



**Texas Department of Transportation  
Workforce Plan  
2013-2017**

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## **Anticipated Changes Over The Next Five Years**

Texas' favorable business environment has fast become a big attraction to organizations wanting to capitalize on the state's business opportunity offerings. Recently there have been increases in rural expansion, tourism, a resurgent oil and gas boom, and the presence of growing retirement communities.

Additionally, emerging technologies, consumer demand for viable transportation options and the necessity for the right mix of workforce skills, competencies and experiences are redefining TxDOT's workforce mission.

During the last five years, the department has been through several rounds of comprehensive agency and management reviews. As a result, the department will embark on a progressive talent management strategy and a total rewards system.

Strategic workforce planning will allow the department to proactively integrate organizational process change that avoids labor surpluses, mitigates talent shortages (panic hirings), and establishes opportunities for competent employees to advance and maintain business readiness and flexibility.

The FY 2013-2017 Workforce Plan examines the existing workforce skill levels, assesses future worker competencies and advocates for a progressive succession strategy, which will enhance efforts in cultivating a diversified talent workforce capable of meeting department goals.

## **Current Workforce Profile (Supply Analysis)**

### **A. Critical Workforce Skills**

The department employs qualified individuals in a myriad of program disciplines. There are 732 active business job descriptions that include 938 competencies.

The list below categorizes the types most required in job positions or those which employees possess. Strong employee competencies are critical to meet ongoing business objectives and goals.

***Current critical workforce skills include the following:***

|                                     |                                   |
|-------------------------------------|-----------------------------------|
| Leadership/Management               | Transportation Federal/State Laws |
| Information Technology              | Engineering/Architecture          |
| Roadway System Maintenance          | Finance                           |
| Human Capital Management            | Aviation/Waterway/Rail Operations |
| Environmental/Archeological         | Customer Service Assistance       |
| Contract Negotiation/Administration | Project Management                |
| Communications/Media                | Auditing                          |
| Research and Analysis               | Occupational Safety               |
| Purchasing/Procurement              | Legal Services                    |
| Facilities/Property Management      |                                   |

## B. Workforce Demographics

### Gender, Age, Diversity

In FY2011, the department employed an average workforce population of 11,968 employees. Of that total, there were 2,581 females (22%) and 9,387 males (78%). The mean age was 47 years and 77% of the workforce population was 40 years old or older.

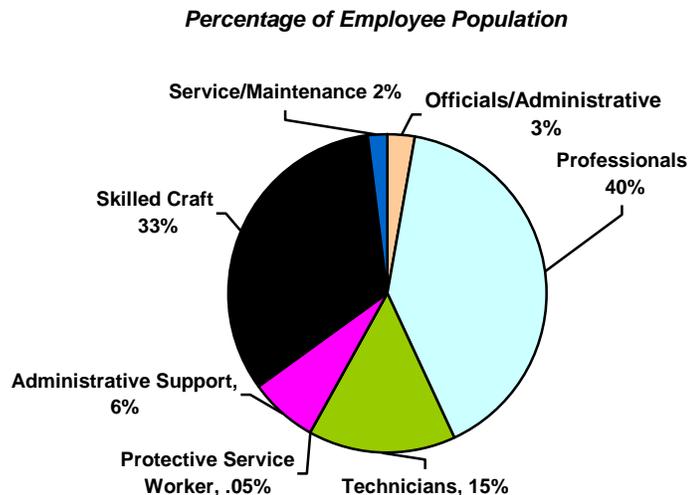
### Tenure

Of the department employees, 5,164 (44%) have 10 years or less department service. There are 3,703 (31%) employees with >10 to 20 years of service while 2,847 (24%) employees have 20+ years. The average length of department service time is 14 years and the same length of time holds true for overall state government longevity time as well.

With slightly less than half of the workforce with 10 years or less department experience, the number of employees who possess the seasoned expertise and process “wisdom” is in short supply. The data shows that tenure accruing years is represented by a smaller employee group and may give support to a prevailing trend that employees will leave state government to pursue more lucrative compensation packages during their wealth building years.

