, within this report.

The financial statements have been prepared in accordance with the principles of governmental accounting and reporting as set forth by the Governmental Accounting Standards Board (GASB).

We have implemented a comprehensive framework of internal controls to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Internal controls also provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. The concept of reasonable assurance recognizes that first, the cost of a control should not exceed the benefits likely to be derived; second, the valuation of the cost and benefits requires estimates and judgments by management.

KPMG LLP, Certified Public Accountants, has issued an unmodified ("clean") opinion on TCDRS' financial statements for the year ended Dec. 31, 2023. The independent auditor's opinion is located at the front of the Financial Section of this report (see page 20).

Immediately following the independent auditor's opinion, Management's Discussion and Analysis

(MD&A) provides a narrative introduction, overview and analysis of the basic financial statements. The MD&A complements the Letter of Transmittal and should be read in conjunction with it.

## AWARDS AND ACKNOWLEDGMENTS

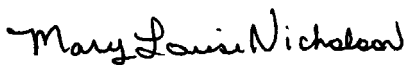
For the 31st consecutive year, TCDRS proudly accepted a Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association of the United States and Canada (GFOA) for the fiscal year ended Dec. 31, 2022. This prestigious award recognizes legible and efficiently organized annual comprehensive financial reports that satisfy accepted accounting principles and applicable legal requirements.

For 2023, TCDRS also received the Public Pension Coordinating Council's (PPCC) Public Pension Standards Award for the 21st consecutive year. This award recognizes systems that meet professional standards for plan funding and administration.

## SUMMARY

At TCDRS, we are proud to partner with Texas counties and districts to provide meaningful retirement, disability and survivor benefits to hardworking Texans. By keeping our eyes on the horizon, we work to ensure TCDRS' success for the future. We thank everyone who has helped to make TCDRS a model for retirement and a benefit that can be counted on by so many Texans.

Sincerely,



Mary Louise Nicholson  
Chair

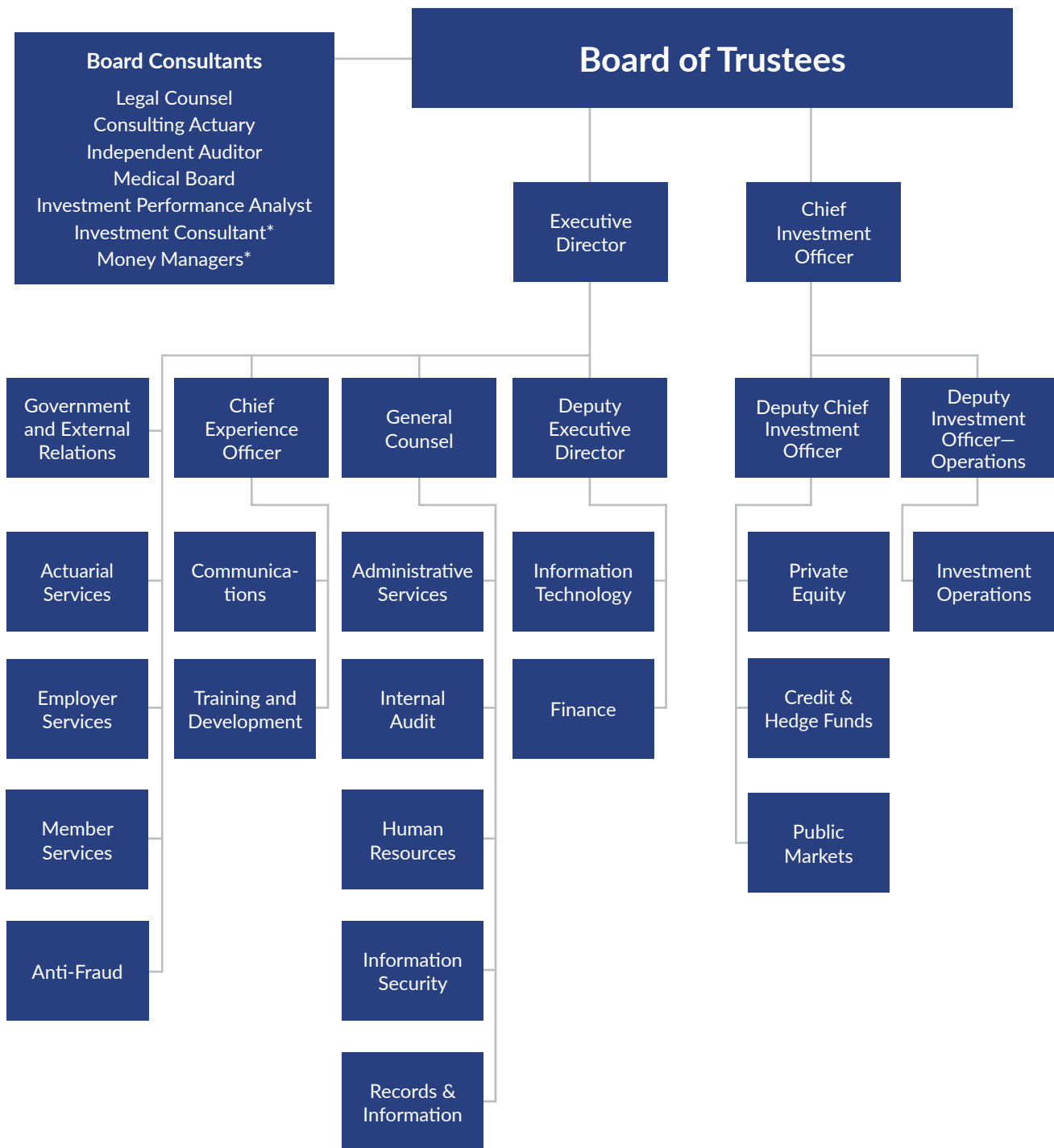


Amy Bishop  
Executive Director



Casey Wolf  
Chief Investment Officer

# ORGANIZATION CHART



\* For information regarding investment professionals' fees, see Tables 8–9 on pages 59–60 in the Investment Section.





Standing (l to r): Sammy Farias, Holly Williamson, Chris Taylor, Mary Louise Nicholson, Kara Sands, Chris Davis  
Seated (l to r): Susan Fletcher, Deborah Hunt, Tammy Biggar

### CHAIR

**Mary Louise Nicholson**  
Tarrant County Clerk  
Term expires Dec. 31, 2029

### VICE-CHAIR

**Deborah Hunt**  
Williamson County Tax  
Assessor-Collector (retired)  
Term expires Dec. 31, 2027

### Tammy Biggar

Fannin County Clerk  
Term expires Dec. 31, 2025

### Chris Davis

Cherokee County Judge  
Term expires Dec. 31, 2027

### Sammy Farias

Bee County Commissioner  
Term expires Dec. 31, 2027

### Susan Fletcher

Collin County Commissioner  
Term expires Dec. 31, 2029

### Kara Sands

Nueces County Clerk  
Term expires Dec. 31, 2023

### Chris Taylor

District Judge, 48th Judicial  
District—Tarrant County  
Term expires Dec. 31, 2025

### Holly Williamson

Harris County  
Justice of the Peace  
Term expires Dec. 31, 2025

## EXECUTIVE STAFF AND PROFESSIONAL ADVISORS

### INVESTMENT STAFF



**Casey Wolf**  
Chief Investment Officer



**Sandra Bragg**  
Deputy Investment  
Officer – Operations



**Jon Shoen**  
Deputy Chief  
Investment Officer

### ADMINISTRATIVE STAFF



**Amy Bishop**  
Executive Director



**Karen Correa**  
Deputy Executive  
Director



**Ann McGeehan**  
General Counsel

### PROFESSIONAL ADVISORS

#### Investment Counsel

Vinson & Elkins LLP  
Bradshaw & Bickerton PLLC  
DLA Piper LLP  
Reed Smith LLP  
Foster Garvey P.C.  
Chapman & Cutler LLP  
Norton Rose Fulbright US LLP

#### Consulting Actuary

Milliman, Inc.

#### Investment Performance Analyst

Bank of New York Mellon

#### Investment Consultant

Cliffwater LLC

#### Independent Auditor

KPMG LLP

#### Fiduciary & Benefit Plan Administration Counsel

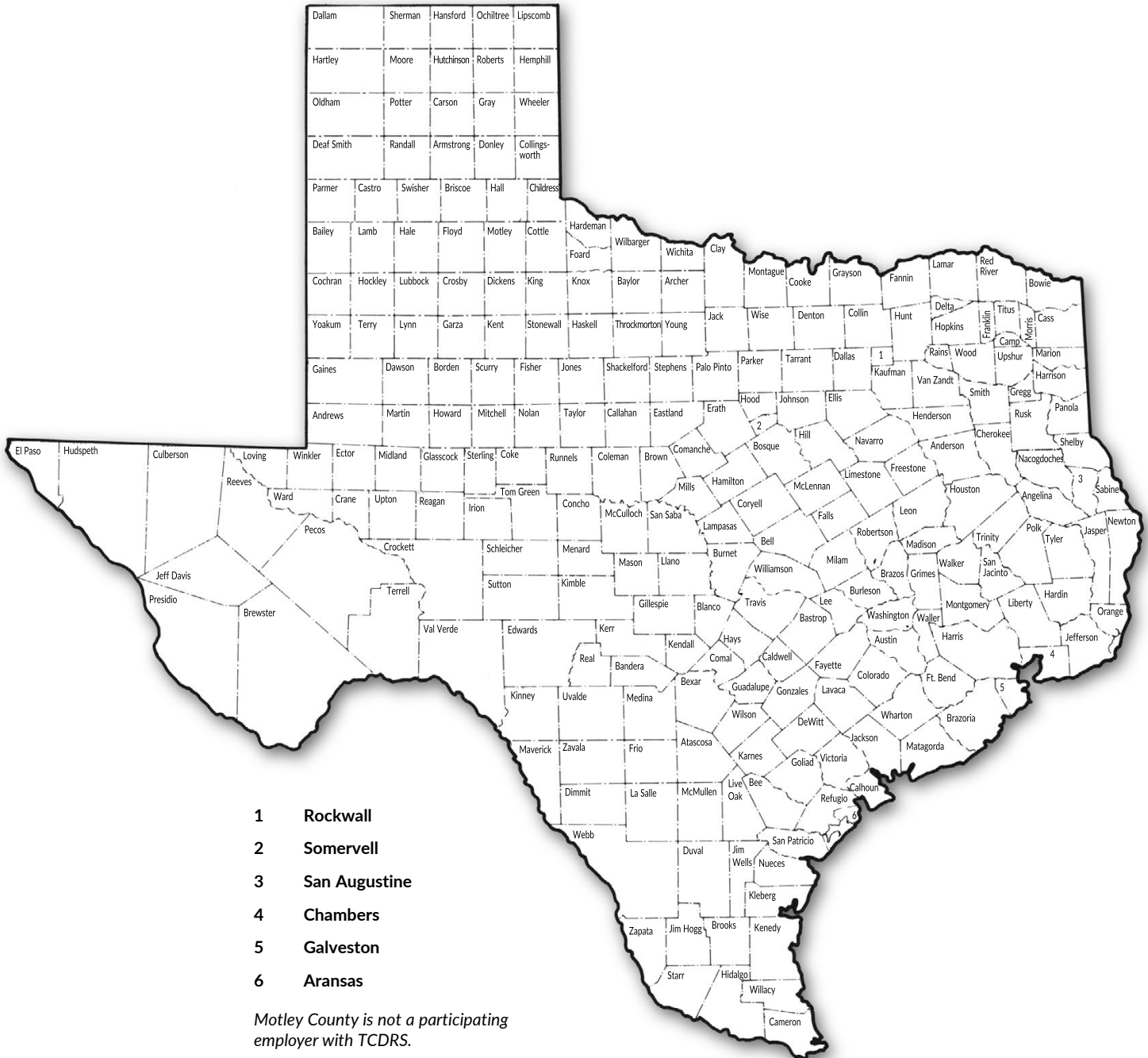
Jackson Walker LLP

#### Medical Board

Ace Alsup, M.D., Chairman  
Shelby H. Carter, M.D.  
Frank E. Robinson, M.D.



# PARTICIPATING COUNTIES AND DISTRICTS As of Dec. 31, 2023



## PARTICIPATING COUNTIES AND DISTRICTS As of Dec. 31, 2023

### A

Acton Municipal Utility District  
 Agua Poquita Soil and Water Conservation District  
 Agua Special Utility District  
 Alamo Area Council of Governments  
 Alliance Regional Water Authority  
 Anderson County  
 Anderson County Central Appraisal District  
 Andrews County  
 Andrews County Appraisal District  
 Angelina & Neches River Authority  
 Angelina and Nacogdoches Counties WC & ID #1  
 Angelina County  
 Angelina County Appraisal District  
 Angleton Drainage District  
 Aquilla Water Supply District – Hill County  
 Aransas County  
 Aransas County Appraisal District  
 Aransas County Navigation District  
 Archer County  
 Archer County Appraisal District  
 Ark-Tex Council of Governments  
 Armstrong County  
 Armstrong County Appraisal District  
 Atascosa Central Appraisal District  
 Atascosa County  
 Athens Municipal Water Authority  
 Austin County  
 Austin County Appraisal District  
 Austin County Emergency Communications District  
 Austin County Emergency Services District #2

### B

Bacliff Municipal Utility District  
 Bailey County  
 Ballinger Memorial Hospital District  
 Bandera County  
 Bastrop Central Appraisal District  
 Bastrop County  
 Bastrop County Emergency Services District #1  
 Bastrop County Emergency Services District #2  
 Bastrop County Water Control and Improvement District 2  
 Bastrop Travis Counties Emergency Services District #1  
 Baylor County  
 Baylor County Appraisal District  
 Bayview Irrigation District #11  
 Bayview Municipal Utility District  
 Bee County  
 Bee County Appraisal District  
 Bell County  
 Bell County Appraisal District  
 Bell County Public Health District  
 Bell County Water Control and Improvement District #1  
 Bell County Water Control and Improvement District 3  
 Benbrook Water Authority  
 Bexar Appraisal District  
 Bexar County  
 Bexar County Emergency Service District 5  
 Bexar County Emergency Service District No.2  
 Bexar County Emergency Services District #10  
 Bexar County Emergency Services District #12  
 Bexar County Emergency Services District #6  
 Bexar County Emergency Services District 7  
 Bexar County Emergency Services District No. 11

Bexar County Emergency Services District No. 8  
 Bexar County Water Control and Improvement District #10  
 Bexar Metro 9-1-1 Network District  
 Bexar-Medina-Atascosa WCID #1  
 Bistone Municipal Water Supply District – Limestone County  
 Blanco County  
 Blanco County Emergency Services District No. 2  
 Bluebonnet Groundwater Conservation District  
 Borden County  
 Borden County Appraisal District  
 Bosque County  
 Bosque County Central Appraisal District  
 Bowie County  
 Brazoria County  
 Brazoria County Appraisal District  
 Brazoria County Conservation and Reclamation District #3  
 Brazoria County Drainage District #4  
 Brazoria County Drainage District #5  
 Brazoria County Emergency Services District No. 3  
 Brazos Central Appraisal District  
 Brazos County  
 Brazos County Emergency Communications District  
 Brazos County Emergency Services District #2  
 Brazos Regional Public Utility Agency  
 Brazos River Authority  
 Brazos Transit District  
 Brazos Valley Council of Governments  
 Brazos Valley Groundwater Conservation District  
 Brewster County  
 Brewster County Appraisal District  
 Bright Star-Salem Special Utility District  
 Briscoe County  
 Briscoe County Appraisal District  
 Brookeland Fresh Water Supply District  
 Brookesmith Special Utility District  
 Brooks County  
 Brookshire - Katy Drainage District  
 Brookshire Municipal Water District  
 Brown County  
 Brownsville Irrigation District  
 Brush Country Groundwater Conservation District  
 Brushy Creek Municipal Utility District – Williamson County  
 Burleson County  
 Burleson County Appraisal District  
 Burnet Central Appraisal District  
 Burnet County

### C

Caldwell County  
 Caldwell County Appraisal District  
 Calhoun County  
 Calhoun County Appraisal District  
 Calhoun County E911 Emergency Communications District  
 Callahan County  
 Callahan County Appraisal District  
 Cameron County  
 Cameron County Appraisal District  
 Cameron County Drainage District #1  
 Cameron County Drainage District #3  
 Cameron County Drainage District #5  
 Cameron County Emergency Communication District  
 Cameron County Irrigation District #2  
 Cameron County Irrigation District #6

Cameron County Regional Mobility Authority  
 Camp Central Appraisal District  
 Camp County  
 Caney Creek Municipal Utility District  
 Canyon Lake Community Library District  
 Canyon Regional Water Authority  
 Carson County  
 Cass County  
 Cass County Appraisal District  
 Castro County  
 Central Appraisal District of Bandera County  
 Central Appraisal District of Johnson County  
 Central Appraisal District of Taylor County  
 Central Texas Council of Governments  
 Central Texas Groundwater Conservation District  
 Central Texas Regional Mobility Authority  
 Central Water Control and Improvement District – Angelina County  
 Chambers County  
 Chambers County Appraisal District  
 Chambers County Public Hospital District  
 Chambers-Liberty Counties Navigation District  
 Cherokee County  
 Childress County  
 Childress County Appraisal District  
 Childress County Hospital District  
 Childress Housing Authority  
 Chillicothe Hospital District  
 Clay County  
 Clay County Appraisal District  
 Coastal Bend Groundwater Conservation District  
 Coastal Plains Groundwater Conservation District  
 Cochran County  
 Cochran County Appraisal District  
 Coke Central Appraisal District  
 Coke County  
 Coke County Soil and Water Conservation District #219  
 Coleman County  
 Collin County  
 Collin County Central Appraisal District  
 Collingsworth County  
 Collingsworth County Appraisal District  
 Colorado County  
 Comal Appraisal District  
 Comal County  
 Comal County Emergency Services District #3  
 Comanche Central Appraisal District  
 Comanche County  
 Combined Consumers Special Utility District  
 Concho Central Appraisal District  
 Concho County  
 Concho County Hospital District  
 Concho Valley Council of Governments  
 Cooke County  
 Cooke County Appraisal District  
 Corpus Christi Downtown Management District  
 Coryell County  
 Cottle County  
 County Line Special Utility District  
 Cow Creek Groundwater Conservation District  
 Crane County  
 Crane County Appraisal District  
 Crane County Hospital District  
 Crockett County  
 Crockett County Appraisal District  
 Crockett County Water Control and Improvement District #1



Crosby County  
Crosby County Appraisal District  
Crosby Municipal Utility District  
Cross Roads Special Utility District  
Crystal Clear Special Utility District  
Culberson County  
Cypress Springs Special Utility District

## D

Dallam County  
Dallam County Appraisal District  
Dallas Central Appraisal District  
Dallas County  
Dallas County Park Cities Municipal Utility District  
Dawson County  
Dawson County Central Appraisal District  
Deaf Smith County  
Deaf Smith County Hospital District  
Deep East Texas Council of Governments  
Delta County  
Delta County Appraisal District  
Delta County Municipal Utility District  
Delta Lake Irrigation District  
Denco Area 9-1-1 District — Denton County  
Denton Central Appraisal District  
Denton County  
Denton County Emergency Services District #1  
Denton County Transportation Authority  
DeWitt County  
DeWitt County Appraisal District  
Dickens County  
Dickens County Appraisal District  
Dimmit County  
Donley County  
Duval County  
Duval County Appraisal District  
Duval County Groundwater Conservation District

## E

East Central Special Utility District  
East Fork Special Utility District  
East Harris County Emergency Services Joint Powers Board  
East Medina County Special Utility District  
East Texas Council of Governments  
East Texas Municipal Utility District of Smith County  
Eastland County  
Eastland County Appraisal District  
Ector County  
Ector County Appraisal District  
Ector County Hospital District  
Edwards Aquifer Authority — Bexar County  
Edwards Central Appraisal District  
Edwards County  
El Paso Central Appraisal District  
El Paso County  
El Paso County 9-1-1 District  
El Paso County Emergency Services District #1  
El Paso County Emergency Services District #2  
El Paso County Hospital District  
El Paso County Water Improvement District No. 1  
El Paso Mental Health and Mental Retardation  
Electra Housing Authority  
Ellis Appraisal District  
Ellis County  
Elm Ridge Water Control and Improvement District of Denton County  
Emerald Bay Municipal Utility District

Emergency Communication District of Ector County  
Erath County  
Erath County Appraisal District

## F

Falls County  
Falls County Appraisal District  
Fannin Central Appraisal District  
Fannin County  
Fayette County  
Fern Bluff Municipal Utility District  
Fisher County  
Fisher County Appraisal District  
Fisher County Hospital District  
Floyd County  
Foard County  
Foard County Appraisal District  
Fort Bend Central Appraisal District  
Fort Bend County  
Fort Bend County Emergency Services District #4  
Fort Bend County Emergency Services District #7  
Fort Bend County Emergency Services District 2  
Fort Bend County Water Control and Improvement District #2  
Fort Clark Municipal Utility District  
Fort Griffin Special Utility District  
Four Way Special Utility District  
Franklin County  
Freer Water Control & Improvement District  
Freestone County  
Freestone County Appraisal District  
Frio County  
Frio County Appraisal District  
Frognot Special Utility District

## G

Gaines County  
Gaines County Appraisal District  
Galveston Central Appraisal District  
Galveston County  
Galveston County Consolidated Drainage District  
Galveston County Drainage District #1  
Galveston County Drainage District #2  
Galveston County Emergency Communication Dist  
Galveston County Fresh Water Supply District #6  
Galveston County Health District  
Galveston County Water Control & Improvement District No. 8  
Galveston County Water Control and Improvement District #1  
Garza Central Appraisal District  
Garza County  
Garza County Health Care District  
Gillespie Central Appraisal District  
Gillespie County  
Gillespie County Soil and Water Conservation District  
Glasscock County  
Glasscock County Appraisal District  
Goliad County  
Gonzales Central Appraisal District  
Gonzales County  
Gonzales County Emergency Services District #1  
Graham Regional Medical Center  
Gray County  
Gray County Appraisal District  
Grayson Central Appraisal District  
Grayson County  
Greater Harris County 9-1-1 Emergency Network

Greenbelt Municipal & Industrial Water Authority — Donley County  
Gregg County  
Grimes County  
Grimes County Appraisal District  
Guadalupe Appraisal District  
Guadalupe County  
Guadalupe County Groundwater Conservation District  
Guadalupe-Blanco River Authority  
Gulf Coast Protection District  
Gulf Coast Water Authority — Galveston County

## H

Hale County  
Hale County Appraisal District  
Hall County  
Hall County Appraisal District  
Hamilton County  
Hamilton County Appraisal District  
Hansford County  
Hansford County Hospital District  
Hardeman County  
Hardin County  
Hardin County Appraisal District  
Hardin County Emergency Services District # 2  
Harlingen Irrigation District Cameron County #1  
Harris Central Appraisal District  
Harris County  
Harris County Emergency Services District #21  
Harris County Emergency Services District #24  
Harris County Emergency Services District #29  
Harris County Emergency Services District #3  
Harris County Emergency Services District #48  
Harris County Emergency Services District #50  
Harris County Emergency Services District #7  
Harris County Emergency Services District 10  
Harris County Emergency Services District 12  
Harris County Emergency Services District 17  
Harris County Emergency Services District 9  
Harris County Emergency Services District No. 6  
Harris County Emergency Services District No. 11  
Harris County Emergency Services District No. 13  
Harris County Emergency Services District No. 16  
Harris County Emergency Services District No. 4  
Harris County Emergency Services District No. 46  
Harris County Emergency Services District No. 8  
Harris County Fresh Water Supply District 6  
Harris County Fresh Water Supply District 61  
Harris County Fresh Water Supply District No. 51  
Harris County Housing Authority  
Harris County Sports & Convention Corporation  
Harris County Water Control and Improvement District #1  
Harris County Water Control and Improvement District #36  
Harris County Water Control and Improvement District #50  
Harris Fort Bend Emergency Services District #100  
Harrison County  
Hartley County  
Hartley County Appraisal District  
Haskell County  
Haskell Memorial Hospital District  
Hays County  
Hays County Emergency Services District #4  
Hays County Emergency Services District #5  
Hays County Emergency Services District #6  
Hays County Emergency Services District #8

## PARTICIPATING COUNTIES AND DISTRICTS As of Dec. 31, 2023

Hays County Emergency Services District No. 3  
Heart of Texas Council of Governments  
Hemphill County  
Hemphill County Appraisal District  
Hemphill County Hospital District  
Hemphill County Underground Water Conservation District  
Henderson County  
Henderson County 9-1-1 Communications District  
Henderson County Appraisal District  
Hickory Creek Special Utility District  
Hidalgo and Cameron Counties Irrigation District #9  
Hidalgo County  
Hidalgo County Appraisal District  
Hidalgo County Drainage District #1  
Hidalgo County Irrigation District #1  
Hidalgo County Irrigation District #2  
Hidalgo County Irrigation District #6  
Hidalgo Municipal Utility District #1  
High Plains Underground Water Conservation District # 1  
High Point Special Utility District  
Hill County  
Hockley County  
Hockley County Appraisal District  
Hood Central Appraisal District  
Hood County  
Hopkins County  
Hopkins County Appraisal District  
Housing Authority of Starr County  
Housing Authority of the City of Edinburg Texas  
Housing Authority of the City of Kirbyville  
Housing Authority of the City of Knox City  
Housing Authority of the City of Mercedes Texas  
Housing Authority of the City of Mission  
Housing Authority of the City of Munday  
Housing Authority of Travis County  
Houston County  
Houston County Appraisal District  
Howard Central Appraisal District  
Howard County  
Hudspeth County  
Hunt County  
Hunt County Appraisal District  
Hurst Creek Municipal Utility District  
Hutchinson County  
Hutchinson County Appraisal District

### I

Iraan General Hospital District  
Irion County  
Irion County Appraisal District

### J

Jack County  
Jack County Appraisal District  
Jackson County  
Jackson County Appraisal District  
Jackson County County-Wide Drainage District  
Jackson County Emergency Services District No. 3  
Jasper County  
Jasper County Appraisal District  
Jasper County Water Control and Improvement District #1  
Jeff Davis County  
Jefferson Central Appraisal District  
Jefferson County  
Jefferson County Drainage District #3  
Jefferson County Drainage District #6

Jefferson County Drainage District #7  
Jefferson County Water Control and Improvement District #10  
Jim Hogg County  
Jim Hogg County Appraisal District  
Jim Hogg County Water Control and Improvement District #2  
Jim Wells County  
Johnson County  
Johnson County Emergency Services District #1  
Jonah Water Special Utility District  
Jones County  
Jones County Appraisal District

### K

Karnes County  
Karnes County Appraisal District  
Karnes County Hospital District  
Kaufman County  
Kaufman County Appraisal District  
Kendall Appraisal District  
Kendall County  
Kendall County Water Control and Improvement District #1  
Kenedy County  
Kenedy County Central Appraisal District  
Kenedy County Fire & Emergency Services District No. 1  
Kent County  
Kent County Tax Appraisal District  
Kerr County  
Kerr County Soil and Water Conservation District  
Kerr Emergency 9-1-1 Network  
Kimble Central Appraisal District  
Kimble County  
King County  
King County Appraisal District  
Kinney County  
Kinney County Appraisal District  
Kleberg County  
Knox County

### L

La Salle County  
Laguna Madre Water District - Cameron County  
Lake Cities Municipal Utility Authority  
Lake Fork Special Utility District  
Lake Kiowa Special Utility District  
Lakeway Municipal Utility District – Travis County  
Lamar County  
Lamar County Appraisal District  
Lamb County  
Lampasas Central Appraisal District  
Lampasas County  
LaSalle County Appraisal District  
Lavaca - Navidad River Authority – Jackson County  
Lavaca County  
Lee Central Appraisal District  
Lee County  
Leon County  
Leon County Central Appraisal District  
Liberty County  
Liberty County Central Appraisal District  
Limestone County  
Limestone County Appraisal District  
Lipscomb County  
Live Oak County  
Live Oak County Appraisal District  
Llano Central Appraisal District

Llano County  
Loving County  
Loving County Appraisal District  
Lower Trinity Groundwater Conservation District  
Lower Valley Water District  
Lubbock Central Appraisal District  
Lubbock County  
Lubbock County Water Control and Improvement District #1  
Lubbock Emergency Communication District  
Lubbock Reese Redevelopment Authority  
Lumberton Municipal Utility District  
Lynn County  
Lynn County Appraisal District  
Lynn County Hospital District

### M

Macedonia - Eylau Municipal Utility District – Bowie County  
Mackenzie Municipal Water Authority – Briscoe County  
Madison County  
Madison County Appraisal District  
Marion County  
Marion County Appraisal District  
Marion-Cass Soil and Water Conservation District  
Marshall-Harrison County Health District  
Martin County  
Martin County Appraisal District  
Mason County  
Mason County Soil & Water Conservation District #223  
Matagorda County  
Matagorda County Appraisal District  
Matagorda County Drainage District  
Matagorda County Hospital District  
Matagorda County Navigation District #1  
Maverick County  
Maverick County Hospital District  
Maverick County Water Control and Improvement District #1  
McCamey County Hospital District  
McCulloch County  
McCulloch County Appraisal District  
McLennan County  
McLennan County 9-1-1 Emergency Assistance District  
McLennan County Appraisal District  
McLennan County Water Control and Improvement District #2  
McMullen Central Appraisal District  
McMullen County  
Medical Arts Hospital – Dawson County  
Medina County  
Medina County 911 District  
Medina County Appraisal District  
Medina County Emergency Services District #1  
Memorial Medical Center – Calhoun County  
Memorial Villages Water Authority  
Menard County  
Menard County Hospital District  
Menard County Underground Water District  
Mesa Underground Water Conservation District  
Middle Rio Grande Development Council  
Midland Central Appraisal District  
Midland County  
Midland Emergency Communication District  
Milam Appraisal District  
Milam County



Mills Central Appraisal District  
Mills County  
Mitchell County  
Mitchell County Appraisal District  
Monahans Housing Authority  
Montague County  
Montague County Tax Appraisal District  
Montgomery Central Appraisal District  
Montgomery County  
Montgomery County Emergency Communication District  
Montgomery County Emergency Service District No. 3  
Montgomery County Emergency Services District #4  
Montgomery County Emergency Services District #8  
Montgomery County Emergency Services District 7  
Montgomery County Emergency Services District 9  
Montgomery County Emergency Services District No. 10  
Montgomery County ESD 1  
Montgomery County Hospital District  
Montgomery County Housing Authority  
Moore County  
Moore County Appraisal District  
Moore County Hospital District  
Morris County  
Morris County Appraisal District  
Mustang Special Utility District

