ASPIRE. INVEST. PROSPER.
Transitioning to West Virginia’s New Economy
On the Cover: Caleb Angel, a Lincoln County trainee at Coalfield Development Corporation, is part of a new generation of West Virginians aiming to drive the state’s economy in new directions.
West Virginians are facing a significant challenge.

A decline in the coal industry that was not unexpected, but that is moving faster than anticipated, has devastated coal communities and significantly tightened the state’s budget capacity.

Ironically, the decline in coal is due in significant part to the competitive advantage of natural gas. The enormous quantities of shale gas in the Marcellus and Utica region have contributed to reduced gas prices. West Virginia is very much a part of this region, and has a long and substantial history both in petrochemicals and manufacturing. West Virginians well understand that the legacy of prosperity tends to flow to regions where value is added to a raw material. For the future, it is vitally important that the state capture its share of “downstream” activity from the shale gas bonanza. Manufacturing advanced products made from feedstocks refined from natural gas is far more valuable to the region than burning the gas for power or transporting it elsewhere.

This premise is central to the agreement reached in October 2015 among the governors of West Virginia, Pennsylvania, and Ohio to work collaboratively to maximize economic development from shale gas. This and other endeavors testify to the fact that while West Virginians are deeply concerned about the impact on communities and individuals from the decline of the coal industry, they also are focusing on the future.

This year’s Annual Report presents several examples of how West Virginians are moving energetically to create tomorrow. In the near term, creative projects to help transform coal-impacted people and communities are now being leveraged with federal funding through the POWER initiative. These projects are quite different from one another, but each one helps the state transition to a strong and diverse economy. They are examples of the determination of West Virginians to create a future that works.

For the longer term, West Virginians have devised a strategy to maximize downstream opportunities from shale. They propose the creation of an intra-regional natural gas liquids storage and transmission infrastructure that would serve the Marcellus and Utica region. Those working on the “Appalachian Storage Hub” are convinced that this bold project could have a major impact on the ultimate extent to which the region—and certainly not least, West Virginia—derives lasting economic benefit from the shale gas phenomenon.

Education addresses the future in the most important way possible. West Virginia’s efforts to infuse STEAM learning in our schools are now underway, as we report. That will produce a generation of skilled workers among ambitious young students who aspire to new opportunities. It is indisputable that the quality of their education will have a critical and even decisive impact on their well-being.

All of these stories demonstrate an entrepreneurial, opportunistic, and determined approach to creating a prosperous tomorrow. The Benedum Foundation has the enormous privilege of supporting the efforts of the people discussed in these stories, and of so many others like them.

William P. Getty, President
Jacob Dyer (right) gets on-the-level advice from mentor Danny Ferguson at Coalfield Development Corporation’s new solar power training site in Dunbar, Kanawha County.
Power up

New federal funds for out-of-the-box ideas give West Virginia a big opportunity to power up.
This year, coal-impacted communities got a welcome lifeline. The Appalachian Regional Commission and other federal agencies offered $46.2 million to help diversify their economies, expand job training, and attract new investment. Among the fresh ideas: earn-and-learn approaches for young workers, ATV adventure tourism, and high-value agriculture. The first POWER (Partnerships for Opportunity and Workforce and Economic Revitalization) grants to projects already in operation will be awarded in the fourth quarter of 2016. The Benedum Foundation has supported POWER in West Virginia.
Trainee Ashley Wiles on the job at West Edge, Huntington.
Keeping a personal journal and setting goals with mentor Travis Jones are part of the job for Ashley Wiles. Workers are guaranteed 33 hours of paid construction work, six hours of course work, and three hours of life-skills training each week.
Building a better future

On Huntington’s west edge, Coalfield Development Corporation is building small-scale job training programs in a very large space. On an early June morning, Brandon Dennison, founder of the community development enterprise, opens a door to reveal a former clothing factory being simultaneously deconstructed and reconstructed by eager young workers.

Coalfield, now operating in Wayne, Mingo, and Lincoln counties, has a broad mission to build quality affordable homes, create quality jobs, and generate opportunities for quality life for low-income rural and urban families in southern West Virginia. “We started out concentrating on creating affordable housing. But that doesn’t change the trajectory of people’s lives,” explains Dennison, age 29. “Long-term, our young people need more than minimum-wage, part-time employment. We quickly realized: we must create wealth and jobs.”

The fast-growing social enterprise now employs 26 young adults, eight of them at the former Corbin Clothing Company, now called West Edge. Noting a dearth of modern construction skills in the local labor force, Coalfield has created a unique earn-and-learn approach that offers participants 30 months of paid employment and services. Each week’s schedule includes 33 hours of work experience that earn community college credit, six hours of schooling, and three hours of life-skills training. All ten program graduates have found full-time employment.

Coalfield’s scattered sites include rural reconstruction projects. With 19 affordable housing units complete and another 32 in the pipeline, the nonprofit is expanding its earn-and-learn model in related fields. West Edge serves as a launchpad for other new endeavors, including training in solar panel installations, agriculture, business incubators, handcrafted furniture, and partnerships with local artists. Each venture emphasizes “the strengths and assets that are already here,” says Deacon Stone, project director for the West Edge.

Each week, young workers file into the West Edge’s training center—at present a set of recycled church pews under fluorescent lights—to earn certifications in fields like mold remediation and asbestos abatement.

On this morning, only one woman takes a pew. Crystal Snyder of Ona is 36—a few years older than most of her male colleagues, but their match in attention and enthusiasm. Weeks earlier, she saw a notice online for a West Edge certification course in hazardous waste protocols. Snyder registered and investigated other Coalfield programs. “I heard talk of a greenhouse project,” she recalls. Learning about mushroom cultivation sparked her enthusiasm. She applied for training in Coalfield’s agricultural entrepreneurship program, Refresh Appalachia, and enrolled at Mountwest Community & Technical College in June. “I have wanted to go to college for so long,” says the single mother of two, who earned her G.E.D. at 19. “This feels like a win–win.”

For 25-year-old Ethan Spalding of Crum, Coalfield literally sparked an interest in solar power. “Solar’s a new industry. It’s going to be big,” he predicts. Armed with his newly earned associate degree, he enrolled in Marshall University’s engineering program in September 2016. He will be the first college graduate in his family.

Although nearly all Coalfield crew members are eligible for Pell grants to defray tuition costs, the nonprofit covers the remaining balance. It also funds emergency loans to help them cope with crises that could derail their plans. “Transportation, health problems—we find ways to help overcome them,” says Dennison. “They get basic financial training, like balancing a checkbook. They develop a savings cushion they can use when they have an abscessed tooth or need new tires. We help build that bridge.”

“The hardest part for most of our folks is school. The work ethic, getting after it—that comes in the DNA.”

“We started out concentrating on affordable housing. But that doesn’t change the trajectory of people’s lives. We quickly realized: we must create wealth and jobs.”

Brandon Dennison, founder and CEO, Coalfield Development Corporation

The fast-growing social enterprise now employs 26 young adults, eight of them at the former Corbin Clothing Company, now called West Edge. Noting a dearth of modern construction skills in the local labor force, Coalfield has created a unique earn-and-learn approach that offers participants 30 months of paid employment and services. Each week’s schedule includes 33 hours of work experience that earn community college credit, six hours of schooling, and three hours of life-skills training. All ten program graduates have found full-time employment.

Coalfield Development has already attracted support from funders, including the Benedum Foundation and the J.M. Kaplan Fund’s Innovation Prize. Kaplan chose the project from more than 1,000 promising social sector applicants nationally, awarding $175,000 in support. If funded, the nonprofit’s POWER grant will further a $2 million expansion.
Huntington’s West Edge is a former clothing factory being transformed by Coalfield Development’s young workers in training, including Wayne County work crew members Caleb Angel, Cody Martin, and Colt Brogan.

Mentors Travis Jones (left) and Eddie Austin review training materials.
Building a solar power training site in Dunbar is CDC work crew James Likens, Danny Ferguson, and Jacob Dyer.

Billy Carroll walks a beam at a new timber home in Delbarton, Mingo County.
The family feud that lends its name is long dead, but the Hatfield-McCoy Trails are a big draw for ATV enthusiasts. With 600 miles in five southern counties, the trails throughout rugged minelands have become a unique attraction.

Neighboring towns have opened their hearts (and storefronts) to more than 36,000 visitors. The big win: $22 million in economic impact.
The business of trails

Mingo County’s past echoes along rural Route 52, where King Coal Highway and Hatfield Cemetery nod to the region’s history. But the southern West Virginia hillsides increasingly resound with the purr of off-road vehicles cruising a booming tourist attraction: the Hatfield-McCoy Trails.

Over the past 16 years, the Hatfield-McCoy Trails have expanded to comprise more than 600 miles of rugged, privately owned terrain in five southern counties. The Hatfield-McCoy Regional Recreation Authority reported in a 2014 study that trail business activity and visitor spending combined for an overall economic impact of $22 million. Its application for $2 million in POWER funds would leverage additional financing and marketing help for trail business owners.

In 2015, more than 36,000 visitors towing all-terrain vehicles, UTV “side-by-sides,” and dirt bikes patronized dozens of businesses offering food, lodging, gasoline, rentals, and repair services, allowing isolated communities like Gilbert (pop. 450) to sustain their economies.

“Our coal severance tax receipts continue to decline,” says Vivian Livingood, mayor of the town perched on the Guyandotte River. “We need other avenues for revenue.”

The new businesses have helped change the local outlook. While population has declined, regional income growth and labor-force participation have exceeded the state as a whole. A tradition of hospitality has become an industry.

