

TCEQ Workforce Plan, Fiscal Years 2009–2013

This document is an excerpt from SFR-035/09, the TCEQ's Strategic Plan, Fiscal Years 2009–2013.

Overview of the Texas Commission on Environmental Quality

The Legislature created the agency Sept. 1, 1993, by consolidating the Texas Water Commission, the Texas Air Control Board, and environmental programs from the Texas Department of Health. The agency's major responsibilities fall into the following categories:

- Implementing state and federal environmental regulatory laws by issuing permits and authorizations for: the control of air pollution; the safe operation of water and wastewater facilities; and the treatment, storage, and disposal of hazardous, industrial, and municipal waste and of low-level radioactive waste.
- Ensuring compliance with state and federal environmental laws and regulations by: conducting inspections of regulated facilities; monitoring air and water quality; providing technical assistance; encouraging voluntary compliance; and taking formal enforcement action against suspected violators.
- Developing plans for the cleanup and eventual reclamation of contaminated industrial and abandoned hazardous waste sites, and for the restoration of air and water quality.
- Setting water rates and allocating surface water rights.
- Planning for air quality, water quality, and waste management by: developing the State Implementation Plan for attainment of the National Ambient Air Quality Standards; developing total maximum daily loads to improve water quality; and analyzing solid waste generation and management in Texas.

- Ensuring that Texas receives its equitable share of water.

The TCEQ is funded primarily by fee revenues. The agency was appropriated \$1.084 billion for the 2008–09 biennium, of which \$959 million (88.5%) was from dedicated fee revenues. The remainder of the appropriations consisted of \$85.7 million from federal funds, \$20.8 million from General Revenue, and \$18.8 million in interagency contracts and appropriated receipts.

Agency Mission

The Texas Commission on Environmental Quality strives to protect our state's human and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.

Changes to Goals and Objectives

The agency does not anticipate significant changes to its primary programs, critical functions, or current goals, objectives, and strategies during the next five years.

Agency Structure

The TCEQ carries out its mission under the direction of three full-time commissioners, who are appointed by the governor. The commissioners are appointed for six-year terms with the consent of the Senate, and provide oversight to the seven offices of the agency. The offices are each responsible for performing unique functions within the agency, and each office has its own workforce needs and considerations.

Key Factors Facing the Agency

The TCEQ expects challenges as it proceeds to fulfill its mission and goals. Economic, environmental, and political developments indicate that the agency will experience program changes, process redesign initiatives, and technological advancements. New state and federal mandates will prove demanding in the face of budget and FTE constraints. With technical requirements

expanding, a comprehensive knowledge of agency procedures and federal regulations, as well as computing and analytical abilities, will be critical. Retirements and competition for experienced applicants, particularly those in highly skilled, hard-to-fill occupations, will present problems for our efforts to maintain a diverse, well-qualified workforce.

Retirement and Attrition

The departure of employees due to retirement is, and will continue to be, a critical issue facing the TCEQ. This loss of organizational experience, knowledge, and expertise in key management and senior-level professional positions, coupled with normal attrition, poses a critical workforce dilemma that is prevalent throughout the agency as well as the state. This institutional knowledge deficit also affects the level of succession planning that the TCEQ can implement for staff to assume important functions and leadership roles. In addition to succession planning for key positions, a greater focus on internal organizational development and training will be required. Training and mentoring emerged as the primary strategy from agency offices for addressing skill gaps due to retirements, with hiring methods ranking a close second.

Table F.1 depicts the actual projected increases in the number of employees eligible to retire.

The TCEQ estimates that approximately 784 employees will become eligible to retire over the next five years. Retirement of almost 27 percent of the agency’s workforce could critically affect the agency’s ability to deliver programs and accomplish its mission.

Table F.1. Projection of TCEQ Employees Eligible for Retirement, FYs 2008–2012

Fiscal Year	Projected Retirements	Percent of Total Agency FTEs (2,942)
2008	374	12.7
2009	463	15.7
2010	569	19.3
2011	672	22.8
2012	784	26.7

Data Source: Human Resources Information System, as of 8/31/07.

Almost 50 percent of the projected retirees become eligible at the end of the current fiscal year (2008).

In addition to FTE constraints, competition for qualified job applicants and changing job roles remain high on the list of issues as agency management strives to respond to the loss of employee skills. Competition with outside employers, both public and private, and limitations on entry salaries are obstacles to external recruitment efforts and retention. Other factors that affect recruitment efforts are associated costs and loss of productivity.

