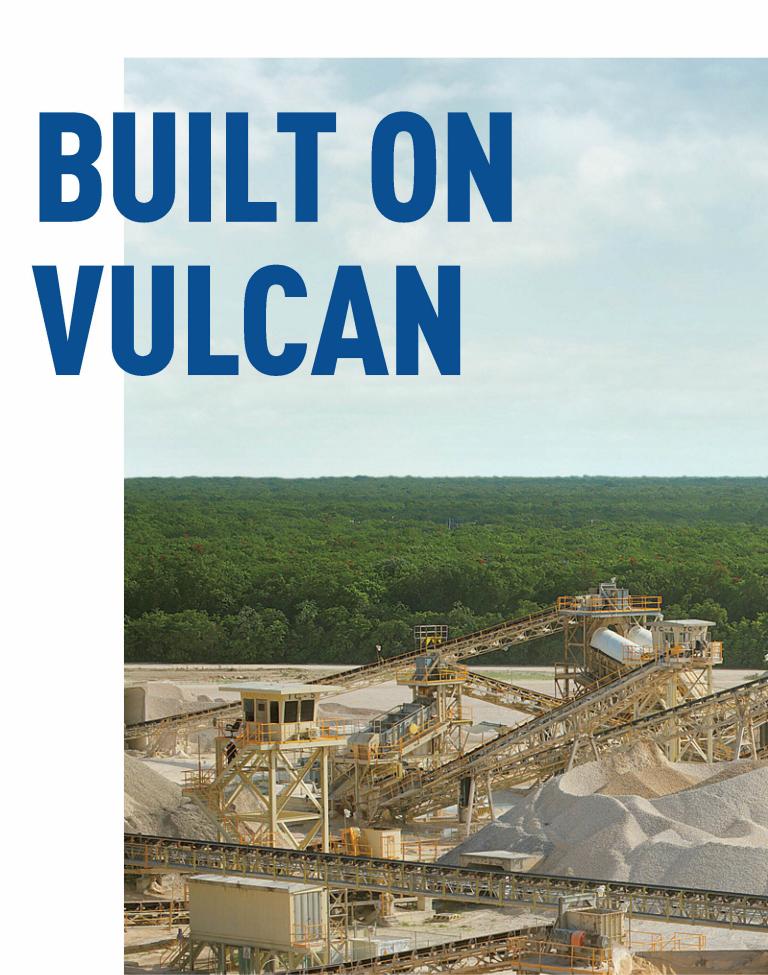


C1403-001



With years of pent-up demand for construction work steadily being released, and major new infrastructure projects coming on line coast-to-coast, Vulcan Materials Company is meeting the essential need for superior construction materials that are building—and rebuilding—America.

Bolstered by clear strategies, operational excellence and enduring commitments, Vulcan is playing a key role in the multiyear recovery that is occurring in the United States. Our products and people are the substance supporting transformative projects across this great nation.

Vulcan became a public company 60 years ago at a time of transformation in America,

initially supplying vital construction materials to a new nationwide interstate highway system. Today, after decades of steady, strategic growth, we are better positioned than any construction materials company in the United States to feed the complex and growing web of vital infrastructure systems that underpin our nation's economy. Delivered by trucks, ships, barges and trains, our products are the indispensable materials building homes, offices, places of worship, schools, hospitals and factories, as well as vital infrastructure including highways, bridges, roads, ports and harbors, water systems, campuses, dams, airports and rail networks. We are the foundation. The future we all share is being built on Vulcan, from the ground up.



DEAR SHAREHOLDER

2016 WAS ANOTHER STRONG YEAR FOR VULCAN. WE ARE SET UP **VERY WELL FOR A PROMISING** 2017, AND BEYOND.



DELIVERING PROFITABLE GROWTH

Our industry-leading core profitability continued to improve. In 2016, we grew net earnings and Adjusted EBITDA by 90 percent and 16 percent, respectively, on only a 2 percent gain in aggregates shipments, illustrating the industry-leading profitability of our aggregates business. Unit profitability and margins improved, and incremental margins remained strong across the business. In fact, since the beginning of the construction recovery in the middle of 2013, our teams' efforts have resulted in Aggregates segment gross profit increasing \$515 million on an increase in shipments of 41 million tons. During this same period, unit gross profit in our core Aggregates segment has improved 89 percent on a trailing 12-month basis.

Over the year, weather patterns and the timing of certain large projects suppressed volume growth in key states, such as California and Texas. While these factors masked, to some degree, the continuing recovery in demand for construction materials across our footprint, construction starts in Vulcan-served markets gained strength in the second half of the year. For the year, underlying demand continued to recover in all enduse market segments. California is poised to return to growth, and Texas markets have already begun to recover. We continued to see healthy pricing growth, with increasing confidence in a sustained economic recovery demonstrated by our customers, and a growing backlog of major construction projects in key markets. We have maintained a sharp focus on continuing compounding improvements in Aggregates gross profit per ton, and we have had impressive results.

RESULTS

Our numbers speak for themselves:

- Total revenues increased \$170 million, or 5 percent, to \$3.59 billion
- Gross profit increased \$143 million, or 17 percent, to \$1 billion
- Aggregates segment sales increased \$184 million, or 7 percent, to \$2.96 billion, and freight-adjusted revenues increased \$182 million, or 9 percent, to \$2.29 billion
- Aggregates shipments increased 2 percent, or 3 million tons, to 181 million tons
- Our freight-adjusted Aggregates sales price increased
- Aggregates gross profit increased \$117 million, or 16 percent, to \$873 million
- · Our Asphalt Mix, Concrete, and Calcium segments' gross profit collectively improved \$26 million
- Sales, Administrative and General (SAG) costs increased by \$28 million, or 400 basis points as a percentage of total revenues, largely as a result of employee incentive compensation tied to our strong performance and stock price
- Net earnings were \$419 million, an increase of \$198 million, or 90 percent
- Adjusted EBIT was \$681 million, an increase of \$121 million, or 22 percent
- Adjusted EBITDA was \$966 million, an increase of \$131 million, or 16 percent
- Earnings from continuing operations were \$3.11 per diluted share compared to \$1.72 per diluted share in 2015

I'm proud of the work our people did in 2016, serving our largest to our smallest customers, solving their problems, providing high-value logistics and product solutions, while continuing to grow our profitability and achieving new records for performance. And our people did all of this with a never-ending focus on safety. In fact, 2016 marked the second best year in safety performance in Vulcan's history. Here, as in all aspects of our work, we are never satisfied, and will keep our focus on getting better every day.

MULTI-YEAR RECOVERY AHEAD

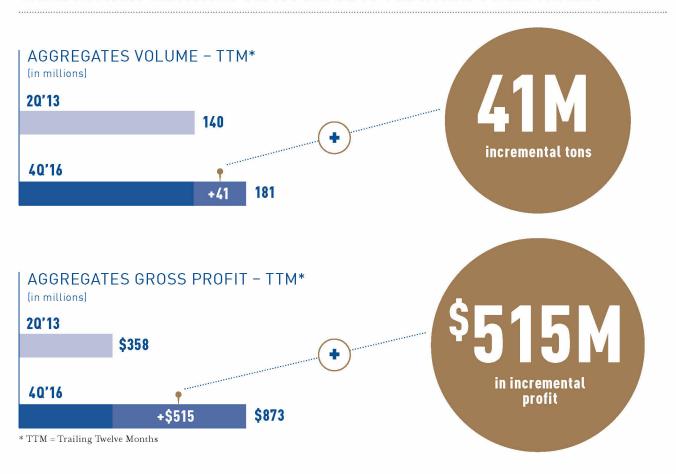
As we and many industry experts see it, the aggregates business is in the early stages of a multi-year recovery that began in mid-2013. The drivers underpinning demand recovery—and sustained, multi-year volume and pricing growth—remain firmly in place, in both the public and private sectors of the economy. They include: population growth; gains in total employment and in household income and wages; a continuing increase in household formations; the current imbalance of housing stock and housing demand; a multi-year federal transportation law in place and continuing increases in transportation funding at state and local levels; record state and local

Total revenues increased \$170 million, to \$3.59 billion

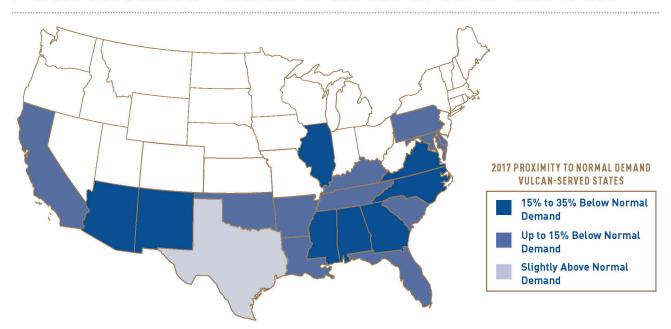
tax receipts; public investment in infrastructure that is still well below the long-term trend-line; and, increasing political awareness and acceptance of the need to invest in infrastructure. We are perfectly positioned to meet this growing and pent-up demand, and major new federal infrastructure programs would only be icing on what is already a very good cake.

Demand for aggregates still has plenty of room to grow before reaching historical norms. Per capita consumption remains well below 40+ year trends despite our three years of strong shipment growth in aggregates. Since mid-2013, we have achieved approximately 8 percent samestore annualized growth in aggregates shipments. And yet our current volume, while strong and rising, is well below normal demand and only 60 percent of prior peak

CHANGE IN AGGREGATES PROFITABILITY SINCE RECOVERY BEGAN



PER CAPITA CONSUMPTION LEVELS REMAIN BELOW 40+ YEAR TRENDS



aggregates shipments. Growth in public construction is just beginning to contribute to this recovery.

As the nation's largest and most strategically located supplier of construction aggregates, serving 19 of the 25 fastest growing markets in the United States, we have tremendous upside exposure to the eventual catch-up in rebuilding our country's infrastructure. Today, we see several years of double-digit revenue growth potential in front of us. But regardless—given our improvements in core profitability over the last several years—we would also benefit from a longer, more moderately paced recovery.

To sum up, we believe there's significant new growth coming, and we are extremely well positioned to take advantage of it. It will produce additional revenue growth and profitability. And our balance sheet is investment grade, giving us the capacity to fund additional profitable growth.

THE OPPORTUNITY, HERE AND NOW

I'm confident about where we are heading. We've done well in the early stages of this recovery, and we've only scratched the surface.

The core drivers of a continuing recovery in shipments are being felt across our footprint. Higher levels of publicly funded construction activity are just beginning to join the ongoing recovery in private demand. The pricing environment remains favorable and pre-construction project pipelines have strengthened sharply.

Pricing strength early in the cycle demonstrates that businesses are confident in a sustained recovery. Strong growth in new projects entering the pipeline is a clear signal of demand recovery and greater volumes of shipments to come.

Overall, the backlog in the pre-construction pipeline has been growing at double-digit rates and is well-balanced geographically, both by funding source and by end-use.

We expect continued growth across all end-uses and the majority of markets—growing both volumes and pricing of shipments. That growth will be broadbased geographically, but perhaps strongest in the Southeast. Certain markets may remain tight as construction starts pick up, but constraints show signs of gradually easing.

Over 2017, the timing of large projects will remain important to our shipments and end-use sectors. In highways, we see strong pipelines and funding conditions in most markets and also expect higher spending in 2018 and beyond. Other public infrastructure construction has lagged in the recovery so far but there remains significant pent-up demand, with the high variability seen across markets in 2016 continuing into 2017. Private nonresidential construction has shown continued recovery with a few weak spots; pipeline indicators remain strong, but recent awards and starts have yet to catch up. Residential construction is picking up, particularly in the entry level segment.

CONFIDENTIAL 2016 ANNUAL REPORT | 5 ++++ FOLSOM DAM AUXILIARY SPILLWAY NORTHERN CALIFORNIA The Folsom Dam and associated reservoir form the key flood control structure protecting the Sacramento area. Vulcan provided more than 300,000 tons of concrete aggregates, to U.S. Army Corps of Engineers' specifications, for construction of the auxiliary spillway that strengthens the nearly 70-year old dam's flood protection capacity.

6 | 2016 ANNUAL REPORT

AGGREGATES-LED STRATEGY: LEVERAGING FUNDAMENTAL STRENGTHS

Our focus now and moving forward remains on aggregates. We have built—strategically and systematically over time—the most valuable aggregates franchise in the world. The fundamentals of the aggregates business are extremely attractive: product value that just keeps rising, and attractive returns on capital through the cycle.

We continue to pursue opportunities for value-creating acquisitions, swaps and greenfield investments. We have made a number of important bolt-on acquisitions, making attractive additions to our positions in markets ranging from Nashville to Dallas to Albuquerque. We also further strengthened our best-in-class distribution network, investing in five new rail yards in our Georgia, South Carolina and Texas markets.

We will continue to make disciplined investments in organic and acquisition-led growth, while continuing to emphasize capital returns and cost control. We are completely focused on actions that improve returns to our shareholders. We seek continuous, compounding improvement, generating big results through small actions.

Our capital allocation priorities remain unchanged:

- Deploying operating capital to sustain our franchise
- Maintaining the financial strength and flexibility needed through the cycle
- Strategic growth through mergers and acquisitions and internal development
- Returning excess cash to shareholders through a healthy mix of sustainable dividend growth and stock repurchases

We have seen continuing improvement in return on capital since the recovery began in the second quarter of 2013. Our return on invested capital is up some 500 basis points, while our weighted average cost of capital is down approximately 160 basis points from the time when the recovery began.

Focused on aggregates, we also have a clear operational strategy, "One Vulcan, Locally Led." This prioritizes company-wide performance improvements while supporting strong local market leadership and autonomy. Our customers will tell you that this leads to better service, and the impact on sales and operating efficiency continues to drive faster growth, increased profitability and higher returns on capital—in other words, shareholder value.

THE VULCAN WAY: A CULTURE THAT DRIVES SUCCESS

We believe culture is absolutely important to improving shareholder value. It has helped us to grow strategically over many years, and to maintain our leadership position in the industry. I like to talk about the Vulcan Way. It means doing the right thing, the right way, at the right time. It's how we talk about our culture, and what we try to do for each other and our customers, every day.

My job—everyone's job at Vulcan—is to make Vulcan a little bit better every day. We're in an essential business supporting essential infrastructure, so "good enough" isn't good enough. That's our culture. That's the sense of ownership we all share. It's about constant improvement. No matter what job you have at Vulcan, it's important to have a vision and strategy for how to do it, goals for getting better and metrics to measure your progress.

We like to say, "Problems are opportunities." Too often, others see problems as a weakness and something to hide. We see problems as opportunities to improve. Our people are not afraid to raise a hand and ask for help

OUR CAPITAL ALLOCATION PRIORITIES REMAIN UNCHANGED:

Deploying operating capital to sustain our franchise

Maintaining the financial strength and flexibility needed through the cycle

Strategic growth through mergers and acquisitions and internal development Returning
excess cash to
shareholders
through a healthy
mix of sustainable
dividend growth
and stock
repurchases



when it's needed. As I say to them, this helps you get better, and that helps us all get better.

All of our people want to be the best. They work hard to be solutions providers, whether it's logistics solutions, fill solutions, haul-off solutions or industry contacts.

SAFETY IS INGRAINED IN OUR PEOPLE AND PRACTICES

We may be a large company, but we still feel like a family. Our people are tremendously devoted to Vulcan, and we are tremendously devoted to them. This includes a deep commitment to the safety, health and well-being of our employees. It's only right that we expect—and our employees expect—that they will go home just as safe and just as healthy as when they came to work.

Overall, our injury rate is about half the industry average, as tracked by the Mine Safety & Health Administration. But given our culture, we will not be satisfied until that number is zero. And that is attainable. We have a number of operations that are already there. We are off to a strong safety start in 2017, and we are going to maintain a relentless focus on safety in all that we do.

ENVIRONMENTAL STEWARDSHIP IS A GIVEN

I'm proud of our environmental record. Here, as with safety, the emphasis is on getting better every day, no matter how good you are. In 2016, we had almost 800 environmental inspections from regulatory agencies at our sites around the country, and were 99.2 percent citation-free. But we'll keep the focus on continual improvement.

In addition to our commitment to meet and exceed regulatory requirements, we are also conscientious stewards of our extensive land and water resources. We own and lease well over 200,000 acres of prime land, and we manage it carefully throughout all phases of its productive use. As a land-based company, we feel a special responsibility to the environment and the communities around us. Our focus on environmental responsibility, on the wise use of our natural resources, is one of the reasons that we have been able to grow and prosper in major, metropolitan markets in states such as California, Florida, Georgia and Virginia, to name a few.

Our commitment to environmental stewardship is more than a good business decision. It's the right thing to do.

HOW VALUE GETS BUILT

We are in a great business, and we are the leader in that business. We intend to continue our leadership position and refuse to be complacent. This management team is working hard to ensure that everyone in our organization is helping improve our performance—every day.

The fact is, we have the right people to get the job done. Our frontline management is worthy of a recognized industry leader. Our people are, hands down, the best in the business. We are in the right business, in the right markets, and we execute better than anyone else. That's because we're never satisfied with just doing well. We want to be great.

Thank you for your continuing support.

I Shomes Hill

Chairman and Chief Executive Officer March 14, 2017

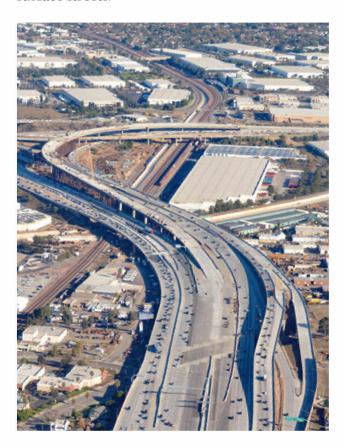
BUILT ON VULCAN

MAJOR INFRASTRUCTURE PROJECTS ACROSS THIS GREAT NATION ARE RISING, BUILT ON ESSENTIAL MATERIALS FROM VULCAN.

91 FREEWAY "FAST FORWARD" PROJECT

SOUTHERN CALIFORNIA

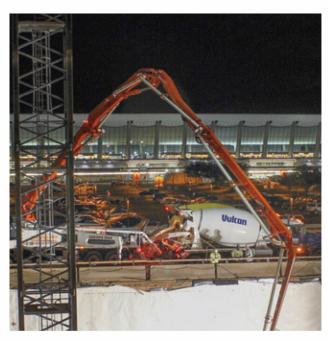
Supplied by our Corona and Durbin quarries, this project will provide significant benefits for drivers, residents and businesses along this vital corridor that connects Orange County to Riverside County, by adding regular lanes, tolled express lanes, auxiliary lanes and direct express lane connectors, as well as by making improvements to interchanges, ramps and surface streets.



DULLES CORRIDOR METRORAIL PROJECT

NORTHERN VIRGINIA/WASHINGTON, DC

Vulcan supplied ready-mixed concrete for the Dulles Corridor Metrorail project, a 23-mile extension of Washington, DC's existing Metrorail system to connect to Dulles airport, which is under control of the Metropolitan Washington Airports Authority.



AMAZON WIND FARM US EAST, POWERED BY AVANGRID RENEWABLES

NORTH CAROLINA

The online retail giant Amazon has teamed up with the world's largest developer of windenergy farms to build Amazon Wind Farm US East, powered by Avangrid Renewables. With our construction materials at the foundation, the facility will power the online retailer's cloudcomputing division, Amazon Web Services, as part of its corporate goal of achieving energy sustainability.

BEACH RENOURISHMENT

MIAMI-DADE COUNTY | FLORIDA

We provided the sand to renourish the shoreline along Miami Beach from Vulcan's Witherspoon Sand facility in Moore Haven, Florida. Combating increasing wind and water erosion, the project is key to not only preserving the beach-centered local economy, but also for vital storm surge protection.





ENDURING STRENGTHS & LASTING VALUES

OUR COMMITMENTS ENABLE US TO CONTINUE GROWING ACROSS AMERICA, PROTECTING AND BUILDING THE MOST VALUABLE CONSTRUCTION MATERIALS FRANCHISE IN THE WORLD.

PEOPLE

Guided by the Vulcan Way—doing the right thing, the right way, at the right time—our people are driving our positive momentum and helping to create a better world around us. Success means staying true to our mission and the values that guide our work.

Small Actions and Big Results

We are never satisfied. Our people are always striving to be the best, always on the hunt to get better at everything we do. Small, day-in day-out improvements, over time, turn into outsized results.

DARIN GRAY, CARROLL CANYON

SAN DIEGO | CALIFORNIA



COMMUNITY

From the very beginning, Vulcan has built strong and lasting relations in the communities in which we operate and where our people live. It's more than just being generous to community causes. Our people give their time and their hearts.

VULCAN MATERIALS QUARRY CRUSHER RUN

NORCROSS QUARRY | GEORGIA



OPERATIONS

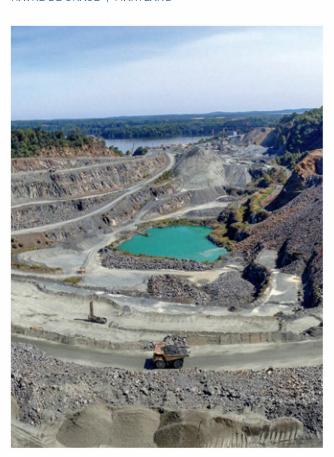
As a unified entity with a strong and recognizable culture everywhere we do business, we prioritize performance improvements across Vulcan, while empowering and supporting strong local market leadership.

One Vulcan, Locally Led

We place a great deal of power in the hands of our local teams across Vulcan to make the best business decisions, on the ground, based on their local knowledge and daily intelligence. This encourages a sense of ownership in our people and helps to harness their hardworking, entrepreneurial spirit.

HAVRE DE GRACE QUARRY

HAVRE DE GRACE | MARYLAND



REACH

A franchise of enduring value, Vulcan operates on an advantaged asset base. Over the years, through strategic acquisitions and bold investments, we have constructed an unmatched coast-to-coast footprint of easily accessed, permitted quarries concentrated in and serving the nation's key growth centers.

20K

plus customers in 74 markets in 20 states, the District of Columbia, Mexico and the Bahamas

Vulcan delivers essential construction materials for projects ranging from very large jobs that take millions of tons to small jobs like your neighbor's driveway. We provide the foundation for the nation's roads, bridges, dams, houses, places of worship, schools and buildings. Everywhere you look, we fill a need.

GALVESTON BAY OYSTER RESTORATION PROJECT

HOUSTON | TEXAS



MANAGEMENT UPDATE

Several key leadership changes occurred in early January of this year. Effective January 1, 2017, Jason Teter, formerly President of the Southern & Gulf Coast Division, was promoted to the position of Corporate Vice President of Finance. Christy Alvord, formerly Vice President of Corporate Planning and Performance Improvement, was promoted to President of the Southern & Gulf Coast Division, succeeding Jason.

In addition, Kim Duke, formerly President of the Mideast Division, was named President of the Southeast Division. Martin Thorpe was promoted to President of the Mideast Division, succeeding Kim. Martin most recently served as Vice President and General Manager of North Carolina.

In February of this year, Elaine L. Chao stepped down from the Board of Directors after being confirmed by the U.S. Senate to serve as U.S. Secretary of Transportation. Secretary Chao joined Vulcan's Board in February 2015. Congratulations to Secretary Chao on becoming the 18th U.S. Secretary of Transportation.

Her insights into both the public and private sectors have been very valuable to Vulcan. We are grateful for the contributions she has made to Vulcan and we wish her the very best as she leads the U.S. Department of Transportation.

Also in February, a new member was elected to the Board, David P. Steiner. David, former Chief Executive Officer of Waste Management, Inc., currently serves on the board of directors of FedEx Corporation. David brings to Vulcan a wealth of expertise in business operations, land management, transportation and logistics, financial management and strategic planning.

These assignment and leadership changes further solidify Vulcan's commitment to strengthen our position as a world-class leader in the construction materials industry, and to be the preferred supplier of choice by our customers.

PHOTO CREDITS

COVER Atkinson/Walsh, A Joint Venture **PAGES 8-9** (from left to right) Atkinson/Walsh, A Joint Venture, Mike Mercer, John F. Peters, Avangrid Renewables **PAGES 10-11** (Norcross Quarry) Vulcan Materials Crusher Run Series and Eggplant Events, (Houston) Joseph Carr

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2016

Commission file number: 001-33841

VULCAN MATERIALS COMPANY

(Exact Name of Registrant as Specified in Its Charter)

New Jersey

20-8579133

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

1200 Urban Center Drive, Birmingham, Alabama 35242

(Address of Principal Executive Offices) (Zip Code)

(205) 298-3000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

Common Stock, \$1 par value

New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes \boxtimes No \square

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or section 15(d) of the Act. Yes □ No ⊠

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes \boxtimes No \square

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ⊠ No □

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer

Accelerated filer □

Non-accelerated filer ☐ Smaller reporting company ☐

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes □ No ⊠

Aggregate market value of voting and non-voting common stock held by non-affiliates as of June 30, 2016:

\$15,976,104,960

Number of shares of common stock, \$1.00 par value, outstanding as of February 14, 2017:

132,355,703

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's annual proxy statement for the annual meeting of its shareholders to be held on May 12, 2017, are incorporated by reference into Part III of this Annual Report on Form 10-K.

VULCAN MATERIALS COMPANY

ANNUAL REPORT ON FORM 10-K FISCAL YEAR ENDED DECEMBER 31, 2016

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Unless otherwise stated or the context otherwise requires, references in this report to "Vulcan," the "Company," "we," "our," or "us" refer to Vulcan Materials Company and its consolidated subsidiaries.

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PART I

"SAFE HARBOR" STATEMENT UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

Certain of the matters and statements made herein or incorporated by reference into this report constitute forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. All such statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements reflect our intent, belief or current expectation. Often, forward-looking statements can be identified by the use of words, such as "anticipate," "may," "believe," "estimate," "project," "expect," "intend" and words of similar import. In addition to the statements included in this report, we may from time to time make other oral or written forward-looking statements in other filings under the Securities Exchange Act of 1934 or in other public disclosures. Forward-looking statements are not guarantees of future performance, and actual results could differ materially from those indicated by the forward-looking statements. All forward-looking statements involve certain assumptions, risks and uncertainties that could cause actual results to differ materially from those included in or contemplated by the statements. These assumptions, risks and uncertainties include, but are not limited to:

- general economic and business conditions
- the timing and amount of federal, state and local funding for infrastructure
- changes in our effective tax rate
- the increasing reliance on information technology infrastructure for our ticketing, procurement, financial statements and
 other processes could adversely affect operations in the event that the infrastructure does not work as intended or
 experiences technical difficulties or is subjected to cyber attacks
- the impact of the state of the global economy on our businesses and financial condition and access to capital markets
- changes in the level of spending for private residential and private nonresidential construction
- the highly competitive nature of the construction materials industry
- the impact of future regulatory or legislative actions, including those relating to climate change, greenhouse gas emissions or the definition of minerals
- the outcome of pending legal proceedings
- pricing of our products
- weather and other natural phenomena
- energy costs
- costs of hydrocarbon-based raw materials
- healthcare costs
- the amount of long-term debt and interest expense we incur
- · changes in interest rates
- volatility in pension plan asset values and liabilities, which may require cash contributions to the pension plans
- the impact of environmental cleanup costs and other liabilities relating to existing and/or divested businesses
- our ability to secure and permit aggregates reserves in strategically located areas
- our ability to manage and successfully integrate acquisitions
- the potential of goodwill or long-lived asset impairment
- the risks set forth in Item 1A "Risk Factors," Item 3 "Legal Proceedings," Item 7 "Management's Discussion and Analysis
 of Financial Condition and Results of Operations," and Note 12 "Commitments and Contingencies" to the consolidated
 financial statements in Item 8 "Financial Statements and Supplementary Data," all as set forth in this report
- other assumptions, risks and uncertainties detailed from time to time in our filings made with the Securities and Exchange Commission

All forward-looking statements are made as of the date of filing or publication. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by law. Investors are cautioned not to rely unduly on such forward-looking statements when evaluating the information presented in our filings, and are advised to consult any of our future disclosures in filings made with the Securities and Exchange Commission and our press releases with regard to our business and consolidated financial position, results of operations and cash flows.

ITEM 1

BUSINESS

Vulcan Materials Company, a New Jersey corporation, is the nation's largest supplier of construction aggregates (primarily crushed stone, sand and gravel) and a major producer of asphalt mix and ready-mixed concrete. As of December 31, 2016, we had 337 active aggregates facilities.

VULCAN'S VALUE PROPOSITION

We are the largest supplier of construction aggregates in the country with coast-to-coast aggregates operations. Our leading position is based upon:

- a favorable geographic footprint serving nearly all key growth corridors and the most rapidly growing population centers
- a pure-play aggregates business with one of the largest proven and probable reserve bases in the U.S.
- strong local leadership and autonomy coupled with company-wide performance goals and improvement



These factors, together with our strong operating expertise and price discipline, allowed us to deliver a 14% increase (\$4.81 compared to \$4.24) in Aggregates segment unit gross profit per ton in 2016.

PORTFOLIO MANAGEMENT

Our aggregates reserves are strategically located throughout the United States in areas that are projected to grow faster than the national average and that require large amounts of aggregates to meet construction demand. Vulcan-served states are estimated to generate 79% of the total growth in U.S. population and 71% of the total growth in U.S. household formations between 2015 and 2025.

VULCAN'S TOP TEN REVENUE PRODUCING STATES IN 2016

1. Texas

6. Tennessee

2. California

7. North Carolina

3. Virginia

8. Arizona

4. Georgia

9. South Carolina

5. Florida

10. Illinois

Our top ten revenue producing states accounted for 84% of our 2016 revenues while our top five accounted for 59%.

We take a disciplined approach to strengthening our footprint by increasing our presence in U.S. metropolitan areas that are expected to grow more rapidly and by divesting assets that are no longer considered part of our long-term growth strategy. In 2016, we expanded our aggregates distribution capabilities in Georgia and completed two strategic bolt-on acquisitions in New Mexico and Texas.

Where practical, we have operations located close to our local markets because the cost of trucking materials long distances is prohibitive. Approximately 80% of our total aggregates shipments are delivered exclusively from the producing location to the customer by truck, and another 16% are delivered by truck after reaching a sales yard by rail or water. The remaining 4% of aggregates shipments are delivered directly to the customer by rail or water.

BUSINESS STRATEGY AND COMPETITIVE ADVANTAGE

We provide the basic materials for the infrastructure needed to maintain and expand the U.S. economy. We operate primarily in the U.S. and are the nation's largest supplier of construction aggregates (primarily crushed stone, sand and gravel) and a major producer of asphalt mix and ready-mixed concrete. Our strategy and competitive advantage are based on our strength in aggregates. Aggregates are used in most types of construction and in the production of asphalt mix and ready-mixed concrete. Our materials are used to build the roads, tunnels, bridges, railroads and airports that connect us, and to build the hospitals, schools, shopping centers, factories and places of worship that are essential to our lives and the economy.

BUSINESS STRATEGIES

Our business strategies include: (1) aggregates focus, (2) coast-to-coast footprint, (3) profitable growth, (4) managing volume, product mix and price to grow profitability, and (5) effective land management.

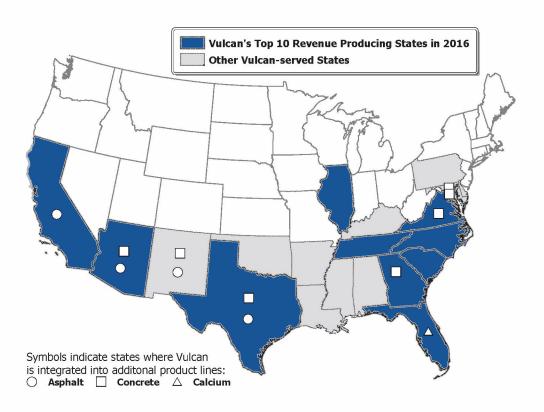
1. AGGREGATES FOCUS

Aggregates are used in virtually all types of public and private construction and practically no substitutes for quality aggregates exist. Given our focus on aggregates, we:

- BUILD AND HOLD SUBSTANTIAL RESERVES: Our reserves are critical to our long-term success. They are strategically located throughout the United States in high-growth areas that are expected to require large amounts of aggregates to meet future construction demand. Moreover, there are significant barriers to entry in many metropolitan markets due to stringent zoning and permitting regulations. Aggregates operations have flexible production capabilities and, other than energy inputs required to process the materials, require virtually no other raw material. Our downstream businesses (asphalt mix and concrete) use Vulcan-produced aggregates almost exclusively.
- TAKE ADVANTAGE OF SIZE AND SCALE: Each aggregates operation is unique because of its location within a local market with particular geological characteristics. Every operation, however, uses a similar group of assets to produce saleable aggregates and provide customer service. We are the largest aggregates supplier in the U.S. Our 337 active aggregates facilities as of December 31, 2016, provide opportunities to standardize operating practices and procure equipment (fixed and mobile), parts, supplies and services in an efficient and cost-effective manner, both regionally and nationally. Additionally, we are able to share best practices across the organization and leverage our size for administrative support, customer service, accounting, procurement, technical support and engineering.

2. COAST-TO-COAST FOOTPRINT

Demand for construction aggregates correlates positively with changes in population growth, household formation and employment. We have pursued a strategy to increase our presence in U.S. metropolitan areas that are expected to grow the most rapidly. Our strategic locations serve 19 of the top 25 highest-growth U.S. metropolitan areas in 20 states plus the District of Columbia.



3. PROFITABLE GROWTH

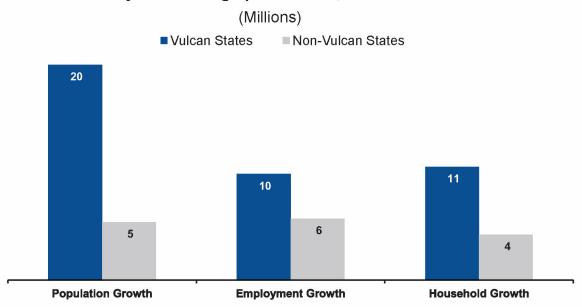
Our long-term growth is a result of strategic acquisitions and investments in key operations.

STRATEGIC ACQUISITIONS AND DISPOSITIONS: Since becoming a public company in 1956, Vulcan has principally grown by mergers and acquisitions. For example, in 1999 we acquired CalMat Co., thereby expanding our aggregates operations into California and Arizona and making us one of the nation's leading producers of asphalt mix. In 2007, we acquired Florida Rock Industries, Inc., the largest acquisition in our history. This acquisition expanded our aggregates business in Florida and our aggregates and ready-mixed concrete businesses in other southeastern and mid-Atlantic states. In 2014, we completed eight transactions that expanded our aggregates business in Arizona, California, New Mexico, Texas, Virginia and Washington D.C. and our asphalt mix business in Arizona and New Mexico. In 2015, we completed an asset exchange transaction in which we exited our ready-mixed concrete business in California and further expanded our asphalt mix business in Arizona.

Additionally, throughout our history we have completed many bolt-on acquisitions that have contributed significantly to our growth. For example, in 2016 we completed strategic bolt-on acquisitions in New Mexico and Texas.

• REINVESTMENT OPPORTUNITIES WITH HIGH RETURNS: Demand for our products is dependent on construction activity and correlates positively with changes in population growth, household formation and employment. During the period 2015 - 2025, Moody's Analytics projects that 79% of the U.S. population growth, 71% of household formation and 63% of new jobs will occur in Vulcan-served states. The close proximity of our production facilities and our aggregates reserves to this projected population growth creates many opportunities to invest capital in high-return projects — projects that will add reserves, increase production capacity and improve costs.

Projected Demographic Growth, 2015 to 2025



Source: Moody's Analytics as of December 12, 2016

The following graphic illustrates the projected growth (2015 – 2025) by key demographics for Vulcan-served states:

Population Growth	Vulcan-served States	CA, FL, TX				
***	79%	48%				
Household Formation	71%	40%				
Employment Growth	63%	34%				

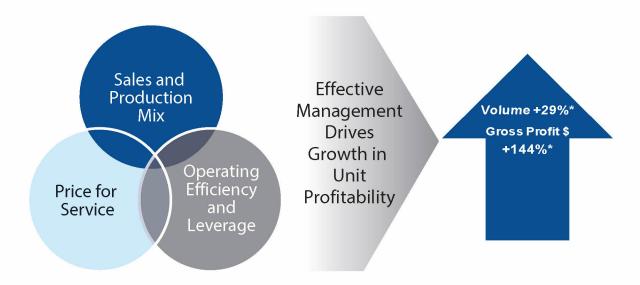
Source: Moody's Analytics as of December 12, 2016

4. MANAGING VOLUME, PRODUCT MIX AND PRICE TO GROW PROFITABILITY

We focus on three major profit drivers that must be managed in combination.

- Price for Service We seek to receive full and fair value for the quality of products and service we provide. We should be
 paid appropriately for helping our customers be successful.
- Operating Efficiency and Leverage We focus on rigorous cost management throughout the economic cycle. Small savings per ton add up to significant cost reductions.
- Sales and Production Mix We adjust production levels to meet varying market conditions. Managing inventories
 responsibly results in improved cost performance and an improved return on capital.

We manage these factors locally, and align our talent and incentives accordingly. Our knowledgeable and experienced workforce and our flexible production capabilities allow us to manage operational and overhead costs aggressively. Recovery in demand serves as a tailwind for all three major profit drivers.



^{*} Aggregates segment improvement since the recovery began - TTM Q2 2013 to Q4 2016

Aggregates segment gross profit has grown at a significantly greater rate than volume over the past few years and we expect continuing improvement in unit profitability.

- On Price for Service Our expanding margins will continue to benefit from the compounding pricing gains associated with cyclical recoveries.
- On Operating Efficiency and Leverage We are operating a capital-intensive business well below full capacity and are extremely well positioned to further leverage fixed costs to sales as we move forward.
- On Sales and Production Mix As the recovery continues and as we see a larger portion of new construction activity in
 the end-use mix, we will sell the entire production mix much more efficiently and at fuller value.

5. EFFECTIVE LAND MANAGEMENT

We believe that effective land management is both a business strategy and a social responsibility that contributes to our success. Good stewardship requires the careful use of existing resources as well as long-term planning because mining, ultimately, is an interim use of the land. Therefore, we strive to achieve a balance between the value we create through our mining activities and the value we create through effective post-mining land management. We continue to focus our actions on prudent decisions regarding the life cycle management of the land we own.

COMPETITIVE ADVANTAGES

The competitive advantages of our aggregates focused business strategy include:

COAST-TO-COAST FOOTPRINT

- largest aggregates supplier in the U.S.
- high-growth markets requiring large amounts of aggregates to meet construction demand
- diversified regional exposure
- · complementary asphalt mix and concrete businesses in select markets

BETTER SALES AND SERVICE

- empowered local leadership teams with intimate knowledge of local markets, leveraged with the strength and knowledge of the largest aggregates supplier in the U.S.
- extensive and advantaged logistics network (as shown on map on page 9)
- benefits of scale in operations, procurement and administrative support
- effective post-mining land management to generate significant additional value
- tightly managed operational and overhead costs

STRATEGICALLY LOCATED ASSETS

- reserves are primarily located in high-growth markets that require large amounts of aggregates to meet demand
- zoning and permitting regulations in many metropolitan markets have made it increasingly difficult to expand existing quarries or to develop new quarries
 - such regulations, while potentially curtailing expansion in certain areas, could also increase the value of our reserves at existing locations

PRODUCT LINES

We have four operating (and reportable) segments organized around our principal product lines:

- 1. Aggregates 76% of 2016's total revenues
- 2. Asphalt Mix 14% of 2016's total revenues
- 3. Concrete 9% of 2016's total revenues
- 4. Calcium less than 1% of 2016's total revenues

See Note 15 "Segment Reporting" in Item 8 "Financial Statements and Supplementary Data."

1. AGGREGATES

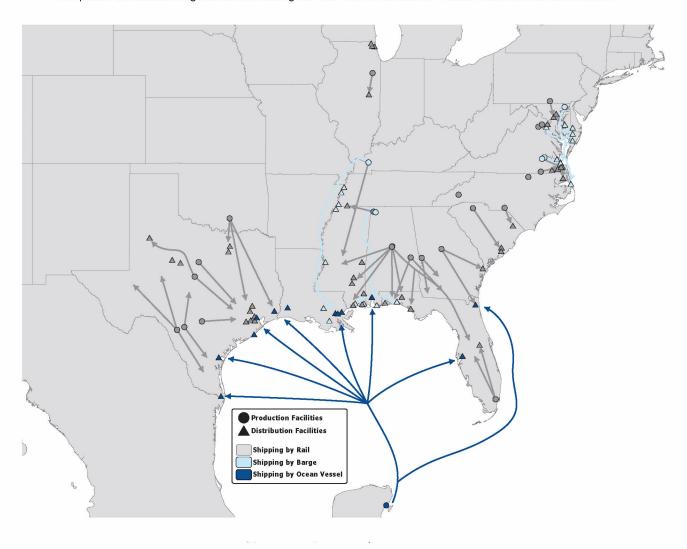
Our construction aggregates are used in a number of ways:

- as a base material underneath highways, walkways, airport runways, parking lots and railroads
- to aid in water filtration, purification and erosion control
- as a raw material used in combination with other resources to construct many of the items we rely on to sustain our quality of life including:
 - houses and apartments
 - roads, bridges and parking lots
 - schools and hospitals
 - commercial buildings and retail space
 - sewer systems
 - airports and runways

Factors that affect the U.S. aggregates industry and our business include:

■ LOCAL MARKETS: Aggregates have a high weight-to-value ratio and, in most cases, must be produced near where they are used; if not, transportation can cost more than the materials, rendering them uncompetitive compared to locally produced materials. Exceptions to this typical market structure include areas along the U.S. Gulf Coast and the Eastern Seaboard where there are limited supplies of locally available high-quality aggregates. We serve these markets from quarries that have access to long-haul transportation — shipping by barge and rail — and from our quarry on Mexico's Yucatan Peninsula with our fleet of Panamax-class, self-unloading ships.