After hearing frequent complaints from visitors about the lack of accommodations near the Rockhouse trailhead, Livingood and her husband, Randy, added another full-time business to their used-car dealership, founding Livingood Lodging in 2004. Today they run five riverside rental properties. Livingood has become a personal and political advocate for trail-related investment.

“The trails are going strong. We’re in an area known for beautiful scenery and friendly people. But people have to take a little bit of a risk,” Livingood admits. The risk is real, along Guyan Street, a newly renovated coffee shop stands empty, already shuttered.

Jeff Lusk, executive director of the Hatfield-McCoy Regional Recreation Authority, says its key task is to provide support for trail-related startups.

“Our biggest challenge is to reach out to non-traditional entrepreneurs — those that aren’t young or college-educated. We help them with business plans and access to capital, plus instilling self-confidence. This is the scariest thing they will do. As we shift from dependence on a resource-based economy, we’re trying to build a culture of entrepreneurship. There are thousands of opportunities.”

Gaps in services remain. For example, few entrepreneurs can invest in rental ATVs, which carry $20,000 price tags. “We need low-interest loans. And we could use some beautification dollars,” says Livingood.

“We still need restaurants. Folks have to go to Logan or Man because they can’t get a steak and biscuits and gravy here,” adds Chad Bishop, a former coal miner in Gilbert. Bishop’s wife, Amber, is a direct descendant of the feuding Hatfields. The family has parlayed their history in the hills into two ventures: rental cabins named for ancestor Devil Anse, and Hatfield and McCoy moonshine, the county’s first legal distillery.

The travel industry’s dependence on online marketing and reservation systems poses a challenge in a region where broadband is still a luxury. But as the network grows, so does coordination. Trail merchants can now sell permits at 65 locations, and the trail website (trailsheaven.com) offers comprehensive trip-planning tools. “We support each other,” says Livingood. To her, the stream rushing down the nearby hillside suggests many more business opportunities for trail towns. “With kayaks, you can go 25 miles, from here to Logan,” she says. “And wow — can you imagine zip-lining?”
Dining, shopping, and lodging options, like Big Bear Lodge in Gilbert, cater to trail users. The trail authority also earns $1.2 million in revenues for trail permits each year.

Campgrounds and rental cabins have become a new business opportunity in coal country. The trail authority encourages and coaches new entrepreneurs.
Wild horses and ATVs share the mountaintops along the Rockhouse Trail in Mingo County.

Trail towns allow visitors the rare opportunity to ride their ATVs on streets — and even through drive-up lanes.
Growing an economy

The harsh contours of West Virginia’s abandoned minelands are a stark contrast to Butchart Gardens, the signature tourist attraction of Victoria, British Columbia. But Butchart, a blighted limestone quarry turned renowned botanical park, represents what central Appalachia’s former mines might one day look like, with a flourishing industry of high-value plant products and a metropolis of healthy chickens.

An innovative project to remediate these sites is being shaped at the West Virginia Regional Technology Park in South Charleston, where chemists and botanists are working on a plan to produce high-value plants on the former surface mine sites, now owned by the state. The plan could be implemented on a vast scale: former coal mines in central Appalachia cover some 1.2 million acres, a region nearly the size of Delaware.

“The big idea is agriculture on minelands,” explains Russell Kruzelock, a molecular geneticist and biotech entrepreneur who is the park’s CEO and executive director. “We can diversify our economy, using our strengths.” The project he has dubbed “green mining” has applied for POWER funding; its innovative twist is a vision for lab production of agrichemicals worth hundreds to thousands of dollars per gallon, rather than bushels of seasonal fruits and produce.

The technology park is now home to 30 companies that use the center’s laboratories. “We have 136 chemists and chemical engineers at the park,” says Kruzelock. “We have some of the best separations experts in the world. How can we use this asset to create jobs?”

Marina Sawyer, an entrepreneur at the technology park, puts the park’s role succinctly. “The question is not just what can we grow,” she says. “It’s what can we grow that makes money?”

For the past four months, chemists and botanists have created a blueprint to research the right conditions, the right plants, and the right lab applications to fulfill that vision.

“It all starts with clean water,” says Kruzelock. A mobile water purification treatment program developed in North Carolina can create 30,000 gallons of clean water a day. Trucked to former mine sites, it can contribute the first piece of the green mining process.

Good soil is the second requisite. Research at the Tech Park has determined that amending even a 6-inch depth of soil can support a variety of high-value plants. Three candidates that thrive in poor, rocky soils — lavender, pyrethrum, and purslane — produce chemicals that fit the project’s call for intense profitability.

In a second-floor lab at the Tech Park, Sawyer slides open a glass door sheltering trays of lavender seedlings. Their fragrant essential oils are used in the cosmetics industry and as a natural insect repellent. Prices for those chemicals hover at about $500 per gallon. An ongoing trial at a site donated by Pritchard Mining will test the perennial’s success on reclaimed minelands.

Purslane, a common weed that is another top performer in harsh conditions, produces more healthy omega-3 oils than any other plant. Its $500-per-gallon value makes it a natural candidate for the green mining lineup. Chrysanthemums yield pyrethrum, a compound with a four-figure per-gallon value. Military uniforms treated with the chemical provide protection to soldiers in the field, making defense contractors a target market.

“We’ll demonstrate with these plants. And there are a dozen more high-value crops,” says Kruzelock.

Like many small farmers who raise chickens as well as plants, the green mining project envisions a twofold use for poultry. The booming market for organic chicken products makes a 60-million-bird population a profitable business proposition, enhanced by the mining site’s access to interstate highways. Equally important, chicken manure helps turn rocky soils into fertile agricultural topsoil. A North Carolina poultry firm is a potential investor in the project.

“Park chemists expect that developing new extraction and distillation methods will result in valuable intellectual property, as well as pure products. Kruzelock expects that the region can tailor the green mining mode to a variety of sites. “Overall, the key to success is flexibility, marketing, and training. We’ll see a strategic shift in how people think about using their land. We’ll find a use of this land that will create the revenues to help pay for their remediation and sustainability. We will create jobs and make sites people want to come to, not stay away from.”

“The question is not just what can we grow. It’s what can we grow that makes money?”

Marina Sawyer, entrepreneur and president, JESMS Services, LLC

by the mining site’s access to interstate highways. Equally important, chicken manure helps turn rocky soils into fertile agricultural topsoil. A North Carolina poultry firm is a potential investor in the project.

Park chemists expect that developing new extraction and distillation methods will result in valuable intellectual property, as well as pure products. Kruzelock expects that the region can tailor the green mining mode to a variety of sites. “Overall, the key to success is flexibility, marketing, and training. We’ll see a strategic shift in how people think about using their land. We’ll find a use of this land that will create the revenues to help pay for their remediation and sustainability. We will create jobs and make sites people want to come to, not stay away from.”
An all-natural insect repellent and cosmetic oil, fragrant lavender is a high-value agricultural crop that could grow on former minelands.
Surface mining has left 1.2 million acres of scarred, rocky hillsides underfoot in Appalachia. Russell Kruzelock (left), with Howard Stint of West Virginia Regional Technology Park, proposes that plants that thrive in these challenging conditions may provide a new cash crop in West Virginia.

A reliable source of pure water, now being developed in a partnership at West Virginia Regional Technology Park, is the first step in cultivating hardy perennials.
Hannah Payne, a student at West Virginia State University, tends a test batch of lavender seedlings in the university greenhouse.

Aaron Smith, a WVSU student interning at West Virginia Regional Technology Park, tests lab applications that can add value to crops developed in the green mining project.
Hub of activity

A plan to create an $8 billion infrastructure to deliver Marcellus and Utica gas to chemical plants throughout the region relies on top-flight research, state cooperation, and efficient job training and marketing.

BRIAN ANDERSON
GE Plastics Materials Engineering Professor of Chemical Engineering; Director, West Virginia University Energy Institute
DIANNE ANDERSON
former BP executive and Case Western Reserve University Energy Institute director, alumnus and chair, Statler College Advisory Committee, West Virginia University

STEVE HEDRICK
president and CEO of Mid-Atlantic Technology, Research & Innovation Center (MATRIC)
History can repeat itself. One hundred years ago, the world’s first ethane cracker was built in Clendenin, West Virginia, using local natural gas to create ethylene.

Fast-forward a century: Today, ethylene has become the world’s most widely used petrochemical, and the Appalachian Basin has once again become the largest producer of natural gas in the United States, surpassing Texas and North Dakota. Its vast reserves are worth an estimated $2 trillion. In June 2016, Shell became the first multinational firm to recognize that potential, picking the region as a site for a massive $5 billion cracker. The projected manufacturing renewal will yield revolutionary fuels, 3-D printed plastics, and materials yet to be invented.

Economic development groups and university leaders from West Virginia, Pennsylvania, and Ohio have worked since the beginning of the natural gas boom to leverage cheap, abundant gas for manufacturing to serve the immense Northeastern U.S. market. The states’ governors added their commitment in a historic agreement signed in 2015. In June 2016, three West Virginians deeply involved in the effort gathered for a discussion of projects already underway.
WE’RE TRYING TO IDENTIFY HOW TO DEVELOP A STRONG MANUFACTURING SECTOR USING THE RAW MATERIALS WE HAVE, AS OPPOSED TO SHIPPING OUT OUR RAW MATERIALS TO INCREASE VALUE ELSEWHERE.”
QUESTION: How can development of the Marcellus, Utica, and Rogersville shale fields differ from how local resources were used in the past?

