



Workforce Plan

Fiscal Years 2021 to 2025

Human Resources Division

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 maintenance and expansion 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. On a daily basis, 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.

TxDOT generated more than 12,148 full-time equivalent employees (FTEs) during fiscal year 2019. 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. Currently, TxDOT operations use a design-build model allowing us to focus on the purpose and design of a project. This has allowed stakeholders to assist TxDOT in the building of Texas' economy.

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
- 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
- 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 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. TxDOT's commitment to its employees is demonstrated by its focus on employee wellness and work-life balance, as well as its support and implementation of numerous incentives and programs. TxDOT encourages employee participation in the following:

- Employee Diversity and Inclusion Program
- Safety
- Training and Career Development Programs
- Wellness Program
- Flexible Work Strategies
- Work-life Balance

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.

Survey of Employee Engagement

In an effort to gauge employees' perspectives on their work environment, TxDOT uses the Survey of Employee Engagement (SEE) tool administered by The University of Texas at Austin Institute for Organizational Excellence. The SEE results contribute to the development of the State's overall strategic plan which is provided to state legislators for use during the biennial legislative sessions. It is specifically focused on the key drivers relative to the ability to engage employees toward successfully fulfilling the vision and mission of the organization. For TxDOT that mission is to deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.

The SEE consists of a series of 48 primary items used to assess essential and fundamental aspects of how the organization functions. Organizations participating in the SEE were also invited to include 20 additional questions to obtain more information about organization functions, but the responses to these questions are not calculated in the overall SEE results. The items and additional questions are on a 5-point scale from Strongly Disagree to Strongly Agree.

62.6%

Response Rate



Down 8%

The response rate to the survey is your first indication of the level of employee engagement in your organization. Of the 12,176 employees invited to take the survey, 7,622 responded for a response rate of 62.6%. As a general rule, rates higher than 50% suggest soundness, while rates lower than 30% may indicate problems. At 62.6%, your response

rate is considered high. High rates mean that employees have an investment in the organization and are willing to contribute towards making improvements within the workplace. With this level of engagement, employees have high expectations from leadership to act upon the survey results.

Overall Score

The overall score is a broad indicator for comparison purposes with other entities. Scores above 350 are desirable, and when scores dip below 300, there should be cause for concern. Scores above 400 are the product of a highly engaged workforce. Your Overall Score from last time was 375.



Constructs

Similar items are grouped together and their scores are averaged and multiplied by 100 to produce 12 construct measures. These constructs capture the concepts most utilized by leadership and drive organizational performance and engagement.

Each construct is displayed below with its corresponding score. Constructs have been coded below to highlight the organization's areas of strength and concern. The three highest are green, the three lowest are red, and all others are yellow. Scores typically range from 300 to 400, and 350 is a tipping point between positive and negative perceptions. The lowest score for a construct is 100, while the highest is 500.



