



# AGENCY STRATEGIC PLAN

FOR FISCAL YEARS 2007-2011

By

TEXAS BOARD OF PROFESSIONAL ENGINEERS

July 7, 2006

SIGNED: \_\_\_\_\_

Dale Beebe Farrow, P.E., Executive Director

APPROVED: \_\_\_\_\_

Govind Nadkarni, P.E., Board Chair

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## Board Members

BOARD MEMBERS	DATES OF TERM	HOMETOWN
Govind Nadkarni, P.E. Board Chairman	Appointed Chair 4/14/06	Corpus Christi
Jose F. Cardenas, P.E. Vice Chair	06/16/04 - 09/26/09	El Paso
Vicki T. Ravenburg, CPA Board Secretary	02/07/00 - 09/26/05	San Antonio
Elsie Allen	12/30/05 - 09/26/07	Fort Worth
G. Kemble Bennett, Ph.D., P.E.	04/14/06 - 09/26/11	College Station
James Greer, P.E.	04/14/06 - 09/26/09	Roanoke
Shannon K. McClendon	10/10/02 - 09/26/09	Dripping Springs
Gerry E. Pate, P.E.	10/10/02 - 09/26/07	Houston
Daniel Wong, Ph.D., P.E.	02/10/06 - 09/26/07	Sugar Land

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**Texas Board of Professional Engineers  
Strategic Plan**

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## **The Mission of Texas State Government**

Texas state government must be limited, efficient, and completely accountable. It should foster opportunity and economic prosperity, focus on critical priorities, and support the creation of strong family environments for our children. The stewards of the public trust must be men and women who administer state government in a fair, just, and responsible manner. To honor the public trust, state officials must seek new and innovative ways to meet state government priorities in a fiscally responsible manner. *Aim high...we are not here to achieve inconsequential things!*

## **The Philosophy of Texas State Government**

The task before all state public servants is to govern in a manner worthy of this great state. We are a great enterprise, and as an enterprise we will promote the following core principles:

- First and foremost, Texas matters most. This is the overarching, guiding principle by which we will make decisions. Our state, and its future, is more important than party, politics, or individual recognition.
- Government should be limited in size and mission, but it must be highly effective in performing the tasks it undertakes.
- Decisions affecting individual Texans, in most instances, are best made by those individuals, their families, and the local government closest to their communities.
- Competition is the greatest incentive for achievement and excellence. It inspires ingenuity and requires individuals to set their sights high. And just as competition inspires excellence, a sense of personal responsibility drives individual citizens to do more for their future and the future of those they love.
- Public administration must be open and honest, pursuing the high road rather than the expedient course. We must be accountable to taxpayers for our actions.
- State government has a responsibility to safeguard taxpayer dollars by eliminating waste and abuse, and providing efficient and honest government.

Finally, state government should be humble, recognizing that all its power and authority is granted to it by the people of Texas, and those who make decisions wielding the power of the state should exercise their authority cautiously and fairly.

## **The Regulatory Goals of Texas State Government**

### PRIORITY GOAL

To ensure Texans are effectively and efficiently served by high-quality professionals and businesses by:

- Implementing clear standards;
- Ensuring compliance;
- Establishing market-based solutions; and
- Reducing the regulatory burden on people and business.

## **Statewide Relevant Regulatory Benchmarks**

- Percent of state professional licensee population without documented violations
- Percent of new professional licenses as compared to the existing population
- Percent of documented complaints to licensing agencies resolved within six months
- Percent of individuals given a test for licensure who received a passing score
- Percent of new and renewed licenses issued via Internet
- Percent increase in utilization of the state business portal



## Texas Board of Professional Engineers

### **AGENCY MISSION STATEMENT**

The mission of the Texas Board of Professional Engineers (Board) is to protect the health, safety, and welfare of the people in Texas by ensuring that the practice of engineering in the state is carried out only by those persons who are proven to be qualified and by regulating the practice of professional engineering in Texas.

### **AGENCY PHILOSOPHY**

The Board will continue to act in accordance with the highest standards of ethics, accountability, and efficiency in the licensing and regulatory processes. We will continue to clearly define the parameters of the engineering profession where we have the statutory authority to exercise our mandate on behalf of the public trust, and will limit our actions only to those parameters. As an agency dedicated to establishing and maintaining individual professional responsibility among the regulated engineering community, we will continue to provide the ethical and legal framework from which engineers provide their services to the public.

### **AGENCY OVERVIEW**

The Board is a small state agency responsible for the implementation of the Texas Engineering Practice Act. The agency was created in 1937 by the 45<sup>th</sup> Legislature, Regular Session, in the aftermath of the New London School explosion in which almost three hundred students and teachers were killed as a result of an improperly designed gas heating system. Texas Civil Statutes, Article 3271a (The Texas Engineering Practice Act or the Act) established a Board to regulate the practice of engineering through licensing and rules of practice. The Act has been recodified as Texas Occupations Code, Title 6, Chapter 1001. The Board that governs the agency is currently composed of six Professional Engineers and three public members appointed by the governor and confirmed by the senate for six-year staggered terms.

The agency's primary service populations are the consumers of consulting and public sector engineering services: transportation providers, builders, developers, cities, counties, etc. The secondary service population is composed of professional engineers who look to the Board for the establishment and maintenance of the rules regarding proper and ethical practice, and applicants who seek an engineering license. Historically, the consumer service population increases demands on the agency during a strong economy; these demands are primarily on the Compliance & Enforcement Division. Service demands from engineers are relatively constant; demands from applicants historically increase during weaker economic conditions. During FY 2005, the agency issued 1,883 new licenses. Since the beginning of fiscal year 2006, 1,090 new licenses have been issued, bringing the total number of licensed professional engineers to 49,258.

Texas has the second largest licensed engineer population after California. The public views the agency as the entity of state government responsible for protecting the health, safety and welfare through the licensure of qualified professional engineers and through the regulation of the engineering profession in Texas. The engineering profession views the agency as a source of information concerning ethical and professional practice issues related to engineering.

## EXTERNAL / INTERNAL ASSESSMENT

### MANAGEMENT TEAM

#### BOARD OF DIRECTORS

**Govind Nadkarni, P.E., Chair:** Received his Bachelor of Science in Civil Engineering from Gujarat University (India) and Master's of Science in Civil Engineering from the University of Southern California. He established Govind and Associates, Inc., in 1984 and Indtech, Inc in 1989 and serves as the president of both firms.

**Jose F. Cardenas, P.E., Vice-Chair:** Received his Bachelor of Science in Civil Engineering from the University of Texas at El Paso. He is the president of Moreno Cardenas, Inc., a consulting civil engineering firm in El Paso. He has served on the board of directors of the Texas Council of Engineering Companies, on the board of directors of the El Paso Chapter of the American Society of Civil Engineers, and is a past president of the El Paso Chapter of the Texas Society of Professional Engineers.

**Vicki T. Ravenburg, CPA, Secretary (Public Member):** Received a Bachelor's Degree in Business Administration with a major in Accounting from the University of Texas at Austin. She is currently a shareholder and director in the CPA firm of Sagebiel, Ravenburg, & Schuh, P.C., where she is a tax partner. She is a past president of the San Antonio chapter of the Texas Society of Certified Public Accountants.

**Elsie Allen (Public Member):** Background investigator for DynCorp and a former member of the Appraisal Review Board for Tarrant County. She is a graduate of the Fort Worth Police Academy and a former patrol officer for the Fort Worth Police Department.

**G. Kemble Bennett, Ph.D., P.E.:** Vice Chancellor of Engineering for the Texas A&M University System, Director of the Texas Engineering Experiment Station, Dean of the Look College of Engineering and a Professor of Industrial Engineering at Texas A&M University. He holds a doctorate in industrial engineering from Texas Tech University.

**James Greer, P.E.:** Received a Bachelor of Science in Electrical Engineering from the University of Texas at Arlington and an MBA from the M.J. Neeley School of Business at Texas Christian University. He joined TXU in 1984 and is currently the Vice President of Asset Management & Engineering for TXU Electric Delivery.

**Shannon K. McClendon (Public Member):** Received her doctorate of Jurisprudence from the University of Houston, and graduated magna cum laude with a Bachelor of Science degree from the University of Houston-Clear Lake. She is an attorney in private practice focusing on law affecting the electric industry.

**Gerry E. Pate, P.E.:** Received a bachelor's degree from Lamar University. The president of Pate Engineers, Inc., a consulting engineering firm. He is past president of the

Consulting Engineers Council of Texas and a member and past president of the Association of Consulting Municipal Engineers in Houston.

**Daniel O. Wong, Ph.D., P.E.:** Received a Bachelor of Science in Civil Engineering in 1983, a Master's of Science in 1985, and a doctorate in Civil Engineering in 1988 from University of Houston. He currently serves as President and CEO of Tolunay-Wong Engineers, Inc. in Houston, Texas. He is an At-Large City Councilman in the City of Sugar Land since 2002.

## OPERATIONS AND PROFESSIONAL MANAGEMENT

The agency has 29 full-time employees, which includes one exempt position. There are currently 1 administrative, 12 professional, 15 clerical employees, and 1 technician. Seven Professional Engineers are on staff to analyze and evaluate technical engineering issues and the technical/professional credentials of applicants. The ethnic distribution of the staff is 59% White, 34% Hispanic, and 7% Black. Women make up 62% of the agency's work force. The average tenure for an agency employee is just under 6 years. The average employee turnover rate for the past two years was 26%.

The agency is divided into three main functions: Licensing, Compliance & Enforcement, and Administrative Services. Each function is responsible for implementing particular portions of the Act and Board rules and for preventing variances from the agency's statutory role. The executive staff is composed of the Executive Director, Deputy Executive Director, Director of Licensing, Director of Compliance & Enforcement, Director of Financial Services, Director of IT/Communications, and Executive Assistant. No employee is separated from the senior management team by more than one supervisor. The organizational structure is designed to delegate tasks among the divisions based on the assigned areas of statutory responsibility. This is done to minimize response time to the public and to provide accountability and consistency in the application of public policy.

