USEPA Region 2 Administrator Judith Enck Talks "New Jersey"

Cleaning up the environment is serious business in New Jersey, where there is a legacy of industrial pollution and a lack of funds to address it. Here are insights from the USEPA's Judith Enck.



BY MARTIN C. DAKS CONTRIBUTING EDITOR

ONTAMINATED PROPERTIES, from brownfields to Superfund sites, are still an issue of concern to environmental regulators, businesses and citizens. In this exclusive interview with COMMERCE, U.S. Environmental Protection Agency (USEPA) Region 2 Administrator Judith Enck discusses the ongoing environmental challenges and opportunities facing the Garden State.

COMMERCE: What is the status of brownfield cleanups in New Jersey?

JUDITH ENCK: New Jersey has a solid brownfield remediation program that's based on sound technical expertise. This has been demonstrated across-theboard, from projects that are straightforward to those of a complex, challenging nature. There have also been extensive collaborative interactions and partnerships among federal, state and local government agencies, including the NJ Brownfields Interagency Working Group, and the USEPA/NJDEP Brownfield Roundtables.

Q. How do you ensure that everyone is moving in the right direction?

A. To ensure there is a high degree of consistency in managing remediation and cleanup projects in the state from

start to completion, New Jersey has instituted the Licensed Site Remediation Professional (LSRP) program [where private industry LSRPs oversee the remediation of contaminated sites]. Besides working directly with grantees on brownfield projects, academic institutions continue to play a vital role by providing a range of services to municipalities, such as hosting brownfield-related forums (Rutgers University, Montclair State University) and providing technical assistance to statewide consortiums. Thomas Edison State College, for example, has worked with the New Jersey Urban Mayors Association on this.

Q. What about the USEPA's role in coordinating and facilitating this work?

A. The USEPA Region 2 Brownfields Program remains committed to utilizing our agency resources as well as seeking opportunities to collaborate with our federal partners, for example, in the Partnership for Sustainable Communities, to continue to make a visible difference in the communities we serve. We are shining a spotlight, for example, on the cities of Camden and Newark, where creative and strategic solutionssuch as the Camden Collaborative Initiative and the Newark Sustainability Plan—are collectively addressing a range of environmental, public health, housing and economic issues that have, for far

too long, plagued these once-bustling economic engines of the Garden State. The State of New Jersey also benefits from the symbiotic relationship between the regional and the national brownfields program offices—managed by the Office of Brownfields and Land Revitalization—which ensures emerging local and state challenges that may involve national policy implications are properly vetted and that any resulting recommendations are grounded in sound science.

Q. What are some significant issues regarding Superfund sites?

A. For the past 35 years, the USEPA's Superfund program has helped protect the health of America's communities and their environments from the dangers posed by legacy hazardous waste sites through investigation and cleanup of contaminated land, ground water and sediment. Protection of human health continues to be the program's most salient concern. In particular, Superfund cleanups are important to protect the nation's most vulnerable populations, including children. The Superfund program's primary objective is protection of human health and the environment, but cleaning up contaminated sites also results in positive economic and social impacts for many communities.

Q. How does this make environmental and economic interests converge?

A. New Jersey has the most Superfund cleanup sites in the nation. Here, more than anywhere, we can see how a strong national Superfund program is vital to protecting the health of people who live and work in every corner of the state. More than 51 percent of the U.S. population lives within three miles of a Superfund, brownfields, or RCRA corrective action site. By eliminating or reducing real and perceived health and environmental risks associated with hazardous waste sites, Superfund cleanups help convert vacant and underutilized that a site will be cleaned up. Furthermore, the study found that once a site has all cleanup remedies in place, nearby properties have a significant increase in property values as compared to pre-NPL proposal values.