New Requirements and Initiatives

New federal and state requirements, as well as internal initiatives, will continue to have an agencywide impact. Program changes will occur that will require changes to existing program coverage, the elimination of certain programs, and the addition of others. A major program change, resulting from HB 1516, required the transition of agency data center services to a consolidated statewide data center and continues to greatly affect the TCEQ.

Other expected program changes are the following:

- Air quality State Implementation Plan (SIP) revision requirements are increasing with newly-defined federal mandates. SIPs are also becoming more complex and the technical requirements are expanding.
- Revision of the 8-hour ozone standard from 0.08 ppm to 0.075 ppm will increase the number of areas within the state that are out of compliance with the ozone standard. Each of these new non-attainment areas will require SIP development and increased air monitoring networks.
- The number of water quality impairments requiring Total Maximum Daily Load (TMDL) assessments is increasing. A TMDL is a technical analysis that determines the maximum amount of specified pollutants a body of water can receive and still meet the water quality standards for its intended use. After TMDLs are completed, implementation plans must be developed. These activities require an on-going commitment of

TMDL program resources, with development currently requiring increased staff resources and over 50 percent of available funding. These needs are expected to rise. Multi-year plans will be initiated and will require long-term staff resources. Start-up of new TMDLs are already being adversely affected by unavailable funds and staff. Water quality issues addressed in future TMDLs—such as bacteria, nutrients, and aquatic toxicity—continue to be more complicated than issues addressed in earlier TMDLs, which focused on legacy pollutants. Extensive public participation and conflict-resolution activities associated with TMDLs has doubled, leading to the need to hire a public facilitator.

- The health and productivity of Galveston Bay, Corpus Christi Bay, other estuary systems, and surrounding tributaries continue to be threatened by rapid population growth that is outpacing our ability to employ protection and restoration measures.
- Implementation of newly developed emission event rules and an environmental lab accreditation program.
- Changes to the mulch site guidance documents and timelines for the Edwards Aquifer Protection Program for Water Pollution Abatement Plans are being implemented.
- HB 3554 sunsets the Petroleum Storage Tank (PST) Reimbursement Program on Sept. 1, 2012.
- SB 1604 transferred the responsibility for regulation and licensing of source material recovery (uranium mining), by-product disposal, and the processing and storage of radioactive substances from the Texas Department of State Health Services (TDSHS) to the TCEQ.
- New regulatory programs to implement are included in Dry Cleaner, Municipal Settings Designation (MSD), and TWC 26.408 Water Well Notification.
- The Consolidated Compliance and Enforcement Data System (CCEDS) must be enhanced as well as continue to be maintained.

- The agency's review of enforcement programs—including the Enforcement Standard Operating Procedures (SOPs), Compliance History, Enforcement Initiation Criteria (EIC), Penalty Policy, and Supplemental Environmental Projects—will continue.
- Permit Timeframe Reduction (PTR) is essential to timely permits and economic development. Efforts will continue to study ways to improve the permit process, including e-filing and e-permitting.
- Budgetary constraints are cited as an obstacle to maximizing agency programs and deliverables. Some key areas are: travel necessary for training; improvements in data gathering, handling, management, and reporting; successful recruitment and retention of key staff; statewide dam inspection; additional and improved scientific data; and making more online resources available.

Information and Technology

To maintain and enhance the agency's level of service, respond to increasing customer demand, and implement legislative changes, the TCEQ must prepare for a number of issues in the field of information technology. These issues include:

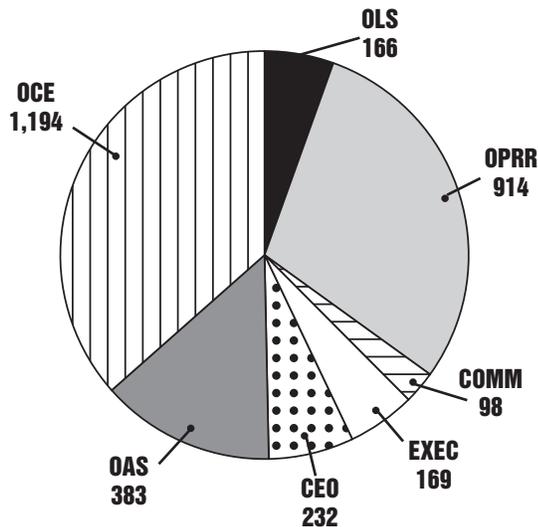
- Implementation of several legislative projects, including the addition of public information to the agency's Web site and clarification of an individual's privacy rights in the area of e-mail and information submitted on agency forms. Multi-language and accessibility requirements for the Web site will need to be addressed as well.
- Analysis and documentation of the flow of electronic information to and from the regulated community and development of efficient and effective IT systems to automate that flow.
- Development of an electronic filing system that allows customers to submit legal filings through an Internet-based system. Design, testing, and implementation will require a large investment of funding and staff resources.

