

Supplemental Schedule D

Agency Workforce Plan

Texas Water Development Board

Workforce Plan

Section I

Agency Overview

The Texas Water Development Board (TWDB) is the state's water planning and water project financing agency. The TWDB main responsibilities are threefold:

- Collecting and disseminating water-related data.
- Assisting with regional water supply and flood planning.
- Administering cost-effective financial programs.

Since 1957, the TWDB has been charged with addressing the state's water needs. The TWDB works to ensure Texans have access to sufficient, clean, and affordable water supplies that foster a healthy economy and environment.

Agency Vision: Water Security and Flood Resilience for all Texans.

Agency Mission: The mission of the TWDB is to lead the state's efforts in ensuring a secure water future for Texas.

Agency Values: Innovation, Impact, Pride in Public Service, and Accountability.

The TWDB mission is carried out by the following offices:

- Governing Board
- Executive Administration
- Finance
- General Counsel
- Internal Audit
- Operations and Administration
- Planning
- Texas Geographic Information Office
- Water Science and Conservation
- Water Supply and Infrastructure

Section II

Workforce Analysis

Current Workforce Profile – Supply Analysis

Current Profile Defined

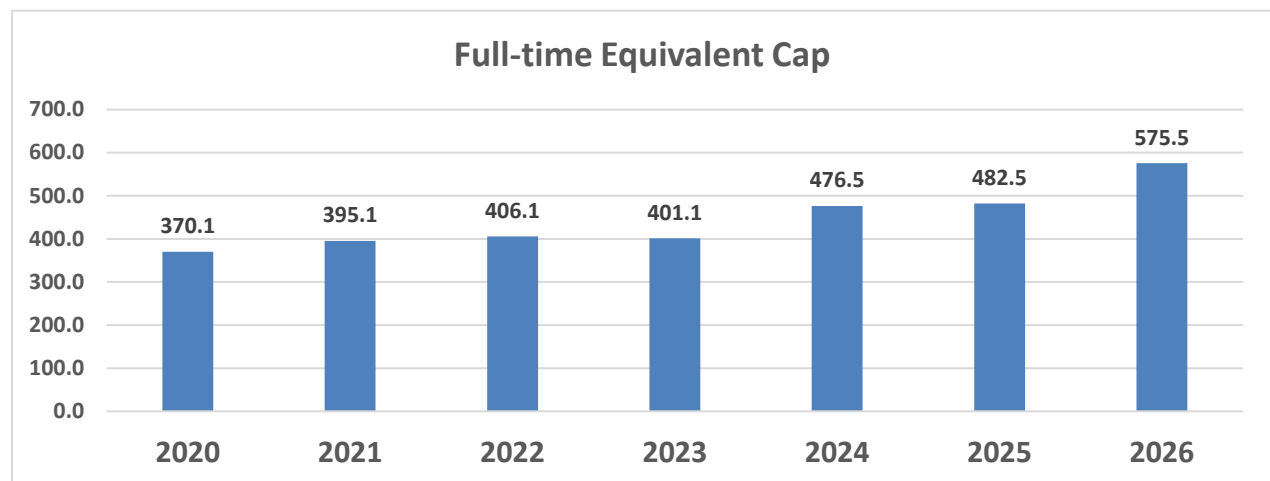
Over the past four fiscal years, the TWDB has expanded its workforce in response to increased statutory responsibilities and programmatic demands, growing from 401.1 Full-Time Equivalent Employees (FTEs) in fiscal year 2023 to 575.5 FTEs by fiscal year 2026, an increase of more than 43 percent. This workforce supports highly technical and professional functions aligned with the agency’s mission, including engineering, water and flood sciences, information technology, geographic information systems, contract administration, legal services, and financial and planning activities.

The workforce is comprised of several generations and reflects a mix of experience levels, with an average agency tenure of 5.03 years and an average state service of 9.99 years in fiscal year 2025; approximately 64 percent of employees have fewer than 5 years of agency service, while 38 percent have fewer than 5 years of state service. Turnover declined by 1.2 percent between fiscal years 2023 and 2025, indicating increased workforce stability. Veterans continue to comprise a small but consistent portion of staff, representing approximately 6 to 7 percent of the workforce. Retirement eligibility is a key workforce consideration, with approximately 12 percent of employees eligible to retire in fiscal year 2026 and additional eligibility projected to increase steadily through fiscal year 2031, underscoring the importance of succession planning and knowledge transfer to maintain workforce capacity.

Demographics – Full Time Equivalents

The figures below represent a few of the TWDB key demographics.