Q. Who is paying for all this cleanup work?

A. The USEPA has obtained nearly \$454 million in commitments from responsible parties to clean up Superfund sites and billed private parties for approximately \$89 million in oversight costs. Additionally, responsible parties agreed to reimburse nearly \$58 million



"The intersection of science and law is growing as agencies address more complex environmental concerns," says Connell Foley LLP Partner Steve Barnett, Esq., PE, CIH, MSPH. "Cleanup of sites located on bodies of water involves multiple regulations, including EPA's CERCLA, NJDEP's Spill Act, Natural Damage Resource issues and others. Connell Foley environmental attorneys apply their technical backgrounds to interpret laws and regulations in the context of complex science."

part of our cleanup of the Diamond Alkali Superfund site, a former manufacturing facility located at 80-120 Lister Avenue in Newark that began producing DDT and other products in the 1940s. After investigations by the State of New Jersey and the USEPA, the site was listed on the USEPA Superfund program's National Priorities List in 1984. A cleanup plan for containment of the dioxin contamination was selected in 1987, which included a variety of strategies including capping, subsurface slurry walls to keep the contaminated material from moving, and a ground water treatment system. In 2001, the interim cleanup of the 80-120 Lister Avenue site was completed.

Q. What else has been done to clean up the Passaic River?

A. On April 11, 2014, the USEPA proposed a cleanup plan for the lower eight miles of the river. The proposed plan was released for public review and comment through the end of 2015. The proposed plan is based on an extensive seven-year study of the lower eight miles of the river, and was developed in consultation with the New Jersey

land into productive resources; reduce blight, uncertainty, and other negative perceptions; and improve the aesthetics and general well-being in communities surrounding the sites. Today, more than 800 Superfund sites across the nation support some type of continued use, active reuse or planned reuse activities.

Q. What do the numbers say when it comes to cleanups and communities?

A. During Fiscal Year 2014, the USEPA found that, at 450 of those 800 sites, there were approximately 3,400 businesses with ongoing operations generating annual sales of more than \$31 billion and employing more than \$9,000 people. Another academic study conducted by researchers at Duke University and The University of Pittsburgh, concluded that making a site final on the Superfund National Priorities List (NPL) may increase housing prices by signaling



"In response to the NJDEP's new focus of managing a balance between new development and environmental protection, PS&S advises clients to fully understand New Jersey's very unique regulatory program as most of the available lands in the state have some environmental constraint," explains Paulus, Sokolowski and Sartor Chief Executive Officer John Sartor.

of the USEPA's past costs from cleanup work at Superfund sites.

Q. Could you please highlight a significant New Jersey project?

A. In New Jersey, the USEPA coordinates with federal and state partners to clean up the lower Passaic River. The studies and cleanup efforts there are

Department of Environmental Protection, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration, along with outreach to representatives of the many communities along the lower Passaic River. The USEPA expects to release the Record of Decision for this site in fall 2015.

It's hard to plan for the unforeseen.

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Q. What is the federal government doing to reduce its use of energy and its carbon footprint?

A. President Obama also demonstrated his commitment to energy efficiency, green building and other sustainability goals in March of this year when he issued Executive Order 13693. This directive will cut the federal government's greenhouse gas emissions 40 percent over the next decade from 2008 levels—saving taxpayers up to \$18 billion in avoided energy costs—and increase the share of electricity the federal government consumes from renewable sources to 30 percent.

Q. What is the ENERGY STAR program?

A. The USEPA's ENERGY STAR program provides guidance on how to save energy, save money, and protect the environment. Behind each blue label is a product, building or home that is independently certified to use less energy and cause fewer of the emissions that contribute to climate change. Today, ENERGY STAR helps families and businesses save \$360 billion on utility bills, while reducing greenhouse gas emissions by 2.5 billion metric tons since 1992. While the program certifies more than 70 different product categories to help consumers identify the most energy-efficient products on the market, ENERGY STAR also certifies buildings, industrial plants and homes. In fact, since 1992, the USEPA has worked with organizations to help them save money and reduce greenhouse gas emissions by making their buildings and plants more energy efficient.

Q. What recommendations does the USEPA have regarding the best ideas for alternative energy, pilot programs or new technologies?

A. The USEPA's Green Power Partnership encourages organizations to use green power as a way to reduce the environmental impacts associated with conventional electricity use. The Partnership currently has more than 1,300 partner organizations, including about 30 in New Jersey, voluntarily using billions of kilowatt-hours of green power annually. The partners in New Jersey include educational institutions, law firms, medical technology companies and banks.