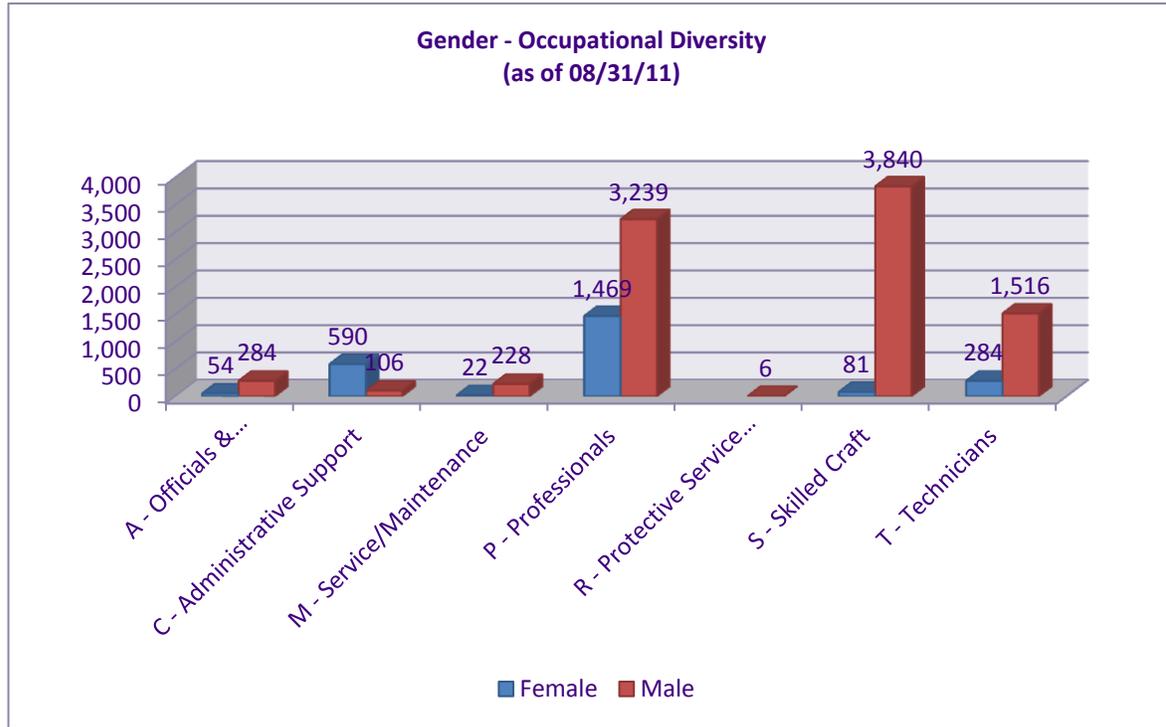
### Job Categories

Three main job categories comprise the largest number of department employees (84%). The categories, “*Professionals, Technicians, and Skilled Craft*”, underscore the broad range of competencies utilized in accomplishing the department’s mission. Department data in most of the job categories reflect comparable to or above statewide workforce statistics.



**Gender**

The department female population is represented mostly in the “Professional, Technicians and Administrative Support” job categories. The categories “Skilled Craft and Service/maintenance” have historically been occupied by males, and we continue to experience little interest by the female population to apply or engage in this kind of work.



**Employee Turnover and Projected Attrition**

During the last decade TxDOT has enjoyed one of the lowest turnover rates when compared to other state agencies and the statewide workforce. This has been a testament to its good fortune even though it continued to lose some of its more seasoned experienced workers to the private sector. However, the trend appears to be that employees are leaving for more lucrative positions in transportation industry-related firms and comparable private sector organizations. In FY2011, approximately 33 percent of the state workforce turnover occurred in the 16 to 29 years age group, followed by the 30 to 39 years age group at 16 percent.

| EMPLOYEE TURNOVER - FIVE-YEAR TREND* |      |      |      |      |      |
|--------------------------------------|------|------|------|------|------|
| Fiscal Year                          | 2007 | 2008 | 2009 | 2010 | 2011 |
| TxDOT                                | 11%  | 12%  | 7%   | 12%  | 9%   |
| All Agencies                         | 17%  | 17%  | 14%  | 15%  | 17%  |

\*TxDOT percentages include interagency transfers because it is considered a loss to the agency. State agencies percentages do not include interagency transfers as they are not considered a loss to the State as a whole. Rounded to the nearest whole number.