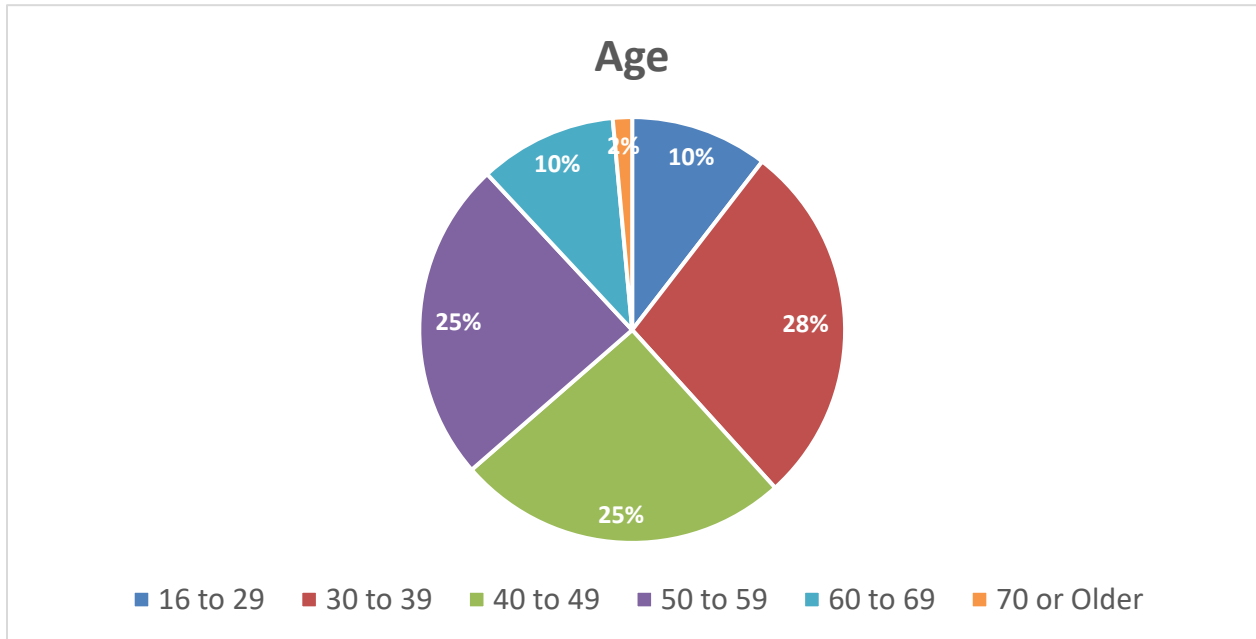
Figure 1



TWDB Workforce Plan

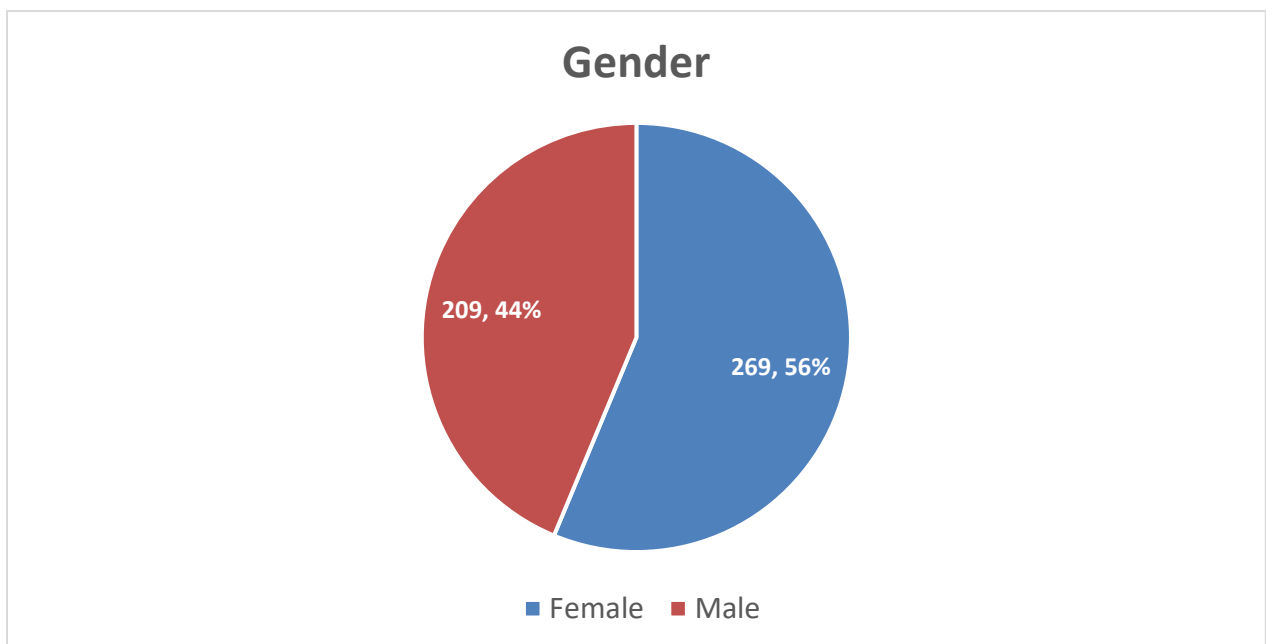
SAO Advanced FTE Data Query TWDB FTE Limitations by Fiscal Year

