

Texas Board of Professional
Engineers and Land Surveyors

Professional Practice
Update / Ethics

Presenter

- ▶ Michael Sims, P.E.
- ▶ Director of Compliance & Enforcement
- ▶ Michael.Sims@pels.texas.gov



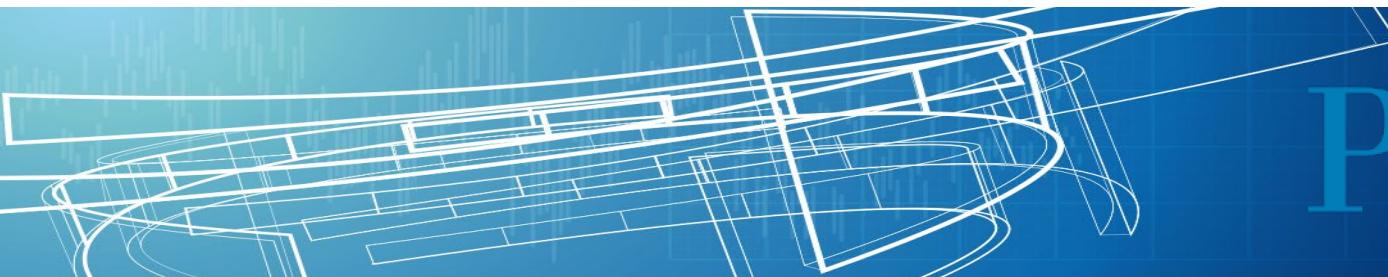
Agenda

- ▶ About the Board
- ▶ Core Functions
- ▶ Professional Engineers in Texas
- ▶ Scenarios
- ▶ Board Activities

Website and Social Media

► <http://pels.texas.gov>

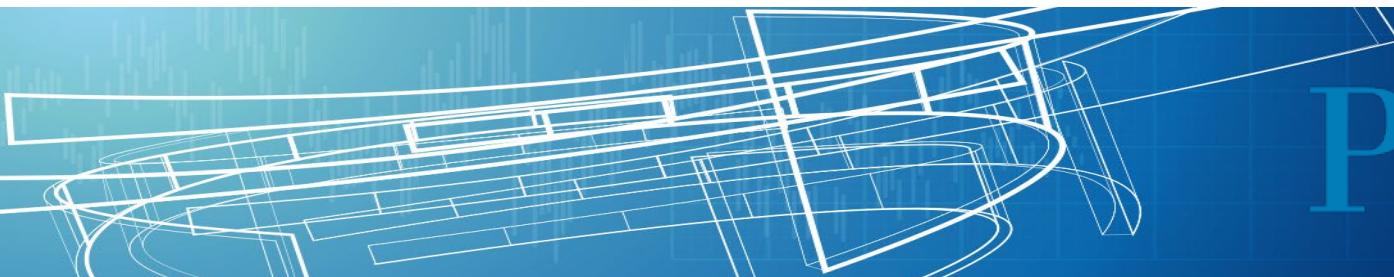
- Facebook: Texas Board of Professional Engineers and Land Surveyors
- Twitter: TBPELS_Exec
- LinkedIn: Texas Board of Professional Engineers and Land Surveyors
- YouTube:
<https://www.youtube.com/channel/UCm0YTnjR3StveBxWhCT4MiA>



PE LS

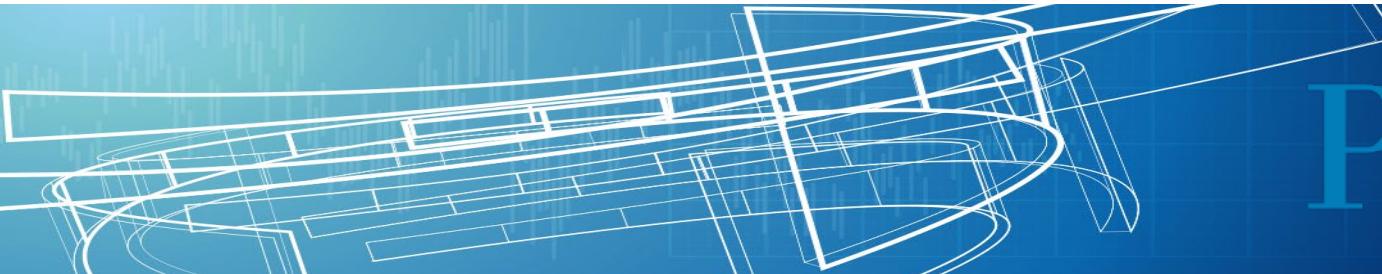
REGULATION OF SURVEYING AND ENGINEERING IN TEXAS

- ▶ 1919- Initial Land Surveying Board established for surveying of public lands.
- ▶ 1937 – Texas Board of Professional Engineers established in response to New London School Explosion.



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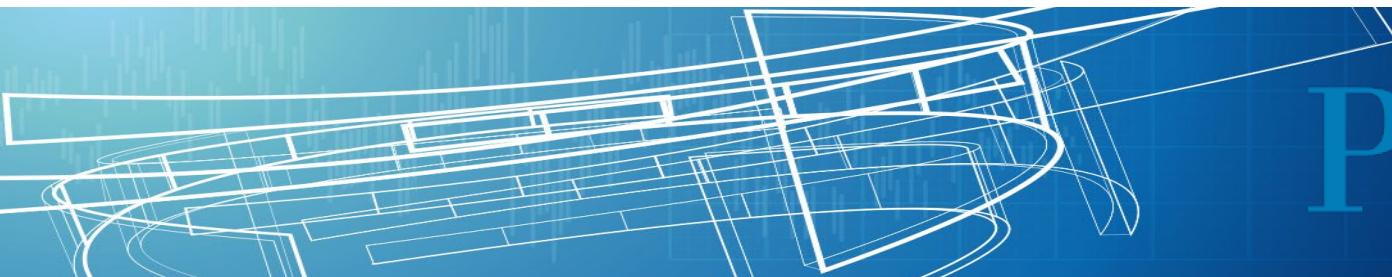
New London School



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REGULATION OF SURVEYING AND ENGINEERING IN TEXAS

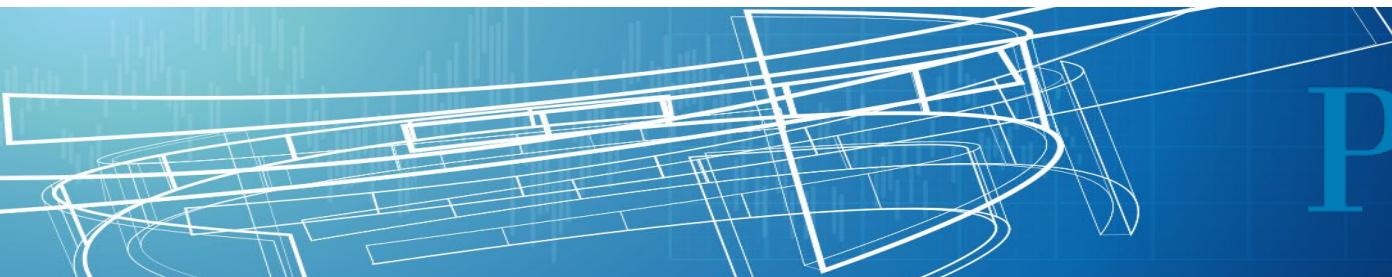
- ▶ 1955 – Additional Land Surveying Board established for surveying of private land.
- ▶ 1979 – Two surveying boards merged to form Texas Board of Professional Land Surveying.
- ▶ 2019 – Texas Board of Professional Engineers and Texas Board of Professional Land Surveying merged to form Texas Board of Professional Engineers and Land Surveyors.



