



# 2017 | SUSTAINABILITY REPORT

BUILDING.  
CARING.  
GROWING.





Cover photo taken by Ryan Adams, Senior Electrical Controls Engineer

On the cover: Martin Marietta's Fountain Quarry, located in Fountain, North Carolina, has been in operation since 1961, successfully fulfilling its responsibilities for over 50 years. Learn more about Martin Marietta's commitment to managing quarries responsibly from the day they open and beyond on page 26.



Martin Marietta has been a trusted community partner for many years. Its employees go above and beyond to be responsible neighbors and supporters of our community.

— Captain Andy Reid  
Alabaster, Alabama Fire Dept.

# CONTENTS

A MESSAGE FROM OUR CEO	5
COMPANY HIGHLIGHTS	6
OUR AWARD-WINNING IMPACT	8
SAFE OPERATIONS	10
EMPLOYEE WELL-BEING	14
COMMUNITY WELL-BEING	18
ENVIRONMENTAL STEWARDSHIP	22

## A MESSAGE FROM OUR CEO



C. HOWARD NYE  
Chairman, President  
and Chief Executive Officer

To our Stakeholders,

Martin Marietta has a long history of building solid foundations; caring about our employees, our communities and the environment; and responsibly growing our company. A track record such as ours is not built by accident. Sustainability is an integral part of our strategy and our day-to-day business. We maintain a deliberate focus on fulfilling our responsibilities to you. Among other things, these responsibilities include:

- Demanding and providing a safe, ethical workplace for our employees.
- Creating a positive, lasting impact on our communities and the environment.
- Growing our business and responsibly investing our capital for maximum return.

Our clear, unified Mission, Vision and Values guide us as we fulfill these responsibilities and further our legacy of **building, caring and growing**.

In conjunction with and as part of our third annual sustainability report, we will be continuously upgrading our online presence throughout the year.

Please visit [www.MartinMarietta.com/Sustainability](http://www.MartinMarietta.com/Sustainability) to learn more and to track our progress. We are committed to improving in all aspects of sustainability and we thank you for joining us on our journey.

Sincerely,

C. Howard Nye  
Chairman, President and Chief Executive Officer

### MISSION

As a leading provider of natural resource-based building materials, Martin Marietta provides the **foundation** upon which our **communities** improve and grow.

### VISION

Our goal is to build a **world-class organization** committed to the long-term success of our shareholders, employees, communities and other stakeholders.

### VALUES

SAFETY

INTEGRITY

EXCELLENCE

COMMUNITY

STEWARDSHIP





8,000+  
Employees



282  
Aggregates Quarries,  
Mines & Sales Yards



2  
Cement Plants



143  
Ready Mixed  
Concrete Plants



9  
Asphalt Plants



2  
Magnesia Specialties  
Facilities

## COMPANY HIGHLIGHTS

### 2017 RECORD FINANCIAL HIGHLIGHTS

**\$4B**

Total revenues

**\$1B**

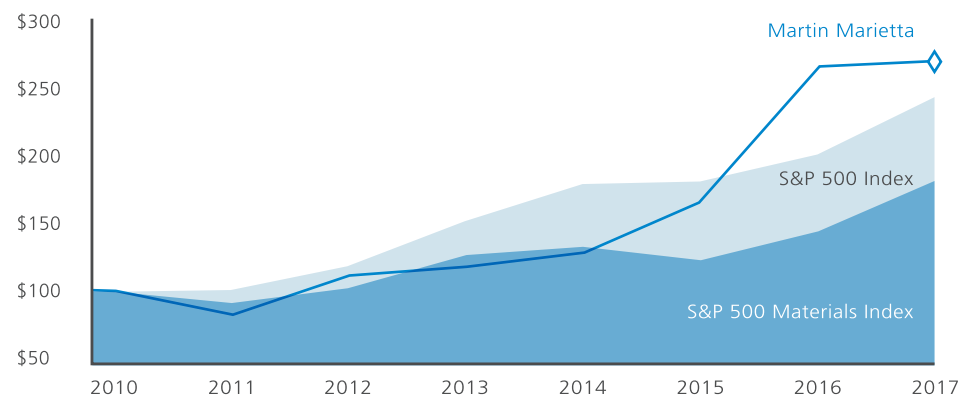
EBITDA\*

**\$11.25**

Diluted EPS\*\*

\*Earnings Before Interest, Taxes, Depreciation and Amortization  
\*\*This includes the \$4.07 impact of the Tax Cuts and Jobs Act of 2017

### CUMULATIVE TOTAL SHAREHOLDER RETURN



	2010	2011	2012	2013	2014	2015	2016	2017
Martin Marietta	\$100.00	\$83.44	\$106.47	\$114.69	\$128.22	\$160.39	\$262.51	\$264.02
S&P 500 Index	\$100.00	\$102.11	\$118.45	\$156.82	\$178.28	\$180.75	\$202.37	\$246.55
S&P 500 Materials Index	\$100.00	\$90.25	\$103.76	\$130.32	\$139.33	\$127.65	\$148.95	\$184.47

## SUSTAINABILITY EXCELLENCE DRIVES SHAREHOLDER VALUE

Sustainability is a key component of our strategy and business plan at Martin Marietta. Sustainability excellence is not only the right thing to do and a key driver of shareholder value, it is a vital component of both our strategic planning process, or Strategic Operating Analysis and Review (SOAR), and our annual planning process. SOAR, supplemented by our annual plan, has guided us since 2010 as we have grown the business, driven our safety incidents to record low levels, achieved record financial performance and created positive impacts on our communities and the environment. Key managers from across our business and our senior leadership team engage throughout the year on material topics, including safety, employee well-being, community well-being and the environment.