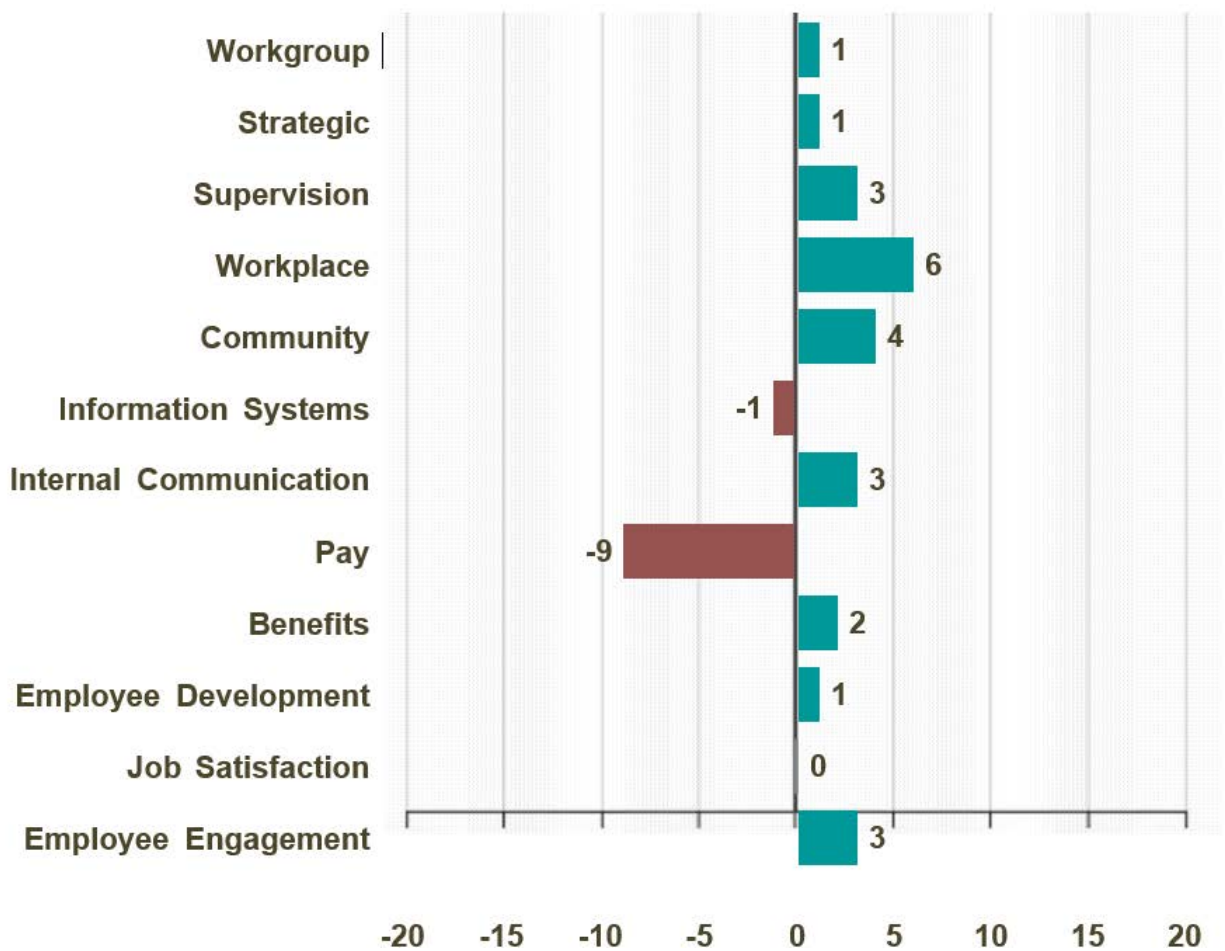
Constructs Over Time

One of the benefits of continuing to participate in the survey is that over time data shows how employees' views have changed as a result of implementing efforts suggested by previous survey results.




Positive changes indicate that employees perceive the issue as having improved since the previous survey.

Negative changes indicate that the employees perceive that the issue has worsened since the previous survey. Negative changes of greater than 40 points and having 8 or more negative construct changes should be a source of concern for the organization and should be discussed with employees and organizational leadership.




Constructs Scores Over Time



Areas of Strength

	Workplace The workplace construct captures employees' perceptions of the total work atmosphere, the degree to which they consider it safe, and the overall feel. Higher scores suggest that employees see the setting as satisfactory, safe and that adequate tools and resources are available.	Score: 403
	Strategic The strategic construct captures employees' perceptions of their role in the organization and the organization's mission, vision, and strategic plan. Higher scores suggest that employees understand their role in the organization and consider the organization's reputation to be positive.	Score: 401
	Supervision The supervision construct captures employees' perceptions of the nature of supervisory relationships within the organization. Higher scores suggest that employees view their supervisors as fair, helpful and critical to the flow of work.	Score: 393

