Texas Board *of* Professional Engineers
Engineering For A Better Texas

TBPE

Texas Board of Professional Engineers Professional Practice Update / Ethics

Webinar
June 2016

http://engineers.texas.gov/outreachsurvey

Engineering for a better Texas

Welcome

- Lance Kinney, PhD, P.E.
  - Executive Director
  - Lance.Kinney@engineers.texas.gov

Presenters

- **Lance Kinney, PhD., P.E.**, Executive Director
  - Lance.Kinney@engineers.texas.gov

- **David Howell, P.E.**, Deputy Executive Director
  - David.Howell@engineers.texas.gov

- **CW Clark, P.E.**, Director of Compliance & Enforcement
  - CW.Clark@engineers.texas.gov

Webinar Info

- Webinar audio can be through your computer speakers or through the phone.
- All attendees will be in Listen-only mode.
- During the presentation, use the Question feature in the webinar software, not the chat feature or the hand raising feature.
- If there are questions, not addressed, please email the presenter.
- We will be using Polls during the presentation.
- A pdf of the slides is available on the TBPE website.

Webinar Documentation

- Documentation of attendance for Continuing Education purposes will be the follow up email from the Webinar system.

- If registered as a group, please keep a sign-in sheet for all attendees

Website and Social Media

http://engineers.texas.gov

- Facebook: Texas Board of Professional Engineers
- Twitter: TBPE_Exec
- LinkedIn: Texas Board of Professional Engineers
- RSS Feed on our website: http://engineers.texas.gov
- YouTube: https://www.youtube.com/channel/UCm0YTnjR3StveBxWhCT4MiA

AGENDA

- About the Board
- Professionalism
- Outreach/Visibility
- Policy Advisory Opinions
- Legislative Update
- Board Initiatives

TBPE

Nine Members - Appointed by Governor

- 6 Licensed Professional Engineers
- 3 Public Members
- Standard term is 6 years

TBPE

Daniel O. Wong, PhD, PE

Chairman - Houston

Lamberto "Bobby" Balli, PE

San Antonio – Vice Chair

Edward Summers, PhD (public member)

Austin – Treasurer

Sockalingham "Sam" Kannappan, PE

Baytown – Secretary

Catherine Norwood, PE

Midland

Elvira Reyna (public member)

Denton County

Sina K. Nejad, D.Eng, PE, PEng

Beaumont

Kyle Womack, PE

Midland

Albert Cheng (public member)

Houston

Engineering for a better Texas

TBPE Staff

31 Staff members, Austin

Lance Kinney, PhD, PE - Executive Director

David Howell, PE – Deputy Executive Director

CW Clark, PE - Compliance & Enforcement

Robert Opiela, PE - Licensing

Jeff Mutscher - Finance

Janet Sobieski - Information Technology

Professional Engineer

Board Primary Functions

- Licensing Qualified Engineers
- Enforcement of Engineering Practice Act
- Requiring Continuing Education
- Educate – PEs, Officials, Potential PEs, Public

Professional Engineer
Expectations

- Protection of the Public
- Ethical
- Competent
  - Initial Qualifications
  - Staying Current
- Professionalism

Professionalism

More than just Codes and Rules

"Meticulous adherence to undeviating **courtesy**, **honesty**, and **responsibility** in one's dealings with customers and associates, plus a **level of excellence** that goes **over and above** the commercial considerations and legal requirements."

http://www.businessdictionary.com

Professionalism

Chapter 137 Subchapter C – Professional Conduct and Ethics

- §137.53 - Engineer Standards of Compliance with Professional Services Procurement Act
- §137.55 - Engineers Shall Protect the Public
- **§137.57 - Engineers Shall be Objective and Truthful**
- §137.59 - Engineers' Actions Shall Be Competent
- **§137.61 - Engineers Shall Maintain Confidentiality of Clients**
- **§137.63 - Engineers' Responsibility to the Profession**

