# ETHCS IN OUR Changing

presented by

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# Polling Question – What has changed in your life due to the pandemic?

- A. Eating more home cooked meals
- B. Exercising more
- C. Picked up a new hobby
- D. Gained weight
- E. Other (comment in chat)

## Overview of Today's Discussion

- Introduction
- NSPE Code of Ethics Overview
- Discussion of New Challenges



I'm excited to take on this new opportunity to give back to the organization that has been such a strong influence on my career and that is an advocate for all professional engineers.

> **Tricia Hatley**, P.E., F.NSPE NSPE President 2020-21





My role models/mentors and Past NSPE Presidents:

- 1978-79, Robert L. Nichols, P.E., F.NSPE
- 1992-93, Joe Paul Jones, P.E.











### Our Vision

A world where the public can be confident that engineering decisions affecting their lives are made by qualified and ethically accountable professionals

### **Our Mission**

To foster licensed professional engineers in service to society

### **Our Values**

Ethics and Accountability Qualifications Professional Advancement

Unity

# When asked to rate the honesty and ethical standards of people in these different fields –

Nurses	85%
Engineers	66%
Lawyers	22%
Business Executives	20%
Members of Congress	12%
Car Salespeople	9%

Gallup January 2020 survey



Background on NSPE Ethics

- NSPE Code of Ethics 1946
- Board of Ethical Review
  - Established 1954
  - Nearly 700 opinions published
  - 12 cases published annually
  - Searchable on-line database



# Polling Question – Have you reviewed the BER cases before?

A. Yes.

B. No.

C. I think so.



## Four Sections of the NSPE Code of Ethics

- I. **Preamble** Answers the question *"Why have a Code of Ethics?"*
- **II. Fundamental Canons** Describes the "bedrock" principles or fundamental obligations of Professional Engineers.
- **III. Rules of Practice** Describes the fundamental rules that govern the professional practice of engineering.
- **IV. Professional Obligations** Describes the standards of <u>professional</u> <u>conduct</u> for Professional Engineers.



### I. Preamble

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people.

Accordingly, the services provided by engineers require honesty, impartiality, fairness, and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.



### II. Fundamental Canons

### Engineers, in the fulfillment of their professional duties, shall:

- 1. Hold paramount the safety, health, and welfare of the public.
- 2. Perform services only in areas of their competence.
- 3. Issue public statements only in an objective and truthful manner.
- 4. Act for each employer or client as faithful agents or trustees.
- 5. Avoid deceptive acts.
- Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.



# Recent updates





### SUSTAINABLE DEVELOPMENT

ANTI-DISCRIMINATION PRINCIPLES





# New Challenges

**Emerging Technology** 

### Sustainability and Resiliency

# New Challenge – **Digital Communication**

# Warm Up Case

# DIGITAL COMMUNICATIONS









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#### Best Regards,

Peter M. Jennings, P.E.

# **DISCUSSION QUESTION:**

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# What are Pete's ethical obligations?

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# Polling Question – What are Pete's ethical obligations?

- A. List all states he is licensed in his signature line.
- B. His signature is fine as is.
- C. Other (comment in chat box)

# CONCLUSION

Ethical not to include the states he is licensed in.

Professional obligation to use prudence and good judgment and consider participation as an extension of professional activities.

Code of Ethics Reference III.3.a III.8.a

SEVIEN

# DIGITAL COMMUNICATIONS

Social media pitfalls

# Case Study 1





# LJ LJ Nextdoor



#### Amy Smith

This project is ridiculous!!!! How could they do this to us without asking for input from the neighborhood. I heard that they are going to tear houses down to complete the project.





#### Zach Jones

Agree with Amy. There is a lot of shady stuff going on and the City is lying through their teeth. Everyone knows what they are really trying to do with this project. Why won't they tell us the truth of what they are trying to do?? They won't be tearing down my house.



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Comment

## DISCUSSION QUESTION:

# How should the engineer respond?

# Polling Question – How should the engineer respond?

- A. Respond with appropriate technical clarifications/information.
- B. Private message the person(s) raising the issues.
- C. Create an anonymous account and respond that the person doesn't know what they are talking about.
- D. Do not respond.
- E. Contact the client and ask how to proceed.
- F. Other (comment in chat box)



Responsibility to the **Client** Accuracy and quality of service

### Integrity Conduct in the Community



**Professional Obligations** 1.b 1.e Rules of Practice 3.b 1.c 0

# New Challenge – Emerging Technology

# Autonomous Vehicles Issues

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# Polling Question Which AV ethical issue do you think is most critical for engineers to consider?

- A. Public safety
- B. Data protection and security
- C. Liability issues
- D. Regulations
- E. Environmental impact
- F. Societal impact
- G. Economic impact
- H. Other (comment in chat)

# Polling Question What role does the engineering profession have in the *ethics* of autonomous vehicles?

- A. Development
- B. Testing
- C. Safety
- D. All of the above
- E. No role

"As technological advances increase, it is apparent more than ever before that licensed professional engineers need to take a leadership role in the ethical development, application and use of technology."

> - **Tim Austin, P.E.**, NSPE Past President & Chair of Committee on Policy and Advocacy



# NSPE Policy Published 2018

#### Autonomous Vehicles: A Public Regulatory Policy Guide

March 2018



## NSPE PE Institute's On-Demand Webinar

# Ethics of Autonomous Vehicles: Who's in the Driver's Seat

## More on the Ethics of Autonomous Vehicles

# **EMERGING TECHNOLOGIES**

Drones

# Case Study 2









## **DISCUSSION QUESTION**

What are Engineer A's ethical obligations under the circumstances?

# Polling Question – What are Engineer A's ethical obligations under the circumstances?

- A. Follow the client's lead and do not report this to law enforcement.
- B. Send the video directly to the authorities.
- C. Don't send the video but let law enforcement know that the videos exist and where to find it.
- D. Other (comment in chat)



Engineer A took appropriate actions with the DOT. While the BER believes Engineer A fulfilled his ethical responsibility, since this is a matter of public safety, the Engineer should also notify the appropriate law enforcement agency.

Code of Ethics Reference II.1 II.4 II.1.f III.3.a II.3.a



# New Challenge – Sustainability and Resiliency

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# Case Study 3

# SUSTAINABILITY AND RESILIENCY

**Building Codes** 









## **DISCUSSION QUESTION**

What are Engineer A's obligations under the circumstances?

# Polling Question What are Engineer A's ethical obligations?

- 1. Withdraw from the project.
- 2. Move forward using the client's data.
- 3. Continue to pursue discussions with the owner.
- 4. Get on NextDoor and tell the community what's going on.
- 5. Other (comment in chat)

# CONCLUSION

Engineer A should continue to pursue discussions with Client A to convince Client A of the danger amd potential significant property and environmental damage. If Client A refuses, Engineer A should withdraw from the project.

Code of Ethics Reference II.1.a,b III.1.b III.2.d



### **Resources:**

Art Schwartz - aschwartz@nspe.org

www.nspe.org – BER case studies www.niee.org www.depts.ttu.edu/murcoughCenter/