- Continued improvement in electronic reporting, data handling, and data management capabilities.
- Expanding and enhancing environmental and compliance monitoring technology to secure and provide real-time data.

Current Workforce Profile (Supply Analysis)

In fiscal 2007, the TCEQ employed a cumulative total of 3,156 employees, which includes 349 separated employees. The following chart (Figure F.1) summarizes the agency workforce by office. The totals indicate an actual head count of employees, not full-time equivalents (FTEs), and do not include contractors or temporary personnel.

Figure F.1.
TCEQ Workforce by Office, FY 2007



LEGEND

COMM – Office of the Commissioners
EXEC – Office of the Executive Director
CEO – Chief Engineer’s Office
OAS – Office of Administrative Services
OCE – Office of Compliance and Enforcement
OLS – Office of Legal Services
OPRR – Office of Permitting, Remediation, and Registration

Data Source: Human Resources Information System, as of 8/31/07.
 Data includes separations.

Location of Employees

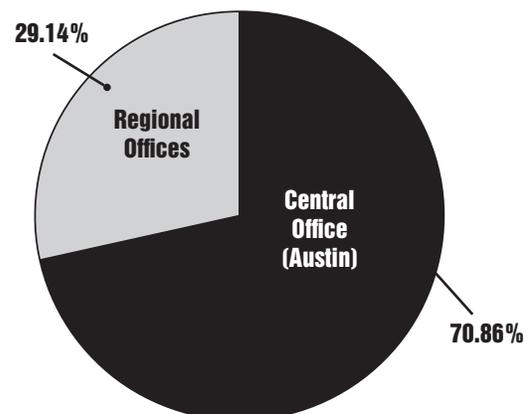
As of Aug. 31, 2007, 825 employees—or 29.14 percent of the total workforce—were located throughout the 16 regional offices (see Figure F.2). In an effort to facilitate delivery of the agency’s services at the point of contact and to increase efficiencies, 99 (12%) of the regional employees were matrix-managed staff who worked in regional offices, but were supervised from the Central Office.

Workforce Demographics

Figures F.3 and F.4 depict the agency’s workforce during fiscal 2007. Blacks and Hispanics constitute over 25 percent of the agency’s workforce, with other ethnic groups representing over 6 percent. Of the total available Texas labor force, Blacks represent 10.52 percent and Hispanics, 27.65 percent. This reveals an underutilization of 12.5 percent. Other ethnic groups constitute 4.48 percent of the available state labor force.

The TCEQ workforce in fiscal 2007 was approximately 51 percent male and 49 percent female. Of the total available Texas labor force, males represent 54.33 percent and females, 45.67 percent. The TCEQ percentages remain basically constant from the last reporting period, fiscal 2005.

Figure F.2.
Location of TCEQ Employees, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

The TCEQ Workforce Compared to Available Texas Workforce

The TCEQ workforce comprises five employee job categories, as established by the Equal Employment Opportunity Commission (EEOC). These categories are: official/administrator, professional, service and maintenance (the paraprofessional category is now included in this category), technical, and administrative support.

Table F.2 and figures F.5, F.6, and F.7 compare the agency's workforce as of Aug. 31, 2007, to the available statewide civilian workforce as reported in the *Equal Employment Opportunity and Minority Hiring Practices Report*, a publication of the Civil Rights Division of the Texas Workforce Commission. This table reflects the percentages of Blacks, Hispanics, and females within the available Texas workforce (ATW) and the TCEQ workforce.

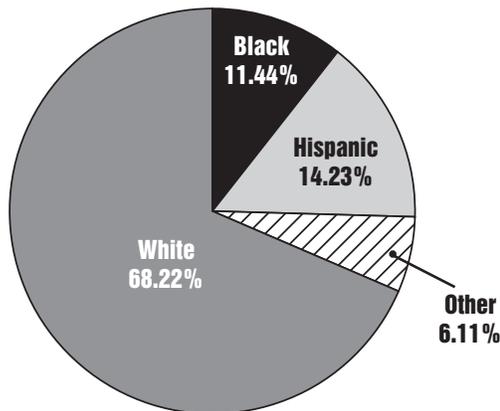
Although minorities and females are generally well represented at the TCEQ, the agency continues to strive to employ a labor force that mirrors the available statewide workforce.