Professionalism

§137.57 - Engineers Shall be Objective and Truthful

- Avoid Misleading, Fraudulent, and Deceitful Actions
- Avoid Conflicts of Interest

§137.61 - Engineers Shall Maintain Confidentiality of Clients

§137.63 - Engineers' Responsibility to the Profession

- Be a Faithful Agent for Employers or Clients
- Guide the Actions of Others related to Law and Rules
- Conduct Business in a Respectful Manner (billing, language, etc.)
- Do Not Injure Professional Reputation of Others
- Do Not Retaliate

TBPE

Professionalism

"It is one of the primary obligations of the Texas Board of Professional Engineers to assure that Texas engineers are held to the highest standards of competency, integrity, and honesty. Public safety depends upon that standard and consistently achieving in our profession requires faithful and unwavering practice of honesty and integrity in all aspects of our lives not only when we sit at our desk."

- Received from a Texas PE in a reference statement letter

TBPE

Professionalism

- Ethical Behavior
  - 61,000 licensed PEs (at the end of March 2016)
    - ~750 Cases opened
    - 70% resolved with Voluntary Compliance
    - 12% Dismissed
    - Board action includes range of action up to revocation
  - Responsibility to Protect the Public

Filing A Complaint

- Mail, email, phone, facsimile – all are acceptable for initial contact
  - Anonymous complaints are accepted
- A complaint form or detailed letter/email is needed to cover all the bases
  - Forms can be found Online
- Provide specific instances of violation
- Provide evidence to show probable cause

Enforcement Sanctions

- Reprimands (Formal and Informal)
- Suspension (possible probation)
- Refuse to Renew
- Revocation
- $5,000 per violation per day
- Cease and Desist Orders
- Emergency Suspension

Violations are Published

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

Preventing Complaints

- CLEAR:
  - Communication (between all parties)
  - Contract (expectations and responsibilities)
  - Calculations and designs (be prepared to support)
- Keep your Documentation

Most importantly – know the law, and contact us if you have a question!

David Howell, P.E.

- Deputy Executive Director
- David.Howell@engineers.texas.gov

Professionalism

scenario

- You are a licensed PE in multiple states working for a Registered International Firm.
- You have been asked by a client to perform an engineering analysis of the completed work of another Engineer in another state and provide a report to the client.

Professionalism

scenario

- You had inadvertently let your license expire in the state where the project is located, but you live in Texas and your Texas license is Active and current.

Professionalism

scenario

True or False?

You would be in violation if you performed the work as described.

True. If the other state's licensing rules are like Texas rules, you would be in violation if you perform engineering for a project located in that state if your license is not current.

It does not matter where you are physically located.

Professionalism

scenario

- You made the choice to do the work.
- The state Board in that state found you in violation and took their lowest level formal enforcement action against you since you resolved it quickly.
- So… What are you expected to do now?

Professional Obligation

A. Take no action. Low level actions do not need to be reported.

B. Report the actions to the Texas Board at the time of your next renewal.

C. Report the action to the Texas Board as soon as possible.

D. Wait for the Board to contact you about the violation to see if it's necessary.

E. None of the above.

Answer

- **C**

- § 137.5 (c) Each license holder shall notify the board in writing not later than 30 days after a misdemeanor or felony criminal conviction, <u>or any sanction is imposed</u> against a licensee by another state's engineering licensing board.

Outreach

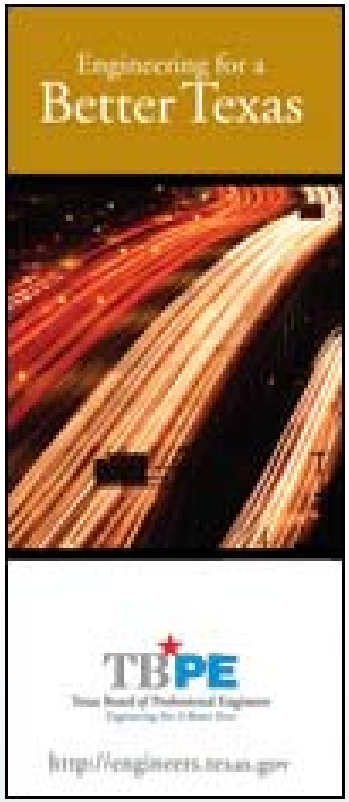
- What is a P.E.? / What do they do?
- Public Perception
- The Value of Licensure
- How does the TBPE fit in?