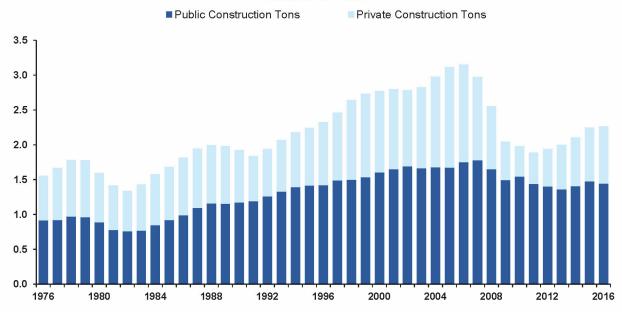
We operate an extensive logistics network along the U.S. Gulf Coast and the Eastern Seaboard as shown below:



- LOCATION AND QUALITY OF RESERVES: We currently have 15.5 billion tons of permitted and proven or probable aggregates reserves. The bulk of these reserves are located in areas where we expect greater than average rates of growth in population, jobs and households, which require new infrastructure, housing, offices, schools and other development. Zoning and permitting regulations in some markets have made it increasingly difficult for the aggregates industry to expand existing quarries or to develop new quarries. These restrictions curtail expansion in certain areas, but they also increase the value of our reserves at existing locations.
- **DEMAND CYCLES:** Long-term growth in demand for aggregates is largely driven by growth in population, jobs and households. While short-term and medium-term demand for aggregates fluctuates with economic cycles, declines have historically been followed by strong recoveries, with each peak establishing a new historical high.

U.S. Aggregates Demand

Billions of Tons



Source: Company estimates

- FLEXIBLE PRODUCTION CAPABILITIES: The production of aggregates is a mechanical process in which stone is crushed and, through a series of screens, separated into various sizes depending on how it will be used. Production capacity can be flexible by adjusting operating hours to meet changing market demand.
- HIGHLY FRAGMENTED INDUSTRY: The U.S. aggregates industry is composed of over 6,000 companies that manage
 more than 11,000 operations. This fragmented structure provides many opportunities for consolidation. Companies in the
 industry commonly enter new markets or expand positions in existing markets through the acquisition of existing facilities.
- LIMITED PRODUCT SUBSTITUTION: There are limited substitutes for quality aggregates. Recycled concrete and asphalt have certain applications as a lower-cost alternative to virgin aggregates. However, due to technical specifications many types of construction projects cannot be served by recycled concrete and require the use of virgin aggregates to meet specifications and performance-based criteria for durability, strength and other qualities. Moreover, the amount of recycled asphalt included in asphalt mix as a substitute for aggregates is limited due to specifications.
- RAW MATERIAL INPUTS LARGELY UNDER OUR CONTROL: Unlike typical industrial manufacturing industries, the
 aggregates industry does not require the input of raw material beyond owned or leased aggregates reserves. Stone, sand
 and gravel are naturally occurring resources. However, production does require the use of explosives, hydrocarbon fuels
 and electric power.

AGGREGATES MARKETS

We focus on the U.S. markets with above-average long-term expected population growth and where construction is expected to expand. Because transportation is a significant part of the delivered cost of aggregates, our facilities are typically located in the markets they serve or have access to economical transportation via rail, barge or ship to a particular end market. We serve both the public and the private sectors.

Public sector construction activity has historically been more stable and less cyclical than privately-funded construction, and generally requires more aggregates per dollar of construction spending. Private sector construction (primarily residential and nonresidential buildings) typically is more affected by general economic cycles than publicly funded projects (particularly highways, roads and bridges), which tend to receive more consistent levels of funding throughout economic cycles.

PUBLIC SECTOR CONSTRUCTION

Public sector construction includes spending by federal, state, and local governments for highways, bridges, buildings, airports, schools and prisons as well as other infrastructure construction for sewer and waste disposal systems, water supply systems, dams, reservoirs and other public construction projects. Construction for power plants and other utilities is funded from both public and private sources. In 2016, publicly funded construction accounted for approximately 47% of our total aggregates shipments, and approximately 26% of our aggregates sales by volume were used in highway construction projects.

- PUBLIC SECTOR FUNDING: Generally, public sector construction spending is more stable than private sector construction spending; public sector spending is less sensitive to interest rates and spending has historically been supported by multi-year laws, which provide certainty and funding amounts, program structures, and rules and regulations. Federal spending is governed by authorization, budget and appropriations laws. The level of state and local spending on infrastructure varies across the United States and depends on individual state needs and economies. Since 2013, seventeen states have increased taxes on motor fuel to support needed transportation investments. In 2016, five state legislatures approved one-time funding for transportation, and three state legislatures passed bills providing recurring funding resources. To cap off state and local action, 2016 was another banner election year for transportation-related measures at the ballot box: 74% of local and state measures passed consistent with the trend of the last 10 years.
 - FEDERAL HIGHWAY FUNDING: In December 2015, President Obama signed a new, long-term federal highway and transit authorization bill, Fixing America's Surface Transportation Infrastructure Act (FAST Act), into law after the final legislation received strong, bipartisan support in both the House and the Senate. The FAST Act provides multi-year funding to state and local governments in support of road, bridge, intermodal and public transportation projects.

The FAST Act increases Federal-Aid Highway Program funding from \$41 billion in the federal fiscal year (FFY) 2015 to \$47 billion in FFY 2020. Federal spending for highways is supported by \$208 billion in excise taxes on gasoline and diesel fuels, taxes on heavy truck sales and use, and heavy truck tire taxes and by a \$70 billion transfer of general funds to the Federal Highway Trust Fund.

The long-term nature of the FAST Act, which authorizes federal funding through FFY 2020, is important. The Federal-Aid Highway Program is the largest component of the law and has provided, on average, 52% of all state capital investment in roads and bridges over the last 10 years. This multi-year authorization and the associated dedicated funding provides state departments of transportation with the ability to plan and execute long-range, complex highway projects.

The FAST Act also contains important policy changes. To further accelerate the project delivery process, it augments the environmental review and permitting process reforms contained in the prior law, Moving Ahead for Progress in the 21st Century Act (MAP-21). The new law also provides assistance for states making investments in major capital projects — particularly freight projects. In states where we operate, we are well-positioned to serve the large general contractors who will compete for new freight and other major capacity projects that will move forward with this FAST Act funding and policy implementation.

Project financing remains an important additional component of overall surface transportation spending, with the Transportation Infrastructure Finance & Innovation Act (TIFIA) program authorized at \$275 million (in line with the previous program outlays) and growing to \$300 million by 2020. The FAST Act also created a new National Surface Transportation and Innovative Finance Bureau to provide technical assistance to states seeking to pursue public-private partnerships and other financing arrangements for transportation projects.

• WATER INFRASTRUCTURE: The Water Infrastructure Improvements for the Nation Act of 2016 (WIIN), which we and numerous other business allies strongly supported, was signed into law in December 2016. This law is the successor to the Water Resources Reform and Development Act of 2014 (WRRDA). It reauthorizes needed investment in America's ports, channels, locks, dams, and other infrastructure that supports the maritime and waterways transportation system and provides flood protection for communities. It also provides funding to the Water Infrastructure Financing and Innovation Act (WIFIA), which was modeled after the highly popular TIFIA program in the surface transportation sector. Created in WRRDA 2014, WIFIA will allow for federal credit assistance to water resources projects in the form of low-cost loans, loan guarantees and lines of credit.

PRIVATE SECTOR CONSTRUCTION

The private sector construction markets include both nonresidential building construction and residential construction and are considerably more cyclical than public construction. In 2016, privately-funded construction accounted for approximately 53% of our total aggregates shipments.

NONRESIDENTIAL CONSTRUCTION: Private nonresidential building construction includes a wide array of projects. Such projects generally are more aggregates intensive than residential construction. Overall demand in private nonresidential construction generally is driven by job growth, vacancy rates, private infrastructure needs and demographic trends. The growth of the private workforce creates demand for offices, hotels and restaurants. Likewise, population growth generates demand for stores, shopping centers, warehouses and parking decks as well as hospitals, places of worship and entertainment facilities. Large industrial projects, such as a new manufacturing facility, can increase the need for other manufacturing plants to supply parts and assemblies. Construction activity in this end market is influenced by a firm's ability to finance a project and the cost of such financing. This end market also includes capital investments in public nonresidential facilities to meet the needs of a growing population.

Nonresidential construction is expected to continue to be a stable source of volume growth in 2017 based on the following assumptions: (1) continuing employment growth should provide support, as it has in the past, (2) current backlogs that our customers, industry groups and outside economists are reporting should continue to be a source of demand in 2017, and (3) growing state and local tax revenues should provide local governments with the funds to make capital investments in schools and other public nonresidential facilities to meet the needs of a growing population.

RESIDENTIAL CONSTRUCTION: The majority of residential construction is for single-family housing with the remainder
consisting of multi-family construction (i.e., two family houses, apartment buildings and condominiums). Public housing
comprises only a small portion of housing demand. Household formations in our markets continue to outpace household
formations in the rest of the United States. Construction activity in this end market is influenced by the cost and availability
of mortgage financing and builders' ability to maintain skilled labor.

U.S. housing starts, as measured by Dodge Analytics data, peaked in early 2006 at over 2 million units annually. By the end of 2009, total housing starts had declined to less than 0.6 million units, well below prior historical lows of approximately 1 million units annually. In 2016, total annual housing starts in the U.S. increased to 1.18 million (an increase of 2.2% over 2015). Housing growth was particularly robust in our markets, which grew at almost twice the rate of the nation as a whole. The consistent growth in residential construction bodes well for continued recovery in our markets.

ADDITIONAL AGGREGATES PRODUCTS AND MARKETS

We sell aggregates that are used as ballast for construction and maintenance of railroad tracks. We also sell riprap and jetty stone for erosion control along roads and waterways. In addition, stone can be used as a feedstock for cement and lime plants and for making a variety of adhesives, fillers and extenders. Coal-burning power plants use limestone in scrubbers to reduce harmful emissions. Limestone that is crushed to a fine powder can be sold as agricultural lime.

We sell a relatively small amount of construction aggregates outside of the United States, principally in the areas surrounding our large quarry on the Yucatan Peninsula in Mexico. Nondomestic sales and long-lived assets outside the United States are reported in Note 15 "Segment Reporting" in Item 8 "Financial Statements and Supplementary Data."

VERTICAL INTEGRATION

While aggregates is our focus and primary business, we believe vertical integration between aggregates and downstream products, such as asphalt mix and ready-mixed concrete, can be managed effectively in certain markets to generate acceptable financial returns. We produce and sell asphalt mix and/or ready-mixed concrete primarily in our mid-Atlantic, Georgia, Southwestern and Western markets. Aggregates comprise approximately 95% of asphalt mix by weight and 80% of ready-mixed concrete by weight. In both of these downstream businesses, aggregates are primarily supplied from our operations.

2. ASPHALT MIX

We produce and sell asphalt mix in Arizona, California, New Mexico and Texas. This segment relies on our reserves of aggregates, functioning essentially as a customer to our aggregates operations. Aggregates are a major component in asphalt mix, comprising approximately 95% by weight of this product. We meet the aggregates requirements for our Asphalt Mix segment primarily through our Aggregates segment. These product transfers are made at local market prices for the particular grade and quality of material required.

Because asphalt mix hardens rapidly, delivery typically is within close proximity to the producing facility. The asphalt mix production process requires liquid asphalt cement, which we purchase from third-party producers. We do not anticipate any significant difficulties in obtaining the raw materials necessary for this segment to operate. We serve our Asphalt Mix segment customers from our local production facilities.

3. CONCRETE

We produce and sell ready-mixed concrete in Arizona, Georgia, Maryland, New Mexico, Texas, Virginia, Washington D.C. and the Bahamas. In May 2015, we entered the Arizona ready-mixed concrete market through the acquisition of ready-mixed concrete operations in conjunction with the acquisition of aggregates operations in Arizona and New Mexico. In January 2015, we swapped our ready-mixed concrete operations in California for asphalt mix operations, primarily in Arizona. In March 2014, we sold our cement and concrete businesses in the Florida area. For additional details see Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data."

This segment relies on our reserves of aggregates, functioning essentially as a customer to our aggregates operations. Aggregates are a major component in ready-mixed concrete, comprising approximately 80% by weight of this product. We meet the aggregates requirements of our Concrete segment primarily through our Aggregates segment. These product transfers are made at local market prices for the particular grade and quality of material required.

We serve our Concrete segment customers from our local production facilities or by truck. Because ready-mixed concrete hardens rapidly, delivery typically is within close proximity to the producing facility.

Ready-mixed concrete production also requires cement which we purchase from third-party producers. We do not anticipate any significant difficulties in obtaining the raw materials necessary for this segment to operate.

4. CALCIUM

As noted above, in March 2014, we sold our cement and concrete businesses in the Florida area. For additional details see Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data." We retained our former Cement segment's calcium operation in Brooksville, Florida. This facility produces calcium products for the animal feed, plastics and water treatment industries with high quality calcium carbonate material mined at the Brooksville quarry.

OTHER BUSINESS-RELATED ITEMS

SEASONALITY AND CYCLICAL NATURE OF OUR BUSINESS

Almost all of our products are produced and consumed outdoors. Seasonal changes and other weather-related conditions can affect the production and sales volumes of our products. Therefore, the financial results for any quarter do not necessarily indicate the results expected for the year. Normally, the highest sales and earnings are in the third quarter and the lowest are in the first quarter. Furthermore, our sales and earnings are sensitive to national, regional and local economic conditions, demographic and population fluctuations, and particularly to cyclical swings in construction spending, primarily in the private sector.

COMPETITORS

We operate in a generally fragmented industry with a large number of small, privately-held companies. We estimate that the ten largest aggregates producers accounted for approximately 30% to 35% of total U.S. aggregates production in 2016. Despite being the industry leader, Vulcan's total U.S. market share is less than 10%. Other publicly traded companies among the ten largest U.S. aggregates producers include the following:

- Cemex S.A.B. de C.V.
- CRH plc
- HeidelbergCement AG
- LafargeHolcim
- Martin Marietta Materials, Inc.
- MDU Resources Group, Inc.
- Summit Materials, Inc.

Because the U.S. aggregates industry is highly fragmented, with over 6,000 companies managing more than 11,000 operations during 2016, many opportunities for consolidation exist. Therefore, companies in the industry tend to grow by acquiring existing facilities to enter new markets or extend their existing market positions.

CUSTOMERS

No material part of our business depends upon any single customer whose loss would have a significant adverse effect on our business. In 2016, our five largest customers accounted for 8.1% of our total revenues (excluding internal sales), and no single customer accounted for more than 3.0% of our total revenues. Our products typically are sold to private industry and not directly to governmental entities. Although approximately 45% to 55% of our aggregates shipments have historically been used in publicly funded construction, such as highways, airports and government buildings, relatively insignificant sales are made directly to federal, state, county or municipal governments/agencies. Therefore, although reductions in state and federal funding can curtail publicly funded construction, our business is not directly subject to renegotiation of profits or termination of contracts with state or federal governments.

ENVIRONMENTAL COSTS AND GOVERNMENTAL REGULATION

Our operations are subject to numerous federal, state and local laws and regulations relating to the protection of the environment and worker health and safety; examples include regulation of facility air emissions and water discharges, waste management, protection of wetlands, listed and threatened species, noise and dust exposure control for workers, and safety regulations under both Mine Safety and Health Administration (MSHA) and Occupational Safety and Health Administration (OSHA). Compliance with these various regulations requires a substantial capital investment, and ongoing expenditures for the operation and maintenance of systems and implementation of programs. We estimate that capital expenditures for environmental control facilities in 2017 and 2018 will be approximately \$17 million and \$11 million, respectively. These anticipated expenditures are not expected to have a material impact on our earnings or competitive position.

We have received notices from the United States Environmental Protection Agency (EPA) or similar state or local agencies that we are considered a potentially responsible party (PRP) at a limited number of sites under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund) or similar state and local environmental laws. Generally we share the cost of remediation at these sites with other PRPs or alleged PRPs in accordance with negotiated or prescribed allocations. There is inherent uncertainty in determining the potential cost of remediating a given site and in determining any individual party's share in that cost. As a result, estimates can change substantially as additional information becomes available about the nature or extent of site contamination, remediation methods, other PRPs and their probable level of involvement, and actions by or against governmental agencies or private parties.

For additional information about litigation and environmental matters, see Notes 1 and 12 to the consolidated financial statements in Item 8 "Financial Statements and Supplementary Data."

Frequently, we are required by state and local regulations or contractual obligations to reclaim our former mining sites. These reclamation liabilities are recorded in our financial statements as a liability at the time the obligation arises. The fair value of such obligations is capitalized and depreciated over the estimated useful life of the owned or leased site. The liability is accreted through charges to operating expenses. To determine the fair value, we estimate the cost for a third party to perform the legally required reclamation, which is adjusted for inflation and risk and includes a reasonable profit margin. All reclamation obligations are reviewed at least annually. Reclaimed quarries often have potential for use in commercial or residential development or as reservoirs or landfills. However, no projected cash flows from these anticipated uses have been considered to offset or reduce the estimated reclamation liability.

For additional information about reclamation obligations (referred to in our financial statements as asset retirement obligations), see Notes 1 and 17 to the consolidated financial statements in Item 8 "Financial Statements and Supplementary Data."

PATENTS AND TRADEMARKS

We do not own or have a license or other rights under any patents, registered trademarks or trade names that are material to any of our reporting segments.

OTHER INFORMATION ABOUT VULCAN

Vulcan is a New Jersey corporation incorporated on February 14, 2007, while its predecessor company was incorporated on September 27, 1956. Our principal sources of energy are electricity, diesel fuel, natural gas and coal. We do not anticipate any difficulty in obtaining sources of energy required for operation of any of our reporting segments in 2017.

As of January 1, 2017, we employed 7,149 people in the United States. Of these employees, 898 are represented by labor unions. Also, as of that date, we employed 380 people in Mexico and 4 in the Bahamas, 304 of whom are represented by a labor union. We do not anticipate any significant issues with any unions in 2017.

We do not use a backlog of orders to evaluate and understand our business at a Company level.

EXECUTIVE OFFICERS OF THE REGISTRANT

The names, positions and ages, as of February 20, 2017, of our executive officers are as follows:

Name	Position	Age				
J. Thomas Hill	Chairman, President and Chief Executive Officer					
John R. McPherson	Executive Vice President, Chief Financial and Strategy Officer	48				
Stanley G. Bass	Chief Growth Officer	55				
Michael R. Mills	Chief Administrative Officer	56				
Jerry F. Perkins Jr.	General Counsel and Secretary	47				
Jason P. Teter	Vice President, Finance	42				
Christina M. Alvord	President – Southern and Gulf Coast Division	49				
David P. Clement	President – Central Division	56				
William K. Duke	President – Southeast Division	61				
C. Brockway Lodge, Jr.	President – Western Division	44				
Jeffery G. Lott	President – Southwest Division	58				
David B. Pasley	President – Mountain West Division	58				
S. Martin Thorpe	President – Mideast Division	60				
Ejaz A. Khan	Vice President, Controller and Chief Information Officer	59				

The principal occupations of the executive officers during the past five years are set forth below:

J. Thomas Hill was elected Chairman of the Board of Directors effective January 1, 2016. He was elected President and Chief Executive Officer in July 2014. Prior to that, he served as Executive Vice President and Chief Operating Officer (January 2014 – July 2014), Senior Vice President – South Region (December 2011 – December 2013). Prior to that, he served in a number of positions with Vulcan including President, Florida Rock Division (September 2010 – December 2011).

John R. McPherson was elected Executive Vice President, Chief Financial and Strategy Officer in July 2014. Prior to that, he served as Executive Vice President and Chief Financial Officer (January 2014 – July 2014), Senior Vice President – East Region (November 2012 – December 2013) and Senior Vice President, Strategy and Business Development (October 2011 – November 2012). Before joining Vulcan in October 2011, Mr. McPherson was a senior partner at McKinsey & Company, a global management consulting firm, from 1995 to 2011.

Stanley G. Bass was elected Chief Growth Officer in February 2016. He served as Senior Vice President – Western and Mountain West Divisions from January 2015 to February 2016. He served as Senior Vice President – West Region from September 2013 to December 2014. Prior to that, he served as Senior Vice President – Central and West Regions (February 2013 – September 2013), Senior Vice President – Central Region (December 2011 – February 2013). Prior to that, he served in a number of positions with Vulcan including President, Midsouth and Southwest Divisions (September 2010 – December 2011).

Michael R. Mills was elected Chief Administrative Officer in February 2016. He served as Senior Vice President and General Counsel from November 2012 to February 2016; and as Senior Vice President – East Region from December 2011 to October 2012. Prior to that, he was President, Southeast Division.

Jerry F. Perkins Jr. was elected General Counsel and Secretary in February 2016. He served as Assistant General Counsel and Secretary since 2011.

Jason P. Teter began serving as Vice President, Finance on January 1, 2017. Prior to that, he served as President – Southern and Gulf Coast Division from January 2015 to December 2016 and as Vice President – Business Development from October 2013 to December 2014. Before joining Vulcan, he was the Vice President and General Manager, Georgia Aggregates for Lafarge North America.

Christina M. Alvord was elected President – Southern and Gulf Coast Division effective January 1, 2017. Prior to that, she served as Vice President, Corporate Planning and Performance Improvement from August 2016 to December 2016. Before joining Vulcan, she held several executive management positions across the United States with GE Aviation, including serving as President of two of its divisions.

David P. Clement was named President – Central Division effective January 1, 2015. He served as Senior Vice President – Central Region from September 2013 through December 2014. During the five years prior to such role, he served in a number of positions with Vulcan including Vice President and General Manager, Midwest Division and Vice President of Operations, Midwest Division.

William K. Duke was named President – Southeast Division effective January 1, 2017. Prior to that, he served in a number of roles over the past five years for Vulcan, including: President – Mideast Division (January 2015 – December 2016), Vice President and General Manager, Florida (August 2012 – December 2014) and Vice President and General Manager, Aggregates – Florida Rock Division (January 2010 – August 2012).

C. Brockway (Brock) Lodge, Jr. was named President – Western Division in February 2016. He served as Vice President and General Manager, Western Division from April 2015 to February 2016. Before that, he was Senior Area General Manager – Central Division (June 2013 – March 2015) and Director of Sales and Marketing – Midsouth Division (April 2010 – May 2013).

Jeffery G. Lott was named President – Southwest Division effective January 1, 2015. Prior to that, he served in a number of roles over the past five years for Vulcan, including Vice President and General Manager, Texas (July 2010 – December 2014).

David B. Pasley began serving as President – Mountain West Division in January 2015. Before that, he was Vice President and General Manager of Central and Northern California (February 2013 – December 2014); Vice President and General Manager of Arizona and Central and Northern California (February 2012 – January 2013); and Vice President and General Manager of Arizona and New Mexico (August 2010 – January 2012).

S. Martin Thorpe began serving as President – Mideast Division on January 1, 2017. Before assuming that role, he held various roles with the Company, including as Vice President and General Manager, North Carolina (January 2015 – December 2016) and General Manager of Pennsylvania, Maryland, Delaware and Marine Transport (January 2011 – December 2014).

Ejaz A. Khan was elected Vice President and Controller in February 1999. He was elected Chief Information Officer in February 2000.

SHAREHOLDER RETURN PERFORMANCE PRESENTATION

Below is a graph comparing the performance of our common stock, with dividends reinvested, to that of the Standard & Poor's 500 Stock Index (S&P 500) and the Materials and Services Sector of the Wilshire 5000 Index (Wilshire 5000 M&S) from December 31, 2011 to December 31, 2016. The Wilshire 5000 M&S is a market capitalization weighted sector containing public equities of firms in the Materials and Services sector, which includes our company and approximately 1,300 other companies.



		2011	2012	2013	2014	2015	2016
Comparative Total Return ¹							
Vulcan Materials Company	\$	100.00	\$ 132.40	\$ 151.20	\$ 167.83	\$ 243.53	\$ 323.16
S&P 500	\$	100.00	\$ 116.00	\$ 153.57	\$ 174.60	\$ 177.04	\$ 198.21
Wilshire 5000 M&S		100.00	\$ 118.20	\$ 160.99	\$ 174.35	\$ 182.72	\$ 203.53

¹ Assumes an initial investment at December 31, 2011 of \$100 in each stock/index, with quarterly reinvestment of dividends.

INVESTOR INFORMATION

We make available on our website, www.vulcanmaterials.com, free of charge, copies of our:

- Annual Report on Form 10-K
- Quarterly Reports on Form 10-Q
- Current Reports on Form 8-K

Our website also includes amendments to those reports filed with or furnished to the Securities and Exchange Commission (SEC) pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as well as all Forms 3, 4 and 5 filed with the SEC by our executive officers and directors, as soon as the filings are made publicly available by the SEC on our EDGAR database (*www.sec.gov*).

The public may read and copy materials filed with the SEC at the Public Reference Room of the SEC at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-732-0330. In addition to accessing copies of our reports online, you may request a copy of our Annual Report on Form 10-K, including financial statements, by writing to Jerry F. Perkins Jr., General Counsel and Secretary, Vulcan Materials Company, 1200 Urban Center Drive, Birmingham, Alabama 35242.

We have a:

- Business Conduct Policy applicable to all employees and directors
- Code of Ethics for the CEO and Senior Financial Officers

Copies of the Business Conduct Policy and the Code of Ethics are available on our website under the heading "Corporate Governance." If we make any amendment to, or waiver of, any provision of the Code of Ethics, we will disclose such information on our website as well as through filings with the SEC.

Our Board of Directors has also adopted:

- Corporate Governance Guidelines
- Charters for our Audit, Compensation, Executive, Finance, Governance and Safety, Health & Environmental Affairs
 Committees

These documents meet all applicable SEC and New York Stock Exchange (NYSE) regulatory requirements.

The Charters of the Audit, Compensation and Governance Committees are available on our website under the heading, "Corporate Governance," or you may request a copy of any of these documents by writing to Jerry F. Perkins Jr., General Counsel and Secretary, Vulcan Materials Company, 1200 Urban Center Drive, Birmingham, Alabama 35242.

Information included on our website is not incorporated into, or otherwise made a part of, this report.

CERTIFICATIONS AND ASSERTIONS

The certifications of our Chief Executive Officer and Chief Financial Officer made pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 are included as exhibits to this Annual Report on Form 10-K. Additionally, on May 20, 2016 our Chief Executive Officer submitted to the NYSE the annual written affirmation required by the rules of the NYSE certifying that he was not aware of any violations of Vulcan Materials Company of NYSE corporate governance listing standards.

ITEM 1A

RISK FACTORS

The following risks could materially and adversely affect our business, financial condition and results of operations, and cause the trading price of our common stock to decline. These risk factors do not identify all risks that we face; our operations could also be affected by factors that are not presently known to us or that we currently consider to be immaterial to our operations. Due to risks and uncertainties, known and unknown, our past financial results may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods. You should also refer to the other information set forth in this Annual Report on Form 10-K, including Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 8 "Financial Statements and Supplementary Data."

ECONOMIC/POLITICAL RISKS

Changes in legal requirements and governmental policies concerning zoning, land use, environmental, international trade and other areas of the law may result in additional liabilities, a reduction in operating hours and additional capital expenditures — Our operations are affected by numerous federal, state and local laws and regulations related to zoning, land use, environmental, and international trade matters. Despite our compliance efforts, we have an inherent risk of liability in the operation of our business. These potential liabilities could have an adverse impact on our operations and profitability. In addition, our operations are subject to environmental, zoning and land use requirements and require numerous governmental approvals and permits, which often require us to make significant capital and operating expenditures to comply with the applicable requirements. Stricter laws and regulations, or more stringent interpretations of existing laws or regulations, may impose new liabilities, taxes or tariffs on us, reduce operating hours, require additional investment by us in pollution control equipment, or impede our opening new or expanding existing plants or facilities.

Our business is dependent on the timing and amount of federal, state and local funding for infrastructure — Our products are used in a variety of public infrastructure projects that are funded and financed by federal, state and local governments. Although Congress passed and President Obama signed a five-year, fully-funded bill into law to invest in roads, bridges and public transportation in 2015, and in 2016, three state legislatures in Vulcan-served areas passed one-time revenue increases for transportation and ballot measures were also passed to increase investment transportation infrastructure in several Vulcan-served areas including northern and southern California, Georgia, North Carolina and South Carolina, given varying state and local budgetary situations and the associated pressure on infrastructure spending, we cannot be entirely assured of the existence, amount and timing of appropriations for future public infrastructure projects.

Climate change and climate change legislation or regulations may adversely impact our business — A number of governmental bodies have introduced or are contemplating legislative and regulatory change in response to the potential impacts of climate change. Such legislation or regulation, if enacted, potentially could include provisions for a "cap and trade" system of allowances and credits or a carbon tax, among other provisions.

Other potential impacts of climate change include physical impacts, such as disruption in production and product distribution due to impacts from major storm events, shifts in regional weather patterns and intensities, and potential impacts from sea level changes. There is also a potential for climate change legislation and regulation to adversely impact the cost of purchased energy and electricity.

The impacts of climate change on our operations and the company overall are highly uncertain and difficult to estimate. However, climate change legislation and regulation concerning greenhouse gases could have a material adverse effect on our future financial position, results of operations or cash flows.

We are subject to various risks arising from our international business operations and relationships, which could adversely affect our business — We have international operations and are subject to both the risks of conducting international business and the requirements of the Foreign Corrupt Practices Act of 1977 (the FCPA). We face political and other risks associated with our international operations, including our largest production facility located in Playa del Carmen, Mexico. These risks may include restrictive trade policies, imposition of duties, taxes or government royalties or overt acts by foreign governments. In addition, failure to comply with the FCPA may result in legal claims against us.

GROWTH AND COMPETITIVE RISKS

Within our local markets, we operate in a highly competitive industry which may negatively impact prices, volumes and costs — The construction aggregates industry is highly fragmented with a large number of independent local producers in a number of our markets. Additionally, in most markets, we also compete against large private and public companies, some of which are significantly vertically integrated. Therefore, there is intense competition in a number of markets in which we operate. This significant competition could lead to lower prices and lower sales volumes in some markets, negatively affecting our earnings and cash flows.

The expanded use of aggregates substitutes could have a material adverse effect on our business, financial condition and results of operations — Recycled concrete and asphalt mix are increasingly being used in a number of our markets, particularly urban markets, as a substitute for aggregates. The expanded use of recycled concrete and asphalt mix could cause a significant reduction in the demand for aggregates.

Our long-term success depends upon securing and permitting aggregates reserves in strategically located areas. If we are unable to secure and permit such reserves it could negatively affect our future earnings — Construction aggregates are bulky and heavy and, therefore, difficult to transport efficiently. Because of the nature of the products, the freight costs can quickly surpass the production costs. Therefore, except for geographic regions that do not possess commercially viable deposits of aggregates and are served by rail, barge or ship, the markets for our products tend to be localized around our quarry sites and are served by truck. New quarry sites often take years to develop; therefore, our strategic planning and new site development must stay ahead of actual growth. Additionally, in a number of urban and suburban areas in which we operate, it is increasingly difficult to permit new sites or expand existing sites due to community resistance. Therefore, our future success is dependent, in part, on our ability to accurately forecast future areas of high growth in order to locate optimal facility sites and on our ability to secure operating and environmental permits to operate at those sites.

Our future growth depends in part on acquiring other businesses in our industry and successfully integrating them with our existing operations. If we are unable to integrate acquisitions successfully, it could lead to higher costs and could negatively affect our earnings — The expansion of our business is dependent in part on the acquisition of existing businesses that own or control aggregates reserves. Disruptions in the availability of financing could make it more difficult to capitalize on potential acquisitions. Additionally, with regard to the acquisitions we are able to complete, our future results will depend in part on our ability to successfully integrate these businesses with our existing operations.

FINANCIAL/ACCOUNTING RISKS

Our industry is capital intensive, resulting in significant fixed and semi-fixed costs. Therefore, our earnings are highly sensitive to changes in product shipments — Due to the high levels of fixed capital required for extracting and producing construction aggregates, our profits are negatively affected by significant decreases in shipments.

Significant downturn in the construction industry may result in an impairment of our goodwill — We test goodwill for impairment on an annual basis or more frequently if events or circumstances change in a manner that would more likely than not reduce the fair value of a reporting unit below its carrying value. While we have not identified any events or changes in circumstances since our annual impairment test on November 1, 2016 that indicate the fair value of any of our reporting units is below its carrying value, a significant downturn in the construction industry may have a material effect on the fair value of our reporting units. A significant decrease in the estimated fair value of one or more of our reporting units could result in the recognition of a material, noncash write-down of goodwill.

A deterioration in our credit ratings and/or the state of the capital markets could negatively impact our business — We currently have \$2 billion of debt with maturities between 2018 and 2037. Given our current credit metrics and ratings, together with other factors, we expect to refinance our nearer term debt maturities rather than repay them when due. Furthermore, we expect to finance acquisitions with a combination of cash flows from existing operations, additional debt and/or additional equity. The mix of financing sources for acquisitions will be situational dependent.

A deterioration in our credit ratings, regardless of the cause, could limit our debt financing options and increase the cost of such debt financing (whether for refinancing existing debt or financing acquisitions). While we do not anticipate a credit ratings downgrade, and plan to manage the capital structure consistent with investment-grade credit metrics, we cannot assure our current credit ratings.

A deterioration in the state of the capital markets, regardless of our credit rating, could impact our access to, and cost of, new debt or equity capital.

We use estimates in accounting for a number of significant items. Changes in our estimates could adversely affect our future financial results — As discussed more fully in "Critical Accounting Policies" under Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations," we use significant judgment in accounting for:

- goodwill impairment
- · impairment of long-lived assets excluding goodwill
- pension and other postretirement benefits
- environmental compliance
- claims and litigation including self-insurance
- income taxes

These assumptions and estimates could change significantly in the future and could adversely affect our financial position, results of operations, or cash flows.

PERSONNEL RISKS

Our future success greatly depends upon attracting and retaining qualified personnel, particularly in sales and operations — A significant factor in our future profitability is our ability to attract, develop and retain qualified personnel. Our success in attracting qualified personnel, particularly in the areas of sales and operations, is affected by changing demographics of the available pool of workers with the training and skills necessary to fill the available positions, the impact on the labor supply due to general economic conditions, and our ability to offer competitive compensation and benefit packages.

OTHER RISKS

We are dependent on information technology and our systems and infrastructure face certain risks, including cybersecurity risks and data leakage risks — Any significant breakdown, invasion, destruction or interruption of our systems by employees, others with authorized access to our systems or unauthorized persons could negatively impact operations. There is also a risk that we could experience a business interruption, theft of information, or reputational damage, which could adversely affect our results of operations, as a result of a cyber-attack, such as an infiltration of a data center, or data leakage of confidential information either internally or at our third-party providers. While we have invested in the protection of our data and informational technology to reduce these risks and periodically test the security of our information systems network, there can be no assurance that our efforts will prevent breakdowns or breaches in our systems that could adversely affect our business. Management is not aware of a cybersecurity incident that has had a material impact on our operations.

Weather can materially affect our operating results — Almost all of our products are consumed outdoors in the public or private construction industry, and our production and distribution facilities are located outdoors. Inclement weather affects both our ability to produce and distribute our products and affects our customers' short-term demand because their work also can be hampered by weather.

Our products are transported by truck, rail, barge or ship, often by third-party providers. Significant delays or increased costs affecting these transportation methods could materially affect our operations and earnings — Our products are distributed either by truck to local markets or by rail, barge or oceangoing vessel to remote markets. The costs of transporting our products could be negatively affected by factors outside of our control, including rail service interruptions or rate increases, tariffs, rising fuel costs and capacity constraints. Additionally, inclement weather, including hurricanes, tornadoes and other weather events, can negatively impact our distribution network.

We use large amounts of electricity, diesel fuel, liquid asphalt and other petroleum-based resources that are subject to potential supply constraints and significant price fluctuation, which could affect our operating results and profitability — In our production and distribution processes, we consume significant amounts of electricity, diesel fuel, liquid asphalt and other petroleum-based resources. The availability and pricing of these resources are subject to market forces that are beyond our control. Our suppliers contract separately for the purchase of such resources and our sources of supply could be interrupted should our suppliers not be able to obtain these materials due to higher demand or other factors that interrupt their availability. Variability in the supply and prices of these resources could materially affect our operating results from period to period and rising costs could erode our profitability.

We are involved in a number of legal proceedings. We cannot predict the outcome of litigation and other contingencies with certainty — We are involved in several complex litigation proceedings, some arising from our previous ownership and operation of our Chemicals business. Although we divested our Chemicals business in June 2005, we retained certain liabilities related to the business. As required by generally accepted accounting principles, we establish reserves when a loss is determined to be probable and the amount can be reasonably estimated. Our assessment of probability and loss estimates are based on the facts and circumstances known to us at a particular point in time. Subsequent developments in legal proceedings may affect our assessment and estimates of a loss contingency, and could result in an adverse effect on our financial position, results of operations or cash flows. For a description of our current significant legal proceedings see Note 12 "Commitments and Contingencies" in Item 8 "Financial Statements and Supplementary Data."

We are involved in certain environmental matters. We cannot predict the outcome of these contingencies with certainty — We are involved in environmental investigations and cleanups at sites where we operate or have operated in the past or sent materials for recycling or disposal. As required by generally accepted accounting principles, we establish reserves when a loss is determined to be probable and the amount can be reasonably estimated. Our assessment of probability and loss estimates are based on the facts and circumstances known to us at a particular point in time. Subsequent developments related to these matters may affect our assessment and estimates of loss contingency, and could result in an adverse effect on our financial position, results of operations or cash flows. For a description of our current significant environmental matters see Note 12 "Commitments and Contingencies" in Item 8 "Financial Statements and Supplementary Data."

ITEM 1B

UNRESOLVED STAFF COMMENTS

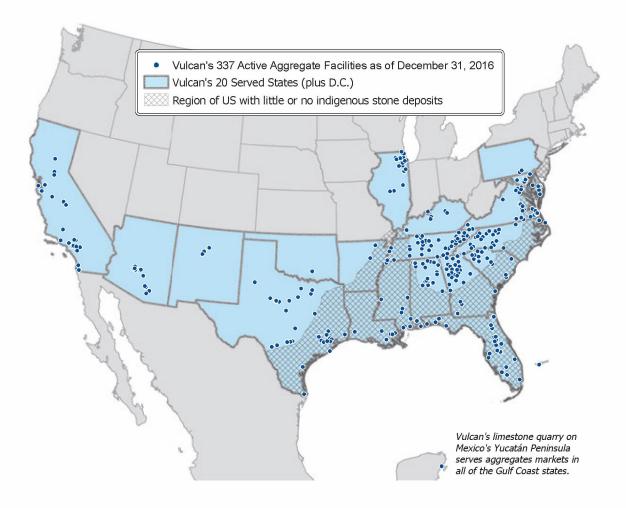
We have not received any written comments from the Securities and Exchange Commission staff regarding our periodic or current reports under the Exchange Act of 1934 that remain unresolved.

ITEM 2

PROPERTIES

AGGREGATES

As the largest U.S. supplier of construction aggregates, we have operating facilities across the U.S. and in Mexico and the Bahamas. We principally serve markets in 20 states, Washington D.C. and the local markets surrounding our operations in Mexico and the Bahamas. Our primary focus is serving states and metropolitan markets in the U.S. that are expected to experience the most significant growth in population, households and employment. These three demographic factors are significant drivers of demand for aggregates.



Our current estimate of 15.5 billion tons of proven and probable aggregates reserves reflects a decrease of 0.2 billion tons from the prior year's estimate. Estimates of reserves are of recoverable stone, sand and gravel of suitable quality for economic extraction, based on drilling and studies by our geologists and engineers, recognizing reasonable economic and operating restraints as to maximum depth of overburden and stone excavation, and subject to permit or other restrictions.

Proven, or measured, reserves are those reserves for which the quantity is computed from dimensions revealed by drill data, together with other direct and measurable observations, such as outcrops, trenches and quarry faces. The grade and quality of those reserves are computed from the results of detailed sampling, and the sampling and measurement data are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well established. Probable, or indicated, reserves are those reserves for which quantity, grade and quality are computed partly from specific measurements and partly from projections based on reasonable, though not drilled, geologic evidence. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

Reported proven and probable reserves include only quantities that are owned in fee or under lease, and for which all appropriate zoning and permitting have been obtained. Leases, zoning, permits, reclamation plans and other government or industry regulations often set limits on the areas, depths and lengths of time allowed for mining, stipulate setbacks and slopes that must be left in place, and designate which areas may be used for surface facilities, berms, and overburden or waste storage, among other requirements and restrictions. Our reserve estimates take into account these factors. Technical and economic factors also affect the estimates of reported reserves regardless of what might otherwise be considered proven or probable based on a geologic analysis. For example, excessive overburden or weathered rock, rock quality issues, excessive mining depths, groundwater issues, overlying wetlands, endangered species habitats, and rights of way or easements may effectively limit the quantity of reserves considered proven and probable. In addition, computations for reserves in-place are adjusted for estimates of unsaleable sizes and materials as well as pit and plant waste.