## **DISTRIBUTION AND MARKETING**

The agency and all of its operations are located in Austin. All geographic regions of the state are served from this location. Most engineers and engineering activities are concentrated in the urban areas of the state, especially Bexar, Dallas, El Paso, Harris, Tarrant, and Travis counties. This situation can often affect the cost of complaints and other activities because of delays in communications and travel; subsequently, expenses for these services can be high. However, the overall cost of this operation is still less than would be reasonably expected if the Board were to operate satellite offices around the state. The agency is working to counter these costs through outreach efforts. The Board publishes a yearly newsletter and interim activities are regularly posted on the Board's Web site. Based on feedback from our customers, we are constantly updating our Web site so that information is up-to-date and easy to obtain.

Even though the agency became a Self-Directed Semi-Independent (SDSI) agency during the 76<sup>th</sup> Legislature (1999), the Board continues to utilize the Texas Building and Procurement Commission's (TBPC) Historically Underutilized Business (HUB) standard procedures in purchasing goods and services. The agency is certified and follows all purchasing rules and regulations set forth by TBPC. As a small agency, most products are purchased through term contracts with the TBPC. The agency also utilizes services from other state agencies such as printing and mailing. The agency's largest expenditure (over \$700,000 annually) is the purchase, grading, and administration of the national engineering examinations, which cannot be competitively bid. Despite these constraints, the agency utilized HUB's on 17% of commodity purchases under our control for the reporting period of September 1, 2005, through May 2006.

## **FINANCING**

The Board's current annual budget is slightly more than \$3 million. There are five sources of financing, all of which are funded through fees established by the Board for licensing, examinations, firm registrations, license renewals, and miscellaneous fees. The annual renewal fee for license holders accounts for approximately two-thirds of the agency's revenues and has been set at \$35 since FY 2004. A strong focus on fiscal responsibility and cost control has allowed the Board to keep the renewal fee stable. License holders that are not exempted by law also pay an additional \$200 professional fee per renewal that is deposited into the general fund and is not utilized by the Board. The \$200 fee increase generates approximately \$6.3 million per year for the General Revenue Fund. As part of SDSI, the Board is completely funded by fees collected. In addition to the \$200 professional fees collected, SDSI requires the Board to annually contribute over \$350,000 to the general revenue fund. Texas' total renewal fee is the highest in the nation; however, without the \$200 professional fee, it is one of the lowest of the state licensing boards for engineers.

The general health of the economy is the primary variable for the number of licensees. The current \$200 increase to the annual renewal fee (for a total renewal fee of \$235) continues to be a hardship for unemployed engineers who have reduced or no income. Many license holders have been unable to pay the fee and have difficulty in finding other engineering employment while their license is expired. Disabled engineers were given an exemption from the \$200 fee increase by the Legislature at the beginning of fiscal year 1998. The "Inactive" status allows license holders that do not offer engineering services to the public, stamp documents, or receive remuneration for engineering work to remain licensed at a reduced fee and has helped to maintain the number of professional engineers.

## **SERVICE DEMOGRAPHICS**

Changes in the rate of engineering licensure have historically been affected by economic factors such as "right-sizing," high-tech start-ups or layoffs, petroleum prices, real estate development, and infrastructure investment. The change in the rate of licensure usually

lags the controlling condition by about a year. The overall rate of licensure has remained fairly constant over the history of the Board.

The Board licenses qualified individuals in 26 different disciplines, with Civil, Mechanical, Electrical, and Structural engineering representing over 77% of the total population. To qualify for licensure as a professional engineer, an individual must have graduated from a curriculum in engineering or a closely related science such as physics, mathematics, chemistry, or computer science. Depending on educational qualifications, each applicant must demonstrate a minimum of four years of creditable engineering experience in active practice. Most applicants must also pass specialized national examinations in the fundamental principles of engineering and a specialized exam in their area of expertise. Applicant ages range from the mid 20's to the 60's and 70's for those who are beginning second careers. Individuals licensed in other jurisdictions can apply for licensure in Texas and are fairly evenly distributed in age.

Until the early 1970's, the engineering profession was almost completely dominated by white males. While the trend is slowly reversing in engineering schools, the demographics of licensing will probably remain relatively unchanged in the near future.

### **TECHNOLOGY INNOVATIONS**

The Board continues to use technology as a tool to offer better customer service while keeping expenses to a minimum.

Although the agency has a relatively small IT department, two full-time employees, all programming, database administration, email maintenance and desktop services are handled by the internal staff.

The Board's SDSI status has allowed the IT staff to purchase upgrades as necessary and utilize industry standard technology solutions. Agency purchasers utilize DIR's "Go Direct" bulk purchasing discounts and approved technology vendors. Technology projects utilize the DIR Project Delivery Framework for documentation and are achieving the maximum return on investment while minimizing risk.

The agency utilizes industry standard database systems with custom applications programmed to meet the business processes. These applications, outlined below, are written in standard programming languages such as Microsoft Access and Visual Basic for internal applications and Microsoft ASP for Internet applications. This software does not require exorbitant software license agreements or expensive vendor maintenance contracts.

### **TIDE (Texas Informational Database of Engineers)**

TIDE is the agency's custom database and information management system. This system has been used to improve agency processes and increase efficiency by making data more

accessible, integrating the database with other desktop systems such as Microsoft Word or Excel, and reducing time-consuming duplicate data entry.

### **ECHO (Engineers Cash Handling Online)**

ECHO is an online system that allows license holders to update and modify their personal information and to record continuing education hours. It also allows license holders to pay their license renewal with their credit card. The system has been live since November 21, 2005. It was marketed to December 2005 license renewals only to monitor acceptance and system tolerances. This initial renewal group was very receptive with a usage rate over 37%. After careful evaluation of the December test group for usage and feedback, several minor system changes were made. When the system was turned on for March renewals the improved features were readily received. The profile management portion of the system was also marketed to the remaining engineers who had June and September expiration dates. They were very receptive to using the online system to change their employer or address and keep track of their continuing education credits as opposed to time-consuming forms or paper methods. As the system goes forward, feedback from the engineering community is being used to improve the system. The usage rate has been consistent with the predicted models, and the agency continues to encourage usage through outreach activities.

### **ECHO-Firms**

The ECHO model will be reused for licensed engineering firm renewals in future enhancements. Feedback was recently gathered in a survey sent to 1,500 licensed engineering firms. Of those surveyed, 77% said they would like to pay their renewal online with a credit card and 95% would use such a system to update their contact information. This project is scheduled for FY 2007.

### **Document Imaging**

The agency has eliminated all future microfilm imaging and has moved to a completely digital document storage process in order to allow the staff more efficient retrieval of documents, the ability to email documents, and more efficient disaster recovery methods. To date, all enforcement case documents have been imaged as well as licensing applications and firm registration documents from 2001 forward. The agency will continue to image all new documents and is planning on incorporating new document types into the system. Efforts are also being made to image all historical data for the agency for long-term retention.

### **Web site Improvements**

The agency Web site is highly utilized by the engineering public for information gathering and online transactions.

Applicants entering the licensure process can obtain all their forms online and keep abreast of the latest law and rule documents. For every exam registration cycle, 90% of the registrations are conducted online. Grades are also posted online through a secure login retrieval method. Board members utilize the Web site to download

agendas and review meetings minutes. The enforcement complaint process is outlined with forms available to aid anyone who has concerns for the health, safety, or welfare of the public. The Policy Advisory Opinion process is outlined and any advisory opinions can be monitored for their progression and responses from the public. Internal improvements include an Intranet site, which provides information to agency staff, as well as webcasting of board meetings to agency staff. A majority of communication with license holders, applicants, and examinees is done electronically via email. To date, over 50% of all licensed engineers can be communicated with via email. This number is growing daily with continued use of online systems such as ECHO which require an email address to login to the system.

### **Information Security**

The security of our customers' data is vital, and all data is encrypted and backed up daily on an offsite server. Advanced spam filtering was implemented recently where each user can monitor their own email and train the filter by moving mail to a public folder where the spam server learns what is considered spam and what is considered safe. Virus protection is provided at the server level with daily scans of each workstation in case of accidental infection. Users are not allowed to install any non-approved programs and are monitored to prevent use of agency bandwidth or resources for personal use and any substantial waste of agency resources. Any transfer of confidential information is encrypted to ensure maximum security. Web databases do not contain credit card information or complete social security numbers. This precaution ensures that if all other security measures were compromised, the data obtained would not be usable.

## **SIGNIFICANT ISSUES**

The Board has identified the following issues that significantly impact the Board's operations and the regulated community:

### **Self-Directed Semi-Independent Project**

The passage of Senate Bill 1438 (76th Legislature, 1999), authorized the Board and two other state agencies with exemplary performance to participate in the Self-Directed Semi-Independent (SDSI) Project Agency Act. This program is not subject to the appropriation process and allows the project agencies to exercise greater autonomy over fiscal operations. Originally implemented for a two-year period, the SDSI program has been extended until September 1, 2009, with the passage of Senate Bill 1382 (78<sup>th</sup> Legislature, Regular Session, 2003).

Since September 2001, this program has saved state resources by not having to submit certain reports that were originally designed to monitor larger state agencies. We have identified quality service and fiscal responsibility as our top priorities under the SDSI status. This approach establishes that the agency will be successfully run with a strong focus on responsive services, responsible spending, and efficient operations in the achievement of the agency's mission objectives and financial commitments.



The Board has also taken this opportunity to creatively pursue innovative technologies, such as online processes and file imaging, to provide more efficient and effective services to the public. At the same time, we are using the fiscal flexibility to strengthen our Compliance and Enforcement efforts. The Board believes the SDSI program is an innovative idea in state government management. It prioritizes state resources, yet continues to provide accountability.

In summary, SDSI benefits to the State are realized as follows:

- SDSI agencies allow state government to run like a business and enhance efficiencies and deliverables.
- SDSI agencies get no appropriations from the Legislature and are self-funded.
- SDSI agencies provide significant monetary contributions to the state. The Board of Engineers contributed almost seven million dollars to the General Revenue Fund in fiscal year 2005 from its licensees.
- SDSI agencies have repaid the program's seed money in full.
- SDSI agencies fund their own employee and retiree insurance matching costs, workman's compensation and Federal Insurance Contributions Act costs.
- The Board of Engineers also funds its building maintenance, operation and insurance costs.
- SDSI agencies provide quarterly progress reports to the Legislature.
- SDSI agencies pay their own fees for State Auditor and Attorney General services.
- SDSI agencies do not require oversight from the Legislative Budget Board.