BRIAN ANDERSON: What excites me the most is the opportunity. Shell’s decision proves there’s a real chance to chart a robust future for the region. We’re trying to identify how to develop a strong manufacturing sector using the raw materials we have, as opposed to shipping out our raw materials to increase value elsewhere. The petrochemical industry was born in West Virginia, but most of the growth over the last 50 years has been in Texas, with more access to raw materials. Now we have those raw materials again, with an opportunity to bring in next-generation technology. West Virginia is the state that needs this opportunity the most — but the partnership across state boundaries allows everybody to buy into this. However, the window could close if we don’t act upon it.

DIANNE ANDERSON: When we talk about the region — this is an opportunity for the country, as well. A straightforward thing to do with gas is to build a pipeline and ship it elsewhere. That offers little value to the region. The next lowest value is to convert it into power — until transportation shifts to electrification. Higher value is when you can make it into high-end products, like ethylene or new chemical compounds. If the tri-state region can find a way to add value to the product instead of shipping it out of the region, then the country will follow that model.

STEVE HEDRICK: Shell’s project in Monaca, Pennsylvania, is the first major ethane cracker to be built outside of the Gulf Coast region in nearly two decades. We are uniquely positioned in this region: the raw materials are here and the customers are here. We know that industry wants to manufacture goods as close as possible to the consumer. Well, we are within 500 miles of two-thirds of the U.S. population and much of Canada’s, offering products a large market with huge value — utilizing natural gas liquids, like ethane and propane.

The region’s manufacturing footprint goes along with the demand for a reliable, stored supply of natural gas liquids, as well as the infrastructure to deliver it to plants. But the opportunities, the infrastructure buildout, and the construction of manufacturing facilities must roll forward in parallel. For example, if I’m going to build a gasoline station, I need a gasoline tanker to deliver to me. I also need someone to stop in and buy my gasoline. With natural gas, if we build a 110-million-barrel storage facility underground and no one buys a drop of natural gas liquids — that doesn’t work. We need to address all sides of the equation.

BRIAN ANDERSON: The region will benefit economically as we create brand-new products. I give this example: Starbucks used to use polystyrene for their cold cups. Now they use polypropylene, which can be recycled and uses less energy to produce. As we build this ability to manufacture, people will think of new uses, like higher-strength polymers and lightweight vehicles. Research will create innovations all along the supply chain. Dianne’s role is helping us map a research ecosystem around all the research organizations in the region, like MATRIC and our universities, to create the strongest collaborative research in the world on this topic.
DIANNE ANDERSON Our regional university presidents and energy institute directors at West Virginia, Carnegie Mellon, Pitt, and Case Western Reserve have created a formal Tri-State University Energy Alliance to complement each other’s efforts. Penn State and Ohio State augment those four to suggest solutions that are distinctive for this region and increase natural gas uses—a key to insure that the gas is developed.

QUESTION What are the main tasks that lie ahead?

BRIAN ANDERSON Last year, Governors Tomblin and Wolf and Ohio Lieutenant Governor Mary Taylor signed the tri-state shale regional agreement (see page 28). That was important. It identified four areas for cooperation: research, infrastructure, workforce development, and marketing. As folks developed tasks in these topics, to imagine what’s necessary, infrastructure very quickly came to the fore. The Benedum Foundation was the catalyst. It offered a $100,000 match if industry partners would commit to funding our first study—which they did.

Industry experts talked about the need for storage. A state is not going to build a storage facility, but academics can help them figure out what barriers there are to private investment. And the first barrier is, where to put the gas. You have to identify where the good locations are. Our faculty member, Doug Patchett, had just completed a project mapping the potential gas in the Utica Shale with the three states’ geological surveys, the U.S. Geological Survey and an industry consortium. So he was an ideal person to head this study—the independent academic exercise of what the engineering of a storage system connected by infrastructure might look like. The project is specifically the geologic analysis of different formations, ranking them on capacity. We’re approaching this as an honest broker, to examine locations in absence of state borders. Investors can pick up our study, to be completed by May 2017, and then proceed with pre-feasibility and feasibility studies. The ultimate goal is to get it into the hands of private enterprise to run with it—in the tri-state market, equity firms across the world, Houston, and elsewhere.

STEVE HEDRICK It is possible to store natural gas liquids in naturally occurring underground caverns and deliver those NGLs through pipelines. Specifically, the corridors naturally created by the Ohio and Kanawha River valleys could be utilized as a platform for a substantial pipe system. From Monaca, Pennsylvania, to Charleston to Catlettsburg, Kentucky, is less than 500 miles, about the same distance as the pipeline connecting Brownsville, Houston, and Lake Charles in the Gulf region. If you look at generic pricing, it’s about an $8–$10 billion investment. So, it’s not unheard of. A large engineering and construction firm would be engaged. It has been accomplished, and it can be accomplished.

DIANNE ANDERSON For natural gas applications, our research and innovation effort has already identified about 20 research projects in four categories: gas to power, gas to chemicals, gas to transportation fuels, and gas that’s for transport fuels, like NGLs or natural gas–powered vehicles. We recognize that the best way to build a national reputation in a couple fields is to collectively work together—for example, connecting really talented energy literacy at WVU and talented policy literacy at Carnegie Mellon. We need real ideas that will break through technical challenges. Our university and industry leaders recognize this. And again, Benedum is providing funding for the universities to inventory
THE UNIVERSITY ENERGY ALLIANCE HAS ALREADY IDENTIFIED ABOUT 20 RESEARCH PROJECTS IN FOUR CATEGORIES: GAS TO POWER, GAS TO CHEMICALS, GAS TO TRANSPORTATION FUELS, AND GAS THAT’S FOR TRANSPORT FUELS, LIKE NGLS OR NATURAL GAS-POWERED VEHICLES. WE RECOGNIZE THAT A LOT OF THESE TECHNOLOGIES CAN’T HAPPEN UNLESS THERE IS TEAMWORK.”
WE ARE UNIQUELY POSITIONED BECAUSE THE RAW MATERIALS ARE HERE AND THE CUSTOMERS ARE HERE. WE ARE WITHIN 500 MILES OF TWO-THIRDS OF THE U.S. POPULATION.”

STEVE HEDRICK
the key relevant researchers, select a couple, and build the industry–university teams around them. That’s crucial.

**QUESTION** Can petrochemical manufacturing meet goals for environmental protection and sustainability?

**STEVE HEDRICK** Of course. We worry about what’s most important: the safety of our people and protecting the environment. The industry demands that of itself. And we protect the water, specifically. The Ohio River Valley Water Sanitation Commission (ORSANCO) has authority over water quality issues on the river. Manufacturing is being done safely now. And plans are in place for emergency response.

**BRIAN ANDERSON** As we develop new infrastructure, technology can provide new sensors for monitoring subsurface conditions and infrastructure integrity. It will be state of the art — we can take a great leap forward. At WVU, we’re also developing applications that apply to renewables. We are working with The Nature Conservancy and the MacArthur Foundation to identify renewable portfolio options that would create jobs and lower the carbon footprint of West Virginia’s energy sector. Right now, we’re 98 percent coal-powered. The surrounding states are switching to natural gas. We’re changing technologies.

**DIANNE ANDERSON** The industry that has been offshore for over 40 years is moving back onshore, and it’s moving into highly populated regions. We have no choice but to develop the resource responsibly. As Brian shares, a lot of that is about new technologies, and a lot of that is about extreme monitoring. Having the standards and showing responsibility is imperative.

**QUESTION** What’s government’s role?

**BRIAN ANDERSON** Government has the ability to look farther forward than industry does. Research partnering with government at the state level thinks about where to seed private industry by incentives like tax credits. We’re talking about infrastructure that can crisscross three or four states, each with permitting control. In a grand vision, what if a company’s permit application could work in all those states? At the federal level, the Department of Energy can look forward. Thirty-five years ago, research at the Department of Energy’s National Energy Technology Laboratory in Morgantown coupled horizontal drilling and fracking technologies. That became the shale industry. As we look forward again 35 years, what investments can we make for the greater good? That’s the role of the federal government, to invest in things beyond the view of industry.

Our president, Gordon Gee, has challenged us to consider the role of the land grant university in the 21st century. It’s a big reach from the ivory tower to spur economic development. We’re building a new creative role, trying to create partnerships in the triangle of industry and government and academia.

**STEVE HEDRICK** We are solving the hardest problems of science and technology for the betterment of society. I believe there will be a day when someone in our region, because of the current work of a collection of people including the private sector and government investment, can put food on the table for his or her family. And that’s beautiful.
On October 13, 2015, the governors of West Virginia and Pennsylvania and the lieutenant governor of Ohio signed a historic agreement to enhance regional cooperation and job growth. The agreement calls for continuing development of shale gas throughout the Appalachian Basin.

The agreement covers both the Marcellus and the Utica gas plays, with an important proviso: it calls for environmentally responsible development with “a particular focus on adding value” to natural gas and natural gas liquids. It also stipulates policies that encourage natural gas use in local processing and for local business purposes to increase regional prosperity.

“This is an important tool,” says Ken Zapinski, senior vice president for energy and infrastructure for the Pittsburgh-based Allegheny Conference on Community Development, a member of the agreement’s steering committee.

The committee has drafted an action plan with tasks assigned in four areas.

In marketing and promotion, Ohio’s TeamNEO and West Virginia’s Vision Shared will prepare a toolkit of promotional materials that describe tri-state assets, including infrastructure, companies, research, and workforce talent, and pitch the value proposition to investors. The group will pursue marketing opportunities at major national and international meetings and enlist manufacturing partnerships to develop supply chains and services for cracker facilities.