Both SOAR and our annual plan are reviewed and endorsed by our Board of Directors. Martin Marietta's Ethics, Environment, Safety and Health Committee (EESH) of the Board of Directors, an experienced and knowledgeable group, has, for decades, overseen our ongoing efforts to hone truly sustainable business practices. Our full Board visits our operations frequently, to hear firsthand from our team and see the positive impact we have on our communities.

Through continued, focused execution of our plans and guidance from our EESH and full Board of Directors, we continue building, caring and growing our business sustainably for future generations, improving both our operational and financial performance.

Our Board of Directors visited operations in our Southeast Division in 2017 and met with the management team who highlighted their record safety performance.





# OUR AWARD-WINNING IMPACT

## MARTIN MARIETTA'S ACCOMPLISHMENTS CONTINUE TO BE RECOGNIZED

Highlights of our more notable 2017 awards can be found below and throughout this report.

**#146** on the Global 2000 Growth Champions by *Forbes* magazine.



**#209** on the Global 2000 World's Best Employers by *Forbes* magazine.



**#72** on the World's 100 Fastest Growing Companies by *Fortune* magazine for the second year in a row.

### NSSGA NATIONAL STONE, SAND & GRAVEL ASSOCIATION



Jay Nivens (left), senior environmental engineer with our Piedmont District, and Vance Allred (right), plant manager at Central Rock Quarry, accept the NSSGA Environmental Excellence Award

All awards are meaningful, but it is particularly satisfying when we are recognized for achievement against core values, such as safety and stewardship.

### 2017 NSSGA SAFETY EXCELLENCE AWARDS

<b>1</b> gold-level winner in large quarry category	<b>6</b> silver-level winners	<b>20</b> bronze-level winners
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### 2017 NSSGA ENVIRONMENTAL EXCELLENCE AWARDS

<b>2</b> gold-level winners	<b>3</b> silver-level winners	<b>11</b> bronze-level winners
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Martin Marietta's Piedmont district office in Greensboro, North Carolina



## OUR SUSTAINABILITY APPROACH

*Martin Marietta supplies the resources needed to build the infrastructure of our communities – the foundation on which we live. As a steward of the Earth's resources, Martin Marietta incorporates sustainability as a core value within our business agenda.*



**Safe Operations**  
Protecting all who come in contact with our products and operations, and creating a culture of responsible leadership



**Employee Well-Being**  
Supporting and investing in our people – the foundation of our success



**Community Well-Being**  
Being a responsible neighbor and supporting the communities that are home to our operations



**Environmental Stewardship**  
Protecting the Earth's resources and reducing our environmental impact



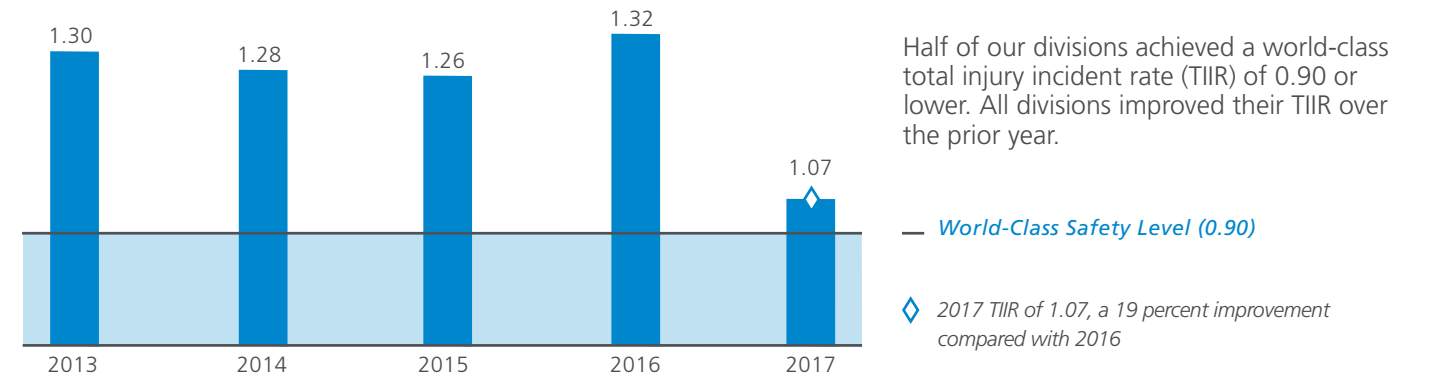
# SAFE OPERATIONS

Safety at Martin Marietta is a shared responsibility and vital to our culture. We are committed to protecting all who come in contact with our products and operations and creating a culture of responsible leadership. We must all do our part if we are to be successful in this, our most important endeavor.