Areas of Concern

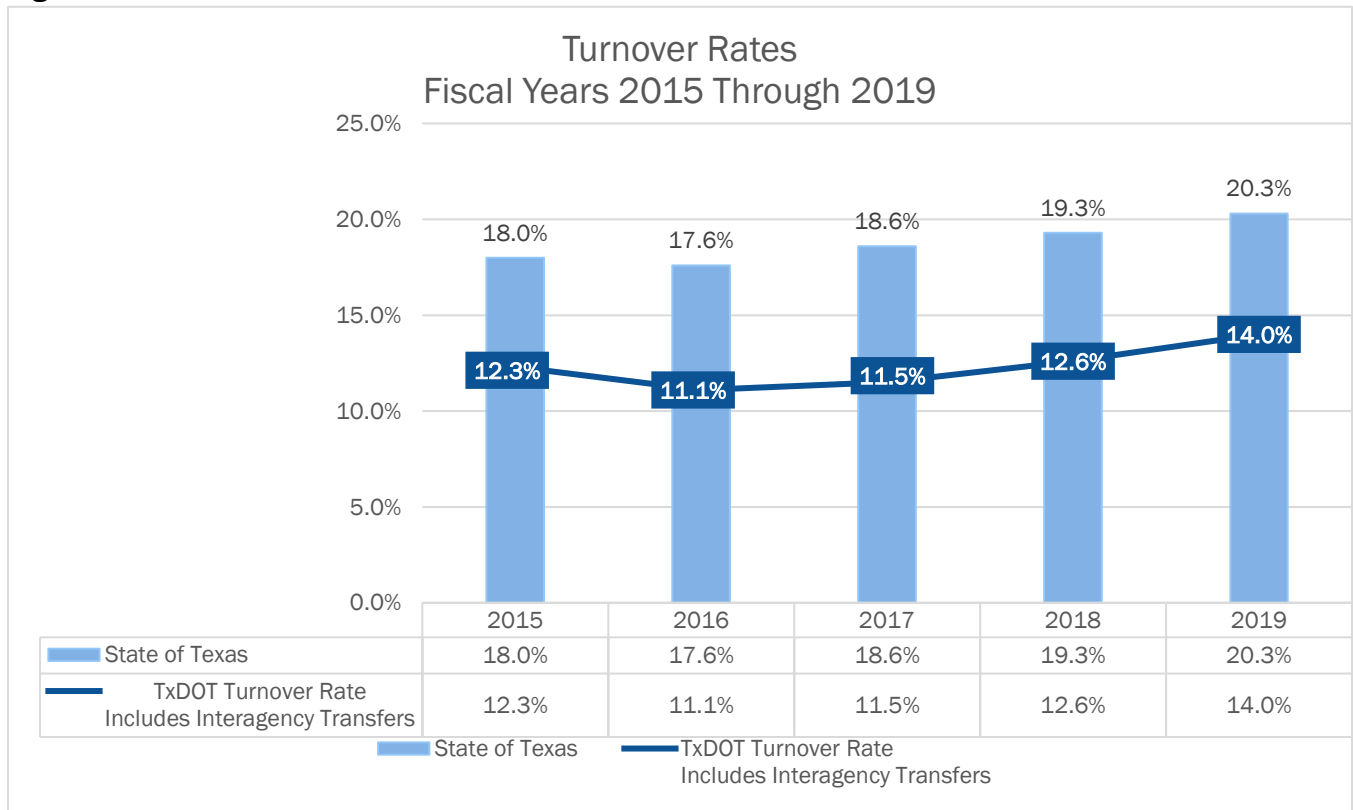
	Pay The pay construct captures employees' perceptions about how well the compensation package offered by the organization holds up when compared to similar jobs in other organizations. Lower scores suggest that pay is a central concern or reason for discontent and is not comparable to similar organizations.	Score: 252
	Information Systems The information systems construct captures employees' perceptions of whether computer and communication systems provide accessible, accurate, and clear information. The lower the score, the more likely employees are frustrated with their ability to secure needed information through current systems.	Score: 358
	Internal Communication The internal communication construct captures employees' perceptions of whether communication in the organization is reasonable, candid and helpful. Lower scores suggest that employees feel information does not arrive in a timely fashion and is difficult to find.	Score: 365

Supply Analysis

Turnover Rate

Figure 1 illustrates turnover rates for the state of Texas, as well as TxDOT; the rates depicted in Figure 1 exclude interagency transfers for the state of Texas. In fiscal year 2019, the statewide turnover rate was 20.3 percent and TxDOT's turnover rate was 14.0 percent. The fluctuation in the oil and gas industry may have contributed to the slight increase in TxDOT's turnover from fiscal year 2016 to fiscal year 2019.