West Virginian Cory Dennison serves on the committee. The president and CEO of Vision Shared, which forges cooperation among the state’s workforce development, research, and business development efforts, reports the group has applied for several federal grants to help promote the brand of the Tri-State Shale Coalition. The committee has met with the governors’ representatives to the project, including former U.S. Congressman Mark Kritz on behalf of Pennsylvania Governor Tom Wolf, Assistant Policy Director of Environment, Energy and Agriculture Michael Fraizer on behalf of Ohio governor John Kasich, and Secretary of Commerce Josh Jarrell on behalf of West Virginia Governor Earl Tomblin.

In workforce development, the agreement builds on the success of ShaleNET, a regional model of competency-based energy and manufacturing training pathways at high schools, community colleges, and career centers. The effort also includes recent research by the Allegheny Conference to determine the jobs and skills that will be most in demand in the region over the next decade.

The Conference’s “Inflection Point” report, published in May 2016, noted that “companies across many sectors now identify themselves as technology companies. Ensuring...
a future workforce with digital fluency must begin with the K–12 system.”

It also noted that incumbent workers “must adapt to these changes, and those seeking opportunity must understand how to become adequately skilled for emerging roles.”

Jim Denova, Benedum Foundation vice president, serves on the committee. He says a priority for the region-wide project is making job credentials portable. He believes that states can work toward standardizing curricula for training programs and associate degrees. A network of community colleges in the region is now working to align their training programs. Agreement on how workers training for new energy jobs can “stack” credentials, creating a common sequence from short non-credit certifications to associate degrees, would allow individuals to build skills while working. Close coordination and agreement on basic standards among community colleges will allow students to transfer across state lines for such training, bringing their credits and financial aid with them.

In transportation and infrastructure, the states will review the study of the Appalachian Storage and Trading Hub, funded by the Benedum Foundation and industry partners for completion by the West Virginia University Energy Institute in 2017. Vision Shared and TeamNEO, northeastern Ohio’s jobs and business attraction nonprofit, will conduct a gap analysis of available sites and transportation issues that hamper downstream manufacturing opportunities.

In research and innovation, leaders of major research universities within a 160-mile radius have signed on to the Tri-State University Energy Alliance. Representatives of Case Western Reserve University, Carnegie Mellon University, the University of Pittsburgh, and West Virginia University signed a memorandum of understanding on a five-year agreement on cooperation and complementary objectives in March 2016, and The Ohio State University and Pennsylvania State University are doing preliminary work with them on increasing the shale usage. The Benedum Foundation is building on that agreement in a project to identify existing university research capabilities, focusing on those that are relevant to industry and manufacturers. Topics from energy innovation to environmental and health issues could be included. The investigation is led by former BP executive and WVU Statler Advisory Committee chair Dianne Anderson and former Carnegie Mellon University vice provost and University Energy Partnership president Christina Gabriel.

“Our university presidents and industry understand the role of research and innovation in economic development efforts,” says Dianne Anderson. “Research and innovation go hand in hand.”

THE COMMITTEE HAS DRAFTED AN ACTION PLAN WITH TASKS ASSIGNED IN FOUR AREAS:

MARKETING AND PROMOTION
WORKFORCE DEVELOPMENT
TRANSPORTATION AND INFRASTRUCTURE
RESEARCH AND INNOVATION
Windfarms dominate the ridges overlooking the Canaan Valley, where Maya Paul (left) attends Tucker County High School. The school has launched a rigorous curriculum in science, technology, engineering, arts, and math. Tory Paul (right) will enroll at the high school in 2019.
At tiny Tucker County High School, ambitious teens welcome the new STEAM program as they plan careers.
In the shadow of a mountaintop wind farm, isolated Tucker County High School has a clear view of the region’s future. The school’s selection as one of eight schools in West Virginia to implement a comprehensive curriculum in science, technology, engineering, arts, and mathematics (STEAM) in the fall of 2016 opens a wider career vista to students graduating into the 2020s.
The Education Alliance, a statewide nonprofit with funding from the Benedum Foundation, created the demonstration sites. Each will develop inquiry-based science and math education, integrated curricula, project-based group learning, and career awareness.

Every one of Tucker’s underclassmen and incoming freshmen was invited to a preview of the program during the 2016 spring semester. Challenged to design and manufacture their own model gliders on a 3-D printer, they worked in a former school library that is being renovated as a maker space, with software-loaded laptops, a camera-carrying drone, tools like drill presses and band saws, and the printer. The result: one of every three students — 65 out of a mere 325 — opted to enroll in one or more of the new courses.

The response pleased Principal Jay Hamric. But he wasn’t surprised. “We pushed,” he says simply. “We emphasized the opportunity — especially for girls. This is not a new department — it’s schoolwide. We’re all embracing STEAM, sharing ideas and equipment.”

Hamric argues that the hands-on approach of the courses developed by Project Lead the Way, a national engineering curriculum, will build Tucker students’ problem-solving and collaborative skills. One cross-curricular project enlists art students to design functional “tiny houses” that will be built by construction students.

Hamric takes the long view of the school’s new approach. “Tucker County needs to create jobs to stay vibrant. We produce highly employable kids. And now, seven miles from here, we’ll have Connector H” — a new interstate highway connecting Tucker County to northern Virginia. “That means that our kids who want a job in one of the biggest metropolitan areas in the world, Washington D.C., can live near here. They can live in the prettiest place in the country. They can start a business here.”

“We emphasized the opportunity — especially for girls. This is not a new department — it’s schoolwide. We’re all embracing STEAM, sharing ideas and equipment.”

Jay Hamric, principal, Tucker County High School
“Last year, I went to robotics summer camp at WVU. I’m planning to join our school robotics team this year. At our STEAM preview, we got to design stuff. It was great! I actually made a model canoe for my teacher. I think the new course will help give me lots of options — I’m planning on engineering in college, but maybe I’ll go on to medical school. Or design spaceships.”
“I am really looking forward to the new course, for problem-solving and three-D modeling. Math and engineering help you apply what you learn—to make sure a building doesn’t collapse. In the future, I’ll be doing something big—maybe designing a hangar for Jack’s spaceships!”

NATHANIEL RADER, 16
DAVIS, WV
Likes: cross-country, architecture

“When we got to work with the 3-D printer, I was pretty interested. I like to focus on solving problems. I’m good with computers. I’ve had to reprogram the light board at our school auditorium a few times. It was a bunch of guesses. The new course will help me further toward engineering and computer science. I’m hoping to go to Glenville State.”

JAZZMYN HINZ, 17
THOMAS, WV
Likes: art, theater, music
MAYA PAUL, 13
CANAAN, WV
Likes: softball, skiing, challenges
“I want to do something in the health science field and think this course will help me prepare. I like to be challenged — some of my courses haven’t been challenging enough. And I like the idea of teamwork. When you have a hard time during a softball game, you think of a play to win. The same idea can apply in a classroom — you work together to create a solution.”

“Learning something new is interesting — I want to jump in. I want to strive to be better. Most girls don’t have knowledge of engineering. I think it will help me advance. Now, I am considering computer science as a career, but if I change my mind, it’s good to have other options.”
ABOUT THE FOUNDATION

The Claude Worthington Benedum Foundation is an independent foundation established in 1944 by Michael and Sarah Benedum, natives respectively of Bridgeport and Blacksville, West Virginia. The Foundation’s assets at year-end 2015 were $342,366,859. Since its inception in 1944, the Foundation has made almost 8,200 grants totaling over $458,000,000.

During his lifetime in the oil and gas business, Michael Benedum amassed a fortune, ranking him in his day among the 100 wealthiest Americans. Michael Benedum operated his worldwide business from corporate headquarters in Pittsburgh, Pennsylvania. Mr. and Mrs. Benedum established residence in Pittsburgh in 1907 and lived here for over 50 years. They named the Foundation in memory of their only child, Claude Worthington Benedum, who died in 1918 at age 20. In creating the Foundation, Mr. and Mrs. Benedum expressed the wish that grantmaking be focused in West Virginia and Pittsburgh, their native and adopted homes.

MISSION

To encourage human development in West Virginia and Southwestern Pennsylvania through strategically placed charitable resources.

GUIDING PRINCIPLES

The following principles guide the Foundation’s grants programs in those regions:

• We honor Michael and Sarah Benedum’s belief in “helping people help themselves,” and we seek opportunities to cultivate the creativity of people and communities.

• We nurture leadership within the communities we serve, and we participate in leadership when it adds value.

• We encourage planning, projects, and programs that cross geographic and political boundaries so that access to services and economic growth is maximized.

• We expect collaboration among the public, private, and nonprofit sectors in order to leverage the resources that each can bring to common concerns.

• We strive to advance innovative practices that demonstrate measurable and sustainable benefit.

• We seek projects that contribute to advancement in public policy.

THE FOUNDATION’S ROLE

In seeking to achieve our mission and acknowledging lessons learned in 70 years of grantmaking, the Foundation has identified its role as follows:

“The Foundation largely takes on the agenda of the people we serve. Our business is to help people help themselves. This is not intended to suggest that the Foundation’s role is passive. To the contrary, we go out into the field and listen closely. We build strong and supportive relationships with grantees. We provide technical assistance. We broker ideas and institutions. We create partnerships. We undertake analyses of issues and problems, and we promote public awareness of them. We help to build broad consensus for change. We seek to empower people to develop their own capacity and the capacity of their institutions to succeed. We leverage not only funds but interest, involvement, and commitment.”

