
Government Relations & Ethics

The Ohio Society of Professional Engineers is the single, most powerful voice representing Ohio's professional engineers ...

How do we protect the public and our professional engineers from poorly crafted legislation that could erode Ohio's strong engineering licensure tradition?

It's a simple formula: our expert government relations staff works with our members to tell our story at the Ohio Statehouse. Legislators and their staff need to know what you think, and they need your expertise. If you don't tell them, no one else will.

Getting involved in advocating to your legislators is one of the most important things you can do to protect the engineering profession in Ohio.

OSPE offers publications and expert, personal guidance to our members that help them learn how to work with state and federal legislators and agency staff.

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OSPE's "Giving Testimony at the Ohio Statehouse" reviews the formal process of testifying on legislation, including protocol rules and tips for making your message more powerful.

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"Do's and Dont's of Lobbying Your Legislators" describes how you can create effective and beneficial relationships with your local legislators.

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Want to create an effective meeting between your local legislators and chapter members? Consider hosting a Backyard BBQ. OSPE's government relations experts tell you how.

OSPE is at work defending your PE license!

Video Reports

- Five legislative advocacy tips for Ohio PEs (Aug. 22, 2016)
- OSPE reports the Republican Caucus appointments from Ohio House Session (Aug. 2, 2016)

Recent news (2016-2019):

Bill tracking, June 2019

Is professional engineering destined to become an 'endangered species'?

by Joe Warino, PE, PS, F.NSPE, OSPE Vice President of Legislative & Government Affairs

I can recall in my early adolescent years the dreams I had of being involved in the space program – landing a man on the moon – or designing a suspension bridge, a tunnel through a mountain or maybe a dam capable of holding back enough water to sustain the needs of a city. All these dreams of a young man led me to the profession of engineering.

After fulfilling the educational requirements and taking the next steps to become a registered professional engineer (PE), it seemed my dreams were growing exponentially – that they would never end! This was much better than any computer simulation or any fantastical immersive environment devised by the makers of virtual reality!

While virtual reality technology can give me sensory feedback that simulates a reality that would perhaps be otherwise inaccessible or transport me to other worlds or universes, I was truly living the dream through the reality of my Ohio PE license!

My PE license signifies that I am qualified — through education, experience, examinations and adherence to a code of ethics — to design aspects of our real world! And through my engineering work and designs, I have been privileged to have a hand in protecting the public and improving our collective lives through innovation. Virtual reality cannot compete with the satisfaction my PE license has afforded me.

However, as I look to the future of the engineering profession, I have to wonder if it will survive the challenges being unnecessarily forced upon it by legislatures and government. If not, will PEs be added to the list of endangered species?

PE licensure was established to provide a safety net for the general public. It was a way to safeguard the profession while providing a level of assurance to the general public that the many bridges on our nation's highways are safe to travel on and that water is treated properly for human consumption. It also provides assurance that dams are constructed in a manner to protect those downstream.

The public not only needs to be reminded of the numerous disasters that took place prior to PE licensure, but they should also be constantly reminded of those costly failures that have recently occurred as a result of the use of unlicensed professionals to do engineering work.

In Ohio, the first successful attempt at the devaluation of licensure occurred during the lame duck session of the 132nd General Assembly at the close of 2018. Senate Bill 255, as passed, opens up occupational licensure boards for a "sunset review" and potential changes to licensure. It may very well threaten the current assurances and safeguards in place to protect the health, safety and welfare of all Ohioans.

The act of passing Senate Bill 255 leads me to believe that Ohio's legislators, representing the voice of the general public, may not fully understand the value of professional engineers and the service we provide in safeguarding the public. To that end, I issue the following reminder, written by OSPE member Andy Stone, PE. I hope you will share Andy's message both far and wide:

"A PE is a problem solver, a scientist, an accountant, and above all else, a steward of public safety. The PE must balance the highly technical science of materials, physics, hydraulics, and chemistry, with the real world realities of material availability, material cost, installation labor costs, maintenance cost, and useful life. PEs are bound by law and a professional code of ethics to help communities make the best decision for the health and safety of their residents."

As registered PEs, we need to become immersed in our profession and get inspired to champion the PE license. This can only be accomplished by being active advocates for the profession.