The 15.5 billion tons of estimated proven and probable aggregates reserves reported at the end of 2016 include reserves at inactive and greenfield (undeveloped) sites. The table below presents, by division, the tons of proven and probable aggregates reserves as of December 31, 2016 and the types of facilities operated.

		(millions o	of tons)		Number of Aggre	egates Operat	ting Facilities ²	
		Aggrega	tes Reserves	2016	Sand and			
Division ¹	Proven	Probable	Total	Production	Stone	Gravel	Sales Yards	
Central	3,042.2	917.9	3,960.1	37.3	57	3	11	
International	578.3	0.0	578.3	13.7	1	0	0	
Mideast	2,416.5	1,057.3	3,473.8	33.4	35	3	23	
Mountain West	175.2	127.8	303.0	6.8	1	13	2	
Southeast 3	2,697.0	827.3	3,524.3	38.8	40	14	8	
Southern Gulf Coast	1,182.4	30.5	1,212.9	13.0	22	0	21	
Southwest	1,122.6	10.1	1,132.7	20.2	17	1	17	
Western	818.5	509.5	1,328.0	20.3	5	13	1	
Total	12,032.7	3,480.4	15,513.1	183.5	178	47	83	

¹ The divisions are defined by states/countries as follows:

Central Division — Arkansas, Illinois, Kentucky and Tennessee

International Division — Mexico

Mideast Division — Delaware, Maryland, North Carolina, Pennsylvania, Virginia and Washington D.C.

Mountain West Division — Arizona and New Mexico

Southeast Division — Florida (excluding panhandle), Georgia, South Carolina and the Bahamas

Southern Gulf Coast Division — Alabama, Florida Panhandle, Louisiana and Mississippi

Southwest Division — Oklahoma and Texas

Western Division — California

Of the 15.5 billion tons of aggregates reserves at December 31, 2016, 8.7 billion tons or 56% are located on owned land and 6.8 billion tons or 44% are located on leased land.

² In addition to the facilities included in the table above, we operated 29 recycled concrete plants which are not dependent on reserves.

³ Includes a maximum of 364.0 million tons of reserves encumbered by volumetric production payments as defined in Note 1 "Summary of Significant Accounting Policies" in Item 8 "Financial Statements and Supplementary Data" under the caption Deferred Revenue.

The following table lists our ten largest active aggregates facilities based on the total proven and probable reserves at the sites. None of our aggregates facilities, other than Playa del Carmen, contributed more than 5% to our total revenues in 2016.

(millions of tons)				
		Rese	rves at 12/31/2016	2016
Location (nearest major metropolitan area)	Proven	Probable	Total	Production
Playa del Carmen (Cancun), Mexico	578.3	0.0	578.3	13.7
Hanover (Harrisburg), Pennsylvania	270.5	274.4	544.9	2.7
McCook (Chicago), Illinois	101.1	271.2	372.3	7.7
DeKalb (Chicago), Illinois	161.3	193.7	355.0	0.3
Corona (Los Angeles), California	17.1	321.6	338.7	2.4
Gold Hill (Charlotte), North Carolina	150.6	121.2	271.8	1.0
Macon, Georgia	122.7	128.0	250.7	1.4
San Emidio (Bakersfield), California	250.0	0.0	250.0	1.4
Norcross (Atlanta), Georgia	192.8	27.7	220.5	2.5
1604 Stone (San Antonio), Texas	216.0	0.0	216.0	2.9

ASPHALT MIX, CONCRETE AND CALCIUM

As of December 31, 2016, we operated a number of facilities producing asphalt mix, ready-mixed concrete and calcium in several of our divisions as reflected in the table below:

Division ¹	Asphalt Mix Facilities	Concrete ² Facilities	Calcium ³ Facilities
Mideast	0	33	0
Mountain West	19	4	0
Southeast	0	14	1
Southwest	11	8	0
Western	23	0	0

¹ International, Central and Southern Gulf Coast Divisions have no asphalt mix, concrete or calcium facilities.

The asphalt mix and concrete facilities are able to meet their needs for raw material inputs with a combination of internally sourced and purchased raw materials. Our Calcium segment operates a quarry at Brooksville, Florida which provides feedstock for the ground calcium operation.

(millions of tons)				
		Reserves at	2016	
Location	Proven	Probable	Total	Production
Brooksville	5.6	7.1	12.7	0.3

Our Brooksville limestone quarry is mined and processed primarily as a supplement for end-use products, such as animal feed and plastics. High purity limestone is inert and relatively inexpensive compared to the other components used in these end-use products. The Brooksville limestone quarry has an average calcium carbonate (CaCO₃) content of 98%.

² Comprised of ready-mixed concrete facilities and 1 block plant in the Southeast Division.

³ Comprised of a ground calcium plant.

HEADQUARTERS

Our headquarters are located in an office complex in Birmingham, Alabama. The office space consists of approximately 184,410 square feet and is leased through December 31, 2023, with three five-year renewal periods thereafter. The annual rental cost for the current term of the lease is approximately \$3.6 million.

ITEM 3

LEGAL PROCEEDINGS

We are subject to occasional governmental proceedings and orders pertaining to occupational safety and health or to protection of the environment, such as proceedings or orders relating to noise abatement, air emissions or water discharges. As part of our continuing program of stewardship in safety, health and environmental matters, we have been able to resolve such proceedings and to comply with such orders without any material adverse effects on our business.

We are a defendant in various lawsuits in the ordinary course of business. It is not possible to determine with precision the outcome of, or the amount of liability, if any, under these lawsuits, especially where the cases involve possible jury trials with as yet undetermined jury panels.

We were not subject to any penalties in 2016 for failure to disclose transactions identified by the Internal Revenue Service as abusive under Internal Revenue Code Section 6707A.

See Note 12 "Commitments and Contingencies" in Item 8 "Financial Statements and Supplementary Data" for a discussion of our material legal proceedings.

ITEM 4

MINE SAFETY DISCLOSURES

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95 of this report.

PART II

TEM 5

MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS
AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is traded on the New York Stock Exchange (ticker symbol VMC). As of February 14, 2017, the number of shareholders of record was 2,843. The prices in the following table represent the high and low sales prices for our common stock as reported on the New York Stock Exchange and the quarterly dividends declared by our Board of Directors in 2016 and 2015.

		tock Prices			
	High		Low		Declared
2016					~
First quarter	\$ 106.78	\$	78.83	\$	0.20
Second quarter	\$ 121.22	\$	104.61	\$	0.20
Third quarter	\$ 127.20	\$	106.42	\$	0.20
Fourth quarter	\$ 138.18	\$	105.71	\$	0.20
2015					
First quarter	\$ 86.25	\$	64.28	\$	0.10
Second quarter	\$ 93.07	\$	80.58	\$	0.10
Third quarter	\$ 102.65	\$	84.10	\$	0.10
Fourth quarter	\$ 106.84	\$	87.40	\$	0.10

The future payment of dividends is within the discretion of our Board of Directors and depends on our profitability, capital requirements, financial condition, business opportunities and other factors which our Board of Directors deems relevant. We are not a party to any contracts or agreements that currently materially limit our ability to pay dividends.

On February 10, 2017, our Board declared a dividend of twenty-five cents per share for the first quarter of 2017. This represents a five cent per share increase over the prior quarter.

ISSUER PURCHASES OF EQUITY SECURITIES

Purchases of our equity securities during the quarter ended December 31, 2016 are summarized below.

				Total Number	Maximum
				of Shares	Number of
				Purchased as	Shares that
	Total			Part of Publicly	May Yet Be
	Number of		Average	Announced	Purchased
	Shares	Price Paid		Plans or	Under the Plans
Period	Purchased	i	Per Share	Programs	or Programs ¹
2016					
Oct 1 - Oct 31	0	\$	0.00	0	1,756,757
Nov 1 - Nov 30	0	\$	0.00	0	1,756,757
Dec 1 - Dec 31	0	\$	0.00	0_	1,756,757
Total	0	\$	0.00	0	

¹ On February 10, 2006, our Board of Directors authorized us to purchase up to 10,000,000 shares. As of December 31, 2016, there were 1,756,757 shares remaining under this authorization. On February 10, 2017, our Board of Directors authorized us to purchase an additional 8,243,243 shares to refresh the number of shares we are authorized to purchase to 10,000,000. Depending upon market, business, legal and other conditions, we may purchase shares from time to time through the open market (including plans designed to comply with Rule 10b5-1 of the Securities Exchange Act of 1934) and/or through privately negotiated transactions. The authorization has no time limit, does not obligate us to purchase any specific number of shares, and may be suspended or discontinued at any time.

We did not have any unregistered sales of equity securities during the fourth quarter of 2016.

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SELECTED FINANCIAL DATA

The selected earnings data, per share data and balance sheet data for each of the five most recent years ended December 31 set forth below have been derived from our audited consolidated financial statements. The following data should be read in conjunction with our consolidated financial statements and notes to consolidated financial statements in Item 8 "Financial Statements and Supplementary Data."

	2016 2015			2014	2013		2012	
As of and for the years ended December 31								
in millions, except per share data								
Total revenues	\$	3,592.7	\$	3,422.2	\$ 2,994.2	\$ 2,770.7	\$	2,567.3
Gross profit	\$	1,000.8	\$	857.5	\$ 587.6	\$ 426.9	\$	334.0
Gross profit margin		27.9%		25.1%	19.6%	15.4%		13.0%
Earnings (loss) from continuing operations ¹	\$	422.4	\$	232.9	\$ 207.1	\$ 20.8	\$	(53.9)
Earnings (loss) on discontinued operations,								
net of tax ²	\$	(2.9)	\$	(11.7)	\$ (2.2)	\$ 3.6	\$	1.3
Net earnings (loss)	\$	419.5	\$	221.2	\$ 204.9	\$ 24.4	\$	(52.6)
Basic earnings (loss) per share								
Continuing operations	\$	3.17	\$	1.75	\$ 1.58	\$ 0.16	\$	(0.42)
Discontinued operations		(0.02)		(0.09)	(0.02)	0.03		0.01
Basic net earnings (loss) per share	\$	3.15	\$	1.66	\$ 1.56	\$ 0.19	\$	(0.41)
Diluted earnings (loss) per share								
Continuing operations	\$	3.11	\$	1.72	\$ 1.56	\$ 0.16	\$	(0.42)
Discontinued operations		(0.02)		(0.08)	(0.02)	0.03		0.01
Diluted net earnings (loss) per share	\$	3.09	\$	1.64	\$ 1.54	\$ 0.19	\$	(0.41)
Cash and cash equivalents	\$	259.0	\$	284.1	\$ 141.3	\$ 193.7	\$	275.5
Total assets	\$	8,471.5	\$	8,301.6	\$ 8,041.1	\$ 8,233.1	\$	8,095.4
Working capital	\$	764.9	\$	731.1	\$ 468.6	\$ 652.4	\$	548.6
Current maturities and short-term debt	\$	0.1	\$	0.1	\$ 150.1	\$ 0.2	\$	150.6
Long-term debt	\$	1,982.8	\$	1,980.3	\$ 1,834.6	\$ 2,496.2	\$	2,495.2
Equity	\$	4,572.5	\$	4,454.2	\$ 4,176.7	\$ 3,938.1	\$	3,761.1
Cash dividends declared per share	\$	0.80	\$	0.40	\$ 0.22	\$ 0.04	\$	0.04

¹ Earnings from continuing operations for 2014 include a pretax gain of \$211.4 million (net of \$16.5 million of disposition related charges) referable to the sale of our cement and concrete businesses in the Florida area as described in Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data."

 $^{^{2}}$ Discontinued operations include the results attributable to our former Chemicals business.

ITEM 7

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

EXECUTIVE SUMMARY

FINANCIAL SUMMARY FOR 2016 (compared to 2015)

- Total revenues increased \$170.5 million, or 5%, to \$3,592.7 million
- Gross profit increased \$143.3 million, or 17%, to \$1,000.8 million
- Aggregates segment sales increased \$184.1 million, or 7%, to \$2,961.8 million
- Aggregates segment freight-adjusted revenues increased \$181.8 million, or 9%, to \$2,294.2 million
 - Shipments increased 2%, or 3.1 million tons, to 181.4 million tons
 - Freight-adjusted sales price increased 7%
 - Segment gross profit increased \$117.5 million, or 16%, to \$873.1 million and segment gross profit margin was 29.5%
 - Incremental gross profit as a percentage of freight-adjusted revenues was 64.6%
- Asphalt Mix, Concrete and Calcium segment gross profit increased \$25.8 million, collectively
- SAG increased \$28.1 million and 0.4 percentage points (40 basis points) as a percentage of total revenues
- Earnings from continuing operations were \$422.4 million, or \$3.11 per diluted share, compared to earnings of \$232.9 million, or \$1.72 per diluted share
 - Discrete items in 2016 include:
 - \$36.1 million of tax benefits (including \$24.8 million of excess tax benefits for share-based compensation), a pretax gain of \$16.2 million on the sale of real estate, a pretax gain of \$11.0 million for business interruption claims, pretax charges of \$16.9 million for divested operations and pretax losses of \$10.5 million from asset impairment
 - Discrete items in 2015 include:
 - a \$6.5 million tax charge for a foreign tax credit carryforward impairment, a \$4.7 million tax benefit for a partial release of the Alabama NOL carryforward valuation allowance, a pretax charge of \$67.1 million for debt purchase costs, a pretax gain of \$6.3 million for the sale of real estate and businesses, a pretax charge of \$7.1 million for divested operations, a pretax loss of \$5.2 million for asset impairment and a pretax charge of \$5.0 million for restructuring
- Net earnings were \$419.5 million, an increase of \$198.3 million, or 90%
- Adjusted EBITDA was \$966.0 million, an increase of \$131.1 million, or 16%
- Increased return of capital to shareholders via higher dividends (\$106.3 million versus \$53.2 million) and share repurchases (\$161.5 million versus \$21.5 million)

KEY DRIVERS OF VALUE CREATION

Domestic Aggregates Focused Business with Several Years of Double-Digit Revenue Growth Potential Largest supplier of construction aggregates

Favorable long-term growth prospects

15.5 billion tons of proven and probable aggregates reserves

Operational expertise and pricing growth provide attractive unit profitability

Upside Exposure to Eventual Catch-Up in U.S. Infrastructure Investment

79% of the U.S. population growth from 2015 to 2025 is projected to occur in Vulcan-served states *

We are operating well under capacity and are extremely well positioned to further leverage fixed costs to sales as we move forward

Federal transportation legislation providing relatively stable funding levels

Investment-Grade Balance Sheet – Capacity to Fund Growth Sustain capital reinvestment in our current asset base

Maintain an investment-grade credit position

Return capital to shareholders via dividends and share repurchases

Prudently pursue attractive bolt-on acquisitions

*Source: Moody's Analytics

OUR FIVE CORE DISCIPLINES



1. SALES AND MARKETING EXCELLENCE

Goal: Remain the market supplier of choice in order to increase our market share while earning full and fair value for our products and services.

Execution: We are winning more than our fair share of large project bids by leveraging our scale and extensive strong customer relationships.

2. OPERATIONAL EXCELLENCE

Goal: Run the industry's safest and most efficient operations by successfully leveraging and driving cost efficiencies to achieve 60% flow through of incremental aggregates freight-adjusted revenues.

Execution: We are driving our cost of revenues down by leveraging our purchasing power and multi-modal logistics network and by better managing inventory levels. In 2016 and 2015, we exceeded our long-term flow through goal of 60% by achieving 65% and 67%, respectively, flow through of incremental aggregates freight-adjusted revenues.

3. SELLING, ADMINISTRATIVE AND GENERAL (SAG) PRODUCTIVITY

Goal: Continue to leverage SAG in order to achieve 6% of total revenues.

Execution: We are leveraging our recently implemented common ERP platform and reorganized central shared services to reduce administrative expenses and enable rapid integration of acquired operations. As a result, SAG as a percentage of total revenues has decreased from 9.1% in 2014 to 8.8% in 2016.

4. CAPITAL PRODUCTIVITY

Goal: Drive improvement in capital turnover while maintaining the longer term health of our asset base.

Execution: We are improving capital turnover by maximizing the lifecycle value of land holdings and optimizing working capital and inventory levels.

5. PORTFOLIO MANAGEMENT

Goal: Continue to pursue attractive bolt-on acquisitions and selectively enter new markets that meet our growth profile while divesting non-core businesses.

Execution: In 2016, we expanded our aggregates distribution capabilities in Georgia and completed two strategic bolt-on acquisitions in New Mexico and Texas. In 2015, we completed a swap of twelve ready-mixed concrete plants in California for thirteen asphalt plants primarily in Arizona. We also acquired three aggregates facilities and seven ready-mixed concrete plants in Arizona and New Mexico.

OUR COMMITMENTS

We crush rocks for a living, but at its core, this is a relationship business. We are deeply committed to our customers and our people, and deeply embedded in our communities.

Our commitment to customers — We have the capabilities to fulfill our customers' needs on large, complex jobs with unmatched performance and service and we aim to be the supplier of choice for smaller contractors. With all of our customers, we strive to maintain and improve our relationships, to provide outstanding value and service for a fair price by being a solution provider rather than simply an aggregates provider.

Our commitment to our employees — We work hard to ensure our employees' safety and health, in a positive environment where each person can thrive. We are completely focused on the things that we can control, and it is here that our people continue to make all the difference: increasing unit profitability, delivering incremental earnings and improving our world-class aggregates franchise every day.

Our commitment to our communities — Our people contribute to the cities, towns and neighborhoods where they live and work, in big ways and in small; from disaster relief to the support of education and a wide variety of other social causes and programs. At Vulcan, this means a great deal more than just financial support. Our people throughout the United States, and in Mexico, are generously volunteering their time, talent and energy to improve the world around them.

Our commitment to the environment — We take a long-term approach that bears in mind the demands of the present and the needs of the future. As we continue to build on our legacy, we do so with a clear view of our responsibility to future generations.

Our commitment to our shareholders — We work hard every day to generate returns that exceed market averages. We are good stewards, with responsible operating and capital project expenditures, to achieve a healthy return on our shareholders' investment in us. We will continue to strive to be the market leader, winning on margin performance, consistent strength of execution and pricing performance; earning a superior return on the very significant capital invested in our business.

We believe our ability to succeed stems directly from these commitments. Over the years, nearly six decades, we have built a strong, resilient and vital business on this foundation of doing things the right way. We expect this to continue for the decades to come.

2016 ACQUISITIONS

During 2016, we acquired the assets of the following businesses for total consideration of \$33.3 million:

- an asphalt plant in New Mexico
- an aggregates facility in Texas
- a distribution business in Georgia to complement our aggregates logistics and distribution activities

For a detailed discussion of our acquisitions and divestitures, see Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data."

MARKET DEVELOPMENTS AND OUTLOOK

The strong fundamentals of our aggregates-focused business and the outstanding improvement in our core profitability have led to strong earnings growth during the last three years of recovery. In 2017, we expect continued growth across the vast majority of our markets and across each of the end use segments we serve. Our expectation for full year Adjusted EBITDA of \$1.125 to \$1.225 billion is driven by a continuing recovery in shipments, with higher levels of publicly funded construction activity just beginning to join the ongoing recovery in private demand, as well as a favorable pricing environment.

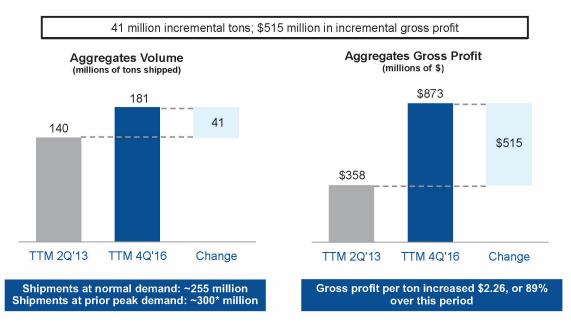
The following assumptions support our outlook for strong year-over-year growth in Adjusted EBITDA in 2017:

- Aggregates shipments growth of 5% to 8% from 2016, with growth weighted more toward the second half of the year
- Freight-adjusted aggregates price increase of 5% to 7%, with unit margins continuing to grow faster than pricing
- Asphalt Mix, Concrete and Calcium segment gross profit growth of approximately 15%
- SAG expenses of approximately \$320 million, 2% higher than the prior year and excluding business development-related expenses

Other expectations include:

- Core capital spending of approximately \$300 million to support the increased level of shipments and further improve production costs and operating efficiencies
- Interest expense of approximately \$140 million
- Depreciation, depletion, accretion and amortization expense of approximately \$300 million
- Effective tax rate of 28%

We remain focused on continuous, compounding improvement in profitability and cash flows. Our 2017 outlook reflects earnings growth and unit margin performance consistent with recent trends as well as our longer range goals. The flow-through of freight-adjusted revenues to gross profit in our Aggregates segment should remain in line with the long-term goal of greater than 60%. Since the beginning of this recovery, our efforts have resulted in Aggregates segment gross profit increasing \$515 million on a 41 million ton increase in shipments. During this same period, unit gross profit in our core Aggregates segment has improved 89% on a trailing twelve month (TTM) basis.



^{*}Excludes more recent acquisitions.

TTM 2Q'13 represents the cyclical low in aggregates volumes.

RECONCILIATION OF NON-GAAP FINANCIAL MEASURES

Gross profit margin excluding freight and delivery revenues is not a Generally Accepted Accounting Principle (GAAP) measure. We present this metric as it is consistent with the basis by which we review our operating results. Likewise, we believe that this presentation is consistent with our competitors and consistent with the basis by which investors analyze our operating results considering that freight and delivery services represent pass-through activities. Reconciliation of this metric to its nearest GAAP measure is presented below:

GROSS PROFIT MARGIN IN ACCORDANCE WITH GAAP

dollars in millions	2016	2015	2014
Gross profit	\$ 1,000.8	\$ 857.5	\$ 587.6
Total revenues	\$ 3,592.7	\$ 3,422.2	\$ 2,994.2
Gross profit margin	27.9%	25.1%	19.6%

GROSS PROFIT MARGIN EXCLUDING FREIGHT AND DELIVERY REVENUES

dollars in millions	2016	2015	2014
Gross profit	\$ 1,000.8	\$ 857.5	\$ 587.6
Total revenues Freight and delivery revenues ¹	\$ 3,592.7 536.0	\$ 3,422.2 538.1	\$ 2,994.2 473.1
Total revenues excluding freight and delivery revenues	\$ 3,056.7	\$ 2,884.1	\$ 2,521.1
Gross profit margin excluding freight and delivery revenues	32.7%	29.7%	23.3%

¹ Includes freight to remote distribution sites.

SAME-STORE

We have provided certain information on a same-store basis. When discussing our financial results in comparison to prior periods, we may exclude the operating results of recently acquired/divested businesses that do not have comparable results in the periods being discussed. These recently acquired/divested businesses are disclosed in Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data." This approach allows us to evaluate the performance of our operations on a comparable basis. We believe that measuring performance on a same-store basis is useful to investors because it enables evaluation of how our operations are performing period over period without the effects of acquisition and divestiture activity. Our same-store information may not be comparable to similar measures used by other entities.

Aggregates segment gross profit margin as a percentage of freight-adjusted revenues is not a GAAP measure. We present this metric as it is consistent with the basis by which we review our operating results. We believe that this presentation is consistent with our competitors and meaningful to our investors as it excludes freight, delivery and transportation revenues, which are pass-through activities. It also excludes immaterial other revenues related to services, such as landfill tipping fees, that are derived from our aggregates business. Incremental gross profit as a percentage of freight-adjusted revenues represents the year-over-year change in gross profit divided by the year-over-year change in freight-adjusted revenues. Reconciliations of these metrics to their nearest GAAP measures are presented below:

AGGREGATES SEGMENT GROSS PROFIT MARGIN IN ACCORDANCE WITH GAAP

dollars in millions	2016	2015	2014
Aggregates segment			,
Gross profit	\$ 873.1	\$ 755.7	\$ 544.1
Segment sales	\$ 2,961.8	\$ 2,777.8	\$ 2,346.4
Gross profit margin	29.5%	27.2%	23.2%
Incremental gross profit margin	63.8%	49.1%	

AGGREGATES SEGMENT GROSS PROFIT AS A PERCENTAGE OF FREIGHT-ADJUSTED REVENUES

dollars in millions	2016 2015			2014
Aggregates segment Gross profit	\$ 873.1	\$	755.7	\$ 544.1
Segment sales Less	\$ 2,961.8	\$	2,777.8	\$ 2,346.4
Freight, delivery and transportation revenues ¹ Other revenues	651.9 15.7		644.7 20.6	532.2 20.2
Freight-adjusted revenues	\$ 2,294.2	\$	2,112.5	\$ 1,794.0
Gross profit as a percentage of freight-adjusted revenues	38.1%		35.8%	30.3%
Incremental gross profit as a percentage of freight-adjusted revenues	64.6%		66.5%	

¹ At the segment level, freight, delivery and transportation revenues include intersegment freight & delivery revenues, which are eliminated at the consolidated level.

GAAP does not define "cash gross profit" and it should not be considered as an alternative to earnings measures defined by GAAP. We present this metric for the convenience of investment professionals who use such metrics in their analyses and for shareholders who need to understand the metrics we use to assess performance. We and the investment community use this metric to assess the operating performance of our business. We do not use this metric as a measure to allocate resources. Reconciliation of this metric to its nearest GAAP measure is presented below:

CASH GROSS PROFIT

Cash gross profit adds back noncash charges for depreciation, depletion, accretion and amortization to gross profit. Cash gross profit per ton is computed by dividing cash gross profit by tons shipped.

in millions, except per ton data	2016	2015	2014
Aggregates segment Gross profit Depreciation, depletion, accretion and amortization	\$ 873.1 236.5	\$ 755.7 228.5	\$ 544.1 227.0
Aggregates segment cash gross profit	\$ 1,109.6	\$ 984.2	\$ 771.1
Unit shipments - tons	181.4	178.3	162.4
Aggregates segment cash gross profit per ton	\$ 6.12	\$ 5.52	\$ 4.75
Asphalt Mix segment Gross profit Depreciation, depletion, accretion and amortization	\$ 97.7 16.8	\$ 78.2 16.4	\$ 38.1 10.7
Asphalt Mix segment cash gross profit	\$ 114.5	\$ 94.6	\$ 48.8
Concrete segment Gross profit Depreciation, depletion, accretion and amortization	\$ 26.5 12.1	\$ 20.2 11.4	\$ 2.2 19.9
Concrete segment cash gross profit	\$ 38.6	\$ 31.6	\$ 22.1
Calcium segment Gross profit Depreciation, depletion, accretion and amortization	\$ 3.5 0.8	\$ 3.5 0.7	\$ 3.2 1.6
Calcium segment cash gross profit	\$ 4.3	\$ 4.2	\$ 4.8

GAAP does not define "Earnings Before Interest, Taxes, Depreciation and Amortization" (EBITDA) and it should not be considered as an alternative to earnings measures defined by GAAP. We present this metric for the convenience of investment professionals who use such metrics in their analyses and for shareholders who need to understand the metrics we use to assess performance. We use this metric to assess the operating performance of our business and for a basis of strategic planning and forecasting. We do not use this metric as a measure to allocate resources. We adjust EBITDA for certain items to provide a more consistent comparison of earnings performance from period to period.

EBITDA AND ADJUSTED EBITDA

in millions	2016	2015	2014
Net earnings	\$ 419.5	\$ 221.2	\$ 204.9
Income tax expense	124.9	94.9	91.7
Interest expense, net of interest income	133.3	220.3	242.4
Loss on discontinued operations, net of tax	2.9	11.7	2.2
EBIT	680.6	548.1	541.2
Depreciation, depletion, accretion and amortization	284.9	274.8	279.5
EBITDA	\$ 965.5	\$ 822.9	\$ 820.7
Gain on sale of real estate and businesses ¹	\$ (16.2)	\$ (6.3)	\$ (238.5)
Business interruption claims recovery, net of incentives	(11.0)	0.0	0.0
Charges associated with divested operations	16.9	7.1	11.9
Fair market value adjustments for acquired inventory	0.0	1.0	1.6
Asset impairment	10.5	5.2	3.1
Restructuring charges	0.3	5.0	1.3
Adjusted EBITDA	\$ 966.0	\$ 834.9	\$ 600.1
Depreciation, depletion, accretion and amortization	284.9	 274.8	279.5
Adjusted EBIT	\$ 681.1	\$ 560.1	\$ 320.6

¹ The 2016 amount includes a \$4.3 million gain (reflected within Other operating income, net) for plant relocation reimbursement.

Adjusted EBITDA for 2015 and 2014 has been revised to conform with the 2016 presentation which no longer includes an adjustment for amortization of deferred revenue and charges associated with business development. Adjusting for amortization of deferred revenue is no longer meaningful as all periods presented include amortization of deferred revenue at amounts that are substantially equivalent. Additionally, we no longer exclude charges associated with business development as they are deemed to represent normal recurring operating expenses.

2017 PROJECTED EBITDA

The following reconciliation to the mid-point of the range of 2017 Projected EBITDA excludes adjustments for the future outcome of legal proceedings, charges associated with divested operations, asset impairment and other unusual gains and losses due to the uncertainty in predicting these items.

in millions	Projected Mid-point
Net earnings	\$ 530
Income tax expense	205
Interest expense, net of interest income	140
Loss on discontinued operations, net of tax	0
Depreciation, depletion, accretion and amortization	300
Projected EBITDA	\$ 1,175

RESULTS OF OPERATIONS

Total revenues include sales of product to customers, net of any discounts and taxes, and freight and delivery revenues billed to customers. Related freight and delivery costs are included in cost of revenues. This presentation is consistent with the basis on which we review our consolidated results of operations. We discuss separately our discontinued operations, which consists of our former Chemicals business.

The following table highlights significant components of our consolidated operating results including EBITDA and Adjusted EBITDA.

CONSOLIDATED OPERATING RESULT HIGHLIGHTS

For the years ended December 31	2016		2015	2014
in millions, except per share data		-		
Total revenues	\$ 3,592.7	\$	3,422.2	\$ 2,994.2
Cost of revenues	2,591.9		2,564.7	2,406.6
Gross profit	\$ 1,000.8	\$	857.5	\$ 587.6
Selling, administrative and general expenses	\$ 315.0	\$	286.8	\$ 272.3
Gain on sale of property, plant & equipment				
and businesses	\$ 15.4	\$	9.9	\$ 244.2
Operating earnings	\$ 679.6	\$	549.8	\$ 538.1
Interest expense	\$ 134.1	\$	220.6	\$ 243.4
Earnings from continuing operations				
before income taxes	\$ 547.3	\$	327.9	\$ 298.8
Earnings from continuing operations	\$ 422.4	\$	232.9	\$ 207.1
Loss on discontinued operations, net of income taxes	(2.9)		(11.7)	(2.2)
Net earnings	\$ 419.5	\$	221.2	\$ 204.9
Basic earnings (loss) per share	· -			
Continuing operations	\$ 3.17	\$	1.75	\$ 1.58
Discontinued operations	(0.02)		(0.09)	(0.02)
Basic net earnings per share	\$ 3.15	\$	1.66	\$ 1.56
Diluted earnings (loss) per share	**************************************			
Continuing operations	\$ 3.11	\$	1.72	\$ 1.56
Discontinued operations	(0.02)		(0.08)	(0.02)
Diluted net earnings per share	\$ 3.09	\$	1.64	\$ 1.54
EBITDA	\$ 965.5	\$	822.9	\$ 820.7
Adjusted EBITDA	\$ 966.0	\$	834.9	\$ 600.1

Net earnings for 2016 were \$419.5 million (\$3.09 per diluted share) compared to \$221.2 million (\$1.64 per diluted share) in 2015 and \$204.9 million (\$1.54 per diluted share) in 2014. Each year's results were impacted by discrete items as follows: Net earnings for 2016 include:

- \$36.1 million of tax benefits (utilization of foreign tax credits \$6.5 million, partial release of the Alabama NOL carryforward valuation allowance \$4.8 million, and excess tax benefits related to share-based compensation \$24.8 million
- a pretax gain of \$16.2 million related to the sale of real estate
- a pretax gain of \$11.0 million for business interruption claims (net of incentives)
- pretax charges of \$16.9 million associated with divested operations
- pretax losses of \$10.5 million from asset impairment

Net earnings for 2015 include:

- a pretax gain of \$6.3 million related to the sale of real estate and businesses
- pretax charges of \$7.1 million associated with divested operations
- a \$5.2 million pretax asset impairment loss
- a \$5.0 million pretax charge for restructuring
- a pretax loss on debt purchase of \$67.1 million presented as a component of interest expense (see Note 6 "Debt" in Item 8 "Financial Statements and Supplementary Data")
- a \$6.5 million tax charge related to a foreign tax credit carryforward impairment
- a \$4.7 million tax benefit related to a partial release of the Alabama NOL carryforward valuation allowance

Net earnings for 2014 include:

- a pretax gain of \$238.5 million related to the sale of real estate and businesses including our cement and concrete businesses in the Florida area
- pretax charges of \$15.0 million associated with divested operations
- a pretax loss on debt purchase of \$72.9 million presented as a component of interest expense

ADJUSTED CONCRETE AND CALCIUM SEGMENT FINANCIAL DATA

The following table compares our Concrete and Calcium segments financial data excluding the results of the divested operations from both the January 2015 exchange of our California concrete businesses and the March 2014 sale of our Florida area concrete and cement businesses.

For the years ended December 31	2016	2015	2014
in millions			
Concrete Segment			
Segment sales			
As reported	\$ 330.1	\$ 299.3	\$ 375.8
Adjusted	\$ 330.1	\$ 294.1	\$ 272.6
Total revenues			
As reported	\$ 330.1	\$ 299.3	\$ 375.8
Adjusted	\$ 330.1	\$ 294.1	\$ 272.6
Gross profit			
As reported	\$ 26.5	\$ 20.2	\$ 2.2
Adjusted	\$ 26.5	\$ 20.9	\$ 12.0
Depreciation, depletion, accretion and amortization			
As reported	\$ 12.1	\$ 11.4	\$ 19.9
Adjusted	\$ 12.1	\$ 11.3	\$ 15.7
Shipments - cubic yards			
As reported	3.0	2.8	3.7
Adjusted	3.0	2.8	2.6
Calcium Segment			
Segment sales			
As reported	\$ 8.9	\$ 8.6	\$ 25.0
Adjusted	\$ 8.9	\$ 8.6	\$ 9.0
Total revenues			
As reported	\$ 8.9	\$ 8.6	\$ 15.8
Adjusted	\$ 8.9	\$ 8.6	\$ 9.1
Gross profit			
As reported	\$ 3.5	\$ 3.5	\$ 3.2
Adjusted	\$ 3.5	\$ 3.5	\$ 3.5
Depreciation, depletion, accretion and amortization			
As reported	\$ 0.8	\$ 0.7	\$ 1.6
Adjusted	\$ 0.8	\$ 0.7	\$ 0.6

EARNINGS FROM CONTINUING OPERATIONS BEFORE INCOME TAXES

Year-over-year changes in earnings from continuing operations before income taxes are summarized below:

in millions				
	2014	\$ 298.8	2015	\$ 327.9
Higher aggregates gross profit		211.6		117.5
Higher asphalt mix gross profit		40.1		19.5
Higher concrete gross profit		17.9		6.4
Higher calcium gross profit		0.3		0.0
Higher selling, administrative and general expenses		(14.6)		(28.1)
Higher (lower) gain on sale of property, plant & equipment and businesses		(234.3)		5.5
Higher business interruption claims recovery		0.0		11.7
Higher impairment loss		(2.1)		(5.3)
Lower (higher) restructuring charges		(3.7)		4.7
Lower interest expense		22.8		86.5
All other		(8.9)		1.0
	2015	\$ 327.9	2016	\$ 547.3

OPERATING RESULTS BY SEGMENT

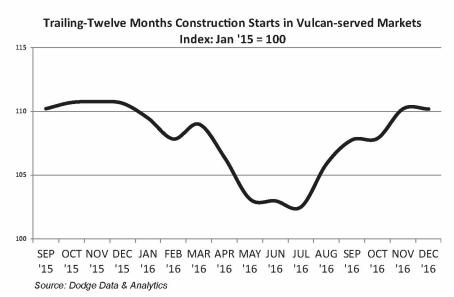
We present our results of operations by segment at the gross profit level. We have four operating (and reportable) segments organized around our principal product lines: (1) Aggregates, (2) Asphalt Mix, (3) Concrete and (4) Calcium. Management reviews earnings for the product line segments principally at the gross profit level.

1. AGGREGATES

Our year-over-year aggregates shipments:

- increased 2% in 2016
- increased 10% in 2015
- increased 11% in 2014

For the year, shipments rose 2% over the prior year, with this gain coming despite double-digit shipment declines in California, Illinois and Texas. Trailing twelve month construction start activity, both public and private, has steadily improved since July 2016. This improvement has helped reverse year-over-year declines from May to October, which negatively impacted our shipments in the second half of the year. The backlog of construction projects in development continues to grow as well. In addition, state and local governments continue to pass measures to increase public infrastructure investment.



Part II 39

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Our year-over-year freight-adjusted selling price¹ for aggregates:

- increased 7% in 2016
- increased 7% in 2015
- increased 2% in 2014

Pricing increased 7%, with virtually all of our markets realizing higher pricing versus the prior year. The overall pricing climate remains favorable as visibility to a sustained recovery improves and as construction materials producers stay focused on earning adequate returns on capital.

AGGREGATES SEGMENT SALES AND FREIGHT-**ADJUSTED REVENUES**

in millions

AGGREGATES GROSS PROFIT AND **CASH GROSS PROFIT** in millions







AGGREGATES UNIT SHIPMENTS

Tons, in millions 181 4 178.3 162.4 2014 2015 2016

AGGREGATES SELLING PRICE AND CASH GROSS PROFIT PER TON

Freight-adjusted average sales price per ton 2



² Freight-adjusted sales price is calculated as freight-adjusted revenues divided by aggregates unit shipments

Aggregates segment gross profit increased \$117.5 million (16%). Unit gross profit increased 14%, to \$4.81 per ton, while unit cash gross profit increased 11% to \$6.12 per ton. The flow-through rate from freight-adjusted aggregates revenues to segment gross profit was 65%, exceeding our long-term flow-through goal of 60%. These improvements in our core profitability were delivered despite modest shipment growth and a year-over-year decline in inventory levels.

¹ We routinely arrange the delivery of our aggregates to the customer. Additionally, we incur transportation costs to move aggregates from the production site to remote distribution sites. These costs are passed on to our customers in the aggregates price. We remove these pass-through freight and transportation revenues (and any other aggregates-derived revenues, such as landfill tipping fees) from the freight-adjusted selling price for aggregates. See the Reconciliation of Non-GAAP Financial Measures within this Item 7 for a reconciliation of freight-adjusted revenues.

2. ASPHALT MIX

Our year-over-year asphalt mix shipments:

- declined 3% in 2016
- increased 30% in 2015
- increased 8% in 2014

Asphalt Mix segment gross profit increased 25% to \$97.7 million. Volumes and price decreased 3% and 2%, respectively, versus the prior year while gross profit margin expanded 4.3 percentage points (430 basis points) due mostly to lower unit costs for liquid asphalt. The significant increase in asphalt mix shipments from 2014 to 2015 was largely attributable to the January 2015 swap of our concrete operations in California for asphalt mix operations, primarily in Arizona.

ASPHALT MIX SEGMENT SALES

ASPHALT MIX GROSS PROFIT AND CASH GROSS PROFIT

in millions





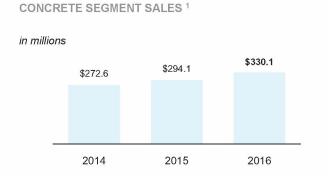
3. CONCRETE

in millions

Our year-over-year ready-mixed concrete shipments:

- increased 7% in 2016
- decreased 25% in 2015¹
- decreased 22% in 2014

Concrete segment gross profit increased 32% and gross profit margin expanded 1.3 percentage points (130 basis points) versus the prior year. Ready-mixed concrete shipments increased 7% and the average sales price increased 3%. Material margins expanded, offsetting higher costs for internally supplied aggregates and other raw materials. The significant decrease in ready-mixed concrete shipments from 2014 to 2015 was largely attributable to the aforementioned January 2015 swap of our concrete operations in California.



CONCRETE GROSS PROFIT AND CASH GROSS PROFIT ¹ in millions

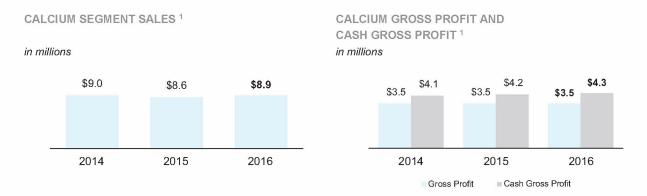
in millions



The financial data above excludes both the California and Florida area concrete businesses exchanged/sold in January 2015 and March 2014, respectively. See the Adjusted Concrete and Calcium Segment Financial Data table on page 38.