Excerpted from In the Company of Extraordinary People: A Special Report upon the Occasion of the 50th Anniversary of the Benedum Foundation, 1994

GRANTS PROGRAMS

In keeping with the wishes of Michael and Sarah Benedum, the Claude Worthington Benedum Foundation is a regional philanthropy focusing on West Virginia and Southwestern Pennsylvania. The Foundation generally invests two-thirds of its grant dollars in West Virginia and one-third in Southwestern Pennsylvania. The Foundation serves the entire state of West Virginia. In Southwestern Pennsylvania, the service area includes Allegheny, Washington, Greene, and Fayette counties. This four-county area is a natural connector between Pittsburgh and West Virginia and contains rural communities that may benefit from the Benedum Foundation’s experiences in West Virginia. However, the Foundation recognizes that economic regions do not follow political boundaries, and, therefore, the Foundation both encourages projects that cross state lines and supports economic and education initiatives that benefit the multi-state region centered on Pittsburgh.
The Foundation makes grants in two program areas that span both states: Education and Economic Development. In addition, the Foundation supports Community Development and Health & Human Services grants programs in West Virginia and, in Southwestern Pennsylvania, supports the major performing arts organizations within the Cultural District.

From time to time, the Foundation revises specific areas of interest within its grants programs, and grant seekers are encouraged to view the Foundation’s website for the most current descriptions.

EDUCATION
The Benedum Foundation seeks to promote successful learning through the formal education system. Academic achievement and preparation for the 21st-century workforce are the ultimate objectives of this program.

The Foundation places a high priority on teacher quality and the most advanced instructional tools. Because schools do not function in isolation, the Foundation also looks to the resources of community organizations, business, and higher education to reinforce the learning objectives of the classroom. In preparation for the rising demands of the workplace, the Foundation recognizes the need for all students to be prepared, without remediation, to pursue some form of post-secondary education.

Although the Foundation is interested in any significant opportunity to improve the education system, specific areas of interest include:

- Programs that improve teacher quality through professional development and innovative instructional strategies.
- Arts education, the integration of arts into other disciplines, and the partnership of community arts groups and higher education with the PreK–12 education system.
- Career education that aligns secondary and post-secondary programs to high-demand, high-wage occupations.

ECONOMIC DEVELOPMENT
Innovation will be the cornerstone of the future success of the economy in West Virginia and Southwestern Pennsylvania. The Foundation supports economic development activities based upon the region’s strengths in research, technology, and advanced manufacturing. The Foundation's agenda seeks to promote regional planning and cooperation, recognizing that, with respect to any endeavor, “region” should mean whatever area is most appropriate to optimize the available opportunity, without reference to historic, geographic, or political boundaries. The expected outcomes of the Foundation’s Economic Development grants are the creation and growth of innovative, wealth-producing businesses and high-quality jobs.

In addition, many of the communities in the region served by the Foundation are rural and enjoy abundant natural assets that provide economic opportunities that complement centers of technology-based growth. The Foundation supports efforts to advance agriculture, outdoor recreation, artisanship, and heritage tourism. Specific areas of Foundation interest include:

- Promotion of entrepreneurship.
- Projects that promote technology-based economic development.
- Programs to promote the growth and accessibility of new capital for businesses in distressed communities and areas of high unemployment.

WEST VIRGINIA GRANTS PROGRAM
In addition to the areas of interest discussed above, in West Virginia the Foundation also makes grants in Health & Human Services and Community Development.

HEALTH & HUMAN SERVICES
West Virginia’s best future requires that all families have access to high-quality health care and human services, and to the resources that enable them to raise their children to be productive members of their communities.

Emphasis in this program area is placed on innovations in health care delivery systems, a strengthening of the public health infrastructure, and community-based health promotion, especially with regard to chronic disease prevention and patient care management. Collaborative efforts are encouraged that provide technical assistance, develop programs, document effectiveness, and improve public policy. Specific areas of interest include:

- Support for a healthier quality of life for West Virginians through access to affordable health care, preventive health services, state-level policy development, provision of a medical home, and the delivery of quality patient care.
• Ensuring a system of accessible and affordable health care for children, early intervention services that lead to school success, and the promotion of child-focused public policy designed to prepare children to grow, learn, and prosper.
• Public oral health education, implementation of preventive strategies and programs, connecting people to a dental home, and achievement of the goals of the state oral health plan.

COMMUNITY DEVELOPMENT
Improving capabilities of leaders, organizations, and interested citizens to address challenges and opportunities will help communities be more prosperous through their own efforts. The Benedum Foundation promotes the economic well-being and quality of life of West Virginia communities. Specific areas of interest include:
• Activities that engage diverse groups of citizens in the life of the community.
• Helping communities organize, plan, and implement ambitious but achievable improvement strategies.
• Leadership development.
• Programs that improve the effectiveness and accountability of nonprofit and public organizations.
• Efforts to expand technology access, affordability, and utilization.
• Activities that provide decent, safe, and affordable housing through home construction, repair, and financing and homeowner education programs.

SOUTHWESTERN PENNSYLVANIA GRANTS PROGRAM
In addition to the Education and Economic Development program areas described above, the Foundation believes that the arts play a significant role in economic development. Pittsburgh’s exceptional arts community and the Pittsburgh Cultural District provide a competitive advantage to the region’s economy. The Foundation supports the major performing organizations within the Cultural District, as well as specific projects that add value to the Cultural District, especially through cooperative ventures among resident organizations.

HOW TO APPLY FOR A GRANT
Before applying for a grant, applicants should carefully review the Foundation’s Mission and Guiding Principles, and our grants program descriptions. Seeking a grant from the Benedum Foundation is a highly competitive process. As you might expect, the Foundation receives more applications each year than we are able to fund, which means that even some proposals that fit within the description of the Foundation’s grants program may not be selected for funding.

RESTRICTIONS
The Foundation generally does not make grants in support of:
• Organizations located outside West Virginia or Southwestern Pennsylvania
• Individuals
• Organizations not exempt from taxation under Internal Revenue Code Section 501(c)(3)
• Student aid, fellowships, or travel
• Construction or equipment
• Endowment
• Ongoing operating expenses
• National organizations
• Biomedical research
• Religious organizations for religious purposes
• Individual elementary and secondary schools
• Annual appeals or membership drives
• Conferences, films, books, and audio-visual productions, unless an integral part of a Foundation-supported program

APPLICATION PROCESS: WHAT TO EXPECT
After reviewing the information listed above, submit your application using the Foundation’s online grant application process found on our website (www.benedum.org).

The Foundation does not have submission deadlines, and applications are accepted throughout the year. Once we receive your completed online application, an automated response will be sent to you acknowledging receipt. You should receive a response to your application within 60 days, at which time you will be notified if your project is not one the Foundation can consider, or if you should submit additional information.
2015 GRANTS

Although some of our grants have impact in both West Virginia and Southwestern Pennsylvania, for ease of reference, grants authorized in 2015 are listed below alphabetically by region of primary benefit.

Readers, especially grant seekers, should be aware that the emphasis of the Foundation’s grants program evolves over time and that grants as reported may not be indicative of the Foundation’s future program emphasis.

WEST VIRGINIA

EDUCATION

Carnegie Mellon University
Pittsburgh, PA
To establish a network of out-of-school environmental science education and professional development centers in West Virginia and Southwestern Pennsylvania
$150,000

Carnegie Museums of Pittsburgh
Pittsburgh, PA
For cross-curricular integration of Andy Warhol’s printmaking techniques in West Virginia and southwestern Pennsylvania classrooms
$125,000

Children’s Museum of Pittsburgh
Pittsburgh, PA
For a partnership between the Children’s Museum and the Education Alliance to establish a consortium of maker spaces in formal and community education sites across West Virginia
$100,000

Clay Center for the Arts & Sciences of West Virginia, Inc.
Charleston, WV
To develop interactive art and technology learning spaces and exhibits
$130,000
To deploy a mobile, energy-focused science lab to rural schools
$75,000

Common Sense Media
San Francisco, CA
To assist educators in the assessment, selection, and use of digital learning tools in West Virginia (over two years)
$150,000

Fairmont State Foundation, Inc.
Fairmont, WV
For a peer learning community of science-themed professional development schools
$107,000

Hancock County Schools
New Cumberland, WV
For teacher-created online classes and blended learning plans
$120,000

Kanawha County Board of Education
Charleston, WV
To establish a nationally recognized professional development school model, Expeditionary Learning, in two low-performing schools in Charleston’s West Side
$200,000

Regional Education Service Agency 3 (RESA 3)
Dunbar, WV
For a pre-K educational technology program developed by Carnegie Mellon University and Pittsburgh Association for the Education of Young Children
$146,000

Regional Education Service Agency 5 (RESA 5)
Parkersburg, WV
For RESAs 5, 6, and 7 to host a regional college preparation program
$77,000

The Education Alliance — Business and Community for Public Schools, Inc.
Charleston, WV
For a network of model STEM schools to demonstrate best practices in business–school partnerships
$162,000
For eight designated STEM schools to adopt the Carnegie Science Center model of assessment and continuous improvement of STEM education
$32,000

West Liberty University Foundation, Inc.
West Liberty, WV
Introduction of a national online science curriculum, Jason Learning, to northern West Virginia and southwestern Pennsylvania school districts (over two years)
$219,000

West Virginia Department of Education
Charleston, WV
Online career planning tool to help students research occupations and corresponding educational requirements
$125,000

West Virginia Division of Culture and History
Charleston, WV
For distribution of STEAM mini-grants through a network of community-based arts organizations
$225,000

West Virginia University Foundation, Inc.
Morgantown, WV
To provide mentoring and graduate courses to preschool teachers seeking National Board Teaching Certification
$150,000
Survey and analysis of public comment on West Virginia Common Core education standards
$47,015