Workforce Qualifications

The TCEQ employs a highly qualified workforce in a variety of program areas, performing complex and diverse duties. Strong employee competencies are critical to meet on-going program objectives and goals.

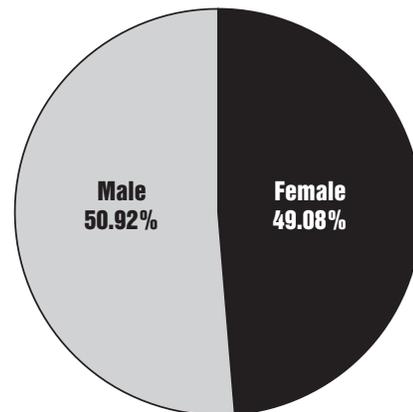
Of the agency's staff, over 23 percent are in a position for which a degree is required (see Figure F.8). Another 46 percent are in a position for which a degree is required but previous experience in the subject area may be substituted for the degree. The remaining employees, in positions not requiring a degree, constitute 29 percent of the agency's workforce.

Figure F.3.
Ethnicity of TCEQ Workforce, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

Figure F.4.
Gender of TCEQ Workforce, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

Table F.2. TCEQ Workforce Compared to Available Texas Workforce, 8/31/07

EEOC Job Category	Black		Hispanic		Female	
	ATW	TCEQ	ATW	TCEQ	ATW	TCEQ
Official/Administrator	6.6%	6.0%	14.2%	10.6%	37.3%	36.4%
Professional	8.3%	9.7%	13.4%	11.3%	53.2%	41.1%
Service & Maintenance*	13.8%	12.0%	40.7%	32.0%	39.0%	68.0%
Technical	12.4%	10.4%	20.2%	17.1%	53.8%	34.2%
Administrative Support	11.2%	20.1%	24.1%	24.1%	64.7%	84.2%

*The "Paraprofessional" category is now included in the "Service and Maintenance" category.

Workforce Profile by Job Classification

Although almost 75 percent of the agency’s employees are categorized as official/administrator, professional, and service/maintenance, the work completed by TCEQ employees is diverse, requiring the use of almost 300 different job classifications and sub-specifications. Figure F.9 shows the number of employees working in the job classification series most commonly used by the TCEQ during fiscal 2007: Environmental Investigator, Program Specialist, Administrative Assistant, Natural Resources Specialist, Engineer, Manager, Attorney, Environmental Permit Specialist, Geologist, and Engineering Specialist.

In order to meet agency goals and objectives, the TCEQ supplements its workforce with 29 contracted staff to provide vital program support and to perform various information technology functions. Restrictions on hiring contractors to augment staff resources have kept this number at a low level. Budgetary constraints also limit the agency’s ability to obtain contract services.

Employee Turnover

Although the agency’s turnover rate has fluctuated across a 10-year period (see Figure F.10), it consistently remains below the statewide rate, which, in fiscal 2007, was 17.4 percent. The loss of experienced, talented employees is costly and affects the agency’s ability to fulfill

its mission and goals and to function at maximum efficiency. In spite of the slight increase in fiscal 2007, the TCEQ enjoys one of the lowest turnover rates among state agencies. See figures F.11 and F.12 for additional information about the tenure of the TCEQ workforce.

Future Workforce Profile (Demand Analysis)

The TCEQ carries out its mission through broad and diverse activities. These activities require that employees demonstrate a high level of proficiency in a variety of critical skills. Table F.3 is a listing of sets of critical “skill clusters” that have been identified as the skill sets necessary to accomplish the agency’s mission.

With demographers anticipating a declining workforce as “Baby Boomers” retire and smaller qualified labor pools emerge, the agency is emphasizing workforce and succession planning. This process involves building a viable talent pool that contributes to the current and future success of the agency, including the need for experienced employees to mentor and impart knowledge to their potential successors. Such initiatives will enable the agency to both develop and retain skilled employees.

