

INDIANA INNOVATION DISTRICT FLOURISHES 10 YEARS AFTER BAMI-I TARGETS AREA FOR LIVING LAB PROJECT

By Erik Hromadka

A new innovation district in Indianapolis, Indiana is flourishing with a variety of innovative companies and activities that have developed just northwest of the city's downtown business district in the 10 years since BAMI-I and Global Water Technologies (OTC: GWTR) envisioned a living lab for the location.

In 2013, the organizations outlined a "Smart Water for Indiana" plan that focused on neighborhoods near the combined Indiana University and Purdue University campus in the state's capital city that is home to more than 850,000 people. Anchored by the city's water company headquarters, the area contained a wide range of key infrastructure assets, including a large pumping station, underground water wells, surface water collection from a river and a canal system and a water treatment plant that served the downtown area.

The Riverside Watershed Environmental Living Lab for Sustainability (RWELLS) began with a BAMI-I initiative to map water resources in the area, apply asset management principles and introduce new technologies that improve water efficiency. Working with students from the Purdue School of Engineering and Technology, the effort reviewed a history of water main breaks in the area and analyzed impacts of water scarcity that led to city restrictions in 2012 when drought conditions caused a new record daily consumption of 233 million gallons per day.



BAMI-I and Global Water Technologies presented water utility officials with an innovative multi-parameter sensor that could be used to establish district metered areas and discover hidden leaks in underground water pipes. They also introduced a People + Pipes + Policy approach that rec-

ognized adoption of new water technologies must include a combination of customer demand from the people served; infrastructure engineering solutions for the aging pipes; and public policy tools to encourage and enforce best practices.



These lessons were early indications of the impact that water infrastructure problems could cause — something that got national attention a few years later with the problems in Flint, Michigan. The approach initiated in Indianapolis was shared with city leaders who gathered in Flint during a 2015 infrastructure conference that discussed new standards for asset management and lead service line replacement.

In 2016, Global Water Technologies and BAM-I hosted the first international technology demonstration in the area that featured a new UV-C LED system for disinfecting water and a unique water pipeline cleaning and rehabilitation process developed in Canada. The demonstration was hosted in the new 16 Tech district that was being created to repurpose the old water company headquarters after the utility moved into a new complex. The event was attended by a combination of city and state leaders, US Environmental Protection Agency officials, local business leader, students and even a delegation from China that was brought to the event by Dr. Tom Iseley.

The following year, Global Water Technologies organized a smart city initiative promoting the area with support from the City of Indianapolis and Indiana University Purdue University at Indianapolis (IUPUI). Focusing on water + energy + transportation, the efforts were recognized by the Smart Cities Council readiness grant competition as one of the top five winners from more than 100 cities that applied from across the United States. That resulted in a workshop on smart infrastructure solutions and consideration and testing of wireless technologies like LoRa networks and advanced metering infrastructure.

At the same time, the 16 Tech District kicked off a comprehensive construction project that repurposed the old water company headquarters into a multi-faceted complex that today houses a makerspace for testing designs and building prototypes, a large co-working facility for entrepreneurial companies and a remarkable food and event space in the building that was formerly the water utility's garage. A new office building constructed across the street houses the Indiana Biosci-

ence Research Institute, a collection of statewide industry organizations and medical school facilities. Future plans include a variety of new housing and office spaces and even a hotel on the site.

While some efforts were slowed by the pandemic that resulted in a virtual grand opening and ribbon-cutting in 2021, today there are a growing number of exciting new projects taking shape in the district. From the Indy Autonomous Challenge that brought university teams from around the world to build and race driverless cars at the famed Indianapolis Motor Speedway to a start-up drone company targeting new methods to improve agriculture and a new project by Global Water Technologies to combine UV-C LED disinfection with capacitive deionization, the initial "living lab" concept envisioned a decade ago is alive and well.

Erik Hromadka is the CEO of Global Water Technologies.

gress is unique, as it is the only asset management congress focused on underground infrastructure. The Congress is proudly co-sponsored by BAM-I and Purdue University. Under the leadership of Wei Liao, our passionate congress team is fully committed to providing an outstanding experience that surpasses all expectations. We have curated an impressive lineup of world-class speakers who will guide us into the future of buried asset management. We invite you to join us and become our valued partner in shaping the trajectory of this vital industry.”

The GBAMC will offer attendees the opportunity to engage with asset management leaders, exchange knowledge and best practices, and gain insights into the latest trends and technologies. Stakeholders in the water and wastewater sector and other utility sectors that have buried assets from

around the world will participate in this groundbreaking event.

GBAMC is an excellent opportunity for companies to demonstrate their commitment to Asset Management a, establish themselves as leaders in the field. As an exhibitor or sponsor, companies will not only have a platform to showcase their cutting-edge technologies and services, and network with industry representatives, but you will also have the opportunity to receive ongoing support from BAM-I and Purdue University, enabling your company to achieve maximum industry influence and stay at the forefront of asset management practices.

The congress program will cover a wide range of topics of asset management, including inventory and mapping, pipeline condition assessment, trenchless technologies, level of ser-

vice, involvement, risk analysis, life cycle costing, long-term funding plans, research and education, and regulation compliance.

Registration is now open. For more information about the GBAMC, including sponsorship opportunities, registration, and the detailed program, please visit <https://bami-igbamc.com/>.

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