Wheeling Jesuit University
Wheeling, WV
Development of interactive virtual science labs for rural schools that lack adequate physical laboratories (over two years)
$121,000

HEALTH & HUMAN SERVICES

Blanche Rockefeller Neurosciences Institute, Inc.
Morgantown, WV
Initiative to develop communities that are informed, safe, and respectful of individuals with dementia and their families and caregivers
$125,000

Cabell-Huntington Health Department
Huntington, WV
To support education and risk-reduction programs for drug-addicted individuals
$75,000
Cabin Creek Health Center, Inc.  
Dawes, WV  
For documentation of a cost-effectiveness and sustainability plan for rural pulmonary rehabilitation services  
$30,000  
To initiate Project ECHO, a primary care and specialist collaboration to bring quality care to patients with prevalent serious diseases  
$100,000

CAMC Health Education and Research Institute, Inc.  
dba CAMC Institute  
Charleston, WV  
For a quality improvement initiative to prevent childhood obesity through policy, systems, and environmental changes in West Virginia child care centers (over three years)  
$310,000

Crittenton Foundation, Inc.  
Wheeling, WV  
To provide early intervention and resiliency-building services for at-risk children in pre-K through 1st grade  
$185,000

Eastern Area Health Education Center, Inc.  
Martinsburg, WV  
To educate federal nutrition assistance recipients about the benefits of shopping at local farmers markets to increase the consumption of fresh and healthy food  
$40,000

First Choice Services, Inc.  
Charleston, WV  
Statewide expansion of the West Virginia Telehealth web-based therapy project to provide clinical care in the home  
$100,000

K.I.D.S. / Fashion Delivers, Inc.  
New York, NY  
In partnership with West Virginia’s food banks, to provide clothing, shoes, books, educational materials, and baby products to families in need  
$40,000

Lily’s Place, Inc.  
Huntington, WV  
Staff development  
$75,000

Marshall University Research Corporation  
Huntington, WV  
To strengthen the West Virginia oral health network through the education of perinatal providers and through school-based oral health services  
$245,000  
In collaboration with the West Virginia Department of Education and community partners, to implement health components through school-based health centers  
$178,000  
To develop community health worker certification recommendations for implementation in West Virginia  
$75,000

Minnie Hamilton Health Care Center, Inc.  
Grantsville, WV  
For regional healthcare providers to use community health workers to provide care coordination to improve health outcomes for diabetic patients and those at high risk of the disease (over three years)  
$240,000

Partnership of African American Churches  
Charleston, WV  
To assist people in recovery from substance abuse and mental health issues to transition into a healthy community environment  
$100,000

Pendleton Community Care, Inc.  
Franklin, WV  
To install health monitoring devices in the homes of geriatric patients to improve disease management  
$33,600

Rural Emergency Trauma Institute, Inc.  
Wheeling, WV  
Creation and evaluation of a network and technology platform to link rural hospitals with centers of expertise in surgery and bioethics  
$150,000

Team for West Virginia Children, Inc.  
Huntington, WV  
To build the capacity of in-home family education programs to improve the health and well-being of young children and their families  
$155,000

The Center for Rural Health Development, Inc.  
Hurricane, WV  
To create a self-assessment tool for boards of rural health organizations  
$48,000

University of Pittsburgh  
Pittsburgh, PA  
To integrate education, health, and social services for children served by Early Head Start and child care centers in the Northern Panhandle of West Virginia  
$46,000

West Virginia Cancer Clinical Trials Network  
Morgantown, WV  
To develop a network that provides access for all West Virginians to cancer clinical trials close to home  
$110,000

West Virginia Coalition Against Domestic Violence, Inc.  
Elkview, WV  
To develop model home visitation guidelines for assessment and response to domestic violence for the statewide home visitation network  
$46,000

West Virginia Community Voices, Inc.  
Charleston, WV  
To facilitate work groups around issues that foster the ability of West Virginia’s seniors to live with dignity and purpose  
$152,600

West Virginia Council of Churches  
Charleston, WV  
To build capacity in the faith-based community to address substance abuse in West Virginia  
$100,000

West Virginia Department of Education and the Arts  
Charleston, WV  
Creation of an early childhood comprehensive data system to fund strategic system planning and targeted system improvements and modernizations  
$300,000

West Virginia Development Office  
Charleston, WV  
To implement programs for community wellness, healthy food, and active living in West Virginia Main Street and ON TRAC communities  
$100,000
West Virginia Healthy Kids and Families Coalition  
Charleston, WV  
To support the “Try This West Virginia” movement to create a culture of good health in the State  
$210,000

West Virginia Higher Education Policy Commission  
Charleston, WV  
To establish a community-based, practice-based research network of interdisciplinary clinical providers to advance research endeavors at West Virginia’s academic health centers  
$150,000

West Virginia Primary Care Association, Inc.  
Charleston, WV  
To recruit health care providers and increase access to primary care services (over two years)  
$120,000

West Virginia Public Broadcasting  
Charleston, WV  
For Appalachia Health News to support a program series on health in the region  
$77,250

West Virginia University Foundation, Inc.  
Morgantown, WV  
To build a resilient emergency food network and web resource in West Virginia  
$74,000  
To provide vision and eye health services for the underserved in West Virginia, in collaboration with free and community clinics  
$115,000

West Virginians for Affordable Health Care  
Hinton, WV  
For promotion of consumer participation in understanding the value of having health insurance and to implement health system improvements  
$256,000

Williamson Health & Wellness Center, Inc.  
Williamson, WV  
To provide a care coordination model using community health workers to treat high-risk patients with diabetes, chronic obstructive pulmonary disease, and congestive heart failure (over three years)  
$150,000

WV Voluntary Organizations Active In Disaster  
Williamson, WV  
To provide services for victims affected by the March 2015 winter storm in West Virginia  
$100,000

COMMUNITY DEVELOPMENT

Americans For The Arts, Inc.  
Washington, DC  
To support a regional conference and activities to advance the role of local arts in community revitalization  
$20,000

Community Connections, Inc.  
Princeton, WV  
For a multimedia workshop that empowers communities to develop arts programming and resources  
$111,000

CommunityWorks in West Virginia, Inc.  
Charleston, WV  
To build capacity of nonprofits to improve applications for federally funded affordable housing projects (over two years)  
$250,000  
For programmatic and financial support to volunteer-based organizations to rehabilitate and repair homes for low-income families  
$125,000  
Research and planning for senior housing models that promote successful aging-in-community that can be replicated throughout the State  
$25,000  
For the West Virginia Housing Conference to bring together representatives from the community to address the housing needs in the State  
$10,000

MACED (Mountain Association for Community Economic Development)  
Berea, KY  
Annual support for the Appalachia Funders Network  
$10,000

Parkersburg Area Community Foundation  
Parkersburg, WV  
To connect participants to career and community service opportunities in 16 West Virginia counties  
$89,000

Philanthropy West Virginia, Inc.  
Morgantown, WV  
For the West Virginia Nonprofit Association to improve the capacity of nonprofits through training, policy development, networking, and cost-saving programs  
$115,000

Tucker Community Foundation  
Parsons, WV  
To undertake data collection, analysis, and planning to guide development of artistic, cultural, and recreational tourism attractions in Tucker County, West Virginia  
$60,000

Vision Shared, Inc.  
Huntington, WV  
To support activities of Vision Shared, a statewide nonpartisan community and economic development organization that bridges social, political, and economic gaps to confront issues that affect West Virginians  
$150,000  
Matching funds for a fellowship program designed to attract and retain young talent to live, work, and contribute to a better future in West Virginia  
$101,000

West Virginia Center for Civic Life, Inc.  
Charleston, WV  
To support “What’s Next WV” discussions in communities intended to strengthen and align efforts to build local economies  
$84,000

West Virginia Community Development Hub, Inc.  
Fairmont, WV  
To provide mini-grant and pre-development funding for community improvement projects in the 2015 Turn This Town Around communities of Ripley and Whitesville  
$175,000
To send West Virginians involved in community development to the Clinton Global Initiative as part of a delegation from Appalachia
$6,000

To continue the transformation of West Virginia communities through place-based capacity building, sector development and support, community-based policy change, and creation of a network communications infrastructure
$260,000

West Virginia Development Office
Charleston, WV
To provide matching funds and funding for program initiatives for the 2015–2016 West Virginia Flex E-Grant program
$75,000

West Virginia University Foundation, Inc.
Morgantown, WV
For the 2015 Community Leadership Academy pre-conference training program
$3,000

To support demolition and redevelopment of abandoned and dilapidated structures along gateways to communities that are participating in the statewide program to address blight
$150,000

ECONOMIC DEVELOPMENT

Collaborative for the 21st Century Appalachia, Inc.
Charleston, WV
To provide assistance for emerging young farmers to launch successful enterprises
$105,000

Coalfield Development Corporation
Wayne, WV
For planning and development of a program to train workers in solar panel installation and related construction skills
$50,000

Consortium for Entrepreneurship Education
Charleston, WV
To initiate an entrepreneurship education initiative in three distressed counties in West Virginia
$25,000

Creative Communities Network, Inc.
Charleston, WV
For a three-month planning grant to support development of an innovation internship program
$21,700

Huntington Municipal Development Authority
Huntington, WV
For a feasibility study to create the initial organizational, financial, and operational model for a public–private partnership to foster economic diversification through polymer-based manufacturing
$75,000

Marshall University Research Corporation
Huntington, WV
To advance West Virginia’s agriculture economy through technology and innovation (over two years)
$266,000

Natural Capital Investment Fund, Inc.
Shepherdstown, WV
For development and implementation of redevelopment financing models for properties in downtown districts to promote economic development in small towns
$250,000