Competition for younger workers trained in disciplines such as science and engineering will become

Figure F.5. Black Population

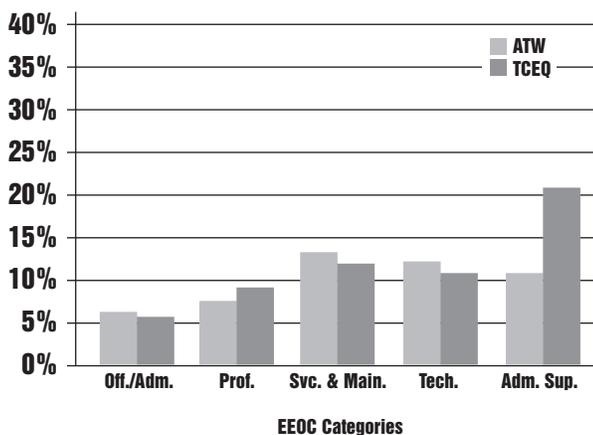
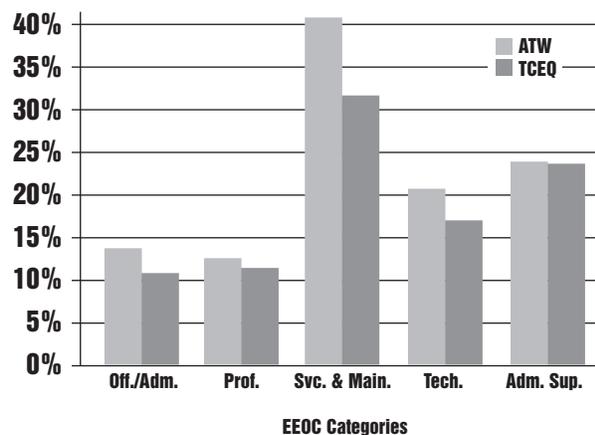


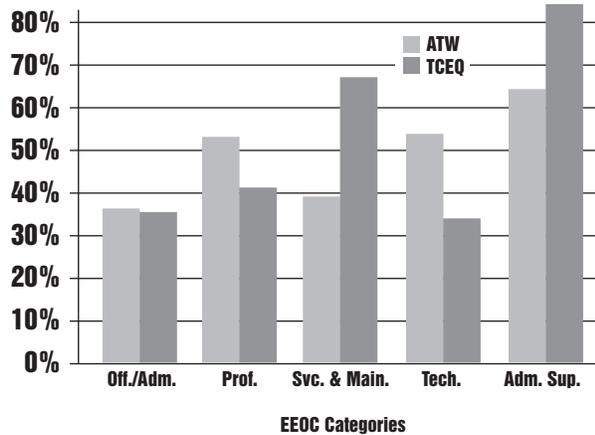
Figure F.6. Hispanic Population



severe in the marketplace. Certain occupations will continue to be hard to fill due to the uniqueness of their requirements. Network and computer systems analysts and administrators, software engineers, and database administrators still maintain a high profile as fast-growing occupations in Texas and elsewhere (according to the Labor Market and Career Information Division of the Texas Workforce Commission). These occupations require high levels of education and skills while also commanding higher wages.

The predominant occupations at the TCEQ have been identified by the Bureau of Labor Statistics as having faster-than-average job growth. The occupations of environmental engineer, scientist, and hydrologist, as well as geoscientist, will experience increased growth over the next five to ten years. In fact, the need for energy, environmental protection, and responsible land and water management will drive a high employment demand. The requirement to comply with complex environmental laws and regulations, as well as increased demands on environmental resources by population growth, will also raise the necessity for these professions. There will also be a strong boost in accountant and auditor occupations due to stricter regulations and economic growth. The agency will strive to remain competitive with other government agencies.

