

Texas Board of Professional Engineers
Engineering For A Better Texas



Texas Board of Professional Engineers Professional Practice Update / Ethics

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Director of Licensing
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Engineering for a better Texas

Agenda

- Responsibility / Professionalism and Ethics
- Laws/Rules/Scenarios
- Legislative News
- TBPE Initiatives

Board Update

- New Chairman – Dr. Daniel Wong, P.E.
- New Board Members
 - Mr. Sina Nejad, P.E. – Beaumont
 - Mr. Kyle Womack, P.E. - Midland
- No longer on the Board
 - Dr. Bennett, P.E.
 - Dr. Raba, P.E.

Expectations of a Licensed Engineer

- Technical Competence
- Professionalism
- Ethical Responsibility
- Understanding of Laws and Rules

Public Perception of Engineers

- Honesty (Gallup Poll Nov. 2012)
 - Nurses
 - Pharmacists
 - Doctors
 - **Engineers**
 - Dentists
 - Police Officers
 - College Professors
 - Clergy

Public Perception of Engineers

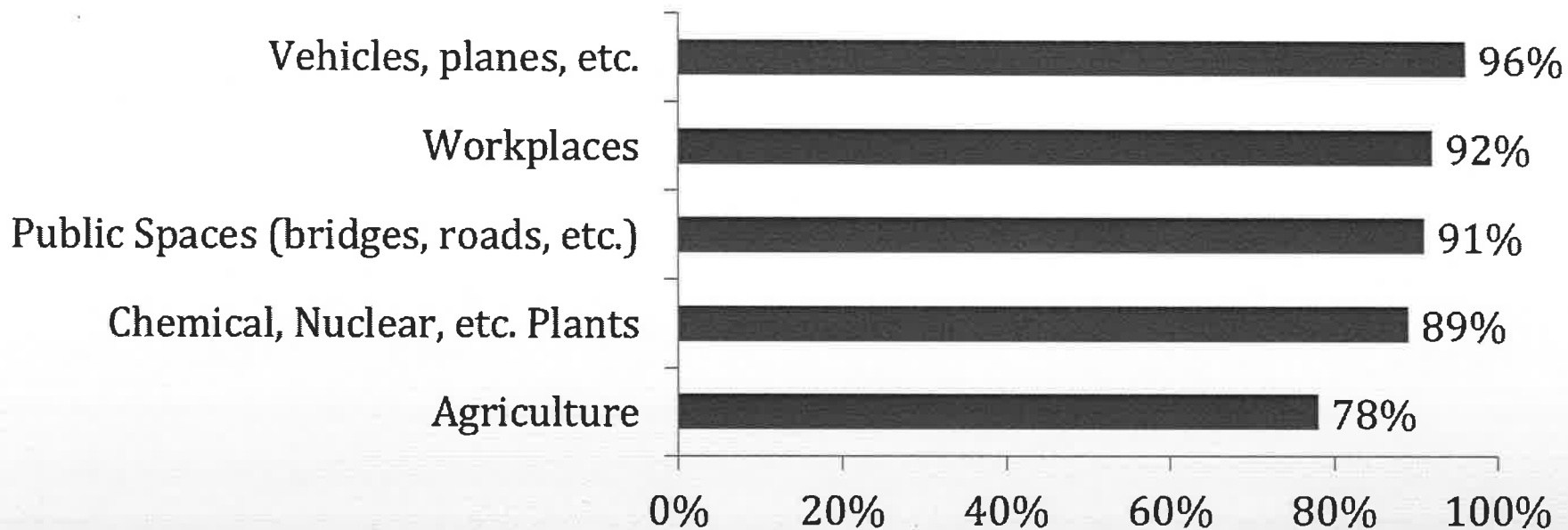


“What three words first come to your mind when you think of engineers?” (N=500)