### **Continuing Education**

Senate Bill 277 (78<sup>th</sup> Regular Session, 2003) mandated the development of a Continuing Education Program for Professional Engineers. The Board has developed a program based on the National Council of Examiners for Engineering and Surveying (NCEES) model law and an extensive review of continuing education programs currently in place from other state engineering boards. The intent of the program is largely self-regulated and does not impose an undue burden on the license holders. The Board feels that the program will enhance the engineering profession and help protect the public by encouraging license holders to continue to increase their knowledge throughout their careers. The program has been in place since 2005, has been well received by the regulated community, and has resulted in an increase in outreach activities presented by the board especially in engineering ethics. An audit system is in place to verify compliance with the program, and the results show the license holders are complying with both the letter and the spirit of the law.

### **Policy Advisory Opinions**

Senate Bill 277 (78<sup>th</sup> Regular Session, 2003) directed the Board to develop and implement a process to prepare written policy advisory opinions. The Board develops these policy advisory opinions in response to requests by the public or internally concerning interpretations of the Board rules and other engineering issues. By statute, the Board has 180 days to respond to these requests. To date, the board has received 21 requests, including such topics as water quality planning, use of the engineer title, and comprehensive building design by engineers.

### **Fees**

Senate Bill 277 (78<sup>th</sup> Regular Session, 2003) removed the cap from individual administrative fees charged by the Board. The bill instead mandates that the Board establish fees in amounts that are reasonable and necessary to cover the costs of administering the different licenses, exams and other activities of the Board. Due to strict financial controls, responsible budget management, and a comprehensive planning process, the board has not had to raise any fees for engineering licensure or firm registration in the last year, while still meeting all budgetary and operating requirements. SDSI has allowed the board the flexibility to manage its own spending and revenue streams and still achieve an increase in value and services for the state

### **Online Functionality**

The board has successfully implemented online exam registration and an online profile management and renewal payment systems. These programs have improved the quality of service provided to the license holders and have also improved internal processes. Since both of these systems were developed in house using agency expertise, the projects were completed at a very low cost to the agency. The agency intends to extend its online programs to include online applications for engineers-in-training (EIT's), new firm registrations, and new engineer license applications.

### **Joint Advisory Committee (JAC)**

SB277 (78th Regular Session, 2003) created a Joint Advisory Committee on the Practice of Engineering and Architecture (see Texas Engineering Practice Act §1001.216.) This committee is composed of members of both boards and is to meet at least twice per year to discuss issues relating to both boards and overlapping areas of practice. The committee is currently working to resolve issues relating to the overlap of the practice of engineering and architecture, such as comprehensive building design and enforcement cases concerning design professionals.

### **Other Issues**

The Board is constantly working to improve internal processes and customer service. A process improvement team has been developed to analyze and document internal processes, as well as recommend improvements based on Malcolm Baldrige quality criteria. The Board has developed a business plan that is separate from the Strategic Plan to assist in the short term planning and management of the agency. The business plan also includes detailed tracking of performance measures, which the Board reviews on a six-month basis. The agency, in conjunction with the Industry Advisory Committee, has formed a Software Engineering Task Force to develop procedures, guidance, and select an examination for licensure of software engineers.

## **OPPORTUNITIES FOR IMPROVEMENT**

In addition to conducting its primary functions of Licensing, Compliance & Enforcement, and Administrative Services, the Board will continue to adopt practices that add value to its functions. These include:

- Continuing committees such as the Industry Advisory Committee, Education Advisory Committee, Joint Committee on Engineering and Geoscience, and Joint Advisory Committee on the Practice of Engineering and Architecture to increase agency effectiveness and community awareness through stakeholder feedback and cooperative initiatives.
- Develop and utilize committees such as the Policy Advisory Opinion Committee and the Audit Committee to address internal and external issues concerning engineering and financial activities of the Board.
- Use auditing resources such as the State Auditor's Office, internal risk assessments, process improvement teams, and external reviews for streamlining and optimization of functions and operations of the Board.
- Be more proactive with the industry community by participating in conferences, annual meetings and outreach programs.
- Continue to leverage IT resources to improve customer service, reduce costs, and protect technology and information assets.
- Continuing to review Board rules for clarity and consistency.
- Increase Board and staff involvement in NCEES committees through Emeritus Members, Board Members and staff participation.

## GOALS, OBJECTIVES, AND STRATEGIES

### STATEWIDE GOAL FOR REGULATORY AGENCIES

To ensure Texans are effectively and efficiently served by high-quality professionals and businesses by:

- Implementing clear standards;
- Ensuring compliance;
- Establishing market-based solutions; and
- Reducing the regulatory burden on people and business.

### AGENCY GOALS

#### **TBPE Goal A**

We will provide a licensing system to ensure that only qualified and competent Texas licensees and registered firms practice professional engineering in Texas.

#### **Objective A.1**

Ensure that all individuals offering engineering services to the public become licensed, maintain a current license, and that applications for licensure are considered and acted on in a timely manner.

#### **Strategy A.1.01**

Provide licensing assistance, review and evaluate all applications for licensure, and license those individuals found to be qualified.

#### **Strategy A.1.02**

Provide engineering examinations required for licensure.

#### **Strategy A.1.03**

Maintain and provide timely information to license holders regarding the law and Board rules.

#### **Strategy A.1.04**

Provide an effective licensing renewal process.

#### **Strategy A.1.05**

Provide outreach to encourage licensure.

**Objective A.2**

Ensure that all firms offering engineering services to the public become registered, maintain a current registration, and that applications for registration are considered and acted on in a timely manner.

**Strategy A.2.01**

Provide registration assistance, review and evaluate all applications for registration, and register those firms found to be qualified.

**Strategy A.2.02**

Maintain and provide timely information to firms regarding the law and Board rules.

**Strategy A.2.03**

Provide an effective firm renewal process.

**TBPE Goal B**

Provide the public with swift, fair, and effective enforcement of the Texas Engineering Practice Act to protect the health, safety, and welfare of the people of Texas.

**Objective B.1**

Ensure fair and due process for all reported violations of the Texas Engineering Practice Act and Board rules.

**Strategy B.1.01**

Investigate and reach final resolution of reported violations of the Texas Engineering Practice Act and Board rules in a timely and consistent manner.

**Objective B.2**

Promote ethical and professional behavior of licensed professional engineers.

**Strategy B.2.01**

Provide outreach to ensure ethical and professional behavior.

**Strategy B.2.02**

Maintain and provide timely information to license holders regarding the law and Board rules.

**TBPE Goal C**

We will manage agency resources in the most effective and efficient manner possible in order to produce the highest possible level of service and benefit to our stakeholders and the citizens of the State of Texas.

**Objective C.1**

Ensure that agency processes and procedures are improved and resources and technology are effectively utilized to achieve greater efficiency.

**Strategy C.1.01**

Review, improve, and document processes and procedures in all areas of agency activities.

**Strategy C.1.02**

Utilize technology to improve internal and external processes.

**Objective C.2**

To ensure that agency is adequately staffed, trained, and managed to set a standard of excellence in customer service.

**Strategy C.2.01**

Train staff in customer service and other areas of professional competency.

**Strategy C.2.02**

Conduct customer service surveys and address issues based on customer input.

**TBPE Goal D (Required)**

Establish and implement policies governing purchasing and public works contracting which foster meaningful and substantive inclusion of historically underutilized businesses (HUBs).

**Objective D.1**

To include HUBs for total contracts and subcontracts that will meet or exceed the state average percent usage for contracts awarded annually by the agency.

**Strategy D.1.01**

Develop and implement a plan for increasing the use of HUBs through contracts and subcontracts.

**PERFORMANCE BENCHMARKING**

As a part of its standard management operation, managers at the agency maintain statistical information that serves as "internal performance benchmarks" to be used in forecasting resource allocation and assessment of effective performance. These performance measures and benchmarks were revised in 2004 and 2006 and will be tracked regularly to measure progress and note areas of improvement.

**Outcome Measures:**

1. Percent of licensees with no reported violations.

2. Recidivism rate of those receiving disciplinary action.
3. Percent of complaints resulting in disciplinary action.
4. Percent of total cases opened from the public.
5. Percentage of total dollar value of purchasing and public works contracts and subcontracts awarded to HUBs.
6. Percentage Rating for Customer Service / Satisfaction.
7. Number of Cases of Unlicensed Practice.

**Output Measures:**

1. Number of New Licenses Issued to Individuals.
2. Number of New Firm Registrations.
3. Number of Individuals Examined (by exam type).
4. Number of Licenses Renewed (Individuals).
5. Number of Registrations Renewed (Firms).
6. Number of Complaints Resolved (Internal and External).
7. Number of Disciplinary Actions Taken.
8. Number of HUB Contracts and Subcontracts Awarded.
9. Dollar Value of HUB Contracts And Subcontracts Awarded.
10. Number of Policy Advisory Opinion Requests.
11. Number of Outreach Events.
12. Number of Attendees for Outreach Events.
13. Open Records Requests Processed.
14. Number of Website Hits / Downloads (Select Pages).
15. Number of Staff Training Events.

**Efficiency Measures:**

1. Average Licensing Cost Per Individual License Issued.
2. Average Licensing Cost Per Individual License Renewed.
3. Average Licensing Cost Per Firm Registration Issued.
4. Average Licensing Cost Per Firm Registration Renewed.
5. Average Cost Per Exam Registration.
6. Average Cost Per Complaint Resolved (by type).
7. Average Processing Time per New Individual Licenses Issued (by type).
8. Percentage of Exams Registered On-line.
9. Percentage of Individual License Renewals Handled Through LockBox.
10. Percentage of Individual License Renewals Handled On-Line.
11. Average Time for Complaint Resolution.
12. Number of Continuing Education Audits.

**Explanatory Measures:**

1. Total Number of Individuals Licensed.
2. Total Number of Firms Registered.
3. Exam Pass Rate.
4. Number of Jurisdictional Complaints Received.