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TEXAS BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

- ▶ State agency in charge of regulating the engineering and land surveying professions in Texas.
- ▶ Operations overseen by appointed Board.
- ▶ Day to day operations carried out by agency staff.

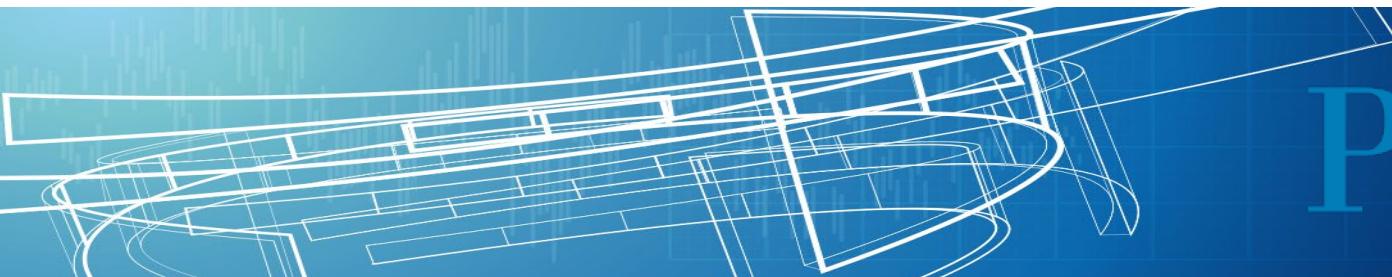


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TBPELS MISSION

Public Safety & Welfare

Our mission is to protect the health, safety and welfare of the people of Texas through the licensure and registration of qualified individuals as professional engineers and land surveyors, compliance with applicable laws and rules, and education about engineering and land surveying.

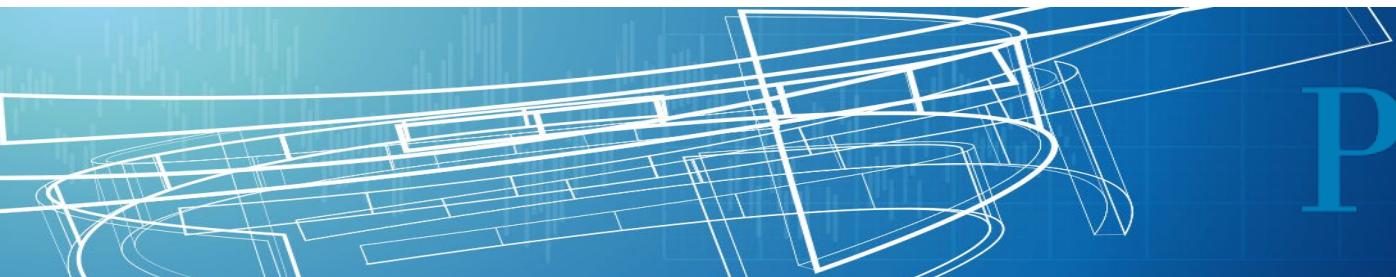


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TEXAS BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

Nine Members - Appointed by Governor

- ▶ 5 Licensed Professional Engineers
- ▶ 1 Registered Professional Land Surveyor
- ▶ 3 Public Members
- ▶ 1 Ex-Officio Representative from GLO
- ▶ Standard term is 6 years



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TBPELS BOARD

Dr. Sina Nejad, PE, PEng

Coleen Johnson, RPLS

Karen Friese, PE

Kiran Shah (public member)

Ademola Adejokun, PE

Albert Cheng (public member)

Roberto Moreno, PE

Catherine Norwood, PE

Dr. Marguerite "Margo" McClinton Stoglin (public member)

Mark Neugebauer, RPLS, LSLS

Beaumont – Chairman

Leander-Vice Chair

Austin-Secretary

Richmond – Treasurer

Arlington

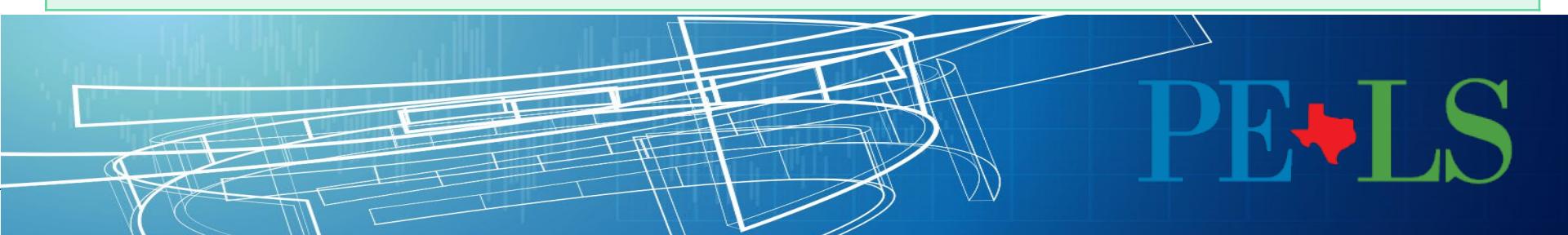
Houston

El Paso

Midland

Grand Prairie

Austin



TBPELS STAFF

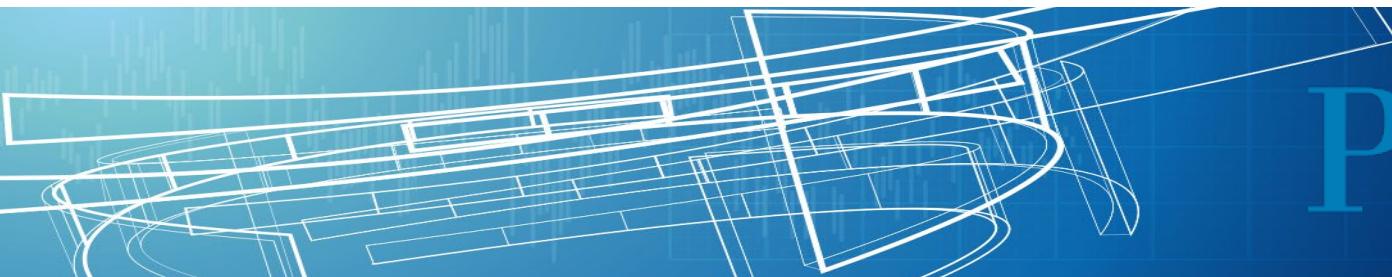
37 Staff members, Austin

Lance Kinney, PhD, PE - Executive Director

Michael Sims, PE - Compliance & Enforcement

Rick Strong, PE - Licensing & Registration

Mason Schoolfield - Operations

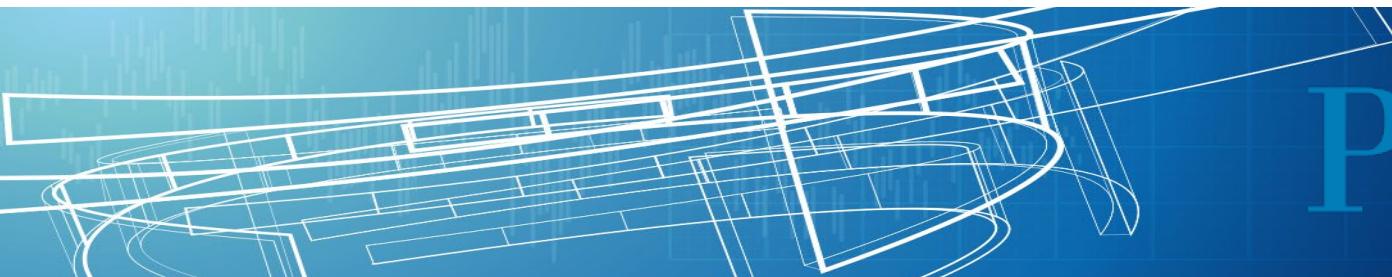


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PROFESSIONAL LICENSURE

System to Protect the Public:

- ▶ Sets the minimum standards for licensure as a Professional Engineer and registration as a Professional Land Surveyor
- ▶ Sets continuing practice and competence standards
- ▶ Sets ethical and professional standards
- ▶ Compliance with these standards of professional practice
- ▶ Standards for indicating competence (titles, seals, etc.)
- ▶ Prevents unqualified individuals from offering or practicing where it could endanger the public

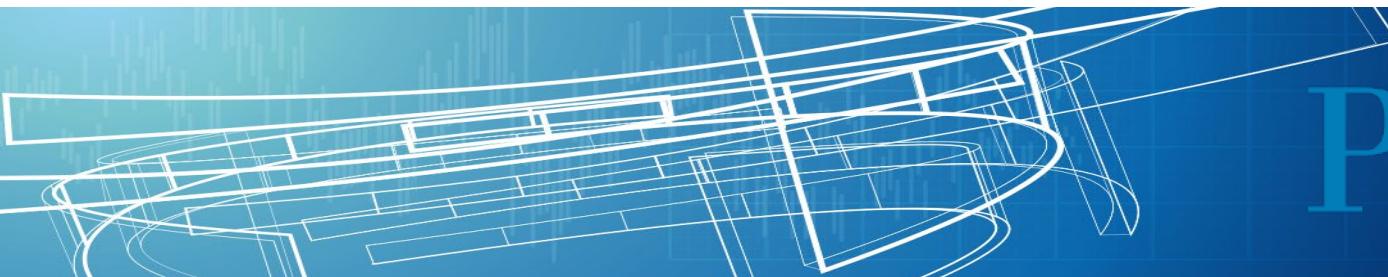


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PROFESSIONAL LICENSURE

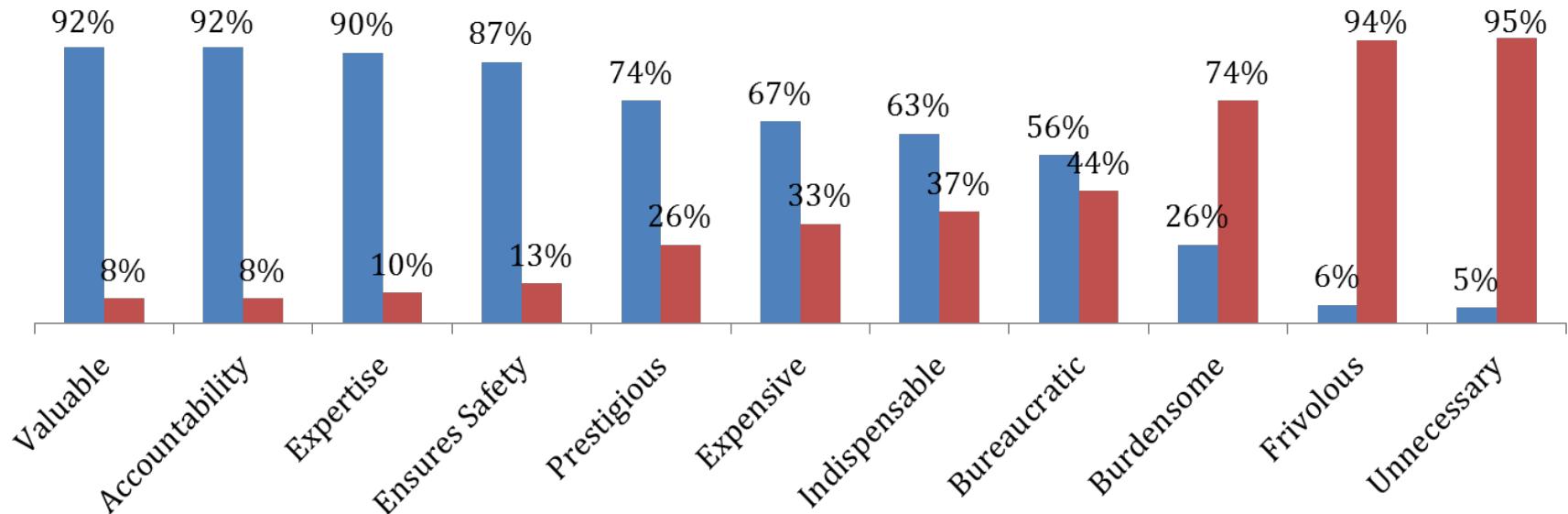
Fields that are regulated and licensed vary among individual states. Among regulated fields are health care professionals (medical doctors, nurses); psychologists; lawyers; teachers; engineers; ...-
Wikipedia

- ▶ Most of these fields impact the public one person at a time.
- ▶ The work done by engineers and surveyors has the potential to affect **many**.



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PUBLIC PERCEPTION OF PROFESSIONAL LICENSURE



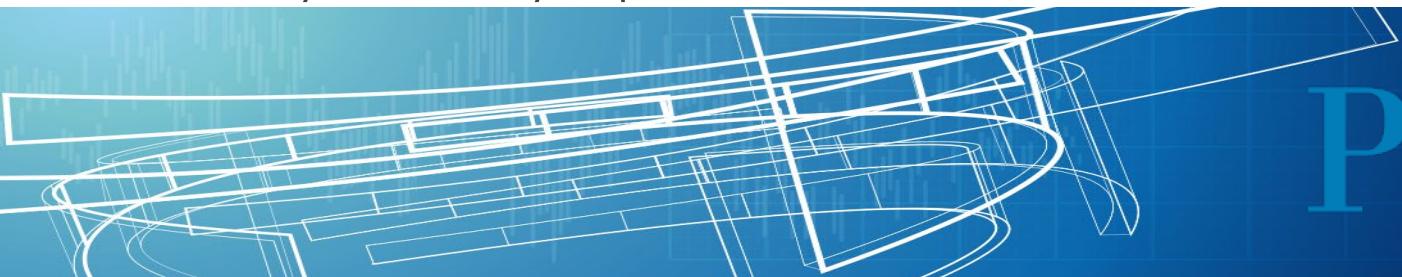
Please "click on" and "drag" each of these terms...based on whether you feel it describes professional licensure or not. (N=874)

■ Describes ■ Doesn't Describe

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The Texas Engineering Practice Act

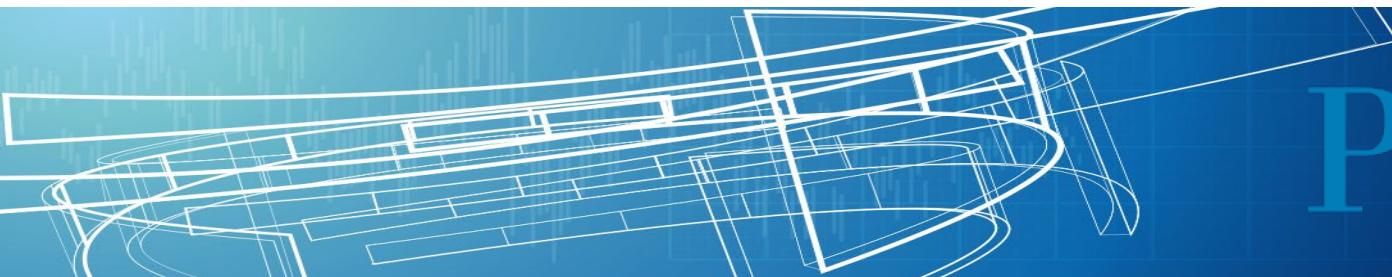
- ▶ Chapter 1001 of Texas Occupations Code
 - ▶ Part of State of Texas laws. Any changes must be done by Legislature
 - ▶ Defines practice of engineering
 - ▶ Exemptions from licensure
 - ▶ Structure of the Board, including the establishment of a Surveying Advisory Committee
 - ▶ Powers of the Board
 - ▶ Disciplinary and enforcement authority
 - ▶ Policy Advisory Opinions