Survey by McKinley Advisors

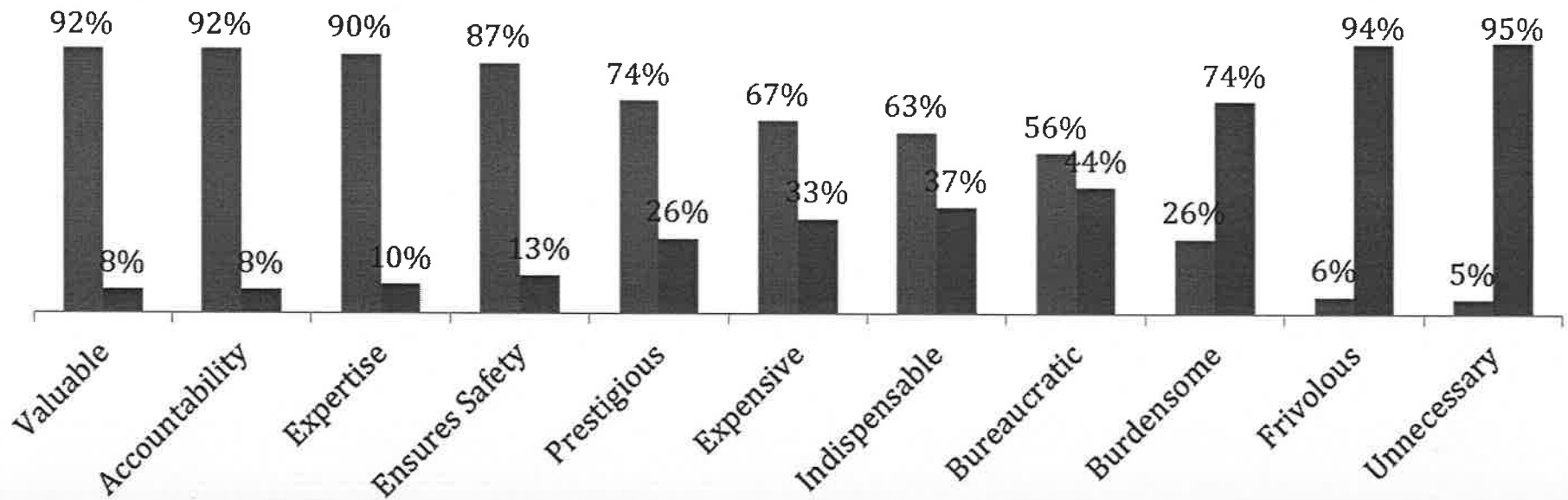
Public Perception - Safety

% Indicating "Very" or "Fairly" Safe



Survey by McKinley Advisors

Public Perception - Licensure



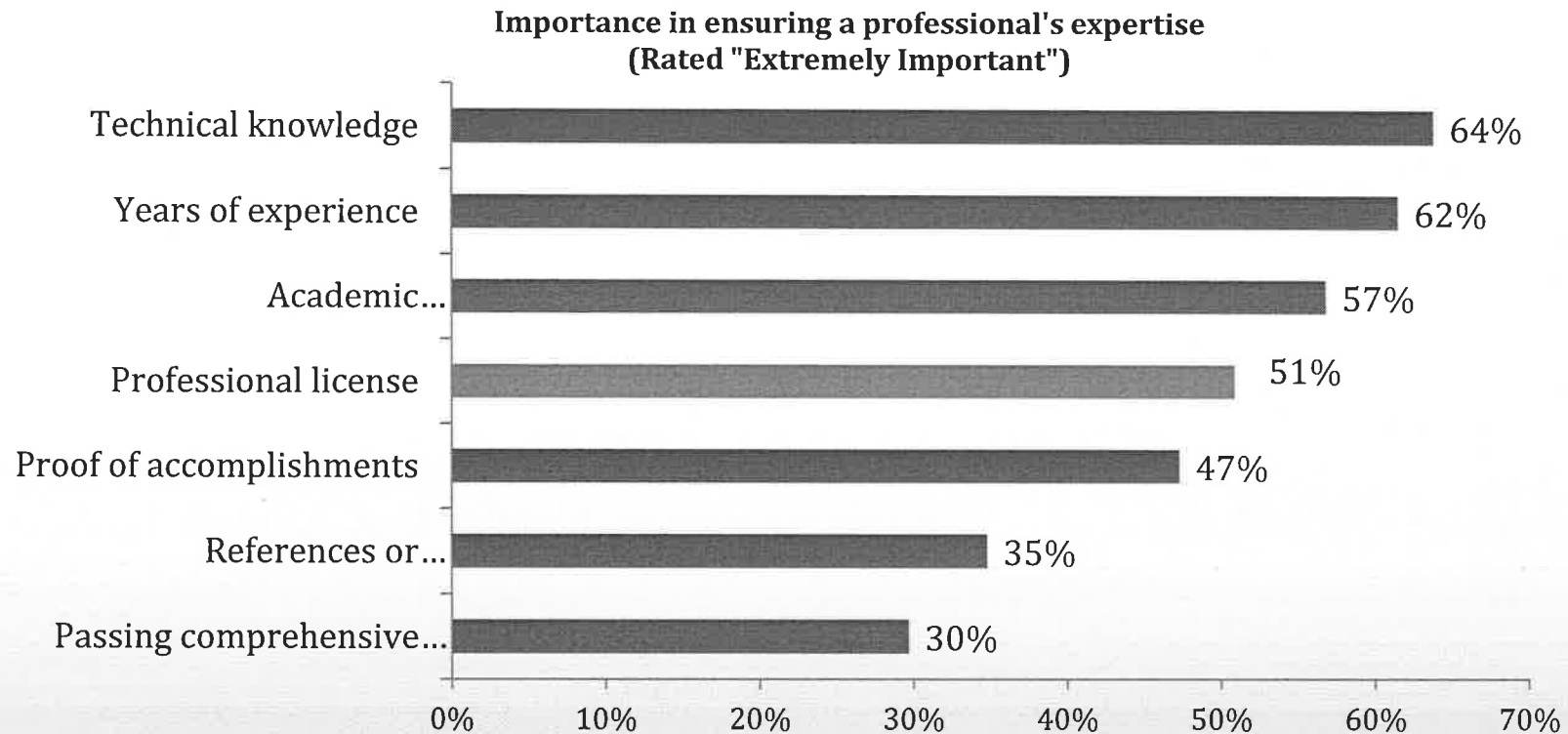
Please "click on" and "drag" each of these terms...based on whether you feel it describes professional licensure or not. (N=874)