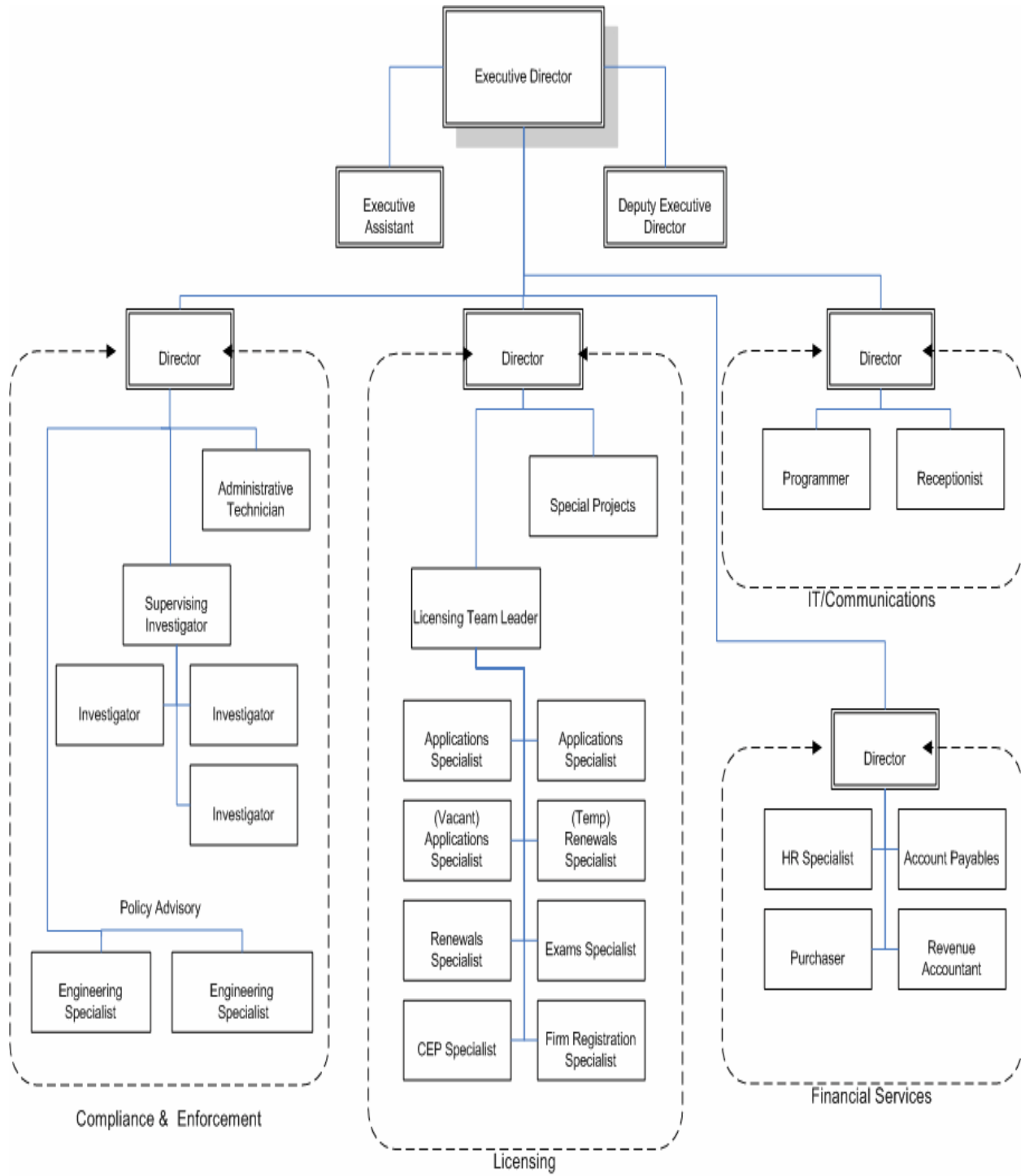
## **APPENDIX A - PLANNING PROCESS**

The Strategic Plan was based on an assessment of the agency's prior achievements, previous and current licensing trends, legislative mandates, SDSI issues and current Board initiatives.

The Strategic Plan was developed with input from staff and Board members. Using the previous Strategic Plan as a starting point, each section was reviewed and updated to include new mandates, projects, initiatives and relevant data. Executive staff met several times to review and discuss projects and plans for the future as well as reviewing and revising the goals and performance measures for the agency.



## APPENDIX B– ORGANIZATIONAL CHART



## **APPENDIX C – FIVE YEAR PROJECTION OF OUTCOMES**

All performance measures and benchmarks were revised in 2006 and are tracked internally to measure progress and note areas of improvement. These metrics are reviewed every six months as part of the agency Business Planning process. New baseline values will be calculated and a Projection of Outcomes included in a future revision of the Strategic Plan.

## APPENDIX D – LIST OF MEASURE DEFINITIONS

### Outcome Measures

#### **Percent of Licensees with No Reported Violations**

Definition: The percent of the total number of licensed individuals at the end of the reporting period who have not incurred a violation within the current and preceding two years (three-year total).

Purpose/Importance: Licensing individuals helps ensure that practitioners meet legal standards for professional education and practice, which is the agency's primary goal. This measure is important because it indicates how effectively the agency's licensing activities deter violations of professional standards established by statute and Board rules.

Source/Collection of Data: The information is derived from TIDE database. The Compliance & Enforcement Division is responsible for collecting and calculating the data.

Method of Calculation: This measure is calculated based on the total number of individuals currently licensed by the agency who have not incurred a violation within the current and preceding two years divided by the total number of individuals currently licensed by the agency. The numerator for this measure is calculated by subtracting the total number of licensees with violations during the three-year period from the total number of licensees at the end of the reporting period.

Data Limitations: None

Calculation Type: Non-cumulative

New Measure: No

Desired Performance: Higher than Target

#### **Recidivism Rate for Those Receiving Disciplinary Action**

Definition: The number of repeat offenders at the end of the reporting period as a percentage of all offenders during the most recent three-year period.

Purpose/Importance: The measure is intended to show how effectively the agency enforces its regulatory requirements and prohibitions. It is important that the agency enforce the Texas Engineering Practice Act and Board rules strictly enough to ensure consumers are protected from unsafe, incompetent and unethical practice by licensed Professional Engineers. It is also tied to appropriate sanctions and outreach efforts.

Source/Collection of Data: The information is derived from the TIDE database. The Compliance & Enforcement Division is responsible for maintaining the data.

Method of Calculation: The number of individuals against whom two or more disciplinary actions were taken by the Board within the current and preceding two fiscal years divided by the total number of individuals receiving disciplinary actions within the current and preceding two fiscal years.

Data Limitations: None

Calculation Type: Non-cumulative

New Measure: No

Desired Performance: Lower than Target

### **Percent of Complaints Resulting in Disciplinary Action**

Definition: Percent of complaints that were resolved during the reporting period that resulted in disciplinary action.

Purpose/Importance: The measure is intended to show the extent to which the agency exercises its disciplinary authority in proportion to the number of complaints received. It is important that both the public and licensees have an expectation that the agency will work to ensure fair and effective enforcement of the Texas Engineering Practice Act and this measure seeks to indicate agency responsiveness to this expectation.

Source/Collection of Data: The information is derived from the TIDE database. The Compliance & Enforcement Division is responsible for maintaining the data and calculating this measure.

Method of Calculation: The total number of complaints resolved during the reporting period that resulted in disciplinary action divided by the total number of complaints resolved during the reporting period. Disciplinary action includes agreed orders, reprimands, suspensions, revocations, restitution and/or fines on which the Board has acted.

Data Limitations: None

Calculation Type: Non-cumulative

New Measure: No

Desired Performance: Higher than Target

### **Percent of Total Cases Opened From the Public**

Definition: The total number of enforcement cases opened as a result of a public complaint.

Purpose/Importance: This measure indicates the number of cases opened as a result of public complaints and assists the agency in determining the workload.

Source/Collection of Data: The data is derived from the TIDE database. The Compliance & Enforcement Division is responsible for maintaining the data and calculating this measure.

Method of Calculation: This measure is a count of the total number of cases opened as a result of a complaint from the public. This measure is calculated between a start and end date; generally one month or one year depending on the reporting requirements.

Data Limitations: None

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Percentage of Total Dollar Value of Purchasing and Public Works Contracts and Subcontracts Awarded to HUBs**

Definition: The percentage dollar value of Contracts and Subcontracts awarded to Historically Underutilized Business (HUB) during the reporting period.

Purpose/Importance: It is a statewide initiative to give preference whenever possible to Historically Underutilized Businesses (HUBs).

Source/Collection of Data: The data is derived from purchasing information maintained by the agency's head purchaser and from the Uniform Statewide Accounting System (USAS). The Financial Services Division is responsible for maintaining this data.

Method of Calculation: The measure is calculated by dividing the total dollar amount of contracts and subcontracts awarded to HUBs by the total dollar amount of contracts and subcontracts awarded during the reporting period.

Data Limitations: Agency has no control over number of bids during a reporting period.

Calculation Type: Non-Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Percent Rating for Customer Service / Satisfaction**

Definition: The percent of the total number of licensed individuals surveyed who indicate that the agency provides services or products that meet their needs and expectations.

Purpose/Importance: Feedback from our regulated community is an important tool to determine the agencies effectiveness. This measure is an indicator of customer satisfaction with the agency's performance, services, and products.

Source/Collection of Data: That data is collected from yearly customer service surveys of a sample of licensed individuals.

Method of Calculation: Calculated as total number of license holders indicating 'satisfaction' on overall quality question divided by the number of respondents to customer service survey. Presented as a percentage.

Data Limitations: Agency has no control over survey response rate.

Calculation Type: Non-Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Number of Cases of Unlicensed Practice**

Definition: The number of enforcement cases opened due to the unlicensed practice of engineering.

Purpose/Importance: It is critical that all individuals that offer engineering services to the public are licensed with the Board. This measure is an indicator of the degree of unlicensed practice.

Source/Collection of Data: The information is derived from the TIDE database. The Licensing Division is responsible for maintaining the data and calculating this measure.

Method of Calculation: This measure counts the total number of cases closed per reporting period indicating a violation for unlicensed practice of engineering.

Data Limitations: The agency has no control over the complaints filed.

Calculation Type: Cumulative

New Measure: Yes (2006)

Desired Performance: Lower than Target

### **Output Measures**

#### **Number of New Licenses Issued to Individuals**

Definition: The number of licenses issued to previously unlicensed individuals during the reporting period.

Purpose/Importance: A successful licensing structure must ensure that legal standards for professional education and practice are met prior to licensure. This measure is a primary workload indicator which is intended to show the number of unlicensed persons who were documented to have successfully met all licensure criteria established by statute and rule as verified by the agency during the reporting period.

Source/Collection of Data: The information is derived from TIDE database. The Licensing Division is responsible for maintaining the data in the licensing database.