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Professional Land Surveying Practices Act

- ▶ Chapter 1071 of Texas Occupations Code
 - ▶ Part of State of Texas laws. Any changes must be done by Legislature
 - ▶ Defines professional surveying and state land surveying
 - ▶ Outlines the individual and firm registration processes
 - ▶ Overview of the practice of land surveying



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Board Rules

- ▶ 22 Texas Administrative Code Chapters 131-140
- ▶ Board rules are adopted and amended by vote of the Board after opportunity for public comment
- ▶ Expand upon provisions of The Texas Engineering Practice Act and Professional Land Surveying Practices Act
- ▶ Board rules must have foundation in statutory authority granted to the Board by the Legislature via the Acts

Relevant Board Rules

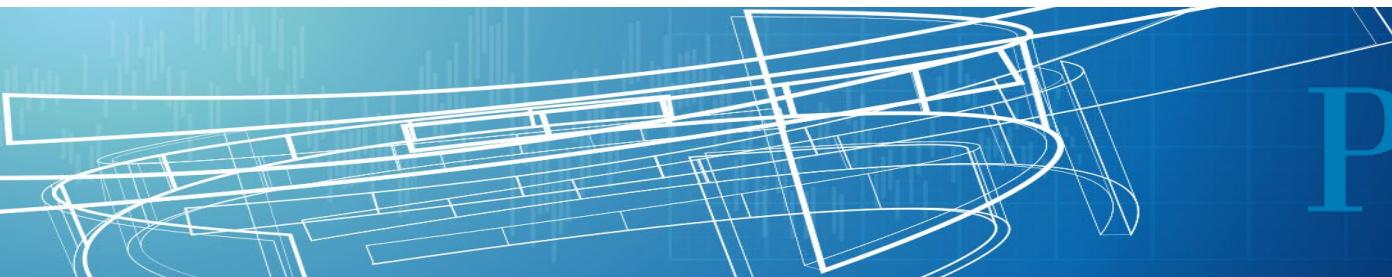
Engineering

- ▶ Ch 131 – Organization and Administration
- ▶ Ch. 133 – Licensing
- ▶ Ch 135 – Firm Registration
- ▶ Ch 137 – Compliance and Professionalism
- ▶ Ch 139 – Enforcement
- ▶ Ch 140 – Criminal History

Surveying

- ▶ Ch. 131 – Organization and Administration
- ▶ Ch. 134 – Registration and Licensing
- ▶ Ch 136 – Firm Registration
- ▶ Ch 138 – Compliance and Professionalism
- ▶ Ch 139 – Enforcement
- ▶ Ch 140 – Criminal History

<https://pels.texas.gov/downloads/lawrules.pdf>



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Professional Responsibility: Ethics

- ▶ Protection of Public Health, Safety, Welfare
- ▶ Ethical responsibilities and expectations
 - ▶ Avoid Conflicts of Interest
 - ▶ Be a Faithful Agent
 - ▶ Be prepared to have a dissenting opinion, if necessary
 - ▶ Obligation to be aware of violations of the Acts or Board rules.

How does this protect the public?

- ▶ You are expected to know the right thing to do and to do the right thing when engaged in professional practice.



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Ethical Trends of Different Professions

Americans' Ethics Ratings of 23 Professions Are at or Below Recent Levels

Please tell me how you would rate the honesty and ethical standards of people in these different fields -- very high, high, average, low or very low?

% Very high/High

| | 2019 | 2022 | 2023 | 2023-2019 |
|-----------------|------|------|------|-----------|
| | % | % | % ▼ | pct. pts. |
| Nurses | 85 | 79 | 78 | -7 |
| Veterinarians* | -- | -- | 65 | N/A |
| Engineers | 66 | -- | 60 | -6 |
| Dentists | 61 | -- | 59 | -2 |
| Medical doctors | 65 | 62 | 56 | -9 |
| Pharmacists | 64 | 58 | 55 | -9 |

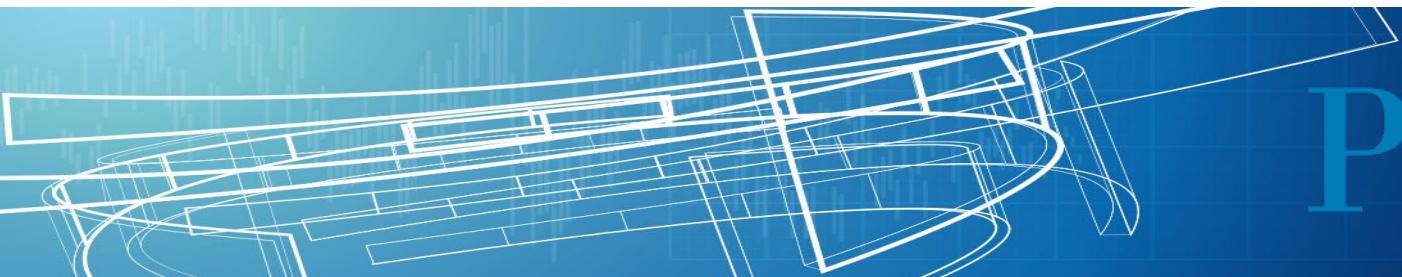
Source: <https://news.gallup.com/poll/608903/ethics-ratings-nearly-professions-down.aspx>

Professional Responsibility: Professionalism

- ▶ Protection of Public Health, Safety, Welfare
- ▶ Communication
 - ▶ Honesty
 - ▶ Clarity (not misleading)
 - ▶ Respectful of all parties
 - ▶ Maintain Public Trust
 - ▶ Timely communication with the TBPELS

How does this protect the public?

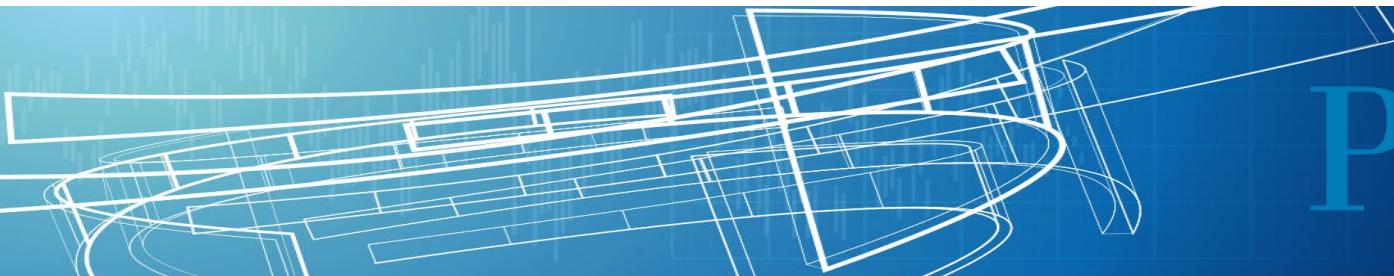
- ▶ You are expected to be complete and correct in your practice.



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Professional Responsibility: Competence

- ▶ Competence is gained by Education and Experience; Measured by examinations
- ▶ Texas uses nationally accepted standards, but considers each application independently.
- ▶ Texas does not license by discipline, but Professional Engineers and Land Surveyors must not practice outside of their competence.
 - ▶ See Board Rules §137.59(a) and §138.59(a) .