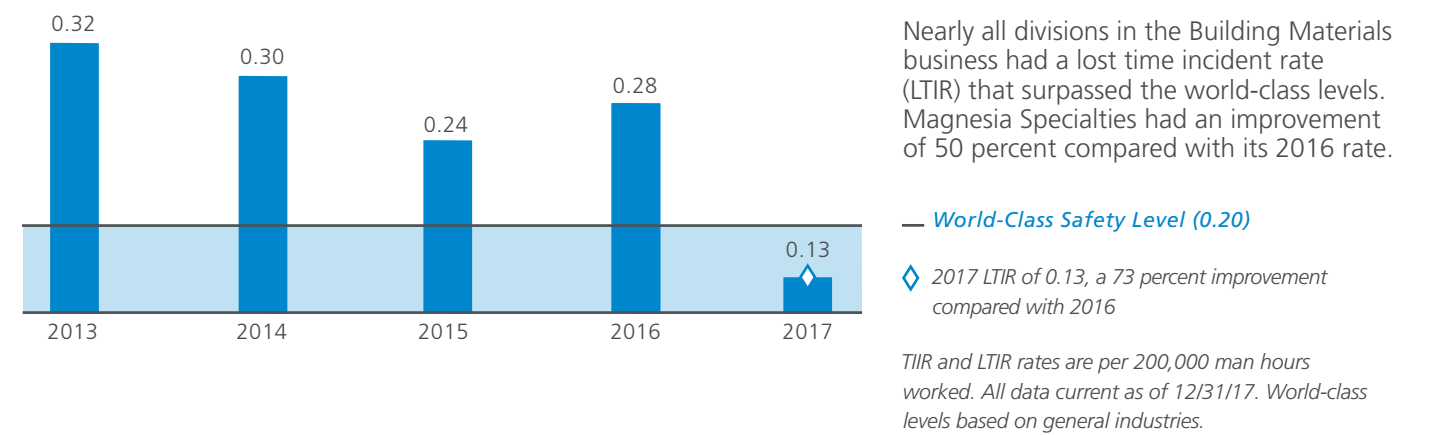
## WORLD-CLASS SAFETY PERFORMANCE

Martin Marietta's 2017 safety performance was our best on record. Our employees continue to demonstrate unwavering dedication to living the **Guardian Angel creed**, which empowers them to take any action necessary to maintain a safe working environment. Details of our world-class performance are reported below.

### TOTAL INJURY INCIDENT RATE



### LOST TIME INCIDENT RATE



Additional highlights of our remarkable 2017 safety performance include:

**90%** More than 90 percent of our over 400 facilities had **no reportable incidents**.

**1M+** Nineteen sites reached 500,000 hours without any incidents and 11 surpassed 1 million hours of **incident-free work**.

**1M+** Sixty-four sites surpassed 500,000 hours without a lost time incident and 11 of these **exceeded the million-hour mark** in that category.



## AFTER SUCCESSFUL YEAR, SAFETY AUDIT TEAM LOOKS TO THE FUTURE

Maintaining world-class safety metrics takes hard work, a focus on continuous improvement and dedicated planning. In 2017, Martin Marietta established a Safety Audit Team, consisting of seven safety professionals from across the company, to travel to operations and evaluate their safety procedures. As the team's first year draws to a close, team members are evaluating their successes and planning for the future.

*"Our mission was to bring world-class safety to operations across the board," said HR and Safety Manager and Auditor Chris Kearnes. "We found a large number of strengths at every site we visited and a number of what we called opportunities, which we pointed out as a way to educate employees about how they could be doing things better."*

The team conducted 12 audits in 2017, searching for any and all conditions that could potentially create a hazard and surveying more than 650 employees during the process. These efforts provided leadership at each site with an accurate and timely assessment of its safety environment.

The team also surveyed employees to gain an understanding of each site's overall safety culture. This helped supervisors identify areas where more focus was needed, whether it was communication, consistency, procedure or rewards programs.

### The Safety Audit team completed 12 audits in 2017. Its 2018 goal: 24 audits

While the Audit Team called attention to even the smallest item that could be improved, they were also fair and quick to point out aspects of an operation that exceeded expectation.

Dirk Cox, plant manager at Midlothian Cement, said the experience of having the Audit Team review the plant was "humbling and invigorating." In the months afterward, the Midlothian team analyzed its own site procedures, changed rewards programs and sent some employees to other operations to learn what it takes to create and maintain a vibrant safety culture.

Vice President of Safety and Health Michael Hunt, the Audit Team's leader, found the process to be beneficial on many levels.

*"It enhances awareness, breaks down divisional lines and helps spread best practices," said Hunt. "As the Audit Team moves forward, it remains committed to the basics of safety and encourages all of our employees to share that commitment. It reminds teams at site after site that we must never take our eyes off the ball when it comes to safe work."*

With a year of success under its belt, the Audit Team is moving through 2018 with the full support of our Board and corporate and divisional leadership.