Method of Calculation: This measure counts the total number of new licenses issued to individuals previously unlicensed in Texas during the reporting period, regardless of when the application was originally received. Licenses are counted as new for persons who were previously licensed but whose license expired and were required to meet the same criteria as a new applicant.

Data Limitations: The agency has no control over the number of new applications submitted or the number of individuals who successfully complete the examination requirements.

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

#### **Number of New Firm Registrations**

Definition: The number of registrations issued to previously unregistered firms during the reporting period.

Purpose/Importance: A successful licensing structure must ensure that legal standards for registration are met for engineering firms. This measure is a primary workload

indicator which is intended to show the number of unregistered firms who were documented to have successfully met all registration criteria established by statute and rule as verified by the agency during the reporting period.

Source/Collection of Data: The information is derived from TIDE database. The Licensing Division is responsible for maintaining the data in the licensing database.

Method of Calculation: This measure counts the total number of new registrations issued to firms previously unregistered in Texas during the reporting period, regardless of when the application was originally received.

Data Limitations: The agency has no control over the number of new applications submitted or the number of firms that successfully complete the registration requirements.

Calculation Type: Cumulative

New Measure: Yes (2005)

Desired Performance: Higher than Target

### **Number of Individuals Examined**

Definition: The number of individuals to whom examinations were administered during the reporting period.

Purpose/Importance: The measure reflects the number of individuals examined which is a primary step in licensing the individual and represents a major cost element for the agency. Examination purchase, grading, and notification costs are directly related to this measure.

Source/Collection of Data: The information is derived from the TIDE database. The Licensing Division is responsible for maintaining the data in the database.

Method of Calculation: The total unduplicated number of individuals examined by the agency at the end of the reporting period. The number of examinees for the Fundamentals of Engineering and the Principles and Practice of Engineering examinations is reported separately.

Data Limitations: The national examinations are only offered twice a year and the agency has no control over the number of examinations scheduled or individuals examined.

Calculation Type: Cumulative



New Measure: No

Desired Performance: Higher than Target

### **Number of Licenses Renewed (Individuals)**

Definition: The number of licensed individuals who held licenses previously and renewed their license during the reporting period.

Purpose/Importance: License renewal is intended to ensure that persons who want to continue to practice engineering in Texas satisfy current legal standards established by statute and Board rules. This measure is intended to track the number of individuals renewing their license during the reporting period.

Source/Collection of Data: The information is derived from the TIDE database. The Licensing Division is responsible for maintaining the data in the database.

Method of Calculation: The measure is a count of individual licenses renewed during the reporting period.

Data Limitations: The agency has no control over the number of licensees who do not renew their license.

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Number of Registrations Renewed (Firms)**

Definition: The number of registered firms that were registered previously and renewed their registration during the reporting period.

Purpose/Importance: Firm registration renewal is intended to ensure that firms that want to continue to offer engineering services in Texas satisfy current legal standards established by statute and Board rules. This measure is intended to track the number of firms renewing their registration during the reporting period.

Source/Collection of Data: The information is derived from the TIDE database. The Licensing Division is responsible for maintaining the data in the database.

Method of Calculation: The measure is a count of firm registrations renewed during the reporting period.

Data Limitations: The agency has no control over the number of firms that do not renew their registration.

Calculation Type: Cumulative

New Measure: Yes (2005)

Desired Performance: Higher than Target

### **Number of Complaints Resolved**

Definition: The total number of complaints resolved during the reporting period. This measure is reported as two values: Internal Complaints and External Complaints.

Purpose/Importance: The measure reflects the workload associated with resolving complaints.

Source/Collection of Data: The information is derived from the TIDE database. The Compliance & Enforcement Division is responsible for maintaining the data.

Method of Calculation: A count of the total number of complaints during the reporting period upon which the Board took final action or for which a determination was made that a violation did not occur. Two separate values are calculated: (1) Complaints resolved that originated from an outside source, (2) Complaints resolved that originated internally by the agency.

Data Limitations: None

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Number of Disciplinary Actions Taken**

Definition: The total number of disciplinary actions taken by the agency against licensees during the reporting period.

Purpose/Importance: The measure reflects the workload associated with the number of disciplinary actions taken by the Board against licensees. It is important that the agency enforce the Texas Engineering Practice Act and Board rules strictly enough to ensure consumers are protected from unsafe, incompetent, and unethical practice by licensed Professional Engineers.

Source/Collection of Data: The information is derived from the TIDE database. The Compliance & Enforcement Division is responsible for maintaining the data.

Method of Calculation: A count of the total number of disciplinary actions issued by the agency against licensed individuals during the reporting period.

Data Limitations: None

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Number of HUB Contracts and Subcontract Awarded**

Definition: The number of Historically Underutilized Business (HUB) Contracts and Subcontracts awarded during the reporting period.

Purpose/Importance: It is a statewide initiative to give preference whenever possible to Historically Underutilized Businesses (HUBs).

Source/Collection of Data: The data is derived from purchasing information maintained by the agency's head purchaser. The purchasing section of the Financial Services Division is responsible for maintaining this data.

Method of Calculation: The measure is a count of the total number of HUB Contracts and Subcontracts that are awarded during the reporting period.

Data Limitations: Agency has no control over number of bids during a reporting period.

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Dollar Value of HUB Contracts and Subcontracts Awarded**

Definition: The total dollar value of Historically Underutilized Business (HUB) Contracts and Subcontracts awarded during the reporting period.

Purpose/Importance: It is a statewide initiative to give preference whenever possible to Historically Underutilized Businesses (HUBs).

Source/Collection of Data: The data is derived from purchasing information maintained by the agency's head purchaser and from the Uniform Statewide Accounting System (USAS). The Financial Services Division is responsible for maintaining this data.

Method of Calculation: The measure is a sum of the dollar amounts of the HUB Contracts and Subcontracts that are awarded during the reporting period.

Data Limitations: Agency has no control over number of bids during a reporting period.

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Number of Policy Advisory Opinion Requests Completed**

Definition: The number of policy advisory opinions completed during the reporting period.

Purpose/Importance: By statute, policy advisory opinion requests must have a response within 180 days of receipt. This measure is indicative of the workload and performance of the Policy Advisory Opinion team and the Compliance & Enforcement Division.

Source/Collection of Data: Data concerning policy advisory opinions is gathered from the Policy Advisory Tracking System. The Compliance & Enforcement Division is responsible for maintaining the data in the tracking system.

Method of Calculation: This measure counts the number of policy advisory opinions completed and issued within the reporting period. This count can include policy advisory opinions that are complete and only pending the final board meeting approval as board meetings are quarterly and are not included in the 180-day requirement.

Data Limitations: The board has no control of the number of policy advisory opinions requested.

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Number of Outreach Events**

Definition: Total number of outreach events that staff presents during the reporting period.

Purpose/Importance: An important aspect of encouraging compliance with the Act and board rules is to inform the public and the engineering community of the roles, responsibilities, and requirements for professional engineers. Outreach presentations are an important part of this communication effort.

Source/Collection of Data: Data concerning outreach events is collected by the outreach coordinator. Data is reported to the outreach coordinator from individual presenters. The Executive Division is responsible for this measure.

Method of Calculation: This measure counts the number of outreach presentations given by staff during the reporting period.

Data Limitations: The agency has limited control over the number of outreach requests.

Calculation Type: Cumulative

New Measure: Yes (2006)

Desired Performance: Higher than Target

### **Number of Attendees for Outreach Events**

Definition: Total number of attendees for outreach events presented by agency staff during the reporting period.

Purpose/Importance: An important aspect of encouraging compliance with the Act and board rules is to inform the public and the engineering community of the roles, responsibilities, and requirements for professional engineers. Outreach presentations are an important part of this communication effort.

Source/Collection of Data: Data concerning outreach events is collected by the outreach coordinator. Data is reported to the outreach coordinator from individual presenters. The Executive Division is responsible for this measure.

Method of Calculation: This measure counts the number of attendees at outreach presentations given by staff during the reporting period.

Data Limitations: The agency has no control over the attendance at outreach events.

Calculation Type: Cumulative

New Measure: Yes (2006)

Desired Performance: Higher than Target

### **Open Records Requests Processed**

Definition: Total number of open records requests processed during the reporting period.

Purpose/Importance: The agency is required to comply with the Public Information Act and open government standards.

Source/Collection of Data: Data concerning open records requests is collected by the Public Information Officer.

Method of Calculation: This measure counts the number of open records requests received during the reporting period.

Data Limitations: The agency has no control over the number of requests.

Calculation Type: Cumulative

New Measure: Yes (2006)

Desired Performance: Higher than Target

### **Number of Website Hits/Downloads**

Definition: The number of visits to particular agency websites.

Purpose/Importance: An important aspect of encouraging compliance with the Act and board rules is to inform the public and the engineering community of the roles, responsibilities, and requirements for professional engineers. It is also vital to communicate board activities and other information to the general public. An accurate and informative website is critical to communicating this information.

Source/Collection of Data: This information is collected from website statistics tracking software provided through the agency internet service provider. The Information Technology/Communications Division is responsible for this measure.

Method of Calculation: The number of visits to specific websites is totaled for the reporting period.

Data Limitations: The agency has no control over the number of visitors to the Web site.

Calculation Type: Cumulative

New Measure: Yes (2006)

Desired Performance: Higher than Target

### **Number of Staff Training Events:**

Definition: The total number of training events attended by staff members during the reporting period.

Purpose/Importance: Staff education, training, and continuous improvement are vital to having a high performance organization. Board rules provide for training opportunities for staff members and all directors encourage staff members to improve their professional skills.

Source/Collection of Data: This information is collected from Human Resources records. Training information is provided from division directors to HR.

Method of Calculation: This measure is a sum of all training events attended by all staff members during the reporting period.

Data Limitations: None

Calculation Type: Cumulative

New Measure: Yes (2006)

Desired Performance: Higher than Target

### **Efficiency Measures**

#### **Average Licensing Cost per Individual License Issued**

Definition: Total expenditures (including encumbrances) for direct licensing activities related to new individual licenses during the reporting period divided by the total number of individuals licensed during the reporting period.

Purpose/Importance: This measure is intended to show how cost-effectively the agency processes new license applications for individuals.

Source/Collection of Data: The information is derived from the number of new licenses obtained from the TIDE database. All cost data is retrieved from the Uniform Statewide

Accounting System (USAS) and the agency's Financial Information System (FIS). The Director of Financial Services is responsible for calculating the cost data.