4. CALCIUM

Our Calcium segment's performance was in line with the prior year — gross profit of \$3.5 million, shipments of 0.3 million tons and price of \$27.08 per ton were all essentially flat when compared with the prior year. Our cement business was sold in the first quarter of 2014 along with the Florida concrete assets. Adjusted for the sale of our cement business in the Florida area, Calcium segment gross profit was \$3.5 million in 2014.



¹ The financial data above excludes the cement businesses sold in March 2014. See the Adjusted Concrete and Calcium Segment Financial Data table on page 38.

In total, the 2016 gross profit contributions from our three non-aggregates (Asphalt Mix, Concrete and Calcium) segments was \$127.7 million, a 25% increase over 2015, and a 293% increase over 2014.

SELLING, ADMINISTRATIVE AND GENERAL EXPENSES



The increase in SAG costs in 2016 was driven primarily by incentives tied to our financial performance and stock price, certain investments in sales and customer service capabilities, as well as elevated legal and other outside service expenses. We intend to further leverage SAG expenses to revenues as volumes recover. As a percentage of total revenues, SAG expenses increased from 8.4% in 2015 to 8.8% in 2016. We do not expect the recent growth in SAG expenses to repeat in 2017.

As a percentage of total revenues, SAG expense was:

- 8.8% in 2016 increased 0.4 percentage points (40 basis points)
- 8.4% in 2015 decreased 0.7 percentage points (70 basis points)
- 9.1% in 2014 decreased 0.3 percentage points (30 basis points)

Our comparative total company employment levels at year end:

- increased 4% in 2016
- increased 4% in 2015
- declined 3% in 2014

GAIN ON SALE OF PROPERTY, PLANT & EQUIPMENT AND BUSINESSES



The 2016 gain on sale of property, plant & equipment and businesses of \$15.4 million includes \$11.9 million of pretax gain from surplus land sales in Virginia and California. The 2015 gain includes a \$5.9 million pretax gain from the previously mentioned asset exchange (we exited the ready-mixed concrete business in California and added thirteen asphalt plant locations, primarily in Arizona). The 2014 gain includes a \$227.9 million pretax gain from the sale of our cement and concrete businesses in Florida to Cementos Argos and a \$6.0 million pretax gain from the sale of two reclaimed operating sites. See Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data."

BUSINESS INTERRUPTION CLAIMS RECOVERY

During 2016, we settled 18 of 22 business interruption claims related to the 2010 Gulf Coast oil spill resulting in a pretax gain of \$11.7 million. There were no similar recoveries in 2015 or 2014.

IMPAIRMENT OF LONG-LIVED ASSETS

Loss on impairment of long-lived assets were:

- \$10.5 million in 2016 we terminated a nonstrategic aggregates site lease we no longer intended to develop resulting in a \$9.6 million loss and wrote off \$0.9 million of nonrecoverable project costs related to two Aggregates segment capital projects that we no longer intend to complete
- \$5.2 million in 2015 we did not renew an Aggregates segment lease on a California land parcel resulting in a \$5.2 million loss related to the associated reclamation obligation
- \$3.1 million in 2014 we divested our cement and concrete businesses in the Florida area resulting in a \$3.1 million loss related primarily to assets retained from the divestiture

See Note 1 "Summary of Significant Accounting Policies" in Item 8 "Financial Statements and Supplementary Data" under the caption Impairment of Long-lived Assets Excluding Goodwill.

OTHER OPERATING EXPENSE, NET

Other operating expense, net is composed of various operating items excluded from cost of revenues and not specifically presented in the accompanying Consolidated Statement of Comprehensive Income. The total other operating expense, net and significant items included in the total were:

- \$22.8 million in 2016 includes \$16.9 million of discrete charges associated with divested operations. These discrete items included charges associated with office space no longer needed and vacated (\$5.2 million), the write-off of a prepaid royalty asset resulting from a change in long-term mining plans (\$3.6 million), a property litigation settlement (\$1.9 million), a pension withdrawal settlement revision (\$1.5 million) and environmental liability accruals associated with previously divested properties (\$4.5 million). These charges were partially offset by a \$4.3 million gain referable to a plant relocation
- \$25.6 million in 2015 includes \$7.1 million of discrete charges associated with divested operations. These discrete items included charges associated with severance (\$1.4 million) and environmental liability accruals associated with previously divested properties (\$5.7 million). Additionally, includes \$5.0 million of restructuring charges related to changes to our executive management team and a new divisional organization structure
- \$18.3 million in 2014 includes \$11.9 million of discrete charges associated with divested operations. These discrete items included charges associated with office space no longer needed and vacated (\$4.4 million) and environmental liability accruals associated with previously divested properties (\$0.4 million). Additionally, includes restructuring charges of \$1.3 million related to changes to our executive management team and a new divisional organization

INTEREST EXPENSE



Interest expense in 2016 decreased \$86.5 million as 2015 included pretax charges for debt purchases of \$67.1 million. Likewise, interest expense in 2014 included pretax charges for debt purchases of \$72.9 million. See Note 6 "Debt" in Item 8 "Financial Statements and Supplementary Data" for additional discussion.

INCOME TAXES

Our income tax expense from continuing operations for the years ended December 31 is shown below:

dollars in millions	2016	2015	2014
Earnings from continuing operations			
before income taxes	\$ 547.3	\$ 327.9	\$ 298.8
Income tax expense	\$ 124.9	\$ 94.9	\$ 91.7
Effective tax rate	22.8%	29.0%	30.7%

The \$30.0 million increase in our 2016 income tax expense is primarily related to the year-over-year improvement in our earnings from continuing operations partially offset by a \$24.8 million excess tax benefit from share-based compensation resulting from our early adoption of ASU 2016-09 (see Note 1 "Significant Accounting Policies" in Item 8 "Financial Statements and Supplementary Data" under the caption Share-based Compensation). The 2016 reduction in the effective tax rate is due to higher benefits from the statutory depletion deduction related to higher aggregates sales and the early adoption of ASU 2016-09.

The \$3.3 million increase in our 2015 income tax expense is primarily related to the year-over-year improvement in our earnings from continuing operations. The 2015 reduction in the effective tax rate is due to higher benefits from the statutory depletion deduction and the U.S. production deduction, both related to higher aggregates sales. A reconciliation of the federal statutory rate of 35% to our effective tax rates for 2016, 2015 and 2014 is presented in Note 9 "Income Taxes" in Item 8 "Financial Statements and Supplementary Data."

DISCONTINUED OPERATIONS

Pretax loss from discontinued operations were:

- \$(4.9) million in 2016
- \$(19.3) million in 2015
- \$(3.7) million in 2014

The \$4.9 million, \$19.3 million and \$3.7 million pretax losses from discontinued operations for 2016, 2015 and 2014, respectively, resulted primarily from general and product liability costs, including legal defense costs and environmental remediation costs associated with our former Chemicals business. For additional information about discontinued operations, see Note 2 "Discontinued Operations" in Item 8 "Financial Statements and Supplementary Data."

LIQUIDITY AND FINANCIAL RESOURCES

Our primary sources of liquidity are cash provided by our operating activities and a substantial, committed bank line of credit. Additional sources of capital include access to the capital markets, the sale of reclaimed and surplus real estate, and dispositions of nonstrategic operating assets. We believe these financial resources are sufficient to fund our business requirements for 2017, including:

- cash contractual obligations
- capital expenditures
- debt service obligations
- dividend payments
- potential share repurchases
- potential acquisitions

Our capital deployment priorities remain unchanged from the prior year. We intend to take a balanced approach to capital deployment, one incorporating strategic reinvestment, sustained financial strength and flexibility, and the return of capital to shareholders. In 2016 and 2015, we returned \$106.3 and \$53.2 million, respectively, in cash to shareholders through our dividend and \$161.5 million and \$21.5 million, respectively, through share repurchases. We expect to increase the return of capital through dividends, share repurchases, or other mechanisms, as earnings grow.

We actively manage our capital structure and resources in order to minimize the cost of capital while properly managing financial risk. We seek to meet these objectives by adhering to the following principles:

- maintain substantial bank line of credit borrowing capacity
- proactively manage our long-term debt maturity schedule such that repayment/refinancing risk in any single year is low
- maintain an appropriate balance of fixed-rate and floating-rate debt
- minimize financial and other covenants that limit our operating and financial flexibility

CASH

Included in our December 31, 2016 cash and cash equivalents balance of \$259.0 million is \$68.0 million of cash held at our foreign subsidiaries. All of this \$68.0 million of cash relates to earnings that are indefinitely reinvested offshore. Use of this cash is currently limited to our foreign operations.

CASH FROM OPERATING ACTIVITIES

in millions



Net cash provided by operating activities is derived primarily from net earnings before noncash deductions for depreciation, depletion, accretion and amortization.

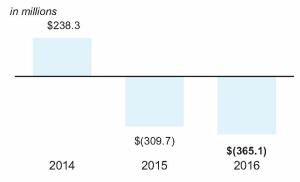
in millions	2016	2015	2014
Net earnings	\$ 419.5	\$ 221.2	\$ 204.9
Depreciation, depletion, accretion			
and amortization (DDA&A)	284.9	274.8	279.5
Net earnings before noncash deductions for DDA&A	\$ 704.4	\$ 496.0	\$ 484.4
Net gain on sale of property, plant &			
equipment and businesses	(15.4)	(9.9)	(244.2)
Cost of debt purchase	0.0	67.1	72.9
Other operating cash flows, net ¹	(44.4)	(33.7)	(52.1)
Net cash provided by operating			
activities	\$ 644.6	\$ 519.5	\$ 261.0

¹ Primarily reflects changes to working capital balances.

2016 VERSUS 2015 — Net cash provided by operating activities was \$644.6 million during 2016, a \$125.1 million increase compared to 2015. This increase was primarily attributable to the \$198.3 million increase in net earnings, \$67.1 million of which was due to the 2015 charges associated with debt purchases (see Note 6 "Debt" in Item 8 "Financial Statements and Supplementary Data"). Cash paid for this debt purchase is presented as a component of financing activities. Additionally, upon our 2016 early adoption of ASU 2016-09 (see Note 1 "Significant Accounting Policies" in Item 8 "Financial Statements and Supplementary Data" under the caption Share-based Compensation), gross excess tax benefits for 2016 of \$28.0 million are classified as operating cash flows. Conversely, gross excess tax benefits of \$18.4 million and \$3.5 million for 2015 and 2014, respectively, are classified as financing cash flows.

2015 VERSUS 2014 — Net cash provided by operating activities was \$519.5 million during 2015, a \$258.5 million increase compared to 2014. Although net earnings only increased \$16.3 million, 2014 net earnings included a pretax gain of \$227.9 million (see Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data") from the March 2014 sale of our cement and concrete businesses in the Florida area. Cash received associated with gain on sale of property, plant & equipment and businesses is presented as a component of investing activities. In 2015, we purchased \$485.1 million principal amount of outstanding debt and incurred charges of \$67.1 million. In 2014, we purchased \$506.4 million principal amount of outstanding debt and incurred charges of \$72.9 million (see Note 6 "Debt" in Item 8 "Financial Statements and Supplementary Data"). Cash paid for the debt purchases is presented as a component of financing activities.

CASH FROM INVESTING ACTIVITIES



2016 VERSUS 2015 — Net cash used for investing activities was \$365.1 million during 2016, a \$55.4 million increase compared to 2015. We invested \$350.1 million in our existing operations in 2016, a \$60.9 million increase compared to 2015. Of this \$350.1 million, \$99.2 million was invested in shipping capacity replacement, new site developments and other growth opportunities. During 2016, we expanded our aggregates distribution capabilities in Georgia and completed two strategic bolt-on acquisitions in New Mexico and Texas for \$32.5 million of cash consideration. Conversely, acquisitions during 2015 totaled \$27.2 million in cash consideration (see Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data").

2015 VERSUS 2014 — Net cash used for investing activities was \$309.7 million during 2015, a \$548.0 million decrease in cash compared to the \$238.3 million of net cash provided during 2014. This decrease was the result of lower proceeds from the sale of property, plant & equipment and businesses, less cash used in acquisitions and higher capital investments in our existing operations. During 2014, we sold: a previously mined and subsequently reclaimed tract of land for \$10.7 million, land previously containing a sales yard for \$5.8 million, and our cement and concrete businesses in the Florida area for \$721.4 million. We had no comparable significant sales in 2015. During 2014, we completed several acquisitions for cash consideration of \$284.2 million. Conversely, acquisitions during 2015 totaled \$27.2 million in cash consideration (see Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data"). Furthermore, during 2015, we increased investments in our existing operations by \$64.4 million as reflected in the increased purchases of property, plant & equipment.

CASH FROM FINANCING ACTIVITIES

in millions



2016 VERSUS 2015 — Net cash used for financing activities in 2016 was \$304.6 million, an increase of \$237.6 million from 2015. This large increase was primarily attributable to a \$193.1 million increase in return of capital to our investors via increased dividends (\$0.80 per share compared to \$0.40 per share) and share repurchases (1,427 thousand shares compared to 228 thousand shares). Additionally, there were no proceeds from the exercise of employee stock options in 2016 (compared to \$73.0 million in 2015) as only stock-only stock appreciation rights (SOSARs) remained outstanding at the beginning of the year. Finally, the aforementioned early adoption of ASU 2016-09 resulted in 2016 gross excess tax benefits of \$28.0 million classified as operating cash flows rather than financing cash flows.

2015 VERSUS 2014 — Net cash used for financing activities in 2015 was \$67.0 million, a decrease of \$484.8 million from 2014. This large decrease is primarily attributable to 2014's \$506.4 million principal amount debt purchase, which required \$579.7 million of cash. The 2014 debt purchase was funded by the aforementioned sale of our cement and concrete businesses in the Florida area. In 2015, we refinanced \$635.1 million principal amount of debt and entered into a new \$750.0 million line of credit. The total cash requirement for these actions was \$702.3 million (\$635.1 million principal, \$59.3 million of premiums above par and transaction fees of \$7.9 million). We funded the refinancing by issuing \$400.0 million of new 10-year notes, borrowing \$235.0 million under our new and expanded line of credit and using \$67.3 million of cash. Furthermore, in 2014 we generated \$30.6 million of cash by issuing new shares to our 401(k) plan (such issuances were discontinued in the fourth quarter of 2014). Finally, in 2015 we returned capital to our investors by repurchasing 228 thousand shares of common stock for cash consideration of \$21.5 million.

DEBT

Certain debt measures as of December 31 are outlined below:

dollars in millions	2016	2015
Debt		
Current maturities of long-term debt	\$ 0.1	\$ 0.1
Short-term debt (line of credit)	0.0	0.0
Long-term debt ¹	1,982.8	1,980.3
Total debt	\$ 1,982.9	\$ 1,980.4
Capital		-
Total debt	\$ 1,982.9	\$ 1,980.4
Equity	4,572.5	4,454.2
Total capital	\$ 6,555.4	\$ 6,434.6
Total Debt as a Percentage of Total Capital	30.2%	30.8%
Weighted-average Effective Interest Rates		
Line of credit ²	1.25%	1.75%
Term debt	7.52%	7.52%
Fixed versus Floating Interest Rate Debt		
Fixed-rate debt	88.3%	88.3%
Floating-rate debt	11.7%	11.7%

¹ Includes borrowing under our line of credit for which we have the intent and ability to extend repayment beyond twelve months, as follows: December 31, 2016 — \$235.0 million and December 31, 2015 — \$235.0 million.

LINE OF CREDIT

In December 2016, among other favorable changes, we extended the maturity date of our unsecured \$750.0 million line of credit from June 2020 to December 2021 (incurring \$1.9 million of transaction fees together with the new term loan described below).

The credit agreement contains affirmative, negative and financial covenants customary for an unsecured investment-grade facility (none of which materially impact our ability to execute our strategic, operating and financial plans). The financial covenants are: (1) a maximum ratio of debt to EBITDA of 3.5:1 (upon certain acquisitions, the maximum ratio can be 3.75:1 for three quarters), and (2) a minimum ratio of EBITDA to net cash interest expense of 3.0:1. As of December 31, 2016, we were in compliance with the line of credit covenants.

² Reflects the margin above LIBOR for LIBOR-based borrowings; we also paid upfront fees that are amortized to interest expense and pay fees for unused borrowing capacity and standby letters of credit.

Borrowings and other cost ranges and details are described in Note 6 "Debt" in Item 8 "Financial Statements and Supplementary Data." As of December 31, 2016, the credit margin for the London Interbank Offered Rate (LIBOR) borrowings was 1.25%, the credit margin for base rate borrowings was 0.25%, and the commitment fee for the unused portion was 0.15%.

As of December 31, 2016, our available borrowing capacity under the line of credit was \$475.5 million. Utilization of the borrowing capacity was as follows:

- \$235.0 million was borrowed
- \$39.5 million was used to provide support for outstanding standby letters of credit

TERM DEBT

All of our term debt is unsecured. \$1,769.0 million of such debt is governed by two essentially identical indentures that contain customary investment-grade type covenants. The primary covenant in both indentures limits the amount of secured debt we may incur without ratably securing such debt. As of December 31, 2016, we were in compliance with all of the term debt covenants.

In December 2016, we entered into an unsecured \$250.0 million delayed draw term loan (incurring, together with the line of credit extension mentioned previously, \$1.9 million of transaction costs). The term loan is provided by the same group of banks that provides our line of credit, and is governed by the same credit agreement as the line of credit. As such, it is subject to the same affirmative, negative, and financial covenants.

The term loan may be funded in up to three draws through June 21, 2017, after which any undrawn amount expires. Borrowings bear interest in the same manner as the line of credit. Until June 21, 2017, we also pay a commitment fee on the undrawn amount in the same manner as the line of credit. The term loan principal will be repaid quarterly beginning March 2018 (quarter 5 after closing) as follows: quarters 5 - 8 @ 0.625%; quarters 9 - 12 @ 1.25%; quarters 13 - 19 @ 1.875% and quarter 20 @ 79.375%. The term loan may be prepaid at any time without penalty.

In March, April and August of 2015, we completed the refinancing of \$485.1 million principal amount of debt as described in Note 6 "Debt" in Item 8 "Financial Statements and Supplementary Data." And, in December 2015 we refinanced at maturity the \$150.0 million of 10.125% notes via borrowing on our line of credit. These refinancing actions resulted in total debt of approximately \$2.0 billion as of December 31, 2015 (consistent with year-end 2014) and have the following benefits, among others: (1) eliminated \$621.1 million of debt maturities in 2015 – 2018, (2) extended the weighted-average life of our debt portfolio, and (3) lowered our weighted-average interest rate.

The 2015 refinancing actions resulted in charges totaling \$67.1 million. Such charges are detailed in Note 6 "Debt" in Item 8 "Financial Statements and Supplementary Data" and are presented in the accompanying Consolidated Statement of Comprehensive Income as a component of interest expense for the year ended December 31, 2015.

DEBT PAYMENTS AND MATURITIES

There were no significant scheduled debt payments during 2016. Scheduled debt payments during 2015 included \$150.0 million in December to retire the 10.125% notes (which were refinanced via long-term borrowings on our line of credit). Additionally, we refinanced \$485.1 million of debt in 2015 as described in Note 6 "Debt" in Item 8 "Financial Statements and Supplementary Data."

As of December 31, 2016, current maturities for the next four quarters and maturities (excluding borrowings on the line of credit) for the next five years are due as follows:

	Current
in millions	Maturities
First quarter 2017	\$ 0.0
Second quarter 2017	0.0
Third quarter 2017	0.0
Fourth quarter 2017	0.1

	Debt
in millions	Maturities
2017	\$ 0.1
2018	522.5
2019	0.1
2020	0.1
2021	606.0

We expect to retire current maturities using existing cash.

DEBT RATINGS

Our debt ratings and outlooks as of December 31, 2016 are as follows:

	Rating/Outlook	Date	Description			
Senior Unsecured Term Debt ¹						
Fitch	BBB-/stable	3/31/2016	rating changed from BB+			
Moody's	Ba1/positive	5/4/2016	rating changed from Ba2			
Standard & Poor's	BBB/stable	3/8/2016	rating/outlook changed from BB+/positive			

¹ Not all of our long-term debt is rated.

EQUITY

Our common stock issuances and purchases are as follows:

in thousands	2016	2015	2014
Common stock shares at January 1, issued and outstanding	133,172	131,907	130,200
Common Stock Issuances			
Acquisitions	0	0	715
401(k) retirement plans	0	0	485
Share-based compensation plans	594	1,493	507
Common Stock Purchases			
Purchased and retired	(1,427)	(228)	0
Common stock shares at December 31,			
issued and outstanding	132,339	133,172	131,907

During 2014, we issued 715.0 thousand shares of our common stock in connection with business acquisitions as explained in Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data."

Under a program that was discontinued in the fourth quarter of 2014, we occasionally sold shares of our common stock to the trustee of our 401(k) retirement plans to satisfy the plan participants' elections to invest in our common stock. During 2014, we issued 485.3 thousand shares for cash proceeds of \$30.6 million under this arrangement.

On February 10, 2006, our Board of Directors authorized us to purchase up to 10,000,000 shares of our common stock. As of December 31, 2016, there were 1,756,757 shares remaining under this authorization. On February 10, 2017, our Board of Directors authorized us to purchase an additional 8,243,243 shares to refresh the number of shares we are authorized to purchase to 10,000,000. Depending upon market, business, legal and other conditions, we may purchase shares from time to time through the open market (including plans designed to comply with Rule 10b5-1 of the Securities Exchange Act of 1934) and/or privately negotiated transactions. The authorization has no time limit, does not obligate us to purchase any specific number of shares, and may be suspended or discontinued at any time. Our common stock purchases (all of which were open market purchases) are detailed below:

in thousands, except average cost	2016	2015	2014
Shares Purchased and Retired			
Number	1,427	228	0
Total cost 1	\$ 161,463	\$ 21,475	\$ 0
Average cost 1	\$ 113.18	\$ 94.19	\$ 0.00

¹ Excludes commissions of \$0.02 per share.

There were no shares held in treasury as of December 31, 2016, 2015 and 2014.

OFF-BALANCE SHEET ARRANGEMENTS

We have no off-balance sheet arrangements, such as financing or unconsolidated variable interest entities, that either have or are reasonably likely to have a current or future material effect on our:

- · results of operations and financial position
- capital expenditures
- liquidity and capital resources

STANDBY LETTERS OF CREDIT

For a discussion of our standby letters of credit see Note 6 "Debt" in Item 8 "Financial Statements and Supplementary Data."

CASH CONTRACTUAL OBLIGATIONS

We expect core capital spending (excluding growth) of \$300.0 million during 2017. Excluding future cash requirements for capital expenditures and immaterial or contingent contracts, our obligations to make future contractual payments as of December 31, 2016 are summarized in the table below:

	Note	Payments Due by Year								
in millions	Reference		2017		2018-2019	2	2020-2021	Thereafter		Total
Cash Contractual Obligations										
Bank line of credit 1										
Principal payments	Note 6	\$	0.0	\$	0.0	\$	235.0	\$ 0.0	\$	235.0
Interest payments and fees ²			6.5		16.4		18.6	0.0		41.5
Term debt										
Principal payments	Note 6		0.1		522.6		606.1	640.3		1,769.1
Interest payments	Note 6		125.7		196.9		138.9	337.8		799.3
Operating leases	Note 7		31.0		54.5		44.3	119.7		249.5
Mineral royalties	Note 12		22.2		36.2		23.5	134.3		216.2
Unconditional purchase obligations										
Capital	Note 12		131.8		0.2		0.0	0.0		132.0
Noncapital ³	Note 12		24.4		19.4		7.2	4.0		55.0
Benefit plans ⁴	Note 10		9.4		40.9		60.5	112.0		222.8
Total cash contractual obligations 5, 6		\$	351.1	\$	887.1	\$	1,134.1	\$ 1,348.1	\$	3,720.4

¹ Bank line of credit represents borrowings under our unsecured \$750.0 million line of credit that expires December 2021.

² Includes fees for unused borrowing capacity, and fees for standby letters of credit. The figures for all years assume that the amount of unused borrowing capacity and the amount of standby letters of credit do not change from December 31, 2016, and borrowing costs reflect a rising LIBOR.

³ Noncapital unconditional purchase obligations relate primarily to transportation and electricity contracts.

⁴ Payments in "Thereafter" column for benefit plans are for the years 2022-2026.

⁵ The above table excludes discounted asset retirement obligations in the amount of \$223.9 million at December 31, 2016, the majority of which have an estimated settlement date beyond 2021 (see Note 17 "Asset Retirement Obligations" in Item 8 "Financial Statements and Supplementary Data").

⁶ The above table excludes liabilities for unrecognized tax benefits in the amount of \$10.8 million at December 31, 2016, as we cannot make a reasonably reliable estimate of the amount and period of related future payment of these uncertain tax positions (for more details, see Note 9 "Income Taxes" in Item 8 "Financial Statements and Supplementary Data").

CRITICAL ACCOUNTING POLICIES

We follow certain significant accounting policies when we prepare our consolidated financial statements. A summary of these policies is included in Note 1 "Summary of Significant Accounting Policies" in Item 8 "Financial Statements and Supplementary Data."

We prepare these financial statements to conform with accounting principles generally accepted in the United States of America. These principles require us to make estimates and judgments that affect reported amounts of assets, liabilities, revenues and expenses, and the related disclosures of contingent assets and contingent liabilities at the date of the financial statements. We base our estimates on historical experience, current conditions and various other assumptions we believe reasonable under existing circumstances and evaluate these estimates and judgments on an ongoing basis. The results of these estimates form the basis for our judgments about the carrying values of assets and liabilities as well as identifying and assessing the accounting treatment with respect to commitments and contingencies. Our actual results may materially differ from these estimates.

We believe the following six critical accounting policies require the most significant judgments and estimates used in the preparation of our consolidated financial statements:

- 1. Goodwill impairment
- 2. Impairment of long-lived assets excluding goodwill
- 3. Pension and other postretirement benefits
- 4. Environmental compliance costs
- 5. Claims and litigation including self-insurance
- 6. Income taxes

1. GOODWILL IMPAIRMENT

Goodwill represents the excess of the cost of net assets acquired in business combinations over the fair value of the identifiable tangible and intangible assets acquired and liabilities assumed in a business combination. Goodwill impairment exists when the fair value of a reporting unit is less than its carrying amount. Goodwill is tested for impairment on an annual basis or more frequently whenever events or changes in circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. The impairment evaluation is a critical accounting policy because goodwill is material to our total assets (as of December 31, 2016, goodwill represents 37% of total assets) and the evaluation involves the use of significant estimates, assumptions and judgment.

HOW WE TEST GOODWILL FOR IMPAIRMENT

Goodwill is tested for impairment at the reporting unit level, one level below our operating segments. We have identified 18 reporting units, of which 9 carry goodwill. We have the option of either assessing qualitative factors to determine whether it is more likely than not that the carrying value of our reporting units exceeds their respective fair value or proceeding directly to a two-step quantitative test. We elected to perform the quantitative impairment test for all years presented.

STEP 1

We compare the fair value of a reporting unit to its carrying value, including goodwill:

- if the fair value exceeds its carrying value, the goodwill of the reporting unit is not considered impaired
- if the carrying value of a reporting unit exceeds its fair value, we go to step two to measure the amount of impairment loss, if any

STEP 2

We compare the implied fair value of the reporting unit goodwill with the carrying amount of that goodwill. The implied fair value of goodwill is determined by hypothetically allocating the fair value of the reporting unit to its identifiable assets and liabilities in a manner consistent with a business combination, with any excess fair value representing implied goodwill:

• if the carrying value of the reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess

HOW WE DETERMINE CARRYING VALUE AND FAIR VALUE

First, we determine the carrying value of each reporting unit by assigning assets and liabilities, including goodwill, to those units as of the measurement date. Then, we estimate the fair values of the reporting units using both an income approach (which involves discounting estimated future cash flows) and a market approach (which involves the application of revenue and EBITDA multiples of comparable companies). We consider market factors when determining the assumptions and estimates used in our valuation models. Finally, to assess the reasonableness of the reporting unit fair values, we compare the total of the reporting unit fair values to our market capitalization.

OUR FAIR VALUE ASSUMPTIONS

We base our fair value estimates on market participant assumptions we believe to be reasonable at the time, but such assumptions are subject to inherent uncertainty and actual results may differ. Changes in key assumptions or management judgment with respect to a reporting unit or its prospects may result from a change in market conditions, market trends, interest rates or other factors outside of our control, or underperformance relative to historical or projected operating results. These conditions could result in a significantly different estimate of the fair value of our reporting units, which could result in an impairment charge in the future.

The significant assumptions in our discounted cash flow models include our estimate of future profitability, capital requirements and the discount rate. The profitability estimates used in the models were derived from internal operating budgets and forecasts for long-term demand and pricing in our industry. Estimated capital requirements reflect replacement capital estimated on a per ton basis and acquisition capital necessary to support growth estimated in the models. The discount rate was derived using a capital asset pricing model.

RESULTS OF OUR IMPAIRMENT TESTS

The results of our annual impairment tests for:

- November 1, 2016 indicated that the fair values of all reporting units with goodwill substantially exceeded (in excess of 100%) their carrying values
- November 1, 2015 indicated that the fair values of all reporting units with goodwill substantially exceeded (in excess of 100%) their carrying values
- November 1, 2014 indicated that the fair values of all reporting units with goodwill substantially exceeded (in excess of 20%) their carrying values

For additional information about goodwill, see Note 18 "Goodwill and Intangible Assets" in Item 8 "Financial Statements and Supplementary Data."

2. IMPAIRMENT OF LONG-LIVED ASSETS EXCLUDING GOODWILL

We evaluate the carrying value of long-lived assets, including intangible assets subject to amortization, when events and circumstances indicate that the carrying value may not be recoverable. The impairment evaluation is a critical accounting policy because long-lived assets are material to our total assets (as of December 31, 2016, net property, plant & equipment represents 39% of total assets, while net other intangible assets represents 9% of total assets) and the evaluation involves the use of significant estimates, assumptions and judgment. The carrying value of long-lived assets is considered impaired when the estimated undiscounted cash flows from such assets are less than their carrying value. In that event, we recognize a loss equal to the amount by which the carrying value exceeds the fair value.

Fair value is estimated primarily by using a discounted cash flow methodology that requires considerable judgment and assumptions. Our estimate of net future cash flows is based on historical experience and assumptions of future trends, which may be different from actual results. We periodically review the appropriateness of the estimated useful lives of our long-lived assets.

We test long-lived assets for impairment at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets. As a result, our long-lived asset impairment test is at a significantly lower level than the level at which we test goodwill for impairment. In markets where we do not produce downstream products (e.g., asphalt mix and ready-mixed concrete), the lowest level of largely independent identifiable cash flows is at the individual aggregates operation or a group of aggregates operations collectively serving a local market. Conversely, in vertically integrated markets, the cash flows of our downstream and upstream businesses are not largely independently identifiable as the selling price of the upstream products (aggregates) impacts the profitability of the downstream business.

During 2016, we recorded a \$10.5 million loss on impairment of long-lived assets resulting from the termination of a nonstrategic aggregates lease and the write off of nonrecoverable project costs related to two Aggregates segment capital projects that we no longer intend to complete. During 2015, we recorded a \$5.2 million impairment loss resulting from exiting a lease. During 2014, we recorded a \$3.1 million impairment loss related primarily to assets retained in the divestiture of our cement and concrete businesses in the Florida area, see Note 19 "Acquisitions and Divestitures" in Item 8 "Financial Statements and Supplementary Data."

We maintain certain long-lived assets that are not currently being used in our operations. These assets totaled \$374.4 million at December 31, 2016, representing a less than 1.0% increase from December 31, 2015. Of the total \$374.4 million, approximately 40% relates to real estate held for future development and expansion of our operations. In addition, approximately 25% is comprised of real estate (principally former mining sites) pending development as commercial or residential real estate, reservoirs or landfills. The remaining 35% is composed of aggregates, asphalt mix and ready-mixed concrete operating assets idled temporarily as a result of a decline in demand for our products. We anticipate moving idled assets back into operation as demand recovers. We evaluate the useful lives and the recoverability of these assets whenever events or changes in circumstances indicate that carrying amounts may not be recoverable.

For additional information about long-lived assets and intangible assets, see Note 4 "Property, Plant & Equipment" and Note 18 "Goodwill and Intangible Assets" in Item 8 "Financial Statements and Supplementary Data."

3. PENSION AND OTHER POSTRETIREMENT BENEFITS

Accounting for pension and postretirement benefits requires that we make significant assumptions about the valuation of benefit obligations and the performance of plan assets. Each year we review the following primary assumptions:

- DISCOUNT RATES The discount rate used in calculating the present value of projected benefit payments and the
 discount rates used to measure service cost and interest cost
- EXPECTED RETURN ON PLAN ASSETS The expected future return on plan assets reduces the recorded net benefit
 costs
- RATE OF COMPENSATION INCREASE Annual pay increases after 2015 will not increase our pension plan obligations as a result of a 2013 plan amendment
- RATE OF INCREASE IN THE PER CAPITA COST OF COVERED HEALTHCARE BENEFITS Future increases in the
 per capita cost after 2015 will not increase our postretirement medical benefits obligation as a result of a 2012 plan
 amendment to cap medical coverage cost at the 2015 level

HOW WE SET OUR ASSUMPTIONS

In selecting the discount rate, we use the yield on high-quality bonds with a duration equal to the duration of plan liabilities. At December 31, 2016, the discount rates for our various plans ranged from 3.43% to 4.41% (December 31, 2015 ranged from 3.53% to 4.68%).

In estimating the expected return on plan assets, we consider past performance and long-term future expectations for the types of investments held by the plan as well as the expected long-term allocation of plan assets to these investments. At December 31, 2016, the expected return on plan assets was reduced to 7.00% (December 31, 2015 was 7.50%).

Changes to the assumptions listed above would have an impact on the projected benefit obligations and the annual net benefit cost. The following table reflects the favorable and unfavorable outcomes associated with a change in certain assumptions:

		(Favorable) Unfavorable									
		0.5 Percentage Point Increase				5 Percentage	Point I	nt Decrease			
		Inc (Dec) in		Inc (Dec) in		Inc (Dec) in	Inc (Dec) in				
in millions	Bene	Benefit Obligation		Annual Benefit Cost		Benefit Obligation		Annual Benefit Cost			
Actuarial Assumptions											
Discount rates											
Pension	\$	(55.7)	\$	(1.0)	\$	61.5	\$	1.0			
Other postretirement benefits		(1.2)		(0.0)		1.3		0.0			
Expected return on plan assets	not	applicable		(3.7)	not	applicable		3.7			

As of the December 31, 2016 measurement date, the fair value of our pension plan assets increased from \$745.7 million to \$749.5 million due to investment returns. No contributions were made to the qualified pension plans in 2016.

During 2017, we expect to recognize net pension expense of approximately \$0.4 million and net postretirement credit of approximately \$(3.7) million compared to credits of \$(3.6) million and \$(3.7) million, respectively, in 2016. The increases are primarily due to a reduction in discount rates coupled with the aforementioned reduction in the expected long-term return on pension assets.

In 2016, we changed our method to estimate the service and interest cost components of net periodic benefit cost for our defined benefit pension and other postretirement benefit plans. Previously, we estimated the service and interest cost components using a single weighted-average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period. As of 2016, we elected to use a full yield curve approach to estimate the service and interest cost, applying the specific spot rates along the yield curve to the relevant projected cash flows. We made this change to provide a more precise measurement of service and interest costs by improving the correlation between projected benefit cash flows to the corresponding yield curve spot rates.

We accounted for this change as a change in estimate and, accordingly, accounted for it prospectively as of 2016. The weighted-average discount rates used to measure service and interest costs for 2016 were 4.68% and 3.79%, respectively, for our pension plans and 3.77% and 2.81%, respectively, for our other postretirement plans.

We do not anticipate contributions to the funded pension plans will be required during 2017; however, we do anticipate making a discretionary contribution of \$9.5 million. We currently do not anticipate that the funded status of any of our plans will fall below statutory thresholds requiring accelerated funding or constraints on benefit levels or plan administration.

For additional information about pension and other postretirement benefits, see Note 10 "Benefit Plans" in Item 8 "Financial Statements and Supplementary Data."

4. ENVIRONMENTAL COMPLIANCE COSTS

Our environmental compliance costs include the cost of ongoing monitoring programs, the cost of remediation efforts and other similar costs. Our accounting policy for environmental compliance costs is a critical accounting policy because it involves the use of significant estimates and assumptions and requires considerable management judgment.

HOW WE ACCOUNT FOR ENVIRONMENTAL COSTS

To account for environmental costs, we:

- expense or capitalize environmental costs consistent with our capitalization policy
- expense costs for an existing condition caused by past operations that do not contribute to future revenues
- accrue costs for environmental assessment and remediation efforts when we determine that a liability is probable and we
 can reasonably estimate the cost

At the early stages of a remediation effort, environmental remediation liabilities are not easily quantified due to the uncertainties of various factors. The range of an estimated remediation liability is defined and redefined as events in the remediation effort occur, but generally liabilities are recognized no later than completion of the remedial feasibility study. When we can estimate a range of probable loss, we accrue the most likely amount. If no amount in the range of probable loss is considered most likely, the minimum loss in the range is accrued. As of December 31, 2016, the difference between the amount accrued and the maximum loss in the range for all sites for which a range can be reasonably estimated was \$3.3 million — this amount does not represent our maximum exposure to loss for all environmental remediation obligations as it excludes those sites for which a range of loss cannot be reasonably estimated at this time. Our environmental remediation obligations are recorded on an undiscounted basis.

Accrual amounts may be based on technical cost estimations or the professional judgment of experienced environmental managers. Our Safety, Health and Environmental Affairs Management Committee routinely reviews cost estimates and key assumptions in response to new information, such as the kinds and quantities of hazardous substances, available technologies and changes to the parties participating in the remediation efforts. However, a number of factors, including adverse agency rulings and unanticipated conditions as remediation efforts progress, may cause actual results to differ materially from accrued costs.

For additional information about environmental compliance costs, see Note 8 "Accrued Environmental Remediation Costs" in Item 8 "Financial Statements and Supplementary Data."

5. CLAIMS AND LITIGATION INCLUDING SELF-INSURANCE

We are involved with claims and litigation, including items covered under our self-insurance program. We are self-insured for losses related to workers' compensation up to \$2.0 million per occurrence and automotive and general/product liability up to \$3.0 million per occurrence. We have excess coverage on a per occurrence basis beyond these retention levels.

Under our self-insurance program, we aggregate certain claims and litigation costs that are reasonably predictable based on our historical loss experience and accrue losses, including future legal defense costs, based on actuarial studies. Certain claims and litigation costs, due to their unique nature, are not included in our actuarial studies. For matters not included in our actuarial studies, legal defense costs are accrued when incurred.

Our accounting policy for claims and litigation including self-insurance is a critical accounting policy because it involves the use of significant estimates and assumptions and requires considerable management judgment.

HOW WE ASSESS THE PROBABILITY OF LOSS

We use both internal and outside legal counsel to assess the probability of loss, and establish an accrual when the claims and litigation represent a probable loss and the cost can be reasonably estimated. Significant judgment is used in determining the timing and amount of the accruals for probable losses, and the actual liability could differ materially from the accrued amounts.

For additional information about claims and litigation including self-insurance, see Note 1 "Summary of Significant Accounting Policies" in Item 8 "Financial Statements and Supplementary Data" under the caption Claims and Litigation Including Self-insurance.

6. INCOME TAXES

VALUATION OF OUR DEFERRED TAX ASSETS

We file federal, state and foreign income tax returns and account for the current and deferred tax effects of such returns using the asset and liability method. We recognize deferred tax assets and liabilities (which reflect our best assessment of the future taxes we will pay) based on the differences between the book basis and tax basis of assets and liabilities. Deferred tax assets represent items to be used as a tax deduction or credit in future tax returns while deferred tax liabilities represent items that will result in additional tax in future tax returns.

Significant judgments and estimates are required in determining our deferred tax assets and liabilities. These estimates are updated throughout the year to consider income tax return filings, our geographic mix of earnings, legislative changes and other relevant items.

Each quarter we analyze the likelihood that our deferred tax assets will be realized. Realization of the deferred tax assets ultimately depends on the existence of sufficient taxable income of the appropriate character in either the carryback or carryforward period. A valuation allowance is recorded if, based on the weight of all available positive and negative evidence, it is more likely than not (a likelihood of more than 50%) that some portion, or all, of a deferred tax asset will not be realized. A summary of our deferred tax assets is included in Note 9 "Income Taxes" in Item 8 "Financial Statements and Supplementary Data."

At December 31, 2016, we have state net operating loss carryforward deferred tax assets of \$54.5 million, against which we have a valuation allowance of \$44.2 million. Of the deferred tax assets, \$53.2 million relates to Alabama.

From 2008 through the second quarter of 2015, we carried a full valuation allowance against the Alabama deferred tax asset for the following reasons:

- we had a substantial cumulative loss in Alabama
- due to our legal entity structure, we had no expectation of creating sufficient taxable income in Alabama

During the second quarter of 2015, we restructured our legal entities. Among other benefits, we anticipated that the restructuring would generate significant taxable income in Alabama, and therefore, allow for the utilization of some or all of the Alabama deferred tax asset.