## EMERGENCY PREPAREDNESS PAYS OFF

Among the most important lessons instilled in every Martin Marietta employee is that safety extends to all who come in contact with our operations. Crews across the company create action plans and engage in safety training designed to ensure preparedness in the face of an emergency.

At the Martin Marietta quarry in Junction City, Georgia, this thorough planning paid off when the National Weather Service issued a warning one April afternoon. A tornado was approaching fast, but the team was ready.

*"We immediately started locking down the office and heading toward the shelter area in the surge tunnel," said Edward Rose, the site's plant manager. "Within minutes, everyone on site was accounted for in a designated, safe location."*

The group huddled in the tunnel as the tornado moved directly above. Trees and utility poles split. A 30,000-pound electrical transformer was picked up and moved off its base. Still, not a single person was injured.

Martin Marietta also takes preparedness and training further by reaching out to local emergency response agencies to schedule joint drills in the quarry.

Alabama District Production Manager John Stalcup said Martin Marietta operations across the state regularly host emergency responders so they can familiarize themselves with quarry settings.

*"There are seven quarries and mines south of Birmingham and these departments have to respond to all of them, not just ours," said Stalcup. "By allowing them to become familiar with the environment and equipment, we're helping to make the local industry safer."*

Alabaster Fire Department Captain Andy Reid said the two joint drills his team holds annually at Martin Marietta's Maylene Quarry represent "the greatest benefit of our relationship."

*"Martin Marietta offers us the opportunity to train in an industrial setting. It's not something we get to do every day," said Reid. "That training provides us with a level of education that has made our department better as a whole."*

Martin Marietta continues to invest in emergency preparedness so that plans are executed smoothly and everyone is ready when disaster strikes. Our ultimate goal is that every employee goes home safely at the end of each shift.





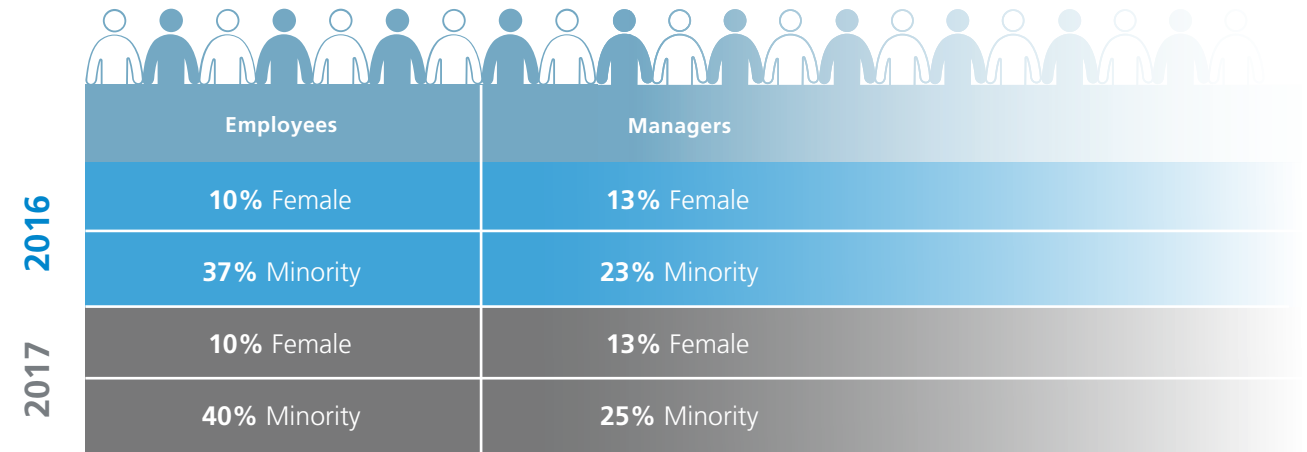
# EMPLOYEE WELL-BEING



*At Martin Marietta, our people are the foundation of our success. Their excellence and passion drive our performance. We are committed to providing resources and programs to maintain the safety and wellness of our employees. Creating a culture where employee well-being and vitality are embraced is paramount to our success.*

## ATTRACTING THE BEST TALENT

At Martin Marietta, we work to create a workplace of safe, healthy and highly engaged employees. By focusing on a diverse and inclusive environment, we attract talent from all backgrounds for all levels.



## INVESTING IN CONTINUOUS LEARNING

Since 2014, Martin Marietta has invested in Martin Marietta University, or MMU, a platform that gives employees opportunities to learn and grow. MMU offers more than **170 personal and development classes**. In 2017, **10,803 courses were taken** by employees. Our goal is to increase the number of classes offered and the number of courses taken. To help achieve this, MMU is being updated for 2018 to provide a more user-friendly experience with a newly designed look.

## SUPPORTING EMPLOYEES' COMPLETE WELL-BEING

Benefits provided by Martin Marietta for employees and their families are comprehensive and high quality, focusing on both physical and financial well-being. Martin Marietta assesses benefits and compensation based on market analysis, benchmarking and internal pay equity. These assessments include pay equity between men and women to ensure fair compensation.

94%

participation in our 401(k) program by eligible employees.

20%+

board seats held by women. Martin Marietta has been recognized as a Winning 'W' Company for **seven consecutive years**.