It is a growing national trend (32 states over the last few years) to propose legislation and government policy that threaten licensure. Often the threats are broad and encompass all occupations, including learned professions.

However, in Indiana (2015) and Montana (2017), professional engineering licensure was directly targeted. It is important to note that it was only as a result of the efforts of the National Society of Professional Engineers and its state societies that both of the threats in Indiana and Montana were defeated.

I urge all members to contact their legislators to let them know the hundreds of reasons engineering licensure is necessary to preserve the health, safety and welfare of the public. If you have not already, it is never too late to introduce yourself to your newly sworn-in Ohio legislator. After all, these are still early days in the 133rd Ohio General Assembly! There are numerous ways to accomplish this including U.S. mail, e-mail, a phone call or a personal visit. OSPE can and is willing to assist you in any of the methods above. (In addition, Ohio Engineers Legislative Day, sponsored by OSPE on May 8, will provide you with the perfect opportunity to connect with legislators! Call OSPE at 614-223-1144 for program details, including 5.0 CPD hours.)

The preservation of the professional engineer's license can best be accomplished with your help! Make it your mission to advance our profession. Do not stand by as PEs become an endangered species.

A call to action for Ohio PEs: Your expertise is needed to advocate for rebuilding Ohio's deteriorating infrastructure

by Joe Warino, PE, PS, F.NSPE, OSPE Vice President of Legislative & Government Affairs

With the rising cost of air travel, many have taken to America's highways. This prompts me to ask, "Are our highways safe and prepared to take on the additional load of users?"

Reviewing reports about our nation's infrastructure — both reports produced by professional, industry-specific publications and those produced by the news media — leads me to one answer: "No!"

Two very prominent and reliable industry-specific publications highlight a spiraling decline in projected funds and a rising increase in needed highway, bridge and public transportation project funding, as well as water and wastewater project funding.

As you know, Ohio's roads are heavily traveled

Your daily commute — or at least an occasional trip during rush hour — will provide ample demonstration that Ohio's roads are busy.

Certainly we can deduce that more than 11.6 million Ohioans — not to mention our many out-of-state visitors — are making use of our state's roads, highways and bridges for daily access to home, day care, school, work, shopping, natural resources, entertainment, and other public and private institutions.

Of course, there's research that sheds light on exactly how busy our roads are, as well as how much infrastructure Ohio needs to maintain.

In June 2018, TRIP — a national transportation research group based in Washington, DC — released a report, which examines the condition, use and safety of Ohio's roads, highways and bridges and future mobility needs. The report includes the evaluation of regional pavement conditions, congestion levels, highway safety data and a cost breakdown for Ohio's major cities (i.e., Cincinnati, Cleveland-Akron, Columbus, Dayton and Toledo). Sources include, among other organizations, the Ohio Department of Transportation, the Federal Highway Administration and the National Highway Traffic Safety Administration.

According to the June 2018 TRIP report: "Ohio maintains one of the most extensive and heavily traveled transportation systems in the nation. Ohio ranks second nationally among states in the number of bridges, third in the volume of freight carried on its transportation system, and sixth in both miles of Interstate highways and total vehicle miles traveled."

TRIP reported that vehicle miles traveled (VMT) in Ohio experienced a 12 percent increase from 105.9 billion VMT in 2000 to 118.6 billion VMT in 2016. Not only that, but "the rate of vehicle travel growth in Ohio has accelerated since 2013, increasing five percent between 2013 and 2016."

TRIP also forewarns us that the daily commute for Ohioans is not expected to improve: "By 2040, vehicle travel in Ohio is projected to increase another 20 percent."

TRIP & ASCE "Report Card" reflect the condition of Ohio's infrastructure

The TRIP report tells us a lot about Ohio's roads, bridges and traffic.

"Twenty-three percent of Ohio's major locally and state-maintained urban roads and highways have pavements in poor condition and 12 percent are rated in mediocre condition, which costs state drivers an estimated

\$3.5 billion in vehicle repairs, fuel consumption and tire wear.

The TRIP report also highlights that seven percent of Ohio bridges are structurally deficient with significant deterioration of deck supports and major components.

Sadly, traffic related crashes in Ohio, the report continued, claimed the lives of 5,360 Ohioans from 2012-2016. That's an average of 1,072 deaths per year.