## N

Nacogdoches Central Appraisal District  
Nacogdoches County  
Navarro Central Appraisal District  
Navarro County  
Newton Central Appraisal District  
Newton County  
Nolan County  
Nortex Regional Planning Commission  
North Blanco County Emergency Services District No. 1  
North Central Texas Municipal Water Authority  
North East Texas Regional Mobility Authority  
North Hunt Special Utility District  
North Plains Groundwater Conservation District  
North Texas Emergency Communication Center  
North Texas Tollway Authority  
Northeast Gaines County Emergency Services District #1  
Northeast Texas Municipal Water District  
Northeast Texas Public Health District  
Northern Trinity Groundwater Conservation District  
Nueces County  
Nueces County Appraisal District  
Nueces County Drainage District #2  
Nueces County Emergency Services District #1  
Nueces County Emergency Services District #2  
Nueces County Water Control and Improvement District #3  
Nueces County Water Control and Improvement District #4

## O

Ochiltree County  
Ochiltree County Appraisal District  
Oldham County  
Oldham County Appraisal District  
Orange County  
Orange County Appraisal District  
Orange County Drainage District

Orange County Emergency Services District # 1  
Orange County Emergency Services District #2  
Orange County Navigation and Port District  
Orange County Water Control and Improvement District #1

## P

Palo Duro Water District  
Palo Pinto Appraisal District  
Palo Pinto County  
Panola County  
Parker County  
Parker County Appraisal District  
Parker County Emergency Services District No. 1  
Parker County Hospital District  
Parker County Special Utility District  
Parmer County  
Parmer County Appraisal District  
Pecan Valley Groundwater Conservation District  
Pecos County  
Pecos County Appraisal District  
Pecos County Water Control & Improvement District #1  
Permian Basin Regional Planning Commission  
Permian Regional Medical Center  
Pineywoods Groundwater Conservation District  
Polk Central Appraisal District  
Polk County  
Polk County Fresh Water Supply District #2  
Port of Bay City Authority  
Port of Beaumont Navigation District  
Port of Corpus Christi Authority  
Port of Port Arthur Navigation District  
Post Oak Savannah Groundwater Conservation District  
Potter - Randall County Emergency Communication District  
Potter County  
Prairielands Groundwater Conservation District  
Presidio Appraisal District  
Presidio County

## R

Rains County  
Rains County Appraisal District  
Randall County  
Randall County Appraisal District  
Rankin County Hospital District – Upton County  
Rayburn Country Municipal Utility District  
Reagan County  
Reagan Hospital District  
Real County  
Real County Appraisal District  
Red Bluff Water Power Control District – Reeves County  
Red River Appraisal District  
Red River Authority  
Red River County  
Red River County Soil and Water Conservation District  
Reeves County  
Reeves County Appraisal District  
Reeves County Emergency Service District No. 1  
Reeves County Emergency Service District No. 2  
Reeves County Hospital District  
Refugio County  
Refugio County Drainage District #1  
Refugio County Water Control & Improvement District #1

Regional Public Defender Office Local Government Corporation  
Rio Grande Council of Governments  
Riverside Special Utility District  
Roberts County  
Robertson County  
Robertson County Appraisal District  
Robertson County Emergency Services District  
Rockwall Central Appraisal District  
Rockwall County  
Runnels County  
Rusk County  
Rusk County Appraisal District  
Rusk County Groundwater Conservation District

## S

Sabine County  
Sabine County Appraisal District  
Sabine Pass Port Authority  
Sabine-Neches Navigation District of Jefferson County Texas  
San Augustine County  
San Jacinto County  
San Jacinto County Central Appraisal District  
San Jacinto County Emergency Services District  
San Jacinto Special Utility District  
San Marcos Housing Authority  
San Patricio County  
San Patricio County Appraisal District  
San Patricio County Drainage District  
San Patricio County Navigation District #1  
San Patricio Municipal Water District  
San Saba County  
Santo Special Utility District  
Schleicher County  
Schleicher County Hospital District  
Scurry County  
Scurry County Appraisal District  
Scurry County Hospital District  
Seis Lagos Utility District  
Shackelford County  
Shackelford County Appraisal District  
Shelby County  
Shelby County Appraisal District  
Sherman County  
Sherman County Appraisal District  
Smith County  
Smith County 9-1-1 Communications District  
Smith County Appraisal District  
Smith County Emergency Services District #2  
Somervell County  
Somervell County Central Appraisal District  
Somervell County Water District  
South Plains Association of Governments  
South Rains Special Utility District  
South Texas Development Council  
Southeast Texas Groundwater Conservation District  
Southwest Fannin Special Utility District  
STAR Transit  
Starr County  
Starr County Appraisal District  
Stephens County  
Stephens County Tax Appraisal District  
Sterling County  
Sterling County Appraisal District  
Stonewall County  
Stonewall County Appraisal District  
Stonewall Memorial Hospital District

## PARTICIPATING COUNTIES AND DISTRICTS As of Dec. 31, 2023

Stratford Hospital District — Sherman County  
Sutton County  
Sutton County Hospital District  
Swisher County  
Swisher County Appraisal District

### T

Talty Special Utility District  
Tarrant Appraisal District  
Tarrant Co 9-1-1 Emergency Assistance District  
Tarrant County  
Tax Appraisal District of Cottle County  
Taylor County  
Terrell County  
Terrell County Water Control & Improvement District #1  
Terry County  
Terry Memorial Hospital District  
Texas Association of Counties  
Texas County & District Retirement System  
Texas Eastern 9-1-1 Network  
The City of Quanah Housing Authority  
The Housing Authority of the City of Abilene  
The Housing Authority of the City of Huntington  
The Housing Authority of the City of Pharr Texas  
The Housing Authority of the County of Hidalgo Texas  
Throckmorton Central Appraisal District  
Throckmorton County  
Titus County  
Titus County Appraisal District  
Titus County Fresh Water Supply District  
Tom Green County  
Travis Central Appraisal District  
Travis County  
Travis County Emergency Services District #1  
Travis County Emergency Services District #2  
Travis County Emergency Services District #5  
Travis County Emergency Services District #8  
Travis County Emergency Services District 12  
Travis County Emergency Services District No. 11  
Tri-County Special Utility District  
Trinity Bay Conservation District  
Trinity County  
Trinity County Appraisal District  
Trinity Glen Rose Groundwater Conservation District  
Trophy Club Municipal Utility District No 1  
Two Way Special Utility District  
Tyler County  
Tyler County Appraisal District

### U

United Irrigation District — Hidalgo County  
Upper Brushy Creek Water Control and Improvement District  
Upper Leon River Municipal Water District  
Upper Sabine Valley Solid Waste Management District  
Upper Trinity Groundwater Conservation District  
Upshur County  
Upton County  
Upton County Appraisal District  
Uvalde County  
Uvalde County Appraisal District

### V

Val Verde County  
Valley Municipal Utility District #2  
— Cameron County

Valwood Improvement Authority — Dallas County  
Van Zandt County  
Van Zandt County Appraisal District  
Velasco Drainage District — Brazoria County  
Verona Special Utility District  
Victoria County  
Victoria County Drainage District #3  
Victoria County Groundwater Conservation District

### W

Walker County  
Walker County Appraisal District  
Walker County Emergency Service District #2  
Walker County Special Utility District  
Waller County  
Waller County Appraisal District  
Waller-Harris County Emergency Services District 200  
Ward County  
Ward County Central Appraisal District  
Ward County Irrigation District No. 1  
Ward Memorial Hospital  
Washington County  
Webb County  
Webb County Appraisal District  
West Central Texas Council of Governments  
West Central Texas Municipal Water District  
West Jefferson County Municipal Water District  
West Nueces -Las Moras Soil and Water Conservation District #236  
West Travis County Public Utility Agency  
Wharton County  
Wharton County Central Appraisal District  
Wharton County Water Control and Improvement District #1  
Wharton County Water Control and Improvement District No. 2  
Wheeler County  
Wheeler County Appraisal District  
White River Municipal Water District  
— Dickens County  
Wichita Appraisal District  
Wichita County  
Wichita County Water Improvement District #2  
Wichita-Wilbarger 9-1-1 District  
Wickson Creek Special Utility District  
— Brazos County  
Wilbarger County  
Wilbarger County Appraisal District  
Wilbarger County Hospital District  
Willacy County  
Willacy County Appraisal District  
Willacy County Housing Authority  
Williamson Central Appraisal District  
Williamson County  
Williamson County Emergency Services District #3  
Williamson County Emergency Services District #5  
Williamson County Emergency Services District #7  
Williamson County Emergency Services District No. 4  
Wilson County  
Wilson County Appraisal District  
Wilson County Emergency Services District #1  
Wilson County Emergency Services District #3  
Wilson County Emergency Services District #4  
Winkler County  
Winkler County Appraisal District  
Winkler County Hospital District  
Wintergarden Groundwater Conservation District  
Wise County

Wise County Appraisal District  
Wood County  
Wood County Appraisal District  
Woodbine Special Utility District  
Wylie Northeast Special Utility District

### Y

Yoakum County  
Yoakum County Appraisal District  
Young Central Appraisal District  
Young County

### Z

Zapata County  
Zapata County Appraisal District  
Zapata Soil and Water Conservation District  
Zavala County  
Zavala County Appraisal District



# FINANCIAL

# 2



## DISCIPLINED FUNDING STRATEGY

TCDRS is responsibly funded. Our employers pay 100% of their required contribution rate each year. This ensures that funds are there when needed.

WILDFLOWER FIELD  
NEAR ENNIS, TEXAS





KPMG LLP  
Suite 1900  
111 Congress Avenue  
Austin, TX 78701-4091

## Independent Auditors' Report

The Board of Trustees  
Texas County & District Retirement System

### *Opinion*

We have audited the financial statements of Texas County & District Retirement System (TCDRS), as of and for the years ended December 31, 2023 and 2022, and the related notes to the financial statements, which collectively comprise TCDRS' basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of Texas County & District Retirement System as of December 31, 2023 and 2022, and the changes in its fiduciary net position for the years then ended in accordance with U.S. generally accepted accounting principles.

### *Basis for Opinion*

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of TCDRS and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### *Responsibilities of Management for the Financial Statements*

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about TCDRS' ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

### *Auditors' Responsibilities for the Audit of the Financial Statements*

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of TCDRS' internal control. Accordingly, no such opinion is expressed.

KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.





- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about TCDRS' ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

#### *Required Supplementary Information*

U.S. generally accepted accounting principles require that the Management's Discussion and Analysis and the Schedule of Money-Weighted Rates of Return be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### *Supplementary Information*

Our audit for the year ended December 31, 2023 was conducted for the purpose of forming an opinion on the financial statements that collectively comprise TCDRS' basic financial statements for the year ended December 31, 2023. The Other Supplementary Information – Changes in Fiduciary Net Position by Fund and Interfund Transfers, Changes in Endowment Fund, Changes in Income Fund, Administrative Revenues and Expenses, Investment Expenses, and Professional and Consulting Services for the year ended December 31, 2023 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements for the year ended December 31, 2023, and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the Other Supplementary Information – Changes in Fiduciary Net Position by Fund and Interfund Transfers, Changes in Endowment Fund, Changes in Income Fund, Administrative Revenues and Expenses, Investment Expenses, and Professional and Consulting Services are fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended December 31, 2023.

#### *Other Information*

Management is responsible for the other information included in the annual comprehensive financial report. The other information comprises the Introductory Section, the Investment Section, the Actuarial Section, and the Statistical Section, but does not include the basic financial statements and our auditors' report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audits of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

KPMG LLP

Austin, Texas  
June 4, 2024

MANAGEMENT’S DISCUSSION AND ANALYSIS

INTRODUCTION

This section provides an overview and analysis of the system’s financial position and performance, focusing on the current year’s results, changes in those results (including three-year trends), and other currently known information. Readers are encouraged to consider this information in conjunction with information provided in other areas of the Financial Section, as well as information presented in the Letter of Transmittal in the Introductory Section.

OVERVIEW OF THE FINANCIAL STATEMENTS

The basic financial statements consist of the Statements of Fiduciary Net Position, Statements of Changes in Fiduciary Net Position and the Notes to the Financial Statements. Required Supplementary Information and Other Supplementary Information are also presented.

- The Statements of Fiduciary Net Position report the assets less liabilities and the resulting net position restricted for pension or insurance benefits at the end of 2023, compared to 2022.
- The Statements of Changes in Fiduciary Net Position report the transactions that occurred during 2023 and 2022 for which additions less deductions equal the net increase or decrease in fiduciary net position.
- Notes to the Financial Statements include additional information not readily evident in the statements themselves. The notes are considered essential to a full understanding of the information provided in the financial statements.
- Required Supplementary Information provides the money-weighted rate of return information.
- Other Supplementary Information provides detailed information, including activity by fund, administrative and investment expenses, and professional and consultant fees and services. These schedules support summary data presented in the basic financial statements.

TCDRS operates two trusts, both of which are accounted for as fiduciary funds. The Pension Trust Fund accounts for and provides retirement, disability and survivor benefits to the employees of participating employers. The Group Term Life Fund (GTLF or Group Term Life) provides a program of group term life insurance for the employees and, if covered, retirees of electing employers. No assets of the Pension Trust Fund may be used to pay any insurance benefit due from the GTLF, nor

may assets of the GTLF be used to pay any benefit due from the Pension Trust Fund. Discussion and analysis is provided separately for each of the two trusts.

The Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position show financial information for both the Pension Trust Fund and the GTLF.

FINANCIAL ANALYSIS: PENSION TRUST FUND

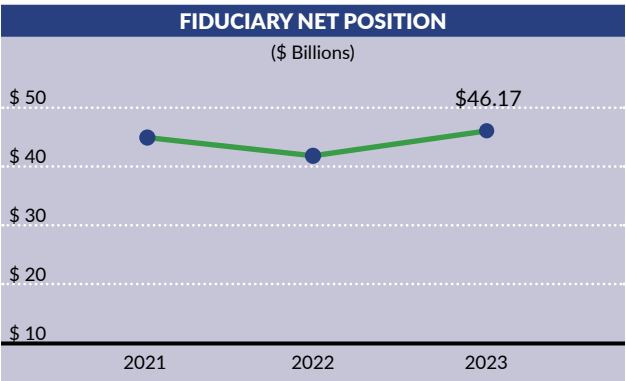
The Pension Trust Fund is comprised of six individual funds, each with a specific operational purpose. Note A in the Notes to the Financial Statements has additional information about each of these funds.

Summary information about fiduciary net position and the changes in fiduciary net position showing comparative detail for 2023, 2022 and 2021 is presented on page 23.

Net position (the amount that assets exceed liabilities) restricted for pensions at year end 2023 totaled \$46.17 billion. The 2022 amount was \$41.97 billion and for 2021 was \$44.89 billion. In 2023, the fiduciary net position increased by \$4.20 billion, in 2022 it decreased by \$2.92 billion, and in 2021 it increased by \$7.78 billion.

The increase in 2023 fiduciary net position was primarily due to a net investment gain of \$4.61 billion, an 11.1% overall return, net of all fees. Net investment results for 2023 consist of the appreciation in fair value of investments of \$4.43 billion, plus \$217 million in interest and dividends, net income from securities-lending activity of \$2.2 million, less \$43 million of investment activity expenses. Net investment loss in 2022 was \$2.60 billion and in 2021 was a gain of \$8.12 billion.

2023 was a strong year for investment markets with most major asset classes increasing in value.



# MANAGEMENT'S DISCUSSION AND ANALYSIS

## SUMMARY INFORMATION ABOUT FIDUCIARY NET POSITION

	Pension Trust Fund (\$ Millions)			2023 – 2022		2022 – 2021	
	Dec. 31,						
	2023	2022	2021	\$ Change	% Change	\$ Change	% Change
<b>Assets</b>							
Investments, at Fair Value	\$ 46,024	\$ 41,840	\$ 44,784	\$ 4,184	10.0%	\$ (2,944)	(6.6%)
Invested Securities-Lending Collateral	324	297	447	27	9.1	(150)	(33.6)
Receivables, Cash and Cash Equivalents, Other	215	202	179	13	6.4	23	12.8
Capital Assets, Net	25	15	15	10	66.7	0	0.0
<b>Total Assets</b>	<b>46,588</b>	<b>42,355</b>	<b>45,425</b>	<b>4,233</b>	<b>10.0</b>	<b>(3,070)</b>	<b>(6.8)</b>
<b>Liabilities</b>							
Securities-Lending Collateral	324	297	447	27	9.1	(150)	(33.6)
Other Liabilities	94	90	86	4	4.4	4	4.7
<b>Total Liabilities</b>	<b>418</b>	<b>386</b>	<b>533</b>	<b>32</b>	<b>8.3</b>	<b>(147)</b>	<b>(27.6)</b>
<b>Net Position Restricted for Benefits</b>	<b>\$ 46,170</b>	<b>\$ 41,969</b>	<b>\$ 44,892</b>	<b>\$ 4,201</b>	<b>10%</b>	<b>\$ (2,923)</b>	<b>(6.5%)</b>

Due to rounding, totals and detail may not equal. Percentages shown are based on rounded amounts and may differ slightly from actual.

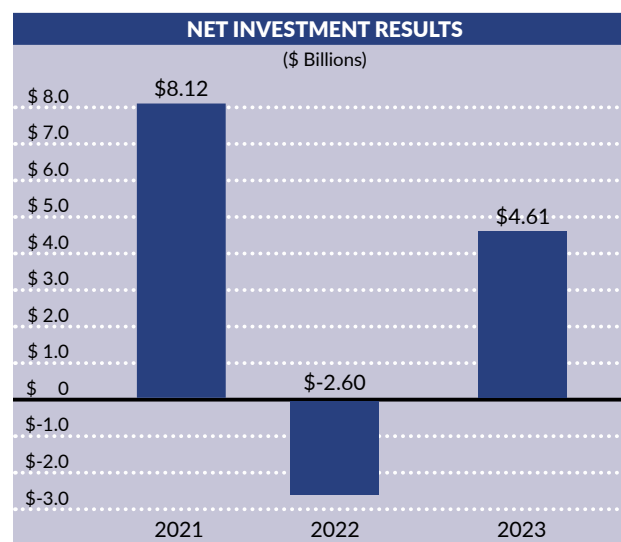
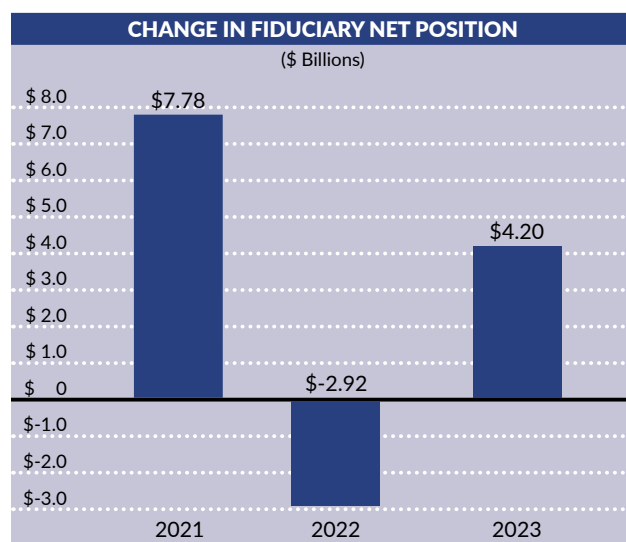
## SUMMARY INFORMATION ABOUT CHANGES IN FIDUCIARY NET POSITION

	Pension Trust Fund (\$ Millions)			2023 – 2022		2022 – 2021	
	Dec. 31,						
	2023	2022	2021	\$ Change	% Change	\$ Change	% Change
<b>Additions</b>							
Employee Deposits	\$ 636	\$ 588	\$ 550	\$ 48	8.2%	\$ 38	6.9%
Employer Contributions	1,253	1,200	1,073	53	4.4	127	11.8
Net Investment Results	4,611	(2,605)	8,117	7,216	277.0	(10,722)	(132.1)
Other Income	3	2	2	1	50.0	0	0.0
<b>Total Additions</b>	<b>6,502</b>	<b>(815)</b>	<b>9,742</b>	<b>7,317</b>	<b>897.8</b>	<b>(10,557)</b>	<b>(108.4)</b>
<b>Deductions</b>							
Benefits Paid	2,141	1,963	1,827	178	9.1	136	7.4
Withdrawals	129	116	103	13	11.2	13	12.6
Administrative Expenses	25	25	24	0	0.0	1	4.2
Other Expenses	5	5	5	0	0.0	0	0.0
<b>Total Deductions</b>	<b>2,300</b>	<b>2,109</b>	<b>1,959</b>	<b>191</b>	<b>9.1</b>	<b>150</b>	<b>7.7</b>
<b>Net Increase (Decrease) in Fiduciary Net Position</b>	<b>4,202</b>	<b>(2,924)</b>	<b>7,784</b>	<b>7,126</b>	<b>243.7</b>	<b>(10,708)</b>	<b>(137.6)</b>
<b>Net Position Restricted for Benefits</b>	<b>\$ 46,170</b>	<b>\$ 41,969</b>	<b>\$ 44,892</b>	<b>\$ 4,201</b>	<b>10.0%</b>	<b>\$ (2,923)</b>	<b>(6.5%)</b>

Due to rounding, totals and detail may not equal. Percentages shown are based on rounded amounts and may differ slightly from actual.



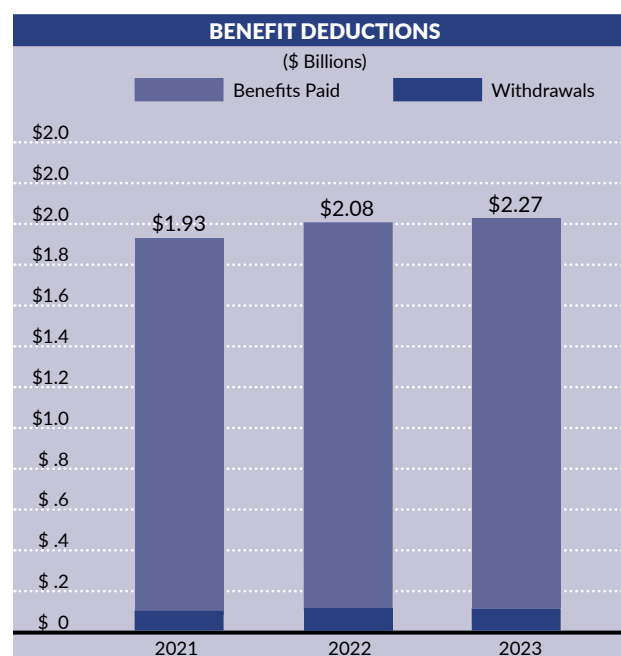
## MANAGEMENT'S DISCUSSION AND ANALYSIS



The strong returns in 2023 were coming off a very weak year for most investments in 2022. The large tech companies based in the United States did exceptionally well and drove returns to start the year. Later in the year, interest rates stabilized, and many expected interest rates would start to fall in early 2024. This triggered another very strong rise in equity/stock markets across the globe and set the stage for the overall strong performance to end 2023. The results from investing activities for all asset classes, net of all fees, are presented on page 57.

Additions to fiduciary net position in 2023 included \$636 million in employee deposits and \$1.25 billion in employer contributions. Employee deposits increased \$48 million and employer contributions rose \$53 million over 2022 amounts. In 2022, employee deposits increased by \$38 million and employer contributions rose by \$127 million. Together, employee deposits and employer contributions increased during 2023 by 5.6% and in 2022 by 10.2% over the previous year's amounts.

Deductions for benefits paid and withdrawals for 2023 were \$2.27 billion, a 9.2% increase over the previous year. These deductions for 2022 were \$2.08 billion, a 7.8% increase over 2021, and in 2021, these deductions were \$1.93 billion, a 9.5% increase over 2020. Higher deductions in 2023 and 2022 were due to several factors, including increases in the number of retiree and beneficiary accounts in 2023 (a 4.0% increase) and in 2022 (a 4.9% increase) along with higher average benefits. Withdrawals increased by \$13 million in 2023 and increased by \$13 million in 2022.



### OTHER CURRENTLY KNOWN INFORMATION: PENSION TRUST FUND

TCDRS' investment return for 2023 was 11.1% net of fees, which trailed its benchmark return of 11.3% by 0.2%.

### FINANCIAL ANALYSIS: GROUP TERM LIFE FUND (GTLF)

The GTLF provides an optional program of group term life insurance for the employees and, if covered, retirees of electing employers. An actuarial valuation is performed annually to determine employers' premium rates and to maintain adequate

## MANAGEMENT'S DISCUSSION AND ANALYSIS

### SUMMARY INFORMATION ABOUT FIDUCIARY NET POSITION

Group Term Life Fund							
	Dec. 31,			2023 - 2022		2022 - 2021	
	2023	2022	2021	\$ Change	% Change	\$ Change	% Change
Total Assets	\$ 49,636,138	\$ 47,310,752	\$ 44,625,324	\$ 2,325,386	4.9%	\$ 2,685,428	6.0%
Total Liabilities	1,173,726	983,716	1,033,943	190,010	19.3	(50,227)	(4.9)
<b>Net Position Restricted for Benefits</b>	<b>\$ 48,462,412</b>	<b>\$ 46,327,036</b>	<b>\$ 43,591,381</b>	<b>\$ 2,135,376</b>	<b>4.6%</b>	<b>\$ 2,735,655</b>	<b>6.3%</b>

### SUMMARY INFORMATION ABOUT CHANGES IN FIDUCIARY NET POSITION

Group Term Life Fund							
	Dec. 31,			2023 - 2022		2022 - 2021	
	2023	2022	2021	\$ Change	% Change	\$ Change	% Change
<b>Additions</b>							
Employer Premiums	\$ 4,246,146	\$ 4,967,995	\$ 4,778,158	\$ (721,849)	(14.5%)	\$ 189,837	4.0%
Income Allocation from Pension Trust Fund	3,183,647	2,999,561	2,892,692	184,086	6.1	106,869	3.7
<b>Total Additions</b>	<b>7,429,793</b>	<b>7,967,556</b>	<b>7,670,850</b>	<b>(537,763)</b>	<b>(6.7)</b>	<b>296,706</b>	<b>3.9</b>
<b>Deductions</b>							
Insurance Benefits	5,294,417	5,231,901	6,699,149	62,516	1.2	(1,467,248)	(21.9)
<b>Total Deductions</b>	<b>5,294,417</b>	<b>5,231,901</b>	<b>6,699,149</b>	<b>62,516</b>	<b>1.2</b>	<b>(1,467,248)</b>	<b>(21.9)</b>
<b>Net Increase in Fiduciary Net Position</b>	<b>2,135,376</b>	<b>2,735,655</b>	<b>971,701</b>	<b>(600,279)</b>	<b>(21.9)</b>	<b>1,763,954</b>	<b>181.5</b>
<b>Net Position Restricted for Benefits</b>	<b>\$ 48,462,412</b>	<b>\$ 46,327,036</b>	<b>\$ 43,591,381</b>	<b>\$ 2,135,376</b>	<b>4.6%</b>	<b>\$ 2,735,655</b>	<b>6.3%</b>

funding over the long term. Based on actuarial analysis, the amount of fiduciary net position is expected to be sufficient to cover any adverse experience that may occur.

Summary information about fiduciary net position and the changes in fiduciary net position showing comparative detail for 2023, 2022 and 2021 is presented above.

The net position restricted for insurance benefits at year end 2023 was \$48.5 million, an increase of \$2.1 million (4.6%) over the 2022 amount. The increase is due to an interest allocation of \$3.2 million, along with a \$1.0 million decrease in operating income (lower employer premiums than insurance benefits).

For the year ended 2023, employer premiums decreased \$0.7 million (-14.5%), while insurance benefits increased by \$0.1 million (1.2%).

At year end 2022, the net position restricted for insurance benefits was \$46.3 million, which was an increase of \$2.7 million (6.3%) over the 2021 amount.

For the year ended 2022, employer premiums increased \$0.2 million while insurance benefits decreased \$1.5 million.

### REQUESTS FOR INFORMATION

This annual report is designed to provide a general overview of TCDRS' finances. Questions concerning any of the information provided in this report or requests for additional information should be addressed to TCDRS, Finance Division, Barton Oaks Plaza IV, Ste. 500, 901 S. MoPac Expy., Austin, TX 78746 or you can send an email to [openrecords@TCDRS.org](mailto:openrecords@TCDRS.org).

# BASIC FINANCIAL STATEMENTS

## STATEMENTS OF FIDUCIARY NET POSITION

	Dec. 31, 2023			Dec. 31, 2022		
	Pension Trust Fund	Group Term Life Fund	Total	Pension Trust Fund	Group Term Life Fund	Total
<b>ASSETS</b>						
Cash and Cash Equivalents	\$ 26,118,141	\$ —	\$ 26,118,141	\$ 27,030,080	\$ —	\$ 27,030,080
Receivables:						
Contributions	158,328,097	—	158,328,097	150,943,739	—	150,943,739
Investment Interest and Dividends	21,666,302	—	21,666,302	17,487,284	—	17,487,284
Securities-Lending Interest	225,340	—	225,340	175,649	—	175,649
Foreign Currency & Exchange Contracts	(56)	—	(56)	132,175	—	132,175
Employer Premiums	—	238,473	238,473	—	302,555	302,555
Other	405,745	—	405,745	243,200	—	243,200
Total Receivables	180,625,428	238,473	180,863,901	168,982,047	302,555	169,284,602
Prepaid Expenses and Other Assets	7,869,329	—	7,869,329	6,273,318	—	6,273,318
Investments, at Fair Value:						
U.S. Equities	5,635,369,659	—	5,635,369,659	5,130,427,791	—	5,130,427,791
International Equities	4,475,054,976	—	4,475,054,976	3,941,840,747	—	3,941,840,747
Global Equities	1,621,870,566	—	1,621,870,566	1,276,083,629	—	1,276,083,629
Hedge Funds	2,354,347,375	—	2,354,347,375	2,568,415,590	—	2,568,415,590
Credit	13,096,217,606	—	13,096,217,606	12,085,973,636	—	12,085,973,636
Private Equity	12,508,875,413	—	12,508,875,413	11,558,996,580	—	11,558,996,580
REITs	863,878,024	—	863,878,024	762,232,420	—	762,232,420
Master Limited Partnerships	457,847,189	—	457,847,189	383,195,096	—	383,195,096
Private Real Estate Partnerships	2,635,745,657	—	2,635,745,657	2,185,772,991	—	2,185,772,991
Investment-Grade Bonds	972,262,186	—	972,262,186	913,722,295	—	913,722,295
Cash and Cash Equivalents	1,402,766,029	—	1,402,766,029	1,033,775,695	—	1,033,775,695
Total Investments	46,024,234,680	—	46,024,234,680	41,840,436,470	—	41,840,436,470
Invested Securities-Lending Collateral	323,737,687	—	323,737,687	296,835,432	—	296,835,432
Funds Held by Pension Trust Fund	—	49,397,665	49,397,665	—	47,008,197	47,008,197
Capital Assets, net	25,192,759	—	25,192,759	15,307,470	—	15,307,470
<b>Total Assets</b>	<b>46,587,778,024</b>	<b>49,636,138</b>	<b>46,637,414,162</b>	<b>42,354,864,817</b>	<b>47,310,752</b>	<b>42,402,175,569</b>
<b>LIABILITIES</b>						
Accounts and Investments Payable	44,616,305	—	44,616,305	42,503,471	—	42,503,471
Insurance Benefits Payable	—	1,173,726	1,173,726	—	983,716	983,716
Funds Held for Group Term Life Fund	49,397,665	—	49,397,665	47,008,197	—	47,008,197
Securities-Lending Collateral	323,737,687	—	323,737,687	296,835,432	—	296,835,432
<b>Total Liabilities</b>	<b>417,751,657</b>	<b>1,173,726</b>	<b>418,925,383</b>	<b>386,347,100</b>	<b>983,716</b>	<b>387,330,816</b>
<b>Net Position Restricted for Benefits</b>	<b>\$46,170,026,367</b>	<b>\$48,462,412</b>	<b>\$ 46,218,488,779</b>	<b>\$ 41,968,517,717</b>	<b>\$ 46,327,036</b>	<b>\$42,014,844,753</b>

See accompanying Notes to the Financial Statements.