■ Describes ■ Doesn't Describe

Survey by McKinley Advisors

Engineering for a better Texas

Public Perception - Licensure



"Please rate each of the following in terms of their importance in ensuring a professional's skills and expertise in their job/occupation" (N=998)

Survey by McKinley Advisors

Engineering Competence

- Protection of Public Health, Safety, Welfare
- Professional Engineers must not practice outside of their competence
- Competence is determined by experience, education and examination
- Competence is an expectation of the public

Engineering Ethics

- Ethical behavior / Professionalism
 - Not just what we do, but how we are expected to treat clients/employers/public/other engineers
 - Most TBPE enforcement is related to ethics rather than technical incompetence
- Laws and Rules

Law and Rules

- Board is authorized by the Texas Engineering Practice Act
- Other statutes also apply to engineering (PSPA, etc.)
- Board interprets and implements the statute to create Rules
- Texas Professional Engineers are expected to know both

Scenarios

- Continuing Education
- Professional Services Procurement Act
- Sealing Rules
- Confidentiality
- Supervision/delegation
- Firm Registration
- Professionalism

Continuing Ed

- You have been licensed for years and have always had more than enough hours for each renewal.
- You misplaced your renewal reminder and the expiration date is in a few days.
- You were busy and haven't completed any continuing education activity this year.

What should a Texas PE do?

- A. Go online and renew without completing the Continuing Ed hours and try to take some courses as soon as you can.
- B. Keep working, wait to renew until you have the Continuing Ed hours which could be a few weeks and then renew.
- C. Check your records from last year to see if you had extra hours.
- D. Call the board and ask for an extension.
- E. None of the above.

And the best answer is?

- **C** – You need to have the Continuing Education hours prior to renewing. You can carry forward up to 14 hours from one renewal period to the next, excluding the hour of ethics.
- Self study is limited to 5 hours and can be used for ethics.
- If you don't renew, your license is delinquent and you cannot practice.
- If you do renew and certify that you have completed Continuing Ed but have not, your license is subject to censure.
- Renew in ECHO. It's immediate and you get confirmation.

Continuing Education

- 15 hours – includes no more than 5 hours of self-study and must include one hour of ethics
- Random audits ongoing
- Keep documentation for 3 years
- Over 65 not exempt
- Fines as high as \$2,500; separate violations for claiming Continuing Ed without documentation or not responding to Board.

Professional Services Procurement Act

- The local Independent School District has properly posted an RFQ and selected an engineering firm to be the prime professional for a new Auditorium/Gym. After negotiations, the ISD and the firm agree on a contract price.
- As the project progresses, the engineering firm contracts with a MEP engineering firm to address the HVAC, electrical and plumbing design.