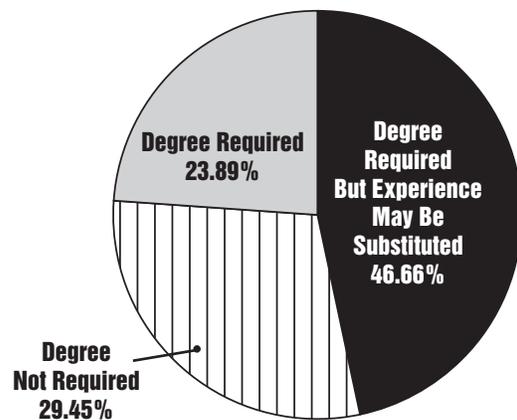
Figure F.7. Female Population



Gap Analysis

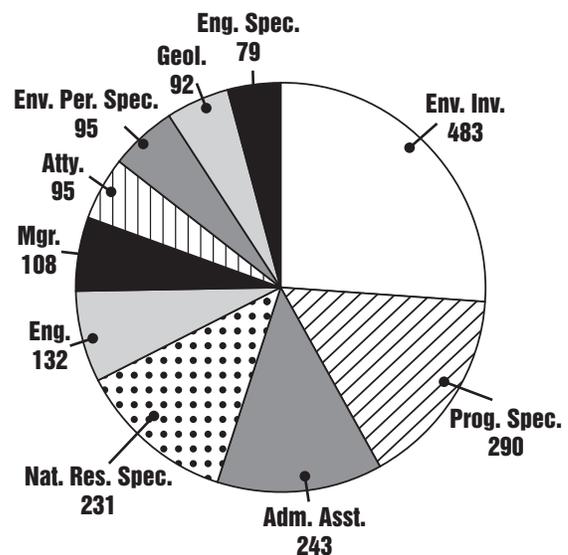
Each office within the TCEQ analyzed the anticipated need for each skill cluster and the possible risk associated with the skill becoming unavailable over the next

Figure F.8. Education Requirements of TCEQ Employees



Data Source: Human Resources Information System, as of 8/31/07.

Figure F.9. Population at the TCEQ by Job Classification Series, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

five years. The results of this “gap analysis” are shown in Table F.4. Each skill is labeled as “low,” “medium,” or “high” risk, reserving the “high” designation for those gaps more likely to require action. According to this assessment, the most significant gap risks are associated with the following workforce skills: Information Management, Technical Knowledge, Management/Leadership, Project Management, and Communication.

Strategy Development

The TCEQ anticipates implementing key strategies, which are discussed in the following sections, to address expected skill gaps. Figure F.13 shows the strategies that were identified by agency offices. As in past assessments, Training/Mentoring and Hiring/Re-hiring will be used most often to ensure that the TCEQ

Table F.3. Critical Workforce Skill Clusters Within TCEQ Offices

<p>Problem Solving Analysis Critical thinking Decision making Innovation</p>	<p>Project Management Organizing Planning Managing multiple priorities Quality analysis and process improvement Coordination</p>
<p>Information Management Database development, management, and integration Software proficiency Web development and maintenance Computer assisted tools Graphic design Electronic reporting</p>	<p>Communication Written – composition and editing Verbal – public speaking and presentation Interpersonal sensitivity Translating technical information into layperson’s terms Teamwork Marketing and public relations Customer service</p>
<p>Technical Knowledge (may be unique to a certain office) Agency policies, procedures, and programs Local, state, and federal laws, rules, and regulations Specialized technical knowledge Policy analysis and development Statistical analysis Regulation analysis and development Technical analysis Research Litigation Auditing Inventory management</p>	<p>Management/Leadership People skills Performance management Strategic planning Conducting training Mentoring Meeting planning/facilitation Contract management Grant management Financial management Delegation</p> <p>Administrative/Support Word processing Tracking and record keeping Mail processing</p>

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Table F.4. Critical Skills Checklist and Gap Risk Analysis

Skill Category	Skill	COMM	EXEC	CEO	OLS	OCE	OAS	OPRR
Problem solving	Analysis			Med				
	Critical thinking	Med						
	Decision making	Med						Med
	Innovation			Med				
	Other							
Information management	Database development, management, and integration					High		Med
	Software proficiency: Java, ColdFusion, Prophecy, TRACS, Ingres, Ingres Open Road, Crystal Enterprise (BOEXI), GIS			Med			High	
	Web development and maintenance							Med
	Web development and maintenance (CMS): Technical writers, Web administrators, Web content developers						High	
	Computer-assisted tools	Med		Med				Med
	Graphic design							
	Electronic reporting			Med		High		Med
	Other							
	Technical knowledge (may be unique to a certain office)	Agency policies, procedures, and programs	High		High		High	
Local, state, and federal laws, rules, and regulations		High		Med		Med		
Specialized technical knowledge		Med					High	High
Specialized technical knowledge: Environmental science, engineering, and air, water, and waste programs				High		High		High
Policy analysis and development		Med		High		High		
Statistical analysis		Med		Med				
Regulation analysis and development		Med		High		Med		
Technical analysis		High		Med		Med		High
Research								
Litigation								
Auditing		High						
Inventory management								
Other: Financial analysis				Med				
Other: New skills related to new technology							Med	