Greenbaum, Rowe, Smith & Davis Partner David B. Farer, chair of the law firm's Environmental Department, recently became President of the American College of Environmental Lawyers (ACOEL).

The ACOEL is a professional association of distinguished lawyers who practice in the field of environmental law. Membership is by invitation and

Clearing the Obstacles in a

complex maze of environmental statutes and regulations can be a challenge ... here in New Jersey, our experience is your advantage.

Greenbaum Rowe Smith S Davis LLP

Remediation of Contaminated Properties & Brownfields - Transaction-Triggered Environmental Laws Contractual Allocation of Environmental Risk - Environmental Due Diligence Reimbursement Options & Project Financing - Environmental Land Use - Compliance & Permitting Workplace Safety - Federal & State Superfund Laws - Lender Concerns - Enforcement Proceedings Product Stewardship - Environmental Litigation & Cost Recovery - Environmental Insurance Sustainable Development & Alternative Energy Projects

> David B. Farer Chair - Environmental Department President - American College of Environmental Lawyers

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members are recognized by their peers as preeminent in their field. ACOEL members are dedicated to maintaining and improving the ethical practice of environmental law; the administration of justice; and the development of environmental law at both the state and federal levels.

Here are ACOEL President David B. Farer's plans and objectives as he takes the helm of this important national organization.

Goals. "My themes for the year are service and organization: service as in further expanding and developing our role in outreach, education and pro bono environmental activities here in the United States and abroad; organization as in building on the work of my predecessors in strengthening the structure of the College and helping to further focus its various functions."

Key Environmental Issues. "On the national front, the College has been focusing on providing input on key issues such as the important developments at the state and federal levels concerning greenhouse gas emissions and their regulation based on the federal Clean Air Act, as well as on the extent of governmental jurisdiction over water bodies such as wetlands under the Clean Water Act (often referred to as the 'waters of the U.S.'). On the international scene, the College has been involved in facilitating pro bono work and teaching programs in foreign countries." Insights on Rules and Regulations. "The College is a non-partisan organization comprised of distinguished lawyers drawn from private practice, government, academia, NGOs and non-profits, and one of the resulting strengths of the College is that we can thus provide scholarly, thoughtful and neutral analyses and overviews of major environmental issues of the day that provide a service for the community. For example, the Environmental Council of the States



"In an effort to keep our clients apprised of the ever-evolving NJDEP Site Remediation Program regulations, Whitestone Associates, Inc. has prepared a series of lunch-and-learn presentations (some approved for professional continuing education credits) specifically geared toward attorneys, architects, REITs and developers," says Whitestone Associates, Inc. President Thomas K. Uzzo, LSRP.

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Sustainability and Environment-Friendly Initiatives at NJ Colleges and Universities



Compiled by Miles Z. Epstein Editor, COMMERCE

EW JERSEY'S COLLEGES AND UNIVERSITIES ARE AT the leading edge of sustainability and environmentfriendly initiatives both on campus and around the world. *COMMERCE* asked the Garden State's leaders of higher education to discuss how their schools are addressing the challenges and opportunities of "going green." Here are their insights, observations and plans for a more sustainable future.

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continued from page 16 those dunes helps even more. Revetments are a rock wall or steel sheets 45 feet long that go into the ground and become a barrier. So even if the dunes wash away, underneath there is a sheet piling that will protect the coastal properties. Those are the kinds of revetments that we have tried to build. For example, on the 3.5-mile stretch of beach on Mantoloking, we put in the sheet piling project to protect the coastline, and now



we are trying to use sand dunes on top of that, offering double protection. When the sand washes away, they still have the revetment to protect their homes and importantly, the area's infrastructure—the electric lines, the water lines and natural gas lines. We are using a lot of mapping information from the U.S. Army Corps of Engineers to do modeling so we can see how to protect the New Jersey shore for the future. Our plan calls for the U.S. Army Corps of Engineers to maintain those beaches on a regular cycle. Local communities will have to contribute to that over time. It's not just a once and done; we need to continue to maintain those beaches for the long term."