PSPA (continued)

- The MEP firm calls you for assistance, because he has worked with you previously. You are a licensed P.E. with HVAC expertise and he asks you to give him a cost estimate to complete the HVAC for the new auditorium/gym.

What should a Texas PE do?

- A. Give him your best estimate of the cost.
- B. Wait for a proper authorization to proceed from the prime professional firm who has the contract with the ISD.
- C. Call the Board for authorization to provide the estimate.
- D. Ask the MEP firm if you have been selected as the HVAC engineering firm prior to providing any cost information.
- E. Respectfully decline to offer any cost or price information.

Best Answer

- **D** – You must follow the Qualification Based Selection process by being selected prior to offering any cost or price information as outlined in the Professional Services Procurement Act (Chapter 2254 of the Texas Government Code) and as identified in the Board Rules, Section 137.53.

Seals

- Your lead engineer on a project has been overseeing all aspects of the design and construction.
- He has a severe health issue is keeping him from the job for an extended time at the same time that there is a deadline for plan submission.

What should a Texas PE do?

- A. Ask an employee under his supervision to copy his seal and digital signature from the shared drive and use them.
- B. Have the documents sent with his seal and assure the authority that he'll come in to sign them later.
- C. Mark the plans as "preliminary"
- D. Negotiate a new deadline
- E. Sign and seal the plans yourself before the deadline.

Best Answers

- **C or D** – Mark as preliminary or renegotiate the deadline
- 137.33(d): License holders shall take reasonable steps to ensure the security of their physical or electronic seals and electronic signatures;
- 137.33(e): Preliminary documents are not sealed.
- 137.33(f): Sealed documents require a signature.
- Only the licensee may use his or her seal.
- 137.33(a): A PE can only sign and seal their own work or work under direct supervision.

A Twist

- What happens if the PE never returns to work?
- Another PE can sign and seal the work if the PE performs sufficient calculations to verify the accuracy of the engineering work and make it his own work.

Confidentiality

- You were the structural design engineer for a new church and that design was released to the church and they contracted the construction to another company. Subsequent to completion, a portion of the church has had a collapse that resulted in some minor injuries.
- It was determined that the failure was a construction problem, as the design had not be followed. You are approached by a good friend of yours whose child had been injured in the collapse and he asks you for a copy of your original design for the project.

What should a Texas PE do?

- A. Since he is a good friend, you give him a copy of your design.
- B. Before you give him a copy you make sure that he does not have any lawsuits pending.
- C. Remove your seal and signature before you give him a copy.
- D. Contact your client, the church, and obtain written approval to release a copy of the design.
- E. Refuse to provide a copy since his child was involved.

Best Answer

- **D** –Board Rule, Section 137.61 requires that engineers maintain the confidentiality of their clients.

§137.61 Engineers Shall Maintain Confidentiality of Clients

- (a) The engineer may reveal confidences and private information only with a fully informed client's or employer's consent, or when required by law or court order; or when those confidences, if left undisclosed, would constitute a threat to the health, safety or welfare of the public.
- (b) The engineer shall not use a confidence or private information regarding a client or employer to the disadvantage of such client or employer or for the advantage of a third party.
- (c) The engineer shall exercise reasonable care to prevent unauthorized disclosure or use of private information or confidences concerning a client or employer by the engineer's employees and associates.

Supervision

- You are hired by the client to perform an inspection in order for the client to be eligible to procure insurance.
- You are very busy, so you send an employee under your supervision to the property with instructions to check everything out and make sure it meets code.

Supervision

- Based on his work, you sign an inspection report and send it to the appropriate authority.
- The authority decides to audit this certification and sends you a letter giving you 10 days to respond with all your calculations and product sheets/information to verify that the property meets the required code for the zone in which the property is located.

Questions

Supervision:

- Can you send an employee to do this inspection?
- What if the employee is an EIT and not a PE?
- Who is responsible?

Best Answers

- You may put your name and seal on work done by another individual if it is under “direct supervision”.
- The work under the supervision of a PE can be done by another PE, an EIT, or another qualified employee.
- **The PE is responsible for work done under his supervision.**
- 131.81(10) Direct supervision defined.