Method of Calculation: This measure is calculated based on the total funds expended and encumbered during the reporting period for the processing of initial licenses for individuals divided by the total number of initial licenses for individuals issued during the reporting period. Costs include the following categories: salaries, supplies, travel, postage, and other costs directly related to licensing. Costs related to the examination function, license renewals, and indirect costs are excluded from this calculation. Currently, this value is calculated using a modeled process flow.

Data Limitations: None

Calculation Type: Non-cumulative

New Measure: No

Desired Performance: Lower than Target

### **Average Licensing Cost Per Individual License Renewed**

Definition: Total expenditures (including encumbrances) for direct licensing activities related to license renewals for individuals during the reporting period divided by the total number of individual licenses renewed during the reporting period.

Purpose/Importance: This measure is intended to show how cost-effectively the agency processes license renewals for individuals.

Source/Collection of Data: The information is derived from the number of license renewals obtained from the TIDE database. All cost data is retrieved from the Uniform Statewide Accounting System (USAS) and the agency's Financial Information System (FIS). The Director of Financial Services is responsible for calculating the cost data.

Method of Calculation: This measure is calculated based on the total funds expended and encumbered during the reporting period for the processing of license renewals for individuals divided by the total number of licenses renewed for individuals during the reporting period. Costs include the following categories: salaries, supplies, travel, postage, and other costs directly related to licensing. Costs related to the examination function, original licenses, and indirect costs are excluded from this calculation. Currently, this value is calculated using a modeled process flow.

Data Limitations: None

Calculation Type: Non-Cumulative



New Measure: No

Desired Performance: Lower than Target

### **Average Licensing Cost Per Firm Registration Issued**

Definition: Total expenditures (including encumbrances) for direct licensing activities related to new firm registrations during the reporting period divided by the total number of firms registered during the reporting period.

Purpose/Importance: This measure is intended to show how cost-effectively the agency processes new firm registration applications.

Source/Collection of Data: The information is derived from the number of new firm registrations obtained from the TIDE database. All cost data is retrieved from the Uniform Statewide Accounting System (USAS) and the agency's Financial Information System (FIS). The Director of Financial Services is responsible for calculating the cost data.

Method of Calculation: This measure is calculated based on the total funds expended and encumbered during the reporting period for the processing of initial firm registrations divided by the total number of initial firm registrations issued during the reporting period. Costs include the following categories: salaries, supplies, travel, postage, and other costs directly related to licensing. Costs related to the firm renewal function and indirect costs are excluded from this calculation. Currently, this value is calculated using a modeled process flow.

Data Limitations: None

Calculation Type: Non-Cumulative

New Measure: Yes (2005)

Desired Performance: Lower than Target

### **Average Licensing Cost Per Firm Registration Renewed**

Definition: Total expenditures (including encumbrances) for direct licensing activities related to firm registration renewals during the reporting period divided by the total number of firm registrations renewed during the reporting period.

Purpose/Importance: This measure is intended to show how cost-effectively the agency processes firm registration renewals.

Source/Collection of Data: The information is derived from the number of firm registration renewals obtained from the TIDE database. All cost data is retrieved from

the Uniform Statewide Accounting System (USAS) and the agency's Financial Information System (FIS). The Director of Financial Services is responsible for calculating the data.

Method of Calculation: This measure is calculated based on the total funds expended and encumbered during the reporting period for the processing of firm registration renewals divided by the total number of firm registrations renewed during the reporting period. Costs include the following categories: salaries, supplies, travel, postage, and other costs directly related to licensing. Costs related to the original firm registrations and indirect costs are excluded from this calculation. Currently, this value is calculated using a modeled process flow.

Data Limitations: None

Calculation Type: Non-Cumulative

New Measure: Yes (2005)

Desired Performance: Lower than Target

### **Average Cost per Exam Registration**

Definition: Total costs expended for examination activities (excluding exam purchase, grading, and administration costs) during the reporting period divided by the total number of exams administered during the reporting period.

Purpose/Importance: The measure reflects the efficiency in costs to register examinees for the national examinations.

Source/Collection of Data: The information is derived from the number of examinations administered, which is maintained in the TIDE database. All cost data from the agency's accounting records is retrieved from the Uniform Statewide Accounting System. The Director of Financial Services is responsible for calculating the cost data.

Method of Calculation: This measure is calculated based on the total funds expended and encumbered during the reporting period for the processing of examination registrations divided by the total number of examinations registered. Costs include the following categories: salaries, supplies, postage, and shipping that are directly related to examination registration. Indirect costs are excluded from this calculation. Currently, this value is calculated using a modeled process flow.

Data Limitations: None

Calculation Type: Non-cumulative

New Measure: No

Desired Performance: Lower than Target

**Average Cost per Complaint Resolved**

Definition: Total costs expended for the resolution of complaints during the reporting period divided by the total number of complaints resolved during the reporting period.

Purpose/Importance: The measure reflects the cost efficiency of the agency in resolving a complaint.

Source/Collection of Data: The case and complaint information is collected from the TIDE database. The Compliance Assistance Division is responsible for case and complaint information. All cost data from the agency's accounting records is retrieved from the Uniform Statewide Accounting System (USAS) and the agency's Financial Information System (FIS). The Director of Financial Services is responsible for calculating the cost data.

Method of Calculation: The total funds expended and encumbered during the reporting period for complaint processing, investigation, and resolution divided by the number of complaints resolved. The costs include salaries, supplies, travel, postage, and operating costs directly related to enforcement, including the State Office of Administrative Hearings. Indirect costs are excluded from this calculation. Currently, this value is calculated using a modeled process flow.

Data Limitations: The average cost will be higher than targeted if fewer cases are closed than originally projected.

Calculation Type: Non-cumulative

New Measure: No

Desired Performance: Lower than Target

**Average Processing Time per New Individual License Issued (by type)**

Definition: The average processing time of initial individual license applications from the time the initial application is received until the date of final internal action during the reporting period.

Purpose/Importance: This measures the ability of the agency to process new applications in a timely manner and its responsiveness to its primary constituent group. This measure is also tied to staffing and productivity.

Source/Collection of Data: The information is derived from the TIDE database. The Licensing Division is responsible for maintaining the data in the database.

Method of Calculation: The percentage is calculated based on the date the status of the application is listed as received to the time it becomes complete for internal action during the reporting period. This measure is calculated for each application type (Waiver, No Exams, PE Exam).

Data Limitations: None

Calculation: Non-cumulative

New Measure: No

Desired Performance: Lower than Target

### **Percentage of Exams Registered On-Line**

Definition: The number of examinations registered on-line compared to the total number of exam registrations during the reporting period.

Purpose/Importance: To increase productivity and improve customer service, the agency has implemented an on-line examination registration system. This measure is an indicator of the effectiveness of the system.

Source/Collection of Data: The information is derived from the TIDE database. The Licensing Division is responsible for maintaining the data in the database.

Method of Calculation: This measure is determined by dividing the number of examinees that register for an examination using the on-line system by the total number of examinees registered for that examination during the reporting period. This value is calculated for each examination type and for all examinations during the reporting period.

Data Limitations: None

Calculation Type: Non-Cumulative

New Measure: Yes (2005)

Desired Performance: Higher than Target

### **Percentage of Individual License Renewals Handled Through LockBox**

Definition: The percent of individual license renewals processed through the Lockbox system during the reporting period.

Purpose/Importance: The Comptrollers Office performs processing of individual license renewals through the off-site Lockbox system. This results in a savings in agency cost, manpower, and processing time. (Note: The agency is reviewing the efficacy of this payment method in light of the on-line renewal system.)

Source/Collection of Data: Data about the total number of renewals is derived from the TIDE database system. The Licensing Division is responsible for maintaining the data in the database concerning renewals. Information concerning the number of renewals processed through the Lockbox system is retrieved from the Comptrollers Office and input into TIDE.

Method of Calculation: The total number of renewals processed through Lockbox is divided by the total number of individual licenses renewed during the reporting period.

Data Limitations: None

Calculation Type: Non-Cumulative

New Measure: No

Desired Performance: Higher than Target

### **Percentage of Individual License Renewals Handled On-Line**

Definition: The percent of individual license renewals processed using the on-line renewal system (ECHO) during the reporting period.

Purpose/Importance: The agency has developed an on-line license renewal and profile management system called ECHO. This results in a savings in agency cost, manpower, and processing time, and more accurate licensing and financial data.

Source/Collection of Data: Data about the total number of renewals and the number of renewals processed through the on-line system is derived from the TIDE database system. The Licensing Division is responsible for maintaining the data in the database concerning renewals. The Information Technology (IT) & Communications Division is responsible for maintaining the ECHO system.

Method of Calculation: The total number of renewals processed using the ECHO system is divided by the total number of individual licenses renewed during the reporting period.

Data Limitations: The agency has no control over the renewal preferences of individual licensees.

Calculation Type: Non-Cumulative

New Measure: Yes (2006)

Desired Performance: Higher than Target

### **Average Time for Complaint Resolution**

Definition: The average length of time to resolve a complaint during the reporting period.

Purpose/Importance: The measure reflects the agency's efficiency in resolving complaints as well as effort required by case type (complexity). It is also related to staffing and productivity..

Source/Collection of Data: The information is derived from the TIDE database. The Compliance & Enforcement Division is responsible for maintaining the data.

Method of Calculation: The total number of calendar days per complaint resolved (summed for all complaints resolved during the reporting period) that lapsed from receipt of a request for agency intervention to the date upon which final action on the complaint was taken by the Board, divided by the number of complaints resolved during the reporting period. The calculation excludes complaints determined to be non-jurisdictional of the agency's statutory responsibilities.

Data Limitations: The board does not have control over the mix of case types.

Calculation Type: Non-cumulative

New Measure: No

Desired Performance: Lower than Target

### **Number of Continuing Education Audits**

Definition: The number of audits performed by staff to verify continuing education documentation from license holders that have renewed during the reporting period.

Purpose/Importance: The Board is statutorily required to implement a continuing education program for all active license holders. Part of that requirement is a periodic audit of compliance with the continuing education requirements in terms of amount and quality of continuing education activities.

Source/Collection of Data: Audit candidates are randomly selected from all license holders that renewed during the renewal period in question. Letters are sent requesting proof of completion of the continuing education requirements. All completed

audits are recorded in the TIDE database. The Licensing Department is responsible for maintaining this data.