To build and strengthen local food supply chains within and between rural and urban areas; develop a downtown building loan program; and develop a New Markets Tax Credit lending strategy
$150,000

New River Gorge Regional Development Authority
Beckley, WV
For marketing and recruitment of participants for regional entrepreneurship support centers in southern West Virginia to accelerate business development in a nine-county region
$166,000

Oglebay Foundation, Inc.
Wheeling, WV
For expansion of the current development campaign for the Oglebay and Wheeling park system (over two years)
$150,000

Upshur County Development Authority
Buckhannon, WV
For planning a statewide centralized food distribution and aggregation center in Buckhannon
$60,000

West Virginia Community Development Hub, Inc.
Fairmont, WV
For expansion of the River Town Program: a community and economic initiative in towns bordering the Monongahela River in north central West Virginia
$135,000

Program to assist new farmers to become successful vendors at farmers markets
$30,000

For development and delivery of a training program for farmers market managers to promote increased profitability of farm and food businesses in West Virginia
$182,000

West Virginia Food and Farm Coalition
Fayetteville, WV
Implementation of a strategic plan focusing on food access, production, aggregation, and distribution
$100,000

West Virginia High Technology Consortium Foundation
Fairmont, WV
Technical assistance and early-stage investment program to accelerate technology commercialization
$250,000

West Virginia University Foundation, Inc.
Morgantown, WV
For expansion of the student intellectual property and patent services project serving student innovators at the WVU College of Law
$96,000

To support community-driven downtown building redevelopment portfolio
$235,000

For production of a comprehensive food safety and technical assistance program for West Virginia food producers
$98,000
**SOUTHWESTERN PENNSYLVANIA**

**EDUCATION**

**Allegheny Intermediate Unit**
Homestead, PA
Re-granting program that advances STEAM education
$150,000

**Carnegie Mellon University**
Pittsburgh, PA
Robotics program for middle school girls designed to raise their interest in STEM careers
$62,000

Design and installation of four advanced learning laboratories in Intermediate Unit 1 schools for students with special needs (over two years)
$200,000

**Catalyst Connection**
Pittsburgh, PA
To educate parents, students, and school board members on promising career opportunities in manufacturing
$50,000

**Chartiers Valley School District**
Pittsburgh, PA
Creation of a regional consortium of schools offering the national “Project Lead the Way” engineering and manufacturing programs
$150,000

**Chatham University**
Pittsburgh, PA
To provide out-of-school environmental science education to K–12 students and professional development of K–12 teachers
$220,000

**Intermediate Unit 1**
Coal Center, PA
Curriculum development and professional development related to two new digital fabrication laboratories
$170,000

To provide individualized career planning and post-secondary preparation for high school and adult basic education students
$177,600

**Sprout Fund**
Pittsburgh, PA
Support of the Remake Learning Network, a regional consortium of educators, artists, and researchers committed to the integration of arts and technology in learning
$150,000

**The Education Policy and Leadership Center**
Harrisburg, PA
Policy study and advocacy activities related to reform of governance and financing of career and technical education
$50,000

**The Grantmakers of Western Pennsylvania**
Pittsburgh, PA
For an interstate consortium of educational leaders committed to improved learning through demonstration projects, applied research, and policy development
$150,000

**Westmoreland County Community College Educational Foundation, Inc.**
Youngwood, PA
High school career and technical education program that offers college credits and post-secondary transition services
$160,000

**ECONOMIC DEVELOPMENT**

**Allegheny Conference on Community Development**
Pittsburgh, PA
For the 2015 plan of work
$227,000

**Catalyst Connection**
Pittsburgh, PA
To engage a consulting service to prepare a proposal in response to a federal grant opportunity
$15,000

To engage a consulting service to prepare additional proposals in response to federal grant opportunities
$10,000

**Center For Sustainable Shale Development, Inc.**
Pittsburgh, PA
To support the performance standards and certification program, strategic planning, and community engagement
$30,000

**Chatham University**
Pittsburgh, PA
Customized mentoring, consulting, and educational services for women starting creative industry businesses
$125,000

**Fayette County Cultural Trust**
Connellsville, PA
To develop a tourism strategy that combines local arts, heritage, and recreational assets
$35,000

**The Forbes Funds**
Pittsburgh, PA
2015 Greater Pittsburgh Nonprofit Partnership Summit
$5,000

**Housing Alliance of Pennsylvania**
Jenkintown, PA
To provide educational resources and technical assistance to local governments on the redevelopment of blighted properties
$100,000

**Innovation Works, Inc.**
Pittsburgh, PA
For business creation and growth in the manufacturing sector
$200,000

**Intelligent Transportation Society of America**
Washington, DC
To support the annual conference in Pittsburgh
$10,000

**The National Road Heritage Corridor**
Uniontown, PA
For expansion of the River Town Program, an economic development initiative based on recreational tourism
$110,000

**Pennsylvania Environmental Council Inc.**
Pittsburgh, PA
For development of a regional trail network and to advance trail town economic development
$210,000

**Pittsburgh Ballet Theatre, Inc.**
Pittsburgh, PA
Operating support for the 2015–2016 season
$75,000
Pittsburgh Community Broadcasting Corporation
Pittsburgh, PA
Production of multimedia presentations to explore water-related challenges facing the upper Ohio River and its tributaries, and how these will impact the economy, ecosystems, quality of life, and regional identity
$100,000

The Pittsburgh Foundation
Pittsburgh, PA
Power of 32 Fund
$25,000

Pittsburgh Opera, Inc.
Pittsburgh, PA
Operating support for the 2015–2016 season
$75,000

Pittsburgh Public Theater Corporation
Pittsburgh, PA
Operating support for the 2015–2016 season
$75,000

The Pittsburgh Trust for Cultural Resources
Pittsburgh, PA
Support for the 2015 Dollar Bank Three Rivers Arts Festival
$15,000
Operating support for the 2015–2016 Pittsburgh Dance Council season
$35,000

The Progress Fund
Greensburg, PA
Expansion of the Trail Town Program® along major corridors of the Power of 32 regional trail network
$150,000

Ptc Techcelerate Inc dba FortyX80
Pittsburgh, PA
Business development services targeting entertainment technology firms and artist entrepreneurs
$150,000

Steel Valley Council of Governments
Homestead, PA
Commercial district analysis and redevelopment of blighted and abandoned properties in the Mon Valley
$150,000

Sustainable Pittsburgh
Pittsburgh, PA
Sustainability assessment and technical assistance program that helps companies and municipalities improve performance and reduce costs, and for development of a regional energy strategy
$172,000

United Way of Westmoreland County
Greensburg, PA
For a plan to form a regional United Way spanning Allegheny, Butler, Fayette, and Westmoreland counties
$40,000

University of Pittsburgh
Pittsburgh, PA
To establish entrepreneurship assistance centers in Washington and Greene counties
$100,000
For Pittsburgh TODAY, a website providing regional demographic indicators and reports related to specific demographic trends
$50,000

Vibrant Pittsburgh (The Regional Opportunity Center)
Pittsburgh, PA
Welcome center services to Latino newcomers
$50,000

OTHER

The Foundation Center
New York, NY
2015 program support
$10,000

The Grantmakers of Western Pennsylvania
Pittsburgh, PA
Operating and program support in 2015
$20,300

Philanthropy West Virginia, Inc.
Morgantown, WV
Program and operating support in 2015
$17,000
2015 FINANCIAL INFORMATION

The Foundation's fiscal year corresponds to the calendar year. At the end of 2015, the market value of the Foundation's investments, including cash, was $339,101,610. Grants authorized during the year totaled $15,438,850. The Foundation makes multi-year commitments, with payments scheduled over as many as three years. At year-end 2015, outstanding grant commitments totaled $1,443,000.

The following indicates invested assets, and authorizations and payments of grants and program-related investments over the last five years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Investments Including Cash</th>
<th>Grants Authorized and Program-Related Investments*</th>
<th>Grant and Program-Related Investment Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$320,871,945</td>
<td>$15,102,393</td>
<td>$15,710,050</td>
</tr>
<tr>
<td>2012</td>
<td>$343,549,325</td>
<td>$14,770,058</td>
<td>$14,587,325</td>
</tr>
<tr>
<td>2013</td>
<td>$376,498,558</td>
<td>$16,301,750</td>
<td>$15,926,350</td>
</tr>
<tr>
<td>2014</td>
<td>$367,771,033</td>
<td>$16,975,500</td>
<td>$17,211,000</td>
</tr>
<tr>
<td>2015</td>
<td>$339,101,610</td>
<td>$15,438,850</td>
<td>$16,535,764</td>
</tr>
</tbody>
</table>

*includes contingent grants

The Foundation maintains a diverse portfolio. The following table summarizes the cost and fair value of the Foundation’s investments as of December 31, 2015. In its audited financial statements and for the federal tax return, the Foundation reports investments at fair value:

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>Cost</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term investments</td>
<td></td>
<td>$450,216</td>
<td>$450,216</td>
</tr>
<tr>
<td>Domestic</td>
<td></td>
<td>50,204,787</td>
<td>49,596,369</td>
</tr>
<tr>
<td>International</td>
<td></td>
<td>47,024,708</td>
<td>63,783,203</td>
</tr>
<tr>
<td>Tactical asset allocation</td>
<td></td>
<td>11,907,369</td>
<td>15,360,408</td>
</tr>
<tr>
<td>Fixed income</td>
<td></td>
<td>30,718,099</td>
<td>27,941,427</td>
</tr>
<tr>
<td>Hedge funds</td>
<td></td>
<td>53,245,363</td>
<td>67,461,166</td>
</tr>
<tr>
<td>Real assets</td>
<td></td>
<td>38,006,122</td>
<td>32,920,192</td>
</tr>
<tr>
<td>Private limited partnerships</td>
<td></td>
<td>64,243,272</td>
<td>71,975,523</td>
</tr>
<tr>
<td></td>
<td></td>
<td>295,799,936</td>
<td>329,488,504</td>
</tr>
<tr>
<td>Program-related investments</td>
<td></td>
<td>6,240,947</td>
<td>6,240,947</td>
</tr>
<tr>
<td></td>
<td></td>
<td>302,040,883</td>
<td>335,729,451</td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>3,372,159</td>
<td>3,372,159</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$305,413,042</td>
<td>$339,101,610</td>
</tr>
</tbody>
</table>
## Summarized Financial Information

### Assets, Liabilities, and Unrestricted Net Assets

**December 31, 2015**

<table>
<thead>
<tr>
<th>Assets</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
<td>$335,729,451</td>
<td>$361,872,625</td>
</tr>
<tr>
<td>Cash and equivalents</td>
<td>3,372,159</td>
<td>5,898,408</td>
</tr>
<tr>
<td>Accrued investment income and other assets</td>
<td>129,052</td>
<td>30,371</td>
</tr>
<tr>
<td>Receivables from private limited partnerships and hedge funds</td>
<td>2,731,632</td>
<td>3,908,673</td>
</tr>
<tr>
<td>Property and equipment, net of depreciation</td>
<td>404,565</td>
<td>445,676</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$342,366,859</strong></td>
<td><strong>$372,155,753</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Unrestricted Net Assets</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants payable</td>
<td>$1,443,000</td>
<td>$1,895,500</td>
</tr>
<tr>
<td>Unrestricted net assets</td>
<td>340,923,859</td>
<td>370,260,253</td>
</tr>
<tr>
<td><strong>Total liabilities and unrestricted net assets</strong></td>
<td><strong>$342,366,859</strong></td>
<td><strong>$372,155,753</strong></td>
</tr>
</tbody>
</table>

### Change in Unrestricted Net Assets

**Year ended December 31, 2015**

<table>
<thead>
<tr>
<th>Income</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividends</td>
<td>$3,255,500</td>
<td>$2,417,095</td>
</tr>
<tr>
<td>Interest</td>
<td>263,851</td>
<td>9,163</td>
</tr>
<tr>
<td>Net (loss) gain on investments</td>
<td>(24,538,073)</td>
<td>3,550,746</td>
</tr>
<tr>
<td>Partnership income</td>
<td>12,328,733</td>
<td>10,602,436</td>
</tr>
<tr>
<td><strong>Total (loss) income</strong></td>
<td><strong>(8,689,989)</strong></td>
<td><strong>16,579,440</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grants and Expenses</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants (net of refunds)</td>
<td>$15,476,698</td>
<td>$15,780,133</td>
</tr>
<tr>
<td>Investment management and custodial fees</td>
<td>2,517,369</td>
<td>2,549,559</td>
</tr>
<tr>
<td>Grant administration</td>
<td>1,587,195</td>
<td>1,594,317</td>
</tr>
<tr>
<td>Other administration</td>
<td>686,957</td>
<td>647,560</td>
</tr>
<tr>
<td>Federal excise tax</td>
<td>378,186</td>
<td>419,486</td>
</tr>
<tr>
<td><strong>Total grants and expenses</strong></td>
<td><strong>$20,646,405</strong></td>
<td><strong>$20,991,055</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(Decrease) in Unrestricted Net Assets</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$(29,336,394)</td>
<td>$(4,411,615)</td>
</tr>
</tbody>
</table>

*This information is summarized from the books and records of the Foundation. Copies of audited financial statements are available upon request.*
EXCERPTS FROM THE FIFTH CODICIL TO THE
LAST WILL & TESTAMENT OF MICHAEL L. BENEDUM

The disposition of a not inconsiderable estate is never an easy assignment.

It has been a thorny & laborious problem for me because, recognizing my frailty & inadequacy, I have not been able to lose sight of the awesome responsibility involved.

If I could have looked upon my material goods as personal property, belonging to me alone, my task would have been immeasurably lighter. But I have never regarded my possessions in that light. Providence gives no fee simple title to such possessions. As I have seen it, all of the elements of the earth belong to the Creator of all things, and He has, as a part of the Divine Purpose, distributed them unevenly among His children, holding each relatively accountable for their wise use and disposition.

I have always felt that I have been only a trustee for such material wealth as Providence has placed in my hands. This trusteeship has weighed heavily upon me. In carrying out this final responsibility of my stewardship, I have sought to utilize such wisdom and understanding of equity as the Creator has given me. No one with any regard for his responsibility to his God and his fellow man should do less. No one can do more.

As I have seen it, life is but a proving ground where Providence tests the character and mettle of those He places upon the earth. The whole course of mortal existence is a series of problems, sorrows & difficulties. If that existence be rightly conducted, it becomes a progress towards the fulfillment of human destiny. We must pass through darkness to reach the light.

Throughout my adult life, day by day & year by year, I have been instilled with the conviction that wealth cannot be measured in terms of money, stocks, bonds, broad acres or by ownership of mine and mill. These cannot bear testimony to the staple of real excellence of man or woman. Those who use a material yardstick to appraise their wealth and foolishly imagine themselves to be rich are objects of pity. In their ignorance and misanthropic isolation, they suffer from shrinkage of the soul.

All of us aspire to a higher and better life beyond this, but I feel that the individual who seeks to climb the ladder alone will never find the way to Paradise. Only those who sustain the faltering ones on the rungs above and extend a helping hand to the less fortunate on the rungs below, can approach the end with the strength of sublime faith and confidence.

At the end of life each of us must face the great teacher that we call death. Stern, cold & irresistible, it walks the earth in dread mystery and lays its hands upon all. The wealth of empires cannot stay its approach. As I near my rendezvous with this common leveler of mankind, which
takes prince and pauper alike to the democracy of the grave, I do so with resignation to the will of God, and with faith in His eternal justice.

Life has been sweet to me … sweet in the loved ones that have been mine, sweet in the friends who have surrounded me & rewarding in the opportunities that have come my way. I could not leave this earth with any degree of happiness and satisfaction if I felt that I had not tried to bring some of these joys to those less fortunate than I have been.

We know not where seed may sprout. In the poorest and most unregarded child who seems to be abandoned to ignorance and evil, there may slumber virtue, intellect and genius. It is our duty to sow and to nurture, leaving it to others to harvest the fruits of our efforts.

While I am conscious that my love for the land that gave me birth has been an influence in guiding the disposition of my estate, there are other practical reasons why I have favored my native state of West Virginia. It is not that I am unmindful or unappreciative of my adopted home of Pennsylvania, but rather that I have sought to appraise and balance the needs of each and the available potential for supplying those needs.

I cannot close my eyes to the realistic consideration that Pittsburgh and Pennsylvania abound in riches, having a citizenship in which men of great wealth are more common than rare. West Virginia is in a less fortunate position. There can be no question but that its needs are much greater than those of my adopted home. Consequently, in making specific provisions for West Virginia institutions, I have done so in good conscience, with a sense of equity & with recognition of a responsibility to distribute my estate in a way that will bring the greatest good to the greatest number. This decision was not made lightly or impetuously.

Conscious that in this Codicil to my Last Will & Testament, I am figuratively speaking from the grave, and that the great book of my account with the Creator has been closed beyond change or amendment, I submit my soul to His tender mercy, and my memory to the generosity & compassion of my fellow man.

Signed by Michael L. Benedum on the 15th day of June 1957
TRUSTEES
Lloyd G. Jackson II, Chair
Hamlin, West Virginia
Gregory S. Babe
Pittsburgh, Pennsylvania
Paul G. Benedum, Jr.
Pittsburgh, Pennsylvania
William P. Getty
Pittsburgh, Pennsylvania
Thomas A. Heywood
Charleston, West Virginia
Parween S. Mascari
Morgantown, West Virginia
Illah R. Nourbakhsh
Pittsburgh, Pennsylvania
Robert B. Walker
Huntington, West Virginia
Jane Werner
Pittsburgh, Pennsylvania

TRUSTEES EMERITI
Esther L. Barazzone
Pittsburgh, Pennsylvania
Ralph J. Bean, Jr.
Bridgeport, West Virginia
G. Nicholas Beckwith III
Pittsburgh, Pennsylvania
L. Newton Thomas
Charleston, West Virginia
G. Randolph Worls
Wheeling, West Virginia

HONORARY TRUSTEE
Governor Gaston Caperton
Charleston, West Virginia

STAFF
Marcie G. Berry
Director of Investments
Catherine M. Budash
Assistant to Dwight Keating and Accounting Assistant
James V. Denova
Vice President
Lisa Flaherty
Administrative Assistant to William Getty and Mary Hunt
William P. Getty
President
Sandy Harvey
Secretary and Office Administrator
Mary Hunt
Senior Program Officer
Dwight M. Keating
Vice President and Chief Investment Officer
Lori A. Lordo
Treasurer
Lawrence T. Mangan
Chief Financial Officer
Margaret M. Martin
Grants Administrator
Kimberly Barber Tieman
Program Officer
Maureen D. Yock
Administrative Assistant to Kimberly Tieman and James Denova

1400 Benedum-Trees Building
223 Fourth Avenue
Pittsburgh, PA 15222
phone 412.288.0360
fax 412.288.0366
from West Virginia 800.223.5948
www.benedum.org