# BASIC FINANCIAL STATEMENTS

## STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

	Year Ended Dec. 31, 2023			Year Ended Dec. 31, 2022		
	Pension Trust Fund	Group Term Life Fund	Total	Pension Trust Fund	Group Term Life Fund	Total
<b>ADDITIONS</b>						
Contributions and Deposits						
Employee Deposits	\$ 635,663,190	\$ —	\$ 635,663,190	\$ 588,035,367	\$ —	\$ 588,035,367
Employer Contributions	1,252,813,531	—	1,252,813,531	1,200,119,263	—	1,200,119,263
Employer Premiums	—	4,246,146	4,246,146	—	4,967,995	4,967,995
Total	1,888,476,721	4,246,146	1,892,722,867	1,788,154,630	4,967,995	1,793,122,625
Investment Income						
From Investment Activities						
Net Appreciation (Depreciation) in Fair Value of Investments	4,434,427,546	—	4,434,427,546	(2,737,305,388)	—	(2,737,305,388)
Interest and Dividends	217,104,701	—	217,104,701	179,562,186	—	179,562,186
Total Investment Activity Income (Loss)	4,651,532,247	—	4,651,532,247	(2,557,743,202)	—	(2,557,743,202)
Less Investment Activity Expenses	43,098,926	—	43,098,926	49,164,361	—	49,164,361
Net Income (Loss) from Investment Activities	4,608,433,321	—	4,608,433,321	(2,606,907,563)	—	(2,606,907,563)
From Securities-Lending Activities						
Securities-Lending Income	17,957,519	—	17,957,519	7,693,374	—	7,693,374
Less Securities-Lending Expenses:						
Borrower Rebates and Agent Fees	15,752,383	—	15,752,383	5,757,993	—	5,757,993
Net Income from Securities-Lending Activities	2,205,136	—	2,205,136	1,935,381	—	1,935,381
Total Net Investment Income (Loss)	4,610,638,457	—	4,610,638,457	(2,604,972,182)	—	(2,604,972,182)
Building Operations and Miscellaneous Income	2,545,618	—	2,545,618	2,203,583	—	2,203,583
Income Allocation from Pension Trust Fund	—	3,183,647	3,183,647	—	2,999,561	2,999,561
<b>Total Additions</b>	<b>6,501,660,796</b>	<b>7,429,793</b>	<b>6,509,090,589</b>	<b>(814,613,969)</b>	<b>7,967,556</b>	<b>(806,646,413)</b>
<b>DEDUCTIONS</b>						
Benefits Paid	2,140,818,015	—	2,140,818,015	1,963,053,430	—	1,963,053,430
Withdrawals	129,482,780	—	129,482,780	116,292,898	—	116,292,898
Terminating Employers SAF Refunds	13,734	—	13,734	—	—	—
Interest Allocation to Group Term Life Fund	3,183,647	—	3,183,647	2,999,561	—	2,999,561
Insurance Benefits	—	5,294,417	5,294,417	—	5,231,901	5,231,901
Administrative Operations Expenses	24,587,838	—	24,587,838	24,767,172	—	24,767,172
Building Operations Expenses	2,066,132	—	2,066,132	2,030,784	—	2,030,784
<b>Total Deductions</b>	<b>2,300,152,146</b>	<b>5,294,417</b>	<b>2,305,446,563</b>	<b>2,109,143,845</b>	<b>5,231,901</b>	<b>2,114,375,746</b>
<b>Net Increase (Decrease) in Net Position</b>	<b>4,201,508,650</b>	<b>2,135,376</b>	<b>4,203,644,026</b>	<b>(2,923,757,814)</b>	<b>2,735,655</b>	<b>(2,921,022,159)</b>
<b>Net Position Restricted for Benefits:</b>						
Beginning of Period, Jan. 1	41,968,517,717	46,327,036	42,014,844,753	44,892,275,531	43,591,381	44,935,866,912
End of Period, Dec. 31	\$46,170,026,367	\$ 48,462,412	\$ 46,218,488,779	\$41,968,517,717	\$ 46,327,036	\$42,014,844,753

See accompanying Notes to the Financial Statements.

# NOTES TO THE FINANCIAL STATEMENTS

## A: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### Reporting Entity

The Texas County & District Retirement System (TCDRS or system) was created in 1967 by the Texas Legislature. The system partners with Texas counties and districts to provide their employees with retirement, disability and survivor benefits. TCDRS is governed by the Texas Legislature and overseen by an independent board of trustees, which is responsible for the administration of the system. TCDRS does not receive state funding. Each plan is funded independently by the county or district, its employees and by investment earnings.

The TCDRS Board of Trustees provides leadership for the system, which serves nearly 380,000 TCDRS members and retirees. Our independent, nine-member board is comprised of system members and retirees appointed by the governor and confirmed by the Texas Senate. TCDRS trustees serve staggered six-year terms and have oversight of all system operations, including the annual budget, policy determination, legislative proposals and investment policy. The board appoints an executive director to manage the day-to-day operations of TCDRS and chief investment officer to manage TCDRS investments.

The financial statements of TCDRS have been prepared to conform to generally accepted accounting principles as prescribed by the Governmental Accounting Standards Board (GASB). The accompanying financial statements report the operations of TCDRS, which consists of two fiduciary funds: the Pension Trust Fund and the Group Term Life Fund (GTLF). The Pension Trust Fund is used to provide retirement, survivor, disability and withdrawal benefits and to pay the operating expenses of the system. The GTLF is used to operate a voluntary program of group term life insurance benefits.

### New Accounting Pronouncements

In May 2020, GASB issued Statement No. 96, Subscription-Based Information Technology Arrangements, whose objective is to provide guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for governments. SBITAs provide governments with access to vendors' IT software and associated tangible capital assets for subscription payments without granting governments perpetual license or title to the IT software and associated tangible capital assets. This Statement (1) defines a SBITA; (2) establishes that a SBITA results

in a right-to-use subscription asset — an intangible asset — and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. To the extent relevant, the standards for SBITAs are based on the standards established in Statement No. 87, Leases. The requirements of this statement will be implemented for fiscal years beginning after June 15, 2022. Management has determined that the implementation of GASB 96 has no material impact.

### Basis of Accounting

The system's funds are maintained on the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when incurred, regardless of when payment is made. Employee deposits and employer contributions are recognized in the period the employer reports compensation for its employees pursuant to statutory requirements. Benefit payments are recognized when due and payable in accordance with the plans' terms.

The preparation of financial statements in accordance with accounting principles generally accepted in the United States requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The system invests in a diversified portfolio of assets. Investments, in general, are exposed to various risks, such as interest rate, credit and market volatility. It is possible that changes in the values of investments will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

### Basis of Presentation

TCDRS maintains separate funds and accounts in accordance with the TCDRS Act. This is done to help ensure observance of limitations and restrictions on the use of resources available to TCDRS.

In the Pension Trust Fund, the assets of all employer plans are pooled for investment purposes. However, each employer's plan is accounted for separately, so that each employer's assets are used only for the funding of its individual plan.

The costs of administering TCDRS are paid from investment earnings and general reserves of the pooled assets of all plans.

The TCDRS Act requires that all assets of the retirement system be credited to one of the following funds and accounts, according to the purpose for which they are held:

## **Employees Saving Fund**

The Employees Saving Fund (ESF) contains an account for each member. Each account is increased as a member makes deposits and earns interest. Accounts are reduced due to withdrawals and retirement transfers.

## **Subdivision Accumulation Fund**

The Subdivision Accumulation Fund (SAF) receives employer contributions and contains an account for each participating employer to fund retirement benefits. An account is increased as an employer makes contributions and by transfers from members' ESF accounts at retirement. An account is decreased as employers pay benefits. Annually, the board decides on the income allocation to each employer's account based on investment earnings and the employer's plan assets. Employer accounts increase if there is a positive allocation of earnings; accounts decrease if there is a negative allocation.

## **Closed Subdivision Annuity Reserve Fund**

The Closed Subdivision Annuity Reserve Fund (CSARF) is used to pay benefits to retirees of terminated plans. When a member retires from an employer that is terminated, amounts are transferred from the member's account to the CSARF to fund the member's retirement annuity.

## **Endowment Fund**

The Endowment Fund contains accounts that hold the general reserves of the system, inactive accounts from the ESF and reserves to transfer to the Expense Fund for the subsequent year's operating expenses. Refer to the schedule of Changes in Endowment Fund on page 48.

General reserves are maintained in the Endowment Fund and have been used to keep rates stable and to help offset future adverse experience. The Endowment Fund may increase or decrease based on income allocation decisions by the board of trustees.

## **Income Fund**

All investment income is credited to the Income Fund. It accounts for investment earnings and expenses and annual allocations to other funds.

The fund is reduced by investment expenses and by the statutory allocation of interest to the ESF, CSARF and GTLF. In addition, the board makes an allocation to the SAF.

If any excess exists after all allocations are made, the remainder is transferred to the Endowment Fund. Refer to the Changes in Income Fund schedule on page 49 for additional information.

## **Expense Fund**

TCDRS pays administrative operating expenses from this fund. As mentioned in the Endowment Fund and the Income Fund, operating expenses are financed from general reserves at the beginning of the year, and the Income Fund finances the investment expenses.

## **Group Term Life Fund**

The Group Term Life Fund reports the net position available to pay insurance benefits for covered participants. Premiums paid by employers and an annual income allocation are added to the fund, while insurance benefits are paid from the fund.

## **Investments**

Investments consist of a diversified portfolio, including equities, hedge funds, credit investments, private equity, real assets and investment-grade bonds along with cash and cash equivalents. The portfolio is further diversified within each of the asset classes.

Investment purchases and sales are recorded as of their trade dates. Separately managed fixed income, equity and debt securities are reported at fair value, and are primarily valued using ICE Data Services. U.S. and international commingled funds, hedge fund investments, real estate funds or similar private limited partnership investment vehicles that do not actively trade through established exchange mechanisms are valued at net asset value by a general or managing partner. Security transactions and any resulting gains or losses are accounted for by the specific identification method on a trade-date basis.

For the years ended Dec. 31, 2023 and 2022, the annual money-weighted rate of return on investments, net of investment expenses, was 11.08% and -5.82%, respectively. The money-weighted rate of return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested. In the Required Supplementary Information is a table of the annual money-weighted rates of return for the 10-year period ended Dec. 31, 2023.



# NOTES TO THE FINANCIAL STATEMENTS

## Capital Assets

Capital assets, which consist of land, building and improvements, software, and equipment and furniture are reported at historical cost and are depreciated on a straight-line basis over the estimated useful lives. TCDRS has elected to capitalize items that individually exceed \$5,000 and have a useful life of greater than one year. The estimated useful lives for building and improvements range from five to 40 years, for furniture, fixtures and equipment three to 10 years, and for leasehold improvements three to 40 years. TCDRS began work on a complete remodel of its office space during 2023, which was the main driver of an increase in capital assets from \$15.3 million in 2022 to \$25.2 million in 2023. The remodel was completed in March 2024.

## B: PLAN DESCRIPTION

### Pension Trust Fund

TCDRS is a statewide, agent multiple-employer, public-employee retirement system. The system serves nearly 870 participating counties and districts throughout Texas. Each employer maintains its own customized plan of benefits. Plan provisions are adopted by the governing body of each employer, within the options available in the TCDRS Act. Employers have the flexibility and local control to adjust benefits annually and pay for those benefits based on their needs and budgets.

Each employer has a defined benefit plan that functions similarly to a cash balance plan. The assets of the plans are pooled for investment purposes, but each employer's plan assets may be used only for the payment of benefits to the members of that employer's plan. In accordance with Texas law, it is intended that the pension plan be construed and administered in a manner that the retirement system will be considered qualified under Section 401(a) of the Internal Revenue Code. All employees (except temporary staff) of a participating employer must be enrolled in the plan. Membership in TCDRS as of Dec. 31, 2023 and 2022 is summarized in Table 1, on page 31.

### Benefits

A percentage of each employee's paycheck is deposited into his or her TCDRS account.

That percentage (from 4% to 7%) is set by the employer.

The employee's savings grow, by law, at a rate of 7%, compounded annually. The employer selects a matching rate — at least "dollar for dollar," up

to \$2.50 per \$1.00 in the employee's account. At retirement, the employee's account balance is combined with employer matching and converted into a lifetime monthly benefit.

Employees receive a month of service time for each month that they make a deposit into their account. The amount of service an employee needs to earn a future benefit is called the vesting requirement. When an employee is vested, he or she has the right to a monthly benefit, which includes employer matching, at age 60 or older. Employers may choose 5-, 8- or 10-year vesting. In addition, employees may retire before age 60 if they meet one of the following requirements, set by the employer:

- "Rule of" eligibility: Under these rules, a vested employee can retire if their age plus years of service time add up to at least 75 or 80.
- 20-year or 30-year retirement at any age: This lets employees retire when they have at least 20 or 30 years of service time.

Retirees elect to receive their lifetime benefit by choosing one of seven actuarially equivalent payment options, which are detailed on page 75.

Employers may elect to provide other optional benefits. Prior service gives employees monetary credit for time worked for an organization before it joined the system. Buybacks allow current employees to re-establish a closed TCDRS account from previous service with an employer. Partial lump-sum payments at retirement allow employees to withdraw part or all of their TCDRS account balance as a lump sum at retirement with a reduced monthly benefit.

In addition, an employer may choose to adopt a cost-of-living adjustment (COLA) for its retirees. This adjusts retiree benefits to restore purchasing power lost due to the effects of inflation.

### Contributions

A combination of three elements funds each employer's plan: employee deposits, employer contributions and investment income.

- The deposit rate for employees is 4%, 5%, 6% or 7% of compensation, as adopted by the employer's governing body.
- Participating employers are required, by law, to contribute at a minimum the actuarially required rates, which are determined annually. Employers have the option of paying more than the required contribution rate each year. Extra contributions

## NOTES TO THE FINANCIAL STATEMENTS

**TABLE 1: MEMBERSHIP**

	Dec. 31,	
<b>Pension Trust Fund:</b>	<b>2023</b>	<b>2022</b>
Retirees and Beneficiaries		
Currently Receiving Benefits	85,298	82,031
Inactive Plan Members Entitled to But Not Yet Receiving Benefits:		
Vested Accounts	32,467	31,112
Nonvested Accounts	108,778	103,270
<b>Total</b>	<b>141,245</b>	<b>134,382</b>
Active Plan Members:		
Vested Accounts	70,359	67,801
Nonvested Accounts	82,058	77,425
<b>Total</b>	<b>152,417</b>	<b>145,226</b>
Number of Plans:		
Counties	253	253
Districts	615	595
Inactive Plan	1	1
<b>Total</b>	<b>869</b>	<b>849</b>
<b>Group Term Life Fund:</b>		
Retirees	10,514	10,126
Terminated Employees:		
Vested	9,378	8,947
Current Employees:		
Vested	18,122	17,130
Nonvested	21,384	20,039
<b>Total</b>	<b>39,506</b>	<b>37,169</b>
Number of Plans:		
Counties	127	127
Districts	275	255
<b>Total</b>	<b>402</b>	<b>382</b>

can help employers “pre-fund” benefit increases, such as a cost-of-living adjustment to retirees, and they can be used to help offset or mitigate future increases in the required rate due to negative plan experience. There are two approaches for making extra contributions: (a) paying an elected contribution rate that is higher than the required rate and (b) making an additional elective contribution as a lump sum.

- Investment income funds a large part of the benefits employees earn.

Administrative costs of TCDRS are financed through the system’s general reserves, which are part of the Endowment Fund.

### Group Term Life Fund (GTLF)

TCDRS also administers the Group Term Life program, a group term life insurance. The fund for this benefit is a separate trust administered by the board. The fund receives monthly premiums from participating employers and pays benefits when due. The obligations of the program are payable only from this fund, and are not an obligation of, or a claim against, the TCDRS Pension Trust Fund. The fund’s assets are pooled with those of the Pension Trust Fund under provisions of the TCDRS Act and annually receive an allocation of income based on the fund value. The Group Term Life program is voluntary and employers can annually begin, change or cease participation. This program provides group term life insurance coverage to currently employed members, and if elected by employers, to retirees. Participation in the Group Term Life program as of Dec. 31, 2023 and 2022 is summarized in Table 1.

### Benefits

Current employees of participating employers are insured for an amount equivalent to the employee’s current annual compensation. Employers may also optionally choose to cover retirees. Retirees are insured for \$5,000. Life insurance proceeds are payable as a lump sum. The coverage provided to retirees is an Other Post Employment Benefit (OPEB).

### Contributions

Each participating employer contributes to the Group Term Life program at a contractually required rate. An annual actuarial valuation is performed and the contractual rate is equal to the cost of providing one-year term life insurance. The premium rate is expressed as a percentage of the covered payroll of members employed by the participating employer. There is a one-year delay between the actuarial valuation that serves as the basis for the employer contribution rate and the calendar year when the rate goes into effect. Contributions are not intended to pre-fund retiree term life insurance during employees’ careers.

## C: TCDRS AS EMPLOYER

### Pension Trust Fund

TCDRS, as an employer, participates in the Texas County & District Retirement System. A brief description of benefit terms:

1. All full- and part-time employees in a non-temporary position participate in the plan, regardless of the number of hours they work in a year. Employees in a temporary position are not eligible for membership.

## NOTES TO THE FINANCIAL STATEMENTS

2. The plan provides retirement, disability and survivor benefits.
3. TCDRS is a savings-based plan. For TCDRS, as an employer, 7% of each employee's pay is deposited into his or her TCDRS account. By law, employee accounts earn 7% interest on the beginning of year balances annually. At retirement, the account is matched at an employer-set percentage (current match is 200%) and is then converted to a monthly benefit.
4. There are no automatic COLAs. Each year, TCDRS, as an employer, may elect an ad hoc COLA for its retirees.
5. Benefit terms are established under the TCDRS Act. They may be amended effective Jan. 1 each year within parameters set forth in the Act.

TCDRS, as an employer, has a contribution rate that is calculated annually on an actuarial basis, although TCDRS may elect to contribute at a higher rate. The contribution rate is based on the TCDRS funding policy adopted by the TCDRS Board of Trustees and must conform with the TCDRS Act. Contributions to the pension plan from TCDRS, as an employer, for 2023, were based on the elected rate of 13.5%, plus a one-time lump-sum amount of \$750,000.

TCDRS' contributions, as an employer, to the Pension Trust Fund for the years ended Dec. 31, 2023 and 2022 were \$2.9 million and \$2.2 million, respectively.

### Group Term Life Fund

TCDRS participates in the Group Term Life program. For a general explanation of the Group Term Life program, turn to page 31. TCDRS provides coverage to current eligible employees and to retired employees.

TCDRS, as an employer, contributes to the Group Term Life program at an actuarially determined rate.

TCDRS' contributions, as an employer, to the Group Term Life program for the years ended Dec. 31, 2023 and 2022 were \$29,175 and \$36,383, respectively, which equaled the required contributions each year.

### TCDRS Bridge Program Health Reimbursement Arrangement

TCDRS adopted the TCDRS Bridge Program Health Reimbursement Arrangement (Bridge Program) for its employees. The program is open to all former TCDRS employees who meet all three conditions: (a) employed with TCDRS on or after Jan. 1, 2007; (b) accumulated at least 10 years of full-time

employment with TCDRS; and (c) an active TCDRS employee on or after attaining age 58½.

The Bridge Program is a self-insured medical expense reimbursement plan that provides a maximum credit of \$550 per month for 60 consecutive months. Coverage begins on the first day of the month immediately after the eligible former employee reaches age 60 or has separated from employment with TCDRS, whichever occurs later.

As of Dec. 31, 2022, the measurement date, the Bridge Program OPEB (Other Post Employment Benefit) liability was \$1,156,475. The plan is unfunded and the discount rate at Dec. 31, 2022, was 3.72% with 141 active members. TCDRS' contributions as an employer pays the benefits under the Bridge Program by reimbursing eligible expenses. For the years ended Dec. 31, 2023 and 2022, benefits paid were \$89,917 and \$86,361, respectively.

### Deferred Compensation

The employees of TCDRS may participate in a deferred compensation plan created in accordance with Internal Revenue Code Section 457. This plan, available to all employees of TCDRS, permits the deferral of a portion of their salary until future years. The deferred compensation is not available to the employees until termination, retirement, death or certain unforeseeable emergencies. All compensation deferred under the plan is held by a custodian for the exclusive benefit of participants and beneficiaries.

## D: CASH AND CASH EQUIVALENTS

Cash and cash equivalents consist of funds on deposit with a financial institution in interest-bearing demand deposit accounts. They are invested on an overnight basis (sweep) in a U.S. dollar-denominated investment under a repurchase agreement. The funds are collateralized at 102% using U.S. Treasury, government or agency securities. Cash held in (1) demand deposit accounts, (2) the overnight sweep, and (3) the JPMorgan U.S. Government Money Market Fund (an open-end institutional money market fund) is available to pay benefits, operational expenses and funds awaiting transfer to investment management.

Custodial credit risk is the risk that in the event of a bank failure, the system's deposits may not be returned to it. A discussion of custodial credit risk pertaining to cash and cash equivalents can be found in Note G, beginning on page 35.



## E: INVESTMENTS

Investment decisions of the board are subject to Section 67, Article XVI of the Texas Constitution, and to the applicable statutory provisions of the Texas Trust Code that provide for a “prudent person” standard of care. Investment authorization is restricted by the investment policy adopted by the board that emphasizes the importance of a long-term investment philosophy with minimization of risk while targeting an attractive risk-adjusted return. The board has determined that a diversified portfolio will offer the best opportunity to produce the desired risk-adjusted return. Accordingly, the TCDRS investment portfolio includes investments in the following asset classes:

### Equity Holdings

The system’s U.S. equities and a portion of its developed international and emerging market equities are passively managed in commingled index funds designed to replicate the performance of broad market indices. The remaining developed international, emerging market and global equities are actively managed in commingled funds or limited partnerships.

### Hedge Funds

The vehicles for hedge fund investments are typically commingled vehicles, such as limited partnerships, limited liability companies or offshore corporations. At Dec. 31, 2023, the system’s hedge fund portfolio consisted of 15 partnerships with a fair value totaling \$2.4 billion. In comparison, at Dec. 31, 2022, the system’s hedge fund portfolio consisted of 16 partnerships with a fair value totaling \$2.6 billion.

### Credit Investments

The board has divided the credit asset class into three portions.

- The strategic credit portfolio is driven primarily by credit risk and includes a combination of traded non-investment-grade bonds and private credit

opportunities. These assets provide potential for high returns and exhibit low correlation to the broader credit markets. As the market environment changes, various credit strategies move in and out of favor. TCDRS alters investment concentration among strategies to optimize the opportunity set for any given market environment.

- Distressed debt partnerships invest in securities of companies whose debt has declined in value because they are experiencing financial stress. Typical holdings are senior and subordinated debt instruments.
- Direct lending partnerships consist of privately originated debt made to small and medium-sized companies or to real estate investors in order to take advantage of dislocations in the capital markets.

Table 2 lists the committed and unfunded capital to private strategic credit, distressed debt and direct lending investments at Dec. 31, 2023. During the first quarter of 2024, an additional \$100 million has been committed to strategic credit. There were no additional commitments to direct lending or distressed debt funds during this period.

### Private Equity

TCDRS’ private equity investments consist of partnerships that (a) invest in private companies or take public companies private in order to improve their operations and then resell them in the future; (b) invest in start-up companies with new ideas or technologies; and (c) invest in companies seeking to discover, produce, and transport energy products.

Table 2 lists the committed and unfunded capital to private equity investments at Dec. 31, 2023. During the first quarter of 2024, an additional \$213 million has been committed to private equity partnerships.

### Real Assets

- Real estate investment trusts (REITs) are companies that own and operate income-producing real estate, such as commercial office buildings,

TABLE 2: SCHEDULE OF UNFUNDED COMMITMENTS

Investment Category	Dec. 31, 2023		
	Total Commitment	Unfunded Commitment	Fair Value
Strategic Credit	\$ 4,047,411,719	\$ 222,452,233	\$ 4,327,670,169
Distressed Debt	3,117,243,477	956,487,662	1,830,436,603
Direct Lending	9,150,787,088	2,724,177,150	6,788,448,835
Private Equity	17,842,067,660	5,627,152,140	12,508,875,413
Private Real Estate	4,876,268,048	1,661,318,636	2,635,745,657
<b>Total Commitments</b>	<b>\$ 39,033,777,992</b>	<b>\$ 11,191,587,821</b>	<b>\$ 28,091,176,677</b>

## NOTES TO THE FINANCIAL STATEMENTS

apartments, malls, warehouses and storage facilities. Under provisions of the U.S. tax law, if REITs pay out most of their income in dividends, they are not required to pay income taxes. Consequently, substantial amounts of income can be received from investing in REITs.

- Private real estate partnerships acquire and operate commercial properties including office buildings, apartments, hotels, malls and residential real estate. Private real estate investments are illiquid and typically have expected holding periods of 10 to 12 years. As reported in Table 2, on page 33, at Dec. 31, 2023, TCDRS had committed \$4.9 billion to 68 private real estate partnerships. There were no additional commitments made during the first quarter of 2024 to private real estate partnerships.
- Master Limited Partnerships (MLPs) are publicly traded partnership interests authorized by Congress to encourage investment in domestic energy infrastructure. At the entity level, these interests are tax free provided that 90% of their income comes from natural resources such as oil, natural gas, coal, timber and other depletable resources.

### Investment-Grade Bonds

The investment-grade bond portfolio consists of debt instruments issued by the United States Treasury and governmental agencies, asset-backed securities and corporate bonds that are rated investment grade by the major ratings agencies. Additionally, this portfolio may contain minimal investments in short-term instruments, non-rated securities, private placement securities, convertible bonds and preferred stock.

The portfolio should exhibit an overall dollar-weighted average quality rating of AA with no investment rated lower than BBB- or equivalent as rated by Standard & Poor's (S&P) or Moody's Investor Service at the time of purchase or, if not rated, be deemed by the manager to be of similar quality.

### Cash and Cash Equivalents

The TCDRS Board of Trustees may select one or more commercial banks, depository trust companies or other entities to serve as custodian or custodians of the system's cash, cash equivalents and short-term investments, and may authorize the custodian to invest the cash in such short-term investments as the board determines. TCDRS has authorized its custodian to invest cash, on an overnight basis, in the custodian's Collective Trust Government Short-Term Investment Fund (STIF). The investment objective of the STIF is to provide safety of

principal, daily liquidity and competitive returns. The STIF owns high-quality debt instruments (which include U.S. government or U.S. government agencies, repurchase agreements, floating-rate notes, etc.). At Dec. 31, 2023, the dollar-weighted average maturity of the STIF was 23 days with an average current yield of 5.20%. In comparison, at Dec. 31, 2022, the dollar-weighted average maturity of the STIF was six days with an average current yield of 4.16%.

The investment officer manages cash in the STIF together with new contributions until they are allocated to a portfolio.

## F: SECURITIES LENDING

State statutes and the board's policies permit TCDRS to use its investments to enter into securities-lending transactions — loans of securities to broker-dealers and other entities in exchange for collateral with a simultaneous agreement to return the collateral for the same securities in the future. The system's custodian, The Bank of New York Mellon Corp. (BNY Mellon), is engaged as the lending agent to lend securities from the system's REITs, MLPs, High-Yield and Investment-Grade Bond portfolios for collateral of a minimum of 102% of the fair value of securities loaned.

Collateral, either cash or U.S. government securities, is initially pledged for the securities on loan and additional collateral is required from the borrower by the close of the next business day if its value falls to less than 100% of the fair value of the securities on loan. TCDRS does not have the ability to pledge or sell securities received as collateral unless the borrower defaults. At Dec. 31, 2023 and 2022, BNY Mellon held \$20,287,488 and \$46,487,540 of non-cash collateral, respectively.

**TABLE 3:  
INVESTED SECURITIES-LENDING CASH-COLLATERAL**

Dec. 31,		
Investment Type	2023	2022
Cash and Other Liquid Assets	\$ 1,381,492	\$ 1,236,569
Asset-Backed Securities	16,749,522	—
Agencies	—	265,267,146
Commercial Paper	81,960,284	—
Repurchase Agreements	55,823,507	30,331,717
Certificates of Deposit	141,850,037	—
Corporate Bonds	25,972,845	—
<b>Total Invested Securities-Lending Collateral</b>	<b>\$ 323,737,687</b>	<b>\$ 296,835,432</b>

TABLE 4: CREDIT RISK BY QUALITY

		Dec. 31,							
		Investment-Grade Bonds				High-Yield Bonds <sup>1</sup>			
Based on Moody's ratings		2023		2022		2023		2022	
Rating		Fair Value (\$ Millions)	% of Total	Fair Value (\$ Millions)	% of Total	Fair Value (\$ Millions)	% of Total	Fair Value (\$ Millions)	% of Total
Aaa		566.9	58	564.0	62	—	—	—	—
Aa		25.1	3	25.3	3	—	—	—	—
A		127.2	13	102.0	11	—	—	—	—
Baa		153.2	16	159.8	17	3.5	2	2.0	2
Ba		22.4	2	17.5	2	44.2	30	34.4	26
B		10.3	1	9.7	1	85.6	58	73.7	56
Less than B		—	—	—	—	10.8	7	10.9	8
Not Rated — Bonds		67.2	7	35.4	4	4.9	3	10.2	8
<b>Total</b>		<b>\$ 972.3</b>	<b>100%</b>	<b>\$ 913.7</b>	<b>100%</b>	<b>\$ 149.0</b>	<b>100%</b>	<b>\$ 131.2</b>	<b>100%</b>

<sup>1</sup> Included in the fair value of Credit investments reported in Statements of Fiduciary Net Position on page 26.

Cash collateral is invested in short-term fixed-income instruments in accordance with the system's securities-lending guidelines. Table 3 lists the categories of cash-collateral investments at Dec. 31, 2023 and 2022.