Method of Calculation: This measure is the count of all completed audits during the reporting period.

Data Limitations: None

Calculation Type: Cumulative

New Measure: Yes (2005)

Desired Performance: Higher than Target

### **Explanatory Measures**

#### **Total Number of Individuals Licensed**

Definition: Total number of individuals licensed at the end of the reporting period.

Purpose/Importance: The measure reflects the total number of currently licensed individuals, which indicates the size of the agency's primary constituency.

Source/Collection of Data: The information is derived from the TIDE database. The Licensing Division is responsible for maintaining the data in the database.

Method of Calculation: The total unduplicated number of individuals licensed at the end of the reporting period. The number does not include those individuals whose licenses have expired or are inactive.

Data Limitations: None

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

#### **Total Number of Firms Registered**

Definition: Total number of firms registered at the end of the reporting period.

Purpose/Importance: The measure reflects the total number of currently registered firms which indicates the size of the agency's engineering business constituency.

Source/Collection of Data: The information is derived from the TIDE database. The Licensing Division is responsible for maintaining the data in the database.

Method of Calculation: The total unduplicated number of registered firms at the end of the reporting period. The number does not include those firms whose registration has expired or are inactive.

Data Limitations: None

Calculation Type: Cumulative

New Measure: Yes (2005)

Desired Performance: Higher than Target

### **Exam Pass Rate**

Definition: The percent of individuals to whom examinations were administered during the reporting period who received a passing score.

Purpose/Importance: The measure reflects the rate at which examined passed the licensure examinations. This is an important step in the licensing process and a low pass rate may represent unnecessarily restrictive examinations or inadequate preparation by students or applicants.

Source/Collection of Data: The information is derived from the examination results provided in digital format by the National Council of Examiners for Engineering and Surveying and loaded into the TIDE database. The Licensing Division is responsible for maintaining the data in the database.

Method of Calculation: The total number of individuals who passed an examination is divided by the total number of individuals examined. Both the Fundamentals of Engineering and the Principles and Practice of Engineering Examinations are included. Presented by exam type.

Data Limitations: The agency has no control over examinee grades.

Calculation Type: Non-cumulative

New Measure: No

Desired Performance: Higher than Target

### **Number of Jurisdictional Complaints Received**



Definition: The total number of complaints received during the reporting period that are within the agency's jurisdiction of statutory responsibility.

Purpose/Importance: The measure indicates the number of jurisdictional complaints that assists the agency in determining the workload.

Source/Collection of Data: The information is derived from the TIDE database. The Compliance & Enforcement Division is responsible for maintaining the data.

Method of Calculation: The agency counts the total number of complaints received during the reporting period. The number of complaints that are not within the agency's jurisdiction are tracked by the agency but not included in the calculation.

Data Limitations: The agency has no control over the number of complaints filed.

Calculation Type: Cumulative

New Measure: No

Desired Performance: Higher than Target

## **APPENDIX E - WORKFORCE PLAN**

### **FORWARD**

The Texas Board of Professional Engineers (Board) Workforce Plan details Board efforts to regulate engineering services while striving to remain responsive to the licensing community it serves. The Workforce Plan forecasts goals and skills required to ensure that the agency is operating in accordance with its mission while upholding the standards required by the regulated license holders.

### **OVERVIEW**

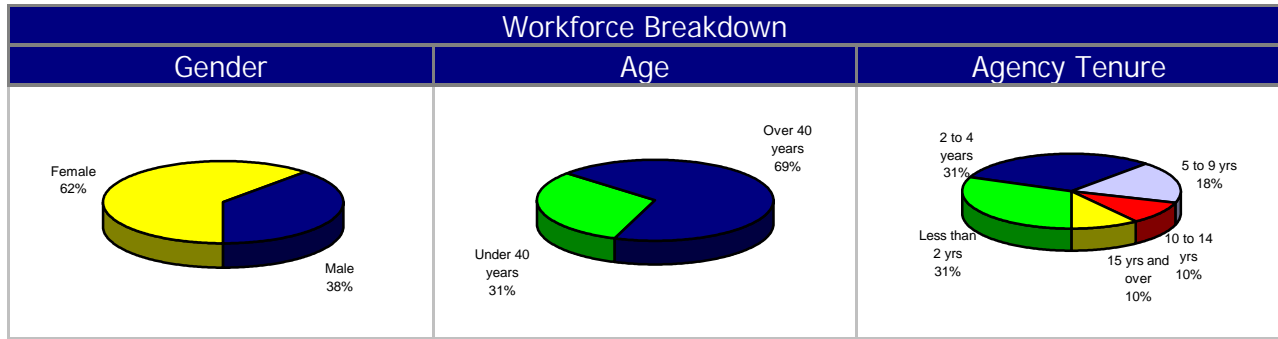
The small size of the agency requires it to work efficiently under the Self-Directed Semi-Independent (SDSI) Project Program and make it necessary that most staff members perform multiple job functions. The Board has high standards of performance and customer service that require the agency to maintain a highly skilled staff.

In the biennium, the Board has undergone a re-evaluation of resources and has made several major changes to management and staff, including bringing in a new Executive Director, Deputy Executive Director, and Director of Licensing. The knowledge, skills, and experience of our employees are vital to meet the goals and objectives of the Board.

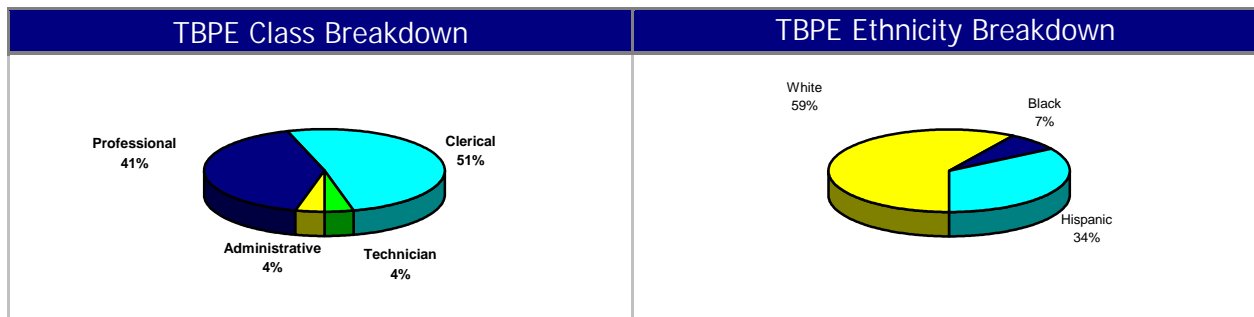
### **WORKFORCE DEMOGRAPHICS**

#### **Gender, Ethnicity, Age**

The following charts profile the agency's workforce as of June 2006. The agency's workforce comprises 62% females and 38% males. Over 52% of the employees are over the age of 40. More than 58% of employees have less than five years agency service. This percentage is high enough to warrant strong training programs to ensure our employees get up to speed as quickly as possible.



The agency has 29 full-time employees, which includes one exempt position. There are currently 1 administrative, 12 professional, 15 clerical employees, and 1 technician. Seven Professional Engineers are on staff to analyze and evaluate technical engineering issues and the technical/professional credentials of applicants. The ethnic distribution of the staff is 59% White, 34% Hispanic, and 7% Black.



### Employee Turnover

Turnover is an important issue in any organization and the Board is no exception. Average tenure in the agency is just under 6 years. The average employee turnover rate for the past two years was 26%.

### Retirement Eligibility

During the last two years, the Board lost three employees due to retirement. The agency estimates that the agency could lose up to three employees in the next five years due to retirement.

## FUTURE WORKFORCE PROFILE

The ongoing changes in engineering practice, technology, and the economy mean TBPE will have to revise and adapt current processes to meet future challenges. As a result, these are the changes we anticipate in our workforce:

### A. Critical Functions

- Expansion of Education and Community Outreach Functions;
- Administration of Policy Advisory section of Compliance & Enforcement;
- Administration of Continuing Education Program; and
- Manage and Maintain IT Initiatives In-house.

### B. Expected Workforce Changes

- Increased Use of Technology to Revise and Streamline Work Processes; and
- Increased Employee Cross-Training in Functional Areas.

### C. Anticipated Increase/Decrease in Number of Employees Needed to Do the Work

- Increased Demands to be Addressed by Adjustments in FTE Count;
- Flexibility from SDSI Program for Budget and Staffing Important; and
- Agency Needs to Review and Enhance Efficiencies.

### D. Future Workforce Skills Needed

To administer effectively and efficiently the variety of activities required, the agency relies on a competent and knowledgeable staff. In addition to the critical competencies listed before, additional skills will be essential for future positions:

- Change management;
- Process analysis;
- Collaboration;
- Negotiation and facilitation;
- Project management;
- Performance management;
- Strategic planning; and
- Business process re-engineering.

## APPENDIX F – SURVEY OF ORGANIZATIONAL EXCELLENCE

The agency participated in the 2005 Survey of Organizational Excellence. Based on the assessments, the staff indicated the following areas of interest:

Lowest Scores	Highest Scores
<ul style="list-style-type: none"> <li>• Fair Pay</li> </ul>	<ul style="list-style-type: none"> <li>• Quality</li> </ul>
<ul style="list-style-type: none"> <li>• Internal Information</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic Organization</li> </ul>
<ul style="list-style-type: none"> <li>• Team Effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of Information</li> </ul>
<ul style="list-style-type: none"> <li>• Holographic Organization*</li> </ul>	<ul style="list-style-type: none"> <li>• Physical Environment</li> </ul>
<ul style="list-style-type: none"> <li>• Benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Burnout</li> </ul>

The survey scoring system ranges from 1-500 with scores of 300 or higher indicating that employees perceive the issue more positively than negatively. The lowest score received by TBPE was 322 and the highest received was 410. The TBPE's scores in each survey dimension and in all survey constructs are higher than the benchmarks for all agencies surveyed.

