Schedule F: Agency Workforce Plan

Introduction

The Texas Department of Transportation (TxDOT) continues to expand the scope of its responsibilities. TxDOT's workforce includes experts in engineering, maintenance, bridge construction, rail, maritime, real estate, project management, environmental affairs, research and technology, aviation, and transportation planning and programming. TxDOT is focused on construction, maintenance, and operations of multi-modal transportation systems. TxDOT's focus is on more than a system of highways; its focus includes cargo ships, airplanes, buses, trains, bicycles, and more.

TxDOT's workforce is vital to maintaining and expanding the prosperity of Texas. Daily, TxDOT employees advocate for infrastructure and investment to fulfill TxDOT's mission. Employees at TxDOT have a sense of pride because they know their work improves the quality of life for citizens and brings economic opportunity to the State.

According to the State Auditor's Office's Full-Time Equivalent (FTE) State Employee System, TxDOT generated more than 12,415 full-time equivalent employees (FTEs) during fiscal year 2021. TxDOT has come a long way since its creation in 1917 when it began with nine (9) employees. The business model has also changed, which has allowed us to become more effective and efficient in the achievement of our mission.

TxDOT and its Human Resources (HR) Division continue to expand the following initiatives:

- HR Generalist program to promote cross-training on core HR functions

- Department-wide Career Development Program

- Department-wide Leadership Development Programs

- Tuition Assistance and GED Completion Programs

- Veterans Preference initiative to promote the hiring of veterans, disabled veterans, and surviving spouses and orphans of veterans

- Wellness Program to improve the physical and mental health of employees in a supportive work environment

- Career conversations process to more closely link employees' performance to the TxDOT's mission

- TxDOT's compensation philosophy and process

- TxDOT's Human Resources Information System, PeopleSoft, revised and simplified human resources procedures

- Hiring and recruitment process to gain efficiencies

- Ensuring issues of discrimination, harassment, and retaliation are promptly addressed and thoroughly investigated as necessary

- Employee retention, especially in the first two years

- Employee Diversity, Equity, and Inclusion Program

- New employee orientation and other on-boarding initiatives, including paperless transactions for cost savings and efficiencies

- TxDOT's flexible work strategies help to address the State's congestion problem and a retention strategy by offering flexible work options such as teleworking, non-standard, compressed, and flexible work schedules

- Employee relations to be more proactive

- Human Resources analytics

TxDOT understands the importance of focusing on an employee as a whole person and empowering employees to reach their full potential. The work environment and culture influence an employee's well-being and their ability to be a productive employee. TxDOT's commitment to its employees is demonstrated by its focus on employee well-being and work-life balance, as well as its support and implementation of numerous incentives and programs. TxDOT encourages employee participation in the following:

- Employee Assistance Program

- Employee Diversity, Equity, and Inclusion Program

- Employee Wellness Program

- Flexible Work Strategies

- Safety Initiatives

- Training and Career Development Programs

A healthy workforce is essential to achieving TxDOT's mission. As reported by the Employee Retirement System for health plan year 2020, top chronic conditions for employees and their dependents are back and joint pain, hypertension, diabetes, and heart disease. In addition, annual preventive health screening results continue to identify overweight and/or obesity and high blood pressure as top risk factors for our workforce.
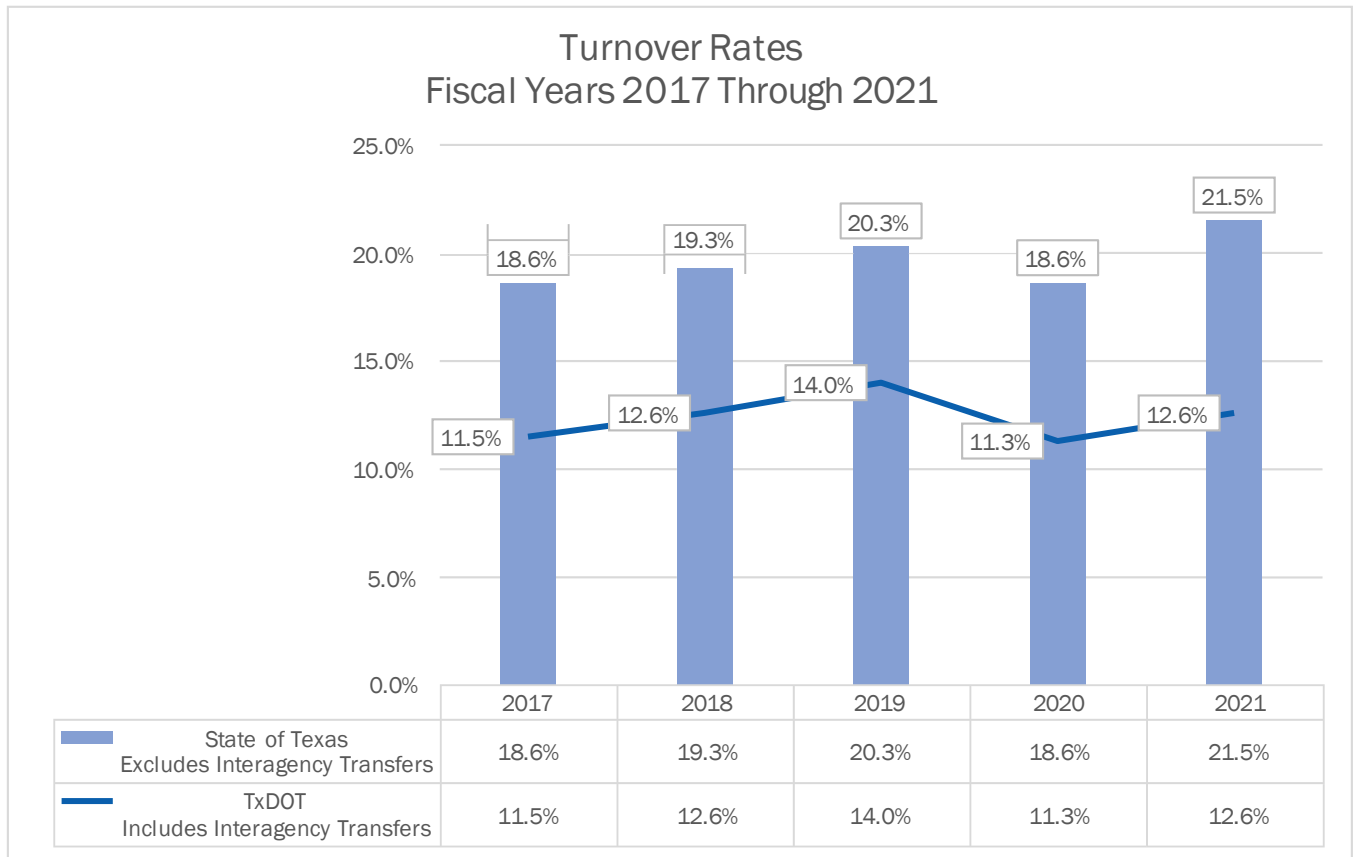
A holistic approach to the work-cycle of employees is key to fostering a modern workforce equipped to meet the challenges of sourcing work activities in the global environment in which TxDOT now functions. Our people need to be well-positioned to embrace change and continue to lead us through the 21st Century.