Figure 1

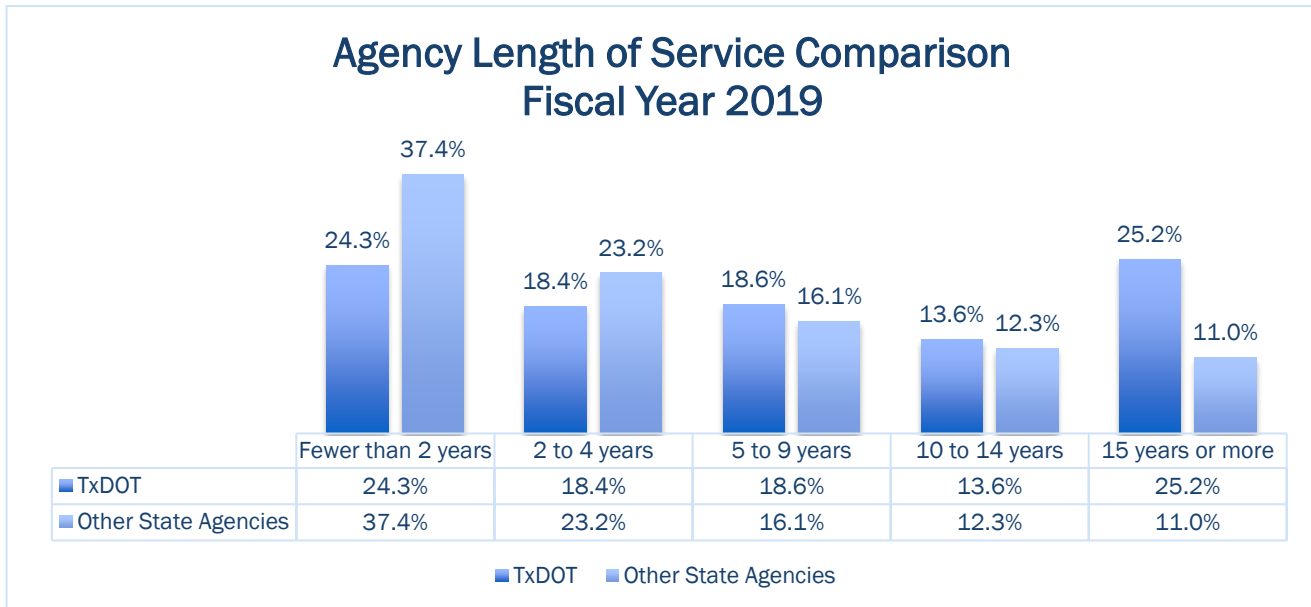


Source: State Auditor's Office's published Turnover Reports & State Classification Team's Electronic Classification Analysis System (E-Class) online system - classified regular full-time and part-time employees

Agency and State Length of Service

In fiscal year 2019, TxDOT employees had an average of 9.4 years of agency length of service. Approximately 42.7 percent of TxDOT employees have fewer than 5 years of TxDOT service. Figure 2 compares the agency length of service between TxDOT and other state agencies.