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BY THE NUMBERS

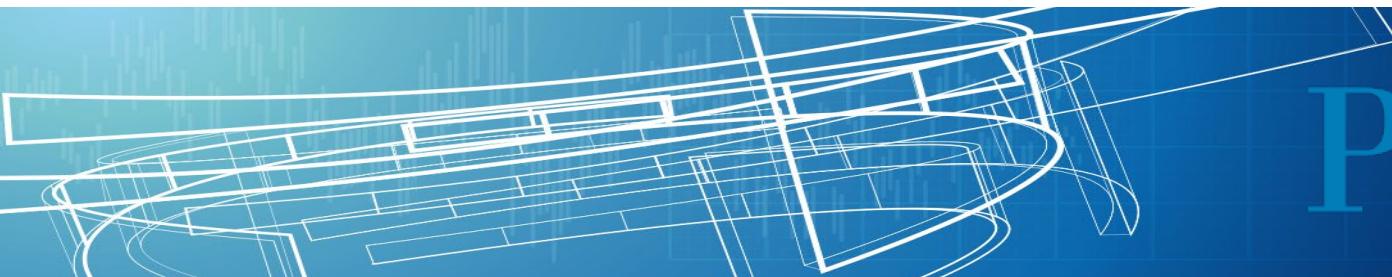
(AUGUST 2024)

ENGINEERING

- Approximately 154,000 Texas PE licenses granted since 1937
- Approximately 75,000 current PE licensees
- Approximately 11,400 engineering firms

SURVEYING

- 6,800 RPLS registrations granted since 1955
- Approximately 2,700 current registrants
- Approximately 60 current licensed state land surveyors
- Approximately 1,300 surveying firms



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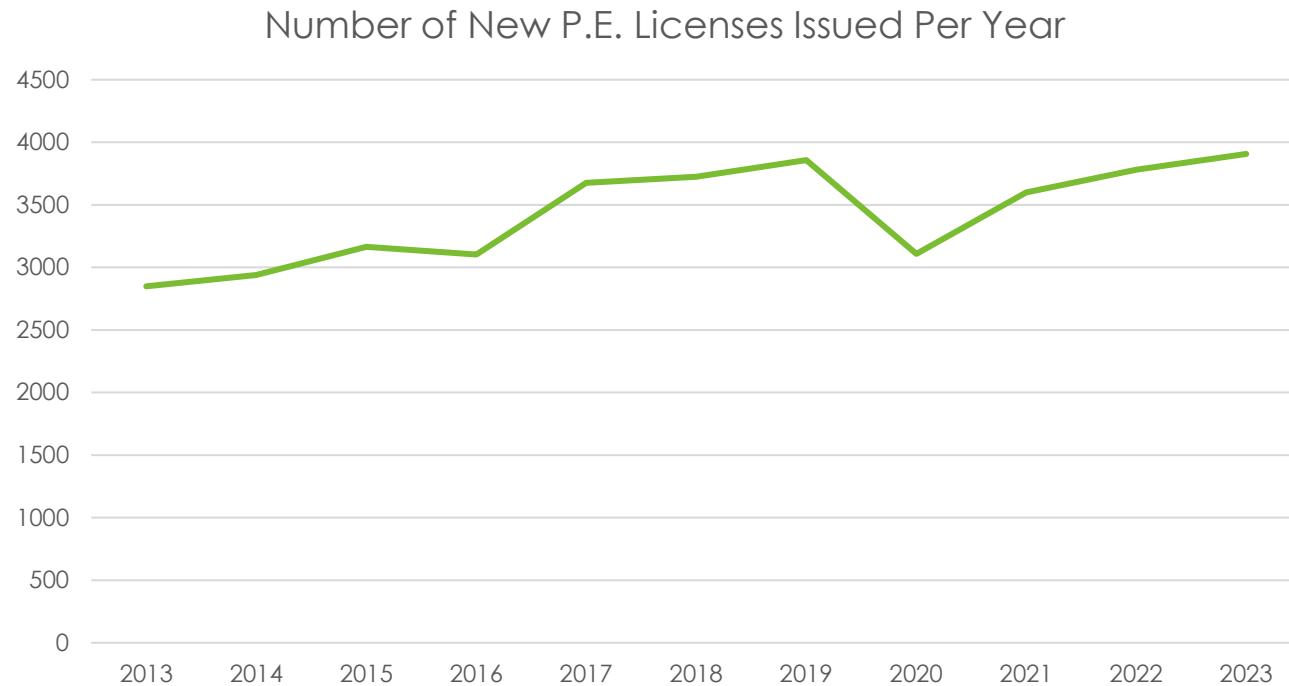
Licensed Texas P.E. by Branch

August 2024

| Branch | Number of Licensees | Branch | Number of Licensees |
|---------------------------------------|---------------------|------------------------------|---------------------|
| Civil | 32,454 | Aeronautical/Aerospace | 152 |
| Mechanical | 13,315 | Mining/Mineral | 130 |
| Electrical/Computer | 9,978 | Engineering Sciences/General | 130 |
| Structural | 7,350 | Sanitary | 129 |
| Chemical | 3,278 | Ocean | 100 |
| Petroleum | 2,802 | Geological | 71 |
| Environmental | 1,903 | Nuclear | 91 |
| Control Systems | 955 | Manufacturing | 61 |
| Fire Protection | 510 | Software | 49 |
| Industrial | 571 | Biomedical | 24 |
| Architectural | 253 | Other | 20 |
| Metallurgical | 252 | Welding | 12 |
| Naval Architecture/Marine Engineering | 175 | Ceramic | 1 |
| Agricultural | 175 | Textile | 1 |

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Growth of Professional Engineering in Texas



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Growth in Largest Engineering Disciplines

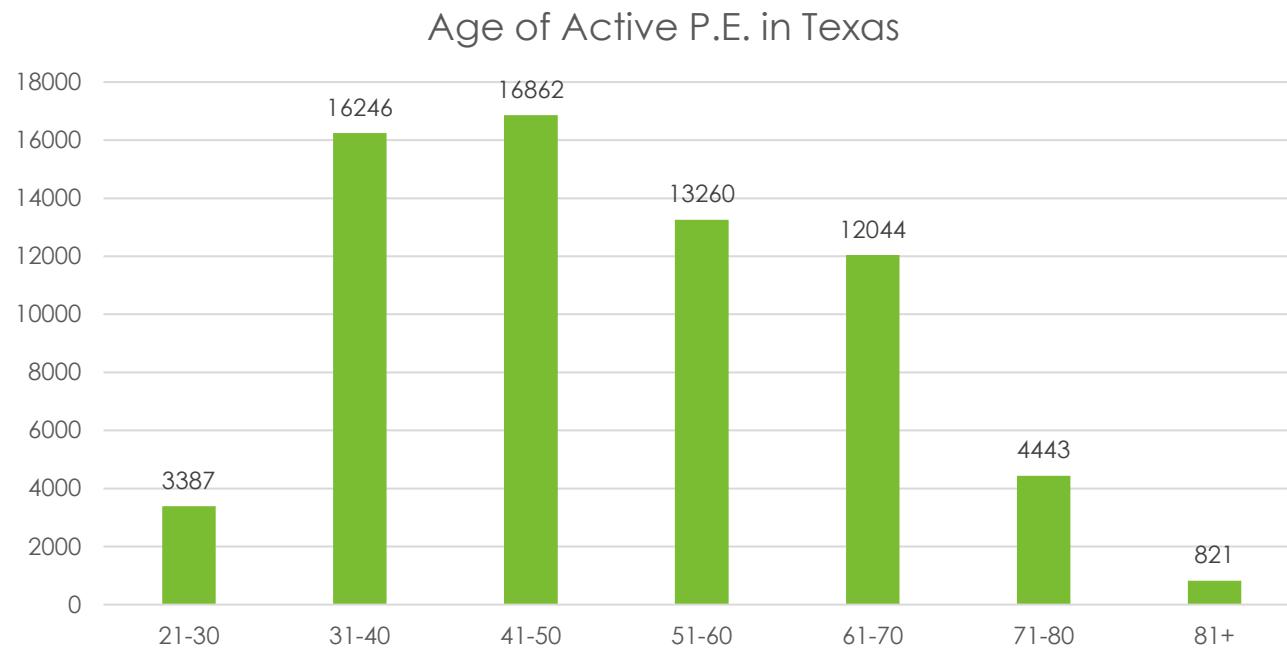
(April 2023-August 2024)

| Branch | Number of Licensees August 2024 | Percent Change Since April 2023 |
|---------------------------|---------------------------------|---------------------------------|
| Civil | 32,454 | +5.62 |
| Mechanical | 13,315 | +2.17 |
| Electrical/Computer | 9,978 | +3.11 |
| Structural | 7,350 | +4.37 |
| Chemical | 3,278 | -1.29 |
| Petroleum | 2,802 | -3.21 |
| Environmental | 1,903 | +3.26 |
| Total Licensees | 74,942 | +3.56 |
| Active Licensees | 66,211 | +4.66 |
| Inactive Licensees | 8,731 | -4.14 |

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Demographics of Texas P.E.