Our Alabama cumulative loss is calculated as pretax earnings from continuing operations, discontinued operations and other comprehensive income plus permanent differences over the last three years. While evaluating all available positive and negative evidence, realizing the significance of the restructuring in our Alabama income tax filing, we determined that it was appropriate to adjust our Alabama cumulative loss calculation to consider the restructuring, remove pretax earnings from discontinued operations and other comprehensive income and remove any other significant nonrecurring items. We refer to this calculation as our Alabama adjusted earnings.

At the end of the second quarter of 2015, our Alabama adjusted earnings were negative. However, the Alabama adjusted earnings loss was dramatically smaller than our Alabama cumulative loss (of the three adjustments made, the restructuring had the greatest impact). In addition, we considered all other forms of positive and negative evidence, including the four sources of taxable income. The first three sources of taxable income (carryback potential, reversing temporary differences and tax planning strategies) provided very little positive evidence. Because our Alabama adjusted earnings were a loss, we did not project future Alabama taxable income (the fourth source). As a result, during the second quarter of 2015 we continued to carry a full valuation allowance against our Alabama deferred tax asset.

At the end of the third quarter of 2015, our Alabama adjusted earnings turned positive. This development provided sufficient positive evidence such that we determined it was appropriate to use projections of future Alabama taxable income in our assessment for the first time. However, because we had not yet returned to sustained profitability (i.e., an Alabama cumulative gain) we used our Alabama trailing twelve months adjusted earnings as the basis for an objectively verifiable projection of future Alabama taxable income. This projection, in addition to considering all other positive and negative evidence, led us to conclude in the third quarter that it was more likely than not that \$4.7 million of the deferred tax asset was realizable. Therefore, we recognized a deferred tax benefit of \$4.7 million in the third quarter of 2015 by reducing the valuation allowance. Our analysis in each of the four subsequent quarters further confirmed our third quarter of 2015 conclusion but resulted in no further reductions of the valuation allowance.

In the fourth quarter of 2016, we achieved three consecutive years of positive Alabama adjusted earnings. This development together with the projection of future Alabama taxable income (using our most recent trailing twelve months adjusted earnings) warranted an additional partial release of \$4.8 million in the fourth quarter of 2016. As of year-end 2016, we have recognized \$9.5 million of the Alabama deferred tax asset.

We believe that once we have an Alabama cumulative gain, we will have sufficient positive evidence to conclude that we have returned to sustained profitability and we will no longer limit our estimate of future taxable income to our Alabama trailing twelve months adjusted earnings. At that time, we may realize a significant portion, if not all, of the Alabama deferred tax asset. We project the earliest this could happen would be the fourth quarter of 2017.

LIABILITY FOR UNRECOGNIZED TAX BENEFITS

We recognize a tax benefit associated with a tax position when we judge it is more likely than not that the position will be sustained based upon the technical merits of the position. For a tax position that meets the more likely than not recognition threshold, we measure the income tax benefit as the largest amount that we judge to have a greater than 50% likelihood of being realized. A liability is established for the unrecognized portion of any tax position. Our liability for unrecognized tax benefits is adjusted periodically due to changing circumstances, such as the progress of tax audits, case law developments and new or emerging legislation.

The years open to tax examinations vary by jurisdiction. While it is often difficult to predict the final outcome or the timing of resolution of any particular tax matter, we believe our liability for unrecognized tax benefits is appropriate.

We consider a tax position to be resolved at the earlier of the issue being "effectively settled," settlement of an examination, or the expiration of the statute of limitations. Upon resolution of a tax position, any liability for unrecognized tax benefits will be released.

Our liability for unrecognized tax benefits is generally presented as noncurrent. However, if we anticipate paying cash within one year to settle an uncertain tax position, the liability is presented as current. We classify interest and penalties associated with our liability for unrecognized tax benefits as income tax expense.

NEW ACCOUNTING STANDARDS

For a discussion of accounting standards recently adopted and pending adoption and the effect such accounting changes will have on our results of operations, financial position or liquidity, see Note 1 "Summary of Significant Accounting Policies" in Item 8 "Financial Statements and Supplementary Data" under the caption New Accounting Standards.

FORWARD-LOOKING STATEMENTS

The foregoing discussion and analysis, as well as certain information contained elsewhere in this Annual Report, contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and are intended to be covered by the safe harbor created thereby. See the discussion in Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995 in Part I, above.

ITEM 7A

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

MARKET RISK

We are exposed to certain market risks arising from transactions that are entered into in the normal course of business. To manage these market risks, we may use derivative financial instruments. We do not enter into derivative financial instruments for speculative or trading purposes.

As discussed in the Liquidity and Financial Resources section of Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations," we actively manage our capital structure and resources to balance the cost of capital and risk of financial stress. Such activity includes balancing the cost and risk of interest expense. In addition to floating-rate borrowings under our line of credit, we at times use interest rate swaps to manage the mix of fixed-rate and floating-rate debt.

While floating-rate debt exposes us to rising interest rates, it is typically cheaper than issuing fixed-rate debt at any point in time but can become more expensive than previously issued fixed-rate debt. However, a rising interest rate environment is not necessarily harmful to our financial results. Since 2002, our EBITDA and Operating income are positively correlated to floating interest rates (as measured by 3-month LIBOR). As such, our business serves as a natural hedge to rising interest rates, and floating-rate debt serves as a natural hedge against weaker operating results due to general economic weakness.

At December 31, 2016, the estimated fair value of our long-term debt including current maturities was \$2,243.4 million compared to a book value of \$1,982.9 million. The estimated fair value was determined by averaging several asking price quotes for the publicly traded notes and assuming par value for the remainder of the debt. The fair value estimate is based on information available as of the balance sheet date. The effect of a decline in interest rates of one percentage point would increase the fair value of our debt by approximately \$104.9 million.

We are exposed to certain economic risks related to the costs of our pension and other postretirement benefit plans. These economic risks include changes in the discount rate for high-quality bonds and the expected return on plan assets. The impact of a change in these assumptions on our annual pension and other postretirement benefit costs is discussed in greater detail within the Critical Accounting Policies section of this Annual Report.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Vulcan Materials Company:

We have audited the accompanying consolidated balance sheets of Vulcan Materials Company and subsidiaries (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of comprehensive income, equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Vulcan Materials Company and its subsidiary companies as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on the criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 24, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.

Birmingham, Alabama

Delothe & Touche LP

February 24, 2017

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CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

		2016		2015		2014
For the years ended December 31						
in thousands, except per share data						
Total revenues	\$	3,592,667	\$	3,422,181	\$	2,994,169
Cost of revenues		2,591,850		2,564,648		2,406,587
Gross profit		1,000,817		857,533		587,582
Selling, administrative and general expenses		314,986		286,844		272,288
Gain on sale of property, plant & equipment and businesses		15,431		9,927		244,222
Business interruption claims recovery		11,652		0		0
Impairment of long-lived assets		(10,506)		(5,190)		(3,095)
Other operating expense, net		(22,826)		(25,648)		(18,283)
Operating earnings		679,582		549,778		538,138
Other nonoperating income (expense), net		944		(1,678)		3,107
Interest income		807		345		960
Interest expense		134,076		220,588		243,367
Earnings from continuing operations before income taxes		547,257		327,857		298,838
Income tax expense						
Current		94,254		89,340		74,039
Deferred		30,597		5,603		17,653
Total income tax expense		124,851		94,943		91,692
Earnings from continuing operations		422,406		232,914		207,146
Loss on discontinued operations, net of tax (Note 2)		(2,915)		(11,737)		(2,223)
Net earnings	\$	419,491	\$	221,177	\$	204,923
Other comprehensive income (loss), net of tax						
Reclassification adjustment for cash flow hedges		1,194		5,828		4.856
Adjustment for funded status of benefit plans		(20,583)		23,832		(69,051)
Amortization of actuarial loss and prior service cost for benefit plans		82		11,985		2,112
Other comprehensive income (loss)		(19,307)		41,645		(62,083)
Comprehensive income	\$	400,184	\$	262,822	\$	142,840
Basic earnings (loss) per share						
Continuing operations	\$	3.17	\$	1.75	\$	1.58
Discontinued operations	•	(0.02)	Ψ	(0.09)	Ψ	(0.02)
Net earnings	\$	3.15	\$	1.66	\$	1.56
·						
Diluted earnings (loss) per share Continuing operations	\$	3.11	\$	1.72	\$	1.56
Discontinued operations	φ	(0.02)	φ	(0.08)	Φ	(0.02)
Net earnings	\$	3.09	\$	1.64	\$	1.54
	•	0.00	Ψ	1.0-7	Ψ	1.04
Weighted-average common shares outstanding		400.005		400.040		404 404
Basic		133,205		133,210		131,461
Assuming dilution		135,790		135,093		132,991

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

CONSOLIDATED BALANCE SHEETS

	2016	2015
As of December 31		
in thousands	 	
Assets		
Cash and cash equivalents	\$ 258,986	\$ 284,060
Restricted cash	9,033	1,150
Accounts and notes receivable		
Customers, less allowance for doubtful accounts		
2016 — \$2,813; 2015 — \$5,576	398,488	397,287
Other	93,333	20,737
Inventories	345,616	347,073
Prepaid expenses	31,726	34,284
Total current assets	1,137,182	1,084,591
Investments and long-term receivables	39,226	40,558
Property, plant & equipment, net	3,261,438	3,156,290
Goodwill	3,094,824	3,094,824
Other intangible assets, net	769,052	766,579
Other noncurrent assets	169,753	158,790
Total assets	\$ 8,471,475	\$ 8,301,632
Liabilities		
Current maturities of long-term debt	138	130
Trade payables and accruals	145,042	175,729
Accrued salaries, wages and management incentives	91,455	91,440
Accrued interest	9,751	9,752
Other current liabilities	125,858	76,428
Total current liabilities	372,244	353,479
Long-term debt	1,982,751	1,980,334
Deferred income taxes, net	702,854	681,096
Deferred management incentive and other compensation	19,698	15,980
Pension benefits	247,784	233,661
Other postretirement benefits	39,533	42,318
Asset retirement obligations	223,872	226,594
Deferred revenue	198,388	207,660
Other noncurrent liabilities	111,875	106,322
Total liabilities	\$ 3,898,999	\$ 3,847,444
Other commitments and contingencies (Note 12)		
Equity		
Common stock, \$1 par value — Authorized 480,000 shares,		
Outstanding 132,339 and 133,172 shares, respectively	132,339	133,172
Capital in excess of par value	2,807,995	2,822,578
Retained earnings	1,771,518	1,618,507
Accumulated other comprehensive loss	(139,376)	(120,069)
Total equity	4,572,476	4,454,188
Total liabilities and equity	\$ 8,471,475	\$ 8,301,632
· '		

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31		2016		2015		2014
in thousands						
Operating Activities						
Net earnings	\$	419,491	\$	221,177	\$	204,923
Adjustments to reconcile net earnings to net cash provided by operating activities	*/	,				,,
Depreciation, depletion, accretion and amortization		284,940		274,823		279,497
Net gain on sale of property, plant & equipment and businesses		(15,431)		(9,927)		(244,222)
Contributions to pension plans		(9,576)		(14,047)		(5,488)
Share-based compensation expense		20,670		18,248		23,884
Excess tax benefits from share-based compensation		0		(18,376)		(3,464)
Deferred tax expense (benefit)		33,591		3,069		18,378
Cost of debt purchase		0		67,075		72,949
(Increase) decrease in assets excluding the initial effects of business						
acquisitions and dispositions						
Accounts and notes receivable		(72,763)		(42, 164)		(25,118)
Inventories		1,625		(20,925)		(5,595)
Prepaid expenses		2,558		(5,288)		(6,256)
Other assets		(18,236)		34,863		(13,930)
Increase (decrease) in liabilities excluding the initial effects of business						
acquisitions and dispositions						(5.5.45)
Accrued interest and income taxes		(7,187)		26,605		(3,840)
Trade payables and other accruals		30,353		26,491		4,229
Other noncurrent liabilities		(29,138)		(42,702)		(42,810)
Other, net	25	3,691		616	222	7,870
Net cash provided by operating activities	\$	644,588	\$	519,538	\$	261,007
Investing Activities						
Purchases of property, plant & equipment		(350,148)		(289, 262)		(224,852)
Proceeds from sale of property, plant & equipment		23,318		8,218		26,028
Proceeds from sale of businesses, net of transaction costs		0		0		721,359
Payment for businesses acquired, net of acquired cash		(32,537)		(27,198)		(284,237)
Increase in restricted cash		(7,883)		(1,150)		0
Other, net	_	2,173		(350)		33
Net cash provided by (used for) investing activities	\$	(365,077)	\$	(309,742)	\$	238,331
Financing Activities				444.000		
Proceeds from line of credit		3,000		441,000		93,000
Payment of line of credit		(3,000)		(206,000)		(93,000)
Payment of current maturities and long-term debt		(130)		(695,060)		(579,829)
Proceeds from issuance of long-term debt Debt and line of credit issuance costs		(1.960)		400,000		0
Purchases of common stock		(1,860)		(7,382)		0
Proceeds from issuance of common stock		(161,463)		(21,475) 0		30,620
Dividends paid		(106,333)		(53,214)		(28,884)
Proceeds from exercise of stock options		(100,000)		72,971		23,502
Share-based compensation, shares withheld for taxes		(34,797)		(16,160)		(671)
Excess tax benefits from share-based compensation		(34,737)		18,376		3,464
Other, net		(2)		(65)		(5)
Net cash used for financing activities	\$	(304,585)	\$	(67,009)	\$	(551,803)
Net increase (decrease) in cash and cash equivalents		(25,074)	Ψ	142,787	Ψ	
Cash and cash equivalents at beginning of year		284,060		142,767		(52,465) 193,738
	\$	258,986	\$		\$	
Cash and cash equivalents at end of year	Ψ	200,500	Φ	284,060	φ	141,273

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

CONSOLIDATED STATEMENTS OF EQUITY

			0				Accumulated	
	Cor	nmon Stock	Capital in Excess of		Retained	Co	Other mprehensive	
in thousands	Shares	Amount	Par Value		Earnings		ncome (Loss)	Total
Balances at December 31, 2013	130,200 \$	130,200	\$ 2,611,703		1,295,834	\$	(99,631) \$	3,938,106
Net earnings	0	0	 0		204,923		0	204,923
Common stock issued	ū		ū		201,020		ū	20 1,020
Acquisitions	715	715	44,470		0		0	45.185
401(k) Trustee (Note 13)	485	485	30,135		0		0	30,620
Share-based compensation plans, net of			,					,
shares withheld for taxes	507	507	20,982		0		0	21,489
Share-based compensation expense	0	0	23,884		0		0	23,884
Excess tax benefits from								
share-based compensation	0	0	3,464		0		0	3,464
Cash dividends on common stock								
(\$0.22 per share)	0	0	0		(28,884)		0	(28,884)
Other comprehensive loss	0	0	0		0		(62,083)	(62,083)
Other	0	0	23		(28)		0	(5)
Balances at December 31, 2014	131,907 \$	131,907	\$ 2,734,661	\$	1,471,845	\$	(161,714) \$	4,176,699
Net earnings	0	0	0		221,177		0	221,177
Share-based compensation plans, net of								
shares withheld for taxes	1,493	1,493	51,240		0		0	52,733
Purchase and retirement of								
common stock	(228)	(228)	0		(21,247)		0	(21,475)
Share-based compensation expense	0	0	18,248		0		0	18,248
Excess tax benefits from	-	_	10.070		_		_	
share-based compensation	0	0	18,376		0		0	18,376
Cash dividends on common stock	0	0	0		(50.04.4)		0	(E2 24 4)
(\$0.40 per share)	0 0	0	0		(53,214)		0 41.645	(53,214) 41,645
Other comprehensive income Other	0	0	53		(54)		41,045	41,045
				_		Φ.		
Balances at December 31, 2015	133,172 \$	133,172	\$ 2,822,578	\$., ,	\$	(120,069) \$	4,454,188
Net earnings Share-based compensation plans, net of	U	U	0		419,491		0	419,491
shares withheld for taxes	594	594	(35,363)		0		0	(34,769)
Purchase and retirement of	334	554	(55,565)		O		U	(34,703)
common stock	(1,427)	(1,427)	0		(160,036)		0	(161,463)
Share-based compensation expense	(1,427)	(1,421)	20,670		(100,000)		0	20,670
Cash dividends on common stock	J	Ü	20,070		Ü		Ü	20,070
(\$0.80 per share)	0	0	0		(106,333)		0	(106,333)
Other comprehensive loss	Ö	0	0		(100,500)		(19,307)	(19,307)
Other	Ö	Ö	110		(111)		0	(1)
Balances at December 31, 2016	132,339 \$	132,339	\$ 2,807,995	\$		\$	(139,376) \$	4,572,476

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS

Vulcan Materials Company (the "Company," "Vulcan," "we," "our"), a New Jersey corporation, is the nation's largest supplier of construction aggregates (primarily crushed stone, sand and gravel) and a major producer of asphalt mix and ready-mixed concrete.

We serve markets in twenty states, Washington D.C., and the local markets surrounding our operations in Mexico and the Bahamas. Our primary focus is serving states in metropolitan markets in the United States that are expected to experience the most significant growth in population, households and employment. These three demographic factors are significant drivers of demand for aggregates. While aggregates is our focus and primary business, we produce and sell asphalt mix and/or ready-mixed concrete in our mid-Atlantic, Georgia, Southwestern and Western markets.

Due to the 2005 sale of our Chemicals business as described in Note 2, the results of the Chemicals business are presented as discontinued operations in the accompanying Consolidated Statements of Comprehensive Income.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of Vulcan Materials Company and all our majority or wholly-owned subsidiary companies. All intercompany transactions and accounts have been eliminated in consolidation.

USE OF ESTIMATES IN THE PREPARATION OF FINANCIAL STATEMENTS

The preparation of these financial statements in conformity with accounting principles generally accepted (GAAP) in the United States of America requires us to make estimates and judgments that affect reported amounts of assets, liabilities, revenues and expenses, and the related disclosures of contingent assets and contingent liabilities at the date of the financial statements. We evaluate these estimates and judgments on an ongoing basis and base our estimates on historical experience, current conditions and various other assumptions that are believed to be reasonable under the circumstances. The results of these estimates form the basis for our judgments about the carrying values of assets and liabilities as well as identifying and assessing the accounting treatment with respect to commitments and contingencies. Actual results may differ materially from these estimates. The most significant estimates included in the preparation of these financial statements are related to goodwill and long-lived asset impairments, pension and other postretirement benefits, environmental compliance, claims and litigation including self-insurance, and income taxes.

BUSINESS COMBINATIONS

We account for business combinations under the acquisition method of accounting. The total cost of acquisitions is allocated to the underlying identifiable assets acquired and liabilities assumed based on their respective fair values. Determining the fair values of assets acquired and liabilities assumed requires judgment and often involves the use of significant estimates and assumptions.

FOREIGN CURRENCY TRANSACTIONS

The U.S. dollar is the functional currency for all of our operations. For our non-U.S. subsidiaries, local currency inventories and long-term assets such as property, plant & equipment and intangibles are remeasured into U.S. dollars at approximate rates prevailing when acquired; all other assets and liabilities are remeasured at year-end exchange rates. Inventories charged to cost of sales and depreciation are remeasured at historical rates; all other income and expense items are remeasured at average exchange rates prevailing during the year. Gains and losses which result from remeasurement are included in earnings and are not material for the years presented.

CASH EQUIVALENTS

We classify as cash equivalents all highly liquid securities with a maturity of three months or less at the time of purchase. The carrying amount of these securities approximates fair value due to their short-term maturities.

RESTRICTED CASH

Restricted cash consists of cash proceeds from the sale of property held in escrow for the acquisition of replacement property under like-kind exchange agreements. The escrow accounts are administered by an intermediary. Pursuant to the like-kind exchange agreements, the cash remains restricted for a maximum of 180 days from the date of the property sale pending the acquisition of replacement property. Changes in restricted cash balances are reflected as an investment activity in the accompanying Consolidated Statements of Cash Flows.

ACCOUNTS AND NOTES RECEIVABLE

Accounts and notes receivable from customers result from our extending credit to trade customers for the purchase of our products. The terms generally provide for payment within 30 days of being invoiced. On occasion, when necessary to conform to regional industry practices, we sell product under extended payment terms, which may result in either secured or unsecured short-term notes; or, on occasion, notes with durations of less than one year are taken in settlement of existing accounts receivable. Other accounts and notes receivable result from short-term transactions (less than one year) other than the sale of our products, such as interest receivable; insurance claims; freight claims; tax refund claims; bid deposits or rents receivable. Receivables are aged and appropriate allowances for doubtful accounts and bad debt expense are recorded. Bad debt expense (income) for the years ended December 31 was as follows: 2016 — \$(1,190,000), 2015 — \$1,450,000 and 2014 — \$2,031,000. Write-offs of accounts receivables for the years ended December 31 were as follows: 2016 — \$1,544,000, 2015 — \$1,483,000 and 2014 — \$2,561,000. The bad debt income in 2016 relates to the collection of previously reserved receivables primarily attributable to the 2014 sale of our Florida area concrete and cement businesses.

INVENTORIES

Inventories and supplies are stated at the lower of cost or market. We use the last-in, first-out (LIFO) method of valuation for most of our inventories because it results in a better matching of costs with revenues. Such costs include fuel, parts and supplies, raw materials, direct labor and production overhead. An actual valuation of inventory under the LIFO method can be made only at the end of each year based on the inventory levels and costs at that time. Accordingly, interim LIFO calculations are based on our estimates of expected year-end inventory levels and costs and are subject to the final year-end LIFO inventory valuation. Substantially all operating supplies inventory is carried at average cost. For additional information about our inventories see Note 3.

PROPERTY, PLANT & EQUIPMENT

Property, plant & equipment are carried at cost less accumulated depreciation, depletion and amortization. The cost of properties held under capital leases, if any, is equal to the lower of the net present value of the minimum lease payments or the fair value of the leased property at the inception of the lease.

Capitalized software costs of \$4,732,000 and \$7,003,000 are reflected in net property, plant & equipment as of December 31, 2016 and 2015, respectively. We capitalized software costs for the years ended December 31 as follows: 2016 — \$152,000, 2015 — \$1,482,000 and 2014 — \$921,000.

For additional information about our property, plant & equipment see Note 4.

REPAIR AND MAINTENANCE

Repair and maintenance costs generally are charged to operating expense as incurred. Renewals and betterments that add materially to the utility or useful lives of property, plant & equipment are capitalized and subsequently depreciated. Actual costs for planned major maintenance activities, related primarily to periodic overhauls on our oceangoing vessels, are capitalized and amortized to the next overhaul.

DEPRECIATION, DEPLETION, ACCRETION AND AMORTIZATION

Depreciation is generally computed by the straight-line method at rates based on the estimated service lives of the various classes of assets, which include machinery and equipment (3 to 25 years), buildings (7 to 20 years) and land improvements (8 to 20 years). Capitalized software costs are included in machinery and equipment and are depreciated on a straight-line basis beginning when the software project is substantially complete.

Cost depletion on depletable land is computed by the unit-of-production method based on estimated recoverable units.

Accretion reflects the period-to-period increase in the carrying amount of the liability for asset retirement obligations. It is computed using the same credit-adjusted, risk-free rate used to initially measure the liability at fair value.

Leaseholds are amortized over varying periods not in excess of applicable lease terms or estimated useful lives.

Amortization of intangible assets subject to amortization is computed based on the estimated life of the intangible assets. A significant portion of our intangible assets is contractual rights in place associated with zoning, permitting and other rights to access and extract aggregates reserves. Contractual rights in place associated with aggregates reserves are amortized using the unit-of-production method based on estimated recoverable units. Other intangible assets are amortized principally by the straight-line method.

Depreciation, depletion, accretion and amortization expense for the years ended December 31 is outlined below:

in thousands	2016	2015	2014
Depreciation, Depletion, Accretion and Amortization			
Depreciation	\$ 238,237	\$ 228,866	\$ 239,611
Depletion	17,812	18,177	16,741
Accretion	11,059	11,474	11,601
Amortization of leaseholds	267	688	578
Amortization of intangibles	17,565	15,618	10,966
Total	\$ 284,940	\$ 274,823	\$ 279,497

DERIVATIVE INSTRUMENTS

We periodically use derivative instruments to manage our mix of fixed-rate and floating-rate debt and to manage our exposure to currency exchange risk or price fluctuations on commodity energy sources consistent with our risk management policies. We do not use derivative financial instruments for speculative or trading purposes. Additional disclosures about our derivative instruments are presented in Note 5.

FAIR VALUE MEASUREMENTS

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels as described below:

- Level 1: Quoted prices in active markets for identical assets or liabilities
- Level 2: Inputs that are derived principally from or corroborated by observable market data
- Level 3: Inputs that are unobservable and significant to the overall fair value measurement

Our assets at December 31 subject to fair value measurement on a recurring basis are summarized below:

	Level 1 Fair Value				
in thousands		2016		2015	
Fair Value Recurring					
Rabbi Trust					
Mutual funds	\$	6,883	\$	11,472	
Equities		10,033		8,992	
Total	\$	16,916	\$	20,464	

	Level 2 Fair Value					
in thousands		2016		2015		
Fair Value Recurring						
Rabbi Trust						
Money market mutual fund	\$	1,705	\$	2,124		
Total	\$	1,705	\$	2,124		

We have two Rabbi Trusts for the purpose of providing a level of security for the employee nonqualified retirement and deferred compensation plans and for the directors' nonqualified deferred compensation plans. The fair values of these investments are estimated using a market approach. The Level 1 investments include mutual funds and equity securities for which quoted prices in active markets are available. Level 2 investments are stated at estimated fair value based on the underlying investments in the fund (short-term, highly liquid assets in commercial paper, short-term bonds and certificates of deposit).

Net gains (losses) of the Rabbi Trusts' investments were \$2,741,000, \$(1,517,000) and \$1,169,000 for the years ended December 31, 2016, 2015 and 2014, respectively. The portions of the net gains (losses) related to investments still held by the Rabbi Trusts at December 31, 2016, 2015 and 2014 were \$1,599,000, \$(1,769,000) and \$(1,049,000), respectively.

The 2016 decrease of \$3,967,000 in total Rabbi Trust asset fair values is primarily due to several retired executives receiving distributions from the nonqualified retirement and deferred compensation plans.

The carrying values of our cash equivalents, restricted cash, accounts and notes receivable, short-term debt, trade payables and accruals, and all other current liabilities approximate their fair values because of the short-term nature of these instruments. Additional disclosures for derivative instruments and interest-bearing debt are presented in Notes 5 and 6, respectively.

Assets subject to fair value measurement on a nonrecurring basis in 2016 and 2015 are summarized below:

	Yea	Year ending December 31, 2016			Year ending December 31, 2015			
			In	npairment			11	mpairment
in thousands		Level 2		Charges		Level 2		Charges
Fair Value Nonrecurring								
Property, plant & equipment	\$	0	\$	1,359	\$	0	\$	2,176
Other intangible assets, net		0		8,180		0		2,858
Other assets		0		967		0		156
Totals	\$	0	\$	10,506	\$	0	\$	5,190

We recorded \$10,506,000 and \$5,190,000 of losses on impairment of long-lived assets in 2016 and 2015, respectively, reducing the carrying value of these Aggregates segment assets to their estimated fair values of \$0 and \$0. Fair value was estimated using a market approach (observed transactions involving comparable assets in similar locations).

GOODWILL IMPAIRMENT

Goodwill represents the excess of the cost of net assets acquired in business combinations over the fair value of the identifiable tangible and intangible assets acquired and liabilities assumed in a business combination. Goodwill impairment exists when the fair value of a reporting unit is less than its carrying amount. As of December 31, 2016, goodwill totaled \$3,094,824,000, the same as at December 31, 2015. Goodwill represents 37% of total assets at December 31, 2016, the same as at December 31, 2015.

Goodwill is tested for impairment annually, as of November 1, or more frequently whenever events or changes in circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. Goodwill is tested for impairment at the reporting unit level, one level below our operating segments. We have four operating segments organized around our principal product lines: Aggregates, Asphalt Mix, Concrete and Calcium. Within these four operating segments, we have identified 18 reporting units (of which 9 carry goodwill) based primarily on geographic location. We have the option of either assessing qualitative factors to determine whether it is more likely than not that the carrying value of our reporting units exceeds their respective fair value or proceeding directly to a two-step quantitative test. We elected to perform the quantitative impairment test for all years presented.

The first step of the quantitative impairment test identifies potential impairment by comparing the fair value of a reporting unit to its carrying value, including goodwill. If the fair value of a reporting unit exceeds its carrying value, goodwill of the reporting unit is not considered impaired and the second step of the impairment test is not required. If the carrying value of a reporting unit exceeds its fair value, the second step of the impairment test is performed to measure the amount of impairment loss, if any.

The second step of the quantitative impairment test compares the implied fair value of the reporting unit goodwill with the carrying amount of that goodwill. The implied fair value of goodwill is determined by hypothetically allocating the fair value of the reporting unit to its identifiable assets and liabilities in a manner consistent with a business combination, with any excess fair value representing implied goodwill. If the carrying value of the reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess.

The results of the first step of the annual impairment tests performed as of November 1, 2016, 2015 and 2014 indicated that the fair values of all reporting units with goodwill substantially exceeded their carrying values. Accordingly, there were no charges for goodwill impairment in the years ended December 31, 2016, 2015 or 2014.

We estimate the fair values of the reporting units using both an income approach (which involves discounting estimated future cash flows) and a market approach (which involves the application of revenue and EBITDA multiples of comparable companies). Determining the fair value of our reporting units involves the use of significant estimates and assumptions and considerable management judgment. We base our fair value estimates on assumptions we believe to be reasonable at the time, but such assumptions are subject to inherent uncertainty and actual results may differ. Changes in key assumptions or management judgment with respect to a reporting unit or its prospects, which may result from a change in market conditions, market trends, interest rates or other factors outside of our control, or underperformance relative to historical or projected operating results, could result in a significantly different estimate of the fair value of our reporting units, which could result in an impairment charge in the future.

For additional information about goodwill see Note 18.

IMPAIRMENT OF LONG-LIVED ASSETS EXCLUDING GOODWILL

We evaluate the carrying value of long-lived assets, including intangible assets subject to amortization, when events and circumstances indicate that the carrying value may not be recoverable. The carrying value of long-lived assets is considered impaired when the estimated undiscounted cash flows from such assets are less than their carrying value. In that event, we recognize a loss equal to the amount by which the carrying value exceeds the fair value. Fair value is determined primarily by using a discounted cash flow methodology that requires considerable judgment and assumptions. Our estimate of net future cash flows is based on historical experience and assumptions of future trends, which may be different from actual results. We periodically review the appropriateness of the estimated useful lives of our long-lived assets.

We test long-lived assets for impairment at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets. As a result, our long-lived asset impairment test is at a significantly lower level than the level at which we test goodwill for impairment. In markets where we do not produce downstream products (e.g., asphalt mix and ready-mixed concrete), the lowest level of largely independent identifiable cash flows is at the individual aggregates operation or a group of aggregates operations collectively serving a local market. Conversely, in vertically integrated markets, the cash flows of our downstream and upstream businesses are not largely independently identifiable as the selling price of the upstream products (aggregates) determines the profitability of the downstream businesse.

As of December 31, 2016, net property, plant & equipment represents 39% of total assets, while net other intangible assets represents 9% of total assets. During 2016, we recorded a \$10,506,000 loss on impairment of long-lived assets resulting from the termination of a nonstrategic aggregates lease and the write off of nonrecoverable project costs related to two Aggregates segment capital projects that we no longer intend to complete. During 2015, we recorded a \$5,190,000 impairment loss related to exiting a lease for an aggregates site. During 2014, we recorded a \$3,095,000 impairment loss related primarily to assets retained in the divestiture of our cement and concrete businesses in the Florida area (see Note 19).

For additional information about long-lived assets and intangible assets see Notes 4 and 18.

TOTAL REVENUES AND REVENUE RECOGNITION

Total revenues include sales of product to customers, net of any discounts and taxes, and freight and delivery revenues billed to customers. Freight and delivery generally represents pass-through transportation we incur (including our administrative costs) and pay to third-party carriers to deliver our products to customers. The cost related to freight and delivery is included in cost of revenues.

Revenue is recognized at the time the selling price is fixed, the product's title is transferred to the buyer and collectibility of the sales proceeds is reasonably assured (typically occurs when finished products are shipped to the customer).

SALES TAXES

Sales taxes collected from customers are recorded as liabilities (within other current liabilities) until remitted to taxing authorities and therefore, are not reflected in the Consolidated Statements of Comprehensive Income.

DEFERRED REVENUE

In 2013 and 2012, we sold a percentage interest in future production structured as volumetric production payments (VPPs).

The VPPs:

- · relate to eight quarries in Georgia and South Carolina
- provide the purchaser solely with a nonoperating percentage interest in the subject quarries' future production from aggregates reserves
- are both time and volume limited
- contain no minimum annual or cumulative production or sales volume, nor minimum sales price

Our consolidated total revenues excludes the sales of aggregates owned by the VPP purchaser.

We received net cash proceeds from the sale of the VPPs of \$153,282,000 and \$73,644,000 for the 2013 and 2012 transactions, respectively. These proceeds were recorded as deferred revenue on the balance sheet and are amortized to revenue on a unit-of-sales basis over the terms of the VPPs (expected to be approximately 25 years, limited by volume rather than time).

Reconciliation of the deferred revenue balances (current and noncurrent) is as follows:

in thousands	2016	2015	2014
Deferred Revenue			
Balance at beginning of year	\$ 214,060	\$ 219,968	\$ 224,743
Cash received and revenue deferred	0	0	187
Amortization of deferred revenue	(7,592)	(5,908)	(4,962)
Balance at end of year	\$ 206,468	\$ 214,060	\$ 219,968

Based on expected sales from the specified quarries, we expect to recognize approximately \$8,080,000 of deferred revenue as income in 2017 (reflected in other current liabilities in our 2016 Consolidated Balance Sheet).

STRIPPING COSTS

In the mining industry, the costs of removing overburden and waste materials to access mineral deposits are referred to as stripping costs.

Stripping costs incurred during the production phase are considered costs of extracted minerals under our inventory costing system, inventoried, and recognized in cost of sales in the same period as the revenue from the sale of the inventory. The production stage is deemed to begin when the activities, including removal of overburden and waste material that may contain incidental saleable material, required to access the saleable product are complete. Stripping costs considered as production costs and included in the costs of inventory produced were \$55,987,000 in 2016, \$50,409,000 in 2015 and \$44,896,000 in 2014.

Conversely, stripping costs incurred during the development stage of a mine (pre-production stripping) are excluded from our inventory cost. Pre-production stripping costs are capitalized and reported within other noncurrent assets in our accompanying Consolidated Balance Sheets. Capitalized pre-production stripping costs are expensed over the productive life of the mine using the unit-of-production method. Pre-production stripping costs included in other noncurrent assets were \$70,227,000 as of December 31, 2016 and \$61,369,000 as of December 31, 2015. This year-over-year increase resulted primarily from the removal of overburden at a greenfield site in California.

SHARE-BASED COMPENSATION

We account for share-based compensation awards using fair-value-based measurement methods. These result in the recognition of compensation expense for all share-based compensation awards (less an estimate for forfeited awards) based on their fair value as of the grant date. Compensation cost is recognized over the requisite service period.

A summary of the estimated future compensation cost (unrecognized compensation expense) as of December 31, 2016 related to share-based awards granted to employees under our long-term incentive plans is presented below:

,	Unrecognized	Expected
	Compensation	Weighted-average
dollars in thousands	Expense	Recognition (Years)
Share-based Compensation		
SOSARs ¹	\$ 4,899	1.8
Performance shares	20,965	2.4
Restricted shares	4,925	2.6
Total/weighted-average	\$ 30,789	2.3

¹ Stock-Only Stock Appreciation Rights (SOSARs)

Pretax compensation expense related to our employee share-based compensation awards and related income tax benefits for the years ended December 31 are summarized below:

in thousands	2016	2015	2014
Employee Share-based Compensation Awards			
Pretax compensation expense	\$ 17,823	\$ 16,362	\$ 22,217
Income tax benefits	6,925	6,347	8,571

EARLY ADOPTION OF ASU 2016-09 We receive an income tax deduction for share-based compensation equal to the excess of the market value of our common stock on the date of exercise or issuance over the exercise price. Upon our early adoption of Accounting Standards Update (ASU) 2016-09, tax benefits resulting from tax deductions in excess of the compensation cost recognized (excess tax benefits) are reflected as discrete income tax benefits in the period of exercise or issuance. Before the adoption of this standard, excess tax benefits were recorded directly to equity (APIC). Net excess tax benefits of \$24,847,000 are reflected as a reduction to our income tax expense for 2016 (see Note 9). Gross excess tax benefits of \$28,009,000 are classified as operating cash flows prospectively beginning in 2016 while gross excess tax benefits for 2015 and 2014 of \$18,376,000 and \$3,464,000, respectively, are reflected as financing cash flows. Upon the adoption of this ASU, we revised our dilutive share calculation to exclude the assumption that proceeds from excess tax benefits would be used to purchase shares, resulting in an increase in dilutive shares as of December 31, 2016 of 773,101.

ASU 2016-09 requires that the cash paid for shares withheld to satisfy statutory income tax withholding obligations be classified as a financing activity in the statement of cash flows. As a result, we revised our accompanying Statements of Cash Flows for prior years to conform to the 2016 presentation as follows: 2015 — increased operating cash flows \$16,160,000 with a corresponding decrease in financing cash flows, and 2014 — increased operating cash flows \$671,000 with a corresponding decrease in financing cash flows.

For additional information about share-based compensation, see Note 11 under the caption Share-based Compensation Plans.

RECLAMATION COSTS

Reclamation costs resulting from normal use of long-lived assets are recognized over the period the asset is in use when there is a legal obligation to incur these costs upon retirement of the assets. Additionally, reclamation costs resulting from normal use under a mineral lease are recognized over the lease term when there is a legal obligation to incur these costs upon expiration of the lease. The obligation, which cannot be reduced by estimated offsetting cash flows, is recorded at fair value as a liability at the obligating event date and is accreted through charges to operating expenses. This fair value is also capitalized as part of the carrying amount of the underlying asset and depreciated over the estimated useful life of the asset. If the obligation is settled for other than the carrying amount of the liability, a gain or loss is recognized on settlement.

To determine the fair value of the obligation, we estimate the cost (including a reasonable profit margin) for a third party to perform the legally required reclamation tasks. This cost is then increased for both future estimated inflation and an estimated market risk premium related to the estimated years to settlement. Once calculated, this cost is discounted to fair value using present value techniques with a credit-adjusted, risk-free rate commensurate with the estimated years to settlement.

In estimating the settlement date, we evaluate the current facts and conditions to determine the most likely settlement date. If this evaluation identifies alternative estimated settlement dates, we use a weighted-average settlement date considering the probabilities of each alternative.

We review reclamation obligations at least annually for a revision to the cost or a change in the estimated settlement date. Additionally, reclamation obligations are reviewed in the period that a triggering event occurs that would result in either a revision to the cost or a change in the estimated settlement date. Examples of events that would trigger a change in the cost include a new reclamation law or amendment of an existing mineral lease. Examples of events that would trigger a change in the estimated settlement date include the acquisition of additional reserves or the closure of a facility.

The carrying value of these obligations was \$223,872,000 as of December 31, 2016 and \$226,594,000 as of December 31, 2015. For additional information about reclamation obligations (referred to in our financial statements as asset retirement obligations) see Note 17.

PENSION AND OTHER POSTRETIREMENT BENEFITS

Accounting for pension and postretirement benefits requires that we make significant assumptions about the valuation of benefit obligations and the performance of plan assets. The primary assumptions are as follows:

- DISCOUNT RATE The discount rate is used in calculating the present value of projected benefit payments
- EXPECTED RETURN ON PLAN ASSETS The expected future return on plan assets reduces the recorded net benefit
 costs
- RATE OF COMPENSATION INCREASE Annual pay increases after 2015 will not increase our pension plan obligations as a result of a 2013 plan amendment
- RATE OF INCREASE IN THE PER CAPITA COST OF COVERED HEALTHCARE BENEFITS Increases in the per capita cost after 2015 will not increase our postretirement medical benefits obligation as a result of a 2012 plan amendment

Accounting standards provide for the delayed recognition of differences between actual results and expected or estimated results. This delayed recognition of actual results allows for a smoothed recognition in earnings of changes in benefit obligations and asset performance. The differences between actual results and expected or estimated results are recognized in full in other comprehensive income. Amounts recognized in other comprehensive income are reclassified to earnings in a systematic manner over the average remaining service period of participants for our active plans or the average remaining lifetime of participants for our inactive plans.

For additional information about pension and other postretirement benefits see Note 10.

ENVIRONMENTAL COMPLIANCE

Our environmental compliance costs are undiscounted and include the cost of ongoing monitoring programs, the cost of remediation efforts and other similar costs. We accrue costs for environmental assessment and remediation efforts when we determine that a liability is probable and we can reasonably estimate the cost. At the early stages of a remediation effort, environmental remediation liabilities are not easily quantified due to the uncertainties of various factors. The range of an estimated remediation liability is defined and redefined as events in the remediation effort occur, but generally liabilities are recognized no later than completion of the remedial feasibility study.