Figure 2



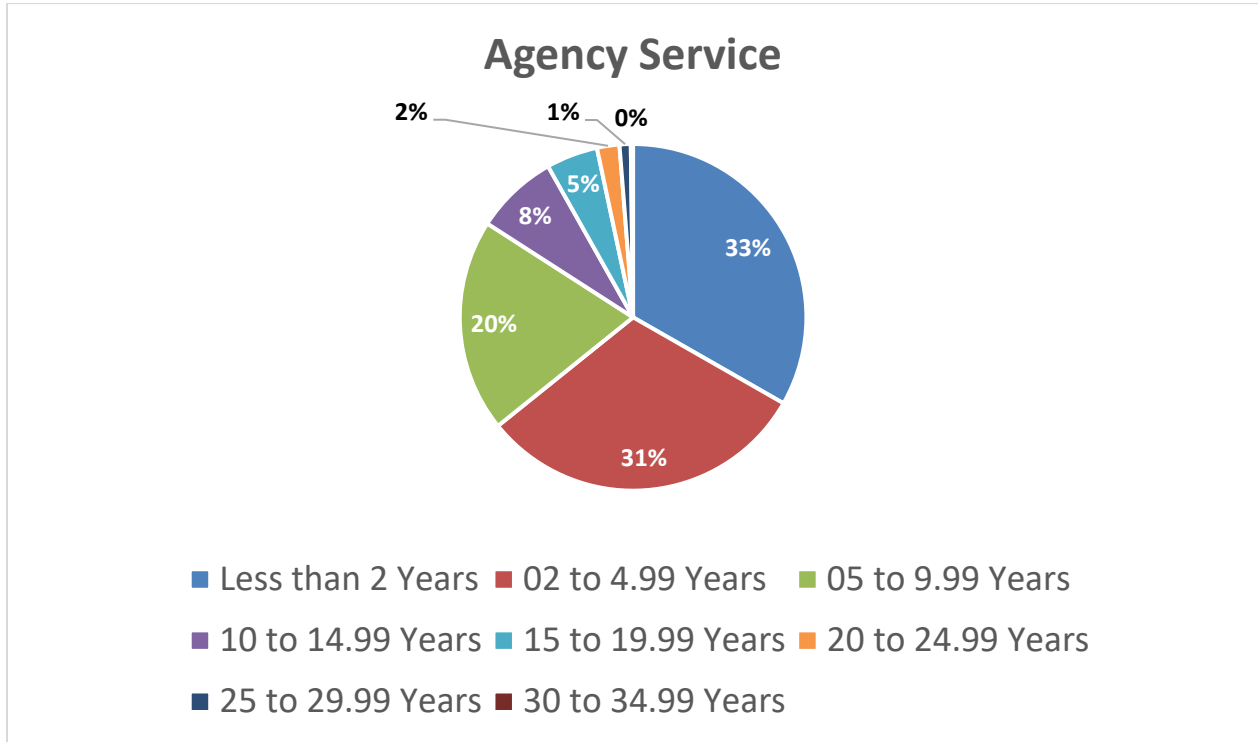
SAO E-Class TWDB FY26 Q1

Figure 3



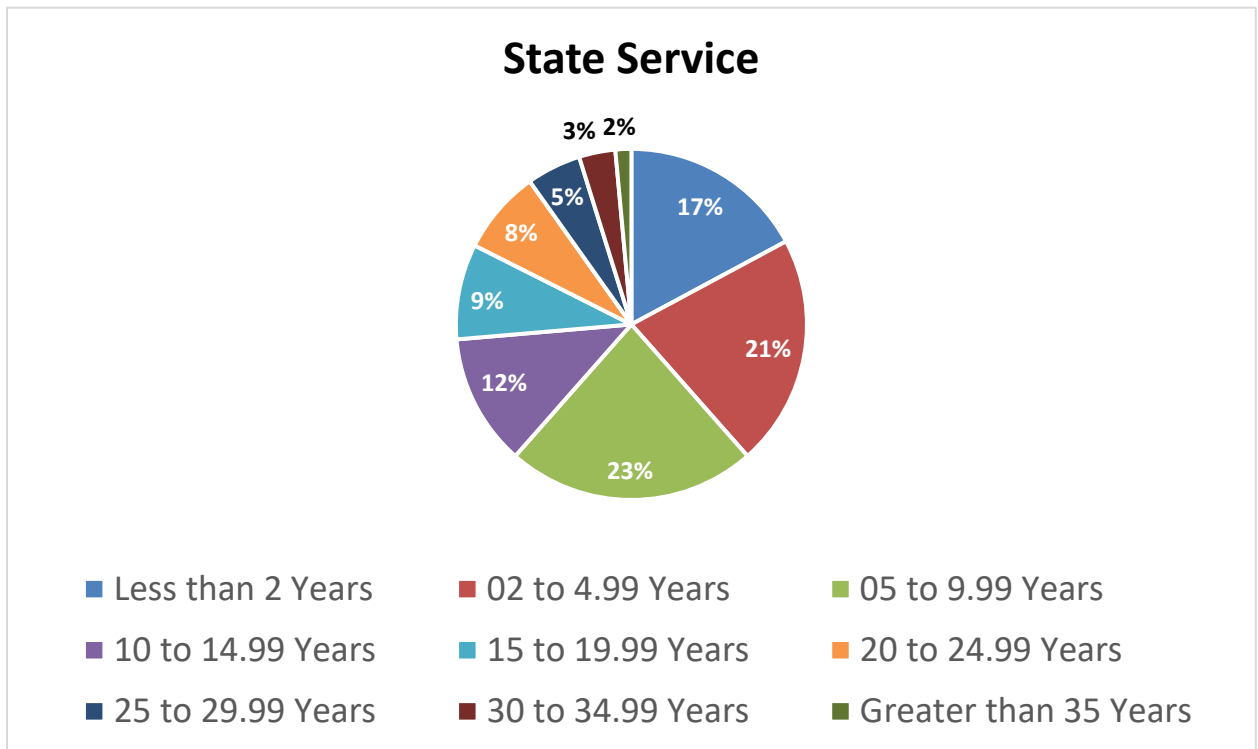
SAO E-Class TWDB FY26 Q1

Figure 4



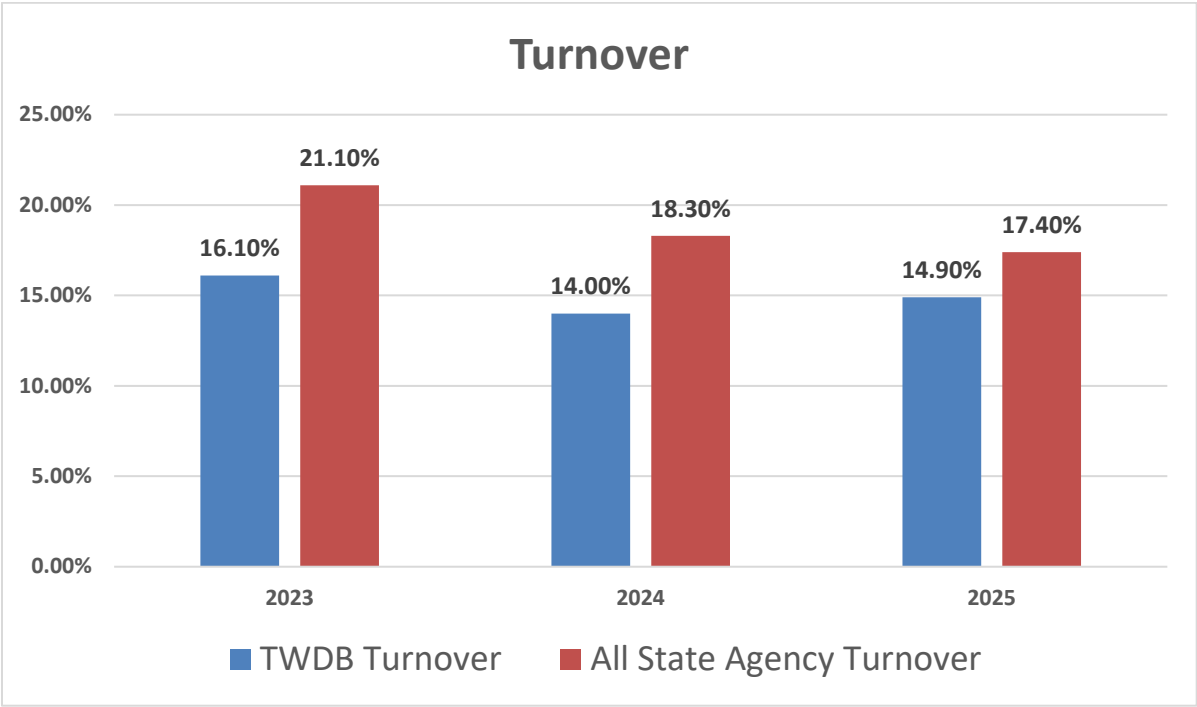
SAO E-Class TWDB FY26 Q1

Figure 5



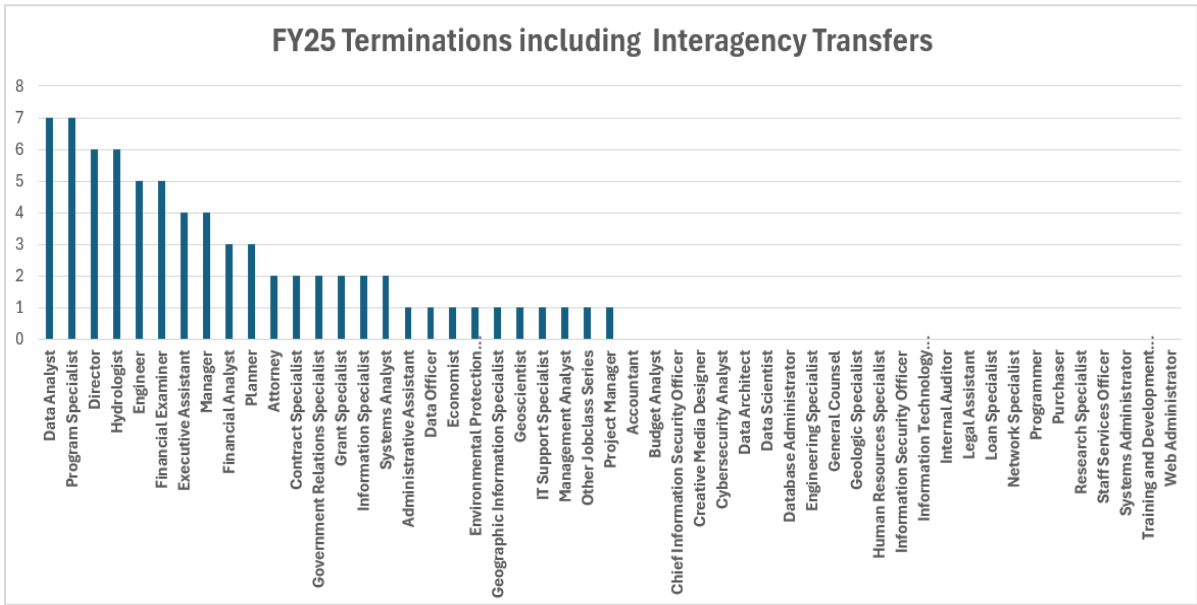
SAO E-Class TWDB FY26 Q1

Figure 6



SAO E-Class TWDB turnover including interagency transfers.

Figure 7



SAO E-Class TWDB FY25 turnover including interagency transfers.

Veterans and Eligibility for Retirement

Figure 8

VETERANS	NUMBER	PERCENTAGE
2024	32	7%
2025	28	6%

Data Source: Centralized Accounting and Payroll/Personnel, as of March 17, 2026; % is based on 461 Full-Time Employees

Retirement Eligibility

Figure 9

RETIREMENT	NUMBER	PERCENTAGE
2026	57	12%
2027	19	4%
2028	9	2%
2029	12	2.5%
2030	10	2%
2031	13	2.5%

Data Source: Centralized Accounting and Payroll/Personnel, as of March 17, 2026; % is based on 461 Full-Time Employees

Future Workforce Profile – Demand Analysis

Future Profile Defined

The TWDB future workforce demand is shaped by expanding statutory responsibilities, increasing program complexity, technological advancements, and competitive labor market conditions. To meet these demands, the agency must maintain sufficient staffing capacity while strengthening advanced technical, scientific, financial, and digital skillsets—particularly in engineering, water and flood sciences, information technology, geospatial services, cybersecurity, planning, and finance. Future workforce success depends on mitigating institutional knowledge loss through succession planning, leadership development, cross-training, and knowledge transfer, while sustaining strong Science, Technology, Engineering, and Math (STEM) pipelines through internships and structured career progression programs.

Ongoing recruitment and retention challenges, driven largely by compensation constraints and heightened competition for specialized talent, require the agency to continue leveraging such non-salary incentives as professional development, leadership training, and mission-driven public service alignment. Ensuring adequate staffing in mission-critical functions is essential to maintaining statutory compliance, operational continuity, financial stewardship, and effective delivery of statewide water and flood planning and infrastructure programs.

Expected Workforce Development

Expected workforce developments at the TWDB are driven by existing and evolving agency programs, technological advances, and increasing complexity in core functions. Advanced workforce skills will be needed to meet the demands of the state and stakeholders. At the same time, rapid changes in technology and data systems are reshaping work processes and increasing the need for staff with expertise in information technology, analytics, and digital transformation. Recruitment, retention, and compensation challenges influence staffing strategies, training investments, and succession planning. To remain effective, the agency must continue adapting how work is performed by emphasizing workforce development, cross-training, and innovative recruitment and retention approaches.

Future Workforce Skills Needed

The future workforce needs of the TWDB are expected to remain aligned with current core competencies while expanding to address increased program complexity, technological advancements, and evolving stakeholder demands. The agency must retain staff with existing technical, financial, scientific, and administrative expertise while providing ongoing training to prepare both new and existing employees for future challenges. The rapid pace of technological change also increases the need for advanced information technology, cybersecurity, and digital transformation skills across the agency.

The agency faces an ongoing risk of institutional knowledge loss due to retirements and staff losses to competitive labor markets. Future workforce success depends on effective succession planning, cross-training, leadership development, and knowledge transfer, ensuring continuity of operations while developing the next generation of technical and managerial leaders.

Science- and engineering-related roles make up a significant portion of TWDB positions. For this reason, TWDB recruitment focuses heavily on STEM. One of the practices of this initiative is to host a year-round internship program to connect students in STEM fields to career paths in water sciences, engineering, planning, and other professional roles. Another initiative is the TWDB Engineering Career Ladder program, which supports career progression for professionals in engineering-related roles.