Supply Analysis

Turnover Rate

Figure 1 illustrates the state of Texas turnover rate for classified regular full-and part-time employees was 21.5 percent and TxDOT's turnover rate was 12.6 percent.
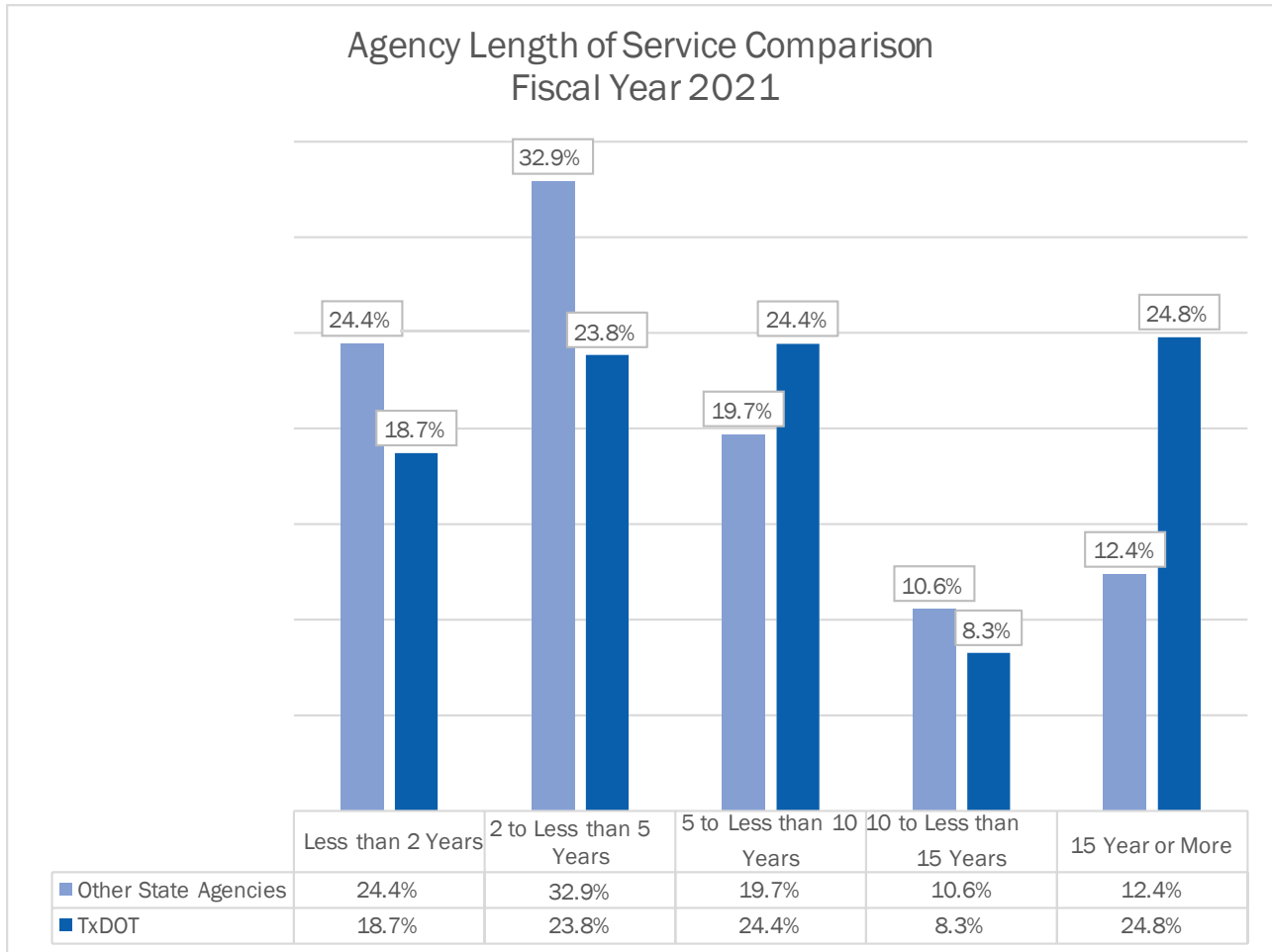
Figure 1

Turnover Rates
Fiscal Years 2017 Through 2021

	2017	2018	2019	2020	2021
State of Texas Excludes Interagency Transfers	18.6%	19.3%	20.3%	18.6%	21.5%
TxDOT Includes Interagency Transfers	11.5%	12.6%	14.0%	11.3%	12.6%

Source: State Auditor's Office's published Turnover Reports and State Classification Team's Electronic Classification Analysis (E-CLASS) online system – classified regular full-and part-time employees.

Agency Length of Service

In fiscal year 2021, TxDOT employees had an average of 9.15 years of agency length of service. Approximately 42.5 percent of TxDOT employees have fewer than 5 years of TxDOT service. Figure 2 compares employee agency length of service between TxDOT and other state agencies.

Figure 2

	Less than 2 Years	2 to Less than 5 Years	5 to Less than 10 Years	10 to Less than 15 Years	15 Year or More
Other State Agencies	24.4%	32.9%	19.7%	10.6%	12.4%
TxDOT	18.7%	23.8%	24.4%	8.3%	24.8%