"It is estimated that roadway features are likely a contributing factor in approximately one-third of fatal traffic crashes," the TRIP report explained. "Roadway features that impact safety include the number of lanes, lane widths, lighting, lane markings, rumble strips, shoulders, guard rails, other shielding devices, median barriers and intersection design." TRIP said that while Ohio's overall traffic fatality rate is lower than the national average, the state's fatality rate on rural roads is disproportionately high — about 2.5 times higher than on all other roads in the state.

Another well-respected publication — this produced by the American Society of Civil Engineers (ASCE) — also rates the nation's infrastructure. ASCE's 2017 Infrastructure Report Card gives our nation's roads a grade of D, transit a grade of D- and bridges a grade of C+. (ASCE uses "C" to indicate "mediocre, requires attention" and "D" to signify that the structure is "poor, at risk.")

According to the ASCE Infrastructure Report Card, Ohio itself has "122,926 miles of public roads, with 17 percent in poor condition." Also, ASCE reported, 1,942 of Ohio's 28,284 bridges are structurally deficient.

ASCE's Report Card also grades our nation's drinking water and wastewater, which earned a D and a D+ respectively.

The ASCE national ratings for roads, bridges and drinking water remain unchanged from 2013.

Infrastructure fixes carry hefty price tag for Ohioans

The annual cost of aging and ailing infrastructure on the individual Ohio motorist is spelled out in dollars and cents in TRIP's new report

on roads and bridges: Unfortunately, "Ohio motorists lose a total of \$12 billion per year on roads that are rough, congested and lack some safety features — as much as \$2,180 per driver," according to TRIP's research and communication staff. The \$12 billion figure comes in the form of "extra vehicle operating costs (VOC) as a result of driving on roads in need of repair, lost time and fuel due to congestion-related delays, and the costs of traffic crashes in which roadway features likely were a contributing factor." Vehicle operating costs might include "accelerated vehicle depreciation, additional repair costs, and increased fuel consumption and tire wear."

ASCE's 2017 Infrastructure Report Card gives Ohioans two more formidable price tags: "\$12.2 billion in drinking water infrastructure" and "\$14.58 billion in wastewater infrastructure" will be needed over the next 20 years.

The costs of potable water and safe wastewater may seem steep. But not addressing a solution to cover them for the next generation? That's unthinkable.

Current funding & spending vs. projections for the foreseeable future

TRIP announced that while additional investment has allowed Ohio to move forward with some transportation projects, "many projects remain stalled due to a lack of available funding."

At present, the majority of highway funding comes from gas taxes and motor fuel user fees. The Ohio Construction Information Association reported that the federal gas tax was last increased to 18.4 cents per gallon in 1993, and Ohio's gas tax was increased to 28 cents per gallon in 2005.

The TRIP report documented transportation spending levels of \$2 billion in 2017 and \$2.35 billion in 2018. TRIP's report also stated that the projected transportation funding level proposed for 2019 has been set at \$1.85 billion, and \$1.7 billion proposed spending in 2021. TRIP expects a decrease of \$500 million dollars from 2018 to 2019, and another \$150 million dropped by 2021.

Another concern, TRIP reported, is that inflation has eroded buying power of user fee monies.

Yet another concern — this from my own observations: With the increased number of fuel-efficient cars and electric cars on our roads, we may presume that the gas tax will not be sufficient in funding many needed

future highway projects. Alternative funding sources have been suggested:

- Increase the annual registration fee for licenses
- Charge an annual user fee based on reported annual vehicle miles
- Increase the gas tax
- Charge a percentage per gallon (e.g., five percent to 10 percent per dollar per gallon)
- Institute more toll roads

Whatever course of action Ohio takes, it is important to remember that the Ohio Department of Transportation reported in Access Ohio 2040 – the State of Ohio’s 2014 long-range transportation plan – that it anticipates a \$14 billion shortfall by 2040 to maintain state highways, bridges and transit services.

Ohio gubernatorial candidates provide insight on the future of infrastructure funding

With the race for Ohio’s next governor, most of the state’s candidates have openly discussed the importance of rebuilding and maintaining the state’s infrastructure.