Outreach Publication

General

Engineering for a Better Texas

Agency overview and history



History of TBPE

- Created by Texas Legislature (45R) in 1937
- New London School Explosion
  - 300 students and teachers killed
  - Result of improperly designed mechanical and electrical devices
- Established a Board to regulate the practice of engineering through licensing and rules of practice

- C. W. Clark, P.E.
  - Director of Compliance & Enforcement
- CW.Clark@engineers.texas.gov

Working with Government

- Government Advisory Group
  - State agencies, Cities, Counties, School Districts
- TBPE Outreach
  - Building Officials
  - Texas Municipal League, etc.
- What we can do for them
  - When PE is required on projects / public works
  - Better understanding of State Laws
  - The role of a Professional Engineer

Outreach Publication

Government

When is a Professional Engineer required on a project?

Flowchart to assist building and Code compliance officials.

TBPE

When is a **Professional Engineer** required on a project?

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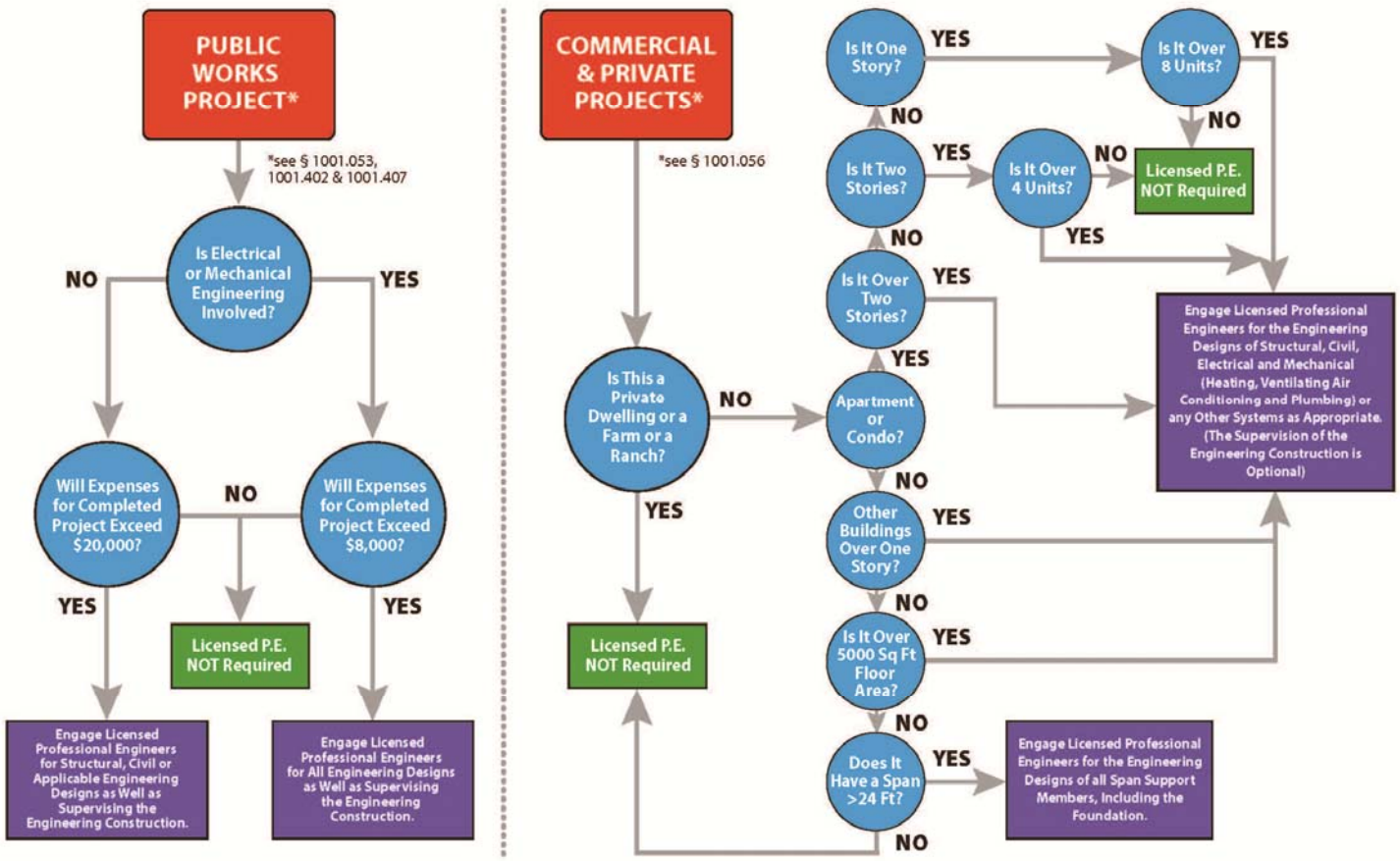