Source: State Auditor's Office's published Turnover Reports and State Classification Team's Electronic Classification Analysis (E-CLASS) online system – classified regular full-and part-time employees.
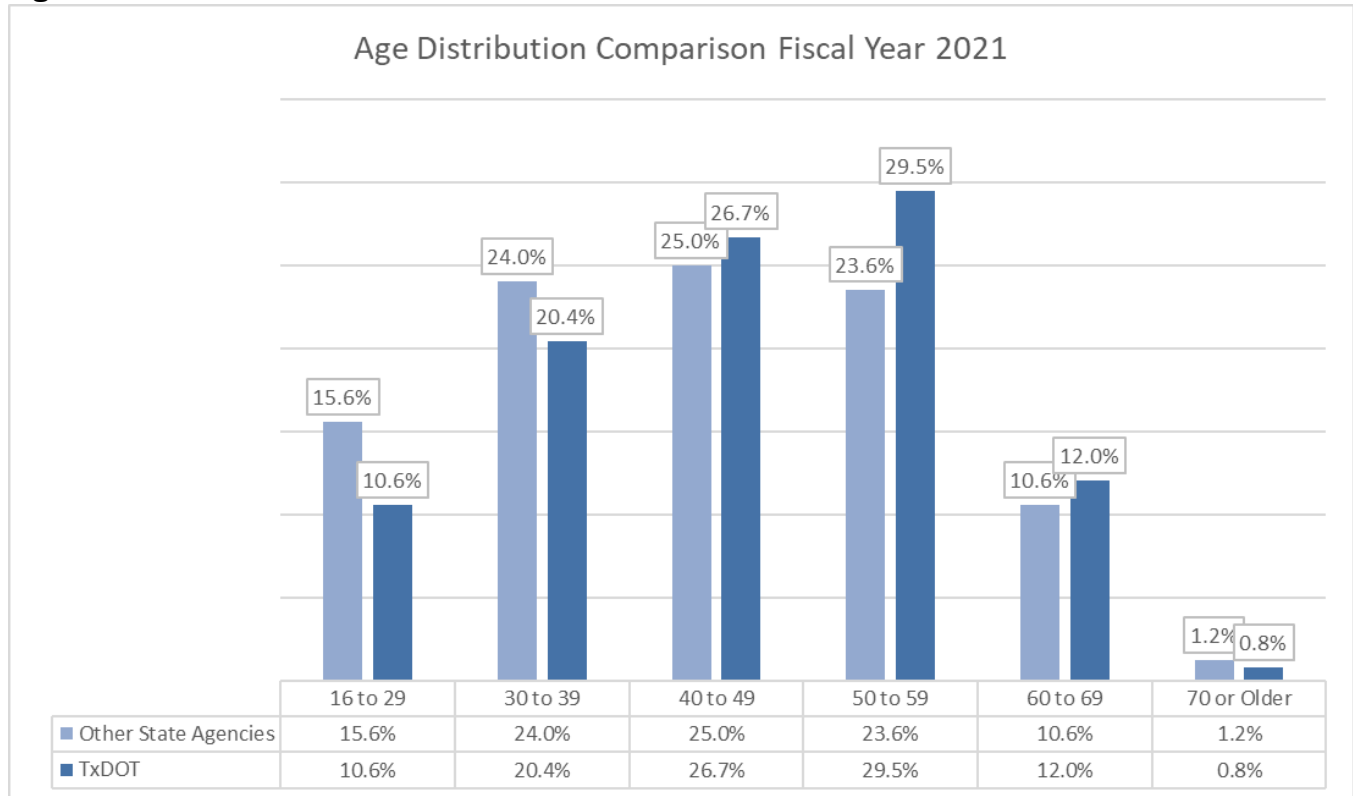
Retirement Eligibility

Based on April 2022 data, TxDOT estimates that 22.6 percent of the TxDOT's workforce will be eligible to retire by fiscal year 2026; 8.9 percent of which was eligible to retire in or before fiscal year 2021.

According to the Texas Workforce Commission's *Report on Texas Growth Occupations – 2020*, "Texas employers continue to experience the retirements of the Baby Boom generation of workers. The workforce for many industries in Texas has been dominated by Baby Boomer workers, many of whom are now in their sixties and had delayed retirement but now are starting to exit the workforce. This demographic shift is increasing demand for many occupations."

Age

Figure 3 shows that on average, in fiscal year 2021, TxDOT employees were 46.3 years old compared to other state agency employees who were on average 44.2 years of age. Of TxDOT's employees, 69.0 percent were 40 years of age or older, compared to 60.4 percent of other state agency employees.

Figure 3

Age Distribution Comparison Fiscal Year 2021

|	16 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 or Older
Other State Agencies	15.6%	24.0%	25.0%	23.6%	10.6%	1.2%
TxDOT	10.6%	20.4%	26.7%	29.5%	12.0%	0.8%

Source: State Auditor's Office's State Classification Team's Electronic Classification Analysis System (E-Class) online system - classified regular full-time and part-time employees.

Gender

Figure 4 shows TxDOT's workforce is predominately made up of men at 76.5 percent; with 23.5 percent being women.