Figure 2



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

Retirement Eligibility

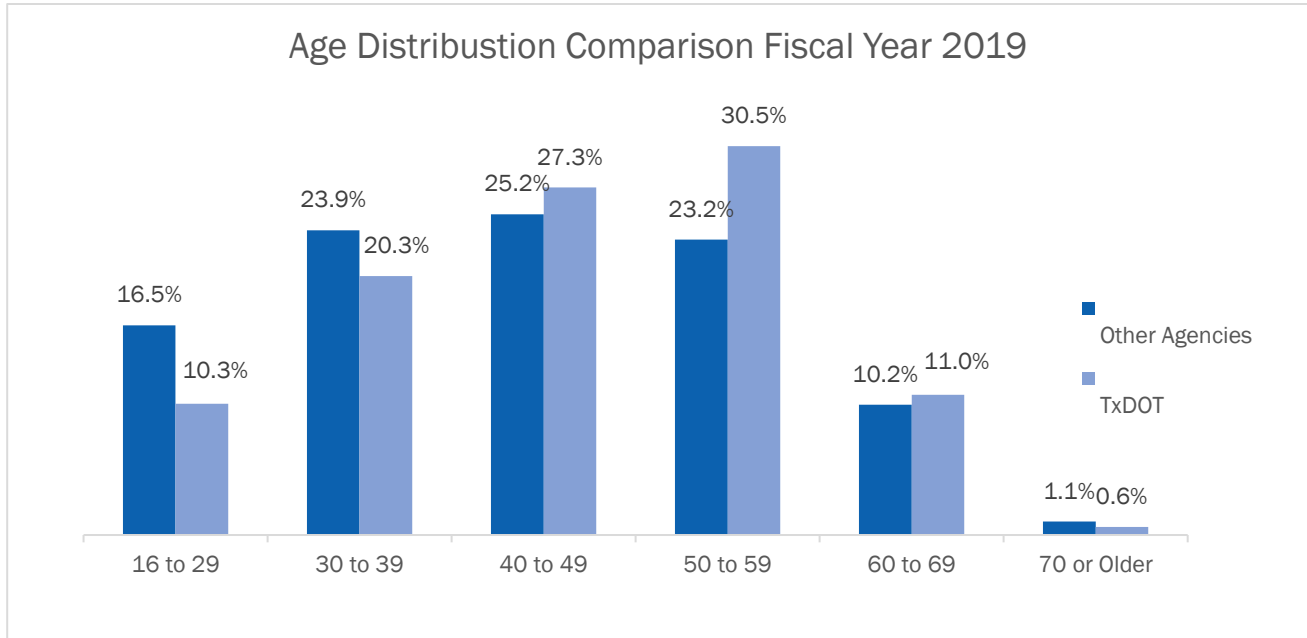
TxDOT estimates that between fiscal years 2021 and 2024, 25.7 percent of the TxDOT's workforce will be eligible to retire, based on March 2019 data.

According to the Texas Workforce Commission's *Report on Texas Growth Occupations - 2018*, "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 2019, TxDOT employees were 54.8 years old and other state agency employees were 45.1 years of age. Of TxDOT's employees, 69.43 percent were 40 years of age or older, compared to 59.7 percent of other state agency employees.

Figure 3

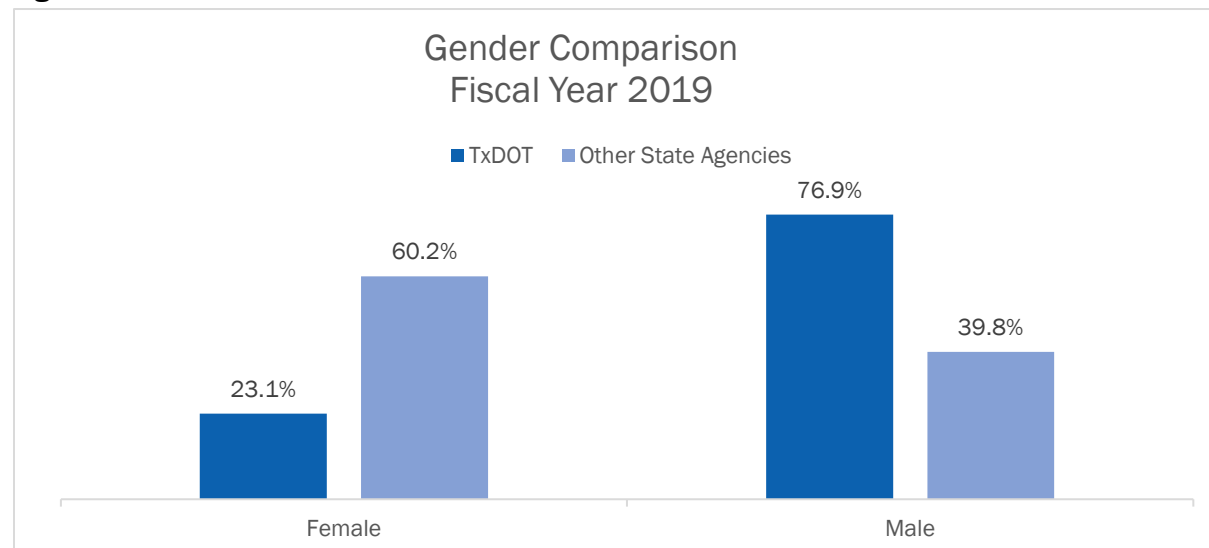


Source: State Auditor's Office's State Classification Team's Electronic Classification Analysis System (E-Class) online system - classified regular full-time and part-time employees