Factors Influencing the Agency's Ability to Compete in the Labor Market

The TWDB ability to compete in the labor market is influenced by a combination of compensation constraints, labor market conditions, workforce demographics, and increasing program demands. As the broader economy becomes more competitive, the agency faces challenges attracting and retaining qualified staff due to compensation limitations, which are often not competitive with comparable private-sector, highly specialized positions. This is especially the case in engineering-related roles.

The agency experiences particularly strong competition for professionals with expertise in engineering, water and flood science, information technology, geographic information systems, contract administration, and finance. These challenges are exacerbated by

increased statewide and federal investments in water- and flood-related initiatives, which have expanded demand for a limited pool of qualified candidates within Texas and nationally.

The potential retirement of tenured staff poses a significant risk to institutional knowledge and operational continuity. To mitigate this, the TWDB must invest heavily in training and development.

While competitive compensation remains a challenge, the agency leverages alternative strategies to enhance competitiveness, including recruitment and retention bonuses, opportunities for professional development, leadership training, and strong alignment with the agency's public service mission. These non-salary factors play an important role in attracting and retaining employees in an increasingly competitive labor market.

Critical Functions Required to Achieve Goals

All areas of the agency are experiencing staffing shortages. Some of the most critical positions are listed below.

- **Water Science and Conservation:** Hydrologists, hydrogeologists, geoscientists, and licensed engineers are critical. Staff in these areas are essential partly because they are called upon to provide scientific testimony to the legislature and information to stakeholders and the public.
- **Office of Planning:** Planners, floodplain managers, and licensed engineers are the most critical in these areas. Staff are required to provide the public and the legislature with water supply data and flood data, along with the state water plan and state flood plan.
- **Operations and Administration:** Human resources professionals and information technology personnel (particularly in cybersecurity) are critical roles. Failure to have staff in these roles can result in non-compliance with statutory requirements and undermine overall operational resilience.
- **Texas Geographic Information Office:** It is imperative to have geospatial information professionals on staff to maintain the geospatial infrastructure and the ability to respond to queries from the legislature, stakeholders, and the general public.
- **Finance:** Critical needs with senior leadership, analysts, and directors. The risk of maintaining personnel in these roles could result in the failure to remain in financial compliance, ensure the agency's financial infrastructure, and the ability to meet community needs.
- **Water Supply and Infrastructure:** The most critical shortage is with licensed engineers. A shortage in this area results in excessive workload for staff and could also result in failure to remain in compliance with funding mechanisms.

Core Business Functions and Gap Analysis

Executive Administration

Core Business Function

In addition to staff in the Executive Office, Executive Administration includes Government Relations and Communications. Staff and workforce skills critical to the mission and goals of Executive Administration include, but are not limited to, the following:

- An Executive Administrator with extensive institutional knowledge of complex state and federal financial programs, knowledge of planning activities, managerial skills, and the ability to work with state leadership and bring their requests and visions to fruition
- An Assistant Executive Administrator with extensive knowledge and experience in the day-to-day operations of the TWDB
- A General Counsel that possesses recognized legal expertise in water resources, including water rights, water resources planning, and TWDB financial programs
- Staff attorneys with core skills through continuing education, institutional knowledge in planning, program activities, human resources, contracts, and open records matters
- Staff with knowledge of the State Records Retention Schedule, Texas State Libraries and Archives Commission rules and regulations, and working knowledge of electronic document management systems

The active involvement and professional familiarity with the complexity of TWDB public financing programs provides the members of the governing Board with the judgment necessary to assess the specialized professional skills necessary and appropriate for the Executive Administrator position and the salary necessary to attract and retain qualified individuals.

Staff and workforce skills critical to the mission and goals of Government Relations and Agency Communications include, but are not limited to, the following:

- The ability to create and maintain effective relationships with stakeholders and organizations
- Excellent verbal and written communications skills
- The ability to proactively and reactively analyze and interpret information in an efficient and effective manner
- Familiarity with all TWDB programs and business areas
- Deep understanding of traditional and social media, including the ability to recognize and assess stories, trends, and opportunities
- Graphic designers with extensive experience using a variety of programs to create graphics and materials, including long-form documents, and ensure brand consistency
- Expertise in providing print services and utilizing and maintaining large-format printers
- Skills in conference and event management and videography
- Active involvement with the members of all government levels

Shortages

Executive Administration encounters persistent challenges in recruiting, hiring, and retaining staff for classifications with highly specialized skillsets (such as attorneys and Government Relations and Communications staff) at salaries that are competitive with the private sector and some public sector agencies.

Internal Audit

Core Business Function

The Texas Internal Auditing Act (Texas Government Code, Chapter 2102) establishes Internal Audit and mandates that the program adequately addresses risks identified through an annual risk assessment of the agency's functions, activities, and processes within a reasonable time frame.

Internal Audit serves as the independent auditor for the TWDB. The Office provides independent and objective audit and advisory services, handles complaints related to fraud, waste and abuse, and performs statutorily required audits.

Internal Audit provides the Board and the Executive Office with risk information, analysis, and recommendations to assist with implementing proactive changes, managing business risk, and enhancing compliance and accountability.

Shortages

The recruitment and retention of qualified and experienced internal auditors remain a challenge. Expertise in internal auditing within state government, along with specialized skills in accounting, investments, information technology and security, fraud, process improvement, and contract management are essential. Knowledge of professional and government auditing standards is also a critical and required skill set.

Water Science and Conservation

Core Business Functions

The mission of the Office of Water Science and Conservation (WSC) is to provide assistance, information, and education for the conservation, management, and understanding of water in Texas. The Office is composed of the Conservation and Innovative Water Technologies (CIWT), Flood Science and Community Assistance (FS&CA), Groundwater, and Surface Water divisions.

Conservation and Innovative Water Technologies

The Conservation and Innovative Water Technologies (CIWT) Division works to ensure Texas' future water supplies by advancing conservation and innovative water supply strategies through education, data, and funding. The Municipal Water Conservation Department assists cities and utilities in establishing effective, water-wise conservation programs. They lend out leak detection and meter testing equipment; assist with water loss audits, water conservation plans, and annual reports; conduct water loss audit validation; and provide water conservation

brochures and educational materials. They also provide administrative support to the state's Water Conservation Advisory Council and promote rainwater harvesting by hosting the Texas Rain Catcher Awards.

The Agricultural Water Conservation Department provides grants to political subdivisions to implement conservation measures and to improve irrigation efficiency, and staff estimate the use of irrigation water by county each year. The Innovative Water Technologies Department works to support the implementation of alternative and innovative water supply strategies through the investigation of desalination, water reuse, aquifer recharge (AR), and aquifer storage and recovery (ASR) projects. Staff maintain the desalination database, prepare a biennial report to the legislature on desalination, support indirect and direct reuse projects for both potable and non-potable uses, and conduct studies to advance AR and ASR projects.

Surface Water

The Surface Water Division delivers integrated scientific and engineering expertise by collecting, analyzing, and disseminating data related to hydrometeorological and surface water conditions across the state. This division also provides technical expertise in support of environmental flows, regional water planning, and flood planning and science.

Division activities focus on

- data collection related to surface water conditions in rivers, lakes, and estuaries, meteorological conditions, bathymetry, and sediments;
- data dissemination via Water Data for Texas, Texmesonet.org, and other publications;
- development and application of statistical, hydrologic, hydraulic, and hydrodynamic models;
- conducting studies and administering contracts with universities, government agencies, and private companies;
- providing technical reviews of applications for financial assistance; and
- stakeholder support, including that of the Texas environmental flows process.

Through these activities, the division ensures that high-quality data and scientific analyses guide regional water planning, environmental flow assessments, and flood science initiatives statewide.

Groundwater

The Groundwater Division works to collect, interpret, and provide accurate and objective information on groundwater resources to Texans, groundwater resource managers, policymakers, and lawmakers. The Groundwater Division is responsible for all aspects of groundwater studies in the state. The division monitors groundwater levels and quality in the state's aquifers, conducts regional-scale aquifer modeling, and houses and maintains water well records.