Figure 4
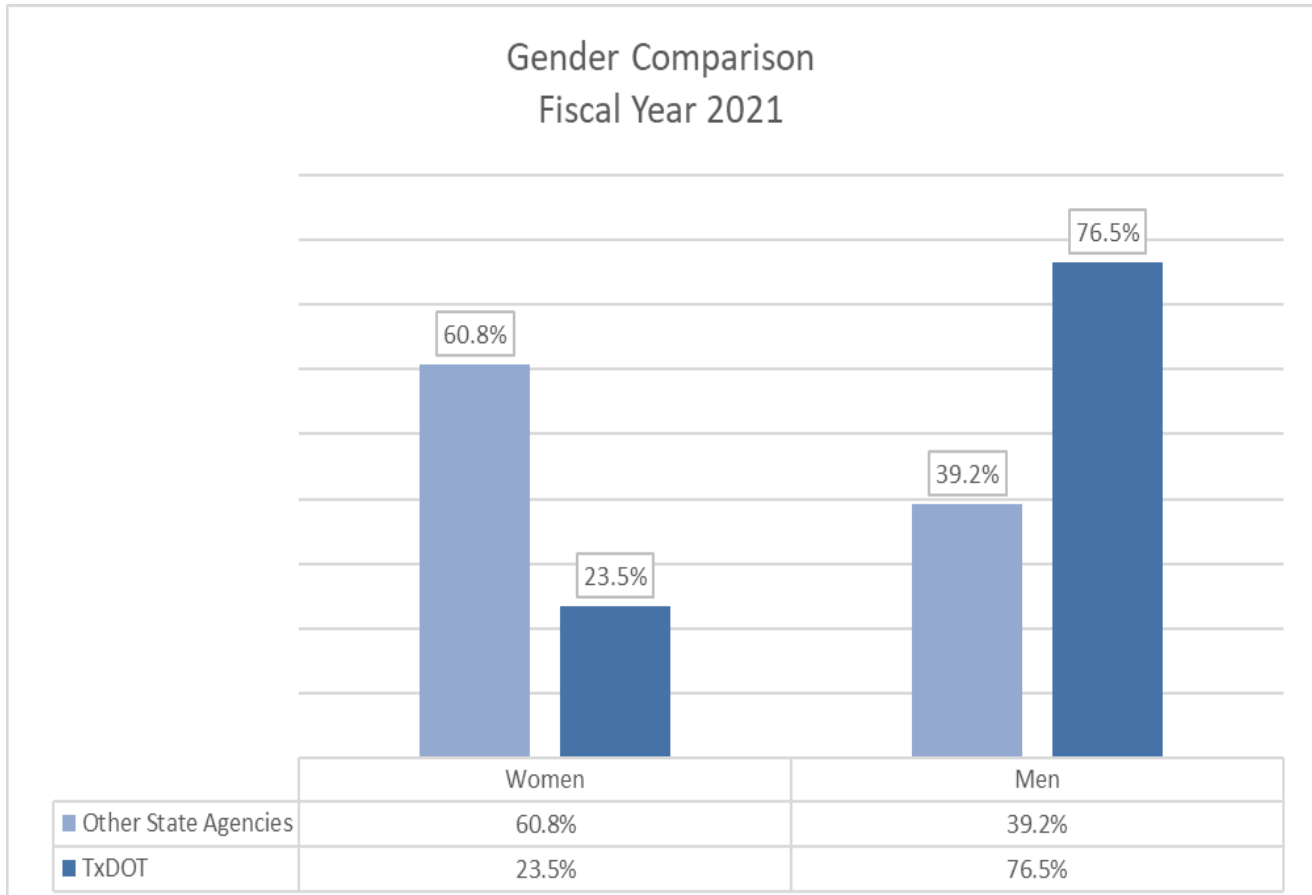
Gender Comparison
Fiscal Year 2021