This flowchart is intended for guidance purposes only and the Texas Engineering Practice Act and Rules govern final interpretation. Local codes and ordinances may be more restrictive as long as not in conflict with the Texas Engineering Practice Act and Rules.

Visit http://engineers.texas.gov/downloads.htm for a copy of the Texas Engineering Practice Act and Board Rules and download this diagram.

Seal

scenario

- You are a Texas PE contract employee for a Firm that is lead on a project overseeing all aspects of the design and construction.
- The lead engineer you're working under has a severe health issue 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?

True or False?

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 or her own work.

True!

More questions

- If you were asked to review, sign and seal the work, can you do it as a Contract Employee?
- Yes.
- What Firm name should be on the document?
- As a contract employee for a company, Board rules would consider you an employee, so you can use the Firm name and number on a document unless the work is subcontracted to you as a separate company (with a separate firm registration).

Seals

Which of These is Correct?

A

B

C

And the best answer is?

- **B or C**
- 137.33(f) License holders shall affix their seal and original signature or electronic seal and signature with the date on the final version of their engineering work before such work is released from their control.
- (1) The signature and date shall not obscure the engineer's name or license number in the seal.

Continuing Education

Scenario

- 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.

Continuing Education

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.

Answer

- **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.

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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 $5,000; separate violations for claiming Continuing Ed without documentation or not responding to Board.

Professional Services Procurement Act (PSPA)