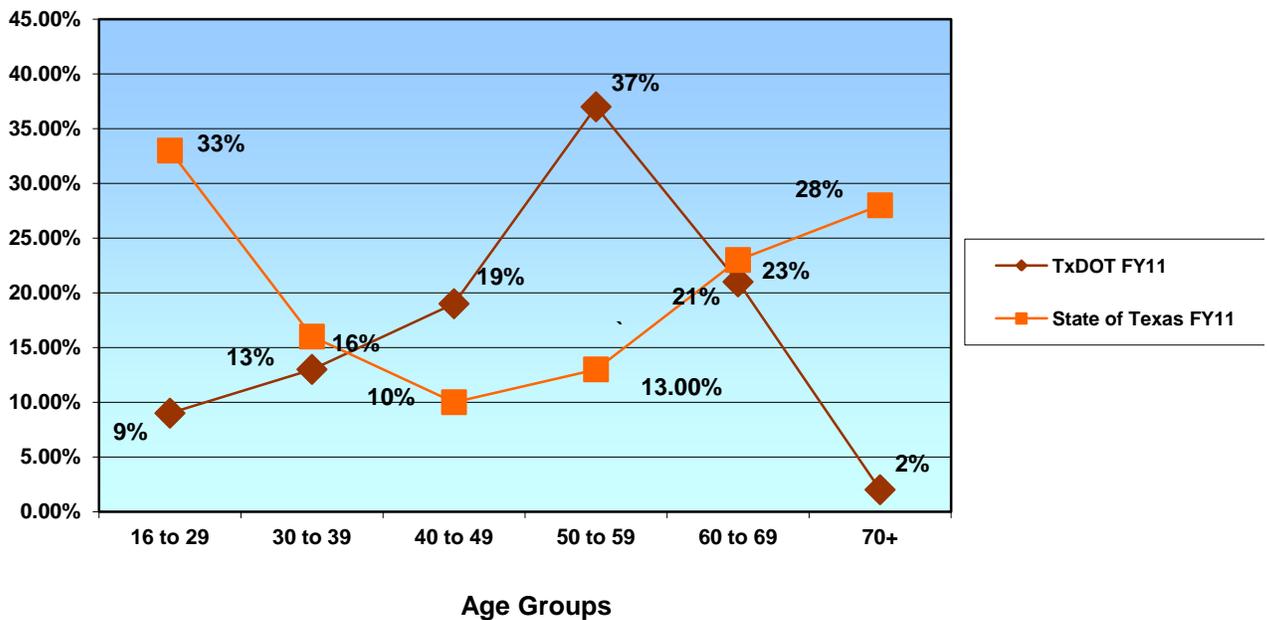
**Length of Service**

| Tenure of Separating Employees Compared to Tenure of All Employees* |                        |                        |               |                 |
|---|------------------------|------------------------|---------------|-----------------|
| FY2011  |                        |                        |               |                 |
| Tenure in Years   | # Separating Employees | % Separating Employees | All Employees | % All Employees |
| 0 – 4   | 261                    | 25%                    | 2112          | 18%             |
| 5 – 10  | 162                    | 16%                    | 3052          | 26%             |
| 11 – 15   | 96                     | 9%                     | 2215          | 19%             |
| 16 – 20   | 89                     | 9%                     | 1488          | 13%             |
| 21 – 25   | 128                    | 12%                    | 1597          | 14%             |
| 26 – 30   | 203                    | 19%                    | 927           | 8%              |
| 31 & above  | 106                    | 10%                    | 323           | 3%              |
| <b>Total</b>  | <b>1045</b>            | <b>100%</b>            | <b>11,714</b> | <b>100%</b>     |

\* Data comparison based on number of employees active on 8/31/2011.

