RIPTA Will Use Geofencing Technology to Increase Ridership

A grant awarded to the Rhode Island Public Transit Authority will help launch a free fare program to facilitate the collection of ridership and other data to inform future fare incentive programs, both in Rhode Island and nationally, according to masstransitmag.com.

Geofencing, a new, evolving technology, holds interest for the authority because it could open the door to targeted marketing efforts to increase use of public transportation. The technology could allow individual businesses or entities such as social service agencies to sponsor ridership in specific, limited areas.

The grant was one of 25 Accelerating Innovative Mobility grants from the Federal Transit Administration.

Smart Bay Initiatives Could Help “Blue Economy”

Data-collecting infrastructure could be set up in Narragansett Bay to support Rhode Island’s “blue economy,” which comprises seven sub-industries: defense, marine trades, fisheries, offshore renewable energy, ports and shipping, tourism and recreation, and aquaculture, a Navy spokesperson said at a recent briefing.

The venture, known as “Smart Bay,” would make Narragansett Bay “transparent” through data streams from underwater communications, underwater GPS, high-resolution bathymetry and sonar imaging, distributed temperature and environmental sensing, underwater video, and localization devices. Data can be collected via these methods at various “Smart Bay hubs” and made accessible to industry, academia, and government. Read more.

Stay up to date on legislative issues through the NSPE Advocacy Center.
Meet the 2022 Federal Engineer of the Year

Robert Zueck, Ph.D., P.E., was named NSPE’s Federal Engineer of the Year during a virtual awards event on February 24 for his discoveries and contributions in the engineering field. The Federal Engineer of the Year Award, sponsored by the Professional Engineers in Government, honors engineers employed by a federal agency that employs at least 50 engineers worldwide.

Zueck works in the US Department of the Navy’s Naval Facilities Engineering Systems Command (NAVFAC), Expeditionary Warfare Center at Port Hueneme, California. He is heralded for applying his vibration research to military defense projects for which engineers can now design beyond the speed, agility, and stealth limitations of many military sensors, weapons, and platforms.

“Every success for me has come out of the hard teamwork of many fellow engineers and scientists,” Zueck stated. “I thank them all—particularly those who provided valuable constructive criticism of my rather unique research results.”

In a basic research project conducted several years ago, Zueck discovered how geometrically complex vibrations initiate, grow, and sustain themselves, often limiting higher performance for many combat systems. He used this new vibration knowledge to improve the Expeditionary Warfare Center’s modeling capability for designing, analyzing, and deploying towed sensors, ship moorings, sub-sea arrays, and other slender naval structures.

“This basic science discovery could be very useful for modeling, simulating, and testing in many other fields of engineering and science,” he said.

Read more.

Mark Your Calendars: 2022 Professional Engineers Conference

[Image of conference poster]
The 2022 NSPE Professional Engineers Conference will bring together professional engineers across disciplines from August 1–3, in Philadelphia at the Sheraton Philadelphia Downtown. Registration for the conference opens in April.

PECON attendees can access specialized content from experts as they discuss issues and trends impacting the profession, develop power skills and life skills not taught in school, and advance their careers by expanding their expertise and preparing for future developments in the industry.

The seventh annual PE Day will coincide with the conference’s culmination on August 3. These two events allow PEs to join their peers in celebration of the profession and advocacy for licensure.

NSPE will continue to monitor health and safety guidelines while we proceed toward hosting this in-person event.

### 2022 NSPE Student Scholarships Available

Students can apply for the 2022 NSPE Education Foundation scholarships through a new online submission platform. The following scholarships have an April 1 application deadline:

The **Maureen L. and Howard N. Blitman, P.E., Scholarship to Promote Diversity in Engineering** is awarded annually to a high school senior from an ethnic minority who has been accepted into an ABET-accredited engineering program at a four-year college or university.

The **Auxiliary Legacy Scholarship** is awarded annually to a female undergraduate entering or continuing their junior year of a four-year ABET-accredited engineering program.

The **Steinman Scholarship** is awarded annually to undergraduates entering or continuing their junior year in a four-year ABET-accredited engineering program.

The **George B. Hightower, P.E. Fellowship** is awarded annually to a current engineering undergraduate or graduate student who is enrolled in, or graduated from, an ABET-accredited engineering program.

**Coming soon!** The **Swadesh and Om P. Popli, P.E., P.L.S. Scholarship** will be a multi-year scholarship, providing $5,000 each year for the recipient’s four-year education. Applicants must be a female high school senior from an ethnic minority pursuing a degree in engineering at an ABET-accredited program.