Gender

Figure 4 shows TxDOT's workforce is predominately male at 76.9 percent, with females at 23.1 percent.

Figure 4

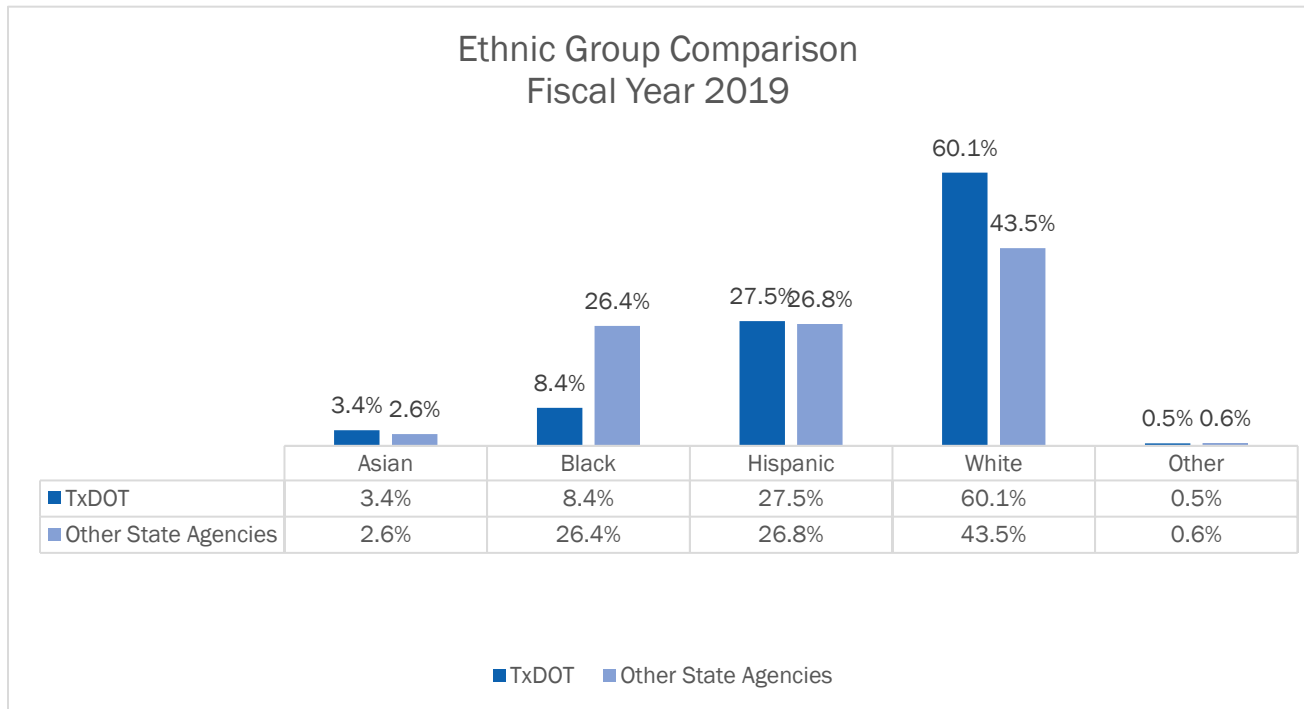


Source: State Auditor's Office's State Classification Team's Electronic Classification Analysis System (E-Class) online system - classified regular full-time and part-time employees

Ethnicity

TxDOT's workforce is composed of 60.1 percent White, 27.5 percent Hispanic, 8.4 percent Black, 3.4 percent Asian, and 0.5 percent American Indian or Alaskan Native and Native Hawaiian or Pacific Islander, depicted as Other in Figure 5.