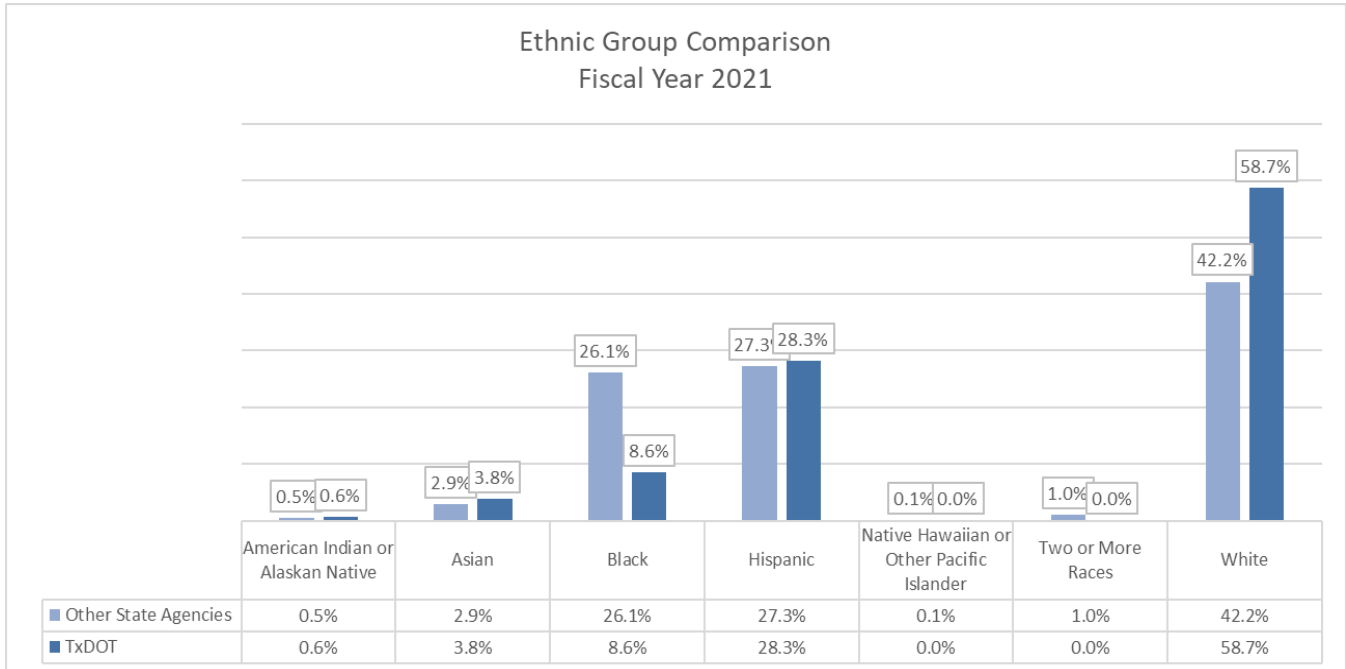|	Women	Men
Other State Agencies	60.8%	39.2%
TxDOT	23.5%	76.5%

Source: State Auditor's Office's State Classification Team's Electronic Classification Analysis System (E-Class) online system - classified regular full-time and part-time employees.

Ethnicity

TxDOT's workforce is composed of 58.7 percent White, 28.3 percent Hispanic, 8.6 percent Black, 3.8 percent Asian, and 0.6 percent American Indian or Alaskan Native.

Figure 5

Ethnic Group Comparison
Fiscal Year 2021

	American Indian or Alaskan Native	Asian	Black	Hispanic	Native Hawaiian or Other Pacific Islander	Two or More Races	White
Other State Agencies	0.5%	2.9%	26.1%	27.3%	0.1%	1.0%	42.2%
TxDOT	0.6%	3.8%	8.6%	28.3%	0.0%	0.0%	58.7%

Source: State Auditor's Office's State Classification Team's Electronic Classification Analysis System (E-Class) online system - classified regular full-time and part-time employees. TxDOT implemented new Ethnicity categories during the second quarter of fiscal year 2022 and is not available for this reporting period.

Veterans

As reported in the State Auditor's Office's Legislative Workforce Analysis Summary for fiscal year 2020, TxDOT's total percent of employed veterans was 9.7 percent which was higher than the statewide average of 6.4 percent.

State Occupational Category and Job Classification

In fiscal year 2021, the majority of TxDOT's employees were classified in job classifications under the Engineering and Design and Maintenance occupational categories as depicted below:

- Transportation Maintenance Specialist – 21.9%

- Engineering Specialist – 17.9%

- Engineering Technician – 9.9%

- Engineers – 5.9%

- Equipment Operator – 5.1%

Table 1 illustrates the percentage breakdown by category for all occupations used by TxDOT.

Table 1

Texas Department of Transportation Fiscal Year 2021	
State Classification Plan - Occupational Category	Percentage of TxDOT Workforce
Accounting, Auditing, and Finance	2.6%
Administrative Support	4.9%
Compliance, Inspection, and Investigation	0.3%
Engineering and Design	34.5%
Human Resources & Training and Development	1.0%
Information and Communication	2.0%
Information Technology	1.3%
Land Surveying, Appraising, and Utilities	1.6%
Legal	0.4%
Library and Records	0.1%
Maintenance	30.9%
Natural Resources	1.2%
Office Services	0.2%
Planning, Research, and Statistics	1.1%
Program Management	12.9%
Property Management and Procurement	4.3%
Safety	0.6%
Source: State Auditor's Office's State Classification Team's Electronic Classification Analysis System (E-Class) online system – classified regular full-time and part-time employees.	