**Age**

**Age of Separated Employees**



In the Texas State Auditor’s Classified Employee Turnover Report for Fiscal Year 2011, that year was cited as the highest turnover rate since fiscal year 2008. There was an increase of 15 percent and the majority of the employment separations were voluntary. Several influencing factors were noted such as the continued increased retirement numbers, perceived lack of employment due to budget cuts and dwindling merits awards.

During the past five years, state employee retirements have increased by 40.6 percent, while merits decreased by 55 percent for the same time period. Better pay/benefits continue to reign as the top two reasons for employee departures.

**Occupations**

During the past five years the department maintained a 7% to 12% cyclical turnover rate.

| BUSINESS JOB CATEGORIES  | PERCENT TURNOVER RATE |              |             |              |             |
|--|-----------------------|--------------|-------------|--------------|-------------|
|  | FY07                  | FY08         | FY09        | FY10         | FY11        |
| A. EXECUTIVE/ADMINISTRATIVE/<br>CLERICAL/LEGAL                               | 10.3%                 | 10.6%        | 8.8%        | 18.1%        | 8.04%       |
| B. FINANCE/ACCOUNTING  | 9.1%                  | 11.0%        | 7.6%        | 11.4%        | 11.9%       |
| C. INFORMATION TECHNOLOGY  | 9.4%                  | 10.5%        | 7.4%        | 15.2%        | 7.1%        |
| D. ARCHITECTURE  | 5.6%                  | 13.7%        | 4.4%        | 0.00%        | 0.00%       |
| E. ENGINEERING/ENGR. SUPPORT   | 9.9%                  | 9.4%         | 5.8%        | 5.9%         | 6.6%        |
| G. CIVIL RIGHTS/BUSINESS OPPORTUNITY   | 10.2%                 | 12.8%        | 6.2%        | 5.8%         | 9.0%        |
| H. HUMAN RESOURCES   | 6.3%                  | 7.2%         | 4.6%        | 6.7%         | 9.2%        |
| I. OCCUPATIONAL SAFETY   | 9.5%                  | 10.9%        | 10.0%       | 15.8%        | 7.4%        |
| J. GENERAL SERVICES<br>CONTRACTS/PURCHASING                                  | 9.1%                  | 12.7%        | 6.3%        | 9.1%         | 8.2%        |
| K. MAINTENANCE/SKILLED CRAFT/<br>FERRY OPERATIONS                            | 12.2%                 | 12.4%        | 8.0%        | 9.0%         | 10.9%       |
| L. LABORATORY/MATERIALS  | 6.9%                  | 7.1%         | 5.6%        | 5.8%         | 5.4%        |
| M. MOTOR VEHICLE/VEHICLE TITLE &<br>REGISTRATION                             | 11.1%                 | 7.4%         | 9.7%        | 360.1%**     | 15.4%       |
| N. PLANNING/ENVIRONMENTAL/<br>AVIATION/PUBLIC TRANSPORTATION/<br>LEGISLATIVE | 16.0%                 | 47.4% *      | 9.3%        | 10.4%        | 10.6%       |
| P. RIGHT OF WAY  | 13.1%                 | 8.1%         | 6.5%        | 8.6%         | 4.9%        |
| Q. TRAVEL/PUBLIC INFORMATION   | 9.8%                  | 15.9%        | 7.8%        | 18.5%        | 14.5%       |
| V. ENVIRONMENTAL   | 5.6%                  | 9.0%         | 8.0%        | 9.8%         | 6.7%        |
| Z. NOT DEFINED   | 20.3%                 | 5.1%         | 12.3%       | 8.4%         | 13.5%       |
| <b>TOTAL</b>   | <b>10.8%</b>          | <b>11.7%</b> | <b>7.3%</b> | <b>11.6%</b> | <b>8.7%</b> |

\*Higher than normal attrition due to the legislatively mandated transfer of 186 PTN employees to HHSC.