Over the first few days of August, it was widely reported that Republican Mike DeWine announced that his strategy would include appointing a blue-ribbon commission to make a “quick assessment” on the status of infrastructure and develop funding recommendations. As The Columbus Dispatch (August 2) reported, DeWine would engage in discussions with voters about how to raise infrastructure funds.

Also widely reported in early August, Democrat Richard Cordray has proposed a \$1.8 billion bond package to improve the state’s infrastructure. According to The Dispatch, he has also proposed reopening an office in Washington, DC, to advocate for federal infrastructure funding, creating a state data exchange dedicated to transportation and infrastructure, dedicate state funding to public transit, and developing a statewide plan for water quality. As Cordray announced on August 4 via Twitter, his infrastructure plan includes the following components: “Repair & maintain our roads, bridges & freight facilities; Invest in public transit; Expand access to Broadband across the state; Upgrade underground infrastructure to protect our clean water.”

Green Party candidate Constance Gadell-Newton’s platform includes

upgrading transportation, watershed management, clean energy and green infrastructure. According to her statement on the Green Party of Ohio's website, Gadell-Newton also advocates for an investment "in Ohio's public transportation systems, using State and local bond issues and multiple alternative funding sources that allow for capturing of revenues generated through community economic development and reduced traffic congestion in areas benefiting from public transportation system improvements."

"Updating our water management to prevent lead poisoning and other toxins is also an important priority," Gadell-Newton said. She also supports the expansion of bike trails and bike paths, as well as providing access to affordable public transportation for people with disabilities. Furthermore, she wants to promote worker owned and community owned wind and solar cooperatives.

Recently tapped Libertarian candidate Travis Irvine said, "When public infrastructure is in disrepair and government officials have a hard time finding funding, that's a pretty clear sign that both budgets and priorities are out of control and need to be adjusted." Irvine believes less money should be spent on the Ohio Arts Council and prosecution of marijuana offenses so the State can take care of infrastructure. "We also want to give flexibility to localities so they can vote to fund their own infrastructure if they wish."

The PE's perspective & influence on the fate of Ohio's infrastructure

In addition to financing the much-needed fixes for Ohio's aging and ailing infrastructure, a healthy investment in our structures and facilities would enhance lives by offering Ohioans greater mobility and resource access.

Furthermore, the tremendous potential for job creation and the resultant boon to the State's economy should be apparent.

In an effort to better serve the public health, safety and welfare, I call upon Ohio's professional engineers to continue to step forward and serve as advocates for the engineering profession — to educate and encourage federal, state and local political candidates to commit funding to the rebuilding of Ohio's infrastructure.

Keep in mind, across the country, the National Society of Professional Engineers (NSPE) is the fighting arm of the engineering profession. The Ohio Society of Professional Engineers — with the support of NSPE — is the single, most powerful voice representing Ohio's professional engineers.

As OSPE works to protect professional engineering licensure to the benefit of the public, we share the PE's perspective on key issues with our legislators and government agencies, working together to influence policy decisions to benefit all Ohioans.

'Autonomous Engineers'?!'

by Joe Warino, PE, PS, F.NSPE, OSPE Vice President of Legislative & Government Affairs

When considering the burgeoning use of "autonomous" vehicles (driver-less vehicles, self-driving vehicles, robotic vehicles further defined as a vehicle that is capable of sensing its environment and navigating without human input), I could not help but draw an immediate parallel to the professional practice of engineering.

Autonomous vehicles detect surroundings using radar, lidar, GPS, odometry and computer vision. Advanced computer systems in these vehicles interpret sensory information to identify appropriate navigation paths, as well as obstacles and relevant signage. In much the same way, professional engineers solicit and utilize the existing environment surrounding them as well as tools available to them in the daily practice of the science of engineering.

The profiles of the most modern engineers include the use of computer software programs for an aide in the design of complex structures. Civil engineers use GPS extensively to assist in defining an appropriate path, as well as identifying obstacles for the mapping of existing facilities and infrastructure.

In the high tech world that we live in, engineers depend on the available technology to perform sometimes the simplest of tasks that require the utmost accuracy. Who among us has not reached for or picked up their calculator to total up purchases made or to calculate the amount to "tip" the waiter or waitress after an enjoyable meal?