When we can estimate a range of probable loss, we accrue the most likely amount. If no amount in the range of probable loss is considered most likely, the minimum loss in the range is accrued. As of December 31, 2016, the spread between the amount accrued and the maximum loss in the range for all sites for which a range can be reasonably estimated was \$3,341,000 — this amount does not represent our maximum exposure to loss for all environmental remediation obligations as it excludes those sites for which a range of loss cannot be reasonably estimated at this time. Accrual amounts may be based on technical cost estimations or the professional judgment of experienced environmental managers. Our Safety, Health and Environmental Affairs Management Committee routinely reviews cost estimates and key assumptions in response to new information, such as the kinds and quantities of hazardous substances, available technologies and changes to the parties participating in the remediation efforts. However, a number of factors, including adverse agency rulings and encountering unanticipated conditions as remediation efforts progress, may cause actual results to differ materially from accrued costs.

For additional information about environmental compliance costs see Note 8.

CLAIMS AND LITIGATION INCLUDING SELF-INSURANCE

We are involved with claims and litigation, including items covered under our self-insurance program. We are self-insured for losses related to workers' compensation up to \$2,000,000 per occurrence and automotive and general/product liability up to \$3,000,000 per occurrence. We have excess coverage on a per occurrence basis beyond these retention levels.

Under our self-insurance program, we aggregate certain claims and litigation costs that are reasonably predictable based on our historical loss experience and accrue losses, including future legal defense costs, based on actuarial studies. Certain claims and litigation costs, due to their unique nature, are not included in our actuarial studies. We use both internal and outside legal counsel to assess the probability of loss, and establish an accrual when the claims and litigation represent a probable loss and the cost can be reasonably estimated. For matters not included in our actuarial studies, legal defense costs are accrued when incurred. The following table outlines our self-insurance program at December 31:

dollars in thousands	2016	2015
Self-insurance Program		
Self-insured liabilities (undiscounted)	\$ 49,310	\$ 44,618
Insured liabilities (undiscounted)	72,644	16,787
Discount rate	1.40%	1.44%
Amounts Recognized in Consolidated		
Balance Sheets		
Other accounts and notes receivable	\$ 67,631	\$ 0
Investments and long-term receivables	16,133	15,810
Other current liabilities	(69,549)	(14, 198)
Other noncurrent liabilities	(49,074)	(44, 102)
Net liabilities (discounted)	\$ (34,859)	\$ (42,490)

The increase in liabilities and the offsetting increase in receivables as noted above relate primarily to a former Chemicals business litigation matter as discussed in Note 12.

Estimated payments (undiscounted and excluding the impact of related receivables) under our self-insurance program for the five years subsequent to December 31, 2016 are as follows:

in thousands	
Estimated Payments under Self-insurance Program	
2017	\$ 74,027
2018	13,599
2019	8,767
2020	5,461
2021	3,716

Significant judgment is used in determining the timing and amount of the accruals for probable losses, and the actual liability could differ materially from the accrued amounts.

INCOME TAXES

We file federal, state and foreign income tax returns and account for the current and deferred tax effects of such returns using the asset and liability method. We recognize deferred tax assets and liabilities (which reflect our best assessment of the future taxes we will pay) based on the differences between the book basis and tax basis of assets and liabilities. Deferred tax assets represent items to be used as a tax deduction or credit in future tax returns while deferred tax liabilities represent items that will result in additional tax in future tax returns.

Significant judgments and estimates are required in determining our deferred tax assets and liabilities. These estimates are updated throughout the year to consider income tax return filings, our geographic mix of earnings, legislative changes and other relevant items.

Each quarter we analyze the likelihood that our deferred tax assets will be realized. Realization of the deferred tax assets ultimately depends on the existence of sufficient taxable income of the appropriate character in either the carryback or carryforward period. A valuation allowance is recorded if, based on the weight of all available positive and negative evidence, it is more likely than not (a likelihood of more than 50%) that some portion, or all, of a deferred tax asset will not be realized. A summary of our deferred tax assets is included in Note 9.

U.S. income taxes are not provided on foreign earnings when such earnings are indefinitely reinvested offshore. At least annually, we evaluate our investment strategies for each foreign tax jurisdiction in which we operate to determine whether foreign earnings will be indefinitely reinvested offshore.

We recognize a tax benefit associated with a tax position when, in our judgment, it is more likely than not that the position will be sustained based upon the technical merits of the position. For a tax position that meets the more likely than not recognition threshold, we measure the income tax benefit as the largest amount that we judge to have a greater than 50% likelihood of being realized. A liability is established for the unrecognized portion of any tax position. Our liability for unrecognized tax benefits is adjusted periodically due to changing circumstances, such as the progress of tax audits, case law developments and new or emerging legislation.

The years open to tax examinations vary by jurisdiction. While it is often difficult to predict the final outcome or the timing of resolution of any particular tax matter, we believe our liability for unrecognized tax benefits is appropriate.

We consider a tax position to be resolved at the earlier of the issue being "effectively settled," settlement of an examination, or the expiration of the statute of limitations. Upon resolution of a tax position, any liability for unrecognized tax benefits will be released.

Our liability for unrecognized tax benefits is generally presented as noncurrent. However, if we anticipate paying cash within one year to settle an uncertain tax position, the liability is presented as current. We classify interest and penalties associated with our liability for unrecognized tax benefits as income tax expense.

Our largest permanent item in computing both our taxable income and effective tax rate is the deduction allowed for statutory depletion. The impact of statutory depletion on the effective tax rate is presented in Note 9. The deduction for statutory depletion does not necessarily change proportionately to changes in pretax earnings.

COMPREHENSIVE INCOME

We report comprehensive income in our Consolidated Statements of Comprehensive Income and Consolidated Statements of Equity. Comprehensive income comprises two subsets: net earnings and other comprehensive income (OCI). OCI includes fair value adjustments to cash flow hedges, actuarial gains or losses and prior service costs related to pension and postretirement benefit plans.

For additional information about comprehensive income see Note 14.

EARNINGS PER SHARE (EPS)

Earnings per share are computed by dividing net earnings by the weighted-average common shares outstanding (basic EPS) or weighted-average common shares outstanding assuming dilution (diluted EPS), as set forth below:

in thousands	2016	2015	2014
Weighted-average common shares outstanding Dilutive effect of	133,205	133,210	131,461
Stock options/SOSARs	1,339	1,027	656
Other stock compensation plans	1,246	856	874
Weighted-average common shares outstanding,			
assuming dilution	135,790	135,093	132,991

All dilutive common stock equivalents are reflected in our earnings per share calculations. Antidilutive common stock equivalents are not included in our earnings per share calculations.

The number of antidilutive common stock equivalents for which the exercise price exceeds the weighted-average market price for the years ended December 31 is as follows:

in thousands	2016	2015	2014
Antidilutive common stock equivalents	97	544	2,352

RECLASSIFICATIONS

Certain items previously reported in specific financial statement captions have been reclassified to conform with the 2016 presentation. During 2016, we early adopted ASU 2016-09, "Improvement to Employee Share-Based Payment Accounting," resulting in adjustments to our prior financial statements as noted in the caption Share-based Compensation above.

NEW ACCOUNTING STANDARDS

ACCOUNTING STANDARDS RECENTLY ADOPTED

SHARE-BASED PAYMENTS As of December 31, 2016, we early adopted Accounting Standards Update (ASU) 2016-09, "Improvement to Employee Share-Based Payment Accounting," which amends several aspects of the accounting for employee share-based payment transactions. Most significantly, the income tax effects of awards are recognized in the income statement when the awards vest or are settled (the use of APIC pools is eliminated). Additionally, the guidance requires cash paid for shares withheld (to satisfy the employer's statutory income tax withholding obligation) to be presented as a financing activity in the statement of cash flows. See the caption Share-based Compensation above for the impact of the adoption of this standard to our consolidated financial statements.

GOING CONCERN As of December 31, 2016, we adopted ASU 2014-15, "Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern," which requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year after the date that the financial statements are issued. The adoption of this standard did not have a material impact on our consolidated financial statements and related notes.

NET ASSET VALUE PER SHARE INVESTMENTS During the first quarter of 2016, we adopted ASU 2015-07, "Disclosures for Investment in Certain Entities That Calculate Net Asset Value per Share (or its Equivalent)." This ASU removed the requirement to categorize investments within the fair value hierarchy when their fair value is measured using the net asset value per share practical expedient. This ASU also removed the requirement to make certain disclosures for investments that are eligible to be measured at fair value using the net asset value per share expedient. Rather, those disclosures are limited to investments for which we elected to measure the fair value using that practical expedient. The impact of this standard was limited to our annual pension plan fair value disclosures (see Note 10) and was applied retrospectively.

ACCOUNTING STANDARDS PENDING ADOPTION

INTRA-ENTITY ASSET TRANSFERS In October 2016, the Financial Accounting Standards Board (FASB) issued ASU 2016-16, "Intra-Entity Transfers of Assets Other Than Inventory," which requires the tax effects of intercompany transactions other than inventory to be recognized currently. ASU 2016-16 is effective for annual reporting periods beginning after December 15, 2017, and interim reporting periods within those annual reporting periods. Early adoption is permitted as of the beginning of an annual reporting period. We do not expect the adoption of this standard to have a material impact on our consolidated financial statements.

CASH FLOW CLASSIFICATION In August 2016, the FASB issued ASU 2016-15, "Classification of Certain Cash Receipts and Cash Payments," which amends guidance on the classification of certain cash receipts and payments in the statement of cash flows. This ASU adds or clarifies guidance on eight specific cash flow issues. Additionally, guidance on the presentation of restricted cash is addressed in ASU 2016-18 which was issued in November 2016. Both of these standards are effective for annual reporting periods beginning after December 15, 2017, and interim reporting periods within those annual reporting periods. Early adoption is permitted. We do not expect the adoption of these standards to have a material impact on our consolidated financial statements.

CREDIT LOSSES In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments," which amends guidance on the impairment of financial instruments. The new guidance estimates credit losses based on expected losses, modifies the impairment model for available-for-sale debt securities and provides for a simplified accounting model for purchased financial assets with credit deterioration. ASU 2016-13 is effective for annual reporting periods beginning after December 15, 2019, and interim reporting periods within those annual reporting periods. Early adoption is permitted for annual reporting periods beginning after December 15, 2018. While we are still evaluating the impact of ASU 2016-13, we do not expect the adoption of this standard to have a material impact on our consolidated financial statements.

LEASE ACCOUNTING In February 2016, the FASB issued ASU 2016-02, "Leases," which amends existing accounting standards for lease accounting and adds additional disclosures about leasing arrangements. Under the new guidance, lessees are required to recognize lease assets and lease liabilities on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement and presentation of cash flow in the statement of cash flows. This ASU is effective for annual reporting periods beginning after December 15, 2018, and interim reporting periods within those annual reporting periods. Early adoption is permitted and modified retrospective application is required. We are currently evaluating the impact that the adoption of this standard will have on our consolidated financial statements and related disclosures.

CLASSIFICATION AND MEASUREMENT OF FINANCIAL INSTRUMENTS In January 2016, the FASB issued ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities," which amends certain aspects of current guidance on the recognition, measurement and disclosure of financial instruments. Among other changes, this ASU requires most equity investments be measured at fair value. Additionally, the ASU eliminates the requirement to disclose the method and significant assumptions used to estimate the fair value for instruments not recognized at fair value in our financial statements. This ASU is effective for annual reporting periods beginning after December 15, 2017, and interim reporting periods within those annual reporting periods. Early adoption is permitted. We do not expect the adoption of this standard to have a material impact on our consolidated financial statements.

INVENTORY MEASUREMENT In July 2015, the FASB issued ASU 2015-11, "Simplifying the Measurement of Inventory," which changes the measurement principle for inventory from the lower of cost or market principle to the lower of cost and net realizable value principle. The guidance applies to inventories that are measured using the first-in, first-out (FIFO) or average cost method, but does not apply to inventories that are measured using the last-in, first-out (LIFO) or retail inventory method. We use the LIFO method for approximately 66% of our inventory (based on the December 31, 2016 balances); therefore, this ASU will not apply to the majority of our inventory. This ASU is effective prospectively for annual reporting periods beginning after December 15, 2016, and interim reporting periods within those annual reporting periods. We will adopt this standard as of and for the interim period ending March 31, 2017. We do not expect the adoption of this standard to have a material impact on our consolidated financial statements.

REVENUE RECOGNITION In May 2014, the FASB issued ASU 2014-09, "Revenue From Contracts With Customers," which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. This ASU provides a more robust framework for addressing revenue issues and expands required revenue recognition disclosures. In March 2016, the FASB issued ASU 2016-08, "Revenue From Contracts With Customers: Principal Versus Agent Considerations (Reporting Revenue Gross Versus Net)," which amends the principal versus agent guidance in ASU 2014-09. The amendments in ASU 2016-08 provide guidance on recording revenue on a gross basis versus a net basis based on the determination of whether an entity is a principal or an agent when another party is involved in providing goods or services to a customer. These ASUs are effective for annual reporting periods beginning after December 15, 2017, and interim reporting periods within those annual reporting periods. Early adoption is permitted only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. Further, in applying these ASUs an entity is permitted to use either the full retrospective or cumulative effect transition approach. While we are currently evaluating the impact of adoption of these standards on our consolidated financial statements, we expect to identify similar performance obligations under ASU 2014-09 compared with the deliverables and separate units of account we have identified under existing accounting standards. As a result, we expect the timing of our revenues to remain generally the same. We will adopt these standards using the cumulative effect transition approach.

NOTE 2: DISCONTINUED OPERATIONS

In 2005, we sold substantially all the assets of our Chemicals business to Basic Chemicals, a subsidiary of Occidental Chemical Corporation. The financial results of the Chemicals business are classified as discontinued operations in the accompanying Consolidated Statements of Comprehensive Income for all periods presented. There were no revenues from discontinued operations for the years presented. Results from discontinued operations are as follows:

in thousands	2016	2015	2014
Discontinued Operations			
Pretax loss	\$ (4,877)	\$ (19,326)	\$ (3,683)
Income tax benefit	1,962	7,589	1,460
Loss on discontinued operations,			
net of tax	\$ (2,915)	\$ (11,737)	\$ (2,223)

The 2016, 2015 and 2014 pretax losses from discontinued operations of \$4,877,000, \$19,326,000 and \$3,683,000, respectively, include charges related to general and product liability costs, including legal defense costs, and environmental remediation costs associated with our former Chemicals business. During 2016, we settled one of the cases in the Texas Brine matter (see Note 12). This settlement was covered by our insurance policy which also reimbursed a portion of our past legal expenses such that the net loss for this matter was immaterial for the year. The prior year's increased loss resulted primarily from charges associated with the Lower Passaic and Texas Brine matters (see Note 12).

NOTE 3: INVENTORIES

Inventories at December 31 are as follows:

in thousands	 2016	2015
Inventories		_
Finished products ¹	\$ 293,619	\$ 297,925
Raw materials	22,648	21,765
Products in process	1,480	1,008
Operating supplies and other	27,869	26,375
Total	\$ 345,616	\$ 347,073

¹ Includes inventories encumbered by volumetric production payments (see Note 1, caption Deferred Revenue), as follows: December 31, 2016 — \$2,841 thousand and December 31, 2015 — \$4,452 thousand.

In addition to the inventory balances presented above, as of December 31, 2016 and December 31, 2015, we have \$15,285,000 and \$14,995,000, respectively, of inventory classified as long-term assets (other noncurrent assets) as we do not expect to sell the inventory within one year of their respective balance sheet dates. Inventories valued under the LIFO method total \$239,187,000 at December 31, 2016 and \$242,147,000 at December 31, 2015. During 2016, 2015 and 2014, inventory reductions resulted in liquidations of LIFO inventory layers carried at lower costs prevailing in prior years as compared to current-year costs. The effect of the LIFO liquidation on 2016 results was to decrease cost of revenues by \$3,956,000 and increase net earnings by \$2,419,000. The effect of the LIFO liquidation on 2015 results was to decrease cost of revenues by \$3,284,000 and increase net earnings by \$2,010,000. The effect of the LIFO liquidation on 2014 results was to decrease cost of revenues by \$2,686,000 and increase net earnings by \$1,650,000.

Estimated current cost exceeded LIFO cost at December 31, 2016 and 2015 by \$155,576,000 and \$169,257,000, respectively. We use the LIFO method of valuation for most of our inventories as it results in a better matching of costs with revenues. We provide supplemental income disclosures to facilitate comparisons with companies not on LIFO. The supplemental income calculation is derived by tax-effecting the change in the LIFO reserve for the periods presented. If all inventories valued at LIFO cost had been valued under the methods (substantially average cost) used before the adoption of the LIFO method, the approximate effect on net earnings would have been an decrease of \$(8,338,000) in 2016, a decrease of \$(7,614,000) in 2015 and an increase of \$19,108,000 in 2014.

NOTE 4: PROPERTY, PLANT & EQUIPMENT

Balances of major classes of assets and allowances for depreciation, depletion and amortization at December 31 are as follows:

in thousands	2016	2015
Property, Plant & Equipment		
Land and land improvements 1	\$ 2,374,051	\$ 2,305,801
Buildings	127,369	124,950
Machinery and equipment	4,316,243	4,124,808
Leaseholds	17,595	14,143
Deferred asset retirement costs	168,258	166,252
Construction in progress	182,302	155,333
Total, gross	\$ 7,185,818	\$ 6,891,287
Less allowances for depreciation, depletion		
and amortization	3,924,380	3,734,997
Total, net	\$ 3,261,438	\$ 3,156,290

¹ Includes depletable land, as follows: December 31, 2016 — \$1,327,402 thousand and December 31, 2015 — \$1,296,211 thousand.

Capitalized interest costs with respect to qualifying construction projects and total interest costs incurred before recognition of the capitalized amount for the years ended December 31 are as follows:

in thousands	2016 2015			2014
Capitalized interest cost Total interest cost incurred before recognition	\$ 7,468	\$	2,930	\$ 2,092
of the capitalized amount	141,544		223,518	245,459

NOTE 5: DERIVATIVE INSTRUMENTS

During the normal course of operations, we are exposed to market risks including interest rates, foreign currency exchange rates and commodity prices. From time to time, and consistent with our risk management policies, we use derivative instruments to balance the cost and risk of such expenses. We do not use derivative instruments for trading or other speculative purposes.

The accounting for gains and losses that result from changes in the fair value of derivative instruments depends on whether the derivatives have been designated and qualify as hedging instruments and the type of hedging relationship. The interest rate swap agreements described below were designated as either cash flow hedges or fair value hedges. The changes in fair value of our interest rate swap cash flow hedges are recorded in accumulated other comprehensive income (AOCI) and are reclassified into interest expense in the same period the hedged items affect earnings. The changes in fair value of our interest rate swap fair value hedges are recorded as interest expense consistent with the change in the fair value of the hedged items attributable to the risk being hedged.

CASH FLOW HEDGES

During 2007, we entered into fifteen forward starting interest rate locks on \$1,500,000,000 of future debt issuances to hedge the risk of higher interest rates. Upon the 2007 and 2008 issuances of the related fixed-rate debt, underlying interest rates were lower than the rate locks and we terminated and settled these forward starting locks for cash payments of \$89,777,000. This amount was booked to AOCI and is being amortized to interest expense over the term of the related debt.

This amortization was reflected in the accompanying Consolidated Statements of Comprehensive Income for the years ended December 31 as follows:

in thousands	Location on Statement	2016	2015	2014
Cash Flow Hedges				
Loss reclassified from AOCI				
(effective portion)	Interest expense	\$ (2,008)	\$ (9,759)	\$ (7,988)

The losses reclassified from AOCI for the years ended December 31, 2015 and 2014 include the acceleration of a proportional amount of the deferred loss in the amount of \$7,208,000 and \$3,762,000, respectively, referable to the debt purchases as described in Note 6.

For the 12-month period ending December 31, 2017, we estimate that \$2,179,000 of the pretax loss in AOCI will be reclassified to earnings.

FAIR VALUE HEDGES

In June 2011, we issued \$500,000,000 of 6.50% fixed-rate notes due in 2016 to refinance near term floating-rate debt. Concurrently, we entered into interest rate swap agreements in the stated amount of \$500,000,000 to reestablish the pre-refinancing mix of fixed-rate and floating-rate debt. Under these agreements, we paid 6-month London Interbank Offered Rate (LIBOR) plus a spread of 4.05% and received a fixed interest rate of 6.50%. Additionally, in June 2011, we entered into interest rate swap agreements on our \$150,000,000 of 10.125% fixed-rate notes due in 2015. Under these agreements, we paid 6-month LIBOR plus a spread of 8.03% and received a fixed interest rate of 10.125%. In August 2011, we terminated and settled these interest rate swap agreements for \$25,382,000 of cash proceeds. The resulting gain was added to the carrying value of the related debt and was amortized as a reduction to interest expense over the terms of the related debt using the effective interest method.

This deferred gain amortization was reflected in the accompanying Consolidated Statements of Comprehensive Income for the years ended December 31 as follows:

in thousands	2016		2015		2014
Deferred Gain on Settlement					
Amortized to earnings as a reduction to interest expense	\$ 0	\$	3,036	\$	10,674

The deferred gain was fully amortized in December 2015, concurrent with the retirement of the 10.125% notes due 2015. The amortized deferred gains for the years ended December 31, 2015 and 2014 include the acceleration of a proportional amount of the deferred gain in the amount of \$1,642,000 and \$8,032,000, respectively, referable to the debt purchases as described in Note 6.

NOTE 6: DEBT

Debt at December 31 is detailed as follows:

	Err		
in thousands	Effective Interest Rates	2016	2015
Short-term Debt	interest Nates	2010	2010
Bank line of credit expires 2021 1, 2, 3	n/a	\$ 0	\$ 0
Total short-term debt		\$ 0	\$ 0
Long-term Debt		-	
Bank line of credit expires 2021 1, 2, 3	1.25%	\$ 235,000	\$ 235,000
7.00% notes due 2018	7.87%	272,512	272,512
10.375% notes due 2018	10.63%	250,000	250,000
7.50% notes due 2021	7.75%	600,000	600,000
8.85% notes due 2021	8.88%	6,000	6,000
Delayed draw term loan 2,3	1.25%	0	0
4.50% notes due 2025	4.65%	400,000	400,000
7.15% notes due 2037	8.05%	240,188	240,188
Other notes ³	6.31%	365	498
Total long-term debt - face value		\$ 2,004,065	\$ 2,004,198
Unamortized discounts and debt issuance costs		(21,176)	(23,734)
Total long-term debt - book value		\$ 1,982,889	\$ 1,980,464
Less current maturities		138	130
Total long-term debt - reported value		\$ 1,982,751	\$ 1,980,334
Estimated fair value of long-term debt		\$ 2,243,213	\$ 2,204,816

¹ Borrowings on the bank line of credit are classified as short-term debt if we intend to repay within twelve months and as long-term debt otherwise.

Our total long-term debt - book value is presented in the table above net of unamortized discounts from par and unamortized deferred debt issuance costs. Discounts and debt issuance costs are amortized using the effective interest method over the terms of the respective notes resulting in \$4,418,000 of net interest expense for these items for the year ended December 31, 2016.

The estimated fair value of our debt presented in the table above was determined by: (1) averaging several asking price quotes for the publicly traded notes and (2) assuming par value for the remainder of the debt. The fair value estimates for the publicly traded notes were based on Level 2 information (as defined in Note 1, caption Fair Value Measurements) as of their respective balance sheet dates.

² The effective interest rate is the spread over LIBOR as of the most recent balance sheet date.

³ Non-publicly traded debt.

LINE OF CREDIT

In December 2016, among other favorable changes, we extended the maturity date of our unsecured \$750,000,000 line of credit from June 2020 to December 2021 (incurring \$1,860,000 of transaction fees together with the new term loan described below). The credit agreement contains affirmative, negative and financial covenants customary for an unsecured investment-grade facility. The primary negative covenant limits our ability to incur secured debt. The financial covenants are: (1) a maximum ratio of debt to EBITDA of 3.5:1 (upon certain acquisitions, the maximum ratio can be 3.75:1 for three quarters), and (2) a minimum ratio of EBITDA to net cash interest expense of 3.0:1. As of December 31, 2016, we were in compliance with the line of credit covenants.

Borrowings on our line of credit are classified as short-term debt if we intend to repay within twelve months and as long-term debt if we have the intent and ability to extend repayment beyond twelve months. Borrowings bear interest, at our option, at either LIBOR plus a credit margin ranging from 1.00% to 1.75%, or SunTrust Bank's base rate (generally, its prime rate) plus a credit margin ranging from 0.00% to 0.75%. The credit margin for both LIBOR and base rate borrowings is determined by our credit ratings. Standby letters of credit, which are issued under the line of credit and reduce availability, are charged a fee equal to the credit margin for LIBOR borrowings plus 0.175%. We also pay a commitment fee on the daily average unused amount of the line of credit that ranges from 0.10% to 0.25% determined by our credit ratings. As of December 31, 2016, the credit margin for LIBOR borrowings was 1.25%, the credit margin for base rate borrowings was 0.25%, and the commitment fee for the unused amount was 0.15%.

As of December 31, 2016, our available borrowing capacity was \$475,462,000. Utilization of the borrowing capacity was as follows:

- \$235,000,000 was borrowed
- \$39,538,000 was used to provide support for outstanding standby letters of credit

TERM DEBT

All of our term debt is unsecured. \$1,768,700,000 of such debt is governed by two essentially identical indentures that contain customary investment-grade type covenants. The primary covenant in both indentures limits the amount of secured debt we may incur without ratably securing such debt. As of December 31, 2016, we were in compliance with all of the term debt covenants.

In December 2016, we entered into an unsecured \$250,000,000 delayed draw term loan (incurring, together with the line of credit extension mentioned previously, \$1,860,000 of transaction costs). The term loan is provided by the same group of banks that provides our line of credit and is governed by the same credit agreement as the line of credit. As such, it is subject to the same affirmative, negative, and financial covenants.

The term loan may be funded in up to three draws through June 21, 2017, after which any undrawn amount expires. Borrowings bear interest in the same manner as the line of credit. Until June 21, 2017, we also pay a commitment fee on the undrawn amount in the same manner as the line of credit. The term loan principal will be repaid quarterly beginning March 2018 (quarter 5 after closing) as follows: quarters 5 - 8 @ 0.625%; quarters 9 - 12 @ 1.25%; quarters 13 - 19 @ 1.875% and quarter 20 @ 79.375%. The term loan may be prepaid at any time without penalty.

In 2015, we issued \$400,000,000 of 4.50% senior notes due 2025. Proceeds (net of underwriter fees and other transaction costs) of \$395,207,000, together with cash on hand and borrowings under our line of credit, funded: (1) the purchase, via tender offer, of \$127,488,000 principal amount (33%) of the 7.00% notes due 2018, (2) the redemption of \$218,633,000 principal amount (100%) of the 6.40% notes due 2017, and (3) the redemption of \$125,001,000 principal amount (100%) of the 6.50% notes due 2016. These debt purchases cost \$530,923,000, including a \$59,293,000 premium above the principal amount of the notes and transaction costs of \$508,000. The premium primarily reflects the trading price of the notes relative to par before the tender offer commencement. Additionally, we recognized \$7,274,000 of net noncash expense associated with the acceleration of a proportional amount of unamortized discounts, deferred debt issuance costs, and deferred interest rate derivative settlement gains and losses. The combined charge of \$67,075,000 was a component of interest expense for the year ended December 31, 2015.

Additionally in 2015, we repaid our \$150,000,000 10.125% notes due 2015 and our \$14,000,000 industrial revenue bond due 2022 via borrowing on our line of credit. These repayments did not incur any prepayment penalties.

DEBT PAYMENTS

During 2016, our debt payments, excluding the line of credit, were composed of \$130,000 principal and \$125,748,000 interest.

As described above, during 2015, we purchased/redeemed \$471,122,000 principal amount of debt using the proceeds from the 2015 debt issuance, cash on hand and borrowings on our line of credit. Additionally in 2015, we borrowed on our line of credit to repay our \$14,000,000 industrial revenue bond due 2022 and our \$150,000,000 10.125% notes due 2015.

The total scheduled (principal and interest) debt payments, excluding the line of credit, for the five years subsequent to December 31, 2016 are as follows:

in thousands	Total	Principal			Interest	
Debt Payments (excluding the line of credit)						
2017	\$ 125,878	\$	138	\$	125,740	
2018	638,725		522,531		116,194	
2019	80,740		23		80,717	
2020	80,741		25		80,716	
2021	664,174		606,026		58,148	

STANDBY LETTERS OF CREDIT

We provide, in the normal course of business, certain third-party beneficiaries standby letters of credit to support our obligations to pay or perform according to the requirements of an underlying agreement. Such letters of credit typically have an initial term of one year, typically renew automatically, and can only be modified or cancelled with the approval of the beneficiary. All of our standby letters of credit are issued by banks that participate in our \$750,000,000 line of credit, and reduce the borrowing capacity thereunder. Our standby letters of credit as of December 31, 2016 are summarized by purpose in the table below:

in thousands	
Standby Letters of Credit	
Risk management insurance	\$ 34,111
Reclamation/restoration requirements	5,427
Total	\$ 39,538

NOTE 7: OPERATING LEASES

Rental expense from continuing operations under nonmineral operating leases for the years ended December 31, exclusive of rental payments made under leases of one month or less, is summarized as follows:

in thousands	2016	2015	2014	
Operating Leases				
Minimum rentals	\$ 52,713	\$ 49,461	\$	42,887
Contingent rentals (based principally on usage)	57,278	60,380		56,717
Total	\$ 109,991	\$ 109,841	\$	99,604

Future minimum operating lease payments under all leases with initial or remaining noncancelable lease terms in excess of one year, exclusive of mineral leases (see Note 12), as of December 31, 2016 are payable as follows:

in thousands	
Future Minimum Operating Lease Payments	
2017	\$ 31,017
2018	29,389
2019	25,132
2020	23,022
2021	21,312
Thereafter	119,602
Total	\$ 249,474

Lease agreements frequently include renewal options and require that we pay for utilities, taxes, insurance and maintenance expense. Options to purchase are also included in some lease agreements.

NOTE 8: ACCRUED ENVIRONMENTAL REMEDIATION COSTS

Our Consolidated Balance Sheets as of December 31 include accrued environmental remediation costs (measured on an undiscounted basis) as follows:

in thousands	2016	2015
Accrued Environmental Remediation Costs		
Continuing operations	\$ 9,136	\$ 6,876
Retained from former Chemicals business	10,716	10,988
Total	\$ 19,852	\$ 17,864

The long-term portion of the accruals noted above is included in other noncurrent liabilities in the accompanying Consolidated Balance Sheets and amounted to \$12,655,000 at December 31, 2016 and \$12,569,000 at December 31, 2015. The short-term portion of these accruals is included in other current liabilities in the accompanying Consolidated Balance Sheets.

The accrued environmental remediation costs in continuing operations relate primarily to the former Florida Rock, Tarmac, and CalMat facilities acquired in 2007, 2000 and 1999, respectively. The balances noted above for Chemicals relate to retained environmental remediation costs from the 2003 sale of the Performance Chemicals business and the 2005 sale of the Chloralkali business. Refer to Note 12 for additional discussion of these contingent environmental matters.

NOTE 9: INCOME TAXES

The components of earnings from continuing operations before income taxes are as follows:

in thousands	2016	2015	2014
Earnings from Continuing Operations			
before Income Taxes			
Domestic	\$ 513,721	\$ 293,547	\$ 264,473
Foreign	33,536	34,310	34,365
Total	\$ 547,257	\$ 327,857	\$ 298,838

Income tax expense from continuing operations consists of the following:

in thousands	2016	2015	2014
Income Tax Expense from			
Continuing Operations			
Current			
Federal	\$ 72,506	\$ 67,521	\$ 47,882
State and local	14,774	14,035	18,983
Foreign	6,974	7,784	7,174
Total	\$ 94,254	\$ 89,340	\$ 74,039
Deferred			
Federal	\$ 37,246	\$ 11,192	\$ 13,556
State and local	(6,647)	(4,888)	4,120
Foreign	(2)	(701)	(23)
Total	\$ 30,597	\$ 5,603	\$ 17,653
Total expense	\$ 124,851	\$ 94,943	\$ 91,692

Income tax expense differs from the amount computed by applying the federal statutory income tax rate to earnings from continuing operations before income taxes. The sources and tax effects of the differences are as follows:

dollars in thousands		2016		2015		2014
Income tax expense at the federal statutory tax rate of 35%	\$ 191,540	35.0%	\$ 114,750	35.0%	\$ 104,594	35.0%
Expense (Benefit) from Income Tax Differences						
Statutory depletion	(32,230)	-5.9%	(27,702)	-8.4%	(25,774)	-8.6%
State and local income taxes, net of federal						
income tax benefit 1	5,283	1.0%	5,945	1.8%	15,017	5.0%
U.S. production deduction	(8,790)	-1.6%	(5,099)	-1.6%	0	0.0%
Foreign tax credit carryforward	(6,513)	-1.2%	6,486	2.0%	0	0.0%
Permanently reinvested foreign earnings	(4,578)	-0.8%	(6,396)	-2.0%	0	0.0%
Share-based compensation ²	(22,443)	-4.1%	0	0.0%	0	0.0%
Other, net	2,582	0.4%	6,959	2.2%	(2,145)	-0.7%
Total income tax expense/						
Effective tax rate	\$ 124,851	22.8%	\$ 94,943	29.0%	\$ 91,692	30.7%

¹ The 2016 amount includes \$2,404 thousand of benefit related to the early adoption of ASU 2016-09.

² As discussed in Note 1, we early adopted ASU 2016-09 as of December 31, 2016.

Deferred taxes on the balance sheet result from temporary differences between the amount of assets and liabilities recognized for financial reporting and tax purposes. The components of the net deferred income tax liability at December 31 are as follows:

in thousands	2016	2015
Deferred Tax Assets Related to		
Employee benefits	\$ 85,123	\$ 78,999
Asset retirement obligations & other reserves	63,617	59,507
Deferred compensation	103,947	117,298
State net operating losses	54,498	61,658
Federal credit carryforwards	18,139	34,340
Other	44,843	48,856
Total gross deferred tax assets	370,167	400,658
Valuation allowance	(44,237)	(59,323)
Total net deferred tax assets	\$ 325,930	\$ 341,335
Deferred Tax Liabilities Related to		
Property, plant & equipment	\$ 664,763	\$ 665,057
Goodwill/other intangible assets	327,666	324,910
Other	36,355	32,464
Total deferred tax liabilities	\$ 1,028,784	\$ 1,022,431
Net deferred tax liability	\$ 702,854	\$ 681,096

The above net deferred tax liabilities are reflected in the accompanying Consolidated Balance Sheets as noncurrent liabilities.

Each quarter we analyze the likelihood that our deferred tax assets will be realized. A valuation allowance is recorded if, based on the weight of all available positive and negative evidence, it is more likely than not (a likelihood of more than 50%) that some portion, or all, of a deferred tax asset will not be realized.

As noted above, we have state net operating loss carryforward deferred tax assets of \$54,498,000 of which \$53,220,000 relates to Alabama. The Alabama net operating loss carryforward, if not used, would expire in years 2023 – 2029. Before 2015, this Alabama deferred tax asset carried a full valuation allowance. During 2015, we restructured our legal entities which resulted in a partial release of the valuation allowance in the amount of \$4,655,000. During the fourth quarter of 2016, based on our continued positive performance, we recorded an additional partial release of the valuation allowance in the amount of \$4,791,000.

As of December 31, 2016, income tax receivables of \$10,201,000 are included in accounts and notes receivable in the accompanying Consolidated Balance Sheet. These are federal and state amended return receivables and overpayments that we have requested to be refunded. There were similar receivables of \$4,138,000 as of December 31, 2015.

Our liability for unrecognized tax benefits is discussed in our accounting policy for income taxes (see Note 1, caption Income Taxes). Changes in our liability for unrecognized tax benefits for the years ended December 31 are as follows:

in thousands	2016	2015	2014
Unrecognized tax benefits as of January 1	\$ 8,447	\$ 7,057	\$ 12,155
Increases for tax positions related to			
Prior years	1,368	491	229
Current year	1,040	942	528
Decreases for tax positions related to			
Prior years	0	0	(53)
Settlements with taxing authorities	0	0	0
Expiration of applicable statute of limitations	(27)	(43)	(5,802)
Unrecognized tax benefits as of December 31	\$ 10,828	\$ 8,447	\$ 7,057

We classify interest and penalties recognized on the liability for unrecognized tax benefits as income tax expense. Interest and penalties recognized as income tax expense (benefit) were \$266,000 in 2016, \$138,000 in 2015 and \$(1,067,000) in 2014. The balance of accrued interest and penalties included in our liability for unrecognized tax benefits as of December 31 was \$1,369,000 in 2016, \$1,103,000 in 2015 and \$965,000 in 2014.

Our liability for unrecognized tax benefits at December 31 in the table above include \$9,884,000 in 2016, \$7,614,000 in 2015 and \$6,282,000 in 2014 that would affect the effective tax rate if recognized.

We are routinely examined by various taxing authorities. We anticipate no single tax position generating a significant increase or decrease in our liability for unrecognized tax benefits within 12 months of this reporting date.

We file income tax returns in U.S. federal, various state and foreign jurisdictions. Generally, we are not subject to significant changes in income taxes by any taxing jurisdiction for the years before 2013.

As of December 31, 2016, we have \$154,874,000 of accumulated undistributed earnings from our foreign subsidiaries. We consider these earnings to be indefinitely reinvested and, therefore, have not recorded income taxes on these earnings. If we were to distribute these earnings in the form of dividends, the distribution would result in U.S. income taxes of \$32,860,000.

NOTE 10: BENEFIT PLANS

PENSION PLANS

We sponsor three qualified, noncontributory defined benefit pension plans. These plans cover substantially all employees hired before July 2007, other than those covered by union-administered plans. Normal retirement age is 65, but the plans contain provisions for earlier retirement. Benefits for the Salaried Plan and the Chemicals Hourly Plan are generally based on salaries or wages and years of service; the Construction Materials Hourly Plan provides benefits equal to a flat dollar amount for each year of service. In addition to these qualified plans, we sponsor three unfunded, nonqualified pension plans. The projected benefit obligation presented in the table below includes \$85,021,000 and \$89,652,000 related to these unfunded, nonqualified pension plans for 2016 and 2015, respectively.

Effective July 2007, we amended our defined benefit pension plans to no longer accept new participants. In December 2013, we amended our defined benefit pension plans so that future benefit accruals for salaried pension participants ceased effective December 31, 2015.

The following table sets forth the combined funded status of the plans and their reconciliation with the related amounts recognized in our consolidated financial statements at December 31:

in thousands	2016	2015
Change in Benefit Obligation Projected benefit obligation at beginning of year Service cost Interest cost Actuarial (gain) loss Benefits paid	\$ 988,453 5,343 36,505 24,675 (48,302)	\$ 1,083,222 4,851 44,065 (63,725) (79,960)
Projected benefit obligation at end of year	\$ 1,006,674	\$ 988,453
Change in Fair Value of Plan Assets Fair value of assets at beginning of year Actual return on plan assets Employer contribution Benefits paid	\$ 745,686 42,555 9,576 (48,302)	\$ 816,972 (5,373) 14,047 (79,960)
Fair value of assets at end of year	\$ 749,515	\$ 745,686
Funded status	(257,159)	(242,767)
Net amount recognized	\$ (257,159)	\$ (242,767)
Amounts Recognized in the Consolidated Balance Sheets Noncurrent assets Current liabilities Noncurrent liabilities	\$ 0 (9,375) (247,784)	\$ 0 (9,106) (233,661)
Net amount recognized	\$ (257,159)	\$ (242,767)
Amounts Recognized in Accumulated Other Comprehensive Income Net actuarial loss Prior service credit	\$ 250,099 (361)	\$ 222,580 (404)
Total amount recognized	\$ 249,738	\$ 222,176

The accumulated benefit obligation (ABO) and the projected benefit obligation (PBO) exceeded plan assets for all of our defined benefit plans at December 31, 2016 and December 31, 2015, except for the Chemicals Hourly Plan where the plan assets exceeded the ABO by \$277,000. The ABO for all of our defined benefit pension plans totaled \$1,006,001,000 (unfunded, nonqualified plans of \$85,021,000) at December 31, 2016 and \$987,724,000 (unfunded, nonqualified plans of \$89,652,000) at December 31, 2015.