## RECOGNIZING AWARD-WINNING EMPLOYEES



Martin Marietta employees Mike Dobbs (left), Grady Smith (center), Kenneth Johnson (right) and Tim Ross were recognized at the Mine Safety and Health Administration (MSHA) Southeast Mine Conference with the 40-year Safe Miner Award.



## ETHICS TRAINING PROVIDES EMPLOYEES WITH TOOLS TO MAKE ETHICAL DECISIONS

Martin Marietta demands an ethical workplace. We work to ensure that all employees have the tools necessary to make proper decisions, including an easy-to-understand Code of Ethical Business Conduct and an ethics hotline. Martin Marietta also provides company-wide ethics training every year, delivered online and in-person.

*“Ethics training isn’t just about teaching right versus wrong, it’s about teaching right versus right,” said Talent Development Specialist Ray Rogers. “Too often, ethical decisions are not a clear-cut choice of good versus evil. Our goal is to create ethics training that provides each employee with the skills to arrive at a reasoned, rational ethical decision that others can understand.”*

Executive Vice President, General Counsel and Corporate Secretary Roselyn Bar, Martin Marietta’s

chief ethics officer, said the classes are designed to place all employees on the same page when it comes to addressing ethical dilemmas.

**8,000+**  
employees  
completed ethics  
training in 2017.

*“Ethical conduct in our business dealings greatly affects morale and has a substantial impact on our reputation and overall success,” said Bar. “By providing every employee with the tools necessary to make the right decision every time, this training lets our employees know we care about them and are committed to maintaining an ethical workplace.”*

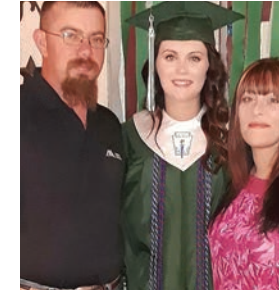
In 2017, the three-hour, in-person training sessions began with an in-depth discussion of Martin Marietta’s Mission, Vision and Values and included group exercises designed to engage employees and familiarize them with the available tools. Each ethics class also covered a variety of topics, including our policies on sexual harassment, procurement cards, computer usage and proprietary information.

*Martin Marietta employees refer to the Code of Ethical Business Conduct during ethics training, increasing their familiarity with this important tool.*



## PLANNING FOR A SUCCESSFUL FUTURE

The 2017 Martin Marietta Scholarship program made company history by increasing the number of recipients from six to eight. Since the program’s inception, **more than \$1 million have been awarded in scholarships.** We are excited to see how this year’s bright students grow through their college careers.



**CASSIDIE CAMPBELL**

- University of North Texas
- Waxahachie High School (TX)

Cassidie led Sunday school classrooms, coached children on the ball field and held down a job while earning a spot in the National Honor Society.

*Cassidie’s stepfather is Midlothian Cement Plant Maintenance Apprentice Daniel Minor.*



**ASHLEY RIDLON**

- Texas A&M University
- Cedar Creek High School (TX)

Ashley served as president of her high school’s Science Olympiad club. She and a partner competed in the Water Quality Division and medaled at regionals.

*Ashley is the daughter of Central Texas Ready Mix Operations Manager Brian Ridlon.*



**NICHOLAS DIMOND**

- Minerva Schools at KGI (San Fran.)
- Peak to Peak Charter School (CO)

Nicholas excelled as a high school student, earning a spot in the National Honor Society and shining as a saxophonist while performing in productions across the state.

*Nicholas’s mother is Kathleen Dimond, a District/Regional Finance Manager in the Rocky Mountain Ready Mix District.*



**JEROD SCHWANDT**

- North Carolina State University
- Lake View Academy home school (NC)

Jerod volunteered with a local food bank, coached children and led free workshops on electricity, rocketry and public speaking.

*Jerod’s father is Piedmont District Field Services Team Leader Eric Schwandt.*



**GAGE DOLLAR**

- Alabama State University
- Central High School (AL)

Gage served as a leader in the Fellowship of Christian Athletes, chapter president of the National Honor Society and captain of the varsity baseball team.

*Gage is the stepson of Junction City Quarry Quality Assurance Supervisor Brad Melton.*

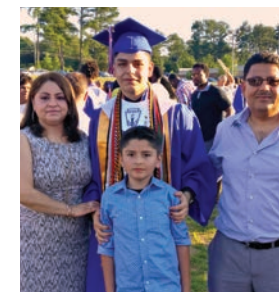


**SARAH STORCH**

- Texas State University
- San Marcos High School (TX)

As a sophomore, Sarah focused on her grades with the goal of graduating in the top 10 percent of her class. On graduation day, she was in the top 4 percent.

*Sarah is the daughter of Senior Accounting Specialist Katrina Storch.*



**LUIS PIMENTEL**

- Georgia Institute of Technology
- Heritage High School (GA)

In high school, Luis earned top honors at several local and state technology competitions and a position working with Ph.D. candidates at Georgia Tech.

*Luis’s father is Lithonia Quarry Rock Splitter Luis Pimentel.*



**MICHAEL SOSNOWSKI**

- DePauw University
- Greenfield-Central High School (IN)

Michael plans to study political science and play football at DePauw University. He hopes to pursue law school and, perhaps one day, enter the political sphere.