've come to the realization that technology, with its rapidly changing advancements, might just be steering the ship! This realization compelled me to ask myself, "Can what I am doing today in my profession be accomplished to completion by a robot — or what might be labeled an "autonomous engineer"?

As professional engineers, it is incumbent upon each and every one of us to stay in tune with the societal needs as well as relevant advancements in present day technology. Continuing professional development (CPD) is just one of the tools available to engineers who wish to become and stay a significant asset going forward.

I would venture to declare that the Ohio Society of Professional Engineers is the most important tool available to Ohio professional engineers. I firmly believe that OSPE is the single most powerful voice for professional engineers, and I invite all Ohio engineers to join and see for themselves.

Together we can prove to the world of science that where engineering is concerned, the most important autonomous feature that is acceptable is the choice of professional engineers to be the best that they can be.

2016 brought OSPE three legislative victories

by Joe Warino, PE, PS, F.NSPE, OSPE Vice President of Legislative & Government Affairs

The year 2016 was productive for OSPE with the state legislature passing two bills – both supported by the Society – that have a direct impact on engineering practice in Ohio. The year also saw the defeat of a bad bill – one opposed by OSPE.

As you may recall, in February 2016, Governor John Kasich signed House Bill 17 on the topic of volunteer immunity. This "Good Samaritan" legislation, which became law on May 17, provides civil immunity for engineers, surveyors, architects, contractors and tradespersons providing volunteer services during a declared emergency. While this legislation was still in consideration, OSPE's Legislative and Government Affairs Committee offered proponent testimony in the 131st Ohio General Assembly and made other efforts to support the bill. OSPE thanks Representatives Louis W. Blessing, III, PE, and Al Landis for serving as the cosponsors for House Bill 17.

More recently, another bill cosponsored by Representatives Blessing and Landis was signed by the Governor. House Bill 236 requires professional engineers and surveyors to complete two continuing professional development (CPD) hours in professional ethics or rules relevant to engineering or surveying practices. This legislation, was introduced with the full support of OSPE.

In your travels, if you have the opportunity to speak with an Ohio legislator, please offer him or her our sincere appreciation for the 131st Ohio General Assembly's action in passing both House Bill 17 and House Bill 236.

Finally, we are also pleased to announce that House Bill 214 (piping materials) died in an Ohio House of Representatives' committee when the lame duck session closed. House Bill 214 would have removed the PE's autonomy

in selecting piping materials. Please be aware, this measure could be reintroduced in the new year.

OSPE members, stay vigilant in 2017 as the 132nd Ohio General Assembly begins. With your support, OSPE will remain "the single, most powerful voice representing professional engineers."

OSPE member Andrew Stone, PE, does a fantastic job opposing Ohio House Bill 121

The Ohio Society of Professional Engineers (OSPE) provided testimony today to the House State and Local Government Committee on House Bill 121 (piping materials) through member Andrew Stone, PE. Stone, the city engineer and director of public works for Athens, Ohio, did fantastic work in representing OSPE's interests in opposition to the legislation.

In his testimony, Stone said, "House Bill 121 is very broad and vague. It implies that public entities are biased. The bill also addresses a problem that doesn't exist."

Stone explained to the Committee a professional engineer's obligation and service to the public:

"A PE is a problem solver, a scientist, an accountant, and -- above all else -- a steward of the public's safety. The PE must balance the highly-technical sciences of materials, physics, hydraulics, and soil chemistry with the real world realities of material availability, material cost, installation costs, maintenance cost, and life cycle cost. PEs are bound by law and a Code of Ethics to help communities make the best decision for the public."

After highlighting the factors and specifications that PEs evaluate in selecting pipe material for jobs, and after explaining the importance of being able to stock replacement parts, Stone explained the problem with House Bill 121, saying, "Ultimately House Bill 121 hurts communities."

Stone explained that House Bill 121 creates "unnecessary concerns regarding the decision-making of professional engineers." He also said that the legislation "would cost Ohioans more money," and it creates a "slippery slope" in terms of opening the proverbial flood gates for other materials manufacturers to attempt to influence the Ohio General Assembly to benefit their industries.

"The Ohio Society of Professional Engineers and the City of Athens oppose House Bill 121 and its attempt to limit local communities and professional engineers from making the best decisions to protect the public," Stone concluded.

