Vermont to Receive $329 Million in Latest Bipartisan Infrastructure Law Allotment

The US Department of Transportation’s Federal Highway Administration will send Vermont $329 million in federal infrastructure dollars for fiscal year 2024, according to VT Digger. The federal dollars will be allocated directly to Vermont to help pay for critical infrastructure projects, including work on roads, bridges and tunnels, safety improvements, carbon emissions reduction and workforce development.

The feds do have some say in how the dollars are spent: Vermont’s $329 million is divided among 12 different formula programs. The largest pieces of the state’s pie are for the National Highway Performance Program ($151 million), Surface Transportation Block Grant ($74 million) and the Bridge Formula Program ($45 million).

Governor Phil Scott called the latest round of federal funding critical to revitalizing communities in all corners of the state. “This funding, in addition to (American Rescue Plan Act) dollars and historic state investments we’re making, will work together to build stronger, more resilient communities and lay the foundation for long term success,” Scott said in a written statement. “I once again thank the President, our congressional delegation, and both Republicans and Democrats in Congress for working together to pass this historic law.” Read more.

BETA Technologies Opens Electric Aircraft Production Facility

BETA Technologies, an electric aerospace company based in South Burlington, recently opened the doors to a large-scale production facility at the Patrick Leahy Burlington International Airport, where it will manufacture and assemble its all-electric aircraft. Production has begun with the installation of assembly tooling and the initiation of various system production lines, marking a significant milestone along BETA’s path to delivering its all-electric aircraft, the ALIA CTOL and the ALIA
VTOL, to military and commercial customers, Vermont Business Magazine reports.

BETA’s facility is designed to be net-zero, equipped with state-of-the-art sustainability technology. The company’s balanced approach to manufacturing includes vertically integrating the design and manufacture of new and enabling technologies such as their superefficient propulsion system, battery systems, and flight controls; and contracting top aerospace suppliers, including Albany Engineered Composites, Advanced Integration Technology, Garmin, Solvay, Sensata, and Volz Servos, among others.

The 188,500-square-foot production facility will ultimately be capable of producing up to 300 aircraft per year and it is expected to create hundreds of jobs. BETA is planning for a steady ramp up to maximum production rates and delivery to its diverse base of customers across cargo, medical, defense, and passenger industries. Read more.

Vermont Utility Seeks Approval to Install Residential Batteries

Green Mountain Power, a Vermont-based utility company, is seeking approval from state regulators to install batteries at customers’ homes instead of constructing more power lines, according to Energyportal.eu. The company argues that this approach would be more cost-effective and resilient in the face of extreme weather events.

Traditionally, electric utilities generate revenue by building and operating power lines that transmit electricity from power plants to homes and businesses. However, Green Mountain Power aims to decentralize this model by purchasing batteries for homeowners, allowing them to generate and store their own electricity.

Vermont has experienced numerous severe storms and power outages this year, which influenced Green Mountain Power’s proposal. After conducting a cost analysis, the company determined that investing in battery installations, burying power lines, and reinforcing overhead cables would be more financially viable than constructing new power plants and lines.

Under the proposed plan, Green Mountain Power would gradually install batteries at most homes by 2030, ensuring uninterrupted power supply for its customers. The utility would control the batteries, enabling it to optimize energy usage based on the availability of wind and solar power. When demand is high, the batteries could release electricity to meet customers’ needs. Read more.

Stay up to date on legislative issues through the NSPE Advocacy Center.
As I continue on my professional journey as the NSPE president, I often reflect on what our organization has done since its founding in 1934 and what NSPE needs to do going forward. The next stage of NSPE’s future begins with our vision to ensure that the public lives in a world where engineering decisions are made by qualified and ethically accountable professionals. This will require that a unified engineering community step up to protect licensure laws across the nation and maintain high standards for professional practice. It will require that we embrace innovation and emerging technologies. This future will be bolstered by a new generation of engineers that we must encourage to understand that they can truly make a difference in the world. I look forward to playing my part and supporting others in these efforts.

Licensure and Emerging Technologies
Protection of the public health, safety, and welfare is at our core as professional engineers. Licensure is key to ensuring consistent standards of practice and professional competencies. We must make sure that these standards and competencies remain relevant to how we do things today, while looking toward the future.

We must continually question ourselves and the regulations that are in place. Are state licensing laws adequately regulating the profession of engineering without precluding otherwise qualified individuals from practicing? Is our current licensure model adequately serving its purpose? Are engineering licensure exemptions creating gaps where the public could be harmed? The answers to these questions can help drive us to better ways of safeguarding the public.

I believe that most individuals that become engineers do so because they are good at making things better. They are not tied to the world they are in today and are always pursuing excellence and improvement. I believe that by pooling our experiences as engineers, we can bring the best and brightest together to tackle any challenge that we may face as we seek to evolve. This evolution will involve
the development and use of emerging technologies to spur innovative solutions. NSPE is supporting members by providing professional development that showcases the use of these technologies in a manner that is ethical and will benefit the public. Read more.

NSPECon24 – Call for Presentation Proposals

Prepare to share your expertise during NSPECon24 in Raleigh, North Carolina, August 7-9, 2024. Review the topics NSPE seeks in the areas of career development, leadership, and issues and trends, and think about how you can contribute. The submission site will open on November 1 and the proposal deadline is January 10, 2024.

The NSPECon23 program is still available online and may give potential presenters some ideas about the caliber of sessions needed for next year.

Volunteers are the Heart of NSPE: Get Involved and Share Your Voice

Volunteers are essential to advancing NSPE’s vision to ensure a world where the public can be confident that engineering decisions affecting their lives are made by qualified and ethically accountable professionals. Volunteering is also a great opportunity for members to grow their professional network and connect with other leaders in the field.

There are several ways to get involved…here a few opportunities to consider

Serve as a mentor for an engineering student. If interested, send an email to education@nspe.org.

NSPE online community champion. Virtual opportunity to promote community and sharing of ideas through NSPE’s online channels. If interested, send an email to membership@nspe.org.
Write an article for PE magazine. Share your expertise and insights on professional practice, education, ethics, leadership, licensure, public policy, DEI, emerging technologies, and sustainability and resilience by serving as a guest writer for PE magazine. If interested, email pemagazine@nspe.org for submission guidelines.

Collaborate with staff to draft/supply input on federal legislation, regulations or public comments to federal Congressional staff and committees (Identify your area(s) of vocational expertise.) If interested, send an email to governmentrelations@nspe.org.