The following table sets forth the components of net periodic benefit cost, amounts recognized in other comprehensive income and weighted-average assumptions of the plans at December 31:

dollars in thousands	2016	2015	2014
Components of Net Periodic Pension			
Benefit Cost			
Service cost	\$ 5,343	\$ 4,851	\$ 4,157
Interest cost	36,505	44,065	44,392
Expected return on plan assets	(51,562)	(54,736)	(50,802)
Settlement charge	0	2,031	0
Amortization of prior service cost (credit)	(43)	48	188
Amortization of actuarial loss	6,163	21,641	11,221
Net periodic pension benefit cost (credit)	\$ (3,594)	\$ 17,900	\$ 9,156
Changes in Plan Assets and Benefit			
Obligations Recognized in Other			
Comprehensive Income			
Net actuarial loss (gain)	\$ 33,682	\$ (3,615)	\$ 118,915
Reclassification of actuarial loss	(6,163)	(23,672)	(11,221)
Reclassification of prior service (cost) credit	43	(48)	(188)
Amount recognized in other comprehensive			
income	\$ 27,562	\$ (27,335)	\$ 107,506
Amount recognized in net periodic pension			
benefit cost and other comprehensive			
income	\$ 23,968	\$ (9,435)	\$ 116,662
Assumptions			
Weighted-average assumptions used to			
determine net periodic benefit cost for			
years ended December 31			
Discount rate — PBO	4.55%	4.14%	4.91%
Discount rate — service cost	4.68%	4.14%	4.91%
Discount rate — interest cost	3.79%	4.14%	4.91%
Expected return on plan assets	7.50%	7.50%	7.50%
Rate of compensation increase	0.500/	0.700/	0.500/
(for salary-related plans)	3.50%	3.70%	3.50%
Weighted-average assumptions used to			
determine benefit obligation at			
December 31			
Discount rate	4.29%	4.54%	4.14%
Rate of compensation increase			
_(for salary-related plans)	3.50%	3.50%	3.70%

The 2015 settlement charge noted above relates to a lump sum payment to a former employee from the nonqualified plan. This \$2,031,000 charge is reflected within both cost of revenues and selling, administrative and general expenses in our accompanying Consolidated Statement of Comprehensive Income for the year ended December 31, 2015.

The estimated net actuarial loss and prior service credit that will be amortized from accumulated other comprehensive income into net periodic pension benefit cost (credit) during 2017 are \$6,988,000 and \$(73,000), respectively.

Our expected return on plan assets is: (1) a long-term view based on our current asset allocation, and (2) a judgment informed by consultation with our retirement plans' consultant and our pension plans' actuary. The expected return on plan assets used to determine 2016 pension benefit cost was 7.50%.

We establish our pension investment policy by evaluating asset/liability studies periodically performed by our consultants. These studies estimate trade-offs between expected returns on our investments and the variability in anticipated cash contributions to fund our pension liabilities. Our policy balances the variability in potential pension fund contributions to expected returns on our investments.

Our current strategy for implementing this policy is to invest in publicly traded equities and in publicly traded debt and private, nonliquid opportunities, such as venture capital, commodities, buyout funds and mezzanine debt. The target allocation ranges for plan assets are as follows: equity securities — 50% to 77%; debt securities — 15% to 27%; specialty investments — 0% to 20%; commodities — 0% to 6%; and cash reserves — 0% to 5%. Equity securities include domestic investments and foreign equities in the Europe, Australia and Far East (EAFE) and International Finance Corporation (IFC) Emerging Market Indices. Debt securities primarily include domestic debt instruments, while specialty investments include investments in venture capital, buyout funds, mezzanine debt, private partnerships and an interest in a commodity index fund

The fair values and net asset values of our pension plan assets at December 31, 2016 and 2015 by asset category are as follows:

FAIR VALUE MEASUREMENTS AT DECEMBER 31, 2016

in thousands	Level 1 1	Level 2 ¹	Level 3 ¹	Total
Asset Category				
Debt securities	\$ 0	\$ 162,894	\$ 0	\$ 162,894
Investment funds				
Commodity funds	0	16,594	0	16,594
Equity funds	530	124,407	0	124,937
Investments in the fair value hierarchy	\$ 530	\$ 303,895	\$ 0	\$ 304,425
Interest in common/collective trusts (at NAV) ²				358,345
Venture capital and partnerships (at NAV) 2				86,745
Total pension plan assets				\$ 749,515

FAIR VALUE MEASUREMENTS AT DECEMBER 31, 2015

in thousands	Level 1 1	Level 2 1	Level 3 ¹	Total
Asset Category				
Debt securities	\$ 0	\$ 154,745	\$ 0	\$ 154,745
Investment funds				
Commodity funds	0	14,490	0	14,490
Equity funds	647	123,078	0	123,725
Investments in the fair value hierarchy	\$ 647	\$ 292,313	\$ 0	\$ 292,960
Interest in common/collective trusts (at NAV) ²				349,854
Venture capital and partnerships (at NAV) 2				102,872
Total pension plan assets				\$ 745,686

¹ See Note 1 under the caption Fair Value Measurements for a description of the fair value hierarchy.

² As discussed in Note 1, we adopted ASU 2015-07 as of March 31, 2016. As a result, pension plan assets measured using the net asset value practical expedient were excluded from the fair value hierarchy.

At each measurement date, we estimate the fair values and net asset values of our pension assets using various valuation techniques. We use, to the extent available, quoted market prices in active markets or observable market inputs in estimating the fair value of our pension assets. When quoted market prices or observable market inputs are not available, we use valuation techniques that rely on unobservable inputs to estimate the fair value of our pension assets. The following describes the types of investments included in each asset category listed in the tables above and the valuation techniques we used to determine the fair values or net asset values as of December 31, 2016 and 2015.

The debt securities category consists of bonds issued by U.S. federal, state and local governments, corporate debt securities, fixed income obligations issued by foreign governments, and asset-backed securities. The fair values of U.S. government and corporate debt securities are based on current market rates and credit spreads for debt securities with similar maturities. The fair values of debt securities issued by foreign governments are based on prices obtained from broker/dealers and international indices. The fair values of asset-backed securities are priced using prepayment speed and spread inputs that are sourced from the new issue market.

Investment funds consist of exchange traded and non-exchange traded funds. The commodity funds asset category consists of a single open-end commodity mutual fund. The equity funds asset category consists of a publicly traded mutual fund investing in domestic equities. For investment funds publicly traded on a national securities exchange, the fair value is based on quoted market prices. For investment funds not traded on an exchange, the total fair value of the underlying securities is used to determine the net asset value for each unit of the fund held by the pension fund. The estimated fair values of the underlying securities are generally valued based on quoted market prices. For securities without quoted market prices, other observable market inputs are used to determine the fair value.

Common/collective trust fund investments consist of index funds for domestic equities, an actively managed fund for international equities, and a short-term investment fund for highly liquid, short-term debt securities. Investments are valued at the net asset value (NAV) of units of a bank collective trust. The NAV is used as a practical expedient to estimate fair value. The NAV is based on the fair value of the underlying investments held by the fund less its liabilities. This practical expedient is not used when it is determined to be probable that the fund will sell the investment for an amount different than the reported NAV.

The venture capital and partnerships asset category consists of various limited partnership funds, mezzanine debt funds and leveraged buyout funds. NAV is used as a practical expedient to estimate fair value. The NAV of these investments has been estimated based on methods employed by the general partners, including consideration of, among other things, reference to third-party transactions, valuations of comparable companies operating within the same or similar industry, the current economic and competitive environment, creditworthiness of the corporate issuer, as well as market prices for instruments with similar maturities, terms, conditions and quality ratings. The use of different assumptions, applying different judgment to inherently subjective matters and changes in future market conditions could result in significantly different estimates of fair value of these securities.

Total employer contributions to the pension plans are presented below:

in thousands	Pension
Employer Contributions	
2014	\$ 5,488
2015	14,047
2016	9,576
2017 (estimated)	18,875

During 2016, 2015 and 2014, we made no contributions to our qualified pension plans. We anticipate contributing \$9,500,000 to our qualified pension plans in 2017. For our nonqualified pension plans, we contributed \$9,576,000, \$14,047,000 and \$5,488,000 during 2016, 2015 and 2014, respectively, and expect to contribute \$9,375,000 during 2017.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

in thousands	Pension
Estimated Future Benefit Payments	
2017	\$ 52,691
2018	55,221
2019	56,720
2020	57,664
2021	58,755
2022-2026	304,149

We contribute to a number of multiemployer defined benefit pension plans under the terms of collective-bargaining agreements for union-represented employees. A multiemployer plan is subject to collective bargaining for employees of two or more unrelated companies. Multiemployer plans are managed by boards of trustees on which management and labor have equal representation. However, in most cases, management is not directly represented. The risks of participating in multiemployer plans differ from single employer plans as follows:

- assets contributed to a multiemployer plan by one employer may be used to provide benefits to employees of other participating employers
- if a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers
- if we cease to have an obligation to contribute to one or more of the multiemployer plans to which we contribute, we may be required to pay those plans an amount based on the underfunded status of the plan, referred to as a withdrawal liability

None of the multiemployer pension plans that we participate in are individually significant. Our contributions to individual multiemployer pension funds did not exceed 5% of the fund's total contributions in the three years ended December 31, 2016, 2015 and 2014. Total contributions to multiemployer pension plans were \$10,435,000 in 2016, \$9,800,000 in 2015 and \$8,503,000 in 2014.

As of December 31, 2016, a total of 12.8% of our domestic hourly labor force was covered by collective-bargaining agreements. Of such employees covered by collective-bargaining agreements, 8.5% were covered by agreements that expire in 2017. We also employed 305 union employees in Mexico who are covered by a collective-bargaining agreement that will expire in 2017. None of our union employees in Mexico participate in multiemployer pension plans.

In addition to the pension plans noted above, we had one unfunded supplemental retirement plan as of December 31, 2016 and 2015. The accrued costs for the supplemental retirement plan were \$1,320,000 at December 31, 2016 and \$1,384,000 at December 31, 2015.

POSTRETIREMENT PLANS

In addition to pension benefits, we provide certain healthcare and life insurance benefits for some retired employees. In 2012, we amended our postretirement healthcare plan to cap our portion of the medical coverage cost at the 2015 level. Substantially all our salaried employees and, where applicable, certain of our hourly employees may become eligible for these benefits if they reach a qualifying age and meet certain service requirements. Generally, Company-provided healthcare benefits end when covered individuals become eligible for Medicare benefits, become eligible for other group insurance coverage or reach age 65, whichever occurs first.

The March 2014 sale of our cement and concrete businesses in the Florida area (see Note 19) significantly reduced total expected future service of our postretirement plans resulting in a reduction in the projected benefit obligation of \$2,639,000 and a one-time curtailment gain of \$3,832,000. This gain is reflected within gain on sale of property, plant & equipment and businesses in our accompanying Consolidated Statement of Comprehensive Income for the year ended December 31, 2014.

The following table sets forth the combined funded status of the plans and their reconciliation with the related amounts recognized in our consolidated financial statements at December 31:

in thousands		2016	2015
Change in Benefit Obligation			
Projected benefit obligation at beginning of year	\$	48,605	\$ 85,336
Service cost		1,123	1,894
Interest cost		1,209	2,485
Actuarial gain		(111)	(35, 195)
Benefits paid		(5,280)	(5,915)
Projected benefit obligation at end of year	\$	45,546	\$ 48,605
Change in Fair Value of Plan Assets			
Fair value of assets at beginning of year	\$	0	\$ 0
Actual return on plan assets		0	0
Fair value of assets at end of year	\$	0	\$ 0
Funded status	\$	(45,546)	\$ (48,605)
Net amount recognized	\$	(45,546)	\$ (48,605)
Amounts Recognized in the Consolidated	0		
Balance Sheets			
Current liabilities	\$	(6,013)	\$ (6,287)
Noncurrent liabilities		(39,533)	(42,318)
Net amount recognized	\$	(45,546)	\$ (48,605)
Amounts Recognized in Accumulated			
Other Comprehensive Income			
Net actuarial gain	\$	(22,685)	\$ (24, 325)
Prior service credit		(19,692)	(23,928)
Total amount recognized	\$	(42,377)	\$ (48,253)

The following table sets forth the components of net periodic benefit cost, amounts recognized in other comprehensive income, weighted-average assumptions and assumed trend rates of the plans at December 31:

dollars in thousands		2016	2015	2014
Components of Net Periodic Postretirement Benefit Cost				
Service cost Interest cost Curtailment gain Amortization of prior service credit	\$	1,123 1,209 0 (4,236)	\$ 1,894 2,485 0 (4,232)	\$ 2,146 3,297 (3,832) (4,327)
Amortization of actuarial (gain) loss Net periodic postretirement benefit cost (credit)	\$	(1,751) (3,655)	\$ 37 184	\$ (2,489)
Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income Net actuarial gain	**************************************	(111)	\$ (35,209)	 (5,256)
Reclassification of actuarial gain (loss) Reclassification of prior service credit		1,751 [°] 4,236	(37) 4,232	(227) 8,159
Amount recognized in other comprehensive income	\$	5,876	\$ (31,014)	\$ 2,676
Amount recognized in net periodic postretirement benefit cost and other comprehensive income	\$	2,221	\$ (30,830)	\$ 187
Assumptions Assumed Healthcare Cost Trend Rates at December 31 Healthcare cost trend rate assumed				
for next year Rate to which the cost trend rate gradually		n/a	n/a	7.50%
declines Year that the rate reaches the rate it is		n/a	n/a	5.00%
assumed to maintain		n/a	n/a	2025
Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31				
Discount rate — PBO Discount rate — service cost Discount rate — interest cost		3.69% 3.77% 2.81%	3.50% 3.50% 3.50%	4.10% 4.10% 4.10%
Weighted-average assumptions used to determine benefit obligation at December 31				
Discount rate		3.58%	3.69%	3.50%

The estimated net actuarial gain and prior service credit that will be amortized from accumulated other comprehensive income into net periodic postretirement benefit cost (credit) during 2017 are \$(1,724,000) and \$(4,236,000), respectively.

Total employer contributions to the postretirement plans are presented below:

in thousands	Post	retirement
Employer Contributions		
2014	\$	7,739
2015		5,915
2016		5,280
2017 (estimated)		6,013

The employer contributions shown above are equal to the cost of benefits during the year. The plans are not funded and are not subject to any regulatory funding requirements.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

in thousands	Pos	tretirement
Estimated Future Benefit Payments		
2017	\$	6,013
2018		5,757
2019		5,510
2020		5,227
2021		4,826
2022–2026		18,546

Contributions by participants to the postretirement benefit plans for the years ended December 31 are as follows:

in thousands	Pos	tretirement
Participants Contributions		
2014	\$	1,873
2015		2,031
2016		2,085

PENSION AND OTHER POSTRETIREMENT BENEFITS ASSUMPTIONS

Each year we review our assumptions about the discount rate, the expected return on plan assets, and the rate of increase in the per capita cost of covered healthcare benefits. Annual pay increases after 2015 do not increase our pension plan obligations as a result of a 2013 plan amendment.

In selecting the discount rate, we consider the yield on high-quality bonds with a duration equal to the duration of plan liabilities. At December 31, 2016, the discount rates used to measure the benefit obligation for our various plans ranged from 3.43% to 4.41% (December 31, 2015 ranged from 3.53% to 4.68%).

In 2016, we changed our method to estimate the service and interest cost components of net periodic benefit cost for our defined benefit pension and other postretirement benefit plans. Previously, we estimated the service and interest cost components using a single weighted-average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period. As of 2016, we elected to use a full yield curve approach to estimate the service and interest cost, applying the specific spot rates along the yield curve to the relevant projected cash flows. We made this change to provide a more precise measurement of service and interest costs by improving the correlation between projected benefit cash flows to the corresponding yield curve spot rates.

We accounted for this change as a change in estimate and, accordingly, accounted for it prospectively as of 2016. The weighted-average discount rates used to measure service cost and interest cost for 2016 were 4.68% and 3.79%, respectively, for our pension plans and 3.77% and 2.81%, respectively, for our other postretirement plans.

Our expected return on plan assets is: (1) a long-term view based on our current asset allocation, and (2) a judgment informed by consultation with our retirement plans' consultant and our pension plans' actuary. In estimating the expected return on plan assets, we consider past performance and long-term future expectations for the types of investments held by the plan as well as the expected long-term allocation of plan assets to these investments. At December 31, 2016, the expected return on plan assets was reduced to 7.00% (December 31, 2015 was 7.50%).

Future increases in the per capital cost of healthcare benefits will not increase our postretirement medical benefits obligation as a result of a 2012 plan amendment to cap medical coverage cost at the 2015 level.

DEFINED CONTRIBUTION PLANS

We sponsor two defined contribution plans. Substantially all salaried and nonunion hourly employees are eligible to be covered by one of these plans. Under these plans, we match employees' eligible contributions at established rates. Expense recognized in connection with these matching obligations totaled \$45,295,000 in 2016, \$36,085,000 in 2015 and \$29,215,000 in 2014.

NOTE 11: INCENTIVE PLANS

SHARE-BASED COMPENSATION PLANS

Our 2016 Omnibus Long-term Incentive Plan (Plan) authorizes the granting of stock options, Stock-Only Stock Appreciation Rights (SOSARs) and other types of share-based awards to key salaried employees and nonemployee directors. The maximum number of shares that may be issued under the Plan is 8,000,000.

PERFORMANCE SHARES — Each performance share unit is equal to and paid in one share of our common stock, but carries no voting or dividend rights. The number of units ultimately paid for performance share awards may range from 0% to 200% of the number of units awarded on the date of grant. Payment is based upon our Total Shareholder Return (TSR) performance relative to the TSR performance of the S&P 500®. Awards vest on December 31 of the fourth year after date of grant. Vesting is accelerated upon reaching retirement age, death, disability, or change of control, all as defined in the award agreement. Nonvested units are forfeited upon termination for any other reason. Expense provisions referable to performance share awards amounted to \$12,074,000 in 2016, \$13,159,000 in 2015 and \$16,863,000 in 2014.

The fair value of performance shares is estimated as of the date of grant using a Monte Carlo simulation model. The following table summarizes the activity for nonvested performance share units during the year ended December 31, 2016:

	Target	Weigh	ted-average
	Number		Grant Date
	of Shares		Fair Value
Performance Shares			
Nonvested at January 1, 2016	806,339	\$	63.13
Granted	164,498		87.73
Vested	(289,424)		53.65
Canceled/forfeited	(14,317)		68.49
Nonvested at December 31, 2016	667,096	\$	73.20

During 2015 and 2014, the weighted-average grant date fair value of performance shares granted was \$74.85 and \$63.42, respectively.

The aggregate values for distributed performance share awards are based on the closing price of our common stock as of the distribution date. The aggregate values of distributed performance shares for the years ended December 31 are as follows:

in thousands	2016	2015	2014
Aggregate value of distributed			
performance shares	\$ 60,443	\$ 26,258	\$ 0

RESTRICTED SHARES — Each restricted share unit is equal to and paid in one share of our common stock, but carries no voting or dividend rights. Awards vest on the fourth anniversary of the grant date. Vesting is accelerated upon reaching retirement age, death, disability, or change of control, all as defined in the award agreement. Nonvested units are forfeited upon termination for any other reason. Expense provisions referable to restricted share awards amounted to \$3,004,000 in 2016, \$982,000 in 2015 and \$704,000 in 2014.

The fair value of restricted shares is estimated as of the date of grant based on the stock price adjusted for dividends foregone. The following table summarizes the activity for nonvested restricted share units during the year ended December 31, 2016:

		Weigh	nted-average
	Number		Grant Date
	of Shares		Fair Value
Restricted Stock Units			
Nonvested at January 1, 2016	74,000	\$	58.23
Granted	63,350		87.77
Vested	0		0.00
Canceled/forfeited	(1,920)		87.77
Nonvested at December 31, 2016	135,430	\$	71.63

The weighted-average grant date fair value of restricted shares granted in 2015 was \$74.85. No restricted shares were granted in 2014.

There were no distributions of restricted shares during 2016, 2015 and 2014.

STOCK ONLY STOCK APPRECIATION RIGHTS (SOSARs) — SOSARs granted have an exercise price equal to the market value of our underlying common stock on the date of grant. The SOSARs vest ratably over 4 years and expire 10 years subsequent to the grant. Vesting is accelerated upon reaching retirement age, death, disability, or change of control, all as defined in the award agreement. Nonvested awards are forfeited upon termination for any other reason.

The fair value of SOSARs is estimated as of the date of grant using the Black-Scholes option pricing model. Compensation cost for SOSARs is based on this grant date fair value and is recognized for awards that ultimately vest. The following table presents the weighted-average fair value and the weighted-average assumptions used in estimating the fair value of grants during the years ended December 31:

	2016	2015	2014
SOSARs			
Fair value	\$ 29.20	\$ 25.17	\$ 21.94
Risk-free interest rate	1.66%	1.85%	2.40%
Dividend yield	1.39%	1.70%	1.64%
Volatility	30.42%	33.00%	33.00%
Expected term	9.00 years	8.00 years	8.00 years

The risk-free interest rate is based on the yield at the date of grant of a U.S. Treasury security with a maturity period approximating the SOSARs expected term. The dividend yield assumption is based on our historical dividend payouts adjusted for current expectations of future payouts. The volatility assumption is based on the historical volatility and expectations about future volatility of our common stock over a period equal to the SOSARs expected term. The expected term is based on historical experience and expectations about future exercises and represents the period of time that SOSARs granted are expected to be outstanding.

A summary of our SOSAR activity as of December 31, 2016 and changes during the year are presented below:

	Number of Shares	nted-average xercise Price	Weighted-average Remaining Contractual Life (Years)	Aggregate Intrinsic Value (in thousands)
SOSARs/Stock Options 1				
Outstanding at January 1, 2016	3,052,749	\$ 58.32		
Granted	97,700	92.02		
Exercised	(753, 251)	83.29		
Forfeited or expired	(4,767)	78.22		
Outstanding at December 31, 2016	2,392,431	\$ 51.80	4.30	\$ 178,558
Vested and expected to vest	2,379,036	\$ 51.70	4.28	\$ 177,794
Exercisable at December 31, 2016	2,005,030	\$ 47.30	3.62	\$ 158,651

¹ There were no stock options outstanding at December 31, 2016.

The aggregate intrinsic values in the table above represent the total pretax intrinsic value (the difference between our stock price on the last trading day of 2016 and the exercise price, multiplied by the number of in-the-money SOSARs) that would have been received by the option holders had all SOSARs been exercised on December 31, 2016. These values change based on the fair market value of our common stock. The aggregate intrinsic values of SOSARs/ stock options exercised for the years ended December 31 are as follows:

in thousands	2016	2015	2014
Aggregate intrinsic value of SOSARs/			
stock options exercised	\$ 27,705	\$ 43,620	\$ 7,372

The following table presents cash and stock consideration received and tax benefit realized from stock option/SOSAR exercises and compensation cost recorded referable to SOSARs/stock options for the years ended December 31:

in thousands	2016	2015	2014
SOSARs/Stock Options			
Cash and stock consideration received			
from exercises	\$ 0	\$ 72,884	\$ 23,199
Tax benefit from exercises	10,767	16,920	2,844
Compensation cost	2,744	2,221	4,650

DEFERRED STOCK UNITS — In addition to the share-based compensation plans for employees discussed above, we issue a limited number of deferred stock units to our nonemployee directors annually. These deferred stock units vest over three years (except for the 2016 grant which vested upon issuance) and accumulate dividends over the vesting period. Expense provisions referable to nonemployee director deferred stock units amounted to \$2,848,000 in 2016, \$1,886,000 in 2015 and \$1,668,000 in 2014.

CASH-BASED COMPENSATION PLANS

We have incentive plans under which cash awards may be made annually to officers and key employees. Expense provisions referable to these plans amounted to \$32,169,000 in 2016, \$26,325,000 in 2015 and \$27,442,000 in 2014.

NOTE 12: COMMITMENTS AND CONTINGENCIES

We have commitments in the form of unconditional purchase obligations as of December 31, 2016. These include commitments for the purchase of property, plant & equipment of \$132,046,000 and commitments for noncapital purchases of \$55,037,000. These commitments are due as follows:

in thousands	L	Inconditional Purchase Obligations
Property, Plant & Equipment		
2017	\$	131,846
Thereafter		200
Total	\$	132,046
Noncapital (primarily transportation and electricity contracts)		
2017	\$	24,402
2018–2019		19,406
2020–2021		7,229
Thereafter		4,000
Total	\$	55,037

Commitments for the purchase of property, plant & equipment for 2017 include \$85,293,000 for the construction of two new Panamax-class, self-unloading ships. Expenditures under noncapital purchase commitments totaled \$60,591,000 in 2016, \$76,178,000 in 2015 and \$65,582,000 in 2014.

We have commitments in the form of minimum royalties under mineral leases as of December 31, 2016 in the amount of \$216,241,000, due as follows:

in thousands	Mineral Leases
Minimum Royalties	
2017	\$ 22,153
2018–2019	36,196
2020–2021	23,513
Thereafter	134,379
Total	\$ 216,241

Expenditures for royalties under mineral leases totaled \$62,978,000 in 2016, \$58,048,000 in 2015 and \$49,685,000 in 2014. Refer to Note 7 for future minimum nonmineral operating lease payments.

Certain of our aggregates reserves are burdened by volumetric production payments (nonoperating interest) as described in Note 1 under the caption Deferred Revenue. As the holder of the working interest, we have responsibility to bear the cost of mining and producing the reserves attributable to this nonoperating interest.

As summarized by purpose in Note 6, our standby letters of credit totaled \$39,538,000 as of December 31, 2016.

As described in Note 9, our liability for unrecognized tax benefits is \$10,828,000 as of December 31, 2016.

As described in Note 17, our asset retirement obligations totaled \$223,872,000 as of December 31, 2016.

LITIGATION AND ENVIRONMENTAL MATTERS

We are subject to occasional governmental proceedings and orders pertaining to occupational safety and health or to protection of the environment, such as proceedings or orders relating to noise abatement, air emissions or water discharges. As part of our continuing program of stewardship in safety, health and environmental matters, we have been able to resolve such proceedings and to comply with such orders without any material adverse effects on our business.

We have received notices from the United States Environmental Protection Agency (EPA) or similar state or local agencies that we are considered a potentially responsible party (PRP) at a limited number of sites under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund) or similar state and local environmental laws. Generally we share the cost of remediation at these sites with other PRPs or alleged PRPs in accordance with negotiated or prescribed allocations. There is inherent uncertainty in determining the potential cost of remediating a given site and in determining any individual party's share in that cost. As a result, estimates can change substantially as additional information becomes available regarding the nature or extent of site contamination, remediation methods, other PRPs and their probable level of involvement, and actions by or against governmental agencies or private parties.

We have reviewed the nature and extent of our involvement at each Superfund site, as well as potential obligations arising under other federal, state and local environmental laws. While ultimate resolution and financial liability is uncertain at a number of the sites, in our opinion based on information currently available, the ultimate resolution of claims and assessments related to these sites will not have a material effect on our consolidated results of operations, financial position or cash flows, although amounts recorded in a given period could be material to our results of operations or cash flows for that period. Amounts accrued for environmental matters are presented in Note 8.

We are a defendant in various lawsuits in the ordinary course of business. It is not possible to determine with precision the outcome, or the amount of liability, if any, under these lawsuits, especially where the cases involve possible jury trials with as yet undetermined jury panels.

In addition to these lawsuits in which we are involved in the ordinary course of business, certain other material legal proceedings are specifically described below.

■ LOWER PASSAIC RIVER STUDY AREA (SUPERFUND SITE) — The Lower Passaic River Study Area is part of the Diamond Shamrock Superfund Site in New Jersey. Vulcan and approximately 70 other companies are parties (collectively the Cooperating Parties Group) to a May 2007 Administrative Order on Consent (AOC) with the EPA to perform a Remedial Investigation/Feasibility Study (draft RI/FS) of the lower 17 miles of the Passaic River (River). However, before the draft RI/FS was issued in final form, the EPA issued a record of decision (ROD) in March 2016 that calls for a bank-to-bank dredging remedy for the lower 8 miles of the River. The EPA estimates that the cost of implementing this proposal is \$1.38 billion. In September 2016, the EPA entered into an Administrative Settlement Agreement and Order on Consent with Occidental Corporation (Occidental) in which Occidental agreed to undertake the remedial design for this bank-to-bank dredging remedy, and to reimburse the United States for certain response costs.

Efforts to remediate the River have been underway for many years and have involved hundreds of entities that have had operations on or near the River at some point during the past several decades. We formerly owned a chemicals operation near the mouth of the River, which was sold in 1974. The major risk drivers in the River have been identified as dioxins, PCBs, DDx and mercury. We did not manufacture any of these risk drivers and have no evidence that any of these were discharged into the River by Vulcan.

The AOC does not obligate us to fund or perform the remedial action contemplated by either the draft RI/FS or the ROD. Furthermore, the parties who will participate in funding the remediation and their respective allocations have not been determined. We do not agree that a bank-to-bank remedy is warranted, and we are not obligated to fund any of the remedial action at this time; nevertheless, we previously estimated the cost to be incurred by us as a potential participant in a bank-to-bank dredging remedy and recorded an immaterial loss for this matter in 2015.

■ TEXAS BRINE MATTER — During the operation of its former Chemicals Division, Vulcan was the lessee to a salt lease from 1976 – 2005 in an underground salt dome formation in Assumption Parish, Louisiana. The Texas Brine Company (Texas Brine) operated this salt mine for our account. We sold our Chemicals Division in 2005 and assigned the lease to the purchaser and we have had no association with the leased premises or Texas Brine since that time. In August 2012, a sinkhole developed near the salt dome and numerous lawsuits were filed in state court in Assumption Parish, Louisiana. Other lawsuits, including class action litigation, were also filed in August 2012 in federal court in the Eastern District of Louisiana in New Orleans.

There are numerous defendants to the litigation in state and federal court. Vulcan was first brought into the litigation as a third-party defendant in August 2013 by Texas Brine. We have since been added as a direct and third-party defendant by other parties, including a direct claim by the state of Louisiana. The damages alleged in the litigation range from individual plaintiffs' claims for property damage, to the state of Louisiana's claim for response costs, to claims for physical damages to oil pipelines, to business interruption claims. In addition to the plaintiffs' claims, we have also been sued for contractual indemnity and comparative fault by both Texas Brine and Occidental. The total amount of damages claimed is in excess of \$500 million. It is alleged that the sinkhole was caused, in whole or in part, by our negligent actions or failure to act. It is also alleged that we breached the salt lease, as well as an operating agreement and a drilling agreement with Texas Brine; that we are strictly liable for certain property damages in our capacity as a former assignee of the salt lease; and that we violated certain covenants and conditions in the agreement under which we sold our Chemicals Division in 2005. We have made claims for contractual indemnity, comparative fault, and breach of contract against Texas Brine, as well as claims for contractual indemnity and comparative fault against Occidental. Discovery is ongoing and no trials are currently set.

In December 2016, we settled with the plaintiffs in one of these cases involving property damages but there are crossclaims remaining against us in that case. In February 2017, we offered to settle with the plaintiffs in the cases involving physical damages to oil pipelines. The insurers who have coverage at these settlement amounts agreed that the cases were covered by our policy. An immaterial loss limited to our insurance deductible was recognized during the fourth quarter. Except for these cases, at this time we cannot reasonably estimate a range of liability pertaining to this matter.

HEWITT LANDFILL MATTER (SUPERFUND SITE) — In September 2015, the Los Angeles Regional Water Quality Control Board (RWQCB) issued a Cleanup and Abatement Order (CAO) directing Vulcan to assess, monitor, cleanup and abate wastes that have been discharged to soil, soil vapor, and/or groundwater at the former Hewitt Landfill in Los Angeles. The CAO follows a 2014 Investigative Order from the RWQCB that sought data and a technical evaluation regarding the Hewitt Landfill, and a subsequent amendment to the Investigative Order requiring Vulcan to provide groundwater monitoring results to the RWQCB and to create and implement a work plan for further investigation of the Hewitt Landfill. In April 2016, we submitted an interim remedial action plan (IRAP) to the RWQCB, proposing a pilot test of a pump and treat system; testing and implementation of a leachate recovery system; and storm water capture and conveyance improvements. We are currently implementing the IRAP, including the drilling and installation of monitoring wells and construction of a treatment plant for a pilot-scale groundwater extraction and re-injection treatment system. The estimated cost to implement the IRAP is fully accrued. Operation of the pilot-scale treatment system began in January 2017. However, until this pilot testing is complete, we are unable to estimate the cost of remedial action.

We are also engaged in an ongoing dialogue with the EPA, the Los Angeles Department of Water and Power, and other stakeholders regarding the potential contribution of the Hewitt Landfill to groundwater contamination in the North Hollywood Operable Unit (NHOU) of the San Fernando Valley Superfund Site. We are gathering and analyzing data and developing technical information to determine the extent of possible contribution by the Hewitt Landfill to the groundwater contamination in the area. This work is also intended to assist in identification of other PRPs that may have contributed to groundwater contamination in the area.

In July 2016, the EPA sent a letter to us requesting that we enter into an AOC for remedial design work at the NHOU including, but not limited to, the design of two or more groundwater extraction wells to be located south of the Hewitt Landfill. In February 2017, the EPA sent a draft AOC to us. Vulcan and EPA representatives expect to engage in negotiations for a possible AOC during the first and second quarters of 2017.

It is not possible to predict with certainty the ultimate outcome of these and other legal proceedings in which we are involved and a number of factors, including developments in ongoing discovery or adverse rulings, or the verdict of a particular jury, could cause actual losses to differ materially from accrued costs. No liability was recorded for claims and litigation for which a loss was determined to be only reasonably possible or for which a loss could not be reasonably estimated. Legal costs incurred in defense of lawsuits are expensed as incurred. In addition, losses on certain claims and litigation described above may be subject to limitations on a per occurrence basis by excess insurance, as described in Note 1 under the caption Claims and Litigation Including Self-insurance.

NOTE 13: EQUITY

Our capital stock consists solely of common stock, par value \$1.00 per share. Holders of our common stock are entitled to one vote per share. Our Certificate of Incorporation also authorizes preferred stock, of which no shares have been issued. The terms and provisions of such shares will be determined by our Board of Directors upon any issuance of preferred shares in accordance with our Certificate of Incorporation.

In 2014, we issued 715,004 shares of common stock in connection with a business acquisition as described in Note 19.

Under a program that was discontinued in the fourth quarter of 2014, we occasionally sold shares of common stock to the trustee of our 401(k) retirement plan to satisfy the plan participants' elections to invest in our common stock. During 2014, we issued 485,306 shares for cash proceeds of \$30,620,000 under this arrangement.

There were no shares held in treasury as of December 31, 2016, 2015 and 2014.

Our common stock purchases (all of which were open market purchases) for the years ended December 31 are summarized below:

in thousands, except average cost	2016	2015	2014
Shares Purchased and Retired			
Number	1,427	228	0
Total cost 1	\$ 161,463	\$ 21,475	\$ 0
Average cost ¹	\$ 113.18	\$ 94.19	\$ 0.00

¹ Excludes commissions of \$0.02 per share.

As of December 31, 2016, 1,756,757 shares may be purchased under the current purchase authorization of our Board of Directors.

NOTE 14: OTHER COMPREHENSIVE INCOME

Comprehensive income comprises two subsets: net earnings and other comprehensive income (OCI). The components of other comprehensive income are presented in the accompanying Consolidated Statements of Comprehensive Income and Consolidated Statements of Equity, net of applicable taxes.

Amounts in accumulated other comprehensive income (AOCI), net of tax, at December 31, are as follows:

in thousands	2016	2015	2014
AOCI			
Cash flow hedges	\$ (13,300)	\$ (14,494)	\$ (20,322)
Pension and postretirement plans	(126,076)	(105,575)	(141,392)
Total	\$ (139,376)	\$ (120,069)	\$ (161,714)

Changes in AOCI, net of tax, for the three years ended December 31, 2016 are as follows:

in thousands		Cash Flow Hedges	Pension and Postretirement Benefit Plans		Total
AOCI	20			200	
Balance as of December 31, 2013	\$	(25,178)	\$ (74,453)	\$	(99,631)
Other comprehensive income (loss) before reclassifications Amounts reclassified from AOCI		0 4,856	(69,051) 2,112		(69,051) 6,968
Net OCI changes		4,856	(66,939)		(62,083)
Balance as of December 31, 2014	\$	(20,322)	\$ (141,392)	\$	(161,714)
Other comprehensive income (loss) before reclassifications Amounts reclassified from AOCI		0 5,828	23,832 11,985		23,832 17,813
Net OCI changes		5,828	35,817		41,645
Balance as of December 31, 2015	\$	(14,494)	\$ (105,575)	\$	(120,069)
Other comprehensive income (loss) before reclassifications Amounts reclassified from AOCI Net OCI changes		0 1,194 1,194	(20,583) 82 (20,501)		(20,583) 1,276 (19,307)
Balance as of December 31, 2016	\$	(13,300)	\$ (126,076)	\$	(139,376)

Amounts reclassified from AOCI to earnings, are as follows:

in thousands	,	2016	2015	2014
Reclassification Adjustment for Cash Flow				
Hedge Losses				
Interest expense	\$	2,008	\$ 9,759	\$ 7,988
Benefit from income taxes		(814)	(3,931)	(3,132)
Total ¹	\$	1,194	\$ 5,828	\$ 4,856
Amortization of Pension and Postretirement Plan				
Actuarial Loss and Prior Service Cost				
Cost of revenues	\$	109	\$ 15,916	\$ 2,789
Selling, administrative and general expenses		25	3,608	688
Benefit from income taxes		(52)	(7,539)	(1,365)
Total ²	\$	82	\$ 11,985	\$ 2,112
Total reclassifications from AOCI to earnings	\$	1,276	\$ 17,813	\$ 6,968

¹ Totals for 2015 and 2014 include the acceleration of a proportional amount of deferred losses on interest rate derivatives (see Note 5) referable to debt purchases (see Note 6).

² Total for 2015 includes a one-time settlement loss resulting from a lump sum payment to a former employee (see Note 10). Total for 2014 includes a one-time curtailment gain (see Note 10) resulting from the sale of our cement and concrete businesses in the Florida area (see Note 19).

NOTE 15: SEGMENT REPORTING

We have four operating (and reportable) segments organized around our principal product lines: Aggregates, Asphalt Mix, Concrete and Calcium.

The Aggregates segment produces and sells aggregates (crushed stone, sand and gravel, sand, and other aggregates) and related products and services (transportation and other). During 2016, the Aggregates segment principally served markets in twenty states, Washington D.C. and Mexico with a full line of aggregates, and two additional states with railroad ballast. Customers use aggregates primarily in the construction and maintenance of highways, streets and other public works and in the construction of housing and commercial, industrial and other nonresidential facilities. Customers are served by truck, rail and water distribution networks from our production facilities and sales yards. Due to the high weight-to-value ratio of aggregates, markets generally are local in nature. Quarries located on waterways and rail lines allow us to serve remote markets where local aggregates reserves may not be available.

The Asphalt Mix segment produces and sells asphalt mix in four states primarily in our southwestern and western markets.

The Concrete segment produces and sells ready-mixed concrete in six states, Washington D.C. and an immaterial amount in the Bahamas. In January 2015, we swapped our ready-mixed concrete operations in California (see Note 19) for asphalt mix operations, primarily in Arizona. In March 2014, we sold our concrete business in the Florida area (see Note 19) which in addition to ready-mixed concrete, included concrete block, precast concrete, as well as building materials purchased for resale.

The Calcium segment consists of a Florida facility that mines, produces and sells calcium products. Before the sale of our cement business in March 2014 (see Note 19), we produced and sold Portland and masonry cement in both bulk and bags from our Florida cement plant and imported and exported cement, clinker and slag and either resold, ground, blended, bagged or reprocessed those materials from other Florida facilities.

Aggregates comprise approximately 95% of asphalt mix by weight and 80% of ready-mixed concrete by weight. Our Asphalt Mix and Concrete segments are primarily supplied with their aggregates requirements from our Aggregates segment. These intersegment sales are made at local market prices for the particular grade and quality of product used in the production of asphalt mix and ready-mixed concrete. Customers for our Asphalt Mix and Concrete segments are generally served locally at our production facilities or by truck. Because asphalt mix and ready-mixed concrete harden rapidly, delivery is time constrained and generally confined to a radius of approximately 20 to 25 miles from the producing facility.

The vast majority of our activities are domestic. We sell a relatively small amount of construction aggregates outside the United States. Total domestic revenues were \$3,579,427,000 in 2016, \$3,410,773,000 in 2015 and \$2,979,470,000 in 2014. Nondomestic Aggregates segment revenues were \$13,240,000 in 2016, \$11,408,000 in 2015 and \$14,699,000 in 2014; there were no significant nondomestic revenues in our Asphalt Mix, Concrete or Calcium segments. Long-lived assets outside the United States, which consist primarily of property, plant & equipment, were \$188,652,000 in 2016, \$160,125,000 in 2015 and \$139,427,000 in 2014. Equity method investments of \$22,965,000 in 2016, \$22,967,000 in 2015 and \$22,924,000 in 2014 are included below in the identifiable assets for the Aggregates segment.