*Michael is the son of Indiana District Regional Land Manager John Sosnowski.*





# COMMUNITY WELL-BEING

*In communities large and small, the relationships that we build in our own backyards define Martin Marietta. We are committed to being a responsible neighbor and supporting the communities that are home to our operations. We are invested in each community's well-being and proud to serve as a ready and willing partner.*

## COMMITTED TO OUR COMMUNITIES

Martin Marietta strives to be a responsible, caring neighbor in the more than 400 communities in which we live and operate. By donating our time and resources, we continue to build strong relationships with our community partners.

**2,500+**

volunteer hours completed by Martin Marietta employees.

**3,000+**

visitors from education-related organizations to Martin Marietta sites.

**55,000+**

meals sorted, packaged and/or donated by Martin Marietta employees.

**17,500+**

tons of aggregates donated to communities or organizations.

**1,500+**

yards of ready mix concrete donated to communities and organizations.

Martin Marietta was named Corporate Benefactor of the Year by the Wake Tech Foundation in North Carolina. Our donations to the state's largest community college have provided a range of opportunities, including the Outdoor Geology Labs at the Northern and Main campuses, which feature 26 multi-ton boulders personally selected from quarry sites across North Carolina.



*"Martin Marietta's support for Wake Tech creates ripples every day. Whether they are giving to a student scholarship, providing advance technology and equipment, or investing in faculty and staff innovation - they are changing the lives of our students, their families and the surrounding communities."*

**— Dr. Stephen C. Scott**  
President, Wake Tech Community College



## WORKFORCE DEVELOPMENT: A MUTUALLY BENEFICIAL EFFORT

Workforce development is a challenge across every business, faced by all communities at all educational levels. At Martin Marietta, a company operating in an industry often requiring physical work and technical know-how, recruitment and development can be even more difficult. By working directly with educators, Martin Marietta has identified solutions that have proven to be mutually beneficial.

In the Mideast Division, we have found a way to connect with high school students and educate them on the hands-on skills needed as an employee.

*"We devote quite a bit of time to identifying the right vocational schools and growing our relationships with them," said Indiana District HR and Safety Manager Jeff McIntosh. "This is how we came across Area 30."*

Based in Greencastle, Indiana, Area 30 is a two-year program for high school students seeking an alternative to traditional classroom learning. When students enter as juniors, they spend much of their time becoming acquainted with heavy equipment and learning each machine's function, said Scott Livesay, a program instructor. During senior year, the program's curriculum moves teens into the real world as interns.

Martin Marietta accepted three of the program's students during the 2016-2017 school year and provided each with an internship at a nearby quarry.

Mike Mote, plant manager at Cloverdale Quarry, said the teens were treated just as any new employee and exposed to the business slowly, safely and with proper training. In return, they were expected to perform as any other employee – operating small and heavy equipment, participating in safety meetings and adhering to company policies.

Indiana District Vice President-General Manager Ed Gehr was quick to note that Martin Marietta experienced great gains as a result of the program since each of the three students accepted a position at a local quarry.

### Since 2013, 21 management associates have accepted permanent positions with Martin Marietta.

*"The relationship between Area 30 and Martin Marietta has so far been a great partnership," Livesay said. "These students are coming right out of high school and Martin Marietta is offering them not just good-paying jobs, but solid careers. That's tremendous."*

On a collegiate level, Martin Marietta continually looks for opportunities to connect and grow relationships with students interested in a career in the industry.

When word reached Vice President of Talent Management Kelly Bennett that the University of Kentucky was seeking financial support to host the 2017 International Collegiate Mining Competition, she jumped at the opportunity.

*"The mining competition is a great place to connect with talented college students. We're always interested in speaking with students who have an interest in mining-related careers and showcasing the innovation in the industry," Bennett said.*

Representing one of the competition's larger corporate supporters, Martin Marietta employees were on site to judge competitions and network with soon-to-be graduates.

*"For Martin Marietta, this was a truly meaningful experience. We met many impressive students – several of whom will be working as interns across our divisions," Bennett said. "But just as important was being part of something so valued by the students like the mining competition."*

While the mining competition was one of Martin Marietta's more visible recruitment efforts in 2017, it was not the only one. Throughout the year, we worked directly with colleges and universities with top mining programs. Company representatives visited college campuses to speak directly to students about the industry and, specifically, about the Martin Marietta Management Associate Program, an initiative that aims to bring top talent into the company right after graduation.

Each year, management associates are hired as full-time employees with full benefits and placed with specific supervisors who allow them to learn as much as possible about the industry under a knowledgeable and watchful eye. At the end of the program, most management associates are offered a permanent position.

*"These are the best and brightest students from the strongest mining programs in the country," said Director of Training and Development Brad Geiger, who has run the program for the past five years. "We hope that with training and hard work and through commitment to our safety culture, they will grow to become Martin Marietta's future leaders."*

As Martin Marietta and the industry continue to innovate and progress, we remain dedicated to working with educators to develop a workforce that is career-ready, identifying talent within our communities, encouraging employee development and promoting the company and the mining industry as great places to build a career. Our employees are our greatest asset and by building relationships during recruitment, Martin Marietta is able to better connect with the future of the industry.