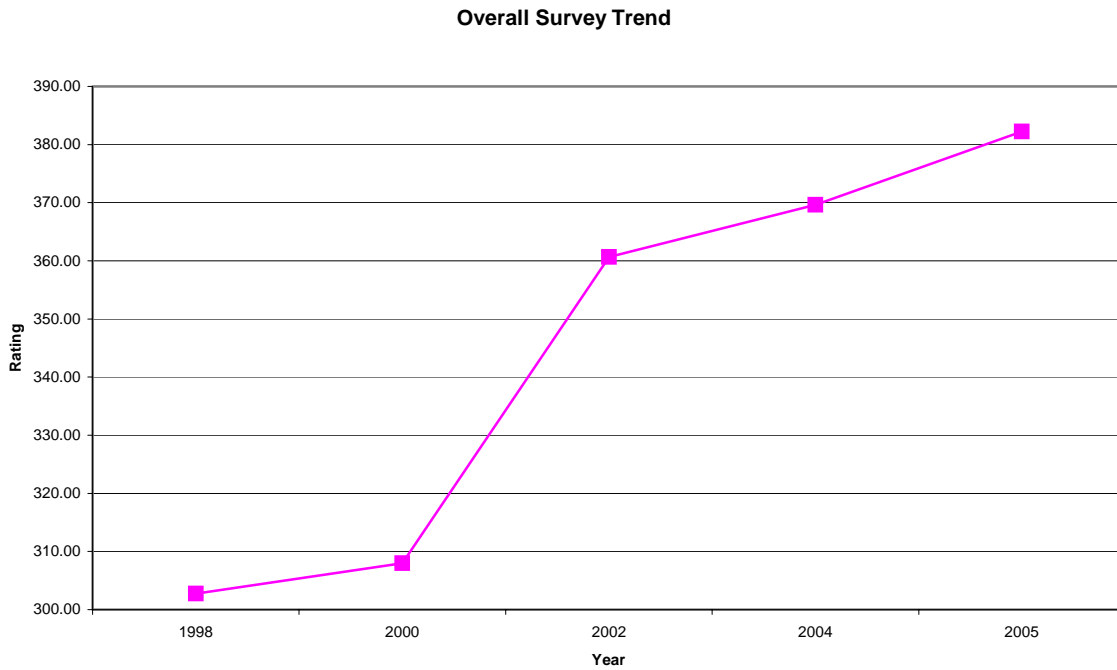
\* Holographic organization refers to the degree to which all actions of the organization "hang together" and are understood by all. It concerns the employees' perceptions of the consistency of decision-making and activity within the organization.

### TRENDS

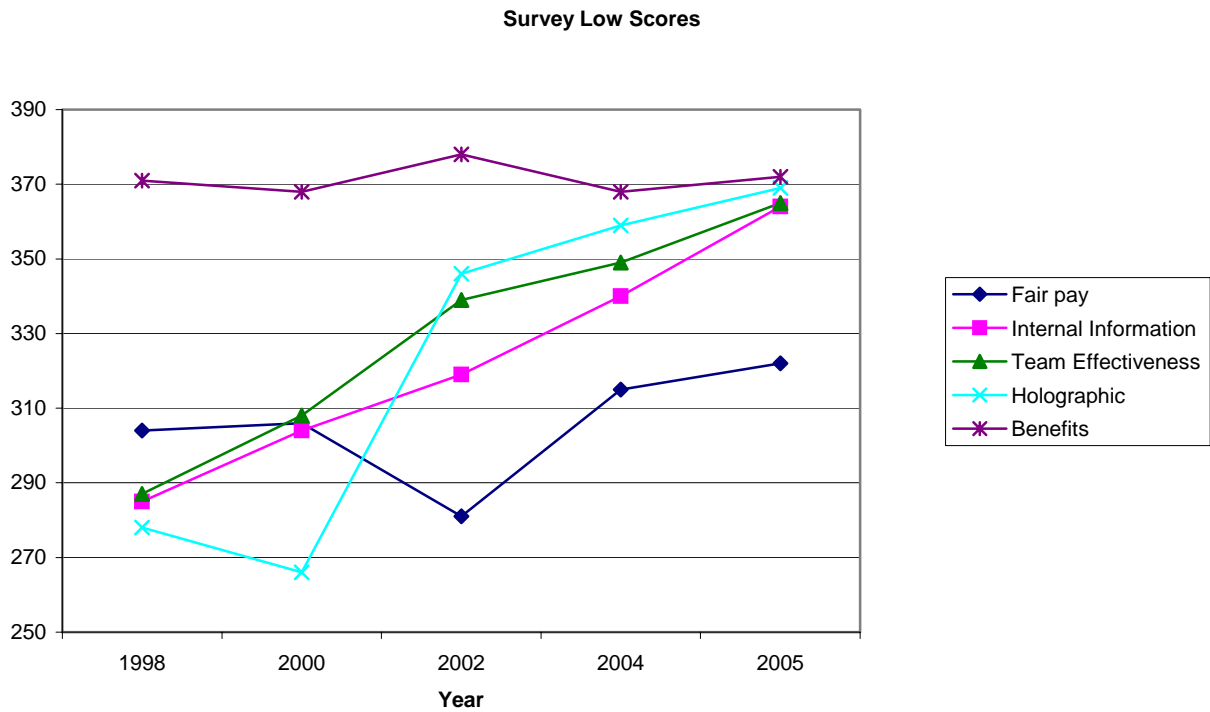
Data from the survey has been analyzed to show trends across the last four surveys. These trends show an overall improvement over time at TBPE in both areas that were rated as low and those that are rated highly by staff. In only three categories did the survey results drop or remain the same from the previous (2004) survey. All of these deviations were very small in comparison to the overall rating.

Category	Deviation from Previous Survey (2004)
Time and Stress	-9
Strategic Organization	-1
External Information	0

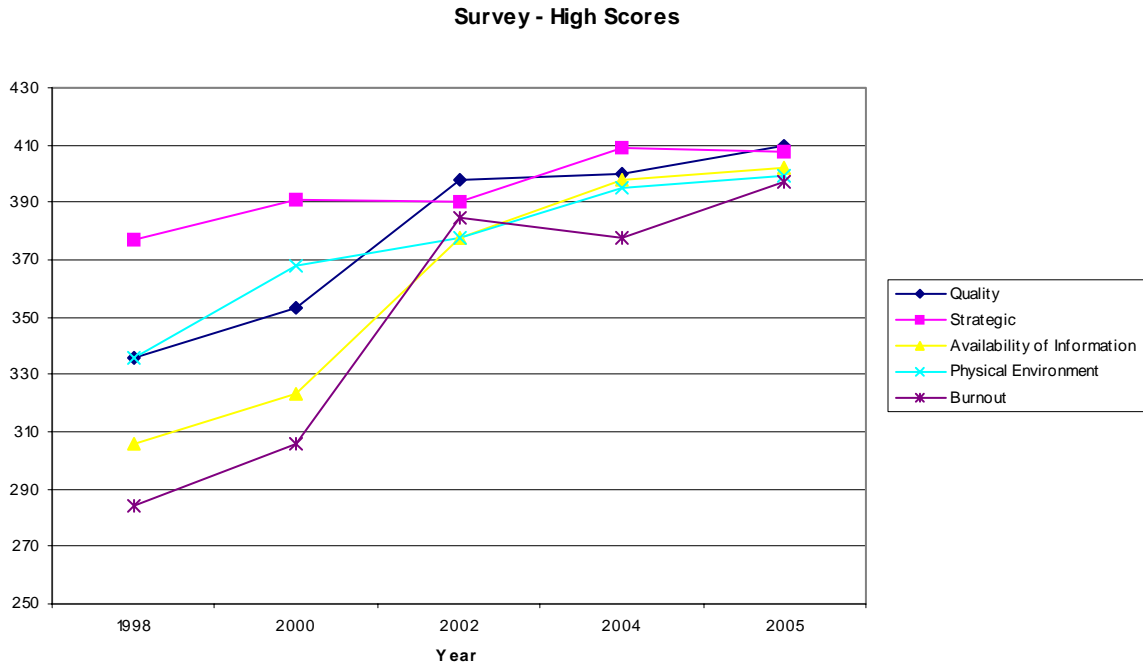
## Overall Rating



## Low Scoring Areas



## High Scoring Areas



## Summary

The Survey of Organizational Excellence has provided the Board with valuable information and is a vital part of our planning and review process. It provides important direction for improvements in our workforce.

## **APPENDIX G – SDSI Mission**

### **SELF-DIRECTED SEMI-INDEPENDENT PILOT PROJECT**

#### **SDSI Strategic Plan, Mission and Vision**

**Vision:**

The Semi-Independent, Self-Directed (SDSI) agencies envision a more effective, responsive and accountable system for the regulation of our professions.

**Mission:**

To enable the SDSI agencies to respond more effectively and proactively to the changing needs of licensees and the public.

**Purpose:**

The SDSI pilot program was created to demonstrate the effectiveness of operating independently of the appropriations process while becoming more accountable and responsive to the stakeholders and the Legislature.

**Goals:**

- Provide high quality administration through effective programs and services.
- Conduct business in a timely, efficient and cost effective manner.
- Strengthen the public's trust and confidence in the licensed professionals we regulate.
- Maintain competence of licensees through continuing education.
- Promote, encourage and expand training in ethics for licensees.
- Improve communication and customer service to all stakeholders.
- Protect the public interest through fair and forthright enforcement activities.
- Improve operational efficiencies by sharing best practices between the SDSI agencies.
- Provide for long-term planning to be responsive to a changing global business environment.
- Develop metrics to assess the benefits of SDSI on an ongoing basis.



## **APPENDIX H– 2007-2011 Projects**

### **Fiscal Year 2007**

- On-line firm renewals and applications
- Increased Outreach Program – Staff outreach, Workshops, Policy Advisory, NCEES committees, etc.
- Newsletter: 1/year mail out and electronic version
- Building Operations / Maintenance Program
- Staff Training Plan – Cross Training and Staff Development
- PE Recognition Program (Longevity)
- Process Improvement Plan and Documentation

### **Two-Year Plan**

- SDSI Continuation
- Outreach Expansion and Development of other media tools (e.g., DVD's, brochures, etc.)
- Building Operations / Maintenance (Cont.)
- Automating Board Application Review
- On-line Application Status
- NAFTA License Exchange Ceremony
- NCEES Southern Zone Initial Planning (2011) \*
- Emerging Technology Licensure Procedure \*

\* Also on Five Year Plan

### **Five-Year Plan**

- Computer Based Testing (Consider Texas Pilot Program)
- Emerging Technology Licensure Procedure
- NCEES Southern Zone Meeting (2011)
- On-line PE Applications
- Technology Upgrades