The Brackish Resource Aquifer Characterization System (BRACS) program works to characterize the state's brackish groundwater resources and designate brackish groundwater production zones. Division staff review and approve groundwater conservation district

management plans and participate in the establishment of desired future conditions for aquifers in the state's groundwater management areas. Groundwater staff also provide groundwater information to anyone seeking more information about groundwater resources in Texas.

Flood Science and Community Assistance

The Flood Science and Community Assistance Division (FS&CA) administers the agency's flood modeling, flood mapping, flood grant coordination, and community assistance programs related to the National Flood Insurance Program. FS&CA conducts research, develops flood risk data, disseminates the data and research findings to the public, and participates in the Cooperating Technical Partners program with the Federal Emergency Management Agency (FEMA).

The division also participates in the management of state grants (TWDB Flood Infrastructure Fund) and federal grants (FEMA Flood Mitigation Assistance) to political subdivisions to conduct flood studies and mitigation projects and supports the regional and state flood planning processes. FS&CA staff administer the FEMA Flood Mitigation Assistance grant program—which is responsible for the National Flood Insurance Program (NFIP) in Texas—conducts State Coordinating Agency functions for the NFIP, assists communities in enrolling in the NFIP, conducts training related to floodplain management, and provides technical assistance and compliance reviews for participating communities with ordinance, floodplain management, and other NFIP issues.

Shortages

The various technical and programmatic work undertaken in WSC provides the foundation for understanding Texas' water resources and supports the state's water supply and flood planning processes. WSC staff are responsible for data collection, dissemination, analysis, visualization, and interpretation; hydrologic, hydraulic, hydrodynamic, and sediment transport modeling; contract development and management; administration of state and federal funding programs; and outreach and education, among other responsibilities. Additionally, WSC staff are frequently called upon as subject matter experts to provide testimony to the legislature regarding the state's water resources and provide input on draft legislation. WSC staff have highly specialized expertise and skillsets critical to the mission and goals of the agency.

WSC includes, but is not limited to, the following staff makeup:

- Hydrologists and geoscientists who are knowledgeable about Texas water and geologic resources.
- Hydrogeologists, geoscientists, and groundwater modelers with experience with groundwater models and interpretation of geophysical data.
- Licensed professional engineers with significant experience with flood modeling and mapping; knowledge of hydrologic, hydraulic, and hydrodynamic models or other computations/numerical models; water availability modeling; and water supply and flood mitigation infrastructure design.

- Individuals with significant experience in data analytics, programming, data visualization, data standards and governance, database management, and web development.
- Individuals with significant experience with Geographic Information System technology and the evaluation and presentation of geospatial data.
- Professionals knowledgeable about Texas water regulations, research issues, and programs covering a wide spectrum of activities, such as conservation, ecology, and innovative water strategies.
- Professionals involved in floodplain management, flood hazard mitigation, the National Flood Insurance Program (NFIP), flood preparedness, warning, and disaster recovery.
- Certified Texas Contract Managers who can effectively administer and manage state and federal programs as well as research studies/investigations, including the ability to maintain effective working relationships with customers.
- Staff with performance measurement, planning, and management system analysis skills to review and implement policies and procedures to increase efficiency and effectiveness of workload.
- Administrative professionals with experience in state government, TWDB programs, and Board procedures.
- Managers with significant experience in WSC programs, data analysis and management, programmatic development, leadership, management, technical, communications, and interpersonal skills needed to guide programs and interact with media and the public.
- Directors with significant experience in WSC programs, strategic planning, policy and program development, data interpretation, and strong written and verbal communications skills that support direction and oversight of programs as well as interactions with the public, media, and legislature.

The Office of WSC encounters persistent challenges in recruiting, hiring, and retaining technical staff for classifications with highly specialized skillsets as described above at salaries that are competitive with the private sector and some public sector agencies, resulting in workforce gaps and persistent shortages in key functional areas.

Planning

Core Business Function

The Office of Planning core business functions include development of the regional and state water plans as supported through implementation of the annual Water Use Survey, and development of regional and state flood plans and administration of Flood Infrastructure Fund (FIF) Flood Management Evaluations (FMEs).

Water Supply Planning

The Water Supply Planning Division provides ongoing data and technical assistance and administrative support to 16 regional water planning groups to assist in updating regional water plans. Staff in this division also prepare the state water plan every five years and provide economic and demographic technical support to regional and state water planning processes. They collect annual water use and service boundary data from the public water systems and industrial facilities across the state. They also develop water use estimates and demand projections for municipal, manufacturing, mining, steam-electric power generation, irrigation, and livestock water users.

Flood Planning

The Flood Planning Division administers the regional and state flood planning program for Texas and provides ongoing technical assistance and administrative support to 15 regional flood planning groups. Division staff prepare the state flood plan every five years and generate a ranking of all flood risk reduction solutions recommended by regional flood planning groups. Flood Planning staff are also responsible for regional and state flood planning data dissemination, collection, and data management. The Flood Planning Division includes a team that manages and provides oversight of flood studies performed for small and rural communities in Texas, as identified by regional flood planning groups. The division also participates in the management of state grants through the TWDB Flood Infrastructure Fund to political subdivisions to conduct flood and watershed management studies.

Staff Capabilities

The Office of Planning requires a wide variety of technical, engineering, project management, contract management, and data management skills to support and implement the regional water supply planning and regional flood planning programs. Each division has its own unique technical aspects and programmatic mandates and requires maintaining a unique combination of staff to fulfill the numerous aspects of the associated statutory requirements.

Both divisions deal with enormous amounts of data, ranging from historical data collected by the annual Water Use Survey and data to support socioeconomic impact analysis of not addressing water supply needs, to the large volume of flood and water supply planning data that is produced within each five-year regional and state water supply and flood planning cycles. Most of the staff in the Office of Planning perform a wide range of activities from stakeholder interactions and contract management to data analysis and highly technical tasks that vary in frequency and intensity depending on legislative directives and planning cycles.

The entire office is involved heavily in supporting a variety of stakeholder-driven activities that vary in nature throughout each planning cycle. These programs require staff who can maintain a proactive, responsive, and forward-looking posture to stay ahead of our stakeholders to serve them and to ensure compliance with contractual, statutory, and rule requirements.

Staff and workforce skills critical to meeting the associated mission and goals of the Office of Planning include, but are not limited to, the following:

- A wide variety of technical staff, including licensed civil engineers and professional geologists, planners, and certified floodplain managers—many of whom must also develop and manage professional contracts and develop, monitor, and oversee a variety of technical studies.
- Administrative and executive assistants.
- Water planners and flood planners with knowledge of Texas’ water laws and flood regulations, contract management skills, and the ability to maintain effective working relationships with contractors and stakeholders.
- Licensed professional engineers knowledgeable in flood modeling and mapping, hydrologic, hydraulic, and hydrodynamic models or other computations/numerical models, water availability modeling, and water supply and flood mitigation infrastructure design.
- Data analysts/specialists with significant experience in data analytics, data visualization, and database management.
- Research specialists who are knowledgeable in data management and research techniques.
- Economists who are knowledgeable in principles, methodologies, and practices of economic data analysis and modeling.
- Program specialists with significant experience with relational database development and management, and business analyst skills.
- Specialists with significant experience with Geographic Information System technology and the evaluation and presentation of geospatial data.
- Project managers with significant experience in managing contracts and supporting technical work, along with other program activities.
- Business analysts to support the Information Technology needs of the business area.
- Managers with significant experience in water planning, flood planning, data analysis and management, engineering, and communications skills to oversee the programs and interact with the media and public.
- Division directors with significant experience in water supply planning and flood planning program, policy and program development, and communications skills to direct and oversee the division and interact with the public, media, and legislature.

Shortages

Attracting and retaining adequately qualified regional planners, data analysts, and engineering positions continue to pose a challenge. Licensed professional engineers with water resources engineering skills, especially engineering managers, have been particularly challenging to fill in recent years.

Operations and Administration

Core Business Function

The Office of Operations and Administration (O&A) provides agency-wide services and functions in three areas: Human Resources (HR), Information Technology (IT), and Support Services.

Human Resources

The Human Resources (HR) Division provides services and administers benefits that promote the security and well-being of most important resource at the TWDB, its employees. HR provides administrative services to TWDB employees in the areas of recruitment, employee benefits, compensation, classification, personnel records, employee relations, and organizational training and development.