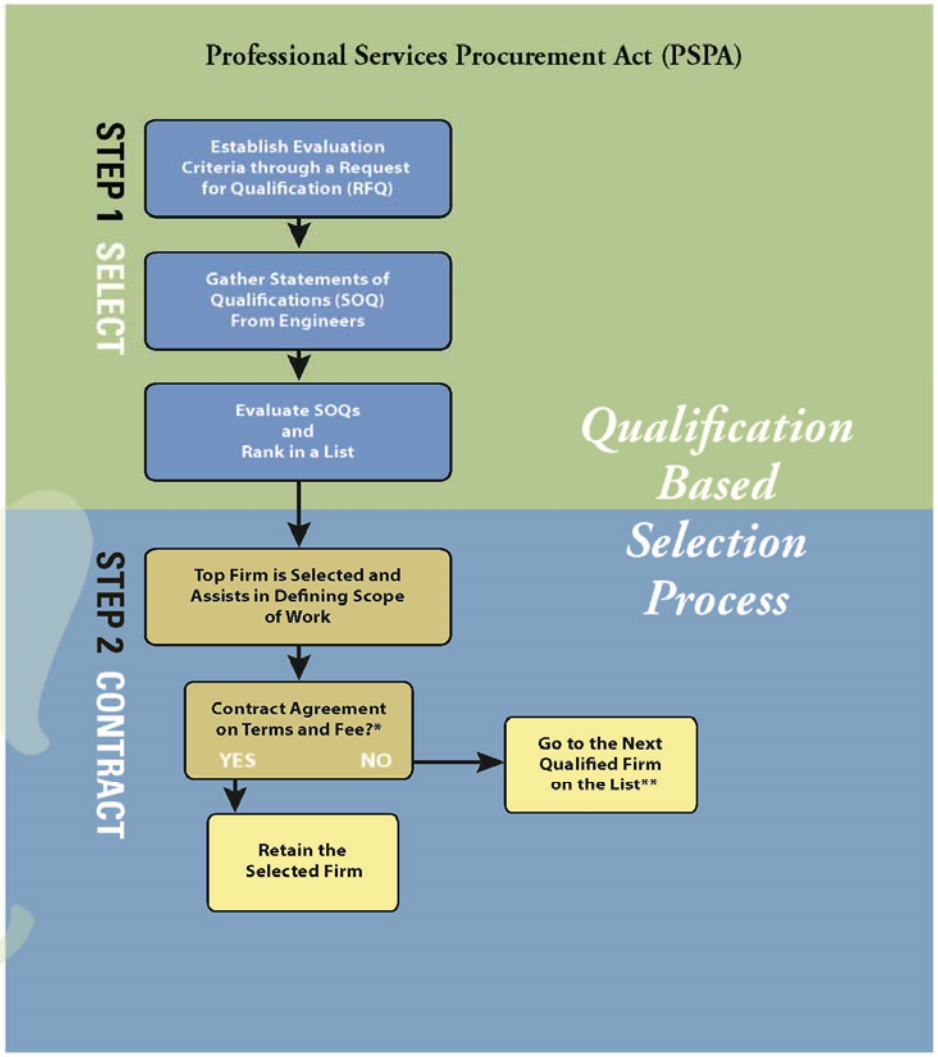
- Qualifications Based Selection (QBS) for engineering on public projects
- Responsibilities of Professional Engineers
- Responsibilities of Public Officials in RFQ / RFP process

Outreach Publication

Government

What is the Professional Services Procurement Act?

Flowchart to assist building and code compliance officials.



*At no time should the fee proposal of one firm be compared to the fee of another. Agreement on fee should be based on the merits and information of one firm at a time.

**Negotiation with only one company or firm at a time may take place to be in compliance with TAC 2254.004 (b).

PSPA

scenario

The local Independent School District has posted a Request For Qualifications (RFQ) for engineering services to design a new Auditorium/Gym. Included in their RFQ is a requirement for the firm to include an itemized list of employees and their salaries in a sealed envelope to be opened after selection.

PSPA

scenario

- As a properly registered firm with licensed engineers your firm wants to respond to this RFQ for consideration.
- As the licensed professional engineer responsible for responding to such RFQs you prepare your firm's credentials and experience into a proper response.

TBPE

What is the least appropriate response?

A. Include the list of your employees with the required salaries in a sealed envelope.

B. Include a list of your employees without salaries in a sealed envelope.

C. Refuse to respond to this RFQ because the list of employees salaries is a violation.

D. Notify the ISD that they are in violation.

E. Notify the Texas Board of Professional Engineers.

Answer

- **A** – According to Board Rule, §137.53, it is a violation to provide "cost and/or pricing information or any other information from which pricing or cost can be derived", prior to being selected. Sealing the envelope is not an exception to the rule.

Better Options

- D - As a first alternative, notify the ISD that it is a violation for you to respond completely as requested. You should also inform them that their request is not consistent with the PSPA. It could just be a misunderstanding.
- B (response without salaries) - a viable option, but you should include why you have excluded the list, understanding that they may disqualify you.
- C (not responding) - means you won't be in the running. This also means the ISD would never be aware of the law.
- E – Contacting the TBPE is always an option, but may not be necessary. The Board may be able to help convince the ISD to issue an amendment prior to RFQ response opening.