Figure 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

Veterans

As reported in the Workforce Analysis Summary for fiscal year 2018, published by the State Auditor's Office, TxDOT's total percent of veterans employed in fiscal year 2018 was 9.4 percent; this increased to 9.7 percent as of March 2020.

State Occupational Category and Job Classification

In fiscal year 2019, 52.1 percent of TxDOT's employees were classified in the Engineering and Design occupational category; this percent also includes General Transportation Technicians performing routine maintenance work. The majority (59.5 percent) of TxDOT's employees were classified in the following state classification series:

- Engineering Technicians – 26.0%
- Engineering Specialist – 18.0%
- Engineers – 5.9%
- Equipment Operator – 5.9%
- Transportation Maintenance Specialist – 3.7%

As previously stated, the majority of TxDOT employees are in the Engineering and Design occupational category. See Table 1 for percentage breakdown by category.

Table 1

Texas Department of Transportation Fiscal Year 2019	
State Classification Plan - Occupational Category	Percentage of TxDOT Workforce
Accounting, Auditing, and Finance	2.8%
Administrative Support	5.3%
*Engineering and Design	52.1%
Human Resources	1.0%
Information and Communication	1.4%
Information Technology	1.8%
Inspectors and Investigators	0.3%
Land Surveying, Appraising, and Utilities	1.4%
Legal	0.4%
Library and Records	0.2%
Maintenance	13.7%
Natural Resources	1.3%
Office Services	0.2%
Planning, Research, and Statistics	1.1%
Program Management	12.5%
Property Management and Procurement	3.8%
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	
*Engineering and Design includes General Transportation Technicians performing routine maintenance work.	

Equal Employment Opportunity

As part of the reporting as outlined by the Equal Employment Opportunity Commission, TxDOT is required to make periodic reports indicating the composition for their workforce by gender and race/ethnic categories.

The Texas Workforce Commission's *Equal Employment Opportunity and Minority Hiring Practice Report, Fiscal Years 2017-2018* provides the workforce composition for the state of Texas and Texas state agencies (see Tables 2 and 3).

Table 2

Statewide Civilian Workforce Composition

Job Categories	Total Employees	Caucasian #	Caucasian %	Black #	Black %	Hispanic #	Hispanic %	Female #	Female %	Male #	Male %
Officials, Administrators (A)	1,348,247	839,760	62.3%	109,458	8.1%	302,293	22.4%	523,117	38.8%	825,130	61.2%
Administrative Support (C)	1,784,417	790,038	44.3%	255,335	14.3%	649,503	36.4%	1,278,037	71.6%	506,380	28.4%
Service and Maintenance (M)	2,530,786	739,586	29.2%	333,028	13.2%	1,325,982	52.4%	1,316,810	52.0%	1,213,976	48.0%
Professional (P)	2,836,345	1,630,751	57.5%	309,922	10.9%	575,259	20.3%	1,546,887	54.5%	1,289,458	45.5%
Skilled Craft Workers and Operatives (S)	2,382,595	827,402	34.7%	242,003	10.2%	1,226,412	51.5%	286,848	12.0%	2,095,747	88.0%
Technical (T)	377,937	179,394	47.5%	54,240	14.4%	110,232	29.2%	208,733	55.2%	169,204	44.8%
Total	11,524,476	5,127,137	44.5%	1,358,979	11.8%	4,271,404	37.1%	5,221,110	45.3%	6,303,366	54.7%