Information Technology

The Information Technology (IT) Division serves as the TWDB strategic and operational leader for technology services, digital transformation, and information resource management. Core functions include support for process efficiency integration, emerging technology implementation, management of technology contracts, enterprise system management, information security management, data governance administration, project management services for enterprise technologies, supporting end-user technology needs, overseeing disaster recovery and continuity of operations services, establishing and enforcing technology standards, and providing training and guidance to staff on agency technologies.

Support Services

The Support Services Department delivers agency-wide services that enable TWDB to operate effectively and safely. Core responsibilities include mail and courier operations, vehicle management, property and asset management, building and parking administration, facilities coordination, office space and lease administration, safety committee management, telecommunications support, meeting set up and logistics, office relocations, and special event support. Support Services functions as a central operational hub, ensuring support across TWDB headquarters and regional offices.

Shortages

With the growth of the agency from 482.5 to 575.5 full-time equivalents (FTEs) during the 89th Texas Legislature, as well as the addition of new programs and initiatives, support for Operations and Administration core business functions has become more challenging.

Primary challenges within HR include providing efficient and effective support for recruitment initiatives to fill current and new positions, as well as supporting extensive training and organizational development needs for new staff and staff in new roles.

The IT Division anticipates workforce gaps in several key areas due to increasing demand for modernized technology services, evolving security requirements, and expanded strategic

responsibilities. These areas include cybersecurity and risk management; cloud, infrastructure, and platform management; data management and analytics; systems analysis, business relationship management, and automation enablement; project and portfolio management; and application development and systems integration.

The Support Services Department is also challenged due to the recent growth of the agency and return-to-office initiatives. The agency recently acquired additional office space within the Stephen F. Austin building to support growth. Despite this additional space, the agency still lacks sufficient office space to support a workforce of 575.5 FTEs. Future initiatives are expected to include efforts to add and/or modify office space at headquarters and regional office locations to accommodate the agency's current workforce. Support Services staff will be instrumental in leading these processes.

Texas Geographic Information

Core Business Function

The Texas Geographic Information Office (TxGIO) serves as the State of Texas' central authority for geospatial data coordination, access, and policy. Established in statute, the office functions as a statewide clearinghouse and referral center for geographic information, including natural resource data, census data, emergency management data, and other socioeconomic datasets. Through this role, TxGIO ensures that critical geographic information resources are organized, accessible, and usable by local governments, researchers, the public, and state agencies for such purposes as the following:

- Texas Commission on Environmental Quality – Dam Safety, plume modeling
- Railroad Commission of Texas – Pipeline routing, oil well locations and prospecting
- Texas Department of Transportation – Road maintenance and new road/project development
- Texas Parks and Wildlife Department – Habitat/vegetation mapping, preservation, and protection
- Texas General Land Office – Oil spill response, rookeries mapping, and mining assessment
- Texas Historical Commission – Cultural resources mapping and protection
- Texas Division of Emergency Management – All emergency management support and response
- Public Utility Commission of Texas – Electrical grid mapping, expansion, and maintenance

The office promotes effective acquisition, archiving, documentation, indexing, and dissemination of geospatial information to support informed decision-making across government operations and public services.

A core function of the office is to coordinate the development and maintenance of authoritative statewide geographic datasets and digital base maps that support a wide range

of governmental activities, including infrastructure planning, natural resource management, and emergency response. The office works to promote standards and practices that enable geographic data to be shared efficiently among federal, state, and local partners while improving access to reliable location-based information for both government and the public. By fostering collaboration, advancing statewide geospatial policies, and supporting public access to geographic information, TxGIO strengthens the ability of Texas agencies and communities to use location-based data to improve efficiency, transparency, and service delivery across the state.

Central to this mission is the role of the Texas Geographic Information Officer (State GIO), who provides statewide leadership and strategic direction for the coordination, development, and use of geospatial information across Texas government. Designated by the executive administrator of the TWDB, the State GIO is responsible for coordinating the acquisition of high-priority imagery and geographic datasets, establishing and supporting authoritative statewide data layers, and ensuring that geospatial information resources are effectively shared and utilized across agencies and levels of government. The State GIO works closely with state agencies, federal partners, local governments, academic institutions, and private-sector stakeholders to promote collaboration, data standards, and efficient investment in geospatial technologies and data resources.

In addition, the State GIO plays an important role in advancing the state's geospatial strategy by monitoring emerging trends in geographic information technologies and identifying opportunities to improve government operations using location-based data. The State GIO also supports the geospatial data needs of emergency responders during disasters and helps expand public access to state geographic data and services. Through policy leadership, coordination of statewide initiatives, and engagement with the broader geospatial community, the State GIO helps ensure that Texas maintains a modern, interoperable geospatial infrastructure that supports effective governance, public safety, economic development, and environmental stewardship.

Shortages

Texas is the largest state in the contiguous United States, encompassing more than 268,000 square miles and a rapidly growing population, infrastructure network, and natural resource base. Maintaining a modern and reliable statewide geospatial infrastructure at this scale requires significant and sustained investment in both data acquisition and skilled personnel.

TxGIO currently has only 26 staff members to support all statewide geospatial data development, maintenance, and distribution activities. This limited workforce must manage data acquisition programs, coordinate with federal and local partners, develop new geospatial products, maintain existing datasets, and ensure reliable public access to statewide geographic information. Without sufficient staffing and sustained funding, the office's ability to maintain up-to-date statewide datasets and respond to emerging needs will be severely constrained.

Finance

Core Business Function

Finance is expected to deliver centralized, timely, and meticulously accurate financial services that support informed decision-making and ensure the effective stewardship, investment, and protection of TWDB assets, which total \$26.2 billion as of August 31, 2025. The Office of Finance is responsible for maintaining fiscal integrity across the agency through the oversight and execution of highly complex financial, accounting, and compliance functions.

Finance leads all activities related to the structuring, issuance, and management of municipal debt, oversees investment of public funds in strict accordance with the Public Funds Investment Act, and prepares detailed cash-flow projections, program capacity analyses, and lending rate scales. In addition, Finance conducts financial stability and creditworthiness reviews of borrowers to support sound lending and investment decisions and to ensure financial accountability of state funds.

Finance also directs the more traditional day-to-day financial operations, ensuring the precise and timely processing of payroll and financial transactions; developing, administering, and monitoring the agency's budget; producing comprehensive financial and budgetary reporting; oversight of contract development, compliance, monitoring, and payment authorization; and procurement services to acquire goods and services in alignment with applicable state and federal requirements. To carry out these responsibilities, Finance is organized into six specialized divisions: Accounting, Budget, Debt and Portfolio Management, Financial Compliance, Financial Operations, and Procurement and Contract Services.

Accounting

The Accounting Division maintains the general ledger and prepares timely and accurate financial reports for internal and external recipients. This division is responsible for ensuring the integrity of financial data in multiple systems and is responsible for closing loans and registering all public securities purchased by the TWDB.

Budget

The Budget Division is responsible for the development, preparation, and ongoing management of the operating budget and position control system. Budget staff produce and analyze budgetary and financial data to support the governing board, agency leadership, staff, and external oversight entities. In addition, the Budget Division leads the preparation of the agency's Legislative Appropriations Request and develops fiscal notes, briefing materials, and formal responses to budget-related inquiries throughout each legislative session, ensuring accurate representation of the agency's financial needs and impacts.

Debt and Portfolio Management

The Debt and Portfolio Management Division provides comprehensive financial analysis to support oversight of the TWDB loan and debt portfolios. This division is responsible for structuring and issuing bonds to secure funding at the lowest possible cost in support of loan and grant programs. Responsibilities also include preparing detailed cash-flow projections,

capacity analyses, lending rate calculations, investor relations, fulfilling bond covenants, and ensuring continuing disclosure requirements of the Municipal Securities Rulemaking Board of the Securities and Exchange Commission are met. These responsibilities ensure liquidity, sustainability, and prudent stewardship of public resources.

Financial Compliance

The Financial Compliance Division oversees the agency's loan portfolio to promote long-term program sustainability and reduce the risk of loan defaults through ongoing financial stability reviews of borrowers. This division also monitors financial assistance program requirements to ensure borrowers and grantees remain in compliance with applicable financial, contractual, and reporting obligations.