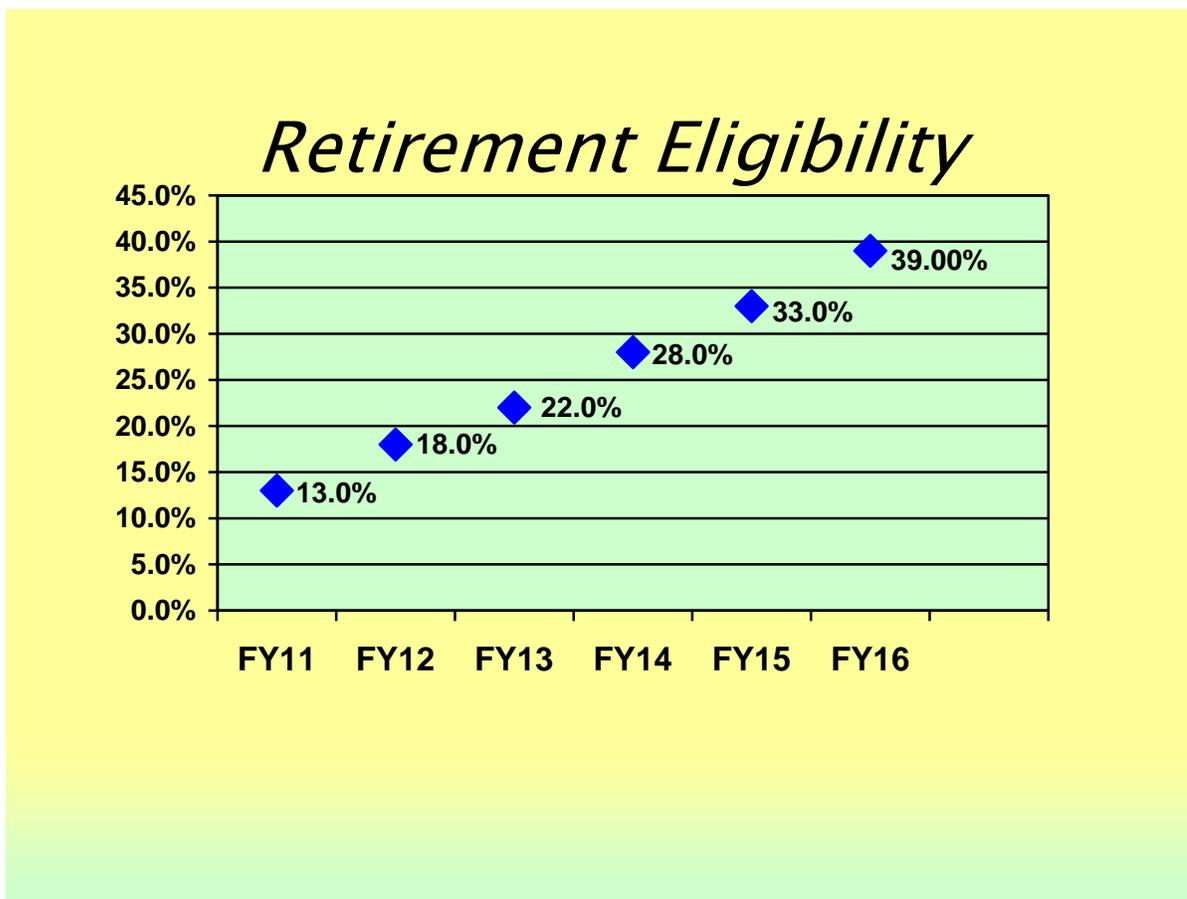
\*\* Legislatively mandated transfer of 507 division/office employees to the newly created Texas Department of Motor Vehicles.

### C. Retirement Eligibility

Loss of institutional knowledge and expertise due to retirement is important to department operations. It affects succession planning levels the department should embark upon to ensure the attraction of the “right mix” of new employees and the training development of existing staff in key competencies.

The chart below depicts the projected increases in the number of employees eligible to retire between the fiscal years 2011 and 2016. The data projects that approximately 18% of the current workforce can retire in FY2012.

In FY2011, the mean age of retiring employees was 57 years with 25 years of TxDOT service time and 25.7 years of overall state government service time. There was a 12% increase in retirements over last fiscal year and in the last five years there has been a 53% increase in the number of department retirements.