From left: DJ Lacy, Kyle Scott and Blake Benson. The teens learned much as interns at Cloverdale Quarry.



# ENVIRONMENTAL STEWARDSHIP

*We are committed to continuously improving our operations and conserving natural resources to maximize our contributions to society while minimizing our environmental impact. We will continue to embed sustainable processes and behaviors throughout our company.*

## OUR COMMITMENT STATEMENT

*Martin Marietta's corporate environmental stewardship programs are guided by a combination of industry best practices, innovative operational improvements and the adoption of clean technologies.*



### Managing Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions from our operations are attributed to the consumption of carbon-based fuels, such as diesel, gasoline, propane and natural gas. These fuels power equipment, including our mobile fleet, and heat the kilns at our lime plant, magnesia-based products plant and two cement plants.

Our corporate-wide management strategy includes upgrading our mobile fleet and implementing GHG reduction processes and technologies that also improve operational efficiencies. Since 2010, the initial year of our Strategic Operating Analysis and Review (SOAR) process, we have implemented multiple operating initiatives with the potential for broader rollout across our sites. This prepares us for medium- and long-term risk mitigation associated with GHG emissions while ensuring and improving financial sustainability.

Some examples of initiatives include:

- Using alternative fuels such as bio-diesel
- Implementing state-of-the-art emissions monitoring equipment and real-time fleet management software
- Converting from quarry trucks to conveyor belt systems to reduce fuel use

In managing our GHG emissions and leveraging lessons learned from local initiatives, we will identify corporate-wide internal key indicators and set performance targets.

### Managing Water Use, Waste and Dust

Our industry uses water and generates non-salable products and dust as a byproduct of operations. As with our GHG emissions strategy, we test and rollout new processes and technologies that can reduce the impact and use of water, and manage and reduce waste and dust emissions.

Some examples of the technologies and process changes we have implemented include:

- Reusing cooling water streams to improve water usage rate
- Installing deep water production wells to reduce use of surface water
- Partnering with area contractors to recycle waste asphalt and concrete
- Applying environmentally friendly dust suppressants on unpaved mine roads

## \$200M

committed to investing in mobile equipment that delivers improved operating efficiencies and GHG emissions profiles from 2016-2018.

## 19%

use of alternative fuels at our Midlothian Cement Plant, improved from the 10 percent reported in our 2015 Sustainability Report.



## NOTABLE ENVIRONMENTAL ACHIEVEMENTS

Environmental stewardship is about optimization. With a focus on achieving more with less, we strive for continuous improvement in water and energy conservation and reducing emissions and wastes. These are examples of some of the many efforts we make in these areas.

### WATER CONSERVATION

The Midwest Division's Weeping Water Mine in Nebraska installed a deep-water production well to reduce reliance on surface water, an important resource for the local community. In 2017, the deep-water well provided over 60 percent of the water needed at the mine.

*A new plate press at Hunter Stone in New Braunfels, Texas, eliminated the need for a settling pond. It captures and returns 75 dry tons of material per hour that can be blended into salable products. The plate diverts fine material from a settling pond and ultimately the waste pile.*

### ENERGY CONSERVATION

The Rocky Mountain Division, based in Denver, Colorado, has replaced all 1,000-watt HID bulbs with the LED equivalent 300-watt bulbs at a number of its operations, reducing electricity demand by 70 percent.

*In 2017, nearly 1,500 old, low-capacity rail cars were replaced with more efficient, high-capacity rail cars. This decreases the number of trips needed to deliver the same tonnage by 7.5 percent, equating to an annual fuel savings of 775,000 gallons and reduction of 7.9 million Kg CO<sub>2</sub>.\**

\*According to the U.S. Energy Information Administration

### WASTE REDUCTION

The Mid-Central Ready Mix District in Texas uses a ready mixed concrete reclamation plant to process and recycle material generated from washing out ready mix trucks. In 2017, 24,000 tons of material were reclaimed.

*The Indiana District partners with the local concrete industry to recycle concrete waste. It is blended into a commercial aggregate base and reused as an alternative material. Over the past two years, 40,000 tons of this material have been reused.*

### EMISSIONS REDUCTION

Beginning in 2010, Martin Marietta mandated that mining equipment be transitioned to use 100 percent extended life coolants. Such coolants extend the drain intervals from 3,000 to 15,000 hours, reducing the creation of waste coolants by 85 percent.

*Since 2005, operations in North Carolina have planted 160,600 tree seedlings. If all of these trees mature, they will equate to an annual carbon offset of 497,860 tons, which would represent a carbon offset for over 27,000 people.*

Martin Marietta ships more stone by rail than any other aggregates provider in the United States. According to the American Association of Railroads, moving freight by rail instead of by truck lowers fuel consumption by **31 million gallons and greenhouse gas emissions by 75 percent**. A typical unit train can transport 12,000 tons of aggregate, the equivalent of 480 semi-truck loads, and the U.S. Environmental Protection Agency estimates that rail transportation produces only a quarter of the emissions per ton-mile compared to truck transportation.