Financial Operations

The Financial Operations Division is responsible for the accurate and timely processing of all payments to vendors and employees. This team also manages the drawdown of federal funds, processes accounts receivable activities to include loan collections and payments resulting from the maturity of political subdivision obligations, and provides ongoing servicing of the agency's debt obligations. Collectively, these functions are essential to maintaining liquidity, meeting financial and contractual obligations, and supporting the uninterrupted operation of agency programs.

Procurement and Contract Services

The Procurement and Contract Services Division oversees the full lifecycle of contracting and procurement activities, including contract development, compliance oversight, performance monitoring, and payment authorization. This function ensures that contractual obligations are clearly defined, properly administered, and consistently enforced to protect the agency's financial and programmatic interests. In addition, Procurement and Contract Services manages the acquisition of goods and services necessary to support agency operations, conducting procurements in strict accordance with applicable state and federal laws, rules, and regulations. Through these efforts, the division plays a critical role in mitigating risk, ensuring fiscal accountability, and supporting the effective delivery of agency programs.

Shortages

The agency's financial operations are supported by a complex mix of funding sources that include both trust and treasury funds, spanning federal and state revenue streams. These resources consist of appropriated funds authorized through the General Appropriations Act (GAA), as well as funds that are outside the GAA, such as federally awarded grants, dedicated trust funds, bond proceeds, and other revenues with specific statutory or contractual restrictions. In addition, Finance administers funding programs that rely on sophisticated cash-flow structures, including the issuance of municipal bonds and the acquisition of municipal bonds from program participants, commonly referred to as providing loans to local communities.

These financing mechanisms are essential to sustaining several major financial assistance programs that support water, wastewater, and flood infrastructure statewide. Each program

carries distinct eligibility, accounting, reporting, and compliance requirements, often governed by different federal and state statutes, grant agreements, and oversight entities at both the state and federal levels. The management of this interdependent funding structure requires rigorous financial controls, specialized expertise, and precise reporting to ensure funds are used appropriately and in accordance with all applicable requirements.

Finance continues to experience staffing challenges in part due to the specialized financial, accounting, compliance, and capital-markets expertise required at the TWDB described above. These types of positions often command significantly higher salaries not just outside of public service, but competing public agencies frequently offer higher pay for the same or similar position titles with narrower scopes, fewer complexities, or lower levels of responsibility, making it more difficult to attract and retain highly skilled finance professionals at the TWDB. These market pressures, combined with the technical demands and high accountability inherent to the agency's finance functions, contribute to ongoing recruitment and retention challenges.

Staffing challenges have been further compounded by additional funding, reporting, and compliance responsibilities assigned during the most recent legislative session. Increased funding levels, new statutory requirements, and expanded oversight expectations have increased the volume, frequency, and complexity of financial reporting, oversight, and coordination required of Finance. These obligations were implemented without a corresponding increase in authorized staffing, placing additional strain on existing resources and further limiting the division's capacity to absorb workload increases while maintaining timely, accurate, and compliant financial operations.

Finance staff critical to the mission and goals of providing public financial assistance include, but are not limited to, the following:

- Experienced finance leadership, including the chief financial officer, deputy chief financial officer, and finance controller, is essential to managing and safeguarding the agency's assets while providing strategic direction to support agency operations. Beyond expertise in the traditional finance functions of accounting, budgeting, procurement, payables, and revenue, these leaders must also have expertise in the complexities associated with municipal debt and portfolio management and post-issuance financial compliance. These specialized responsibilities require a deep understanding of capital markets, regulatory requirements, and risk management. With total agency assets exceeding \$26.2 billion as of August 31, 2025, experienced leadership is essential to maintaining strong internal controls, ensuring compliance with applicable requirements, safeguarding public funds, and overseeing capacity and liquidity modeling to ensure the agency's infrastructure funding programs can meet community needs as demands for funding continue to increase.
- Directors, managers, and team leads for each functional area, with both leadership capability and deep subject-matter knowledge to guide specialized finance teams, set priorities, ensure technical accuracy, and translate complex requirements into effective execution are essential.

- Financial analysts with expertise in the issuance and management of taxable and tax-exempt municipal bonds are needed to develop and execute complex financing strategies; communicate financing objectives to financial advisors, bond counsel, underwriters, and credit rating agencies; and ensure compliance with public disclosure requirements throughout the life of the debt. These roles require advanced Excel proficiency to build and maintain complex financing models and cash-flow analyses.
- Financial examiners with technical proficiency to review audited financial statements, evaluate the financial condition of program participants, identify covenant noncompliance, and develop and monitor corrective action plans as needed. These positions require the ability to analyze complex financial information and interpret bond covenants, including repayment pledges and contractual agreements related to the sale of water.
- Accountants with advanced knowledge of governmental accounting functions, including federal fund administration, and experience accounting for investments, public debt, loans, and grants.
- Budget analysts with advanced knowledge of governmental budgeting practices, including responsibility for local funds outside of the traditional appropriations framework. In addition, analysts knowledgeable in all statewide financial systems as well as external banking and underwriting systems to ensure compliance with financial reporting requirements; this role is critical to ensuring strategic success and mitigating financial system risks, including cybersecurity issues.
- Certified Texas purchasers and qualified contract specialists are essential to administering and managing complex procurement and contracting activities for both state and federally funded programs, ensuring compliance with applicable requirements and supporting effective program delivery.
- Experienced executive and administrative assistants who provide direct support to the staff identified above but also understand complex deliverables and associated timelines well enough to actively contribute to meeting workload demands and advancing work to completion.

Water Supply and Infrastructure

Core Business Function

Water Supply and Infrastructure (WSI) supports the agency's mission and Texas communities by assisting in the planning and managing of water resources through the administration of the regional and state water planning processes—offering cost-effective financing options while ensuring programmatic compliance to implement water-related infrastructure projects. To accomplish these strategies, WSI is comprised of two divisions: Program Administration and Reporting and Regional Water Project Development. Supporting both divisions is the Business Operations Team.

Regional Water Project and Development

Regional Water Project and Development (RWPD) is responsible for working with communities as they develop their projects from conception through commitment of funding and, ultimately, project completion. The division provides assistance and guidance to project

owners and their consultants throughout all phases. This is accomplished through a director, assistant directors, an administrative team, an application and closing team (to process financial assistance applications and closings), and a disbursement and review team responsible for programmatic approvals of payment requests. The seven project implementation teams are divided by geographical area and oversee projects from concept to the end of construction to ensure financial accountability of state funds. Each team consists of a team manager, engineering staff, and an environmental reviewer. An attorney and a regional planner also work closely with each team.

Program Administration and Reporting

Program Administration and Reporting consist of six departments: Program Administration – Federal Programs, Program Administration – State Programs, Outlays and Escrows, Reporting, Technical Systems Oversight, and Outreach. This division develops policies to facilitate the management of financial assistance programs. Division staff monitors and ensures agency compliance with state and federal laws, policies, and standards as it relates to administering TWDB financial assistance programs—including technical assistance and processing financial assistance disbursements through outlays and escrows. The Outreach Department serves as a liaison between entities and the TWDB and is responsible for the coordination and facilitation of marketing TWDB programs to local communities, cities, counties, districts, authorities, and water supply corporations.

Business Operations Team

The Business Operations Team provides the resources, support, and assistance to WSI staff for the successful implementation of agency goals and measures. This team facilitates the development and management of the systems and programs that staff utilize. Its members perform highly complex analysis, staff training, archival support, and contract management across all functions. The team consists of a manager, a management analyst, a contract specialist, a training and development specialist, and a records specialist.

Shortages

Infrastructure projects identified in the state water plan and the state flood plan are funded through the various financial programs supported by WSI staff. Existing programs pose such challenges as increases in federal appropriations for the State Revolving Fund programs, balancing U.S. Environmental Protection Agency (EPA) requests for information and reporting requirements with other workload requirements, potential project delays due to environmental coordination with regulatory agencies, and the challenges associated with the continued growth of the financial assets owned and managed by the TWDB. WSI is often called on to provide input on draft legislation and appropriations related to water resources policy and funding.