**Retirees by Job Category**

By FY2016, the department’s workforce will have 39% eligible employees for retirement. This turnover rate will have enormous impact on the department’s organizational structure and service delivery.

| <b>BUSINESS JOB CATEGORY<br/>RETIREMENT ELIGIBILITY</b>            | <b>% FY11<br/>or<br/>Before</b> | <b>% FY12<br/>or<br/>Before</b> | <b>% FY13<br/>or<br/>Before</b> | <b>% FY14<br/>or<br/>Before</b> | <b>% FY15<br/>or<br/>Before</b> | <b>% FY16<br/>or<br/>Before</b> |
|--|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| <b>A. EXECUTIVE/ADMINISTRATIVE/<br/>CLERICAL/LEGAL</b>             | 19%                             | 23%                             | 27%                             | 34%                             | 39%                             | 44%                             |
| <b>B. FINANCE/ACCOUNTING</b>                                       | 12%                             | 21%                             | 25%                             | 31%                             | 37%                             | 43%                             |
| <b>C. INFORMATION TECHNOLOGY</b>                                   | 13%                             | 19%                             | 22%                             | 27%                             | 34%                             | 40%                             |
| <b>D. ARCHITECTURE</b>   | 29%                             | 40%                             | 52%                             | 60%                             | 64%                             | 69%                             |
| <b>E. ENGINEERING/ENGR. SUPPORT</b>                                | 15%                             | 20%                             | 25%                             | 32%                             | 38%                             | 44%                             |
| <b>G. CIVIL RIGHTS/BUSINESS OPPORTUNITY</b>                        | 23%                             | 29%                             | 32%                             | 39%                             | 39%                             | 42%                             |
| <b>H. HUMAN RESOURCES</b>  | 18%                             | 20%                             | 25%                             | 33%                             | 38%                             | 43%                             |
| <b>I. OCCUPATIONAL SAFETY</b>                                      | 16%                             | 22%                             | 29%                             | 35%                             | 37%                             | 45%                             |
| <b>J. GENERAL SERVICES<br/>CONTRACTS/PURCHASING</b>                | 22%                             | 28%                             | 32%                             | 37%                             | 42%                             | 47%                             |
| <b>K. MAINTENANCE/SKILLED CRAFT/<br/>FERRY OPERATIONS</b>          | 10%                             | 14%                             | 18%                             | 22%                             | 27%                             | 32%                             |
| <b>L. LABORATORY/MATERIALS</b>                                     | 18%                             | 23%                             | 26%                             | 33%                             | 39%                             | 44%                             |
| <b>M. MOTOR VEHICLE/VEHICLE TITLE &amp;<br/>REGISTRATION</b>       | 9%                              | 9%                              | 18%                             | 18%                             | 18%                             | 18%                             |
| <b>N. PLANNING/AVIATION/PUBLIC<br/>TRANSPORTATION/ LEGISLATIVE</b> | 13%                             | 18%                             | 23%                             | 27%                             | 36%                             | 42%                             |
| <b>P. RIGHT OF WAY</b>   | 17%                             | 27%                             | 29%                             | 36%                             | 44%                             | 48%                             |
| <b>Q. TRAVEL/PUBLIC INFORMATION</b>                                | 13%                             | 18%                             | 27%                             | 30%                             | 32%                             | 38%                             |
| <b>V. ENVIRONMENTAL</b>  | 12%                             | 16%                             | 19%                             | 23%                             | 27%                             | 33%                             |
| <b>Z. NOT DEFINED</b>  | 21%                             | 28%                             | 38%                             | 45%                             | 48%                             | 62%                             |
| <b>TOTAL</b>   | 13%                             | 18%                             | 27%                             | 28%                             | 33%                             | 39%                             |

While the supervisory, mid-level, and executive employees collectively make up a small percentage of those eligible to retire, forecast eligibility data indicates the department could experience a 58% turnover rate in all management levels between now and FY2016.