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(ECOS), the national non-profit, nonpartisan association of state and territorial environmental agency leaders, turned to us for two white papers; one on the Clean Air Act, how it works, its history, states' roles in implementing guidelines under it and how EPA might interpret the provisions of the Act to address existing sources of greenhouse gas emissions; and the other on regulation of the waters of the U.S. under the Clean Water Act. And now that the Obama administration has issued its Clean Power Plan under the Clean Air Act provisions, the College expects to be among the interested parties who will be providing feedback to EPA based on our standing as an organization of recognized environmental lawyers reflecting diverse perspectives."

Agenda and Vision. "In implementing the agenda of service and organization that I've adopted for my term and hope to see furthered in years beyond, I have pressed forward initiatives to facilitate our ability to react and respond more



"Technology has transformed professional services through ready access to information, meaningful real-time analysis and instant communication," says Riker Danzig Scherer Hyland & Perretti LLP Partner Steven T. Senior, Esq. "Our environmental attorneys work more efficiently and effectively with the scientist/consultant team to deliver advice tailored to our clients' needs and objectives."

quickly to breaking issues and news via our blog, embraced longer-range planning, and initiated a study of other professional colleges and what we can learn from them. On the international scene, in addition to our outreach in China and Africa, we are excited to be exploring potential opportunities in Cuba and elsewhere. My vision, in sync with those who have held this position before me, is to take advantage of the wealth of knowledge and experience among this

group of lawyers to maintain and further the standards of practice of environmental law, advance scholarship in our field and contribute to the development of environmental law at the state, federal and international levels."

A Problem-Solving Role. "Collectively, the Fellows of the College really constitute an amazing resource of knowledge, experience and creativity on environmental legal issues. And it's a group that is truly dedicated to sharing that



Caldwell University By Dr. Nancy H. Blattner, President

Caldwell University, in collaboration with Sodexo, has adopted several environmentally friendly policies and programs, including imple-

menting a sustainability committee, engaging energy contracts to reduce campus lighting, upgrading our HVAC energy, replacing five, 50-year-old boilers, installing trash compactors to reduce our carbon footprint, single streaming recycling and purchasing a kitchen bio-digester.



College of Saint Elizabeth

By Dr. Helen J. Streubert, President

Stewardship of God's resources is part of the College of Saint Elizabeth's strategic plan. Renovations to our build-

ings all have "green" protocols. CSE is renovating all science labs and installing high-efficiency equipment. We are also upgrading all buildings with high-efficiency LED lighting, and reducing our energy costs and carbon footprint.



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Establishing Proper Easements in Northern Ocean County. "Right after Superstorm Sandy, the total number of easements we needed for the coast totaled around 4,300. We are now down to the final 350 easements that are necessary. We went out and got close to 2,400 easements from people who gave them voluntarily. We are down to the last 350 and what we are going through now is the eminent domain process with those properties that are left. We are going to court and the people challenging us are saying, 'No we won't give the easement.' This has slowed down some of the work that will allow us to protect all of the beaches. The U.S. Army Corps of Engineers has the money and they are ready to go. Our goal



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resource, and to improving and expanding the ways that we do so. We may not be able to solve any of the intractable environmental issues of the day in the coming year, but we are committed to furthering the understanding of these issues."

COMMERCE also got some key environmental observations from experts and business leaders from all across New Jersey:



New Jersey's Licensed Site Remediation Program. "The LSRP program has been very successful, and it will continue to be successful," says Lanny Kurzweil, a

partner in McCarter & English, LLP's Environment & Energy Practice and moderator of CIANJ's Environmental Business Council Roundtable. "Frankly, we cannot afford for it not to be successful. We are in a competitive region of the country.



"Technological advances continue to transform the scope and cost-effective delivery of environmental services: our ability to collect high quality information and to process it using techniques such as 3-D visualization has never been greater," says Golder Associates, Inc. Principal Steve Finn. "Nano- and biotechnologies have given us new approaches to address previously intractable environmental problems."

We have to continue to do a better job in closing out our environmentally impacted sites and do it cost-effectively and quickly. The old process wasn't working. It was broken. It took too long, and the sites were not being closed out. Businesses and business people would say they could never obtain closure on a site. I think with this LSRP program, we are seeing sites moving into closure more quickly. We have a good group of LSRPs in New Jersey who understand ethical obligations as they move sites to closure. We would like to see that be continued. The NJDEP has been cooperative in this regard, as well. They have been coming out with more guidance that the LSRPs can use to evaluate their sites and move them to closure."