Outreach Publications

Applicants

How to Become a Licensed P.E.

Benefits of Being a Professional Engineer.

Exemptions from Licensure

- Private Entities (Manufacturing, Industry, etc)
- Privately owned Public Utilities

License not required for engineering work on company (or utility) property or products with no Seal required.

Exemptions from Licensure

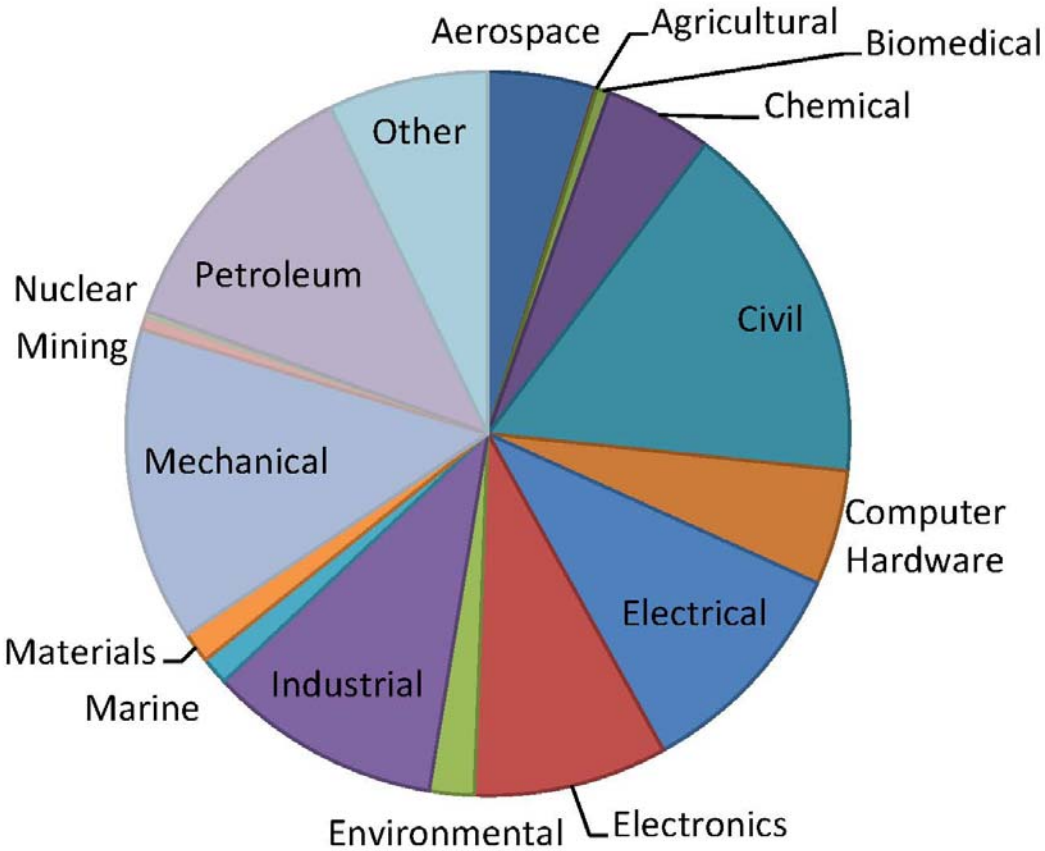
Did you know???

- Only about 20% of US engineers are licensed.