August 2024

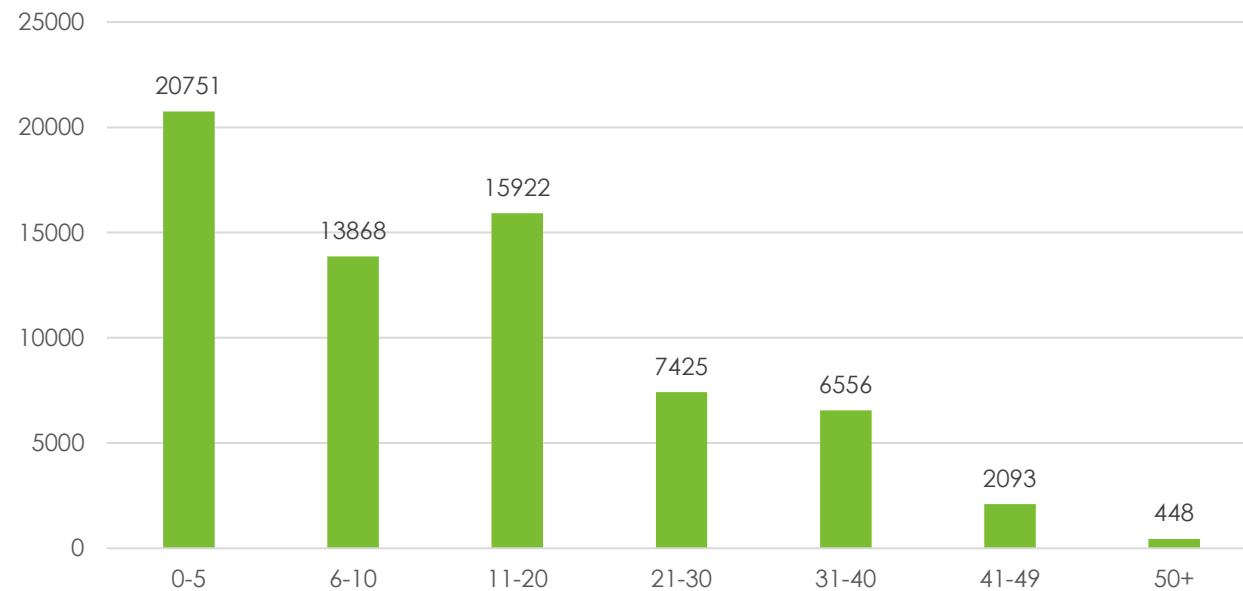


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Demographics of Texas P.E.

August 2024

Years That Active P.E. in Texas Have Been Licensed



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Notification to the Board

- ▶ Within 30 days, licensees or registrants must notify the Board of changes to:
 - ▶ Legal Name Change
 - ▶ Mailing Address
 - ▶ Employer Information or Status
 - ▶ Disciplinary Actions Taken in Another State
 - ▶ Criminal Convictions (Felony or Misdemeanor)
- ▶ See Board Rule §137.5

Professional Responsibility

- ▶ As a licensed or registered professional, you have:
 - ▶ A wide range of actions
 - ▶ A wide range of options
 - ▶ Legal Obligations
 - ▶ Ethical Obligations
 - ▶ To protect the health, safety, and welfare of the public
- ▶ **Professional Responsibility**

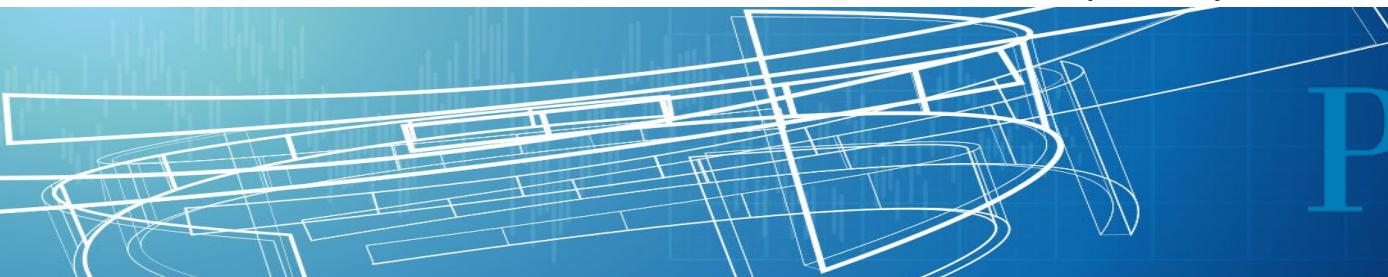


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Professional Responsibility

► **Board Rules, Ch 137, Subchapter C; Ch 138, Subchapter C**

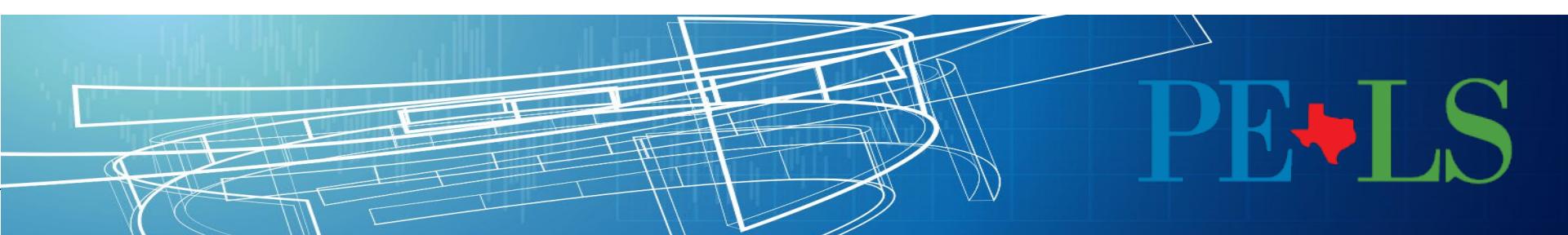
- Signing and Sealing
- Direct Supervision / Responsible Charge
- Objective and Truthful
- Care and Diligence
- Actions of Others
- Aiding and Abetting
- Codes and Ordinances
- Continuing Education
- Professional Services Procurement Act (PSPA)



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Signing and Sealing

- ▶ **Signing and Sealing indicates:**
 - ▶ The work was done by the professional OR
 - ▶ Under the direct supervision of the professional
 - ▶ The work is complete and accurate
 - ▶ Preliminary work if properly notated (permit, bidding, etc.)
 - ▶ Responsible parties if more than one professional
 - ▶ Date issued
 - ▶ Revisions
- ▶ **Signing and Sealing indicates your professional responsibility for the work.**