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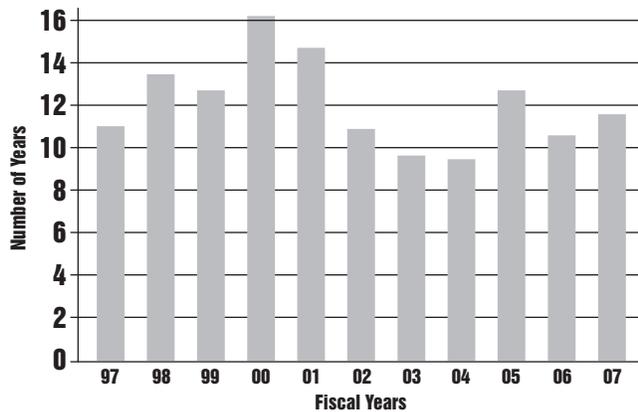
Table F.4. Critical Skills Checklist and Gap Analysis (continued)

Skill Category	Skill	COMM	EXEC	CEO	OLS	OCE	OAS	OPRR
Project management	Organizing	Low		Med				
	Planning	Low		Med				
	Managing multiple priorities	Low		Med				Med
	Quality analysis and process improvement	Low		Med				High
	Coordination	Low		Med				
Communication	Written – composition and editing	Med				Med		Med
	Verbal – public speaking and presentation	Med				Med		
	Interpersonal sensitivity	Low		Med				
	Translating technical information into layperson’s terms	Low		Med			High	
	Teamwork	Low						
	Marketing and public relations	Low		Med				
	Customer service	Low						
	Other: Public participation			Med				
Management/ Leadership	People skills							
	Performance management	Med		Med				
	Strategic planning	Med						High
	Conducting training							
	Mentoring			Med		High		Med
	Meeting planning/facilitation	High						
	Contract management			Med		Med		
	Grant management			Med		Med		
	Financial management	Med		Med		Med		
	Delegation	Med						
Other								
Administrative/ Support	Word processing							
	Tracking and record keeping	Med						
	Mail processing	Med						
	Other							
Other Skills	Other							

continues to have the right people with the right skills in the right job to fulfill the agency's core functions. However, during this same period, Retention Efforts is indicated as another key strategy for addressing anticipated skill gaps. This points to an awareness within the agency that it is important to retain existing staff to lessen the risk of losing critical knowledge and skills that are difficult to replace. Additional efforts can be placed on improving documentation, increasing the

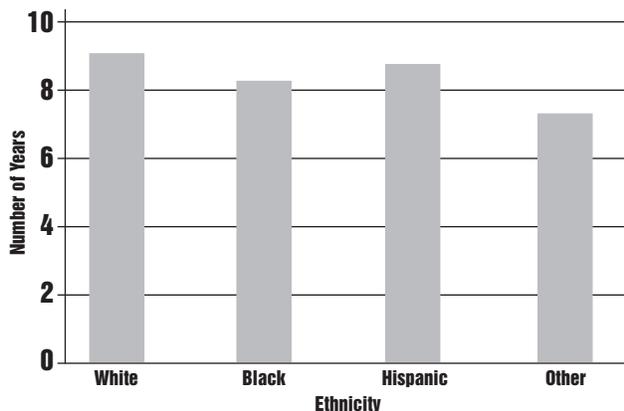
use of existing technology, and making staff allocation changes to ensure that the right people with the right skills are in the right job.

Figure F.10.
TCEQ Employee Turnover Rate,
FYs 1997–2007



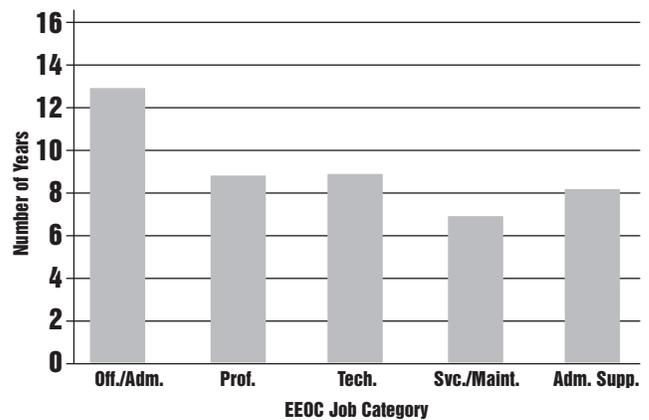
Data Source: Human Resources Information System, as of 8/31/07.