**30M+**

tons of material shipped by Martin Marietta from both our Building Materials and Magnesia Specialties businesses via rail, **removing 1.2 million loaded trucks from our nation's roadways.**

**5M**

**tons of rail capacity expected to be added by Martin Marietta** over the next few years in lieu of truck movements.

Martin Marietta is committed to continued investment in its rail-based distribution network and to partnering with companies that share our ideals. Union Pacific believes that the environment is a guiding principle and provides safe, efficient and sustainable freight solutions to help reduce carbon footprints. By transporting shipments through Union Pacific rail, Martin Marietta reduces greenhouse gas emissions and continues to innovate for environmental progress.

#### Estimated Carbon Footprint for 2017 Rail Shipments

Total Loaded Miles 19,401,915

Carbon Footprint of Union Pacific Shipments\* 32,031

Carbon Footprint of Comparative Truck Shipments\* 179,411

Total Carbon Emission Savings\* 147,380

\*Estimated rail and truck carbon footprint in metric tons CO<sub>2</sub> equivalent. Emissions factors from The Climate Registry general reporting protocol CO<sub>2</sub> includes CO<sub>2</sub> or CO<sub>2</sub> equivalent, methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O).





## THE LIFE OF A QUARRY

Martin Marietta is committed to caring for our environment through the life of a quarry and beyond. Many quarries can be productive for upwards of 50 years. It is our goal that the land be managed responsibly from the day a site opens to long after its last shipment.

We began telling the story of the life of a quarry in our 2016 Sustainability Report, introducing Quarry Springs Park in Colfax, Iowa, and we expand on that now, focusing on two operations in North Carolina - Maiden and New Bern.

Maiden Quarry has been operating since the mid-1990s, providing the aggregates products that are needed to build the infrastructure of the local community. The Butterfly Highway built along its edge came together with a different type of material provided by the quarry.

*“Instead of planting your standard fescue grass, we planted a specially designed pollinator mix,” said Mid-Atlantic Division Environmental and Sustainability Manager Brian North. “It’s a blend of native plants and flowers that will attract bees, butterflies and other types of wildlife. It will take*

*some time to mature, but even in its early stages, our ‘pollinator pit stop’ is having a positive local impact.”*

The brainchild of Angel Hjarving, Ph.D., the Butterfly Highway began in 2014 as a doctoral research project at the University of North Carolina at Charlotte.

### Martin Marietta has helped turn numerous quarries into reclaimed parks and fisheries.

The initiative is now run by the North Carolina Wildlife Federation (NCWF) and has grown to include about 1,500 registered gardens, or ‘pollinator pit stops,’ across an estimated 30,000 acres of the state.

Martin Marietta’s contribution – a 3½-acre plot – lies on enough land for three football fields.

*“Working with Martin Marietta – our first non-utility corporate partner – has set a major precedent,” Hjarving said. “Our partnership shows other companies that this is how they should be doing business.”*

The Butterfly Highway specifically aims to help declining pollinator species, but birds and a host of other animals also benefit. North hopes these preserved habitats will also offer a great educational opportunity for visitors to Maiden Quarry.

*“We’re working with local schools,” North said.*

*“Ultimately, we hope to provide students with tours that go well beyond just the science of geology and the process of mining. We want to offer full lessons in the local flora and fauna and the value of sustainability.”*

Brian Hamrick, the plant manager responsible for Maiden Quarry, welcomed the opportunity. He anticipates that as the operation’s pit stop matures and school tours begin, the relationship between the quarry and its neighbors will strengthen.

*“The pit stop presents a perfect chance for us to interact with our neighbors,” Hamrick says. “Any time you can bring students in to see our operation, they learn about our industry and our efforts to make it sustainable. That’s a win for everyone involved.”*

While Maiden Quarry and its pollinator habitat are thriving, another community is benefiting from a former quarry site. In 2017, Martin Marietta donated 55 acres of property to the city of New Bern, North Carolina, for recreational purposes. City Manager Mark Stephens hopes construction will begin on the land by January 2019.

The site is currently home to deer, various species of turtles, frogs and fish, and a variety of birds - including cranes, cormorants, ducks and gulls - that are popular among local birding enthusiasts.

*“While this will certainly be a recreational opportunity, there’s a great importance to maintaining the resources that are here for the wildlife,” said Stephens.*

Leaders from both the city of New Bern and Martin Marietta eagerly await the project’s final outcome.



*“There are very few municipalities that have a 900-acre park within just three miles of their downtown, so ultimately, this is going to be a jewel in New Bern’s crown. Thanks to Martin Marietta for donating the property. Their environmental stewardship goals are truly being accomplished with this project.”*

— **Mark Stephens**  
New Bern City Manager



When it is mature, Maiden Quarry’s pit stop will resemble this plot in Charlotte, North Carolina. Photo courtesy of the NCWF.







**MARTIN MARIETTA  
CORPORATE HEADQUARTERS**

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2710 Wycliff Road | Raleigh, NC | 27607  
(919) 781-4550 | [MartinMarietta.com/Sustainability](https://www.MartinMarietta.com/Sustainability)