At the end of years 2023 and 2022, TCDRS had no credit risk exposure to borrowers because the amounts the system owed to borrowers (cash plus non-cash collateral) exceeded the amounts the borrowers owed to TCDRS. The contract with the lending agent requires the agent to indemnify TCDRS if borrowers fail to return the securities (and if the collateral is inadequate to replace the securities on loan) or fail to pay TCDRS for income distributions while the securities are on loan. At Dec. 31, 2023 and 2022, the fair value of securities on loan for cash and non-cash collateral was \$335,024,705 and \$333,506,634, respectively.

Additionally, TCDRS invests in two commingled domestic and international equity portfolios that participate in securities-lending programs managed by State Street Global Advisors. TCDRS receives a proportionate share of the securities-lending income generated from these activities.

## G: DEPOSIT AND INVESTMENT RISK

Identification of credit risk, custodial credit risk, concentration of credit risk, interest rate risk and foreign currency risk is promulgated by GASB Statement No. 40.

Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of

a rating by a nationally recognized statistical rating organization. At both Dec. 31, 2023 and 2022, according to Standard and Poor's (S&P) evaluations, the investment-grade bond portfolio exhibited an overall quality rating of AA-. The Bloomberg U.S. Aggregate Bond Index is the benchmark for performance measurement of the investment-grade bond portfolio. At Dec. 31, 2023 and 2022, the Bloomberg U.S. Aggregate Bond Index had an average S&P quality rating of AA and A-1+, respectively.

At both Dec. 31, 2023 and 2022, according to S&P evaluations, the high-yield portion of the credit portfolio exhibited an overall quality rating of B+. The FTSE High-Yield Cash-Pay Index is the benchmark for performance measurement of the credit portfolio. At both Dec. 31, 2023 and 2022, according to S&P evaluations, the benchmark exhibited an average quality rating of B+.

The investment policy does not explicitly outline an acceptable level of credit risk for the investment-grade bond or credit portfolios, but the board's adoption of their respective benchmark indices is an implicit adoption of the market risk inherent in these portfolios.

Table 4 lists the credit risk associated with the investment-grade bond portfolio and the high-yield bond portion of the credit investments portfolio.

At Dec. 31, 2023, according to Moody's Investors Service evaluations, the BNY Mellon STIF contained short-term securities with quality ratings of P-1 (Prime-1), which exhibit a superior ability for repayment of senior short-term debt obligations, and long-term investments (maturity date greater



# NOTES TO THE FINANCIAL STATEMENTS

**TABLE 5: INTEREST RATE RISK – FIXED-INCOME PORTFOLIOS**

Dec. 31,				
Asset Class	2023		2022	
	Fair Value	Effective Duration in Years	Fair Value	Effective Duration in Years
Investment-Grade Bonds	\$ 972,262,186	6.2	\$ 913,722,295	6.1
High-Yield Bonds <sup>1</sup>	149,661,999	3.3	132,337,596	3.8

<sup>1</sup> Included in Credit investments reported in the Statements of Fiduciary Net Position on page 26.

than one year) with an average quality rating of Aaa. Based upon the fair value of the fund at Dec. 31, 2023, 49% of the instruments were rated P-1, 51% of the instruments were rated Aaa and less than 1% was held in cash.

At Dec. 31, 2022, according to Moody's Investors Service evaluations, the BNY Mellon STIF exhibited average short-term quality ratings of P-1 and an average long-term quality rating of Aaa with 55% of the instruments rated P-1, 45% of the instruments rated Aaa and less than 1% was held in cash.

Custodial credit risk is the risk that, in the event of the failure of a depository financial institution, TCDRS will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. TCDRS requires that demand deposit accounts be fully collateralized. Funds received by its master custodian are invested on an overnight basis or, if the funds are received late during a business day, are maintained in a U.S. dollar-denominated interest-bearing deposit account insured by the FDIC.

TCDRS investments, evidenced by securities in physical or book entry form and not on loan, are registered and held in safekeeping for TCDRS by its custodian bank.

Concentration of credit risk is the risk of loss attributed to the magnitude of investment in a single issuer. Investment guidelines established with the individual investment managers generally address concentration risk limits. At Dec. 31, 2023 and 2022, TCDRS did not have investments in any one issuer which were greater than 5% of net investments.

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. The values of portfolios of longer duration are more affected by interest rate changes than are those of shorter duration. Increases in bond market yields result in fair value losses;

decreases result in fair value gains. Multiplying the change in market yield by the duration of the portfolio can approximate the size of the gain or loss in fair value. For example, if one owned a portfolio of investment-grade bonds that had a duration of 6.5 years and if the yields within the bond market were to immediately fall 1%, the fair value gain of the portfolio would approximate 6.5%. This change in fair value indicates the level of interest rate risk inherent in the portfolio.

Table 5 discloses the level of interest rate risk inherent in the TCDRS fixed-income portfolios by reporting the effective duration of those portfolios.

The effective duration of the Bloomberg U.S. Aggregate Bond Index at Dec. 31, 2023 and 2022 was 6.2 and 6.3 years, respectively.

The high-yield bond portion of the credit portfolio is measured against the FTSE High-Yield Cash-Pay Index. The effective duration of the FTSE High-Yield Cash-Pay Index at Dec. 31, 2023 and 2022 was 3.4 and 4.2 years, respectively.

TCDRS does not have a formal policy governing interest rate risk, but the board's adoption of the respective benchmark indices used to measure the investment-grade bond and credit portfolios against is an implicit adoption of the market risk inherent in these portfolios.

The maturities of the investments made with cash collateral may not match the maturities of securities on loan. Any material interest rate risk on investments from cash collateral received from securities lending is mitigated by maintaining an investment yield higher than the rebate rate owed to borrowers. Further, to reduce risk, investment guidelines require floating-rate instruments to reset no less frequently than 90 days or limit maturity of fixed-rate instruments to no more than 18 months.

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The asset allocation plan

# NOTES TO THE FINANCIAL STATEMENTS

**TABLE 6: FOREIGN CURRENCY RISK**

	Dec. 31,							
	REITs / MLPs		Credit Investments		Private Equity & Private Real Estate		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
BRITISH POUND STERLING	—	—	22,801	1,002,685	129,219,152	121,537,390	129,241,953	122,540,075
CANADIAN DOLLAR	4,696,095	5,364	—	—	—	—	4,696,095	5,364
EURO CURRENCY UNIT	—	11,688	286,490,833	211,977,005	1,240,705,098	1,057,772,402	1,527,195,931	1,269,761,095
<b>Total subject to currency risk</b>	<b>\$ 4,696,095</b>	<b>\$ 17,052</b>	<b>\$ 286,513,634</b>	<b>\$ 212,979,690</b>	<b>\$ 1,369,924,250</b>	<b>\$ 1,179,309,792</b>	<b>\$ 1,661,133,979</b>	<b>\$ 1,392,306,534</b>

Due to rounding, totals and detail may not equal.

adopted in the investment policy includes a 13.5% allocation to international and global equities, a 4% allocation to distressed debt, a 2% allocation to REITs, a 2% allocation to MLPs, a 16% allocation to direct lending, a 6% allocation to private real estate partnerships and a 25% allocation to private equity, all of which allow non-U.S. dollar-denominated investments. TCDRS does not have a formal policy governing foreign currency risk. Accordingly, the foreign currency risks inherent in the benchmark indices assigned to these asset classes have been implicitly adopted as an acceptable level of foreign currency risk.

Table 6 lists the foreign currency risk associated within the REITs, MLPs, credit investments, private equity and private real estate partnerships portfolios.

Additionally, at Dec. 31, 2023 and 2022, the international equity portfolio contained nine commingled funds from the Developed International, Emerging Market and Global asset classes. These asset classes are subject to foreign currency risk with an aggregate fair value of \$6,096,925,542 and \$5,217,924,744, respectively.

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates or financial indexes. The investment policy does not explicitly outline the use of derivatives, but investment guidelines allow the investment-grade bond managers the use of exchange-traded treasury futures to replicate cash investments or to manage yield curve or other risk positions within their portfolio. TCDRS' derivative instruments are considered investments and not hedges for accounting purposes.

Table 7, on page 38, lists TCDRS' exposure to derivative instruments at Dec. 31, 2023.

## H: FAIR VALUE MEASUREMENT AND APPLICATION

TCDRS categorizes fair value measurements of investment assets and liabilities within the fair value hierarchy established by generally accepted accounting principles as promulgated by GASB Statement No. 72. These investments are valued through industry standard practices for the respective type of security at a price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The hierarchy classifications are based on the transparency of inputs to the valuation techniques used and should not be perceived as the particular investment's risk. These classifications are summarized into three broad levels, arranged from highest to lowest:

Level 1 — Unadjusted inputs using quoted prices in active markets or exchanges for identical investments.

Level 2 — Other significant observable inputs including quoted prices of securities that are comparable in coupon, rating, maturity and industry. Inputs other than quoted prices that are observable take into account operational, market, financial and non-financial factors (interest rates, yield curves, credit risk and default rates) or other market corroborated inputs that are observable at commonly quoted intervals for the full term of the investment.

Level 3 — Significant inputs that are not observable and cannot be corroborated by observable market data (assumptions, cash flows or earnings multiples).

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are

# NOTES TO THE FINANCIAL STATEMENTS

**TABLE 7: FUTURES CONTRACTS**

Dec. 31, 2023

Futures Contract	Expiration Date	Contracts	Value Per Point	Price Per Contract	Exposure	Base Notional Cost	Unrealized Gain/(Loss)
Us 10Yr Ultra Future	Mar 2024	-304.00	1,000	118.0156	\$(35,876,750)	\$(34,346,154)	\$(1,530,596)
Us 10Yr Ultra Future	Mar 2024	-28.00	1,000	118.0156	(3,304,438)	(3,154,556)	(149,882)
Us Long Bond Future	Mar 2024	-128.00	1,000	124.9375	(15,992,000)	(14,826,225)	(1,165,775)
Us Long Bond Future	Mar 2024	-105.00	1,000	124.9375	(13,118,438)	(12,119,215)	(999,223)
Us 10Yr Note Future	Mar 2024	53.00	1,000	112.8906	5,983,203	5,789,412	193,791
Us 10Yr Note Future	Mar 2024	70.00	1,000	112.8906	7,902,344	7,663,906	238,438
Us 10Yr Note Future	Mar 2024	171.00	1,000	112.8906	19,304,297	18,783,569	520,728
Us 5Yr Note Future	Mar 2024	58.00	1,000	108.7734	6,308,859	6,227,216	81,643
Us 5Yr Note Future	Mar 2024	757.00	1,000	108.7734	82,341,493	80,619,147	1,722,346
Us 2Yr Note Future	Mar 2024	27.00	2,000	102.9570	5,559,680	5,503,080	56,600
Us 2Yr Note Future	Mar 2024	165.00	2,000	102.9570	33,975,820	33,774,144	201,676
Us Ultra Bond	Mar 2024	56.00	1,000	133.5938	7,481,250	6,796,562	684,688
Us Ultra Bond	Mar 2024	57.00	1,000	133.5938	7,614,844	6,930,431	684,413
Us Ultra Bond	Mar 2024	65.00	1,000	133.5938	8,683,594	7,989,136	694,458
<b>Total</b>					<b>\$ 116,863,758</b>	<b>\$ 115,630,453</b>	<b>\$ 1,233,305</b>

Due to rounding, totals and detail may not equal.

categorized based on the lowest level input that is significant to the valuation. The assessment of the significance of particular inputs to their fair value measurements requires judgment and considers factors specific to each asset.

In 2023 and 2022, there were no changes in valuation techniques that had a significant impact on the result.

## Short-Term Securities

Holdings in short-term securities at Dec. 31, 2023 and 2022 consist of a Government Short-Term Investment Fund (STIF) that invests principally or entirely in securities or other obligations issued by or guaranteed by the U.S. government or its agencies and repurchase agreements collateralized by securities or other obligations issued by or guaranteed by the U.S. government. TCDRS classifies the STIF at level 2 based on the availability of a daily value, traded in an inactive market.

## Equity, Debt and Other Securities

Equity and debt securities classified in level 1 are valued using prices quoted in active markets. Investments classified in level 2 are derived using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Index-linked securities are valued by using

multiples of the external market price and the index ratio. Level 3 debt securities at Dec. 31, 2023 and 2022 are impaired assets and are valued using unobservable inputs in inactive markets, such as proprietary information or single source pricing.

Commingled funds are valued daily or monthly through an exchange or provided by the investment manager. Funds where pricing is obtained daily are considered to be in an active market and are listed in level 1, and monthly priced funds are listed in level 2.

## Investments Measured at the Net Asset Value (NAV)

For assets that are measured at the NAV per share (or its equivalent), the non-lagged year-end valuation provided by the fund manager is used. All partnerships provide audited financial statements with unmodified opinions, along with unaudited quarterly reports. In addition, TCDRS confirms additional information regarding the underlying holdings and TCDRS' ownership percentage of the total limited partnership.

## Commingled Funds

The commingled funds with fair values reported at NAV per share (or its equivalent), such as member units or an ownership interest in partners' capital to which a proportionate share of net assets is attributed, are reported in Tables 8 and 9 disclosures on pages 40-43, along with their redemption restrictions.



### Hedge Funds & Strategic Credit Funds

Most hedge funds and strategic credit funds are organized as limited partnerships under the laws of Delaware and use partnership accounting methodologies. These partnerships may invest their assets directly or through a master fund and may also use a wider range of investment techniques such as leverage, short selling and derivatives to achieve their objectives. The fair value of these investments has been determined using the NAV per share or its equivalent. Due to the inherent uncertainty of valuations of investments that are determined to be illiquid and/or do not have readily ascertainable fair values, the estimates of fair value may differ from the values ultimately realized by the partnership, and those differences can be material. The amount of notice the investor is required to give to the general partner in order to redeem ranges from 45 to 180 days. For hedge funds, investors are generally able to sell their interest in the partnerships at regular intervals ranging from monthly to annually. Strategic credit funds can be organized using a traditional hedge fund structure, which provides investors regular intervals to sell their interest in the partnership ranging from monthly to annually, or organized using a shorter-duration, private-equity structure that allows for a two-year investment period, one-year harvest period, and an optional one- to two-year extension. Certain funds may allow for the creation of “special investments,” which are investments the investment manager believes lack a readily ascertainable fair value, are illiquid or should be held until the resolution of a special event or circumstance.

TCDRS targets 50% of its hedge fund allocation to equity long/short funds in which the equity securities maintain some level of market exposure (either net long or net short); however, the level of exposure may vary over time. TCDRS targets 5% of its hedge fund allocation to a market neutral strategy designed to maintain no net exposure to the overall direction of the equity market. Event-driven funds, which are targeted at 20% of TCDRS’ hedge fund allocation, focus on identifying and analyzing securities that can benefit from the occurrence of an extraordinary corporate transaction or event such as mergers, acquisitions, buyouts, stock splits and bankruptcies. Credit/distressed debt funds can come in the form of bonds, mutual funds or the distressed firm itself. This strategy has a low correlation with factors that affect the stock markets. Though TCDRS has a target allocation of zero percent to the credit/distressed strategy, TCDRS may allocate a maximum of 20% to this strategy. The global macro strategy

structures its holdings, such as long and short positions, in order to take advantage of shifts in macroeconomic trends; TCDRS targets 10% of hedge funds to this strategy. The remaining 15% uses a multi-strategy approach, which represents a mix of the other hedge fund strategies.

### Private Equity

Private equity is risk capital provided outside the public markets. Investments are illiquid and traded only on acquisition or exit. The term private equity is very broad and includes many types of investments. TCDRS targets 50% of its private equity allocation to buyout funds that include investments in acquisitions, growth equity, recovery investments, and special situations (a class which represents a diversified strategy across many sub-classes). Buyouts use leverage (debt), aggressive restructuring and the purchase of large controlling stakes in the portfolio companies. Venture capital includes funds that invest in companies in a range of stages of development from start-up/seed-stage, early stage and later/expansion stage. TCDRS targets 25% of its private equity allocation to venture capital funds. TCDRS targets 5% of its private equity allocation to real assets. Funds that invest in real assets have a return linked to inflation, such as energy or other commodity-based investments. The remaining allocation to private equity targets non-U.S. investments. These may be buyout, venture capital or real assets.

The fair value of these investments has been determined using the NAV per share or its equivalent. The fund managers determine fair value of these funds by reference to observable valuation measures for comparable companies or transactions, adjusted for differences between the investment and the referenced comparable, and in some instances by reference to option pricing models or other similar methods. Inputs may include, but are not limited to, significant developments such as meaningful third-party transactions, material progress or slippage in the development of the investee company’s business, a change in the cash or debt on a company’s balance sheet, dividend accretion on certain types of securities, valuation of comparable publicly traded companies, significant changes in the overall market environment and discounts for lack of marketability.

Private equity investments are illiquid and typically have expected holding periods of 10 to 12 years. These investments are not eligible for redemption. Distributions from each fund are received as the underlying investments in the funds are liquidated.

# NOTES TO THE FINANCIAL STATEMENTS

**TABLE 8: INVESTMENTS AND DERIVATIVE INSTRUMENTS MEASURED AT FAIR VALUE**

		Fair Value Measurements Using			
Investment Description	Investment Portfolio	Fair Value 12/31/2023	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Short-Term Securities					
Collective US Gov. STIF	Investment-Grade Bonds	\$ 28,407,544	\$ —	\$ 28,407,544	\$ —
	Master Limited Partnerships	1,604,991	—	1,604,991	—
	Credit	2,726,445	—	2,726,445	—
	REITs	4,984,168	—	4,984,168	—
	Cash and Cash Equivalents	1,340,570,883	—	1,340,570,883	—
Commercial Paper	Investment-Grade Bonds	(107,000)	—	(107,000)	—
Total Short-Term Securities		1,378,187,031	—	1,378,187,031	—
Equity Securities					
Corporate Stock - Preferred	Investment-Grade Bonds	8,310,316	—	8,310,316	—
	Credit	120,115	—	120,115	—
Corporate Stock - Common	Master Limited Partnerships	456,084,843	456,084,843	—	—
	Credit	87,595,450	87,595,450	—	—
	REITs	631,247,743	631,247,743	—	—
Domestic Equity/Commingled	US Equities	5,635,369,659	5,635,369,659	—	—
Internat'l Equity/Commingled Funds	REITs	228,152,178	228,152,178	—	—
	International Equities	4,147,566,412	4,147,566,412	—	—
Total Equity Securities		11,194,446,716	11,186,016,285	8,430,431	—
Debt Securities					
Corp. Debt Instruments	Investment-Grade Bonds	450,278,459	—	450,278,459	—
	Credit	146,200,401	—	146,200,401	—
Government Non-US	Investment-Grade Bonds	2,673,552	—	2,673,552	—
Municipals	Investment-Grade Bonds	12,238,480	—	12,238,480	—
US Government Securities	Investment-Grade Bonds	478,228,246	—	478,228,246	—
Bond Futures/Swaps	Investment-Grade Bonds	1,233,304	1,233,304	—	—
Total Debt Securities		1,090,852,442	1,233,304	1,089,619,138	—
Other Investments					
Invested Securities-Lending Collateral		323,737,687	—	323,737,687	—
		323,737,687	—	323,737,687	—
Leveled Assets at Fair Value		\$ 13,987,223,876	\$ 11,187,249,589	\$ 2,799,974,287	\$ —
Investments Measured at the Net Asset Value (NAV)					
Internat'l Equity/Commingled Funds	Emerging	327,488,564			
	Global	1,621,870,566			
Private Real Estate Partnerships		2,635,745,657			
Private Equity Partnerships		12,504,760,099			
Hedge Funds		2,354,347,375			
Strategic Credit		4,327,670,169			
Distressed Debt		1,830,436,603			
Direct Lending		6,701,518,385			
Total Investments Measured at the NAV		32,303,837,418			
Investment-related Cash, Receivables and Payables Not Included Above		56,911,073			
Total Investments and Securities-Lending Collateral Reinvested		\$ 46,347,972,367			

Due to rounding, totals and detail may not equal.

## NOTES TO THE FINANCIAL STATEMENTS

**TABLE 8: LIQUIDITY INFORMATION FOR INVESTMENTS MEASURED AT THE NET ASSET VALUE (NAV)**

		Fair Value 12/31/2023	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Internat'l Equity/Commingled Funds	Emerging	\$ 327,488,564		Monthly, Quarterly	15-60 days
	Global	1,621,870,566		Monthly	45 days
Private Real Estate Partnerships		2,635,745,657	1,661,318,636	Not eligible	
Private Equity Partnerships	Buyout	7,807,132,469	3,606,417,706	Not eligible	
	Venture Capital	4,056,495,069	1,790,657,190	Not eligible	
	Real Assets	641,132,561	230,077,244	Not eligible	
Hedge Funds	Equity Long/Short	1,259,454,500		Quarterly, Rolling 1-yr	45-60 days
	Event Driven	463,342,202		Quarterly	60-65 days
	Credit/Distressed	—			
	Global Macro	372,167,072		Quarterly	45 days
	Multi-Strategies	246,609,008		Monthly, Semi-annual	95-180 days
	Terminating Funds/In Liquidation	12,774,593			
Strategic Credit		3,916,016,092	21,450,000	Monthly, Quarterly, Annually	60-90 days
Strategic Credit - not eligible for redemption		411,654,077	201,002,233	Not eligible	
Distressed Debt		1,830,436,603	956,487,662	Not eligible	
Direct Lending		6,701,518,385	2,724,177,150	Not eligible	
Total Investments Measured at the NAV		\$ 32,303,837,418	\$ 11,191,587,821		

Due to rounding, totals and detail may not equal.



# NOTES TO THE FINANCIAL STATEMENTS

**TABLE 9: INVESTMENTS AND DERIVATIVE INSTRUMENTS MEASURED AT FAIR VALUE**

		Fair Value Measurements Using			
Investment Description	Investment Portfolio	Fair Value 12/31/2022	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Short-Term Securities					
Collective US Gov. STIF	Investment-Grade Bonds	\$ 34,637,425	\$ —	\$ 34,637,425	\$ —
	Master Limited Partnerships	4,814,401	—	4,814,401	—
	Credit	2,719,227	—	2,719,227	—
	REITs	3,357,904	—	3,357,904	—
	Cash and Cash Equivalents	990,423,570	—	990,423,570	—
Commercial Paper	Investment-Grade Bonds	—	—	—	—
Total Short-Term Securities		1,035,952,527	—	1,035,952,527	—
Equity Securities					
Corporate Stock - Preferred	Investment-Grade Bonds	8,729,997	—	8,729,997	—
	Credit	1,143,322	—	1,143,322	—
Corporate Stock - Common	Master Limited Partnerships	378,363,508	378,363,508	—	—
	Credit	65,063,544	65,063,544	—	—
	REITs	550,363,286	550,363,286	—	—
Domestic Equity/Commingled	US Equities	5,130,427,791	5,130,427,791	—	—
Internat'l Equity/Commingled Funds	Credit	6,540,648	6,540,648	—	—
	REITs	208,511,230	208,511,230	—	—
	International Equities	3,655,063,913	3,655,063,913	—	—
Total Equity Securities		10,004,207,238	9,994,333,920	9,873,318	—
Debt Securities					
Corp. Debt Instruments	Investment-Grade Bonds	415,099,318	—	415,099,318	—
	Credit	120,804,724	—	120,711,211	93,513
Government Non-US	Investment-Grade Bonds	641,552	—	641,552	—
Municipals	Investment-Grade Bonds	12,088,342	—	12,088,342	—
US Government Securities	Investment-Grade Bonds	470,794,900	—	470,794,900	—
Bond Futures/Swaps	Investment-Grade Bonds	71,014	71,014	—	—
Total Debt Securities		1,019,499,849	71,014	1,019,335,322	93,513
Other Investments					
Invested Securities-Lending Collateral		296,835,432	—	296,835,432	—
		296,835,432	—	296,835,432	—
Leveled Assets at Fair Value		\$ 12,356,495,047	\$ 9,994,404,934	\$ 2,361,996,600	\$ 93,513
Investments Measured at the Net Asset Value (NAV)					
Internat'l Equity/Commingled Funds	Emerging	286,777,202			
	Global	1,276,083,629			
Private Real Estate Partnerships		2,185,772,977			
Private Equity Partnerships		11,553,981,365			
Hedge Funds		2,568,415,590			
Strategic Credit		4,401,966,102			
Distressed Debt		1,627,628,320			
Direct Lending		5,860,119,225			
Total Investments Measured at the NAV		29,760,744,410			
Investment-related Cash, Receivables and Payables Not Included Above		20,032,445			
Total Investments and Securities-Lending Collateral Reinvested		\$ 42,137,271,902			

Due to rounding, totals and detail may not equal.

## NOTES TO THE FINANCIAL STATEMENTS

**TABLE 9: LIQUIDITY INFORMATION FOR INVESTMENTS MEASURED AT THE NET ASSET VALUE (NAV)**

		Fair Value 12/31/2022	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Internat'l Equity/Commingled Funds	Emerging	\$ 286,777,202		Monthly, Quarterly	15-60 days
	Global	1,276,083,629		Monthly	45 days
Private Real Estate Partnerships		2,185,772,977	2,230,944,091	Not eligible	
Private Equity Partnerships	Buyout	6,922,893,931	3,593,423,113	Not eligible	
	Venture Capital	3,923,458,447	1,764,542,287	Not eligible	
	Real Assets	707,628,987	274,314,028	Not eligible	
Hedge Funds	Equity Long/Short	1,116,890,450		Monthly, Quarterly, Rolling 1-yr	45-91 days
	Event Driven	423,258,167		Monthly, Quarterly	60-65 days
	Credit/Distressed	—			
	Global Macro	373,772,107		Quarterly	45 days
	Multi-Strategies	428,976,962		Monthly, Quarterly, Semi-annual	45-180 days
	Terminating Funds/In Liquidation	225,517,904			
Strategic Credit		4,060,431,204	21,450,000	Monthly, Quarterly, Annually	30-90 days
Strategic Credit - not eligible for redemption		341,534,898	266,474,143	Not eligible	
Distressed Debt		1,627,628,320	832,586,399	Not eligible	
Direct Lending		5,860,119,225	3,487,626,729	Not eligible	
Total Investments Measured at the NAV		\$ 29,760,744,410	\$ 12,471,360,790		

Due to rounding, totals and detail may not equal.

## NOTES TO THE FINANCIAL STATEMENTS

### **Distressed Debt**

Distressed debt includes investments in the debt instruments of companies that may be publicly traded or privately held that are financially distressed and are either in bankruptcy or likely candidates for bankruptcy. Typical holdings are senior and subordinated debt instruments and bank loans. Gains can be realized by holding the debt until there are some payments by the company at maturity or through distributions of cash, restructured debt or equity resulting from the bankruptcy process. Distressed debt investments are not eligible for redemption. Distributions are received as the underlying investments in the funds are liquidated. Investments are typically made in years one through five with capital typically returned in years three through 10.

### **Direct Lending**

Direct lending partnerships invest primarily in privately originated debt and preferred equity instruments to small and mid-sized companies and privately originated senior and mezzanine debt for real estate. Direct lending investments may also include other types of yield-oriented non-correlated funds including, but not limited to, royalty streams

and aviation leases. Direct lending investments are not eligible for redemption. Distributions are received as the underlying investments in the funds are liquidated, which may take up to three to five years.

### **Private Real Estate**

Private real estate may behave as highly debt-like securities or as highly equity-like securities, depending on the characteristics of the property. Core properties tend to be held for a long time to take full advantage of the lease and rental cash flows that they provide. Value-added and opportunistic real estate achieve a substantial portion of their return from appreciation in value. Value-added real estate can involve repositioning, renovation, and redevelopment of existing properties, while opportunistic real estate includes all of these activities as well as the purchase of raw land and ground-up development. These investments are not eligible for redemption. Distributions from each fund will be received as the underlying investments in the funds are liquidated. As a private, non-exchange-traded asset, private real estate funds are illiquid. The life of a private real estate fund is typically 10 to 12 years.



## REQUIRED SUPPLEMENTARY INFORMATION AND NOTES

**TABLE 10: MONEY-WEIGHTED RATES OF RETURN (UNAUDITED)**

The money-weighted rates of return are presented to provide information regarding investment performance, net of investment expenses, adjusted for the changing amounts actually invested.

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expenses	11.08%	-5.82%	22.02%	10.42%	16.58%	-1.85%	14.72%	7.48%	-0.66%	6.84%

See accompanying independent auditor's report.

Table 10 presents the money-weighted rate of return, which provides information regarding TCDRS' investment performance, net of investment expenses, adjusted for the changing amounts actually invested. The money weighted return and time-weighted performance return may differ due to timing and magnitude of cash flows.

## OTHER SUPPLEMENTARY INFORMATION

### CHANGES IN FIDUCIARY NET POSITION BY FUND AND INTERFUND TRANSFERS

Pension Trust Fund  
12-Month Period Ending December 31, 2023

	Employees Saving Fund	Subdivision Accumulation Fund
<b>ADDITIONS</b>		
Employee Deposits and Employer Contributions	\$ 635,663,190	\$ 1,252,813,531
Investment Income		
Net Appreciation in Fair Value of Investments	—	—
Interest and Dividends	—	—
Total Investment Activity Income	—	—
Less Investment Activity Expenses	—	—
Net Income from Investment Activities	—	—
Net Income from Securities-Lending Activities	—	—
Total Net Investment Income	—	—
Building Operations and Miscellaneous Income	—	—
<b>Total Additions</b>	<b>635,663,190</b>	<b>1,252,813,531</b>
<b>DEDUCTIONS</b>		
Benefits Paid	—	2,139,251,861
Withdrawals	129,482,780	—
Terminating Employer SAF Refunds	—	13,734
Interest Allocation to Group Term Life Fund	—	—
Administrative Operations Expenses	—	—
Building Operations Expenses	—	—
<b>Total Deductions</b>	<b>129,482,780</b>	<b>2,139,265,595</b>
<b>TRANSFERS OF FUNDS</b>		
Retirement Transfers	(673,945,914)	673,184,942
Income Allocation	575,417,148	3,602,978,101
Terminating Employer Transfers	—	(124,532)
Expense Fund Transfer	—	—
Escheated Accounts, Net	(831,597)	—
Allocation from General Reserves	—	—
Net Transfers	(99,360,363)	4,276,038,511
<b>Net Increase (Decrease) in Fiduciary Net Position</b>	<b>406,820,047</b>	<b>3,389,586,447</b>
<b>NET POSITION RESTRICTED FOR PENSION BENEFITS</b>		
Beginning of Period	8,733,260,352	31,066,660,327
End of Period	\$ 9,140,080,399	\$ 34,456,246,774

See accompanying independent auditor's report.