Bureau of Labor Statistics (2014)

- 145,000 engineers in Texas (20% w/ Active licenses)
  - Civil – 23,700 in Texas (68% w/ Active licenses)
  - Petroleum - 18,000 in Texas (15% w/ Active licenses)
  - Industrial - 15,000 in Texas (4% w/ Active licenses)

Texas Engineers - Total (145,000)



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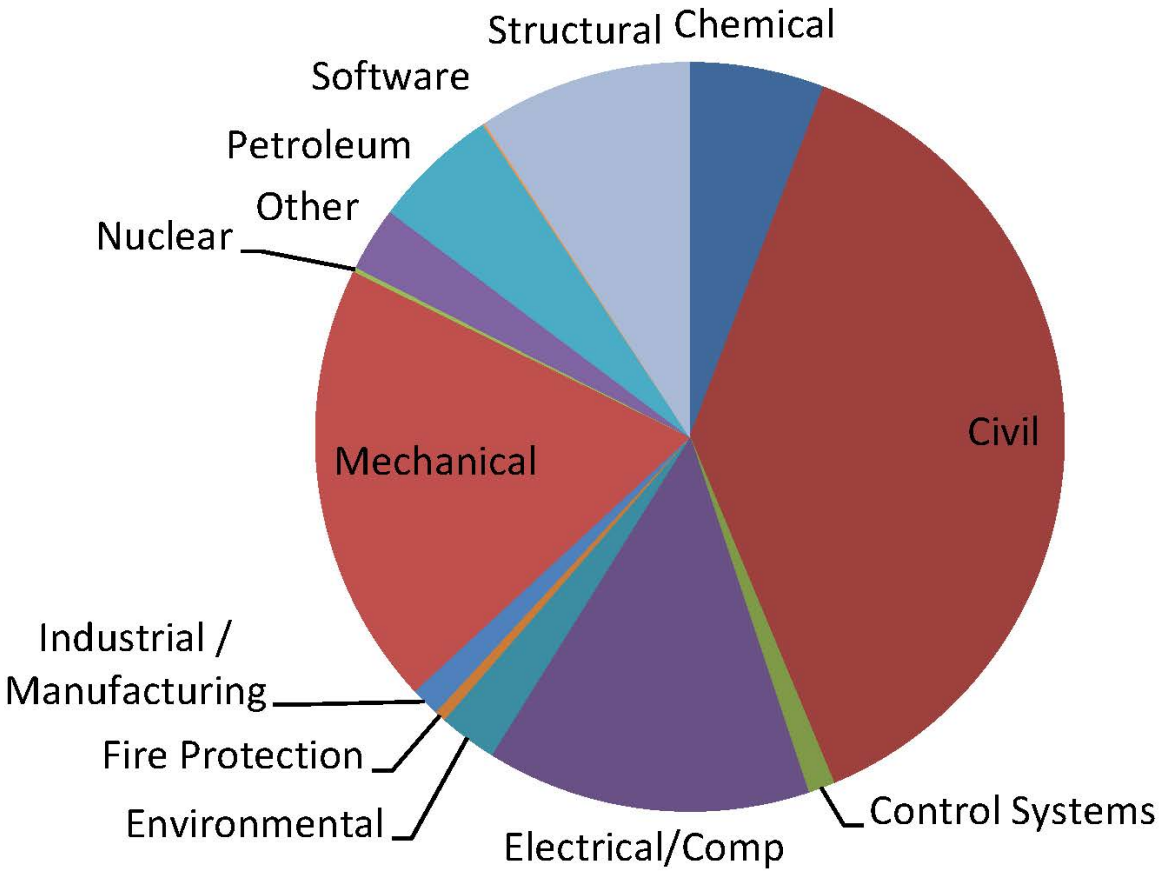
Texas Licensees (61,000)



Law and Rules

- Board is authorized by the Texas Engineering Practice Act
- Board interprets and implements the statute to create Rules
- Other statutes and rules also apply to engineering (PSPA, Windstorm, Architectural Barriers/ADA, etc.)
- Texas Professional Engineers are expected to know the Act, Board Rules, applicable state laws and local codes.

Policy Advisory Opinions

- Provision Added to TEPA in 2003
- Allows Board to develop formal written interpretations of law and rules
  - Specific or hypothetical situations
  - Interpretations – 'Gray Areas'
- Over 30 interpretations for a variety of subjects
  - Water Quality Planning, Power Poles, Use of PE Title, Fire Alarm / Sprinklers, PSPA – Contractors, Building Commissioning, etc.