FY 2013, there could be significant supervisory and upper management staffing adequacy issues, if appropriate succession planning strategies are not executed timely to provide optimum staffing acquisition, training, and development transition.

| <b>Percentage of Management Staff Eligible to Retire Within the Next Five Years</b> |                       |                       |                       |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>MANAGER / WORK LEVEL</b>   | <b>FY11 or Before</b> | <b>FY12 or Before</b> | <b>FY13 or Before</b> | <b>FY14 or Before</b> | <b>FY15 or Before</b> | <b>FY16 or Before</b> |
| <b>SUPERVISOR</b>   | 16%                   | 22%                   | 28%                   | 39%                   | 48%                   | 56%                   |
| <b>BRANCH</b>   | 20%                   | 25%                   | 33%                   | 45%                   | 53%                   | 57%                   |
| <b>SEC / STAFF</b>  | 20%                   | 27%                   | 36%                   | 48%                   | 56%                   | 63%                   |
| <b>EXEC MGR</b>   | 25%                   | 28%                   | 42%                   | 50%                   | 64%                   | 67%                   |
| <b>EXEC DIR</b>   | 0%                    | 0%                    | 0%                    | 0%                    | 0%                    | 0%                    |
| <b>TOTAL</b>  | 18%                   | 24%                   | 32%                   | 43%                   | 52%                   | 58%                   |

## **Future Workforce Profile (Demand Analysis)**

### **A. Future Staffing Outlook**

A surging population growth, shifting demographic trends and job creation restored to pre-recession employment levels in December 2011 favors Texas as economically healthy. Some of the fastest growing occupations in Texas are the oil and natural gas sectors that grew by 18.7% and a 4% growth in trade, transportation and utilities sectors. The soon to be completed Panama Canal expansion will provide economic development opportunity along Texas' coastal areas creating job opportunities in a great many industries.

Certain clusters of occupational groups within the department will see a dramatic increase in vacancies due to employee retirements including executive, administrative and managerial occupations. Higher-skilled professions will require more education, better communication, math, information technology, and reasoning skills.

The historical career ladder promotion structure that has been the cornerstone of progression is now archaic and new state employees want the focus on talent versus experience. Employees no longer embrace the notion of sitting in a role for five to 10 years before they can progress. They want early on organization engagement and ongoing leadership training.

## **B. Gap Analysis**

The department is challenged to acquire, develop, deploy and retain a competent workforce. Work is being done to complete a comprehensive strategic training program that will address and sustain a management and technical training program. The list below details those core competencies the department will build on to strengthen its workforce.

### ***Workplace knowledge and skill alignment:***

|  |                                |                                   |
|--|--------------------------------|-----------------------------------|
| Leadership/People Management             | Inter Relations/Multi-Lingual  | Information Technology            |
| Environmental/Archeological              | Engineering/Architecture       | Roadway Maintenance               |
| Finance/Asset Management                 | Human Capital Management       | Customer Relations Management     |
| Natural/Cultural Resources               | Contract Administration        | Aviation/Rail/Waterway Operations |
| PPP/CDA Marketing/Negotiation            | Project Management             | Multimodal Transportation         |
| Research/Development                     | Government Rules/Regulations   | Community/Citizen Outreach        |
| Org Change Management<br>Business Acumen | Adult Education/Training       | Performance Measures/Metrics      |
| Safety/Security Administration           | Facilities/Property Management | Legal Services                    |

## **C. Strategy Development**

For TxDOT to be a competitive employer, a renewed emphasis on employee engagement is necessary. Research studies routinely survey employees about their expectations from their employers. Top responses were full appreciation for work done, a feeling “in” on things, open two-way communication, good wages, and interesting work with opportunities for growth and development.

These responses mirror The Survey of Organizational Excellence, conducted by the School of Social Work of the University of Texas at Austin of state agencies. Survey results also showed fair pay as a continued concern based on low scoring by department employees. Scoring levels indicate employee viewpoints regarding the competitiveness of the total compensation package and it also addresses how well the package “holds up” when employees compare it to similar jobs in their communities.

Other low scores in internal communications and diversity give rise to targeted improvement initiatives as well. Such conventional employee attitude responses impact the abilities of attraction, motivation, and retention strategies to prove successful.