## OTHER SUPPLEMENTARY INFORMATION

### CHANGES IN FIDUCIARY NET POSITION BY FUND AND INTERFUND TRANSFERS

Pension Trust Fund  
12-Month Period Ending December 31, 2023

Closed Subdivision Annuity Reserve Fund	Endowment Fund	Income Fund	Expense Fund	Total
\$ —	\$ —	\$ —	\$ —	\$ 1,888,476,721
—	—	4,434,427,546	—	4,434,427,546
—	—	217,104,701	—	217,104,701
—	—	4,651,532,247	—	4,651,532,247
—	—	43,098,926	—	43,098,926
—	—	4,608,433,321	—	4,608,433,321
—	—	2,205,136	—	2,205,136
—	—	4,610,638,457	—	4,610,638,457
—	—	—	2,545,618	2,545,618
—	—	4,610,638,457	2,545,618	6,501,660,796
1,529,390	36,764	—	—	2,140,818,015
—	—	—	—	129,482,780
—	—	—	—	13,734
—	—	3,183,647	—	3,183,647
—	—	—	24,587,838	24,587,838
—	—	—	2,066,132	2,066,132
1,529,390	36,764	3,183,647	26,653,970	2,300,152,146
760,972	—	—	—	—
1,004,445	—	(4,179,399,694)	—	—
124,532	—	—	—	—
—	(29,000,000)	—	29,000,000	—
—	831,597	—	—	—
—	428,055,116	(428,055,116)	—	—
1,889,949	399,886,713	(4,607,454,810)	29,000,000	—
360,559	399,849,949	—	4,891,648	4,201,508,650
14,580,484	2,140,435,391	—	13,581,163	41,968,517,717
\$ 14,941,043	\$ 2,540,285,340	\$ —	\$ 18,472,811	\$ 46,170,026,367

## OTHER SUPPLEMENTARY INFORMATION

CHANGES IN ENDOWMENT FUND				
Pension Trust Fund				
12-Month Period Ending December 31, 2023				
	General Reserves Account	Perpetual Endowment Account	Reserve for Expense Fund	Total
<b>ADDITIONS</b>				
Transfer from Income Fund	\$ 428,055,116	\$ —	\$ —	\$ 428,055,116
Escheated Accounts	—	2,847,537	—	2,847,537
<b>Total Additions</b>	<b>428,055,116</b>	<b>2,847,537</b>	<b>—</b>	<b>430,902,653</b>
<b>DEDUCTIONS</b>				
Transfer to Expense Fund	—	—	29,000,000	29,000,000
Reinstatements of Escheated Accounts	—	2,015,940	—	2,015,940
Uncollectible Benefits	36,764	—	—	36,764
<b>Total Deductions</b>	<b>36,764</b>	<b>2,015,940</b>	<b>29,000,000</b>	<b>31,052,703</b>
<b>TRANSFERS</b>				
Next Year Expense Fund Transfer	(25,000,000)	—	25,000,000	—
Prior Period Escheatment Adjustment	613	(613)	—	—
<b>Total Transfers</b>	<b>(24,999,387)</b>	<b>(613)</b>	<b>25,000,000</b>	<b>—</b>
<b>Net Change in Fund</b>	<b>403,018,965</b>	<b>830,984</b>	<b>(4,000,000)</b>	<b>399,849,949</b>
<b>Beginning of Year</b>	<b>2,105,664,328</b>	<b>5,771,063</b>	<b>29,000,000</b>	<b>2,140,435,391</b>
<b>Balance — December 31, 2023</b>	<b>\$ 2,508,683,293</b>	<b>\$ 6,602,047</b>	<b>\$ 25,000,000</b>	<b>\$ 2,540,285,340</b>
See accompanying independent auditor's report.				



## OTHER SUPPLEMENTARY INFORMATION

### CHANGES IN INCOME FUND

Pension Trust Fund  
12-Month Period Ending December 31, 2023

#### INVESTMENT RESULTS

Net Appreciation in Fair Value of Investments	\$ 4,434,427,546
Interest and Dividends	217,104,701
Net Income from Securities-Lending Activities	2,205,136
Investment Activity Expenses	(43,098,926)
<b>Net Investment Results</b>	<b>4,610,638,457</b>

#### STATUTORY ALLOCATIONS

Allocation of Current Year Interest:

Employees Saving Fund	575,417,148
Closed Subdivision Annuity Reserve Fund	1,004,445
Group Term Life Fund	3,183,647

<b>Total Statutory Allocations</b>	<b>579,605,240</b>
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#### BOARD OF TRUSTEES' ALLOCATIONS

Subdivision Accumulation Fund	3,602,978,101
Transfers to General Reserves	428,055,116
<b>Total Board of Trustees' Allocations</b>	<b>4,031,033,217</b>

Net Change in Fund

Balance — January 1, 2023	—
Balance — December 31, 2023	\$ —

See accompanying independent auditor's report.

## OTHER SUPPLEMENTARY INFORMATION

### ADMINISTRATIVE REVENUES AND EXPENSES

Year Ended Dec. 31, 2023

	Administrative Operations	Building Operations	Combined Operations
<b>Administrative Revenues:</b>			
Rental Income	\$ —	\$ 2,396,563	\$ 2,396,563
Other Income	—	149,055	149,055
<b>Total Administrative Revenues</b>	<b>—</b>	<b>2,545,618</b>	<b>2,545,618</b>
<b>Administrative Expenses:</b>			
Payroll and Temporary Employees	11,534,469	—	11,534,469
Payroll Taxes	817,767	—	817,767
Pension Contributions	1,103,694	—	1,103,694
Employee Insurance & Benefits	1,555,402	—	1,555,402
Professional Fees/Outsourced Services	2,150,482	—	2,150,482
Software Licensing	2,034,515	—	2,034,515
Equipment Service	129,889	—	129,889
Building Operations	—	1,420,538	1,420,538
Office Supplies/Postage	126,738	—	126,738
Telecommunications/Internet Services	317,550	—	317,550
Printing and Communications	528,489	—	528,489
Records Management and Reference Materials	41,441	—	41,441
Memberships	10,140	—	10,140
Education and Training	152,592	—	152,592
Field Services for Members and Employers	279,252	—	279,252
Organization and Meetings	180,890	—	180,890
General Insurance	287,161	—	287,161
Strategic Projects	647,807	—	647,807
Depreciation and Amortization	2,689,560	645,594	3,335,154
<b>Total Administrative Expenses</b>	<b>\$ 24,587,838</b>	<b>\$ 2,066,132</b>	<b>\$ 26,653,970</b>

See accompanying independent auditor's report.

**INVESTMENT EXPENSES**

Year Ended Dec. 31, 2023

**INVESTMENT-ACTIVITY EXPENSES**

## Department Operating Expenses

Salaries	\$ 5,227,130
Payroll Taxes	291,555
Pension Contributions	449,467
Employee Insurance and Benefits	390,569
Professional Fees/Outsourced Services	1,393,145
Investment Data Systems	50,966
Equipment Service and Repairs	2,428
Office Supplies/Postage	1,914
Telecommunications	15,561
Reference Materials and Memberships	22,351
Education and Travel	203,403

Total Department Operating Expenses	8,048,489
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## Nondepartment Managers' Fees:

Equities/Hedge Funds	10,956,638
REITs	3,791,282
Master Limited Partnerships	2,611,516
Private Real Estate Partnerships	8,273,711
Investment-Grade Bonds	1,774,462
Credit	4,331,078

Total Nondepartment Managers' Fees	31,738,687
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Total Department Operating Expenses and Managers' Fees	39,787,176
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Custodial Fees — Mellon Trust	561,750
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Investment Consultant Fees — Cliffwater LLC	2,750,000
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<b>Total Investment-Activity Expenses</b>	<b>\$ 43,098,926</b>
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**SECURITIES-LENDING EXPENSES**

Borrower Rebates and Agent Fees	\$ 15,752,383
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See accompanying independent auditor's report.

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## OTHER SUPPLEMENTARY INFORMATION

### PROFESSIONAL AND CONSULTING SERVICES

Year Ended Dec. 31, 2023

Professional/Consultant	Nature of Service	Administrative Operations	Investment Operations <sup>1</sup>
Oshyn, Inc.	Technology consulting	\$ 1,945,476	—
Vinson & Elkins, LLP	Legal services	—	1,045,432
Milliman, Inc.	Actuarial services	520,450	—
KPMG, LLP	Audit services	317,000	—
Phidix, LLC	Technology consulting	303,394	—
Evonsys, LLC	Technology consulting	254,200	—
Jackson Walker, LLP	Legal services	61,149	159,790
Susman Tisdale Gayle Architects	Architectural consulting	198,770	—
Binary Defense Systems	Technology consulting	184,995	—
DLA Piper US, LLP	Legal services	—	124,072
JP Morgan Chase	Banking services	100,510	—
McElvaney Public Affairs, LLC	Public Affairs services	94,500	—
Broaddus & Associates	Project management	93,488	—
enChoice, Inc	Technology consulting	84,346	—
Open Text, Inc	Records management	81,356	—
Framework Security	Technology consulting	66,876	—
LexisNexis Risk Solutions	Technology consulting	60,000	—
Bradshaw & Bickerton, PLLC	Legal services	—	49,620
Texhahn Media, Inc.	Communications consulting	49,469	—
		<b>\$ 4,415,979</b>	<b>\$ 1,378,913</b>

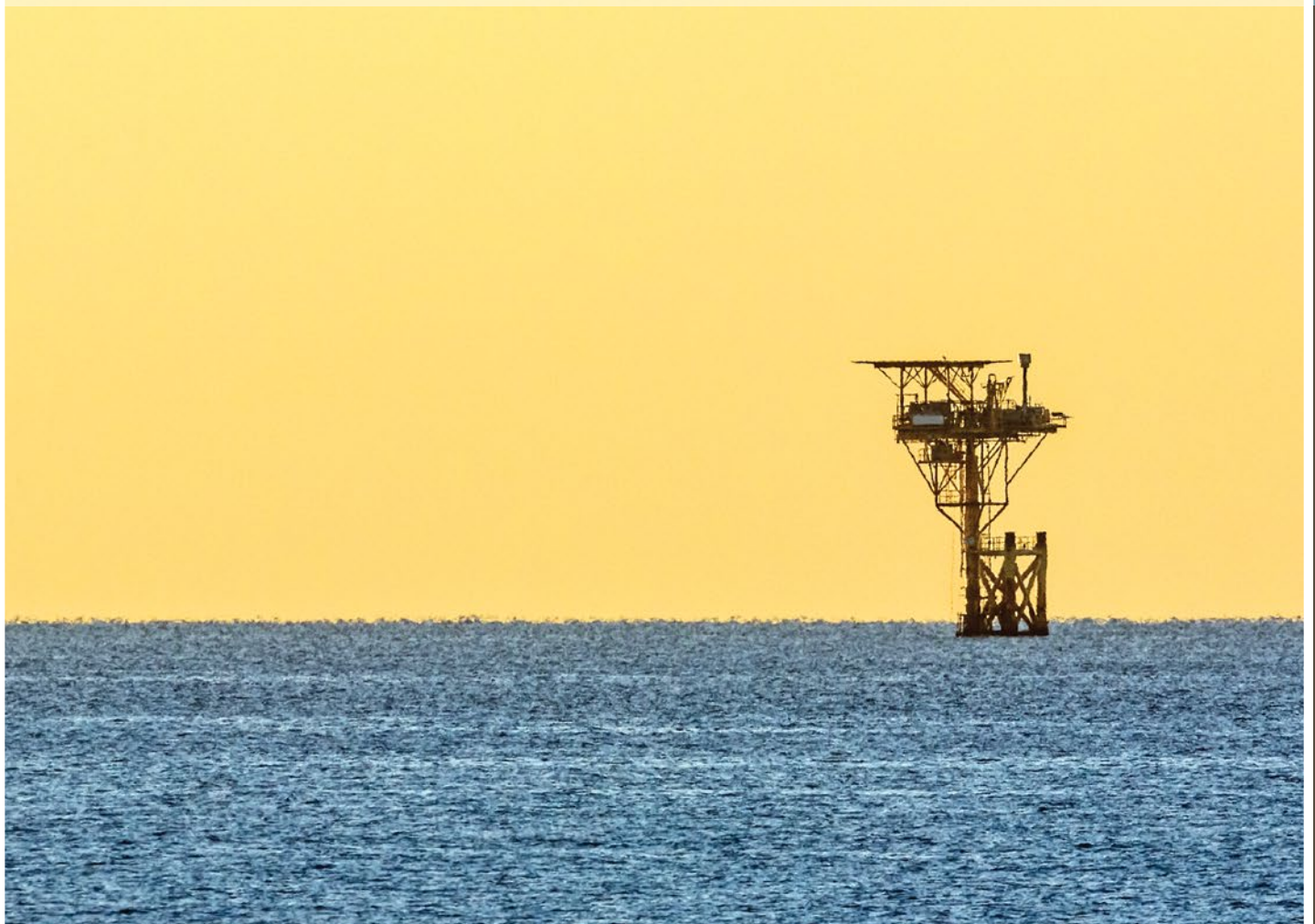
<sup>1</sup> Pursuant to GFOA guidelines, investment advisor expenses are shown only on the investment expenses schedule on the preceding page.

See accompanying independent auditor's report.



# INVESTMENT

# 3



## DIVERSIFIED INVESTMENTS

TCDRS' broadly diversified portfolio is designed to achieve our long-term return goal with an acceptable level of risk. Our large fund size creates unique economies of scale that make our investment process more efficient.

OIL PLATFORM  
GULF OF MEXICO





May 2024

Board of Trustees  
Texas County and District Retirement System  
901 MoPac Expressway South  
Barton Oaks Plaza IV, Ste. 500  
Austin, Texas 78746

To the members of the Board:

It is our pleasure to be the investment consultant for the Texas County and District Retirement System (hereinafter referred to as "TCDRS") and to report on your investment performance and activities for the year ending 2023. Retained in 2005, Cliffwater LLC provides investment policy development and review, asset allocation analysis, asset class structure analysis, investment manager searches and investment performance monitoring and evaluation to the Board and its staff. In calculating investment performance, TCDRS uses the industry standard time-weighted rate of return methodology (net of fees) based upon market values.

2023 was a year of continued interest rate normalization. The Federal Reserve raised interest rates four times during the year and continued quantitative tightening to combat persistently high, although declining, inflation (December 2023 Trailing 12 month CPI-U of 3.4% vs. 6.5% for December 2022). However, the Fed paused rate hikes the second half of the year and indicated rate declines may be in the offing. As a result, stocks rallied the last two months of the year and the 10 year US Treasury interest rate did a full round trip from the start of the year. The US Total Stock Market Index returned 26.1% and developed international stocks (MSCI World Ex US net Index) returned 17.9%. The 10 Year US Treasury yield started the year at 3.87% and ended the year at 3.88%. Most other risk bearing asset classes experienced gains, but the private markets lagged the public market recovery. High yield bonds returned 13.5% (FTSE High Yield Cash-Pay Index) for the year while floating rate bank loans, continuing to benefit from high cash rates, returned 13.3% (Morningstar LSTA US Leveraged Loan Index). REITs recovered with a 11.0% return (FTSE NAREIT All Equity REIT Index) while continued demand for energy resulted in MLPs returning 26.6% (Alerian MLP Index). Private market activity remained muted throughout the year and private equity funds experienced modest gains while real estate funds were flat. In contrast, direct lending benefited from the rise in short-term rates and was a positive contributor for the year.

TCDRS' diversified investment portfolio increased in total assets from \$41.9 billion to \$46 billion. The one-year total fund return was 11.1%, after fees, which was slightly below the Board's Total Fund Policy Benchmark return of 11.3%. Over 10 years, the fund's 7.8% return exceeds the Board's Total Fund Policy Benchmark return of 6.6%. At the asset class level, TCDRS' passively managed US equities portfolio returned 26.1% for the year. TCDRS' balance of active and passive developed international managers resulted in a 17.5% return, slightly below the benchmark return while the active global equity portfolio returned 27.1%, which was above the benchmark return. Emerging market equities had a 9.8% return, matching the benchmark. The active REIT portfolio's return of 13.3% exceeded the benchmark's 11.0% return and the MLP portfolio returned 18.7% compared to the benchmark's 26.6% return. The active core fixed income portfolio returned 6.4% relative to 5.5% for the benchmark as bond markets stabilized. Hedge funds continued to provide stability in the portfolio returning 9.7% compared to its benchmark return of 6.1%. The strategic credit asset class return of 12.8% was slightly below the benchmark's 13.5% return while distressed debt performed well at 11.8%. The private equity program returned 4.9%, below the benchmark's 5.9%. Direct lending returned 11.7% and the real estate program returned -1.8% for the year. Having a higher exposure to private markets during a year in which public market performance significantly rebounded, led to the fund slightly underperforming the benchmark.

In terms of asset allocation, the TCDRS Board did not make any asset allocation policy changes during the year. Rather, the private asset classes began the year at or above their target weights due to the public markets declines in 2022. These overweights eased by the end of the year due to public market performance recovering. The fund committed to new private equity, distressed debt and direct lending partnerships in accordance with its annual commitment budgets.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Kathleen K. Barchick".

Kathleen K. Barchick, Sr. Managing Director

## A: THE TCDRS ACT AND INVESTMENT POLICY

Investment decisions of the TCDRS Board of Trustees (board) are subject to the Texas Constitution, the TCDRS Act and the applicable statutory provisions of the Texas Trust Code that provide for a “prudent person” standard of care.

Additionally, the board has adopted, and reviews at least annually, an investment policy that defines investment authority and emphasizes the importance of a long-term investment philosophy with minimization of risk.

## B: INVESTMENT PHILOSOPHY AND STRATEGY

The board has established a long-term target investment return of 7.5% and has diversified the TCDRS portfolio to include:

- Equities
  - U.S., international developed, emerging markets, and global equities
- Hedge funds

- Credit investments
  - Strategic credit, distressed debt and direct lending
- Private equity
- Real assets
  - Real estate investment trusts (REITs), commodities, private real estate partnerships, Treasury Inflation-Protected Securities (TIPS) and Master Limited Partnerships (MLPs)
- Investment-grade bonds
- Cash and cash equivalents

(For more information on these types of securities, please see the Glossary on page 90.) The board uses a long-term, strategic approach to asset allocation based upon capital market assumptions that are reviewed and adopted annually. The assumptions in effect as of March 2023 are shown in Table 1 and include the long-term expected return and risk (standard deviation) for each asset class.

## C: ASSET ALLOCATION

The board has established asset allocation targets for each asset class within the TCDRS portfolio. Table 2 shows the target allocations in effect during 2023 for each asset class.

**TABLE 1: CAPITAL MARKET ASSUMPTIONS**

As of Jan. 1, 2023

Asset Category (Portfolio)	Expected Return	Standard Deviation
<b>Equities</b>		
U.S. Equities	7.25%	17.00%
International Equities — Developed	7.25	18.00
International Equities — Emerging	7.25	26.00
Global Equities	7.25	17.70
<b>Hedge Funds</b>	5.20	4.40
<b>Credit Investments</b>		
Strategic Credit	5.69	5.86
Distressed Debt	9.90	11.00
Direct Lending	9.25	8.00
<b>Private Equity</b>	10.25	20.00
<b>Real Assets</b>		
REIT Equities	6.45	22.00
Commodities	2.50	18.00
Private Real Estate Partnerships	8.00	30.00
TIPS	3.85	7.00
Master Limited Partnerships (MLPs)	7.60	24.00
<b>Investment-Grade Bonds</b>	4.70	5.00
<b>Cash and Cash Equivalents<sup>1</sup></b>	2.50	2.00

<sup>1</sup> Money awaiting allocation to an asset category and deposited with the system's custodian.

**TABLE 2: ASSET ALLOCATION TARGETS**

Asset Category	Target Allocation Percentages in Effect at:	
	Jan. 1, 2023	Dec. 31, 2023
<b>Equities</b>		
U.S. Equities	11.5%	11.5
International Equities — Developed	5.0	5.0
International Equities — Emerging	6.0	6.0
Global Equities	2.5	2.5
<b>Hedge Funds</b>	6.0	6.0
<b>Credit Investments</b>		
Strategic Credit	9.0	9.0
Distressed Debt	4.0	4.0
Direct Lending	16.0	16.0
<b>Private Equity</b>	25.0	25.0
<b>Real Assets</b>		
REIT Equities	2.0	2.0
Private Real Estate Partnerships	6.0	6.0
Master Limited Partnerships	2.0	2.0
<b>Investment-Grade Bonds</b>	3.0	3.0
<b>Cash</b>	2.0	2.0

The target allocation for TIPS and Commodities at 12/31/23 was 0.0%.



**TABLE 3: BENCHMARK PORTFOLIOS  
FOR PERFORMANCE MEASUREMENT**

Asset Category	Benchmark Portfolio
Equities	<b>U.S. Equity Index</b> <i>Dow Jones U.S. Total Stock Market Index</i>
	<b>Developed International Equity Index</b> <i>MSCI World ex U.S. Index (net)</i>
	<b>Emerging Market International Equity Index</b> <i>MSCI EM (Emerging Markets) Index (net)</i>
	<b>Global Equity Index</b> <i>MSCI World Index (net)</i>
Hedge Funds	<i>Hedge Fund Research, Inc. (HFRI) Fund of Funds Composite Index</i>
Credit Investments	<b>Strategic Credit Index</b> <i>FTSE High-Yield Cash-Pay Index</i>
	<b>Distressed Debt Index</b> <i>Cambridge Associates Distressed Securities Index<sup>1</sup></i>
	<b>Direct Lending Index</b> <i>Morningstar LSTA US Leveraged Loan TR USD Index</i>
Private Equity	<i>Cambridge Associates Global Private Equity &amp; Venture Capital Index<sup>2</sup></i>
Real Assets	<b>REIT Index</b> <i>67% FTSE NAREIT All Equity REIT Index</i>
	<i>33% S&amp;P Global REIT (net) Index</i>
	<b>Commodities Index</b> <i>Bloomberg Commodities Index</i>
	<b>TIPS Index</b> <i>Bloomberg U.S. 10-Year Breakeven Inflation Index</i>
	<b>Private Real Estate Partnerships</b> <i>Cambridge Associates Real Estate Index<sup>3</sup></i>
	<b>MLP Index</b> <i>Alerian MLP Index</i>
Investment-Grade Fixed-Income	<i>Bloomberg U.S. Aggregate Bond Index</i>
Cash	<i>U.S. 3-Month Treasury Bill</i>

<sup>1</sup> Includes vintage years 2005–present of Quarter Pooled Horizon IRRs.

<sup>2</sup> Includes vintage years 2006–present of Quarter Pooled Horizon IRRs.

<sup>3</sup> Includes vintage years 2007–present of Quarter Pooled Horizon IRRs.

## D: ASSET CLASSES, INVESTMENT STYLES AND INVESTMENT MANAGERS

TCDRS uses both active and passive styles of investment management. The passive style seeks to match the performance of an established market index by holding the same securities as the index. An active style seeks to exceed the performance of a benchmark by allowing the manager to actively trade securities that may be different from the index.

Asset classes managed passively are U.S. equities and a portion of the developed international and emerging market equities. The remainder of the assets are actively managed.

The investment manager responsible for an externally managed portfolio holds any cash that portfolio generates in interest-bearing instruments or accounts until it is reinvested. The TCDRS Investment Officer manages cash as well as new contributions in a short-term investment fund until allocated to a portfolio.

## E: INVESTMENT RESULTS

TCDRS retains a professional performance measurement analyst that regularly reports investment performance to the board for each investment manager, for the aggregate of all managers in each asset class and for the total portfolio.

### Performance Reporting

Performance of each investment manager is measured against the performance of similar assets contained within a benchmark portfolio, as represented by a specific index. Comparisons indicate the value added by each manager, if any, in excess of the performance that was experienced by the specific benchmark index. When multiple investment managers are retained within a particular asset class, a benchmark portfolio is selected for measurement of the performance of the entire asset class. Table 3 identifies the benchmark portfolio associated with each asset class contained within the TCDRS investment portfolio.

A policy benchmark portfolio consisting of individual asset class benchmarks, weighted by asset class target allocation, is constructed for measurement of the performance of the entire portfolio.



## Performance Results

The TCDRS portfolio in 2023 returned 11.1% net of fees. 2023 was a strong year for most investment markets with most major asset classes increasing in value. TCDRS' U.S. equities (+26.1%), global equities (+27.1%), MLPs (+18.7%), developed international equities (+17.5%), and REITs (+13.3%)

were all up significantly. Emerging market equities (+9.8%), hedge funds (+9.7%), investment-grade bonds (+6.4%), cash (+4.9%), and private equity (+4.9%) were positive. The three credit portfolios performed well: strategic credit (+12.8%), distressed debt (+11.8%), and direct lending (+11.7%). The only investment which was negative in 2023 was private real estate (-1.8%).

**TABLE 4: RESULTS FROM INVESTING ACTIVITIES, NET OF ALL FEES<sup>1</sup>**

Periods Ended Dec. 31, 2023

TCDRS Portfolio/Benchmark Portfolio	2023 Return	Annualized Returns				
		3-Year	5-Year	10-Year	20-Year	30-Year
Total Fund	11.1	8.5	10.5	7.8	7.3	7.6
Policy Benchmark Portfolio	11.3	6.0	9.2	6.6	6.5	6.5
Equities						
U.S. Equities	26.1	8.5	15.0	11.4	9.8	—
U.S. Equity Index Benchmark Portfolio	26.1	8.4	15.0	11.4	9.7	—
International Equities - Developed	17.5	4.1	8.6	4.8	6.0	—
Developed Intl Equity Index Benchmark Portfolio	17.9	4.4	8.5	4.3	5.6	—
International Equities - Emerging	9.8	-4.7	5.2	3.1	—	—
Emerging Intl Equity Index Benchmark Portfolio	9.8	-5.1	3.7	2.7	—	—
Global Equity	27.1	5.4	15.6	11.8	—	—
Global Equity Benchmark Portfolio	23.8	7.3	12.8	8.6	—	—
Hedge Funds	9.7	5.3	7.4	4.8	—	—
Hedge Fund Benchmark Portfolio	6.1	2.2	5.1	3.2	—	—
Credit Investments						
Strategic Credit	12.8	9.3	7.3	7.3	7.6	—
Strategic Credit Benchmark Portfolio	13.5	2.1	5.1	4.2	6.3	—
Distressed Debt	11.8	12.8	10.4	9.4	—	—
Distressed Debt Index Benchmark Portfolio	6.2	12.6	10.5	7.4	—	—
Direct Lending	11.7	10.4	9.8	7.7	—	—
Direct Lending Index Benchmark Portfolio	13.3	5.8	5.8	3.9	—	—
Private Equity	4.9	13.2	16.7	15.4	—	—
Private Equity Benchmark Portfolio	5.9	9.8	14.4	13.3	—	—
Real Assets						
REITs	13.3	5.2	8.0	7.4	8.0	—
REIT Index Benchmark Portfolio	11.0	4.8	6.4	6.6	7.5	—
Private Real Estate Partnerships	-1.8	9.5	7.2	10.0	—	—
Private Real Estate Benchmark Portfolio	-3.7	7.5	6.5	8.7	—	—
MLPs	18.7	28.5	12.4	3.7	—	—
MLP Index Benchmark Portfolio	26.6	32.4	12.0	1.9	—	—
Investment-Grade Bonds	6.4	-2.8	1.9	2.5	3.8	5.2
Investment-Grade Bond Index Benchmark Portfolio	5.5	-3.3	1.1	1.8	3.3	4.5
Cash	4.9	2.1	1.9	1.4	—	—
U.S. 3-month T-Bill	5.1	2.4	1.9	1.3	—	—

<sup>1</sup> Calculations of performance were prepared using time-weighted rates of return calculations and are reported net of all fees.

Source: BNY Mellon Performance and Risk Analytics Fund Analysis, Fourth Quarter 2023

**TABLE 5: LIST OF LARGEST EQUITY HOLDINGS<sup>1</sup>**

Dec. 31, 2023 (\$ Millions)

Company	Portfolio	Fair Value
Apple Inc.	U.S. Equities	\$ 322.8
Microsoft Corp.	U.S. Equities	320.7
Amazon.com Inc.	U.S. Equities	158.5
NVIDIA Corp.	U.S. Equities	140.3
Alphabet Inc Class A	U.S. Equities	94.8
American Tower Corp.	REITs	90.3
Meta Platforms Inc.	U.S. Equities	90.1
Crescent Capital BDC Inc.	Credit	86.9
Alphabet Inc Class C	U.S. Equities	80.5
Tesla Inc.	U.S. Equities	78.8

<sup>1</sup> TCDRS invests in equity securities through separately managed and commingled equity vehicles. At Dec. 31, 2023, the largest equities contained in the U.S. Equities portfolio represent TCDRS' investment in the S&P 500® Flagship Fund strategy which TCDRS owns a 17.31% indirect interest in. The remaining securities are individual shares held in the REIT and credit portfolios.

## F: LISTS OF LARGEST HOLDINGS<sup>1</sup>

### Equity Holdings

The system's exposure to equity markets is achieved through participation in commingled investment pools, such as State Street Global Advisors (SSgA) U.S. equity and international equity index funds, and direct investment in separately managed REIT and MLP portfolios. At Dec. 31, 2023, TCDRS' largest equity holdings were in the U.S. equity, credit and REIT portfolios. Table 5 displays our exposure to the 10 largest equity holdings.

### Fixed-Income Holdings

Table 6 presents the top 10 fixed-income securities owned by TCDRS. The securities are contained within the investment-grade bond portfolio. At Dec. 31, 2023, the aggregate fair value of the investment-grade bond portfolio was \$972 million.

<sup>1</sup> A complete listing of all securities TCDRS owned at Dec. 31, 2023, is available upon written request.

## G: RESULTS OF SECURITIES-LENDING ACTIVITIES

TCDRS retains The Bank of New York Mellon Corp. as securities-lending agent to engage in lending securities from its portfolios. Securities-lending transactions consist of loans of securities to broker-dealers and other entities in exchange for collateral with a simultaneous agreement to return the collateral for the same securities in the future.

**TABLE 6: LIST OF LARGEST FIXED-INCOME HOLDINGS**

Dec. 31, 2023 (\$ Millions)

Description	Maturity	Interest Rate	Fair Value
U.S. Treasury Bond	11/15/2041	2.000%	\$ 16.65
U.S. Treasury Note	07/31/2029	2.625%	11.77
U.S. Treasury Note	06/30/2030	3.750%	11.21
U.S. Treasury Bond	08/15/2053	4.125%	9.40
FHLMC Pool #Ra-7194	04/1/2052	3.500%	8.38
U.S. Treasury Note	07/15/2025	3.000%	8.27
FHLMC Pool #Sd-1581	09/1/2052	2.500%	7.75
FNMA Pool #0Cb3594	05/1/2052	3.500%	7.70
U.S. Treasury Bond	08/15/2042	3.375%	7.33
FHLMC Pool #Ra-3202	07/1/2050	2.500%	7.04

**TABLE 7: SECURITIES-LENDING ACTIVITY**

Year Ended Dec. 31, 2023

Elements of Securities-Lending Activity	Amount
Gross Earnings	\$ 16,808,842
Less Rebates from Lenders and Lending Agent's Share of Income	15,752,383
Net Securities-Lending Income (Separately Managed Accounts)	1,056,459
Securities-Lending Income (Commingled Funds)	1,148,677
<b>Net Securities-Lending Income</b>	<b>\$ 2,205,136</b>

The gross income and expenses attributable to securities-lending activity and net lending income of \$1.1 million are shown in Table 7. Additionally, SSgA passively manages the U.S. and international equity portfolios of TCDRS in commingled funds. The securities in these funds participate in the securities-lending program of SSgA with TCDRS receiving a proportionate share of the securities-lending income generated from this activity. Also shown in Table 7 is income of \$1.1 million, representing TCDRS' share of the 2023 equity portfolios' securities-lending income.

