

## **NSPE Position Statement No. 08-1777 – Critical Infrastructure and Homeland Security**

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**Latest Revision: July 2018**

**NSPE Contact: Committee on Policy and Advocacy**

**Professional Policy Supported: 08-Infrastructure**

**Position Statement:** NSPE’s position is that professional engineers are an integral factor in the planning, engineering, design, implementation, construction, operation and maintenance of our nation’s infrastructure systems. NSPE will proactively support the legislative and administrative actions necessary to support these goals.

**Background:** Critical infrastructure decay in the United States is occurring at an unsustainable rate today. The professional engineer possesses a key role and responsibility in ensuring that this infrastructure decay is reversed within the next fifteen (15) years. The professional engineer’s education and experience coupled with his/her professional obligations to protect safety, health and welfare place the professional engineer in a key leadership role in ensuring infrastructure rebuilding, enrichment and enhancement.

Critical infrastructure comprises the foundational elements of life sustainment. These elements include, but are not limited to, the following:

- Highways, roads and bridges
- Water and wastewater treatment systems
- Water transmission and distribution systems
- Dams and Levees
- Sewage collection and disposal systems
- Airports
- Seaports
- Railroads and high speed rail
- Communications systems
- Electric power grid
- Oil and gas pipelines

Infrastructure investment must be constantly maintained, enhanced and enriched through a continual program of upgrading, maintenance and replacement. A strategic budget process should be maintained by governmental entities at the local,

state and federal levels to ensure that infrastructure needs are constantly identified and planned for in the budgeting process.

Activities associated with infrastructure design, engineering, construction, operations and maintenance, individually and collectively, work synergistically to enrich and enhance our global economy. A strong national infrastructure enriches our nation's global economic position, including our nation's workforce, production, health, and safety. Long range planning is essential to the enhanced upgrading and maintenance of infrastructure assets. Long range planning ensures that future capital budget requests for maintenance and enhancement of infrastructure are identified, recognized and advocated for in the strategic budgeting process.

Homeland Security disasters caused by terrorism, nature, Acts of God, infrastructure deterioration or accidents impact the health, safety and welfare of the general populace. Optimized disaster response requires the quick coordination of governmental and non-governmental organizations at the local, state and federal levels. Support of initial emergency responders (e.g., police, firefighters, emergency medical response and National Guard troops) is paramount.

NSPE supports professional engineers participating in disaster recovery, initial damage assessment and identification/resolution of other engineering related matters. NSPE supports the state-by-state need for insurance requirements and liability coverage and the creation of Good Samaritan laws to protect all parties, including professional engineers, from frivolous lawsuits arising from voluntary, accident/disaster related, pro bono engineering services and damage recovery.