Questions

Review:

- Does the authority have the discretion to audit the report?
- Can the authority demand you provide your calculations and product sheets to verify that the property meets pertinent codes?
- Are you required to respond?
- Is 10 days reasonable?

Best Answers

- Local Officials, TDI, TDLR, etc. have the authority to request additional information and non-PEs may review the work.
- Not responding to a regulatory authority in a timely manner could result in an enforcement action by the requesting agency as well as the TBPE.
- 10 days may be reasonable since this is an audit of existing information, but an extension may be available, if requested.

Firms

- As a licensed Professional Engineer, you have worked for 20 years performing civil engineering work for your employer, a utility company.
- You have some extra time and want to do some extra work on the side, but haven't done it yet.
- Your church needs some design work and you want to donate your time and talents.

What should a Texas PE do?

- A. Since you are not changing employers or getting paid for the other work, no notification is required.
- B. Register yourself as a new engineering firm with the Board after you have been awarded your first paid engineering job for a client.
- C. Register the engineering firm you will be operating with the Board before you offer or provide any engineering services.
- D. Notify the Board of your secondary employment.

Best Answer

- **C & D**
- §137.59: An engineer must practice within their area of competence.
- §137.5: The Board must be notified of employment change within 30 days, including secondary employment. Changes made in the ECHO system are official.
- §137.77: Offering or performing engineering services requires registration with the board, even if operating as a sole practitioner (single employee firm). And even if you don't get paid.

Professionalism

- After a hurricane, a homeowner contacted a PE to provide an engineering report regarding damages.
- The insurance company denied the claim based on an independent analysis done by other PEs (Mr. X and Mr. Y) that refuted the original report.
- The homeowner asked the original PE to review and comment on the second report.

Professionalism

- His analysis included several comments:
 - “Both authors of the report are in violation of Texas law regulating the practice of engineering in the State of Texas—in my opinion.”
 - “...the reports are nothing more than speculation by persons who are not from Texas, do not live in the state and have minimal to no experience with weather in the area.
 - “There is no evidence that the Mr. X and Mr. Y ever investigated your property and claims personally.”
 - “I find these statements arrogant and naïve: arrogant because Mr. X has absolutely no knowledge of how the house was built and naïve because Mr. Y clearly has no knowledge of the atmosphere in Houston which is highly corrosive.”

Professionalism

- His analysis included several comments:
 - “Clearly Mr. Y has no knowledge of remedial foundation repair. He claims to be a structural engineer with much experience—apparently that extensive experience does not include the investigation of residences that have undergone significant foundation movement. Perhaps he should limit his practice to the bayous in Louisiana.”
 - “By stating the damages to your house were not the result of the storm, but “construction deficiencies”, Mr. X and Mr. Y are calling both you and me liars. This is unprofessional.”
 - “It is surprising to me how an experienced engineer like Mr. X could make such a stupid statement in a report to a client.”

Was the Analysis Professional?

- A. The Board rules don't apply because the First Amendment to the U.S. Constitution guarantees each person the right to say whatever they want as freedom of speech.
- B. The report was not disrespectful because it was simply giving his personal opinion of the other engineers work product to his client as he is authorized.
- C. The report was disrespectful because by the very nature of the words used, the report went beyond a discussion of the engineering issues that might be properly discussed and attacks the character and motives of the other engineers.
- D. The report was disrespectful, but the words used were not unprofessional because that term is not defined in Board rule and so no one can know what it means.

Best Answer

- C
- The words used clearly attacked the motives and credential of the other engineers in a personal and nonprofessional way. The right of free speech is not unlimited, and the unprofessional nature of words or conduct can be established as a matter of practice and custom of what is and is not acceptable in a particular community (engineering profession).
- 137.63(b)(5) provides that “The engineer shall conduct engineering and related business affairs in a manner that is respectful of the client, involved parties and employees. Inappropriate behaviors or pattern of inappropriate behaviors may include but are not limited to...unprofessional correspondence or language...”.

Best Answer

- 137.63(c)(2) provides that “The engineer shall not: maliciously injure or attempt to injure or damage the personal or professional reputation of another by any means. This does not preclude an engineer from giving a frank but private appraisal of engineers or other persons or firms when requested by a client or prospective employer.”