Policy Advisory Opinions

- **Information**
  - All Policy Advisories at:
    - http://engineers.texas.gov/policy.htm
  - How to submit PAO Request / Forms at:
    - http://engineers.texas.gov/Policy_Advisory.htm

Recent Policy Advisory Opinions

Industrial Exemption / Licensure (May 2014)

Construction Management (May 2014)

On-Farm Energy Audits (February 2016)

- Federal rules allow certified energy auditors
- Who can perform these audits in Texas?

Jurisdiction of Regulation of the engineering of work in other States (response letter - May 2016)

TBPE

Legislative News and Rulemaking

Engineering for a better Texas

Legislation 84th Session (2015)

- Session ended June 1, 2015
- Bills affecting engineering or the Engineering Practice Act were tracked on the TBPE website
  - Professional Fee repeal
  - Windstorm Roster repeal
  - PE Indemnification related to state contracts
  - Applications from engineers with Military Service
  - Unmanned Aerial Vehicles used for engineering
  - Structural Engineering (filed but not passed)
  - SDSI changes (filed but not passed)

New Rules - Decoupling

Adopted February - Effective **May, 2016**

- Allows PE exam to be taken while experience is being obtained. Must be a Texas EIT.
- Increased flexibility for applicants
- Does not reduce licensing requirements.
- EIT application now online
  - **DEADLINE - July 15, 2016**

Update on NCEES

- August 2014 Model Law changes
  - BS+30/Masters Or Equivalent moved from NCEES model law to a position statement
  - Decoupling of PE exam from experience allows “early” PE exam in some states.
- CBT – Computer Based Testing – FE 2014
  - Exams began January 1, 2014
  - 6 Hour Exam
  - Switched to year-round starting in 2016
  - PE exams to be converted as well (~3 to 5 years)

TBPE Initiatives

Engagement – Future Engineers Advisory Committee

- Outreach to young / new engineers
- Consists of EITs and new PEs
- Advising on:
  - Communications with young engineers
  - Application issues
  - Future initiatives with board

Engagement – Professional and Technical Organizations

- ***Rule 137.63(a) – [Engineers] should attempt to enhance society's awareness of engineers' responsibilities to the public and encourage the communication of these principles of ethical conduct among engineers.***
- Training and Continuing Education
- Engineering Policy
- Latest Technical Information
- Engineering Networking / Mentoring / References

Technical Organizations

- Involved in technical issues in engineering
- Organizations by branch of engineering
- Training
- Conferences
- Codes and Specs
- Research
- Local, regional, student branches

Professional / Technical Organizations

- ASCE – American Society of Civil Engineers - http://www.texasce.org/
- IEEE – Institute of Electrical Engineers - http://ieeer5.org/
- ASME – American Society of Mechanical Engineers - https://www.asme.org/
- AIChE – American Institute of Chemical Engineers - http://www.aiche.org/
- SEAoT – Structural Engineers of Texas - http://www.seaot.org/
- *And many, many others…*

Professional Organizations

Texas Society of Professional Engineers (TSPE) – *www.tspe.org*

- All branches of engineering
- Represents the individual PE
- Focus on the profession as a whole
- Engineering Policy / Legislative Issues
- Example: $200 fee removal
- State branch of NSPE

Engagement - Webinars

- PE Ethics
  - March, June, September, December
  - Sign up online
- FE Exam / Why become a PE? (Students)
- How to Apply (EITs)
- **Decoupling – June 21 @ noon**

Outreach – continuing excellence

Fiscal Year	Attendees	Presentations
2012	7,327	166
2013	11,559	177
2014	14,866	155
2015	19,751	150

- Quarterly Webinars
- Includes K-12 / E-Week

Webinar

- Additional questions can be emailed to TBPE staff at the addresses provided.
- A pdf copy of this presentation will be available for a week on the TBPE website.
- Attendees will receive a follow up email from the GoToWebinar system.

Thank You

1917 S Interstate 35, Austin, TX 78741
(512) 440-7723

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