## H: FEES AND COMMISSIONS

Table 8, on page 59, presents the 2023 investment managers' fees TCDRS incurred, excluding securities-lending fees.

Note that all returns presented throughout this annual report are reported net of the amounts reported in Table 8.

TABLE 8: INVESTMENT MANAGERS' FEES

Year Ended Dec. 31, 2023

Asset Class	Fees Paid from the Pension Trust Fund <sup>1</sup>		Fees Netted Against Returns		Fair Value at Dec. 31, 2023
	Management Fees	Performance Fees	Management Fees	Performance Fees	
Equities	\$ 7,242,238	\$ 3,714,400	\$ —	\$ —	\$ 11,732,295,201
MLPs	2,611,516	—	—	—	457,847,189
REITs	3,791,282	—	—	—	863,878,024
Investment-Grade Bonds	1,774,462	—	—	—	972,262,186
Cash & Equivalents	—	—	—	—	1,402,766,029
<b>Alternative Investments</b>	<b>Management Fees</b>	<b>Performance Fees</b>	<b>Management Fees</b>	<b>General Partner Carried Interest</b>	<b>Fair Value at Dec. 31, 2023</b>
Private Equity	—	—	178,077,499	156,526,112	12,508,875,413
Private Real Estate Partnerships	8,273,711	—	32,792,373	(40,759,555)	2,635,745,657
Hedge Funds	—	—	27,444,724	9,008,077	2,354,347,375
Strategic Credit	3,158,991	—	45,181,010	50,191,176	4,477,332,168
Distressed Debt	1,172,087	—	17,837,171	37,261,028	1,830,436,603
Direct Lending	—	—	79,112,101	107,128,201	6,788,448,835
<b>Total</b>	<b>\$ 28,024,287</b>	<b>\$ 3,714,400</b>	<b>\$ 380,444,878</b>	<b>\$ 319,355,039</b>	<b>\$ 46,024,234,680</b>

<sup>1</sup> See Nondepartment Managers' Fees on page 51.

### Alternative Investment Fees

The investment management fees included in Investment Activity Expenses presented in the Statement of Changes in Fiduciary Net Position represent only those paid directly from the Pension Trust Fund and do not include fees incurred and charged by general partners in partnerships investing in private equity, distressed debt, direct lending, strategic credit, private real estate and hedge funds, as these types of fees are netted directly against returns for those investments in accordance with FASB ASC 820. In the interest of greater transparency, fees and profit shares associated with these types of investments are disclosed in Table 8, based on information requested and received from fund general partners in conjunction with the annual audit.

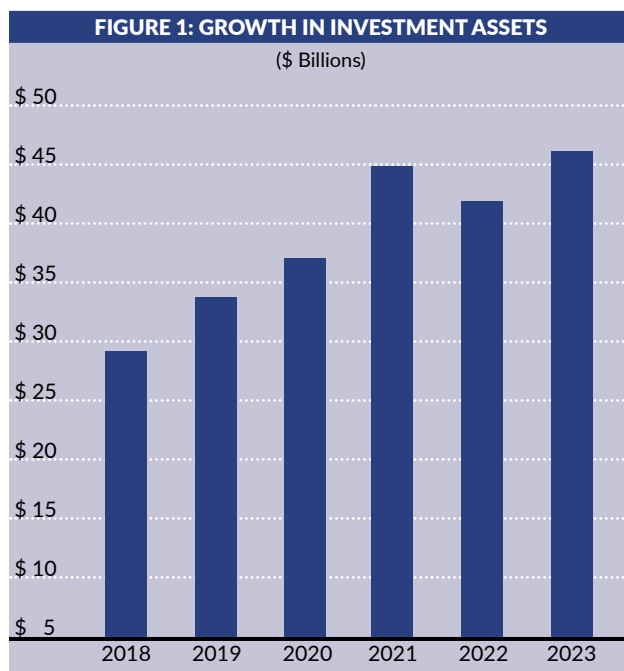
The investment expenses related to TCDRS' investments in partnerships investing in private equity, distressed debt, direct lending, strategic credit, private real estate and hedge funds fall into the categories of management fees and profit sharing (also called "carried interest").

Management fees typically range from 1.5% to 2% of the value of invested assets (hedge funds and strategic credit) or committed capital (private equity, private real estate, distressed debt and direct

lending) and are intended to compensate the general partner for its costs in operating the partnership.

Profit sharing or carried interest incentivizes and aligns the general partner's interest with TCDRS' interest. The carried interest represents the general partner's share of the partnership's profits, typically 20%, with 80% going to the limited partners such as TCDRS. Carried interest earned by hedge funds and strategic credit funds is generally accrued monthly and paid annually because the underlying investments are relatively liquid and more easily valued. Due to the long-term nature of private equity, private real estate, distressed debt and direct lending partnerships (typically eight to 12 years) and the illiquidity associated with the underlying investments, carried interest is accrued over the life of the partnership but is usually not finalized until the fund is fully liquidated. Generally, an agreed rate of return, or preferred return, must first be surpassed before carried interest is earned by the general partner. To incentivize general partners to maintain performance over the life of a partnership, periods of negative performance may result in previously accrued carried interest being reduced or "clawed back." During such periods, negative carried interest expense would be reported.

The fees reported in Table 8 are those that directly impact TCDRS' various partnership investments.



General partners may receive additional economic benefits from their management of the partnerships in accordance with the partnerships' governing documents.

Table 9 presents the commissions paid to brokers by the system's equity managers. The managers executed trades of 40.3 million shares through 40 brokers. The \$0.9 million in commissions earned by these brokers represents a cost of \$0.02 per share traded.

## I: ASSET GROWTH OF THE SYSTEM

As shown in Figure 1, the total value of TCDRS' investment assets, including accrued interest and dividends, has increased by \$16.9 billion over the past five years (from \$29.2 billion at Dec. 31, 2018, to \$46.0 billion at Dec. 31, 2023). The increase of investment assets in 2023 was attributable to a 11.1% investment return along with net cash outflows as the system has reached a stage in its maturity where cash flow from employee deposits and employer contributions is slightly less than the amounts required to meet annual benefits, withdrawals and administrative expenses.

**TABLE 9: BROKER COMMISSIONS  
PAID BY EQUITY MANAGERS**

Year Ended Dec. 31, 2023

Brokerage Firm	Shares Traded (Thousands)	Commissions	
		(Thousands)	Per Share
B. Riley and Co. LLC, NY	4,399	132	0.03
Goldman Sachs & Co., NY	2,125	87	0.04
J.P Morgan Securities Inc., NY	3,525	87	0.02
Merrill Lynch Pierce Fenner Smith Inc. NY	2,294	63	0.03
Wells Fargo Securities, LLC, NY	2,602	62	0.02
Citigroup Global Markets, Inc., NY	1,640	55	0.03
Bernstein Sanford C & Co., NY	2,891	43	0.02
J.P. Morgan Securities LLC, NY	2,734	43	0.02
Cowen And Co LLC, NY	2,314	42	0.02
ISI Group Inc., NY	2,229	42	0.02
Summary of Remaining Firms	13,499	219	0.02
<b>Totals</b>	<b>40,252</b>	<b>\$ 875</b>	<b>\$ 0.02</b>

## J: INVESTMENT SUMMARY

The total value of the portfolio and each asset class at Dec. 31, 2023, is shown in Table 10 on page 61 and is composed of the fair value of the underlying investments plus the amount of accrued interest and dividends, if any. The values shown in each asset class under the column labeled "Fair Value" are the investment amounts presented in the Statements of Fiduciary Net Position shown on page 26 in the Financial Section of this annual report.



TABLE 10: INVESTMENTS BY ASSET SUBCLASS

Dec. 31, 2023

Type of Investment	Fair Value	Interest, Dividends and Other Receivables	Total Value	% of Total Value
<b>Equities</b>				
US Equities	\$ 5,635,369,659	944,010	5,636,313,669	12.2%
International Equities	4,475,054,976	—	4,475,054,976	9.7%
Global Equities	1,621,870,566	—	1,621,870,566	3.5%
<b>Hedge Funds</b>	2,354,347,375	—	2,354,347,375	5.1%
<b>Credit Investments</b>				
Strategic Credit	4,477,332,168	2,398,102	4,479,730,270	9.7%
Distressed Debt	1,830,436,603	—	1,830,436,603	4.0%
Direct Lending	6,788,448,835	2,050,718	6,790,499,553	14.7%
<b>Private Equity</b>	12,508,875,413	—	12,508,875,413	27.2%
<b>Real Assets</b>				
REITs	863,878,024	2,830,735	866,708,759	1.9%
Private Real Estate Partnerships	2,635,745,657	—	2,635,745,657	5.7%
MLPs	457,847,189	101,914	457,949,103	1.0%
<b>Investment-Grade Bonds</b>	972,262,186	6,836,835	979,099,021	2.1%
<b>Cash and Cash Equivalents</b>	1,402,766,029	6,503,932	1,409,269,961	3.1%
<b>Total Investments Shown on Statements of Fiduciary Net Position</b>	<b>\$ 46,024,234,680</b>	<b>\$ 21,666,246</b>	<b>\$ 46,045,900,926</b>	<b>100.0%</b>

## READER'S NOTES

# ACTUARIAL 4



## **FLEXIBILITY AND LOCAL CONTROL**

TCDRS is not a one-size-fits-all system. Every year, TCDRS employers have the opportunity to review their plans and adjust benefit levels to better meet their needs and budgets.

**LADYBIRD LAKE  
AUSTIN, TEXAS**





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May 30, 2024

Board of Trustees  
Texas County & District Retirement System  
Austin, Texas

Dear Trustees:

In accordance with the Texas County & District Retirement System (TCDRS) Act, the annual actuarial valuation of the assets and liabilities of TCDRS has been completed as of December 31, 2023. This valuation was performed using actuarial assumptions that were adopted by the Board. The economic assumptions were adopted at the March 2021 Board meeting, and the demographic assumptions were adopted at the December 2021 Board meeting.

We believe the assumptions individually and collectively represent reasonable expectations of experience over the long-term future and that all methods and assumptions used for funding and financial reporting are in compliance with the relevant Actuarial Standards of Practice. Nevertheless, the emerging costs of the TCDRS employers will vary from those presented to the extent that actual experience differs from that projected by the actuarial assumptions.

To test how well the financing objective for each plan is being achieved, annual actuarial valuations are made. These valuations recognize differences in the past year between the actuarial assumptions and the actual experience, and any benefit changes for each plan.

The financing objective for each TCDRS plan is to provide retirement, death, and disability benefits for a county's or a district's employees financed by an employer contribution rate. The employer contribution rate is determined annually and consists of the normal cost contribution rate plus the unfunded actuarial accrued liability (UAAL) contribution rate. The UAAL as of December 31, 2020 and any subsequent gains and losses are amortized over closed 20-year periods (open 30-year period if the employer is in an overfunded position). In some cases, the initial closed period for the December 31, 2020 UAAL is amortized over a period shorter than 20 years. Benefit increases are amortized over closed 15-year periods. For UAAL layers with a date established December 31, 2022 or earlier, the amortization is a level percent of payroll; for layers that are established after that date, the amortization is on a level dollar basis. The methods for calculating the required contribution rates are specified in the funding policy which has been adopted by the Board.

A separate actuarial valuation for each participating county and district was performed based on the plan benefits in effect on January 1, 2024. The aggregate results of the actuarial valuation of system-wide assets and liabilities are presented in the Actuarial Section in the Summary Actuarial Valuation Results schedule. The assumptions and methods used in this valuation are summarized in the actuarial section. The member, annuitant and asset data used in the valuation were all prepared and furnished by TCDRS. We relied on that data after examining it for general reasonableness and year-to-year consistency. Please refer to the December 31, 2023 System-wide Actuarial Valuation Report for further disclosures.





Milliman provided the information that TCDRS used in preparing the following tables and figures:

- Financial Section – Table 1: Membership
- Financial Section – Notes to the Financial Statements: TCDRS Bridge Program Health Reimbursement Arrangement
- Actuarial Section – Table 1: Select Termination Rates
- Actuarial Section – Table 2: Rates of Withdrawal Upon Termination
- Actuarial Section – Table 3: Disability Rates
- Actuarial Section – Table 4: Service Retirement Rates
- Actuarial Section – Table 5: Annual Rate of Salary Increase
- Actuarial Section – Summary Actuarial Data (Funding Status and Funding Progress)
- Actuarial Section – Table 6: Funding Progress
- Actuarial Section – Table 7: Employer Contributions
- Actuarial Section – Table 8: Retiree and Beneficiary Data – Accounts
- Actuarial Section – Table 9: Retiree and Beneficiary Data – Amounts
- Actuarial Section – Table 10: Solvency Test
- Actuarial Section – Table 11: Contribution Rate Information for Participating Employers
- Actuarial Section – Table 12: Participating Employers and Depositing Members
- Actuarial Section – Table 13: Analysis of Financial Experience
- Actuarial Section – Table 14: Summary Actuarial Valuation Results
- Statistical Section – Table 3: Average Benefits
- Statistical Section – Table 4: Average Benefit Profile by Employer Type
- Statistical Section – Table 5: Annuitants by Type of Benefit
- Statistical Section – Figure 4: Number of Annuitants Grouped by Age

Sincerely,

Matt Larrabee, FSA, EA, MAAA  
Consulting Actuary

Nick J. Collier, ASA, EA, MAAA  
Consulting Actuary

# RETIREMENT PLAN: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

## A: ACTUARIAL ASSUMPTIONS

Except as indicated below, the actuarial assumptions for funding valuation purposes described below were developed from an actuarial experience investigation of TCDRS over the years 2017–2020. They were recommended by Milliman, Inc., adopted by the TCDRS Board of Trustees in 2021 and first used in the Dec. 31, 2021 actuarial valuation. For new plans joining TCDRS, employer-specific assumptions for termination rates and payroll increases are assigned based on the size of the employer and other relevant factors.

There were two assumptions that changed for the Dec. 31, 2020 actuarial valuation: the investment return assumption and the price inflation assumption. The change in the price inflation assumption also impacted the salary increases assumption and the payroll growth assumption. They were recommended by Milliman, Inc., adopted by the TCDRS Board of Trustees in March 2021 and first used in the Dec. 31, 2020 actuarial valuation.

More detail can be found in the explanation of the individual assumptions that follows.

### Termination Rates

The termination rates are used to estimate future terminations of employment for reasons other than death, disability or retirement. The rates vary by length of service, entry-age group (age at hire) and termination group assignments and do not apply after an employee is eligible for retirement. Sample rates for three of the seven termination groups are shown in Table 1.

Each employer was assigned to a termination group based primarily upon the termination characteristics of the members of that employer's plan during the years 2017-2020 relative to the termination characteristics of TCDRS membership system-wide during the same period. Consideration was also given to previous experience studies when assigning an employer's termination group to account for the possibility that 2017-2020 experience was out of the ordinary.

For plans that have adopted the partial lump-sum payment option, adjustments are made to the termination rates. Rates are reduced at ages near retirement as it is anticipated that if the partial lump sum is available, members are less likely to terminate employment so they can withdraw their accounts.

### Withdrawal Rates

Members who terminate employment with the county or district may either elect to maintain their accounts with TCDRS or withdraw their accounts. The likelihood that an active member who terminates employment will elect to withdraw varies by length of service and vesting requirement. Sample withdrawal rates are shown in Table 2.

TABLE 1: SELECT TERMINATION RATES				
Entry Age	Years of Service	Male and Female		
		Low	Mid	High
20 to 29	0	0.264	0.330	0.396
	3	0.144	0.180	0.216
	6	0.088	0.110	0.132
	9	0.064	0.080	0.096
	12	0.048	0.060	0.072
	15	0.035	0.044	0.053
	18	0.026	0.033	0.040
	21	0.020	0.025	0.030
	24	0.015	0.019	0.023
	27	0.010	0.013	0.016
30 to 39	0	0.216	0.270	0.324
	3	0.120	0.150	0.180
	6	0.080	0.100	0.120
	9	0.056	0.070	0.084
	12	0.044	0.055	0.066
	15	0.035	0.044	0.053
	18	0.026	0.033	0.040
	21	0.020	0.025	0.030
	24	0.015	0.019	0.023
	27	0.010	0.013	0.016
40 to 49	0	0.192	0.240	0.288
	3	0.096	0.120	0.144
	6	0.064	0.080	0.096
	9	0.044	0.055	0.066
	12	0.036	0.045	0.054
	15	0.027	0.034	0.041
	18	0.018	0.022	0.026
	21	0.000	0.000	0.000
	24	0.000	0.000	0.000
	27	0.000	0.000	0.000

TABLE 2: RATES OF WITHDRAWAL UPON TERMINATION			
Years of Service	Vesting Requirement		
	5 Years	8 Years	10 Years
0	100.0%	100.0%	100.0%
4	100.0%	100.0%	100.0%
6	38.0%	100.0%	100.0%
8	34.0%	34.0%	100.0%
10	32.0%	32.0%	32.0%
15	26.0%	26.0%	26.0%
20	21.0%	21.0%	21.0%
25	17.5%	17.5%	17.5%
30 and over	0	0	0

# RETIREMENT PLAN: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

**TABLE 3: DISABILITY RATES**

Age	Male and Female Occupational <sup>1</sup>	Male and Female All Causes <sup>2</sup>
35	.00001	.000252
40	.00001	.000420
45	.00001	.000740
50	.00001	.001170
55	.00001	.001620
60 and above	.00001	.000000

<sup>1</sup>Applicable for non-vested members

<sup>2</sup>Applicable for vested members who are not eligible for service retirement

Members who have already terminated employment and are neither vested nor active with another TCDRS employer are assumed to withdraw their accounts. Otherwise, they are assumed to defer their benefit until they attain retirement eligibility.

## Disability Rates

There are two types of disability rates, occupational disability rates (predicts disabilities that occur during the performance of job duties) and all-causes disability rates (predicts all disabilities regardless of whether they occur during the performance of job duties). Before a member is vested, only the occupational disability rates are applicable. For members who are vested, but not eligible for service retirement, the rate of disablement is the all-causes rate. Rates are assumed to be zero after the member is eligible for service retirement. Sample disability rates are shown in Table 3.

## Service Retirement Rates

Retirement rates predict when active retirement eligible members will commence receiving benefit payments and are based on a member's age and length of service. Sample rates are shown in Table 4.

Non-depositing members are assumed to retire at the later of first retirement eligibility or age 60.

## Mortality Rates

### Depositing members:

135% of the PubG-2010 Employees Amount-Weighted Mortality Table for males, and 120% of the PubG-2010 Employees Amount-Weighted Mortality Table for females, both projected from 2010 using 100% of the MP-2021 Ultimate Scale.

**TABLE 4: SERVICE RETIREMENT RATES**

Age	Years of Service			
	Less than 15 Years	Between 15 and 24 Years	Between 25 and 29 Years	Greater than 29 years
40-49	.05250	.06300	.07700	.08750
50-51	.05625	.06750	.08250	.09375
52-53	.06000	.07200	.08800	.10000
54-56	.06750	.08100	.09900	.11250
57-59	.07500	.09000	.11000	.12500
60-61	.09000	.10800	.13200	.15000
62	.13500	.16200	.19800	.22500
63-64	.11250	.13500	.16500	.18750
65-66	.22500	.22500	.27500	.27500
67	.21600	.21600	.26400	.26400
68-69	.18900	.18900	.23100	.23100
70-74	.20700	.20700	.25300	.25300
75 & Over	1.00000	1.00000	1.00000	1.00000

### Service retirees, beneficiaries and non-depositing members:

135% of the PubG-2010 Healthy Retirees Amount-Weighted Mortality Table for males, and 120% of the PubG-2010 Healthy Retirees Amount-Weighted Mortality Table for females, both projected from 2010 using 100% of the MP-2021 Ultimate Scale.

### Disabled retirees:

160% of the PubG-2010 Disabled Retirees Amount-Weighted Mortality Table for males, and 125% of the PubG-2010 Disabled Retirees Amount-Weighted Mortality Table for females, both projected from 2010 using 100% of the MP-2021 Ultimate Scale.

## Investment Return

A 7.50% annual discount rate is used in the valuation based on the expected long-term investment return of 7.50%. This rate of 7.50% is net of investment and administrative expenses.

## Salary Increases

The salary increase assumption predicts salary increases for individuals over their projected careers. These rates vary by the employee's length of

## RETIREMENT PLAN: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

**TABLE 5: ANNUAL RATE OF SALARY INCREASE**

Years of Service	Entry-Age Group			
	< 30	30-39	40-49	> 50
1	7.6%	7.1%	6.6%	5.8%
3	6.8	6.1	5.6	4.8
5	6.2	5.7	5.2	4.6
10	5.3	4.9	4.5	4.0
15	4.7	4.4	3.9	3.7
20	4.2	4.0	3.6	3.4
25	3.9	3.6	3.4	3.4

service and age at hire (entry age). Annual increase percentages consist of a general wage inflation component of 3.00% and a merit, promotion and longevity component that varies from 0.40% to 5.25% based on entry age and service. The 3.00% wage inflation component is based on the underlying price inflation assumption of 2.50% and 0.50% for assumed increases in productivity. The salary scale varies by entry age, with an approximately 4.70% average annual increase over a typical employee's entire career. Because the TCDRS benefit is not based on final average salary, this assumption is generally not as significant as for other defined benefit retirement systems. Refer to Table 5 for sample salary increase rates.

### Payroll Increase

The payroll increase assumption projects the rate of growth of the employer's aggregate payroll. The rate varies by employer, with a maximum of 3.00%, or a smaller percentage as considered appropriate based on the employer's number of employees and prior experience. It also assumes no future growth in the number of employees.

### Cost-of-Living Adjustment

No cost-of-living adjustments for retirees and beneficiaries are assumed. Within certain parameters, employers may elect cost-of-living adjustments for retirees and beneficiaries on an ad hoc basis.

## B: ACTUARIAL METHODS

### Actuarial Cost Method

For funding calculations, TCDRS uses an entry-age actuarial cost method assuming the current plan provisions have always been in place. The goal of this cost method is to fund benefits in an orderly manner for each participant over his or her career so that sufficient funds are accumulated by the time benefit

payments begin. Under this approach, benefits are funded in advance as a level percentage of pay. This part of the contribution rate is called the normal cost rate and generally remains stable from year to year. A portion of the normal cost rate is paid by the employee (employee deposit rate) and the remainder is paid by the employer (employer-paid normal cost rate).

### Amortization Policy

Any remaining unfunded amounts for benefits that are not covered by the normal cost is funded by the unfunded actuarial accrued liability (UAAL) rate. UAAL amounts occur when benefit enhancements are adopted that have not been funded in advance, when there are actuarial losses due to actual investment or demographic experience that varies from what is actuarially assumed, or when actuarial assumptions or methods are changed.

To the extent that there is an actuarial gain for the year and there are unamortized loss bases from previous years, the gain for the year shall be used to offset unamortized losses from previous years in the order of oldest to most recent. Any remaining reduced loss base from a previous year is re-amortized over its remaining amortization period. Any remaining gain or loss base for the current year is amortized as follows.

Amortization bases are amortized over closed periods using a layered approach. Each year, a new layer may be established to amortize remaining changes in the UAAL after the offsetting process described above, as well as a new layer for plan changes elected by an employer. For amortization bases established on or after Dec. 31, 2023, UAAL amounts are amortized on a level-dollar basis, and amortization bases established prior to Dec. 31, 2023 are amortized on a level percent of pay basis. Amortization bases created due to benefit enhancements are amortized over a 15-year closed period, and any other amortization bases are amortized over a 20-year closed period. This approach ensures that all unfunded liability layers are financed over no more than 20 years.

If a plan is overfunded, the overfunded actuarial accrued liability (OAAL) rate is calculated annually using a 30-year open amortization period on a level-dollar basis.

For newly participating districts that have five or fewer employees with at least one employee who is within five years of retirement eligibility, the consulting actuary may determine that any initial UAAL or any subsequent adoption of prior service



## RETIREMENT PLAN: SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

credits is to be amortized over a five-year closed amortization period. This ensures that benefits are appropriately funded over the current generation of employees.

Extra contributions may be made by employers by choosing to pay an elected rate that is greater than the required funding rate or by making ad hoc lump-sum contributions. Any extra contributions made as lump sums are first used to offset the UAAL increase, if any, related to plan changes elected during the current year. Any extra contributions from an elected rate or remaining extra contribution amounts from lump sums are then used to pay down existing loss bases, in the order of oldest to most recent.

### Asset Valuation Method

When determining the actuarial value of assets used for determining required plan funding, TCDRS smooths each year's actuarial investment gains and losses in the following manner. First, any remaining unrecognized asset gains or losses from the previous year are updated to the current year to account for the time value of money using the investment return assumption. Then to the extent that there is a loss for the year and there are unrecognized gains from previous years, or to the extent that there is a gain for the year and there are unrecognized losses from previous years, the gain or loss for the year shall be used to offset unrecognized gains or losses from previous years in the order of oldest to most recent. Any remaining gain or loss for the year is recognized over a five-year period. This better reflects the system's long-term investment horizon

and keeps employer contribution rates more stable. As actuarial asset investment gains and losses are recognized, they become part of the actuarial gains and losses for the year and are funded according to the amortization policy. This method ensures that an investment gain and loss for a year will be recognized within five years, helping to stabilize employer rates while still resulting in rates that are reasonably reflective of current market conditions. In addition, the board may set aside reserves from investment earnings that are used to help offset future negative economic cycles. These reserves are held separately and are not counted as part of a participating employer's plan assets until they are passed through to employers as determined by the board. Reserves help maintain rate and benefit stability for employers.

### C: CHANGES IN ACTUARIAL ASSUMPTIONS AND METHODS

There were no changes in actuarial assumptions reflected in the Dec. 31, 2023 actuarial valuation, but there were changes in methods. General changes to the amortization policy are described in detail in Section B above and reflect a switch from level-percent of pay amortization to level-dollar amortization and include the offsetting of any actuarial gains for the current year against loss layers from prior years. An additional change in the amortization policy reflects more conservative amortization rules for certain newly participating districts with five or fewer employees, and is also described in detail in Section B.

# RETIREMENT PLAN: SUMMARY ACTUARIAL DATA

## SUMMARY ACTUARIAL DATA

### Funded Status and Funding Progress

#### Pension Trust Fund

The funded status of the pension plan as of Dec. 31, 2023, the most recent actuarial valuation date is:

	(\$ Millions)
Actuarial Value of Assets (a)	\$ 43,609.5
Actuarial Accrued Liability (AAL) – Entry Age (b)	\$ 48,921.2
Unfunded AAL (UAAL) (b-a)	\$ 5,311.7
Funded Ratio (a/b)	89.1%
Covered Payroll (c)	\$ 9,369.3
UAAL as a Percentage of Covered Payroll [(b-a) / c]	56.7%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment and mortality. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress presents multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Actuarial calculations reflect a long-term perspective. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial values of assets, consistent with the long-term perspective of the calculations.

Additional information as of the latest actuarial valuation for the retirement plan follows:

<b>Valuation Date:</b>	Dec. 31, 2023
<b>Actuarial Cost Method:</b>	Entry age
<b>Amortization Method:</b>	Level percent (Amortization layers established prior to Dec. 31, 2023)
	Level dollar (Amortization layers established Dec. 31, 2023 or later)
Unfunded AAL	Closed
Overfunded AAL	Open
<b>Remaining Amortization Period:</b>	
Unfunded AAL	20 years or less (varies by plan)
Overfunded AAL	30 years
<b>Asset Valuation Method:</b>	
SAF	5-year smoothed value
ESF	Fund value
CSARF	Fund value
<b>Actuarial Assumptions:</b>	
Investment Return	7.50%
Career Average Projected Salary Increases	4.70% avg. <sup>1</sup>
Payroll Increase (varies by plan)	3.00% or less
Inflation	2.50%
Cost-of-Living Adjustments	0.0%

<sup>1</sup> Includes inflation at the indicated rate

# RETIREMENT PLAN: SUMMARY ACTUARIAL DATA

**TABLE 6: FUNDING PROGRESS**

(\$ Millions)

Actuarial Valuation Date <sup>1</sup>	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) <sup>2</sup> (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Annual Covered Payroll <sup>3</sup> (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
12/31/14	\$ 23,751.8	\$ 26,252.8	\$ 2,501.0	90.5%	\$ 5,779.0	43.3%
12/31/15	25,398.8	28,632.5	3,233.7	88.7	6,122.3	52.8
12/31/16	26,951.9	30,473.9	3,522.0	88.4	6,378.4	55.2
12/31/17 <sup>4</sup>	28,975.7	32,539.9	3,564.3	89.0	6,676.5	53.4
12/31/18	30,553.9	34,541.2	3,987.3	88.5	6,921.0	57.6
12/31/19	32,789.7	36,670.2	3,880.4	89.4	7,342.6	52.8
12/31/20 <sup>5</sup>	36,017.0	41,294.8	5,277.8	87.2	7,908.8	66.7
12/31/21 <sup>6</sup>	38,598.2	43,612.4	5,014.2	88.5	8,109.0	61.8
12/31/22	40,924.1	46,194.5	5,270.4	88.6	8,657.3	60.9
12/31/23	43,609.5	48,921.2	5,311.7	89.1	9,369.3	56.7

<sup>1</sup> Each county and district participating in TCDRS is financially responsible for its own plan. Therefore, the aggregate numbers shown above reflect only the aggregate condition of TCDRS and are not indicative of the status of any one plan. The valuations above reflect changes in benefits elected by individual employers effective Jan. 1 following the valuation date.

<sup>2</sup> The entry-age actuarial cost method is used for all plans. Each valuation above reflects the actuarial cost method and assumptions in effect as of the valuation date.

<sup>3</sup> The annual covered payroll is based on the employee deposits received by TCDRS for the year ending with the valuation date.

<sup>4</sup> Revised economic and demographic assumptions due to an experience review were first used in this valuation.

<sup>5</sup> Revised economic assumptions due to an experience review were first used in this valuation.

<sup>6</sup> Revised demographic assumptions due to an experience review were first used in this valuation.