Demand Analysis

The workforce planning process involves the analysis of work demands that look at multiple areas such as:

- Staffing patterns
- Demand for labor to address aging infrastructure needs
- Anticipated program and workload changes
- Workforce skills to meet projected needs

According to the State Auditor's Office's State Classification Team's Electronic Classification Analysis System (E-Class) online system, in fiscal year 2021, 1,595 employees left TxDOT. Eighty-eight percent of those separations were voluntary (voluntary separations include retirements and transfers to another state agency or institution of higher education); of which 29.4 percent were retirements.

TxDOT will continue to analyze these departures and identify key areas where demand for replacements occurs. TxDOT must hire employees well-suited to complete the TxDOT mission. This includes assembling properly trained staff who are prepared to move TxDOT forward.

In reviewing the past trends and the future forecast, Texas is facing a challenge in maintaining and growing a skilled workforce; especially Science, Technology, Engineering, and Math (STEM) workers.

Science, Technology, Engineering, and Math (STEM) Shortage:
- Recent research shows that certain U.S. STEM jobs in the labor market are growing at a much faster rate than the general workforce.
- The STEM workforce also consists of many types of STEM-capable workers who employ significant STEM knowledge and skills in their jobs. The demand for, supply of, and career prospects for each sub-workforce can vary significantly by employment sector, industry, or geographic region.

The Texas Pathways Initiative was developed by the Tri-Agency Workforce Initiative that was established by Governor Greg Abbott in 2016 to address this growing need in the Texas workforce. This is a joint effort by the Texas Education Agency (TEA), the Texas Higher Education Coordinating Board (THECB), and the Texas Workforce Commission (TWC) to help develop the skills necessary in high demand areas to meet the needs of the changing workforce. The Pathways Initiative establishes career and technical training beginning at the high school level, and it also establishes a STEM pathway as well that will lead to certifications and degrees to address future workforce shortages. The Texas Internship Challenge was also established in partnership with this program to encourage employers to offer paid internships in these areas to introduce students to these in-demand occupations and to help them gain the marketable skills needed to succeed in these occupations.

TxDOT will continue to need highly-skilled, professional STEM workers. Thus, to remain competitive, TxDOT must also focus on hiring STEM-capable workers at every educational level and participating in recruiting programs such as the Texas Internship Challenge. This "technical STEM workforce" consists of workers with high school or two-year technical training or certification who employ significant levels of STEM knowledge in their jobs. TxDOT also recognizes that the declining labor force participation rate leads to labor markets in which retraining, upskilling, and educating our staff will become relatively more important through 2025. Additionally, TxDOT will support Texas' 60x30TX goal by working to ensure 60 percent of employees have a formal certificate or college degree through the promotion of TxDOT's Tuition Assistance Program, Conditional Grant Program, and Summer Internship Program.

Critical Functions

Table 5 provides a list of functions identified as being critical not only to the mission of TxDOT, but also to ensure the State achieves and complies with the federal and state regulations, metrics, and performance measures.

Table 5

Critical Functions at TxDOT		
Engineering	Communications	Financial Management, Audit, and Compliance
Maintenance	Planning	Procurement and Contract Management
Program Management	Project Management	Safety Operations

Competency Needs

As we move forward, TxDOT continues to need employees with expertise in the below competencies. These competencies will be used during the recruiting process, career conversations, and career development.

- Self-management – Displays resilience and flexibility in the face of obstacles; demonstrates self-reflection; pursues personal development; and learns.

- Communication – Communicates clearly and precisely through written and verbal means; provides accurate information effectively.

- Problem-solving – Frames up and analyzes complex problems; develops practical solutions; acts decisively, based on sound judgment.

- Performance focus – Delivers tangible results/action management; takes economic implications into account; demonstrates a "can-do" attitude.

- Teamwork – Involves and consults others; builds partnerships; connects across entities; displays empathy toward others.

- Change Management – Uses continuous improvement; communicates the reason for change; influences others; demonstrates the use of innovative solutions.

- People leadership – Builds diverse teams; coaches and motivates; delegates effectively; gives and receives feedback.