Key trends in the waste disposal processing industry. "Generators are becoming more hands-on and involved in the waste disposal process, not only

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County College of Morris By Dr. Edward J. Yaw, President

County College of Morris believes strongly in sustainability. We constructed our Landscape and Horticultural Technology building as a LEED

Gold certified facility and, with the support of Morris County, installed solar panels. The Board of Trustees also has passed a resolution to reduce our carbon footprint 75 percent by 2030.

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Sustainability

right now is to get these properties and be able to start the projects especially in Northern Ocean County, which is one of the most vulnerable places we have right now. The towns that are most vulnerable are Mantoloking, Brick and Toms River, which includes both Normandy Beach and Ortley

Beach. Those are the most vulnerable on the coastline right now, and those are the ones we can't start because of a lot of holdouts. For some people, it goes back to the simple, 'You're going to block our view.' Some think we will show up with a big check and pay them a lot of money for the easement. Then there are some people who just don't want the federal or state government to build anything on 'their Beach,' and it's more about their own personal rights. Either way, we are moving very quickly on this project, and we will just have to wait for the court process. We aren't taking anything away from anybody; we just want to build a dune to save their houses."

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from a cost savings perspective, but also from a liability management perspective," explains Clean Earth Director of Environmental Compliance Cheryl Coffee. "More generators are learning how to follow waste streams to assure their treatment and final disposition requirements are fulfilled. At Clean Earth, we highly encourage this involvement and provide many tools to assist the generator, consultant, and/or contractor so that all the moving parts of the waste management process are transparent, the communication is open, and roadblocks are mitigated."



The biggest challenges and opportunities for the recycling industry. "Recycling is a very complicated business," says Bayshore Recycling

President Valerie Montecalvo. "Many people think of recycling as a mindless activity where you simply place your



"The spills and accidents that have occurred over the last couple of years have influenced regulatory programs, and prompted environmental professionals to improve controls in physical assets and their risk approach," says TTI Environmental, Inc., President Craig Durand, LSRP, CHMM.

container at the curb and it magically disappears. A more accurate image of recycling is to use the analogy of the New York Stock Exchange floor. Each and every material is a 'commodity' bought and sold each and every day on a worldwide market. The challenge is to find those end markets to keep recycling profitable. The recycling logo, which is referred to as the 'chasing arrows,' stands for the three major phases of recycling—collection, processing and marketing. The biggest challenge is always finding markets for each and every material collected, which fluctuate on a daily basis. Opportunities for industry growth always center on what 'is not' being recycled. The primary materials for future expansion in recycling include food waste; plastics other than #1 (PETE) and #2 (HDPE); tires; expansion of mixed construction debris materials; and evolving waste-tofuel technologies."



Eastwick College and The HoHoKus School By Thomas Eastwick, President

The HoHoKus School of Trade in Paterson owned by Eastwick Education—is offering a tuition-free building maintenance program

that prepares students for certification through The Building Performance Institute (BPI), one of the leading organizations in residential energy efficiency. Students learn to reduce energy waste and monitor conditions that impact human health and safety.



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Adapting Flood Laws with General Permits by Certification. "We have added a whole new classification—Permits by Certification. We have Permit by Rule, that doesn't require filing for any paperwork, and we have General Permits. The General Permits by Classification sits in the middle. We want people to get online quickly, and it allows for reconstruction and expansion of buildings outside of certain floodways so automatically people and companies can start right away. It allows them to construct additional buildings on the same site provided it meets the right conditions. It allows for maintenance of existing storm water management structures. It allows for maintenance of those without coming to us for permits. Applicants will go online, fill out an application and



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The latest trends in environmental drilling. "Some of the trends, particularly in sonic, have been so exciting. Sonic has become the preferred technology

for most of our clients," says Summit Drilling President Tory Donnelly. "We have a backlog of work, which is just fantastic. The sonic technology really sells itself. It's efficient, cost-effective, and safe. There are not a lot of moving parts to it, and clients just really love it. It's been a great investment for our company. In regards to injection, there has definitely been an uptick. The sites in New Jersey are mainly in a remedial phase, so injection is another cost-effective way to treat impacted soils in ground water. It's also approved by the NJDEP, so we use our direct push technology to inject all different products into the soil and ground."