Figure F.11.
TCEQ Employee Tenure, by Race



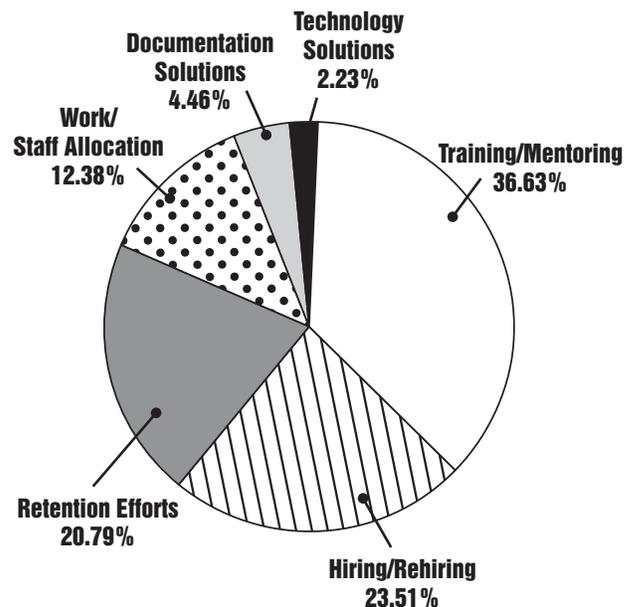
Data Source: Human Resources Information System, as of 8/31/07.

Figure F.12.
TCEQ Employee Tenure, by EEOC Job Category



Data Source: Human Resources Information System, as of 8/31/07.

Figure F.13.
Strategies to Address Skill Gaps



Data Source: Human Resources Information System, as of 8/31/07.

Training and Mentoring

More than ever, job shadowing and cross-training are emerging as solutions to enhancing critical workforce skills. Employees may be assigned to shadow experienced staff and subject-matter experts on special projects in order to develop and sharpen specific skills. Senior staff are increasingly relied on to cross-train less experienced employees. Staff also continue to participate in online, on-the-job, and classroom training. An increased investment in training may be required to address the need for well-trained and skilled employees.

One strategy for preparing the agency's existing workforce for future leadership positions is the Aspiring Leaders Program. This program is designed to provide non-supervisory staff with access to training and development opportunities that will help prepare them for possible succession into management positions. The development and promotion of in-house talent will be essential for long-term mission objectives.

Hiring

Hiring authorities plan to seek approval to hire above the minimum rate of a salary group. Offices plan to request approval to hire retirees, not only to provide needed expertise in the short term, but to allow managers more opportunities to transfer needed skill sets from veteran employees to less experienced staff. The transfer of institutional knowledge ensures continuity of agency functions and is a dynamic process.

Emphasis will continue on recruitment to encourage a diverse, qualified applicant pool to seek employment with the TCEQ. The agency continues to partner with outside entities—such as colleges, universities, and other organizations—to provide options for meeting hiring needs.

Hiring supervisors may utilize the Express Hire program, which allows hiring supervisors to identify and hire qualified applicants for job vacancies on the spot at recruiting events. They can also highlight the generous benefits package and employee programs available at the agency, such as medical insurance,

leave benefits, flextime work schedules, and employee wellness programs.

Retention Strategies

Strategies to retain individuals who possess essential skills include providing opportunities for increased responsibility (promotions), granting merit increases to reward performance, and using employee recognition programs. The TCEQ should continue to provide developmental opportunities for employees to focus on critical skills, competencies, and technical requirements needed by the agency. This can lead to enhanced career and professional development opportunities. We may also see increased reliance on flextime/alternative work hours and tele-working to provide managers with ways to retain today's more flexible, mobile workforce.

Work/Staff Allocation Changes

Managers are seeking innovative ways to allocate work and for staff to maintain or improve skill sets. Some are choosing to restructure jobs, revise functional job descriptions, involve subordinates in higher-level decision making, or assign backups to every position, while also including these backup responsibilities in their performance plan. Managers are also looking at ways to redesign processes, streamline operations using technology, and improve efficiencies to lessen the risk of losing specialized skill sets.

Documentation and Technology Solutions

Managers throughout the agency have increased requirements for documenting job standards, operating processes and procedures, and policy development decisions in an attempt to reduce the risk of knowledge/skill loss. This documentation helps newer employees understand the best practices of their predecessors and to guide future decision making. Managers are seeking ways to make the most of new and existing technological resources in this area. Management may request approval to upgrade existing systems and to purchase new technology, such as computer-assisted tools.