In addition to Stone's oral testimony, written testimony in opposition to House Bill 121 was provided by both NSPE President Kodi Jean Verhalen, PE, Esq., F.NSPE, and OSPE Vice President of Legislative & Government Affairs Joseph V. Warino, PE, PS, F.NSPE.

NSPE & OSPE help defeat a proposal that would have splintered professional engineering

Thanks to the Ohio State Board of Registration for voting against UPLG Motion 12 at the 2016 NCEES Annual Meeting

Earlier this month at the 2016 NCEES Annual Meeting in Indianapolis, the NCEES Council defeated a proposed motion that would have changed the Model Law and encouraged discipline-specific licensure. The NCEES Council vote included 12.5 in favor, 51.5 in opposition and two abstentions to Uniform Procedures and Legislative Guidelines (UPLG) Motion 12.

Motion 12 has been described by proponents as non-substantive. Proponents say the purpose is to merely add "language for structural engineers [that is] parallel to that of professional engineers and professional surveyors."

However, the National Society of Professional Engineers (NSPE) and the Ohio Society of Professional Engineers (OSPE) argue that the impact of UPLG Motion 12 would have been profound and damaging to the PE license.

Specifically, the motion encouraged a separate license for structural engineers in states where such a credential does not already exist and a requirement that structural engineers be included as members of jurisdictional licensing boards.

Last year, OSPE polled its members and determined that 84% of respondents indicated their opposition to different proposed changes to Model Law, which included a designated structural engineer's license. Thanks to the collective work of many NSPE state societies and state licensing boards, the 2015 motion was also defeated.

In July 2016, NSPE President Kodi Jean Verhalen, P.E., Esq., F.NSPE, communicated NSPE's concerns regarding UPLG Motion 12 in a letter. Also, in Indianapolis, in private meetings and addressing the NCEES board, President Verhalen reiterated NSPE's long standing position opposing discipline-specific licensure, which would splinter the profession, confuse the public and weaken a strong licensure system. (However, it should be noted that NSPE does not object to PEs individually identifying the fact that they practice in a particular field of engineering, such as structural engineering, or using specialty designations in combination with the PE designation, so long as such communications are in accordance with local practice regulations.)

In Ohio, over the summer of 2016, OSPE appealed to the State Board of Registration for Professional Engineers and Surveyors for help in defeating UPLG Motion 12. In his letter to the State Board of Registration, OSPE President Bob Fuller, PE, F.NSPE, said that OSPE's position is that licensing by discipline is unnecessary and that it erodes the PE license. Fuller requested that the State Board of Registration carry OSPE's message to the 2016 NCEES Annual Meeting later this month and act to stop any discipline-specific licensure initiatives.

OSPE extends its gratitude to the Ohio State Board of Registration for Professional Engineers and Surveyors for opposing UPLG Motion 12 at the 2016 NCEES Annual Meeting in Indianapolis.

NSPE and OSPE are pleased with the decision of the NCEES Council, and that they voted in a manner that preserves the integrity of the professional engineering licensure system.

OSPE's Political Action Committee endorses three Ohio legislators

The Ohio Society of Professional Engineers' Political Action Committee (OSPE-PAC) has endorsed, to date, three Ohio legislators, including State Representative Louis W. Blessing, III, PE (R-Colerain), an OSPE member, State Representative Al Landis (R-Dover), and State Senator Joe Schiavoni (D-Boardman). Members of OSPE-PAC felt these legislators have been doing a good job helping Ohio's PEs safe-guard the public health, safety and welfare.

Representatives Blessing and Landis have jointly sponsored two key engineering bills -- Ohio House Bill 17 (volunteer immunity for engineers) and Ohio House Bill 236 (ethics education for engineers). OSPE supports both initiatives. While House Bill 17 is law as of May 17, House Bill 236 has passed the Ohio House and it is now in committee hearings in the Ohio Senate.

Senator Schiavoni, the minority leader, is the sponsor of Senate Joint Resolution 3 (infrastructure bonds). OSPE also supports the bond issue proposal to upgrade water and sewer systems.

OSPE-PAC is also considering a number of other nominees for endorsement. OSPE-PAC members are encouraged to identify legislators who share the ideals of the Society in protecting the public through sound engineering policy.