"Intelligent machine control using GPS technology has changed the way we implement many remediation projects: it enables the equipment operator to surgically remove contaminated soils and sediments to exacting limits; and it allows for real-time measuring of existing, intermediate and final grades before, during and after the project," says Creamer Environmental, Inc. Executive Vice President Tracy Straka.



The latest advances in environmental infection control remediation. "New products include preventative nano-technologies such as organosilane quaternary

compounds that are a mechanical form of long-term disinfecting," says Thomas Licker, BSES, CEICR, HACCP, a Certified Environmental Infection Control Remediator for Infection Control Technologies, (ICT) a division of Insurance Restoration Specialists, Inc. (IRS). "There's binary ionization, vaporization of hydrogen peroxide and chlorine dioxide that can achieve reduction for high risk environmental pathogens to 99.9999 percent. There are new handwashing devices that track use by a transducer and wash the hands of employees with pressurized water and detergent and add moisturizer. There are alcohol-based disinfectants that have a 99.999 percent kill claim that are safe to apply to water-sensitive equipment, require no rinse and use



Felician College By Dr. Anne M. Prisco, President

As a Franciscan institution, Felician College is committed to responsible care of the environment. This is exemplified by our current energy

savings project that will reduce carbon emissions by more than 1,000 tons, the equivalent of planting 5,200 trees and removing 185 cars from the road.



Georgian Court University

By Dr. Joseph R. Marbach, President

Last year, Georgian Court University, a USEPA partner, received the Governor's Environmental Excellence Award in the Health & Sustainable

Communities category. We have a 75 percent recycling rate and more than 20 campus initiatives that contribute to sustainability, including those that address pollution/waste reduction, land use, local purchasing and resource conservation.



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continued from page 24 be able to print off the permit from the Internet with immediate certification. It also allows for the construction of a single-family home in tidal flood areas, so you can build such a house in an area provided you meet the conditions. These are proposed rules right now, probably look-

ing towards the end of this year to make them final." Improving Permit Coordination. "This program is designed to help businesses, cities, towns and individuals that want to come in for permits. We set up an Office of Permit Coordination when I first got here that handles the coordination for large projects. It also allows companies and individuals to come in early for a pre-application meeting, even without a lot of planning, so we can talk about the issues. What are the green lights, the yellow lights and red lights that may cause problems for them? By discussing this ahead of time, applicants can make changes before they spend a lot of money with engineers, environmental consultants and lawyers. It's a high-level discussion, and those meetings really help contractors define the projects definitively and learn what the risks are before they even come in for an applica-

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50 percent less labor than using a squirt bottle. There's also instant surface cleanliness monitoring by ATP swabs. These will get you qualitative instant results by detection of surface proteins."



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The latest technology to reduce congestion and urban pollution. "The idea is to use Newark as a smart region or smart city—a test bed for ideas about inter-

secting sensor-based systems with urban infrastructure," explains NJIT Senior Vice President for Research & Development Donald H. Sebastian, Ph.D. "Everything from personalized driving instructions diverting people out of traffic using a device with stored knowledge about you to manage a better route, to smart parking technologies, that identify whether there's a parking spot available at your destination, to smart metering, distributed energy management, personalized signage—LED panels understanding who's walking up and down



"We can now offer imagery captured by drones, and three-dimensional modeling for hydrographic and bulkhead rehabilitation and restoration near New York and New Jersey waterways," says Borbas Surveying and Mapping, LLC Owner/President J. Peter Borbas, PLS, PP.

the street and providing push-advertising for local shops to show what you might be interested in. It's about creating a test bed of operability standards attracting companies to the area and demonstrating the capability of this technology. There's so much we can do with information everywhere, but we need to make people's lives better and more productive with it. If we can solve these problems in an urban environment, we will help transform the image of Newark into a thought leader."