Shortages of staff, particularly licensed professional engineers, contribute to excessive workload and reduced output and staff retention. Current private-sector opportunities and prevailing pay inequities between the TWDB and the private sector continue to impact the agency's ability to recruit and retain engineers, as well as other staff.

Office space constraints at both Stephen F. Austin and regional office locations additionally limit the recruitment of essential positions.

Workforce Surplus in Business Areas

Agencywide, no current or anticipated workforce surpluses have been identified. Ongoing staffing constraints, steady organizational growth, and the expansion of office responsibilities mean that all available staff and resources are fully engaged in meeting existing demands. With these demands expected to persist or increase, excess staffing capacity is not anticipated in the near or long term.

Section III

Workforce Strategies

Strategies Defined

The Texas Water Development Board (TWDB) strategy for addressing workforce shortages is defined as an integrated approach to mitigating operational and compliance risks associated with increasing statutory requirements, specialized skill demands, and competitive labor market conditions. The strategy focuses on maintaining critical functions through prioritization of high-risk and mission-critical activities, ongoing assessment of staffing needs, and the strategic use of recruitment, retention, and workforce development practices.

Recruitment is addressed through data-informed sourcing and early-career pipeline development to support positions that are difficult to fill. Retention is addressed by preserving institutional knowledge and specialized expertise through structured career progression, leadership development, succession planning, targeted training, and non-salary strategies that support employee engagement and continuity, training, knowledge transfer, and supervisory development. Core elements of this strategy serve to reduce operational risk, particularly in high-impact areas, while sustaining a capable workforce aligned with the agency's statutory responsibilities and long-term mission.

Recruitment

There is a persistent recruitment gap in highly competitive roles, making attraction and retention of a skilled workforce critical to maintaining essential agency functions. When addressing this challenge, the TWDB implements a structured, data-driven recruitment strategy that integrates targeted sourcing, technology-enabled platforms, early-career pipeline development, and strategic partnerships to strengthen workforce capacity.

Workforce Recruitment uses data and reporting to guide recruitment strategies for both standard and traditionally hard-to-fill positions. Analysis of CAPPs Recruit data and New Employee Orientation surveys identifies online recruitment platforms as the most effective sourcing channels. Recruitment efforts in fiscal year 2026 prioritize these platforms to improve

reach, efficiency, and candidate engagement. Recruitment activities emphasize proactive sourcing, early engagement, and collaboration with hiring managers across the agency. Bi-weekly reviews of job posting data inform the strategic use of paid advertising for roles with limited applicant flow or specialized skill requirements, supporting improved visibility and reduced hiring times.

The TWDB sustains a recruitment approach that includes online platforms, recruitment events, internships, externships, and partnerships with academic institutions, professional associations, and community employment organizations. These efforts support early-career pipelines, public service outreach, and long-term workforce sustainability while reinforcing the TWDB employer brand across digital, academic, and community-based recruitment channels.

Retention

The TWDB recognizes employee retention as essential to maintaining organizational effectiveness, continuity, and long-term impact. Accordingly, the agency's retention strategy focuses on sustaining a highly skilled and engaged workforce amid competitive labor market conditions, evolving program demands, and projected retirements. With retention rates averaging approximately 85 percent during fiscal years 2023 to 2025, below the commonly cited benchmark of 90 percent, retention is a key component of the TWDB overall workforce strategy. Given the agency's reliance on specialized scientific, engineering, technical, and financial roles, retention efforts prioritize preserving institutional knowledge, supporting career progression, strengthening employee engagement, and mitigating burnout associated with high workloads and staffing gaps.

In response to compensation constraints typical of the public sector, the TWDB emphasizes a comprehensive set of non-salary retention strategies that reinforce employee value, purpose, and growth. These include structured career progression pathways (such as the Career Ladder and Aspiring Leadership Program), targeted training and professional development, mentoring and coaching, performance management enhancements, and opportunities for skill expansion through cross-training and digital transformation initiatives. The TWDB also leverages benefits, wellness programming, recognition practices, community-building initiatives, and flexible management approaches to foster a respectful, transparent, and engaging workplace culture where employees feel heard and supported. These interconnected practices are designed to improve employee engagement, reduce turnover-related costs, and sustain productivity over time.

To address retirement risk and potential turnover in mission-critical positions, the TWDB prioritizes succession planning, leadership development, and knowledge transfer. Such STEM-focused workforce initiatives as year-round internships, mentoring programs, and early-career development opportunities support recruitment and retention by building internal talent pipelines and creating clear pathways for advancement. In addition, the agency continues to strengthen supervisory effectiveness through leadership training, performance feedback mechanisms (including 360 assessments), and practices that proactively identify engagement risks and retention opportunities. Recognizing that supervision plays a vital role in

employee retention, the TWDB emphasizes management accountability for engagement, communication, and employee development.

Collectively, the TWDB retention approach aligns employee engagement, workforce development, recruiting practices, and organizational culture with the agency's public service mission. By investing in people through coordinated efforts across offices and balancing the need to retain high-performing, engaged employees, the agency aims to stabilize its workforce, retain specialized expertise, and maintain the operational capacity necessary to meet statutory obligations and long-term strategic objectives.

Training, Knowledge Transfer, and Succession Planning Strategies

The TWDB strengthens gaps in training, knowledge transfer, and succession planning strategies by expanding structured workforce development initiatives aligned with current and future skill needs. Learning and development leads to these initiatives, including:

- Leveraging agency-wide training programs coordinated by Human Resources to support technical, scientific, financial, and administrative skill development.
- Expanding leadership development opportunities, including the Aspiring Leaders Program (ALP), preparing staff for future management roles, the Mentorship Program, which allows management and non-management staff to connect based on shared interests and background, and targeted supervisory training, such as the Leadership Exploration and Development Program (LEAD) for staff in manager and director roles.
- While the TWDB does not currently have a Learning Management System (LMS), obtaining one would establish baseline capacity for every role, preserve institutional knowledge, and build readiness for critical roles. Additionally, an LMS would improve access to training, automate assignments such as annual compliance, and ensure consistency across divisions.

Initiatives in these categories fall under the Human Resources and Information Technology business areas.

Strategies to Resolve Shortages

The TWDB continues to face workforce challenges driven by specialized skill requirements, expanding statutory responsibilities, and competition with the private sector. To ensure operational continuity, statutory compliance, and mission success, the agency implements targeted strategies focused on prioritization, retention, workforce development, and operational efficiency.

The Internal Audit Office addresses internal staffing constraints by prioritizing the highest-risk areas through its annual risk-based audit plan while requiring management to monitor residual risks through alternative controls. The program periodically evaluates resource adequacy in compliance with state law and communicates staffing needs to executive leadership as warranted.

TWDB Workforce Plan

Across program areas, most notably Water Science and Conservation, Planning, Information Technology, and Water Supply and Infrastructure, retaining highly skilled technical and experienced staff remains critical. The TWDB emphasizes competitive compensation, structured career paths, and ongoing professional development to recruit and retain engineers, scientists, planners, and technical specialists; these investments support the agency's ability to adapt to complex scientific, policy, and stakeholder demands.

To address staffing shortages in Water Supply and Infrastructure, the TWDB has contracted with the University of Texas at Arlington to assist with the review of engineering plans and specifications, site visits of projects under construction, project prioritization scoring for the Clean Water State Revolving Fund program, and for assistance with review and processing of certificates of approval required to close out construction contracts and authorize the release of final retainage.

The Operations and Administration Office addresses workforce shortages through targeted training and professional development, workload rebalancing, process improvements, and ongoing evaluation of staffing levels, with recommendations for additional full-time equivalents as needed. The IT Division prioritizes recruitment of high demand technical talent, strengthening internal capacity through training, cross training, succession planning, and knowledge documentation, and strategically uses contract resources to address short term needs. Given the significant stewardship responsibilities entrusted to the agency, these efforts are essential to mitigate operational risks particularly in cybersecurity, which remains a primary focus over the next two years and continues to evolve as technologies and threats change.

The TWDB workforce strategy is anchored in three core pillars: a clear and motivating mission; competitive compensation with investment in career growth; and a strong organizational culture that reinforces excellence, engagement, and accountability. Together, these efforts support a resilient, capable workforce positioned to meet Texas' long-term water needs.