In an era where more department employees are becoming retirement eligible and fewer workers stay long term with state government, the attraction of top talent to public service continues to be restrained by its limited competitive compensation and benefit packages, these key challenges become more heightened by impending labor shortages fueled by a recovered Texas economy.

High profile news media coverage of the imminent talent shortage and emerging market opportunities clearly underscores the need to drive and mold a human resource strategy for long lasting impact on the department's workforce. The department is dedicated to adopting a uniform and well communicated plan for the development, tracking, delivery and evaluation of all department training delivered. This allows the department to take proactive measures in addressing immediate training and development needs as they occur rather than being reactive to documented trends.

The following lists the key emphasis areas of the workforce plan.

Reinforce existing workforce strengths

TxDOT will continue to a myriad of talent-market programs. These programs include accelerated hiring processes, high school or college summer employment opportunities, a balanced work and life environment, flexible work schedules, career development programs, temporary recruitment programs, job rotation/cross training, executive training, tuition assistance, award and recognition programs, recruitment and retention bonuses.

Talent Development

Now is the time to establish organization career progression academies for the next TxDOT leadership generation. Data and demographics can offer guidance in determining employee retirements and targeted areas for organizational change, and showcase business needs for creative recruitment strategies.

Job rotation and cross training programs (in-house talent cultivation) and a succession planning program, and developing career progression models (management, leadership and technical) are all examples of workforce strategies that lend itself to building and strengthening the department's core business units. A look at certification programs will enhance employee qualifications with increased skills in the area of project management and other technical areas.

Integrating staff development with flexible, mobile career ladders, advocating work/life balance programs, offering competitive salaries coupled with pay for performance incentives, as well as supportive employee recognition programs, are all employee-focused recruitment and retention preparedness strategies.

### Bench Strength

Attracting and retaining critical work segments in our department will require positioning our agency as top draw in the public sector transportation world. Future employee development programs must have a central focus on maximizing already acquired employee knowledge, skills and abilities and cultivating additional strengths to enhance the full suite of management skills, abilities and technical expertise.

Management leadership must propel the push towards stronger analytical and business intelligence capabilities. This means a greater investment in capturing and harnessing information necessary to facilitate sound, well-reasoned decision making processes, financial management, public-private collaborations and customer service.

### Knowledge Transfer

The department has joined the ranks of other state transportation agencies in implementing a new initiative called Knowledge Management. This project involves a visionary approach to identifying, collecting and cataloging “legacy and present knowledge” into one repository capable of providing information through decentralized networks to users.

The idea behind the approach is to provide information tools that capture critical business knowledge while at the same time create an environment which can facilitate learning by employees from in-house professionals, support continued knowledge development and provide a forum for sharing best practices.

### Community/Employee Outreach

The influx of workers into the state can provide TxDOT with a greater talent pool to draw from when job opportunities exist within the department. However, the real challenge lies in our talent management strategy to ensure us, as a Texas employer, provide collaborative partnerships with higher education institutions and businesses that help us build TxDOT’s workforce with sustaining, long term skill development. As technologies change, so too will workplace skills; we must poise the department to be a competitive employer.

### Succession Planning

Worker knowledge and experience development (beyond entry-level and basic process understanding) is the cornerstone to succession planning. Without planning it only serves to further exacerbate the loss of institutional knowledge and expertise as aging department employees retire and younger potentials seek the better job and/or career offers.

It is critical to implement strategies that increase employee job satisfaction, build loyalty, and foster long-term employer-employee relationships with high demand and exceptional performing employees. Through these strategies the department can cultivate a skilled workforce composed of subject matter experts and leaders in the transportation field.

Work Environment

As the department examines workforce trends and its needs, the use of technology-driven systems assistance in carrying out critical functions will become paramount. Efficient service delivery will require employees to possess a wide range of competencies, much in the self-service environments being able to handle a wide array of business functions.

Future directives will adjust employee required skills sets (includes both cultural and business) and a sound general understanding by employees of the department's mission is essential in accomplishing positive transportation solutions for Texas communities and its citizens.

Review Process

The department will develop a mid and year-end performance goal review process. It will be closely tied to the department's merit process.