**TABLE 7: EMPLOYER CONTRIBUTIONS**

(\$ Millions)

Plan Year Ended Dec. 31	Actuarially Determined Contributions (ADC)		Actual Contributions		Percentage of ADC Contributed
	Average Rate*	Dollar Amount	Average Rate*	Dollar Amount	
2014	11.36%	\$ 656.7	11.84%	\$ 684.2	103%
2015	11.42	699.0	12.14	743.1	104
2016	11.20	714.2	12.10	771.7	108
2017	11.36	758.4	12.33	823.5	109
2018	11.68	808.1	12.56	869.6	108
2019	11.58	850.4	12.79	939.0	110
2020	12.14	959.8	13.08	1,034.4	108
2021	11.81	958.1	13.24	1,073.4	112
2022	12.89	1,116.1	13.86	1,200.1	108
2023	12.34	1,155.9	13.37	1,252.8	108

\* System average weighted by payroll

## RETIREMENT PLAN: SUMMARY ACTUARIAL DATA

**TABLE 8: RETIREE AND BENEFICIARY DATA – ACCOUNTS\***

Year Ended	New Accounts Added	Accounts Removed	Net Change in Accounts	Total Number of Accounts	Percent Change in Number of Accounts
12/31/14	4,504	1,155	3,349	53,169	6.7%
12/31/15	4,277	1,084	3,193	56,362	6.0
12/31/16	4,783	1,160	3,623	59,985	6.4
12/31/17	4,689	1,046	3,643	63,628	6.1
12/31/18	5,024	1,223	3,801	67,429	6.0
12/31/19	4,588	1,165	3,423	70,852	5.1
12/31/20	5,299	1,536	3,763	74,615	5.3
12/31/21	5,052	1,461	3,591	78,206	4.8
12/31/22	5,327	1,502	3,825	82,031	4.9
12/31/23	4,801	1,534	3,267	85,298	4.0

\* Accounts reflect the total number of members being paid by separate employers.

**TABLE 9: RETIREE AND BENEFICIARY DATA – AMOUNTS**

Year Ended	New Annual Benefits Added	Annual Benefits Removed	Net Change in Annual Benefits Amount	Annual Benefits	Percent Change in Annual Benefits	Average Annual Benefit*
12/31/14	\$ 114,372,968	\$ 13,737,044	\$ 100,635,924	\$ 1,011,837,815	11.04%	\$ 19,032
12/31/15	108,470,125	12,908,359	95,561,766	1,107,399,581	9.44	19,644
12/31/16	129,666,055	13,856,779	115,809,276	1,223,208,857	10.46	20,388
12/31/17	125,169,416	15,890,364	109,279,052	1,332,487,909	8.93	20,940
12/31/18	162,174,909	18,552,675	143,622,234	1,476,110,143	10.78	21,888
12/31/19	138,210,299	17,155,446	121,054,853	1,597,164,996	8.20	22,548
12/31/20	168,256,759	24,199,586	144,057,173	1,741,222,169	9.02	23,340
12/31/21	158,940,085	24,886,392	134,053,693	1,875,275,862	7.70	23,976
12/31/22	200,159,081	28,066,216	172,092,865	2,047,368,727	9.18	24,960
12/31/23	163,263,855	27,826,588	135,437,267	2,182,805,994	6.62	25,596

\* The average annual benefits are based on the regular benefits paid in January following the valuation date.

**TABLE 10: SOLVENCY TEST**

(\$ Millions)

Valuation Date	Actuarial Accrued Liabilities for			Actuarial Value of Assets	Portion of Actuarial Accrued Liabilities Covered by Net Position		
	(1)	(2)	(3)		(1)	(2)	(3)
	Current Member Deposits	Retirees and Beneficiaries	Current Members (Employer-Financed Portion)				
12/31/14	\$ 5,931.8	\$ 9,785.8	\$ 10,535.2	\$ 23,751.8	100%	100%	76.3%
12/31/15	6,264.8	10,552.7	11,815.0	25,398.8	100	100	72.6
12/31/16	6,563.4	11,601.0	12,309.5	26,951.9	100	100	71.4
12/31/17	6,901.3	12,713.5	12,925.1	28,975.7	100	100	72.4
12/31/18	7,153.4	14,099.6	13,288.2	30,553.9	100	100	70.0
12/31/19	7,591.0	15,221.3	13,857.9	32,789.7	100	100	72.0
12/31/20	7,990.1	17,259.6	16,045.1	36,017.0	100	100	67.1
12/31/21	8,310.4	18,388.6	16,913.4	38,598.2	100	100	70.4
12/31/22	8,733.3	20,042.2	17,419.0	40,924.1	100	100	69.7
12/31/23	9,140.1	21,252.0	18,529.1	43,609.5	100	100	71.3



# RETIREMENT PLAN: SUMMARY ACTUARIAL DATA

**TABLE 11: CONTRIBUTION RATE INFORMATION FOR PARTICIPATING EMPLOYERS**

Distribution of TCDRS Plans by Year 2025 Employer Actuarially Determined Contribution Rate

Number of Depositing Members as of 12/31/2023	Year 2025 Employer Actuarially Determined Contribution Rate Based on the Plan of Benefits in Effect 1/1/2024						Total
	Under 5.00%	5.00% – 6.99%	7.00% – 8.99%	9.00% – 10.99%	11.00% – 12.99%	Over 12.99%	
1–5	30	30	27	15	20	32	154
6–15	29	22	35	37	17	34	174
16–30	22	4	16	29	20	16	107
31–50	12	5	14	19	13	19	82
51–85	20	8	21	19	7	11	86
86–150	17	10	18	25	11	13	94
151–250	5	6	20	15	16	13	75
251–500	2	4	7	19	6	8	46
Over 500	1	0	5	10	17	17	50
<b>Total</b>	<b>138</b>	<b>89</b>	<b>163</b>	<b>188</b>	<b>127</b>	<b>163</b>	<b>868</b>

**TABLE 12: PARTICIPATING EMPLOYERS AND DEPOSITING MEMBERS**

Valuation Date	Number of Participating Employers	Depositing Members		Average Annual Pay	Percent Increase in Average Annual Pay	Employer Contributions <sup>1</sup>	Average Employer Rate Paid
		Number	Annual Payroll				
12/31/14	677	125,860	\$ 5,779,022,617	\$ 45,916	4.3%	\$ 684,212,315	11.84%
12/31/15	701	129,717	6,122,322,455	47,380	3.2	743,149,234	12.14
12/31/16	737	131,140	6,378,374,324	48,638	2.7	771,701,126	12.10
12/31/17	760	135,751	6,676,520,194	49,182	1.1	823,501,201	12.33
12/31/18	781	137,528	6,921,029,795	50,325	2.3	869,683,305	12.56
12/31/19	798	142,265	7,342,564,173	51,612	2.6	939,026,347	12.79
12/31/20	817	142,722	7,908,759,528	55,414	7.4	1,034,443,115	13.08
12/31/21	830	144,107	8,109,002,702	56,271	1.5	1,073,415,093	13.24
12/31/22	848	145,226	8,657,340,761	59,613	5.9	1,200,119,263	13.86
12/31/23	868	152,417	9,369,269,475	61,471	3.1	1,252,813,531	13.37

<sup>1</sup> Employer contributions include optional lump-sum contributions and elected rates.

**TABLE 13: ANALYSIS OF FINANCIAL EXPERIENCE**

Gains and Losses in Actuarial Accrued Liabilities During 2022–23  
Resulting from Differences Between Assumed Experience and Actual Experience  
(\$ Millions)

Source of Change	\$ Gain (or Loss) for Year	
	2023	2022
Age and Service Retirements	\$ 9.4	\$ 25.1
Death In-Service Benefits	4.3	5.3
Other Termination	10.2	95.8
Pay Increases	(47.0)	(36.4)
Contribution Income	(17.8)	(17.7)
Investment Income	13.7	(265.8)
Death After Retirement	13.9	55.0
Other	(23.9)	(24.9)
<b>Gain (Loss) During Year from Financial Experience</b>	<b>(37.2)</b>	<b>(163.6)</b>
Non-Recurring Items		
Plan Changes	(135.5)	(246.0)
Assumption and Method Changes	0.0	0.0
<b>Gain (or Loss) from Non-Recurring Items</b>	<b>(135.5)</b>	<b>(246.0)</b>
<b>Composite Gain (or Loss) for Year</b>	<b>\$ (172.7)</b>	<b>\$ (409.6)</b>
<b>Composite Gain (or Loss) as a % of Actuarial Accrued Liabilities</b>	<b>(0.4%)</b>	<b>(0.9%)</b>

# RETIREMENT PLAN: SUMMARY OF PLAN PROVISIONS

## A: ORGANIZATION

TCDRS is a statewide, agent multiple-employer, public-employee retirement system that provides the employees of participating counties and districts with retirement, disability and survivor benefits. Each county and district that participates in TCDRS maintains its own customized plan of benefits, which may be changed annually. The governing body of each employer has the option to adopt or change plan provisions based on their needs and budget.

Each employer has a savings-based defined benefit plan where member benefits are based on each member's account balance at retirement and employer matching. All plan assets are pooled for investment purposes, but each employer's plan assets may be used only for the payment of benefits to the members of that employer's plan. This summary describes the plan provisions in general terms. Any questions related to the actual administration, provisions or policies of the retirement plans should be directed to TCDRS.

## B: MEMBERSHIP

All full- and part-time non-temporary employees become members in TCDRS, regardless of the number of hours they work in a year. Employees in a temporary position are not eligible for membership.

## C: TERMINATION OF MEMBERSHIP

TCDRS membership is terminated by a member's death, retirement, or withdrawal of a member's account.

## D: EMPLOYEE DEPOSITS

TCDRS is a savings-based plan. Every paycheck, a portion of each member's pay — from 4% to 7% as set by the employer — is deposited into his or her TCDRS account. By law, member accounts earn 7% interest annually.

## E: SERVICE

Members receive a month of service for each month that they make a deposit into their account. Service may also be granted for periods of employment prior to the employer joining TCDRS and for military and certain other service.

Within TCDRS, all periods of service with any TCDRS participating employers are combined. Also, service periods with other Texas public retirement

plans participating with TCDRS in the Texas Proportionate Retirement Program are combined for purposes of satisfying TCDRS retirement eligibility and vesting requirements.

## F: ELIGIBILITY REQUIREMENTS

### Service Retirement Benefits

The amount of service a member needs to earn a future monthly benefit is called the vesting requirement. When a member is vested, he or she has the right to a monthly benefit at age 60 or older. Employers may choose 5-, 8- or 10-year vesting. In addition, members may retire before age 60 if they meet one of the following requirements, set by the employer:

- "Rule of" eligibility: Under these rules, vested members can retire if their age plus years of service time add up to at least 75 or 80.
- 20-year or 30-year retirement at any age: This lets members retire when they have at least 20 or 30 years of service time.

### Disability Retirement Benefits

A member who is vested and who is totally and permanently disabled is eligible for an immediate disability retirement benefit. A member who is not vested is eligible for an immediate disability retirement benefit if the total and permanent disability was a result of an on-the-job injury.

### Survivor Benefits

Benefits are payable to the beneficiaries or estate of a deceased member. The eligibility requirement for an employer-provided survivor benefit is four years of TCDRS service. Otherwise the survivor benefit is the deceased member's account balance.

## G: DETERMINATION OF RETIREMENT BENEFITS

The service or disability retirement benefit is calculated based on the member's account balance and employer matching as selected by the employer, and may include other employer provided funds. The employer matching can range from a "dollar for dollar," up to \$2.50 per \$1.00 in the member's account. The member's account and employer provided funds are combined and converted to a lifetime annuity. The retiree receives a payment every month for the rest of his or her life. Conversions to a lifetime annuity are based on a 7% discount rate and the following mortality assumptions:

## RETIREMENT PLAN: SUMMARY OF PLAN PROVISIONS

- The portion of the benefit that accrues before 2018, including employee deposits made before 2018 and interest and employer matching on those deposits, shall be calculated based on the UP-1984 table with an age setback of five years for retirees and an age setback of 10 years for beneficiaries, with a 30% reserve refund assumption for the single life option.
- The portion of the benefit that accrues after 2017, including employee deposits made after 2017 and interest and employer matching on those deposits, shall be calculated on a generational mortality basis using the RP-2000 Combined Mortality Table, with a one-year set-forward for males and no set-forward for females, projected to 2014 using Scale AA and for projections after 2014 using 110% of MP-2014 Ultimate Projection Scale, with a 32.79% reserve refund assumption for the single life option. Mortality assumptions for these calculations are blended 50% male and 50% female for retirees, and blended 30% male and 70% female for beneficiaries.

Retirees elect to receive their monthly lifetime benefit by choosing from one of the following seven actuarially equivalent payment options:

- **Single Life option** – Monthly payments cease upon death of the retiree. This option provides the highest monthly benefit.
- **Guaranteed Term Benefit options** – The two guaranteed term benefit options are 10-year guaranteed term and 15-year guaranteed term. These options provide a lifetime monthly benefit to the retiree. In addition, if the retiree passes away within 10 or 15 years of the retirement date, the beneficiary will receive the monthly benefit until the end of the guaranteed term.
- **Dual Life options** – The four dual life options are 100% to beneficiary, 75% to beneficiary, 50% to beneficiary and 100% to beneficiary with pop-up. Under each of these options, after the death of the retiree, the beneficiary receives a monthly lifetime benefit equal to the selected percentage of the retiree's benefit payment. Under the 100% to beneficiary with pop-up option, if the beneficiary dies before the retiree, the monthly benefit amount will "pop up" to a higher monthly amount, as if the retiree had retired under the single life option.

All options pay a death benefit equal to the excess of the person's account balance at retirement over the total monthly benefits that have been paid.

Each employer may allow partial lump-sum payments. This allows the retiring member to receive an

immediate lump-sum payment, not to exceed his or her account balance, and choose a reduced monthly lifetime benefit from any of the payment options.

### H: FUNDING PROVISIONS

Contributions are made monthly by both the employees and the employers based on covered payroll.

Each year the actuary determines the required contribution rate for the following year to adequately fund each employer's benefit plan using the actuarial methods described beginning on page 68. Employers may also elect to fund at a rate higher than the required rate and may also make additional lump-sum contributions.

### I: CHANGES IN PROVISIONS

There were no system-wide changes in plan provisions reflected in the Dec. 31, 2023 actuarial valuation.

Effective each Jan. 1 and within the parameters described previously in the summary of plan provisions, each TCDRS plan may make certain changes to their benefit levels, vesting, retirement eligibility and other plan provisions. The Dec. 31, 2023 actuarial valuation reflects plan provisions in effect for each plan as of Jan. 1, 2024.

# RETIREMENT PLAN: SUMMARY ACTUARIAL VALUATION RESULTS

**TABLE 14: SUMMARY ACTUARIAL VALUATION RESULTS**

	Dec. 31, 2023	Dec. 31, 2022
<b>Valuation Results for Employer Plans</b>		
1 Actuarial present value of future benefits		
Annuitants	\$ 21,237,565,522	\$ 20,027,963,182
Members	38,359,167,145	35,785,997,247
Total	59,596,732,667	55,813,960,429
2 Actuarial present value of future normal cost contributions	10,689,999,923	9,633,774,817
3 Actuarial accrued liability [1 - 2]	48,906,732,744	46,180,185,612
4 Actuarial value of assets		
Employees Saving Fund	9,140,080,399	8,733,260,353
Subdivision Accumulation Fund	34,454,444,495	32,176,205,652
Total	43,594,524,894	40,909,466,005
5 Total unfunded actuarial accrued liability (UAAL)	5,384,338,076	5,337,087,463
6 Total overfunded actuarial accrued liability (OAAL)	(72,130,226)	(66,367,856)
7 Unfunded actuarial accrued liability (UAAL), net of overfunded actuarial accrued liability (OAAL) [5 + 6]. Also equals [3 - 4].	5,312,207,850	5,270,719,607
<b>Valuation Results for Pooled Benefits</b>		
8 Actuarial present value of future benefits from the Closed Subdivision Annuity Reserve Fund for annuities in effect	14,429,252	14,269,456
9 Actuarial value of assets of the Closed Subdivision Annuity Reserve Fund	14,941,043	14,580,484
10 Underfunded actuarial accrued liability (UAAL) [8 - 9]	(511,791)	(311,028)
11 System-wide AAL [3 + 8]	\$ 48,921,161,996	\$ 46,194,455,068
12 System-wide actuarial value of assets [4 + 9]	43,609,465,937	40,924,046,489
13 System-wide UAAL [11 - 12]	\$ 5,311,696,059	\$ 5,270,408,579
14 System-wide Funded Ratio [12/11]	89.1%	88.6%





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May 30, 2024

Board of Trustees  
Texas County & District Retirement System  
Austin, Texas

Dear Trustees:

The Group Term Life Fund (GTLF) is an optional cost-sharing multiple-employer defined benefit plan that is administered by the Texas County & District Retirement System. It provides death benefits to active and, if elected, retired employees of participating employers. The financing objective of the GTLF is to operate as a group term insured benefit, charging each employer its premium based on current actuarial assumptions and its own demographic membership (number of active and retired members covered by GTLF). The funding of the GTLF is in accordance with Section 845.406 of the TCDRS statute. Contribution rates are established as a percentage of pay.

Milliman annually determines contribution rates for those employers that elect to participate in the GTLF for the Group Term Life Fund (GTLF). Additionally, Milliman performs GASB 75 financial reporting valuations of employers participating in the GTL who have elected both active and retiree coverage. It is our understanding that GASB 74 reporting is not required for the GTLF as it is not an Other Post-Employment Benefit (OPEB) trust, because it covers both actives and retirees.

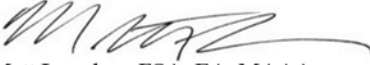
The GTLF provides death benefits to both active and retired members. Each participating employer can elect to cover just active members, or active and retired members. The required contribution rates for funding purposes are equal to a premium rate that is individually determined for each participating employer annually and is based on the mortality and service experience of all employees and retirees covered by the fund and the demographics specific to the workforce of the participating employer. The rate is expressed as a percentage of the compensation of members employed by the participating employer. The required contributions are determined using a one-year term cost funding method. Due to the surplus that exists in the GTLF, effective in 2023, employer premiums are set at 80% of the calculated actuarial cost.


Milliman provided the summarized information about the GTLF that TCDRS has used in preparing the following tables:

- Actuarial Section – Table 15: GTLF – Retirees Covered
- Actuarial Section – Table 16: GTLF – Retirees Coverage Amounts
- Actuarial Section – Table 17: GTLF Participating Employers and Covered Members

The assumptions and methods used in the funding calculations are also summarized in the actuarial section.

Sincerely,

  
Matt Larrabee, FSA, EA, MAAA  
Consulting Actuary

  
Nick J. Collier, ASA, EA, MAAA  
Consulting Actuary

# GTLF: SUMMARY OF ACTUARIAL ASSUMPTIONS, METHODS AND DATA

## A: ACTUARIAL ASSUMPTIONS AND METHODS

The actuarial assumptions and methods for funding valuation purposes described below were developed from an actuarial experience investigation of TCDRS over the years 2017–2020. They were recommended by Milliman, Inc., adopted by the TCDRS Board of Trustees in 2021 and first used in the Dec. 31, 2021 actuarial valuation.

### **Mortality Rates**

Same as for retirement plan.

### **Actuarial Value of Assets**

All assets are valued at fund value. The fund's assets are pooled with those of the Pension Trust Fund under provisions of the TCDRS Act.

### **Actuarial Cost Method**

For funding purposes, the term cost method is used for determining the cost of one-year term life insurance for both active employees and retirees. The one-year term cost is 80% of the rate determined by applying the mortality rate assumptions. This takes into account the size of the GTLF relative to the expected benefit payments and the statutory requirement that the GTLF be credited annually with 7% interest. The only demographic assumptions used for determining funding requirements are active employee mortality rates and retiree mortality rates.

## **Changes in Actuarial Assumptions and Methods**

There were no changes in actuarial assumptions or methods, reflected in the Dec. 31, 2023 actuarial valuation.

## B: PLAN PROVISIONS

### **Participation in the Group Term Life Plan**

Employers who participate in the TCDRS retirement plan may elect to participate in the Group Term Life plan. Employers may elect to cover members who are active employees only or both members who are active employees and retirees and may elect to change or discontinue coverage annually.

### **Benefit Eligibility**

The county or district must have elected the applicable Group Term Life coverage for the calendar year in which a member who is an active employee or retiree dies.

### **Amount of Insurance Benefit**

If death occurs while the member is actively employed, the benefit is an amount equal to the employee's most recent regular annualized salary. The insurance benefit payable to retirees is \$5,000.

# GTLF: SUMMARY OF ACTUARIAL ASSUMPTIONS, METHODS AND DATA

**TABLE 15: GTLF – RETIREES COVERED**

Year Ended	New Retirees Added	Retirees Removed	Net Change in Retirees	Total Number of Retirees <sup>1</sup>	Percent Change in Number Covered
12/31/14	676	183	493	7,216	7.3%
12/31/15	639	203	436	7,652	6.0
12/31/16	797	254	543	8,195	7.1
12/31/17 <sup>2</sup>	652	542	110	8,305	1.3
12/31/18	799	232	567	8,872	6.8
12/31/19	756	943	(187)	8,685	(2.1)
12/31/20	740	345	395	9,080	4.5
12/31/21	651	353	298	9,378	3.3
12/31/22	1,034	286	748	10,126	8.0
12/31/23	762	374	388	10,514	3.8

<sup>1</sup> A single individual may have coverage with more than one participating employer.

<sup>2</sup> An adjustment is included to combine retirees with multiple benefits paid by a single employer.

**TABLE 16: GTLF – RETIREES COVERAGE AMOUNTS**

Year Ended	New Annual Coverage Added	Annual Coverage Removed	Net Change in Annual Coverage Amount	Annual Coverage Amount <sup>1</sup>	Percent Change in Annual Coverage	Average Annual Coverage Per Retiree
12/31/14	\$ 3,380,000	\$ 915,000	\$ 2,465,000	\$ 36,080,000	7.3%	\$ 5,000
12/31/15	3,195,000	1,015,000	2,180,000	38,260,000	6.0	5,000
12/31/16	3,985,000	1,270,000	2,715,000	40,975,000	7.1	5,000
12/31/17 <sup>2</sup>	3,260,000	2,710,000	550,000	41,525,000	1.3	5,000
12/31/18	3,995,000	1,160,000	2,835,000	44,360,000	6.8	5,000
12/31/19	3,780,000	4,715,000	(935,000)	43,425,000	(2.1)	5,000
12/31/20	3,700,000	1,725,000	1,975,000	45,400,000	4.5	5,000
12/31/21	3,255,000	1,765,000	1,490,000	46,890,000	3.3	5,000
12/31/22	5,170,000	1,430,000	3,740,000	50,630,000	8.0	5,000
12/31/23	3,810,000	1,870,000	1,940,000	52,570,000	3.8	5,000

<sup>1</sup> A single individual may have coverage with more than one participating employer.

<sup>2</sup> An adjustment is included to combine retirees with multiple benefits paid by a single employer.

**TABLE 17: GTLF PARTICIPATING EMPLOYERS AND COVERED MEMBERS<sup>1</sup>**

Year Ended <sup>2</sup>	Number of Participating Employers	Covered Members		Average Annual Pay	Percent Increase in Average Annual Pay	Employer Contributions	Average Employer Rate
		Number	Annual Payroll				
12/31/14	289	33,394	\$ 1,419,012,335	\$ 42,493	4.8%	\$ 4,510,866	0.32%
12/31/15	298	34,548	1,502,084,556	43,478	2.3	4,766,129	0.32
12/31/16	312	34,800	1,561,487,281	44,870	3.2	4,962,423	0.32
12/31/17	318	35,934	1,605,566,274	44,681	(0.4)	4,467,382	0.28
12/31/18	329	36,693	1,693,759,626	46,160	3.3	4,518,735	0.27
12/31/19	336	35,975	1,702,168,008	47,315	2.5	4,357,410	0.26
12/31/20	357	36,080	1,816,641,615	50,350	6.4	4,647,511	0.26
12/31/21	365	36,562	1,872,280,412	51,208	1.7	4,778,158	0.26
12/31/22	382	37,169	1,999,921,303	53,806	5.1	4,967,995	0.25
12/31/23	402	39,506	2,225,032,528	56,321	4.7	4,246,146	0.19

<sup>1</sup> Includes only employers that participate in the Group Term Life program.

<sup>2</sup> Annual Payroll, Employer Contributions and Average Employer Rate are for the calendar year ended on the Year Ended date. All other information listed is as of the Year Ended date.

## READER'S NOTES

# STATISTICAL

# 5



## SERVING TEXANS

TCDRS serves a membership of nearly 380,000 members and nearly 870 participating employers. In 2023, TCDRS paid out \$2.3 billion in benefits, and 96% of that money stayed in Texas.

GULF OF MEXICO  
GALVESTON, TEXAS





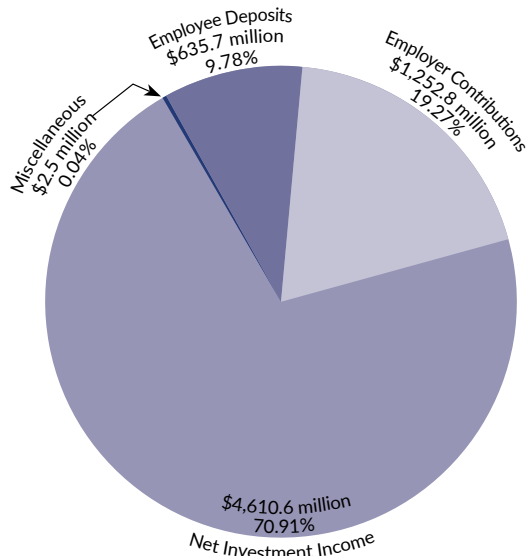
## INTRODUCTION

The Statistical Section provides additional detail to assist you in interpreting the information in the Financial Statements, Notes to Financial Statements and Required Supplementary Information. The information is presented in two main categories: Financial Trends Data and Demographic and Operating Information.

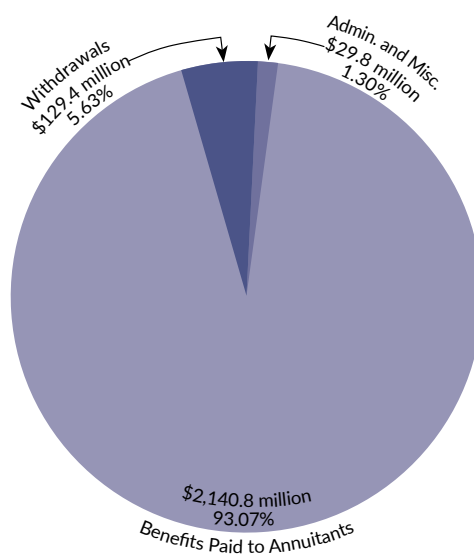
The Financial Trends Data illustrates how TCDRS' financial position has changed over time. The changes in net position for the last 10 fiscal years show additions by source, deductions by type and the total change in Pension Trust Fund and Group Term Life Fund (GTLF) net position for each year. The pension benefit expenses by type gives data on benefits paid and withdrawal deductions for the last 10 fiscal years.

The Demographic and Operating Information provides details about TCDRS' operations and membership. The schedule of New Retiree Average Benefits gives the average monthly benefit and number of retired members, organized by five-year increments of credited service, for the last 10 fiscal years. Data is given for both pension benefits and for GTLF benefit payments. This section also includes information on the number of annuitants grouped by age and by type of benefits, along with a description of the retirement payment options. The schedule of largest participating employers compares the number of current members for those employers for the most recent year end and as of nine years ago.