- Project planning and execution – Displays sound project planning; delivers projects to completion; tracks progress.

- Strategic thinking – Conducts strategic, mid- to long-term planning and visioning; displays political savvy; considers broader context, e.g., other entities, society.

- Business acumen – Displays basic budget and finance knowledge; thinks through operational excellence; navigates political landscape.

- Customer Focus – Identify and respond to client needs; provide excellent customer service to both internal and external clients and build relationships.

Environmental Scan

In the next five years, the demands for the workforce will change and will be influenced by the following:

- Aging infrastructure

- Information and technological capabilities

- Significant population growth in Texas

- Competition for talent

- Declining labor force participation rate

Changing Needs in the Workforce

As the workforce changes, TxDOT will need to:

- Recruit and attract knowledgeable and skilled workers to do the work

- Provide initial training, continuing professional development, promote education at all levels, and support knowledge transfer

- Provide comprehensive employee health and wellbeing benefits

- Continue career development conversations with new employees within their first year to increase retention and understanding of career paths

- Reallocate FTEs within TxDOT to address increased demands

- Review and develop efficient work processes

- Increase the use of technology to maximize efficiency in workflow through enterprise resource planning and key transportation applications

- Promote safety and mobility

- Be competitive with the market in order to retain and attract skilled workers

Workforce Gaps
Organizational Structure

- TxDOT's organizational structure is complex which may prove challenging when responding to change.

Strategic Recruiting, Staffing, and Retention

- TxDOT continues to identify opportunities to improve recruiting a diverse, skilled, talented, and inclusive workforce.

- TxDOT continues to review job requirements in support of recruitment and staffing efforts.

- TxDOT faces challenges in attracting and retaining a skilled workforce, especially in Engineering and Design, and Maintenance occupations.

Compensation

- TxDOT, like most state agencies, must comply with the State's Position Classification Plan, which is updated every biennium, which is challenging when competing with a fast-changing market.

Workforce Development

- Staff members and managers are technically competent; however, there is a need to deepen business management and leadership knowledge and techniques.

- TxDOT's Knowledge Management program is in its nascent stages and there remains a risk of losing some critical knowledge when employees exit.

Strategies to Address Identified Workforce Gaps
Strategy: Organizational Structure

Action Plan Goal

- Ensure TxDOT is committed to transformational change.

Objective: Continue to ensure that the organization is responsive to internal and external environmental factors by remaining agile and responsive to the changing needs of Texas.

Objective: Monitor, evaluate, and redesign strategic and operational systems to continually adapt to business model changes.

Strategy: Strategic Recruiting, Staffing, and Retention

Action Plan Goals:

- Address staffing and recruiting from a proactive and planning perspective.
- Improve recruiting process and retention strategies to capture and retain a more diverse and highly qualified workforce.
- Identify the competencies for key positions that are critical to achieving business strategies.
- Improve comprehensive health and well-being employee benefits.

Objective: Develop a strategic staffing and recruiting plan that includes processes, procedures, and resulting metrics.

Objective: Develop plans to attract and retain a workforce that possesses the expertise in transportation planning, programming, financing, and monitoring.

Objective: Develop a strategic staffing plan to lower barriers to increase talent pools at all levels to retain talent.

Objective: Expand and promote employee benefits (i.e., health and well-being benefits) to attract and retain a diverse workforce in a competitive market.

Objective: Develop competencies critical for the accomplishment of TxDOT's mission.

Strategy: Compensation

Action Plan Goals:

- Ensure the compensation strategy and structures align with business strategies and are competitive with the market.

Objective: Ensure roles and responsibilities within TxDOT are appropriately classified and, if needed, reviewed for reclassification.

Objective: Conduct salary market benchmarking to ensure salary structure is competitive based on current compensation philosophy, and review hiring rate philosophy and placements of positions within the appropriate salary range.

Strategy: Workforce Development

Action Plan Goals

- Continue to develop and deliver training focused on core competencies.

- Continue to execute TxDOT's Career Development and Leadership programs and promote the programs as TxDOT's succession planning programs.

- Continue to increase the pursuit of formal education among staff.

Objective: Strengthen TxDOT's current and future workforce by developing the skills, abilities, and talent needed through 2027 and beyond.

Objective: Strengthen the capabilities of the workforce by focusing on leadership at all levels and positions within the organization. Change the paradigm that leadership is a supervisor only concept.

Objective: Attract and retain employees through investments in employee development.

Objective: Support education goals of Texas by having a staff with more formal education and professional certifications.