Table 3

Statewide Agencies Workforce Composition

Job Categories	Total Employees	Caucasian #	Caucasian %	Black #	Black %	Hispanic #	Hispanic %	Female #	Female %	Male #	Male %
Officials, Administrators (A)	22,102	13,364	60.5%	2,529	11.4%	3,351	15.2%	11,984	54.2%	10,121	45.8%
Administrative Support (C)	47,366	19,419	41.0%	8,391	17.7%	15,861	33.5%	38,736	81.8%	8,609	18.2%
Service and Maintenance (M)	14,788	5,114	34.6%	3,655	24.7%	5,269	35.6%	6,574	44.5%	8,210	55.5%
Professional (P)	173,125	93,665	54.1%	19,157	11.1%	28,405	16.4%	97,509	56.3%	75,604	43.7%
Para-Professionals (Q)	21,866	6,990	32.0%	7,910	36.2%	6,511	29.8%	15,611	71.4%	6,257	28.6%
Protective Services (R)	52,971	20,628	38.9%	18,223	34.4%	13,032	24.6%	24,228	45.7%	28,743	54.3%
Skilled Craft Workers and Operatives (S)	10,407	6,252	60.1%	905	8.7%	2,869	27.6%	843	8.1%	9,564	91.9%
Technicians (T)	40,730	16,150	39.7%	7,510	18.4%	10,551	25.9%	24,735	60.7%	15,985	39.2%
Total	383,355	181,582	47.4%	68,280	17.8%	85,849	22.4%	220,220	57.4%	163,093	42.5%

Similar to TxDOT's efforts in improving the employment of veterans, it will strive to diversify its workforce by focusing on recruiting and retaining minorities and women (see Table 4). TxDOT will continue to review its recruitment program strategies to increase the effectiveness of the following:

- | | |
|----------------------------------|-------------------------------------------------|
| Affirmative Action Plan | On-Campus Interviews |
| Career Events | Outreach |
| College Internship/Coop Programs | Recruitment/Retention Bonus |
| Conditional Grant Program | Recruitment Teams |
| Intern Program | Summer Program |
| Marketing/Branding | Targeted recruitment for diversity and veterans |

Table 4
TxDOT's Workforce Composition Fiscal Year 2019

Job Categories	Total Employees	White #	White %	Black #	Black %	Hispanic #	Hispanic %	Other #	Other %	Female #	Female %	Male #	Male %
Officials, Administrators (A)	400	298	74.5%	13	3.1%	76	18.9%	14	3.4%	93	23.3%	307	76.7%
Administrative Support (C)	544	345	63.5%	36	6.6%	154	28.2%	9	1.7%	472	86.9%	71	13.1%
Professional (P)	5,620	3,193	56.8%	577	10.3%	1,474	26.2%	377	6.7%	1,926	34.3%	3,694	65.7%
Service and Maintenance (M)	290	152	52.3%	26	8.9%	102	35.1%	11	3.7%	36	12.4%	254	87.6%
Skilled Craft Workers (S)	3,586	2,272	63.4%	237	6.6%	1,032	28.8%	45	1.3%	82	2.3%	3,505	97.7%
Technical (T)	1,893	1,158	61.2%	150	7.9%	552	29.1%	34	1.8%	243	12.8%	1,650	87.2%
Total	12,333	7,418	60.2%	1,038	8.4%	3,388	27.5%	489	4.0%	2,853	23.1%	9,480	76.9%

Demand Analysis

The workforce planning processes 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

In fiscal year 2019, 1,731 employees left TxDOT. Eighty-nine percent of those separations were voluntary (voluntary separations include retirements and transfers to another state agency or institution). Voluntary separations include 27 percent were retirements and 63 percent were non-retirement.

TxDOT will continue to analyze these departures and identify key areas where a demand for replacements occur. It is critical that TxDOT hires employees well-suited to complete the TxDOT mission. This includes assembling staff that are properly trained and 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 establish 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 have a need for highly-skilled, professional STEM workers. However, 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 a 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 own 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 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 "can-do" attitude.
- **Teamwork** – Involves and consults others; builds partnerships; connects across entities; displays empathy toward others.
- **Change Management** – Uses continuous improvement; communicates reason for change; influences others; demonstrates 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; providing 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
- Aging Workforce
- 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, continue professional development, promote education, and support knowledge transfer
- Continue Career Development conversations with new employees within their first month to increase retention and understanding of career paths
- Reallocate FTEs within TxDOT to address increased demands
- Use contingent workforce as needed
- Review and develop efficient work processes
- Increase use of technology to maximize efficiency in workflow through enterprise resource planning and key transportation applications
- Promote safety and mobility

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 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 that 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 achieve business strategies.

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 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 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 program and promoting the program as TxDOT's succession planning program.
- 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 2025 and beyond.

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

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