**FIGURE 1: ADDITIONS BY SOURCE – 2023**

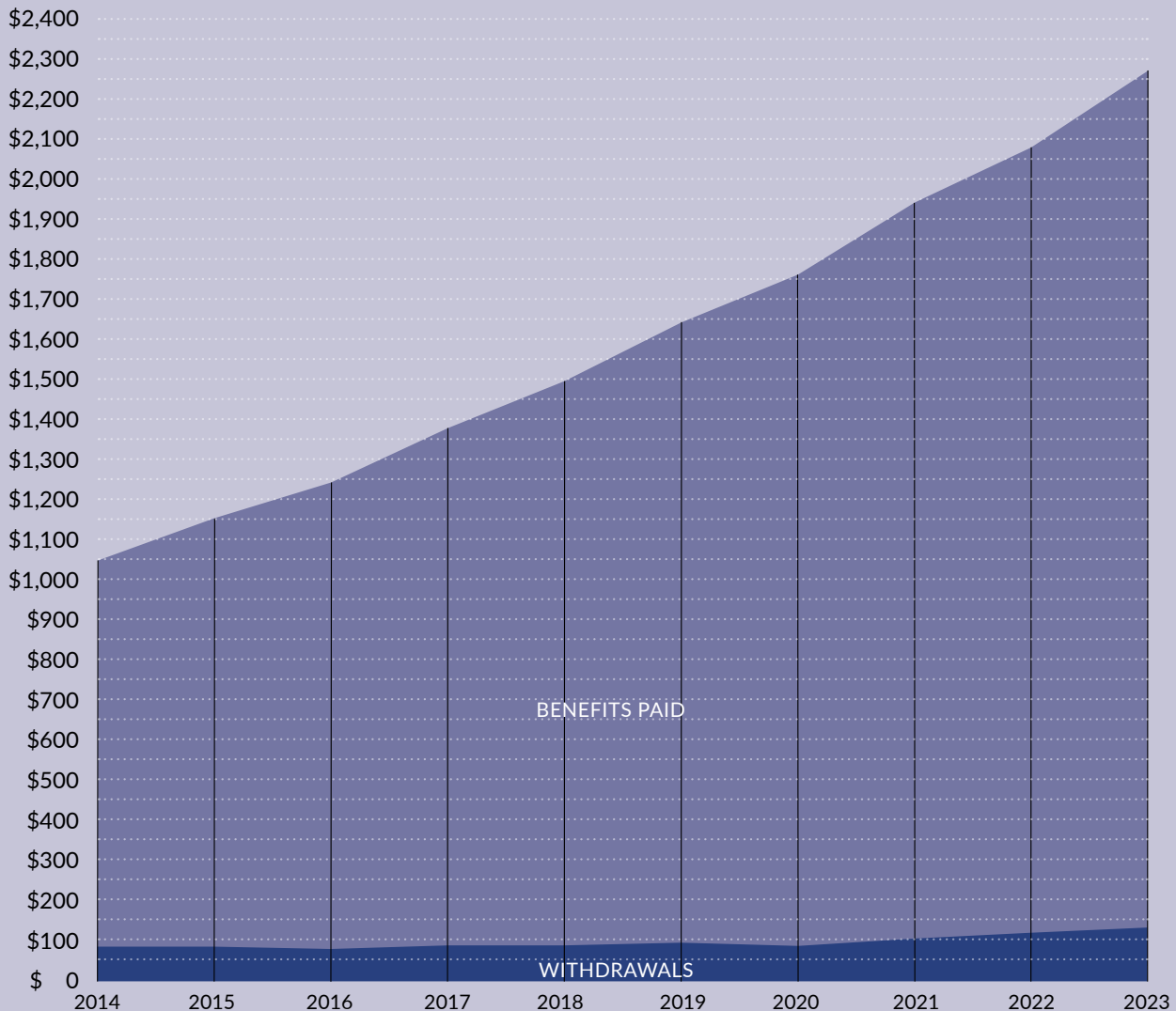


**FIGURE 2: DEDUCTIONS BY TYPE – 2023**



**FIGURE 3: BENEFIT EXPENSES BY TYPE**

(\$ Millions)



# FINANCIAL TRENDS DATA

**TABLE 1: CHANGES IN NET POSITION, LAST TEN FISCAL YEARS**

<b>Pension Trust Fund</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Additions</b>				
Employee Deposits	\$ 383,186,524	\$ 414,806,917	\$ 432,765,143	\$ 453,435,928
Employer Contributions	684,212,315	743,149,234	771,701,126	823,501,201
Total Net Investment Income (Loss)	1,568,660,707	(172,638,528)	1,816,576,383	3,837,061,315
Other Additions	1,588,730	2,475,483	1,858,748	1,957,900
<b>Total Additions</b>	<b>2,637,648,276</b>	<b>987,793,106</b>	<b>3,022,901,400</b>	<b>5,115,956,344</b>
<b>Deductions</b>				
Benefits Paid:				
Service Retirements	948,890,194	1,053,112,636	1,149,053,001	1,276,444,848
Disability Retirements	15,566,244	15,996,931	16,069,755	16,363,172
Total Benefits Allowances	964,456,438	1,069,109,567	1,165,122,756	1,292,808,020
Withdrawals:				
Separation	81,243,255	80,373,804	74,737,725	84,208,957
Death / Ineligible	959,497	1,685,020	1,845,188	1,446,916
Total Withdrawals	82,202,752	82,058,823	76,582,913	85,655,873
Administrative and Building Operations Expenses	20,048,081	20,215,681	21,592,272	21,909,103
Interest Allocation to Group Term Life Fund	1,738,911	1,889,834	2,132,226	2,359,682
Payments to Terminating Employers	—	—	—	2,186
<b>Total Deductions</b>	<b>1,068,446,182</b>	<b>1,173,273,905</b>	<b>1,265,430,167</b>	<b>1,402,734,864</b>
<b>Change in Net Position</b>	<b>\$ 1,569,202,094</b>	<b>\$ (185,480,799)</b>	<b>\$ 1,757,471,233</b>	<b>\$ 3,713,221,480</b>
<b>Group Term Life Fund</b>				
<b>Additions</b>				
Employer Premiums	\$ 4,510,866	\$ 4,766,129	\$ 4,962,423	\$ 4,467,382
Income Allocation from Pension Trust Fund	1,738,911	1,889,834	2,132,226	2,359,682
<b>Total Additions</b>	<b>6,249,777</b>	<b>6,655,963</b>	<b>7,094,649</b>	<b>6,827,064</b>
<b>Deductions</b>				
Insurance Benefits	4,637,239	3,404,592	3,123,197	4,345,197
<b>Total Deductions</b>	<b>4,637,239</b>	<b>3,404,592</b>	<b>3,123,197</b>	<b>4,345,197</b>
<b>Change in Net Position</b>	<b>\$ 1,612,538</b>	<b>\$ 3,251,371</b>	<b>\$ 3,971,452</b>	<b>\$ 2,481,867</b>

TABLE 1: CHANGES IN NET POSITION, LAST TEN FISCAL YEARS

2018	2019	2020	2021	2022	2023
\$ 469,786,710	\$ 498,343,448	\$ 536,458,089	\$ 550,152,286	\$ 588,035,367	\$ 635,663,190
869,683,305	939,026,347	1,034,443,116	1,073,415,093	1,200,119,263	1,252,813,531
(558,892,357)	4,807,071,981	3,496,597,429	8,117,364,773	(2,604,972,182)	4,610,638,457
1,871,879	1,976,896	1,818,132	1,765,526	2,203,583	2,545,618
<b>782,449,537</b>	<b>6,246,418,672</b>	<b>5,069,316,766</b>	<b>9,742,697,678</b>	<b>(814,613,969)</b>	<b>6,501,660,796</b>
1,392,219,836	1,534,633,593	1,661,524,380	1,810,701,446	1,946,743,174	2,124,101,486
16,499,057	16,523,966	16,512,662	16,389,004	16,310,256	16,716,529
1,408,718,893	1,551,157,559	1,678,037,042	1,827,090,450	1,963,053,430	2,140,818,015
84,596,757	90,484,037	83,338,482	100,550,641	114,253,951	127,713,427
1,056,035	1,300,467	1,425,161	1,970,027	2,038,947	1,769,353
85,652,792	91,784,504	84,763,643	102,520,668	116,292,898	129,482,780
25,374,075	27,759,303	28,970,834	26,052,711	26,797,956	26,653,970
2,527,808	2,715,200	2,856,996	2,892,692	2,999,561	3,183,647
92	37,835	838	63,568	—	13,734
<b>1,522,273,660</b>	<b>1,673,454,401</b>	<b>1,794,629,353</b>	<b>1,958,620,089</b>	<b>2,109,143,845</b>	<b>2,300,152,146</b>
\$ (739,824,123)	\$ 4,572,964,271	\$ 3,274,687,413	\$ 7,784,077,589	\$ (2,923,757,814)	\$ 4,201,508,650
\$ 4,518,735	\$ 4,357,410	\$ 4,647,511	\$ 4,778,158	\$ 4,967,995	\$ 4,246,146
2,527,808	2,715,200	2,856,996	2,892,692	2,999,561	3,183,647
<b>7,046,543</b>	<b>7,072,610</b>	<b>7,504,507</b>	<b>7,670,850</b>	<b>7,967,556</b>	<b>7,429,793</b>
4,398,477	4,453,463	6,279,423	6,699,149	5,231,901	5,294,417
<b>4,398,477</b>	<b>4,453,463</b>	<b>6,279,423</b>	<b>6,699,149</b>	<b>5,231,901</b>	<b>5,294,417</b>
\$ 2,648,066	\$ 2,619,147	\$ 1,225,084	\$ 971,701	\$ 2,735,655	\$ 2,135,376

## DEMOGRAPHIC AND OPERATING INFORMATION

**TABLE 2: BENEFIT AT RETIREMENT FOR RECENT RETIREES**

This schedule reports the number and average monthly benefit at retirement for recent retirees grouped by years of credited service and year of retirement.

	Years of Credited Service						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
<b>2014</b>							
Average Monthly Benefit	\$ 253	\$ 708	\$ 1,228	\$ 1,707	\$ 2,423	\$ 3,691	\$ 5,002
Number of Annuitants	459	782	761	677	745	599	512
<b>2015</b>							
Average Monthly Benefit	\$ 289	\$ 756	\$ 1,239	\$ 1,841	\$ 2,518	\$ 3,462	\$ 5,390
Number of Annuitants	450	733	741	626	674	495	492
<b>2016</b>							
Average Monthly Benefit	\$ 254	\$ 765	\$ 1,301	\$ 1,875	\$ 2,590	\$ 3,792	\$ 5,420
Number of Annuitants	483	786	891	722	735	608	593
<b>2017</b>							
Average Monthly Benefit	\$ 321	\$ 854	\$ 1,322	\$ 1,971	\$ 2,756	\$ 4,043	\$ 5,805
Number of Annuitants	480	744	833	658	700	583	503
<b>2018</b>							
Average Monthly Benefit	\$ 300	\$ 963	\$ 1,381	\$ 2,174	\$ 2,973	\$ 4,208	\$ 6,507
Number of Annuitants	582	743	959	817	710	688	663
<b>2019</b>							
Average Monthly Benefit	\$ 324	\$ 908	\$ 1,432	\$ 2,168	\$ 2,913	\$ 4,219	\$ 6,130
Number of Annuitants	504	738	871	704	671	609	505
<b>2020</b>							
Average Monthly Benefit	\$ 338	\$ 910	\$ 1,453	\$ 2,167	\$ 2,857	\$ 4,255	\$ 6,469
Number of Annuitants	608	852	985	823	825	688	701
<b>2021</b>							
Average Monthly Benefit	\$ 329	\$ 887	\$ 1,494	\$ 2,211	\$ 2,984	\$ 4,329	\$ 6,430
Number of Annuitants	566	881	885	790	837	551	633
<b>2022</b>							
Average Monthly Benefit	\$364	\$954	\$1,611	\$2,277	\$3,197	\$4,671	\$6,918
Number of Annuitants	569	931	899	826	844	619	725
<b>2023</b>							
Average Monthly Benefit	\$410	\$1,071	\$1,587	\$2,244	\$3,287	\$4,425	\$7,185
Number of Annuitants	580	915	790	753	715	504	516

Note: TCDRS is an account-based plan similar to a cash balance plan, and final average salary data is not used to determine benefits, therefore final average salary data is not presented.

**TABLE 3: AVERAGE BENEFITS**

This schedule reports the average benefit for retirees and for all retirees and beneficiaries.<sup>1</sup>

As of Dec. 31,	Retirees Only		All Payees	
	Monthly	Annually	Monthly	Annually
2014	\$1,693	\$20,316	\$1,586	\$19,032
2015	1,752	21,024	1,637	19,644
2016	1,817	21,804	1,699	20,388
2017	1,897	22,764	1,745	20,940
2018	1,981	23,772	1,824	21,888
2019	2,039	24,468	1,879	22,548
2020	2,111	25,332	1,945	23,340
2021	2,169	26,028	1,998	23,976
2022	2,260	27,120	2,080	24,960
2023	2,318	27,816	2,133	25,596

<sup>1</sup> In cases of retirees with multiple accounts from a single employer, the accounts are considered as a single benefit. Benefits from multiple employers to a single retiree are calculated as multiple benefits.

**TABLE 4: AVERAGE BENEFIT PROFILE BY EMPLOYER TYPE**

As of Dec. 31, 2023

	Retirees Only		All Payees	
	Monthly	Annually	Monthly	Annually
Counties	\$ 2,360	\$ 28,320	\$ 2,166	\$ 25,992
Districts	2,011	24,132	1,877	22,524



## DEMOGRAPHIC AND OPERATING INFORMATION

TABLE 5: ANNUITANTS BY TYPE OF BENEFIT

Amount of Monthly Benefit	Annuity			Retirement Option Selected							
	Retiree	Beneficiary <sup>1</sup>	Single Life	100% to Beneficiary	100% to Beneficiary with Pop-up	75% to Beneficiary	50% to Beneficiary	25% to Beneficiary <sup>2</sup>	15-year Guarantee	10-year Guarantee	5-year Guarantee <sup>2</sup>
\$ 0-499	10,432	4,855	6,205	2,741	1,927	377	1,346	145	1,720	759	67
500-999	12,378	3,608	6,462	2,880	2,310	500	1,551	45	1,324	840	74
1,000-1,499	10,259	2,060	4,711	2,096	1,946	508	1,426	40	899	629	64
1,500-1,999	8,052	1,168	3,619	1,425	1,424	501	1,100	33	567	498	53
2,000-2,499	6,302	781	2,746	1,142	1,108	317	991	8	407	340	24
2,500-2,999	4,863	498	2,092	842	888	259	762	7	278	214	19
3,000-3,499	3,897	355	1,628	673	652	243	642	7	208	185	14
3,500-3,999	3,026	255	1,309	494	484	165	467	1	179	172	10
4,000-4,499	2,460	161	990	428	397	162	389	2	118	128	7
4,500-4,999	1,889	85	792	301	280	111	316	3	87	81	3
5,000-5,499	1,626	71	645	280	220	109	281	1	80	78	3
5,500-5,999	1,236	49	479	209	198	103	201	1	43	51	0
6,000-6,499	1,037	29	400	169	151	89	181	1	34	41	0
6,500-6,999	724	30	297	113	88	61	129	0	32	34	0
7,000 & Over	2,997	115	1,108	540	342	265	599	1	129	128	0
Subtotals	71,178	14,120	33,483	14,333	12,415	3,770	10,381	295	6,105	4,178	338
Totals	85,298								85,298		

<sup>1</sup> Includes Alternate Payees.

<sup>2</sup> Retirement payment option is no longer available to new retirees.

### RETIREMENT BENEFIT PAYMENT OPTIONS

All options pay the retiree a monthly benefit for life and, when a retiree passes away, guarantee that the total benefit paid will equal, at a minimum, the total accumulated contributions of the retiree.

#### Single Life

Payments cease upon the death of the retiree.

#### 15-year Guaranteed Term

If the retiree dies within 15 years of retirement, the beneficiary will receive the same monthly payment as the retiree for the balance of the 15-year period, at which time payments cease.

#### 10-year Guaranteed Term

If the retiree dies within 10 years of retirement, the beneficiary will receive the same monthly payment as the retiree for the balance of the 10-year period, at which time payments cease.

#### 50% to Beneficiary

At the death of the retiree, the beneficiary will receive 50% of the retiree's monthly payment throughout the beneficiary's life.

#### 75% to Beneficiary

At the death of the retiree, the beneficiary will receive 75% of the retiree's monthly payment throughout the beneficiary's life.

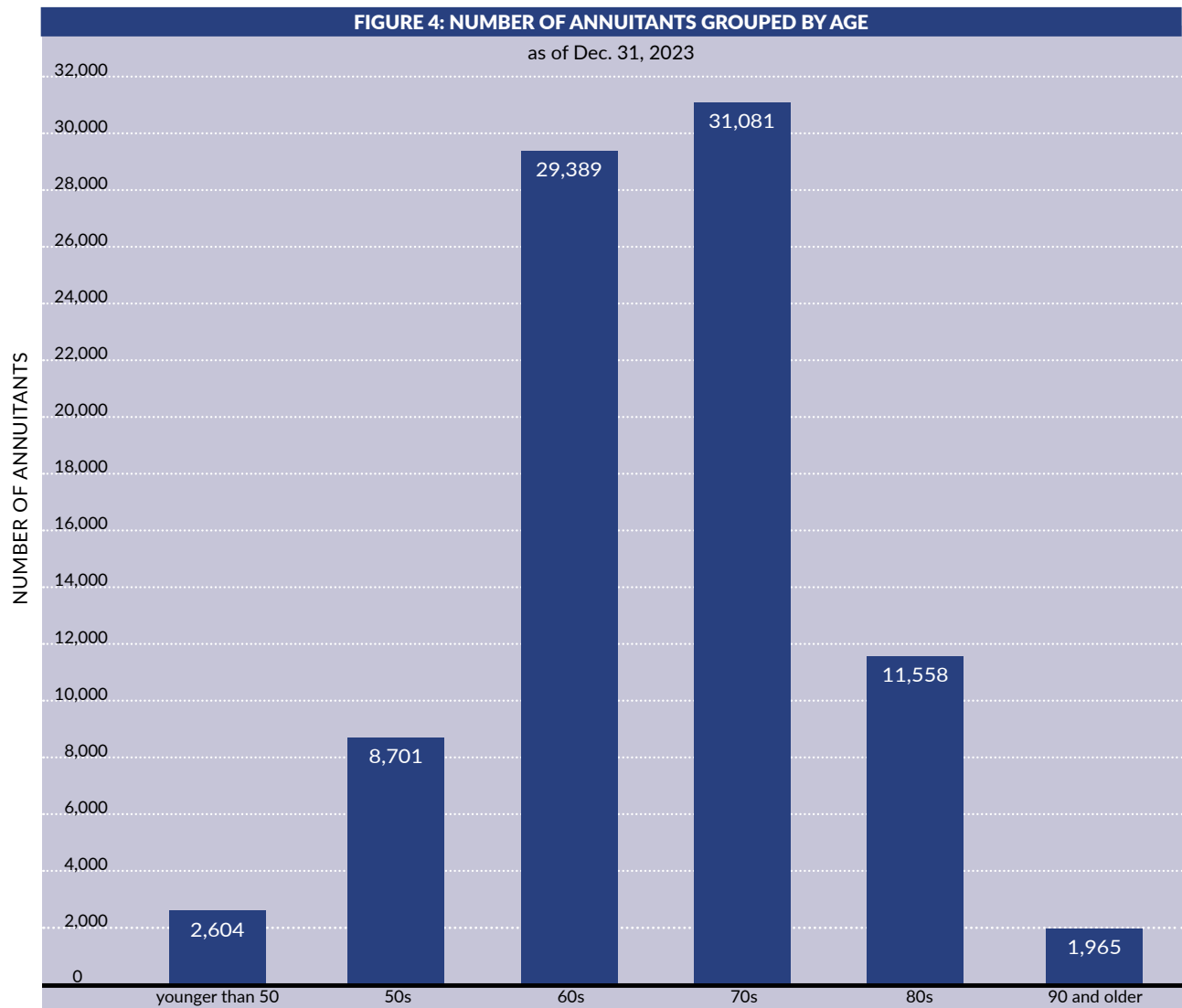
#### 100% to Beneficiary

At the death of the retiree, the beneficiary will receive 100% of the monthly amount paid to the retiree throughout the beneficiary's life.

#### 100% to Beneficiary with Pop-up

If the beneficiary survives the retiree, monthly payments equal to 100% of the monthly amount paid to the retiree continue to the beneficiary for life. If the retiree outlives the beneficiary, the monthly payment amount will increase (pop up) after the beneficiary's death to the higher amount of the Single Life option.

## DEMOGRAPHIC AND OPERATING INFORMATION



**TABLE 6: LARGEST PARTICIPATING EMPLOYERS – CURRENT YEAR AND NINE YEARS AGO**

Employer	2023			2014		
	Number of Current Employee Accounts	Rank	% of Total System	Number of Current Employee Accounts	Rank	% of Total System
Harris County	20,346	1	13.3%	15,801	1	12.6%
Dallas County	6,939	2	4.6%	6,768	2	5.4%
Bexar County	5,541	3	3.6%	4,981	4	4.0%
Travis County	5,469	4	3.6%	5,171	3	4.1%
Tarrant County	4,857	5	3.2%	4,430	5	3.5%
El Paso Co. Hospital District	3,884	6	2.5%	2,549	9	2.0%
Fort Bend County	3,312	7	2.2%	2,557	8	2.0%
Hidalgo County	3,249	8	2.1%	2,960	6	2.3%
El Paso County	3,092	9	2.0%	2,882	7	2.3%
Montgomery County	2,697	10	1.8%	2,118	10	1.7%
All others	93,086		61.1%	75,643		60.1%
<b>Totals</b>	<b>152,472</b>		<b>100.0%</b>	<b>125,860</b>		<b>100.0%</b>

## DEMOGRAPHIC AND OPERATING INFORMATION

**TABLE 7: GROUP TERM LIFE FUND –  
AVERAGE BENEFITS PAID**

This schedule reports the number of GTLF insurance payments and the average benefits paid.

	Active	Retirees
<b>2014</b>		
Average benefit payment	\$41,205	\$5,000
Number of payments	89	194
<b>2015</b>		
Average benefit payment	\$36,819	\$5,000
Number of payments	63	217
<b>2016</b>		
Average benefit payment	\$38,763	\$5,000
Number of payments	54	206
<b>2017</b>		
Average benefit payment	\$41,175	\$5,000
Number of payments	81	202
<b>2018</b>		
Average benefit payment	\$43,446	\$5,000
Number of payments	75	228
<b>2019</b>		
Average benefit payment	\$47,719	\$5,000
Number of payments	69	233
<b>2020</b>		
Average benefit payment	\$49,441	\$5,000
Number of payments	95	317
<b>2021</b>		
Average benefit payment	\$44,137	\$5,000
Number of payments	112	351
<b>2022</b>		
Average benefit payment	\$48,261	\$5,000
Number of payments	77	302
<b>2023</b>		
Average benefit payment	\$50,240	\$5,000
Number of payments	74	315

## GLOSSARY

### **ACTUARIAL ACCRUED LIABILITY**

The portion, as determined by the actuarial cost method, of the Actuarial Present Value of pension plan benefits and expenses that is not provided for by future Normal Costs.

### **ACTUARIAL ASSUMPTIONS**

In order to estimate the cost of funding benefits, the actuaries use long-term assumptions. Examples include mortality, termination, disablement and retirement; changes in salary; payroll growth; investment returns; and other relevant items. Actuarial assumptions are adopted by the board of trustees upon recommendation of the consulting actuaries. The assumptions are reviewed every four years.

### **ACTUARIAL GAIN (LOSS)**

The difference between actual results and what was projected to happen based on Actuarial Assumptions during the period between annual Actuarial Valuations.

### **ACTUARIAL PRESENT VALUE**

The calculated value of a series of projected cash flows expressed in present day dollars as of the valuation date using actuarial assumptions.

### **ACTUARIAL VALUATION**

The process to calculate the employer contribution rate. This process determines valuation results including the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets and Actuarial Present Values.

### **ACTUARIAL VALUE OF ASSETS**

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

### **ACTUARIALLY EQUIVALENT PAYMENT OPTIONS**

Different benefit payment options that pay different amounts per month, but are of equal actuarial value at the time the option is selected.

### **ALERIAN MLP INDEX**

This index is a benchmark for energy infrastructure Master Limited Partnerships that includes MLPs which earn the majority of their cash flow from midstream activities. The index is calculated using a capped, float-adjusted, capitalization-weighted methodology.

### **BENCHMARK PORTFOLIOS**

Portfolios represented by specific indices that are created for the purpose of measuring the relative performance of investment managers, asset classes and, in the case of the Policy Benchmark Portfolio, the entire TCDRS portfolio. Data regarding performance of these benchmark portfolios during any period indicate the returns that were available during the period for comparable investments that were passively managed. Comparisons indicate the value added by each manager, if any, in excess of the performance that was experienced by the specific benchmark index.

### **BLOOMBERG COMMODITIES INDEX**

This index is composed of futures contracts on physical commodities. It provides broad-based exposure to commodities, with no single commodity or sector dominating the index. The liquidity and diversity of the benchmark make it suitable for institutional investment.

### **BLOOMBERG U.S. AGGREGATE BOND INDEX**

This index incorporates all domestic debt issues with maturities greater than one year and in amounts greater than \$1 million. Included are publicly issued, nonconvertible, domestic debt issues of the U.S. government and its agencies and corporations in industrial, utility or financial segments.

### **BLOOMBERG U.S. 10-YEAR BREAKEVEN INFLATION INDEX**

This index is designed to provide access to 10-year breakeven inflation by capturing the returns of a simultaneous long position in 10-year inflation linked securities and a short position in suitable nominal comparator U.S. Treasury bonds.

### **CAMBRIDGE ASSOCIATES DISTRESSED SECURITIES INDEX**

A custom benchmark index provided by Cambridge Associates based on data compiled from more than 350 distressed debt funds, including fully liquidated partnerships with first cash flows beginning in 2005. The benchmark return is net of fees, expenses and carried interest.

### **CAMBRIDGE ASSOCIATES GLOBAL PRIVATE EQUITY & VENTURE CAPITAL INDEX**

A custom benchmark index provided by Cambridge Associates based on data compiled from approximately 3,900 global private equity

and venture capital funds, including fully liquidated partnerships, with first cash flows beginning 2006. The benchmark return is net of fees, expenses and carried interest.

#### **CAMBRIDGE ASSOCIATES REAL ESTATE INDEX**

A custom benchmark index provided by Cambridge Associates based on data compiled from more than 775 global private real estate funds, including fully liquidated partnerships with first cash flows beginning 2007. The benchmark return is net of fees, expenses and carried interest.

#### **COMMODITIES**

Investment in resources that can be perishable (grains, sugar, etc.) and non-perishable (metals, energy, etc.). Commodities provide protection against inflation and have low correlation to stocks and other asset classes.

#### **DIRECT LENDING**

Privately originated debt made to small to medium-sized companies or to real estate investors in order to take advantage of disruptions in the banking system.

#### **DISTRESSED DEBT**

Distressed debt investments are investments in partnerships that purchase the debt of companies experiencing financial distress ranging from deteriorating financial conditions to bankruptcy. Strategies employed include trading, participating in restructuring transactions and controlling bankruptcy proceedings.

#### **DOW JONES U.S. TOTAL STOCK MARKET INDEX**

This index is one of the broadest measures of domestic equity performance since it is computed based upon all equity trades of U.S. stocks during any day. Each company included within the index is not equally weighted within the index, but rather is weighted according to its market value among the market values of all U.S. companies.

#### **ENTRY-AGE ACTUARIAL COST METHOD**

An actuarial cost method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called

the Normal Cost. The portion of this Actuarial Present Value not provided for at a Valuation Date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

#### **FOREIGN CURRENCY FORWARD CONTRACTS**

Forward contracts are over-the-counter agreements between two parties to buy and sell a currency at a set price on a future date. The contracts are marked-to-market on each valuation date with any resulting unrealized appreciation or depreciation recorded on such date. Realized gains or losses equal to the value of the contract when it was opened and the settlement amount at the time the contract is closed (or rolled) are recorded upon receipt of the currency.

#### **FTSE HIGH-YIELD CASH-PAY INDEX**

This index includes cash-pay bonds with a below-investment-grade rating by both Moody's Investor Services and Standard & Poor's. The bonds must have a maturity of at least one year and a minimum amount outstanding of \$250 million.

#### **FTSE NAREIT ALL EQUITY REIT INDEX**

This index gives a broad exposure to U.S. publicly traded equity REITs in every property sector.

#### **FTSE NAREIT EQUITY REITS INDEX**

This index contains all Equity REITs across the U.S. economy not designated as Timber REITs or Infrastructure REITs.

#### **GLOBAL EQUITY**

Investments in stocks included in all public markets, both domestic and international.

#### **HEDGE FUND RESEARCH INSTITUTE (HFRI) FUND OF FUNDS COMPOSITE INDEX**

This index consists of funds that each manage a group of diverse hedge funds. Fund of Funds invests with multiple managers through funds or managed accounts. The strategy designs a diversified portfolio of managers with the objective of significantly lowering the risk (volatility) of investing with an individual manager. The Fund of Funds manager has discretion in choosing which strategies to invest in for the portfolio.

#### **HEDGE FUNDS**

An investment strategy applied to a variety of different investments to help manage risk within the entire portfolio. Over a full market cycle, hedge funds produce risk-adjusted returns to help mitigate losses during market downturns.



## GLOSSARY

### HIGH-YIELD BONDS

Domestic fixed-income securities that have not been highly rated by national rating agencies, such as Moody's Investors Service (Moody's) or Standard & Poor's (S&P). A security is considered a high-yield bond if it is rated below Baa3 by Moody's or below BBB- by S&P. To pay for the risk, the interest rates earned are higher than investment-grade bonds.

### INVESTMENT-GRADE BONDS

The investment-grade bonds portfolio consists of debt securities issued by the U.S. Treasury or an agency or government-sponsored entity (GSE) of the United States (U.S. government); mortgage-related instruments; U.S. dollar-denominated fixed-income securities issued by U.S. and foreign corporations; and U.S. dollar-denominated debt issued by foreign governments and supranationals. Additionally, these portfolios may contain minimal investments in short-term instruments, non-rated securities, private placement securities, convertible bonds and preferred stock. The portfolio should exhibit an overall dollar-weighted average quality rating of AA.

### MASTER LIMITED PARTNERSHIPS (MLPS)

Publicly traded partnership interests created by Congress to encourage investment in domestic energy infrastructure. At the entity level, these interests are tax-free provided that 90% of their income comes from natural resources such as oil, natural gas, coal, timber and other depletable resources.

### MORNINGSTAR LSTA US LEVERAGED LOAN TR USD INDEX

This index is a market value-weighted index designed to measure the performance of the U.S. leveraged loan market based upon market weights, spreads and interest payments.

### MSCI EAFE INDEX (EUROPE, AUSTRALASIA, FAR EAST)

This index, prepared by Morgan Stanley Capital International (MSCI), is designed to measure developed market large and mid-cap equity performance excluding the United States and Canada.

### MSCI EMERGING MARKETS (EM) INDEX

This index, prepared by Morgan Stanley Capital International (MSCI), captures large and mid-cap equity performance across 24 emerging market countries with more than 1,300 constituents.

### MSCI WORLD EX U.S.

This index, prepared by Morgan Stanley Capital International (MSCI), is designed to measure developed market equity performance excluding the United States.

### MSCI WORLD INDEX (NET)

This index, prepared by Morgan Stanley Capital International (MSCI), is a broad global equity index that represents large and mid-cap equity performance across developed markets countries.

### NORMAL COST

The portion of the Actuarial Present Value of pension plan benefits and expenses that is allocated to a valuation year by the actuarial cost method.

### NORMAL COST CONTRIBUTION RATE

This is the rate required to fund current employees' benefits over their projected careers. It is equal to the Actuarial Present Value at hire of Projected Benefits divided by the Actuarial Present Value at hire of anticipated future compensation. It is calculated for each contributing member and the average is weighted by compensation.

### OPPORTUNISTIC CREDIT

Comprises investments primarily in debt instruments that provide return opportunities resulting from dislocations in capital markets.

### OVERFUNDED ACTUARIAL ACCRUED LIABILITY (OAAL)

The excess, if any, of the Actuarial Value of Assets over the Actuarial Accrued Liability.

### PLAN YEAR

The period from Jan. 1 to Dec. 31 inclusive.

### PRIOR SERVICE

Benefits attributable to an amount provided by the employer for service rendered by an employee prior to employer participation in TCDRS.

### PRIVATE EQUITY

Private partnerships that (a) take public companies private in order to improve their operations and resell them in the future; (b) invest in start-up companies with new ideas or technologies; and (c) invest in companies seeking to discover, produce and transport energy products.

**PRIVATE REAL ESTATE**

Non-publicly traded vehicles that invest in a broad array of real estate properties and ventures. Private real estate investments are expected to be very illiquid and long term in nature. The vehicles for private real estate investments are typically partnerships, but may also include other entities such as limited liability companies or offshore corporations.

**PROJECTED BENEFITS**

Retirement benefit amounts that are estimated to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such factors as the effect of advancement in age, and past and anticipated future compensation and service time.

**REITS**

Real estate investment trusts are companies that own and operate income-producing real estate, such as commercial office buildings, apartments, malls, warehouses and storage facilities. Under provisions of the U.S. tax law, if REITs pay out most of their income, they do not pay income taxes. This means higher income earnings along with any increase in the value of the real estate.

**REQUIRED CONTRIBUTION RATE**

The percentage of payroll the employer is required to contribute to fund future benefits for their current employees, former employees and retirees. It is the sum of the Normal Cost Contribution Rate and the Unfunded Actuarial Accrued Liability Contribution Rate.

**S&P GLOBAL REIT INDEX (NET)**

This index serves as a comprehensive benchmark of publicly traded equity REITs listed in both developed and emerging markets.

**STRATEGIC CREDIT**

Portfolio comprised of high-yield bond and opportunistic credit portfolios.

**TIPS**

Treasury Inflation-Protected Securities are bonds issued by the U.S. Treasury just like other U.S. government bonds. However, the principal amount of TIPS increases with the rate of inflation so that inflation does not decrease the value of the bond. They provide a way to protect against inflation.

**UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)**

The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.

**UNFUNDED/(OVERFUNDED) ACTUARIAL ACCRUED LIABILITY CONTRIBUTION RATE**

The amount needed to amortize the Unfunded Actuarial Accrued Liability over a closed period of 20 years or less, expressed as a percent of payroll. If the plan has an Overfunded Actuarial Accrued Liability, it is amortized over an open period of 30 years, and the resulting negative Unfunded Actuarial Accrued Liability Contribution Rate is offset against the Normal Cost Contribution Rate.











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