Know the Law

- PEs are required to know the Act, Board Rules, applicable state laws and local codes.
- Windstorm, Architectural Barriers/ADA, etc.
- If you have any questions about interpretation of the Act or Rules, contact us.
- Keep an eye on our emails and newsletter to make sure you know about changes.

Filing A Complaint

- Online, email, phone, mail – all are acceptable for initial contact
- A complaint form or detailed letter/email is needed to cover all the bases
- Provide specific instances of violation
- Provide evidence to show probable cause

Complaint Process

- If a complaint is filed against a PE
- A letter would be sent from the Board explaining the charge in detail
- Written response required
 - Providing as much documentation as possible
 - The person should be open, honest and forthcoming.

Enforcement Sanctions

- Reprimands (Formal and Informal)
- Suspension (possible probation)
- Refuse to Renew
- Revocation
- \$3,000 per violation per day

Violations are Published

- By law, all violations, except informal reprimands, must be published
 - On website by Board Meeting Date
 - Added to NCEES Enforcement Exchange (national database)
 - Published in the paper newsletter which is mailed at least annually and quarterly E-newsletter emails

Preventing Complaints

- CLEAR:
 - Communication (between all parties)
 - Contract (expectations and responsibilities)
 - Calculations (do excellent work)

Most importantly – know the law, and call if you have a question

Legislative News

Engineering for a better Texas

Bills

- **SB 204** and HB 1676
 - TBPE Sunset companion bills
- SB 208 and **HB 1685**
 - SDSI Sunset bill companion bills
- Bills being tracked potentially affecting the Texas Engineering Practice Act: <http://engineers.texas.gov/legislature83.html>

Sunset Review – 2012-13

- On site evaluation FY 2012
- Initial Commission Staff Report – October, 2012
- Legislative Commission Hearings November and December
- Commission recommendations being drafted into Bill language
- Regular Session January – May 2013

SB 204 Changes

- Agency
 - Continue 12 years
- Enforcement
 - Cease and Desist for Unlicensed Practice
 - Direct authority
 - Summary Suspension Orders
 - Immediate action, specific timing for appeal requests
 - Increase maximum penalty from \$3k to \$5k

SB 204 Changes

- Licensing
 - Exam references
 - No longer all 8-hour exams
 - Background Checks - Fingerprinting
 - For new applicants and 1st renewal for ALL active license holders
 - January 1, 2014
 - Professional Fee for applications
 - Separates application fee from Professional fee
 - August 1, 2013

SB 204 Changes

- Background Checks - Fingerprinting
 - DPS criminal history search using FBI database
 - Met with DPS staff and fingerprint vendor
 - Special numeric code for TBPE
 - Working on automation of data for efficiency
 - In-person locations within Texas; additional procedures for Texas PEs outside of Texas

HB 1685

- Self-Directed / Semi-Independent
 - Continue under new statute (Govt. Code, Chapter 472)
 - Additional Reporting
 - Enforcement Sanctions go into General Revenue

Update on NCEES

- CBT – Computer Based Testing – FE 2014
- Exam changes
- Industry Exemption discussions
- BS+30/Masters Or Equivalent is a part of NCEES model law to be effective 2020



TBPE Excellence

Engineering for a better Texas

Journey to Excellence

- Our goal in 2013
- Implementing Malcolm Baldrige Quality Principles
- Pursuing Quality Texas Award for Performance Excellence

Journey to Excellence

- Strategic Planning
 - Communications
 - Communication Plan / External / Customer Service
 - Resource Development
 - Staff / Workplace / Internal Communication
 - Process and Product Improvements
 - Innovation / Tools / Performance Measures

Communication Improvements

- Website redesign
- Quarterly email updates
- Reaching out to the more stakeholders
- More Outreach / Visibility

Outreach – continuing excellence

Fiscal Year	Attendees	Presentations
2009	6,928	120
2010	9,145	157
2011	8,954	153
2012	7,332	166

- Webinars
- Includes K-12
- E-Week

Compliance and Enforcement Improvements

- Focus on violation deterrent
- 10% increase in the number of disciplinary actions since last year
- Developing on-line Complaint Processing System
- New Staff Attorney cleared backlog of Administrative Hearing cases
- Decreasing complaint resolution time

We want to hear from you

- How did we do today?
- How are we doing in general?

<http://engineers.texas.gov/outreachsurvey>

<http://engineers.texas.gov/feedback>

Contact TBPE

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