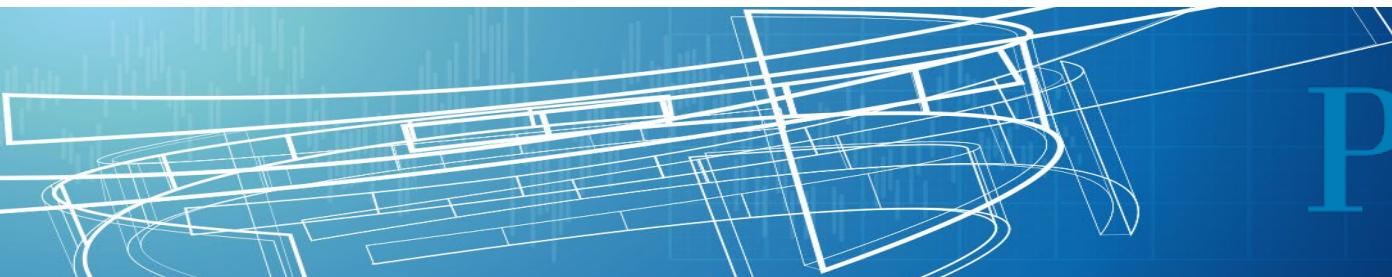


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Scenario – Performing Engineering Work

A homeowner needs a signed and sealed floodplain certification to close on the sale of her home. She does the research on the floodplain to complete the form then asks her neighbor who is a P.E. if he can sign the form to help her out so the closing of the home does not get delayed.

In order to help his neighbor, the P.E. signs and seals the form for her thinking the overall risk associated with this project is minimal.

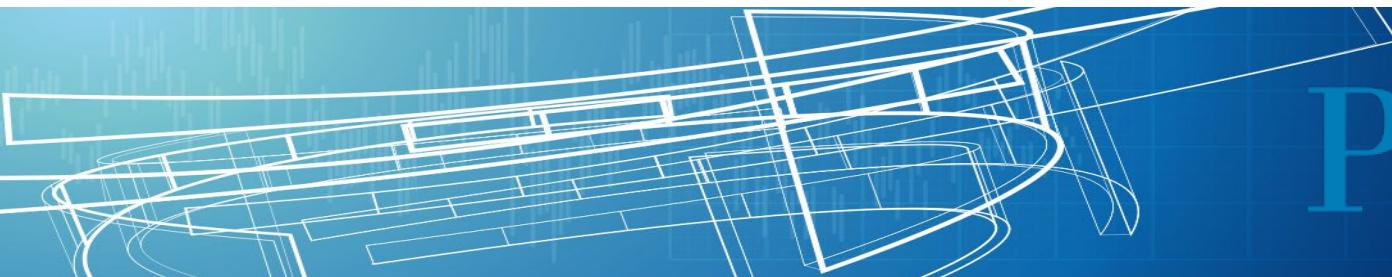


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Scenario- Performing Engineering Work

This was a violation of:

- A. **§137.33(b)** - License holders shall only seal work done by them or performed under their direct supervision.
- B. **§137.57(b)(3)** - The issuance of oral or written assertions in the practice of engineering shall not be: misleading or shall not in any manner whatsoever tend to create a misleading impression.
- C. **§137.63(a)** - Engineers shall engage in professional and business activities in an honest and ethical manner...
- D. **All of the above.**



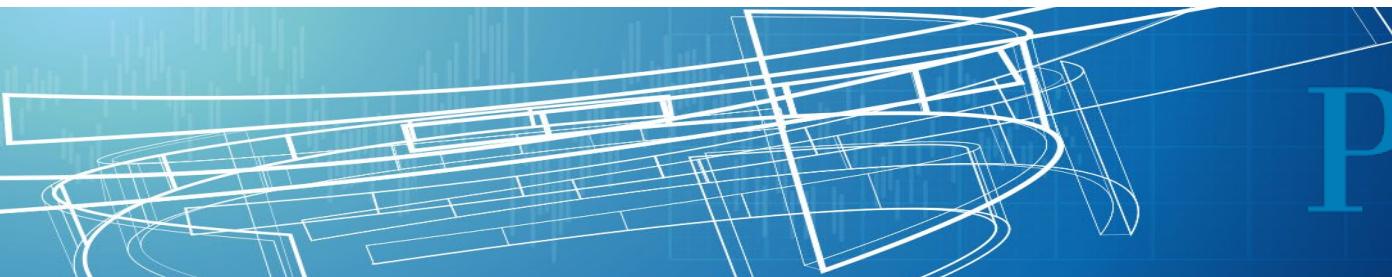
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Scenario- Performing Engineering Work

Answer: All of these

- A. **§137.33(b)** – It is not enough to review and seal the work of another person. A PE can only seal work that he or she has personally generated or work that was generated under his or her direct supervision.
- B. **§137.57(a)(3)** – By sealing work that is not his or hers, a PE is giving a misleading impression to the public
- C. **§137.63(a)** – Passing off another person's work as your own would be considered dishonest.

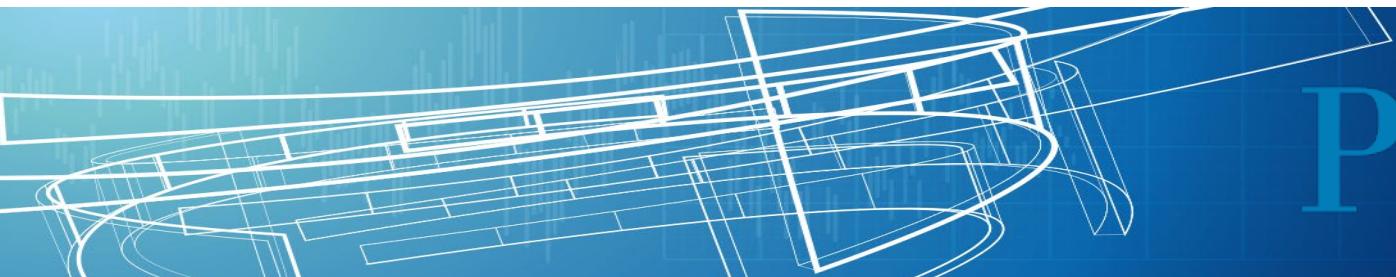
► **“PLAN STAMPING”**



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Continuing Education

- ▶ 15 hours for PE
- ▶ Must include 1 hour of Ethics for PE
- ▶ May include self-study (5 hours max – PE)
- ▶ Various other options to obtain continuing education. See Board Rules 137.17(f)
- ▶ You may carry forward hours for one renewal cycle. Must actively earn required ethics hours during the cycle
- ▶ Random audits ongoing; keep documentation for 3 years



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COMPLIANCE & ENFORCEMENT

Technical / Ethical / Professionalism

Approximately 650-700 Cases opened annually

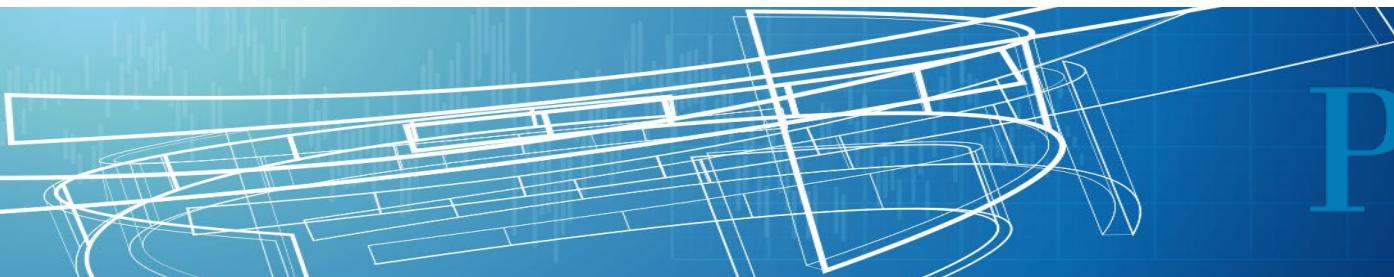
- ▶ 537 Engineering Complaints (FY 2024)
- ▶ 45 Surveying Complaints (FY 2024)
- About 60% resolved with Voluntary Compliance
- About 30% receive guidance for violations or formal sanction
- About 10% Dismissed

Board Actions

- ▶ Reprimands (Formal and Informal)
- ▶ Suspension (possible probation)
- ▶ Refuse to Renew
- ▶ Revocation
- ▶ Cease and Desist Orders
- ▶ Emergency Suspension

Additional Enforcement Options

- ▶ Engineering and Surveying Ethics Courses
 - ▶ Murdough Center for Engineering Professionalism (Texas Tech)
- ▶ Technical Courses
- ▶ Practice limitations
- ▶ Administrative Penalties [\$5,000 per violation per day (Eng) / \$1,500 (LS)]
- ▶ Restitution



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Enforcement

By law, all violations, except informal reprimands, must be published

- ▶ On TBPELS website by Board Meeting Date
- ▶ Added to NCEES Enforcement Exchange (national database)
- ▶ Published in the quarterly E-newsletter

Enforcement Limitations

The Legislature has **not** given the Board the authority to:

- ▶ Assess monetary damages
- ▶ Settle a disputed property boundary
- ▶ Insert itself into engineering or surveying decisions made by local governments or other state agencies
- ▶ Force a licensee or registrant to “remedy” a problem
- ▶ Investigate a registered firm’s business practices (billing, project timing, etc.)

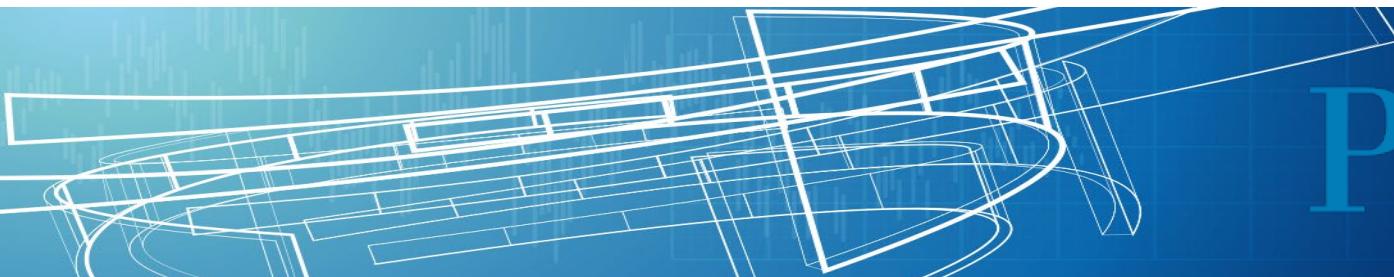
Enforcement - Filing A Complaint

- ▶ 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

Limiting Exposure to Enforcement Action

- ▶ 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!



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Policy Advisory Opinions

- ▶ Provision Added to TEPA in 2003
- ▶ Allows Board to develop formal written interpretations of law and rules for specific or hypothetical 'Gray Areas'
- ▶ Guidance on use of AI issued in November 2024
- ▶ ~70 interpretations for a variety of subjects
 - ▶ <http://pels.texas.gov/policy.htm>
- ▶ How to submit PAO Request / Forms at:
 - ▶ http://pels.texas.gov/Policy_Advisory.htm

Recent Board Activity

- ▶ Rule package to update licensing rules on criminal history and surveying exam format adopted 2023.
- ▶ Rule changes to address surveying education requirements adopted August 2024, not effective until Jan 2026.
 - ▶ Same total number of hours of formal education required (32) but now must have 9 hours of surveying, 6 hours of math, and 3 hours of land law.

Recent Board Activity

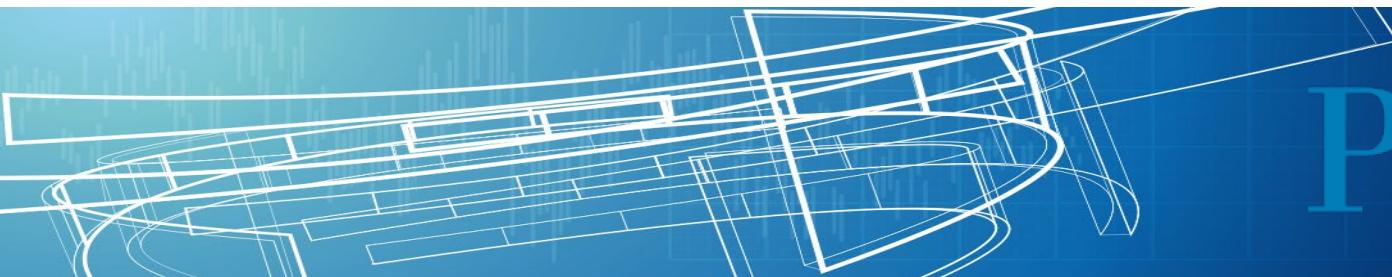
- ▶ Licensing Clean-up Rules – November 2024
 - ▶ Most are minor
 - ▶ Reference submittal clarification
 - ▶ Double counting of engineering and surveying experience
 - ▶ Removal of 3x fail for PE and PS exam – take until pass
- ▶ Comity Rules – February 2025
 - ▶ Formalized existing process to get licensed in Texas if already licensed in another jurisdiction.

2025 Legislative Session

- ▶ Runs through early June 2025
- ▶ Proposed bills include:
 - ▶ Shift to two year renewal cycle
 - ▶ Increase public works exemption from \$20K to \$100K
 - ▶ Decouple surveying exams
 - ▶ Comity issues
- ▶ List of bills that may impact agency or licensees can be found on Board's website

Engagement - Webinars

- ▶ Professional Practice and Board Updates
 - ▶ Available addressing both professions or tailored to P.E. or R.P.L.S.
 - ▶ Monthly, Multiple sessions during renewal months (general)
 - ▶ Sign up online
- ▶ FE Exam / Why become a PE? (Students)
- ▶ FS Exam / Why become an RPLS? (Students)
- ▶ How to Apply (EITs and SITs)



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Engagement – Newsletter

- ▶ E-Newsletter goes out quarterly.
- ▶ If you are not receiving it and want it, update your e-mail address in ECHO.
- ▶ Also available on Board's website:
 - ▶ <https://pels.texas.gov/e-newsletter.htm>

[View as Webpage](#)

PE•LS Texas Board of Professional Engineers and Land Surveyors

March 18, 2022

In This Issue

Focus on Compliance Feature Article
Corpus Christi Regional Advisory Conference
New and Reappointed Board Members
Board and Committee Meetings
Exam News
Webinars and Outreach
Agency Vacancies



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Outreach

- ▶ Monthly and Quarterly Webinars
- ▶ Face to Face Outreach
 - ▶ Resumed in Spring 2022
- ▶ Includes K-12 / E-Week

| Fiscal Year | Attendees | Presentations |
|-------------|-----------|---------------|
| 2017 | 23,054 | 144 |
| 2018 | 23,104 | 168 |
| 2019 | 26,216 | 154 |
| 2020 | 25,216 | 91 |
| 2021 | 24,407 | 78 |
| 2022 | 24,908 | 82 |
| 2023 | 23,063 | 76 |
| 2024 | 26,104 | 76 |

Thank You

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- ▶ info@pels.texas.gov
- ▶ 1917 S Interstate 35, Austin,
TX 78741
- ▶ Phone: 512-440-7723