SEGMENT FINANCIAL DISCLOSURE

in thousands		2016		2015		2014
Total Revenues						
Aggregates ¹	\$	2,961,835	\$	2,777,758	\$	2,346,411
Asphalt Mix ²		512,310		530,692		445,538
Concrete ^{2, 3}		330,125		299,252		375,806
Calcium ⁴		8,860		8,596		25,032
Segment sales	\$	3,813,130	\$	3,616,298	\$	3,192,787
Aggregates intersegment sales		(220,463)		(194, 117)		(189,393)
Calcium intersegment sales		0		0		(9,225)
Total revenues	\$	3,592,667	\$	3,422,181	\$	2,994,169
Gross Profit						
Aggregates	\$	873,118	\$	755,666	\$	544,070
Asphalt Mix ²	•	97,682		78,225		38,080
Concrete ^{2, 3}		26,543		20,152		2,233
Calcium ⁴		3,474		3,490		3,199
Total	\$	1,000,817	\$		\$	587,582
Depreciation, Depletion, Accretion and Amortization (DDA&A)				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, , , , , , , , , , , , , , , , , , , ,
Aggregates	\$	236,472	\$	228,466	\$	227,042
Asphalt Mix ²	Ψ	16,797	Ψ	16,378	Ψ	10,719
Concrete ^{2, 3}		12,129		11,374		19,892
Calcium ⁴		774		679		1,554
Other		18,768		17,926		20,290
Total	\$	284,940	\$	NAMES OF THE PERSONS NAMES OF	\$	279,497
Capital Expenditures ⁵						
Aggregates	\$	297,737	\$	269,014	\$	180,026
Asphalt Mix ²		29,002		8,111		20,796
Concrete ^{2, 3}		10,047		19,053		19,542
Calcium ⁴		534		0		201
Corporate		7,621		7,846		2,532
Total	\$	344,941	\$	304,024	\$	223,097
Identifiable Assets ⁶						
Aggregates	\$	7,589,225	\$	7,540,273	\$	7,311,336
Asphalt Mix ²		259,514		251,716		264,172
Concrete ^{2, 3}		192,673		198,193		227,000
Calcium ⁴		4,959		5,509		5,818
Total identifiable assets	\$	8,046,371	\$	7,995,691	\$	7,808,326
General corporate assets		166,118		21,881		91,498
Cash and cash equivalents		258,986		284,060		141,273
Total assets	\$	8,471,475	\$	8,301,632	\$	8,041,097

¹ Includes product sales, as well as freight, delivery and transportation revenues, and other revenues related to services.

² In January 2015, we exchanged our California ready-mixed concrete operations for 13 asphalt mix plants, primarily in Arizona (see Note 19).

³ In March 2014, we sold our concrete business in the Florida area (see Note 19).

⁴ Includes cement and calcium products. In March 2014, we sold our cement business (see Note 19).

⁵ Capital expenditures include capitalized replacements of and additions to property, plant & equipment, including capitalized leases, renewals and betterments. Capital expenditures exclude property, plant & equipment obtained by business acquisitions.

⁶ Certain temporarily idled assets are included within a segment's Identifiable Assets but the associated DDA&A is shown within Other in the DDA&A section above as the related DDA&A is excluded from segment gross profit.

NOTE 16: SUPPLEMENTAL CASH FLOW INFORMATION

Supplemental information referable to the Consolidated Statements of Cash Flows is summarized below:

in thousands	2016 2015			2014	
Cash Payments					
Interest (exclusive of amount capitalized)	\$ 135,039	\$	208,288	\$ 241,841	
Income taxes	102,849		53,623	79,862	
Noncash Investing and Financing Activities					
Accrued liabilities for purchases of property,					
plant & equipment	\$ 26,676	\$	31,883	\$ 17,120	
Amounts referable to business acquisitions					
Liabilities assumed	798		2,645	26,622	
Fair value of noncash assets and liabilities exchanged	0		20,000	2,414	
Fair value of equity consideration	0		0	45,185	

NOTE 17: ASSET RETIREMENT OBLIGATIONS

Asset retirement obligations (AROs) are legal obligations associated with the retirement of long-lived assets resulting from the acquisition, construction, development and/or normal use of the underlying assets.

Recognition of a liability for an ARO is required in the period in which it is incurred at its estimated fair value. The associated asset retirement costs are capitalized as part of the carrying amount of the underlying asset and depreciated over the estimated useful life of the asset. The liability is accreted through charges to operating expenses. If the ARO is settled for other than the carrying amount of the liability, we recognize a gain or loss on settlement.

We record all AROs for which we have legal obligations for land reclamation at estimated fair value. Essentially all these AROs relate to our underlying land parcels, including both owned properties and mineral leases. For the years ended December 31, we recognized ARO operating costs related to accretion of the liabilities and depreciation of the assets as follows:

in thousands	2016 2015			2014	
ARO Operating Costs	ù.				
Accretion	\$	11,059	\$	11,474	\$ 11,601
Depreciation		6,353		6,515	4,462
Total	\$	17,412	\$	17,989	\$ 16,063

ARO operating costs are reported in cost of revenues. AROs are reported within other noncurrent liabilities in our accompanying Consolidated Balance Sheets.

Reconciliations of the carrying amounts of our AROs for the years ended December 31 are as follows:

in thousands	2016	2015
Asset Retirement Obligations		
Balance at beginning of year	\$ 226,594	\$ 226,565
Liabilities incurred	505	6,235
Liabilities settled	(17,114)	(18,048)
Accretion expense	11,059	11,474
Revisions, net	2,828	368
Balance at end of year	\$ 223,872	\$ 226,594

The ARO liabilities incurred during 2016 and 2015 relate primarily to acquisitions (see Note 19). ARO liabilities settled during 2016 and 2015 include \$12,602,000 and \$13,117,000, respectively, of reclamation activities required under a development agreement and conditional use permits at two adjacent aggregates sites on owned property in Southern California. The reclamation required under the development agreement will result in the restoration and development of 90 acres of previously mined property suitable for commercial and retail development.

NOTE 18: GOODWILL AND INTANGIBLE ASSETS

Acquired identifiable intangible assets are classified into three categories: (1) goodwill, (2) intangible assets with finite lives subject to amortization and (3) intangible assets with indefinite lives. Goodwill and intangible assets with indefinite lives are not amortized; rather, they are reviewed for impairment at least annually. For additional information about our policies on impairment reviews, see Note 1 under the captions Goodwill and Goodwill Impairment, and Impairment of Long-lived Assets excluding Goodwill.

GOODWILL

Goodwill is recognized when the consideration paid for a business exceeds the fair value of the tangible and identifiable intangible assets acquired. Goodwill is allocated to reporting units for purposes of testing goodwill for impairment. There were no charges for goodwill impairment in the years ended December 31, 2016, 2015 and 2014.

We have four reportable segments organized around our principal product lines: Aggregates, Asphalt Mix, Concrete and Calcium. Changes in the carrying amount of goodwill by reportable segment for the years ended December 31, 2016, 2015 and 2014 are summarized below:

in thousands	Aggregates	Д	sphalt Mix	Concrete	Calcium	Total
Goodwill						
Total as of December 31, 2014	\$ 3,003,191	\$	91,633	\$ 0 3	\$ 0	\$ 3,094,824
Total as of December 31, 2015	\$ 3,003,191	\$	91,633	\$ 0 9	\$ 0	\$ 3,094,824
Total as of December 31, 2016	\$ 3,003,191	\$	91,633	\$ 0 :	\$ 0	\$ 3,094,824

We test goodwill for impairment on an annual basis or more frequently if events or circumstances change in a manner that would more likely than not reduce the fair value of a reporting unit below its carrying value. A decrease in the estimated fair value of one or more of our reporting units could result in the recognition of a material, noncash write-down of goodwill.

INTANGIBLE ASSETS

Intangible assets acquired in business combinations are stated at their fair value determined as of the date of acquisition. Costs incurred to renew or extend the life of existing intangible assets are capitalized. These capitalized renewal/extension costs were immaterial for the years presented. Intangible assets consist of contractual rights in place (primarily permitting and zoning rights), noncompetition agreements, favorable lease agreements, customer relationships and trade names and trademarks. Intangible assets acquired individually or otherwise obtained outside a business combination consist primarily of permitting, permitting compliance and zoning rights and are stated at their historical cost less accumulated amortization.

See Note 19 for the details of the intangible assets acquired in business acquisitions during 2016, 2015 and 2014. Amortization of finite-lived intangible assets is computed based on the estimated life of the intangible assets. Contractual rights in place associated with aggregates reserves are amortized using the unit-of-production method based on estimated recoverable units. Other intangible assets are amortized principally by the straight-line method. Intangible assets are reviewed for impairment when events or circumstances indicate that the carrying amount may not be recoverable. As shown in Note 1 under the caption Fair Value Measurements, we incurred \$8,180,000 and \$2,858,000 of impairment charges related to intangible assets in 2016 and 2015, respectively. There were no charges for impairment of intangible assets in 2014.

The gross carrying amount and accumulated amortization by major intangible asset class for the years ended December 31 are summarized below:

in thousands	2016	2015
Gross Carrying Amount		
Contractual rights in place	\$ 742,085	\$ 735,935
Noncompetition agreements	6,757	2,800
Favorable lease agreements	9,479	16,677
Permitting, permitting compliance and zoning rights	112,058	99,513
Other ¹	4,171	4,092
Total gross carrying amount	\$ 874,550	\$ 859,017
Accumulated Amortization		
Contractual rights in place	\$ (77,515)	\$ (65,641)
Noncompetition agreements	(1,118)	(506)
Favorable lease agreements	(2,822)	(4,002)
Permitting, permitting compliance and zoning rights	(21,701)	(20,350)
Other ¹	(2,342)	(1,939)
Total accumulated amortization	\$ (105,498)	\$ (92,438)
Total Intangible Assets Subject to Amortization, net	\$ 769,052	\$ 766,579
Intangible Assets with Indefinite Lives	0	0
Total Intangible Assets, net	\$ 769,052	\$ 766,579
Amortization Expense for the Year	\$ 17,565	\$ 15,618

¹ Includes customer relationships and tradenames and trademarks.

Estimated amortization expense for the five years subsequent to December 31, 2016 is as follows:

in thousands	
Estimated Amortization Expense for Five Subsequent Years	
2017	\$ 16,308
2018	15,941
2019	16,222
2020	15,488
2021	14,288

NOTE 19: ACQUISITIONS AND DIVESTITURES

BUSINESS ACQUISITIONS

During 2016, the following assets were acquired for \$33,287,000 of consideration (\$32,537,000 cash and \$750,000 payable):

- an asphalt mix operation in New Mexico
- an aggregates facility in Texas
- a distribution business to complement our aggregates logistics and distribution activities in Georgia

None of the 2016 acquisitions listed above are material to our results of operations or financial position either individually or collectively. The fair value of consideration transferred for these acquisitions and the preliminary amounts of assets acquired and liabilities assumed (based on their estimated fair values at their acquisition dates), are summarized below:

in thousands	2016
Fair Value of Purchase Consideration	
Cash	\$ 32,537
Payable to seller	750
Total fair value of purchase consideration	\$ 33,287
Identifiable Assets Acquired and Liabilities Assumed	
Accounts and notes receivable, net	\$ 1,034
Inventories	169
Property, plant & equipment, net	15,462
Other intangible assets	
Contractual rights in place	15,213
Noncompetition agreement	1,457
Liabilities assumed	(48)
Net identifiable assets acquired	\$ 33,287
Goodwill	\$ 0

Estimated fair values of assets acquired and liabilities assumed are preliminary pending appraisals of contractual rights in place and property, plant & equipment.

As a result of these 2016 acquisitions, we recognized \$16,670,000 of amortizable intangible assets (primarily contractual rights in place). The contractual rights in place noted above will be amortized against earnings (\$6,798,000 - straight-line over 20 years and \$8,415,000 - units of production over an estimated 20 years) and deductible for income tax purposes over 15 years.

During 2015, the following assets were acquired for \$47,198,000 of consideration (\$27,198,000 cash and \$20,000,000 exchanges of real property and businesses (twelve California ready-mixed concrete operations)):

- one aggregates facility in Tennessee
- three aggregates facilities and seven ready-mixed concrete operations in Arizona and New Mexico
- thirteen asphalt mix operations, primarily in Arizona

None of the 2015 acquisitions listed above were material to our results of operations or financial position either individually or collectively. As a result of these 2015 acquisitions, we recognized \$17,734,000 of amortizable intangible assets (\$17,484,000 contractual rights in place and \$250,000 noncompetition agreement). The contractual rights in place will be amortized against earnings (\$7,168,000 - straight-line over 20 years and \$10,317,000 - units of production over an estimated 34 years) and deductible for income tax purposes over 15 years.

During 2014, we purchased the following for total consideration of \$331,836,000 (\$284,237,000 cash, \$2,414,000 exchanges of real property and businesses and \$45,185,000 of our common stock (715,004 shares)):

- two portable asphalt plants and an aggregates facility in southern California
- five aggregates facilities and associated downstream assets in Arizona and New Mexico
- two aggregates facilities in Delaware, serving northern Virginia and Washington, D.C.
- · four aggregates facilities in the San Francisco Bay Area
- a rail-connected aggregates operation and two distribution yards that serve the greater Dallas/Fort Worth market
- a permitted aggregates quarry in Alabama

None of the 2014 acquisitions listed above were material to our results of operations or financial position either individually or collectively. As a result of these 2014 acquisitions, we recognized \$128,286,000 of amortizable intangible assets (primarily contractual rights in place). The contractual rights in place will be amortized against earnings using the unit-of-production method over an estimated weighted-average period in excess of 40 years and all but \$36,921,000 will be deductible for income tax purposes over 15 years. The \$13,303,000 of goodwill recognized (none of which will be deductible for income tax purposes) represents the balance of deferred tax liabilities generated from carrying over the seller's tax basis in the assets acquired.

DIVESTITURES

In 2016, we sold:

- Fourth quarter surplus land in California and Virginia for net pretax cash proceeds of \$19,185,000 resulting in pretax gains of \$11,871,000
- Fourth quarter plant relocation reimbursement in Virginia for net pretax cash proceeds of \$6,000,000 resulting in a
 pretax gain of \$4,335,000 (this item is presented within other operating expense in the accompanying Consolidated
 Statement of Comprehensive Income)

As noted above, in 2015 (first quarter), we exchanged twelve ready-mixed concrete operations in California (representing all of our California concrete operations) for thirteen asphalt mix plants (primarily in Arizona) resulting in a pretax gain of \$5,886,000.

In 2014, we sold:

- First quarter our cement and concrete businesses in the Florida area for net pretax cash proceeds of \$721,359,000 resulting in a pretax gain of \$227,910,000. We retained all of our Florida aggregates operations, our former Cement segment's calcium operation in Brooksville, Florida and real estate associated with certain former ready-mixed concrete facilities. Under a separate supply agreement, we continue to provide aggregates to the divested concrete facilities, at market prices, for a period of 20 years. As a result of the continuing cash flows (generated via the supply agreement and the retained operation and assets), the disposition is not reported as discontinued operations
- First quarter a previously mined and subsequently reclaimed tract of land in Maryland (Aggregates segment) for net pretax cash proceeds of \$10,727,000 resulting in a pretax gain of \$168,000
- First quarter unimproved land in Tennessee previously containing a sales yard (Aggregates segment) for net pretax cash proceeds of \$5,820,000 resulting in a pretax gain of \$5,790,000

NOTE 20: UNAUDITED SUPPLEMENTARY DATA

The following is a summary of selected quarterly financial information (unaudited) for each of the years ended December 31, 2016 and 2015:

			20	016	5		
			Three Mo	nth	s Ended		
in thousands, except per share data	March 31 June 30		Sept 30	Sept 30			
Total revenues	\$	754,728	\$ 956,825	\$	1,008,140	\$	872,974
Gross profit		164,718	292,184		304,209		239,706
Operating earnings		64,921	213,786		227,076		173,799
Earnings from continuing operations ¹		41,965	127,241		145,137		108,063
Net earnings ¹		40,158	124,709		142,024		112,600
Basic earnings per share from continuing operations ¹	\$	0.31	\$ 0.95	\$	1.09	\$	0.82
Diluted earnings per share from continuing operations ¹	\$	0.31	\$ 0.93	\$	1.07	\$	0.80
Basic net earnings per share ¹	\$	0.30	\$ 0.93	\$	1.07	\$	0.85
Diluted net earnings per share ¹	\$	0.30	\$ 0.92	\$	1.05	\$	0.83

¹ Amounts are revised to reflect the early adoption of ASU 2016-09 (See Note 1, caption Accounting Standards Recently Adopted) in the fourth quarter of 2016 and presented as adopted as of the beginning of the year. Earnings from continuing operations and Net earnings were increased, as follows: March 31 — \$21,234,000 (\$0.16 per share); June 30 — \$959,000 (\$0.01 in diluted net earnings per share only); and September 30 — \$2,259,000 (\$0.02 per share basic and \$0.01 per share diluted).

			20	015	j	
			Three Mo	nth:	s Ended	
in thousands, except per share data	March 31	rch 31 June 30 Sept 30		Dec 31		
Total revenues	\$ 631,293	\$	895,143	\$	1,038,460	\$ 857,285
Gross profit	77,865		234,449		291,290	253,929
Operating earnings	10,759		153,776		212,206	173,037
Earnings (loss) from continuing operations	(36,667)		49,819		126,202	93,560
Net earnings (loss)	(39,678)		48,162		123,805	88,888
Basic earnings (loss) per share from continuing operations	\$ (0.28)	\$	0.37	\$	0.95	\$ 0.70
Diluted earnings (loss) per share from continuing operations	\$ (0.28)	\$	0.37	\$	0.93	\$ 0.69
Basic net earnings (loss) per share	\$ (0.30)	\$	0.36	\$	0.93	\$ 0.67
Diluted net earnings (loss) per share	\$ (0.30)	\$	0.36	\$	0.91	\$ 0.65

ITEM 9

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL
DISCLOSURE

None.

ITEM 9A

CONTROLS AND PROCEDURES

DISCLOSURE CONTROLS AND PROCEDURES

We maintain a system of controls and procedures designed to ensure that information required to be disclosed in reports we file with the SEC is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms. These disclosure controls and procedures (as defined in the Securities Exchange Act of 1934 Rules 13a - 15(e) or 15d - 15(e)), include, without limitation, controls and procedures designed to ensure that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. Our Chief Executive Officer and Chief Financial Officer, with the participation of other management officials, evaluated the effectiveness of the design and operation of the disclosure controls and procedures as of December 31, 2016. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2016.

No material changes were made during the fourth quarter of 2016 to our internal controls over financial reporting, nor have there been other factors that materially affect these controls.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining an adequate system of internal control over financial reporting as required by the Sarbanes-Oxley Act of 2002 and as defined in Exchange Act Rule 13a-15(f).

Under management's supervision, an evaluation of the design and effectiveness of our internal control over financial reporting was conducted based on the framework in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2016.

Deloitte & Touche LLP, an independent registered public accounting firm, as auditors of our consolidated financial statements, has issued an attestation report on the effectiveness of our internal control over financial reporting as of December 31, 2016. Deloitte & Touche LLP's report, which expresses an unqualified opinion on the effectiveness of our internal control over financial reporting, follows this report.

LIMITATIONS OF EFFECTIVENESS OF CONTROLS AND PROCEDURES

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM – INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Board of Directors and Shareholders of Vulcan Materials Company:

We have audited the internal control over financial reporting of Vulcan Materials Company and subsidiaries (the "Company") as of December 31, 2016 based on criteria established in *Internal Control* — *Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016 based on the criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2016 of the Company and our report dated February 24, 2017 expressed an unqualified opinion on those financial statements.

Birmingham, Alabama

February 24, 2017

ITEM 9B

OTHER INFORMATION

None.

PART III

ITEM 10

DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

On or about March 29, 2017, we expect to file a definitive proxy statement with the Securities and Exchange Commission pursuant to Regulation 14A (our "2017 Proxy Statement"). The information under the headings "Proposal 1 - Election of Directors," "Corporate Governance of our Company and Practices of our Board of Directors," and "General Information - Section 16(a) Beneficial Ownership Reporting Compliance" included in the 2017 Proxy Statement is incorporated herein by reference. See also the information about our executive officers and governance policies set forth above in Part I, Item I "Business" of this report.

ITEM 11

EXECUTIVE COMPENSATION

The information under the headings "Compensation Discussion and Analysis," "Director Compensation," "Executive Compensation," "Corporate Governance of our Company and Practices of our Board of Directors," and "Compensation Committee Report" included in our 2017 Proxy Statement is incorporated herein by reference.

ITEM 12

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information under the headings "Security Ownership of Certain Beneficial Owners and Management," "Equity Compensation Plans" and "Executive Compensation — Payments Upon Termination or Change in Control" included in our 2017 Proxy Statement is incorporated herein by reference.

ITEM 13

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information under the heading "Corporate Governance of our Company and Practices of our Board of Directors" included in our 2017 Proxy Statement is incorporated herein by reference.

ITEM 14

PRINCIPAL ACCOUNTING FEES AND SERVICES

The information under the heading entitled "Independent Registered Public Accounting Firm" included in our 2017 Proxy Statement is incorporated herein by reference.

PART IV

ITEM 15

EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) Financial statements

The following financial statements are included herein on the pages shown below:

	Page in Report
Report of Independent Registered Public Accounting Firm	61
Consolidated Statements of Comprehensive Income	62
Consolidated Balance Sheets	63
Consolidated Statements of Cash Flows	64
Consolidated Statements of Equity	65
Notes to Consolidated Financial Statements	66 - 112

(a) (2) Financial statement schedules

Financial statement schedules are omitted because of the absence of conditions under which they are required or because the required information is provided in the financial statements or notes thereto.

Financial statements (and summarized financial information) of 50% or less owned entities accounted for by the equity method have been omitted because they do not, considered individually or in the aggregate, constitute a significant subsidiary.

(a) (3) Exhibits

The exhibits required by Item 601 of Regulation S-K are either incorporated by reference herein or accompany this report. See the Index to Exhibits set forth below.

ITEM 16

FORM 10-K SUMMARY

None.

Part IV 117

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on February 24, 2017.

VULCAN MATERIALS COMPANY

J. Thomas Hill

Chairman, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature Title Date J. Thomas Hill
John R. Mhey Chairman, President and Chief Executive Officer (Principal Executive Officer) February 24, 2017 **Executive Vice President** February 24, 2017 and Chief Financial and Strategy Officer (Principal Financial Officer) John R. McPherson Vice President, Controller and Chief Information Officer February 24, 2017 (Principal Accounting Officer) Ejaz A. Khan The following directors: Thomas A. Fanning Director

O. B. Grayson Hall, Jr. Director Cynthia L. Hostetler Director Douglas J. McGregor Director Richard T. O'Brien Director James T. Prokopanko Director David P. Steiner Director Lee J. Styslinger, III Director Vincent J. Trosino Director Kathleen Wilson-Thompson Director

February 24, 2017

Michael R. Mills Attorney-in-Fact

By Midnel Wille

118 Signatures

	EXHIBIT INDEX
Exhibit 3(a)	Certificate of Incorporation (Restated 2007) of the Company (formerly known as Virginia Holdco, Inc.), filed as Exhibit 3.1 to the Company's Current Report on Form 8-K on November 16, 2007 ¹
Exhibit 3(b)	Amended and Restated By-Laws of the Company (as amended through February 13, 2015) filed as Exhibit 3(b) to the Company's Annual Report on Form 10-K filed on February 27, 2015 $^{\rm 1}$
Exhibit 4(a)	Supplemental Indenture No. 1, dated as of November 16, 2007, among the Company, Legacy Vulcan Corp. and The Bank of New York Trust Company, N.A., as Trustee filed as Exhibit 4.1 to the Company's Current Report on Form 8-K on November 21, 2007 ¹
Exhibit 4(b)	Senior Debt Indenture, dated as of December 11, 2007, between the Company and Wilmington Trust Company, as Trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K on December 11, 2007 ¹
Exhibit 4(c)	First Supplemental Indenture, dated as of December 11, 2007, between Vulcan Materials Company and Wilmington Trust Company, as Trustee, to that certain Senior Debt Indenture, dated as of December 11, 2007, between the Company and Wilmington Trust Company, as Trustee, filed as Exhibit 4.2 to the Company's Current Report on Form 8-K on December 11, 2007 ¹
Exhibit 4(d)	Second Supplemental Indenture, dated June 20, 2008 between the Company and Wilmington Trust Company, as Trustee, to that certain Senior Debt Indenture dated as of December 11, 2007, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on June 20, 2008 ¹
Exhibit 4(e)	Third Supplemental Indenture, dated February 3, 2009, between the Company and Wilmington Trust Company, as Trustee, to that certain Senior Debt Indenture dated as of December 11, 2007 filed as Exhibit 10(f) to the Company's Annual Report on Form 10-K filed on March 2, 2009 ¹
Exhibit 4(f)	Fourth Supplemental Indenture, dated June 14, 2011, between the Company and Wilmington Trust Company, as Trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on June 15, 2011 ¹
Exhibit 4(g)	Fifth Supplemental Indenture, dated March 30, 2015, between the Company and Regions Bank, as Trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on March 30, 2015 $^{\rm 1}$
Exhibit 4(h)	Indenture, dated as of May 1, 1991, by and between Legacy Vulcan Corp. (formerly Vulcan Materials Company) and First Trust of New York (as successor trustee to Morgan Guaranty Trust Company of New York) filed as Exhibit 4 to the Form S-3 on May 2, 1991 (Registration No. 33-40284) ¹
Exhibit 4(i)	Supplemental Indenture No. 1, dated as of November 16, 2007, among the Company, Legacy Vulcan Corp. and The Bank of New York, as Trustee, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 21, 2007 ¹
Exhibit 4(j)	Supplemental Indenture No. 2, dated as of June 30, 2015, between Legacy Vulcan, LLC and The Bank of New York Mellon Trust Company, N.A., as Trustee, filed as Exhibit 4(a) to the Company's Quarterly Report on Form 10-Q filed on August 5, 2015 ¹
Exhibit 10(a)	Credit Agreement dated as of June 19, 2015 among the Company and SunTrust Bank as Administrative Agent, and other parties named therein filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 25, 2015 ¹
Exhibit 10(b)	Credit Agreement dated as of December 21, 2016 among the Company and SunTrust Bank, as Administrative Agent, and the Lenders and other parties named therein filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 22, 2016 ¹
Exhibit 10(c)	Unfunded Supplemental Benefit Plan for Salaried Employees, as amended, filed as Exhibit 10.4 to the Company's Current Report on Form 8-K filed on December 17, 2008 1,2

Exhibit 10(d)	Amendment No. 1 to the Unfunded Supplemental Benefit Plan for Salaried Employees filed as Exhibit 10.1 to its Current Report on Form 8-K on January 7, 2014 1.2
Exhibit 10(e)	Deferred Compensation Plan for Directors Who Are Not Employees of the Company, as amended, filed as Exhibit 10.5 to the Company's Current Report on Form 8-K filed on December 17, 2008 ^{1,2}
Exhibit 10(f)	The 2006 Omnibus Long-Term Incentive Plan of the Company filed as Appendix C to Legacy Vulcan Corp.'s 2006 Proxy Statement on Schedule 14A filed on April 13, 2006 ^{1,2}
Exhibit 10(g)	Amendment to the 2006 Omnibus Long-Term Incentive Plan of the Company filed as Appendix A to the Company's 2011 Proxy Statement on Schedule 14A filed March 31, 2011 1.2
Exhibit 10(h)	Amendment to the 2006 Omnibus Long-Term Incentive Plan of the Company dated February 9, 2012, filed as Exhibit 10(I) to the Company's Annual Report on Form 10-K for the year ended December 31, 2001 filed on February 9, 2012 1.2
Exhibit 10(i)	Deferred Stock Plan for Nonemployee Directors of the Company filed as Exhibit 10(f) to Legacy Vulcan Corp.'s Annual Report on Form 10-K for the year ended December 31, 2001 filed on March 27, 2002 1.2
Exhibit 10(j)	Restricted Stock Plan for Nonemployee Directors of the Company, as amended, filed as Exhibit 10.6 to the Company's Current Report on Form 8-K filed on December 17, 2008 ^{1.2}
Exhibit 10(k)	Executive Deferred Compensation Plan, as amended, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 17, 2008 1.2
Exhibit 10(I)	Independent Contractor Consulting Agreement dated March 26, 2015, between the Company and Danny R. Shepherd, filed as Exhibit 10(a) to the Company's Quarterly Report on Form 10-Q filed on May 6, 2015 ^{1,2}
Exhibit 10(m)	Form of Change of Control Employment Agreement dated January 1, 2016, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 7, 2016 ^{1,2}
Exhibit 10(n)	Vulcan Materials Company Change of Control Severance Plan for Senior Officers, effective January 1, 2016, filed as Exhibit 10(m) to the Company's Annual Report on Form 10-K filed on February 25, 2016 ^{1,2}
Exhibit 10(o)	Executive Incentive Plan of the Company, as amended, filed as Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 17, 2008 $^{1.2}$
Exhibit 10(p)	Supplemental Executive Retirement Agreement filed as Exhibit 10 to Legacy Vulcan Corp.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2001 filed on November 2, 2001 1.2
Exhibit 10(q)	Form of Stock Option Agreement filed as Exhibit $10(o)$ to Legacy Vulcan Corp.'s Report on Form 8-K filed on December 20, $2005^{-1.2}$
Exhibit 10(r)	Form of Director Deferred Stock Unit Agreement filed as Exhibit 10.9 to the Company's Current Report on Form 8-K filed on December 17, 2008 ^{1,2}
Exhibit 10(s)	Form of Performance Share Unit Agreement filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 11, 2010 $^{1.2}$
Exhibit 10(t)	Form of Performance Share Unit Agreement (2012) filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 14, 2012 ^{1,2}
Exhibit 10(u)	Form of Stock-Only Stock Appreciation Rights Agreement filed as Exhibit 10(p) to Legacy Vulcan Corp.'s Report on Form 10-K filed on February 26, 2007 ^{1,2}
Exhibit 10(v)	Stock-Only Stock Appreciation Rights Agreement between the Company and John R. McPherson dated November 9, 2011, filed as Exhibit 10(a) to the Company's Current Report on Form 8-K filed on November 15, 2011 ^{1,2}
Exhibit 10(w)	Form of Employee Deferred Stock Unit Amended Agreement filed as Exhibit 10.7 to the Company's Current Report on Form 8-K filed on December 17, 2008 ^{1,2}

Exhibit 10(x)	Vulcan Materials Company 2016 Omnibus Long-Term Incentive Plan, filed as Exhibit 99 to the Company's Registration Statement on Form S-8 (File No. 333-211349) filed on May 13, 2016 1.2
Exhibit 10(y)	Form of Non-Employee Director Deferred Stock Unit Agreement under the Vulcan Materials Company 2016 Omnibus Long-Term Incentive Plan, filed as Exhibit 10(y) to the Company's Quarterly Report on Form 10-Q filed on August 3, 2016 1.2
Exhibit 10(z)	Form of Stock-Only Stock Appreciation Rights Award Agreement under the Vulcan Materials Company 2016 Omnibus Long-Term Incentive Plan, filed as Exhibit 10(z) to the Company's Quarterly Report on Form 10-Q filed on August 3, 2016 1.2
Exhibit 10(aa)	Form of Restricted Stock Unit Award Agreement under the Vulcan Materials Company 2016 Omnibus Long-Term Incentive Plan, filed as Exhibit 10(aa) to the Company's Quarterly Report on Form 10-Q filed on August 3, 2016 ^{1,2}
Exhibit 10(bb)	Form of Performance Share Unit Award Agreement under the Vulcan Materials Company 2016 Omnibus Long-Term Incentive Plan, filed as Exhibit 10(bb) to the Company's Quarterly Report on Form 10-Q filed on August 3, 2016 ^{1,2}
Exhibit 21	List of the Company's material subsidiaries as of January 31, 2017
Exhibit 23	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
Exhibit 24	Powers of Attorney
Exhibit 31(a)	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
Exhibit 31(b)	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
Exhibit 32(a)	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
Exhibit 32(b)	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
Exhibit 95	MSHA Citations and Litigation
Exhibit 101.INS	XBRL Instance Document
Exhibit 101.SCH	XBRL Taxonomy Extension Schema Document
Exhibit 101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
Exhibit 101.LAB	XBRL Taxonomy Extension Label Linkbase Document
Exhibit 101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
Exhibit 101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

¹ Incorporated by reference.

Our SEC file number for documents filed with the SEC pursuant to the Securities Exchange Act of 1934, as amended, is 001-33841.

² Management contract or compensatory plan.

EXHIBIT 21 SUBSIDIARIES AS OF JANUARY 31, 2017

	State or Other Jurisdiction of Incorporation or Organization	% Owned Directly or Indirectly by Vulcan
Arundel Company, LLC	Delaware	100
Azusa Rock, LLC	Delaware	100
Black Point Aggregates, Inc.	Nova Scotia	100
Calizas Industriales del Carmen, S.A. de C.V.	Mexico	100
CalMat Co.	Delaware	100
Calmat Leasing Company, LLC	Delaware	100
Central Division Logistics, LLC	Delaware	100
Chesapeake Marine Partnership	Maryland	100
O C Materials, Inc.	District of Columbia	100
Florida Cement, LLC	Delaware	100
Florida Rock Industries, Inc.	Florida	100
reeport Aggregates Limited	Bahamas	100
FRI Bahamas Ltd.	Bahamas	100
Fulton Concrete Company, LLC	Delaware	100
Harper Brothers, LLC	Delaware	100
Heritage Logistics, LLC	Delaware	100
egacy Vulcan, LLC	Delaware	100
Maryland Rock Industries, LLC	Delaware	100
Maryland Stone, LLC	Delaware	100
Mountain West Logistics, LLC	Delaware	100
Rancho Piedra Caliza, S.A. de C.V.	Mexico	100
Rapica Servicios Tecnicos Y Administrativos, S.A. de C.V.	Mexico	100
RECO Transportation, LLC	Delaware	100
S & G Concrete Company, LLC	Delaware	100
S & G Prestress Company, LLC	Delaware	100
Salisbury Towing, LLC	Delaware	100
Servicios Integrales, Gestoria Y Administracion, S.A. de C. V.	Mexico	100
Soportes Tecnicos Y Administrativos, S.A. de C.V.	Mexico	100
Southeast Division Logistics, LLC	Delaware	100
Southern Gulf Coast Division Logistics, LLC	Delaware	100
Statewide Transport, LLC	Delaware	100
CS Materials, LLC	Delaware	100
riangle Rock Products, LLC	Delaware	100
/CA Shipping Services, LLC	Delaware	100
/GCM, LLC	Delaware	100
/irginia Concrete Company, LLC	Delaware	100
/ulcan Aggregates Company, LLC	Delaware	100
/ulcan Asphalt, LLC	Delaware	100
/ulcan Concrete, LLC	Delaware	100
/ulcan Construction Materials, LLC	Delaware	100
/ulcan Gulf Coast Materials, LLC	North Carolina	100
/ulcan Lands, Inc.	New Jersey	100
/ulcan Shipping Company, Limited	Bahamas	100

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statements No. 333-202769, 333-197519 and 333-196819 on Form S-3 and Registration Statements No. 333-211349, 333-182498, 333-160302, 333-148993, 333-148238, 333-147450, and 333-147449 on Form S-8 of our reports dated February 24, 2017, relating to the consolidated financial statements of Vulcan Materials Company and subsidiaries (the "Company") and the effectiveness of the Company's internal control over financial reporting appearing in this Annual Report on Form 10-K of Vulcan Materials Company for the year ended December 31, 2016.

/s/ DELOITTE & TOUCHE LLP

Birmingham, Alabama February 24, 2017

EXHIBIT 24

POWER OF ATTORNEY

The undersigned director of Vulcan Materials Company, a New Jersey corporation, hereby nominates, constitutes and appoints Michael R. Mills, Jerry F. Perkins Jr. and C. Samuel Todd and each of them, the true and lawful attorneys of the undersigned to sign the name of the undersigned as director to the Annual Report on Form 10-K for the year ended December 31, 2016 of said corporation to be filed with the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended, and to any and all amendments to said report.

The undersigned hereby grants to said attorneys full power of substitution, resubstitution and revocation, all as fully as the undersigned could do if personally present, hereby ratifying all that said attorneys or their substitutes may lawfully do by virtue hereof.

IN WITNESS WHEREOF, the undersigned director of Vulcan Materials Company has executed this Power of Attorney this 14th day of February, 2017.

/s/ Thomas A. Fanning
Thomas A. Fanning
/s/ O.B. Grayson Hall, Jr.
O.B. Grayson Hall, Jr.
Ic/ Cypthia L. Hastatlar
/s/ Cynthia L. Hostetler
Cynthia L. Hostetler
Ic/ Douglas I. McCrogor
/s/ Douglas J. McGregor
Douglas J. McGregor
/s/ Richard T. O'Brien
Richard T. O'Brien
/s/ James T. Prokopanko
W 10 TO THE STATE OF THE STATE
James T. Prokopanko
/s/ David P. Steiner
David P. Steiner
/s/ Lee J. Styslinger, III
Lee J. Styslinger, III
Lee J. Stysiinger, III
/s/ Vincent J. Trosino
Vincent J. Trosino
/s/ Kathleen Wilson-Thompson
Kathleen Wilson-Thompson

EXHIBIT 31(a)

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, J. Thomas Hill, certify that:

- I have reviewed this annual report on Form 10-K of Vulcan Materials Company;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a
 material fact necessary to make the statements made, in light of the circumstances under which such statements
 were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures or caused such disclosure controls and procedures to be designed under our supervision to ensure that material information relating to the registrant including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date February 24, 2017

J. Thomas Hill

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Chairman, President and Chief Executive Officer

EXHIBIT 31(b)

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, John R. McPherson, certify that:

- 1. I have reviewed this annual report on Form 10-K of Vulcan Materials Company;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a
 material fact necessary to make the statements made, in light of the circumstances under which such statements
 were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures or caused such disclosure controls and procedures to be designed under our supervision to ensure that material information relating to the registrant including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date February 24, 2017

John R. McPherson, Executive Vice President and Chief Financial and Strategy Officer

EXHIBIT 32(a)

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

OF

VULCAN MATERIALS COMPANY PURSUANT TO 18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES OXLEY ACT OF 2002

I, J. Thomas Hill, Chairman, President and Chief Executive Officer of Vulcan Materials Company, certify that the Annual Report on Form 10-K (the "report") for the year ended December 31, 2016, filed with the Securities and Exchange Commission on the date hereof:

- (i) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and
- (ii) the information contained in the report fairly presents, in all material respects, the financial condition and results of operations of Vulcan Materials Company.

J. Thomas Hill

Chairman, President and Chief Executive Officer

February 24, 2017

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Vulcan Materials Company and will be retained by Vulcan Materials Company and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32(b)

CERTIFICATION OF CHIEF FINANCIAL OFFICER

OF

VULCAN MATERIALS COMPANY PURSUANT TO 18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES OXLEY ACT OF 2002

I, John R. McPherson, Executive Vice President and Chief Financial and Strategy Officer of Vulcan Materials Company, certify that the Annual Report on Form 10-K (the "report") for the year ended December 31, 2016, filed with the Securities and Exchange Commission on the date hereof:

- fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and
- (ii) the information contained in the report fairly presents, in all material respects, the financial condition and results of operations of Vulcan Materials Company.

John R. McPherson, Executive Vice President and Chief Financial and Strategy Officer

February 24, 2017

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A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Vulcan Materials Company and will be retained by Vulcan Materials Company and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 95

MSHA CITATIONS AND LITIGATION

On July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act) was enacted. Section 1503 of the Dodd-Frank Act requires companies that are "operators" (as such term is defined in the Federal Mine Safety and Health Act of 1977 (the Mine Act)) to disclose certain mine safety information in each periodic report to the Securities and Exchange Commission. This information is related to the enforcement of the Mine Act by the Mine Safety and Health Administration (MSHA).

The Dodd-Frank Act and the subsequent implementing regulation issued by the SEC require disclosure of the following categories of violations, orders and citations: (1) Section 104 S&S Citations, which are citations issued for violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a mine safety or health hazard; (2) Section 104(b) Orders, which are orders issued upon a follow up inspection where the inspector finds the violation previously cited has not been totally abated in the prescribed time period; (3) Section 104(d) Citations and Orders, which are issued upon violations of mandatory health or safety standards caused by an unwarrantable failure of the operator to comply with the standards; (4) Section 110(b)(2) Violations, which result from the reckless and repeated failure to eliminate a known violation; (5) Section 107(a) Orders, which are given when MSHA determines that an imminent danger exists and results in an order of immediate withdrawal from the area of the mine affected by the condition; and (6) written notices from MSHA of a pattern of violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of mine health or safety hazards under Section 104(e). In addition, the Dodd-Frank Act requires the disclosure of the total dollar value of proposed assessments from MSHA under the Mine Act and the total number of mining related fatalities.

The following disclosures are made pursuant to Section 1503.

During the twelve months ended December 31, 2016, none of our operations: (i) received any orders under Section 104(b), which are issued upon a follow up inspection where the inspector finds the violation previously cited has not been totally abated in the prescribed time period; (ii) had any flagrant violations under Section 110(b)(2); or (iii) received notice from MSHA of a pattern of violations of mandatory health or safety standards under Section 104(e).

CALENDAR YEAR 2016

The table below sets forth, by mine, the total number of citations and/or orders issued by MSHA during the period covered by this report under the indicated provisions of the Mine Act, together with the total dollar value of proposed assessments, if any, from MSHA, received during the twelve months ended December 31, 2016. Of our 257 active MSHA-regulated facilities during the year, we received 500 federal mine safety inspections at 216 facilities during the reporting period. Of our inspected facilities, 159 did not receive any reportable citations or orders.

Name of Operation 1604 STONE, TX	Number of Inspections	Total Number of S&S Citations	Mine Act § 104(b) Orders	Mine Act § 104(d) Citations and Orders	Mine Act § 110(b)(2) Violations	Mine Act § 107(a) Orders	Total Dollar Value of Proposed MSHA Assessments (dollars in thousands)	Total Number of Mining Related Fatalities	Received Written Notice under Mine Act § 104(e) (yes/no)
ABILENE BLACK LEASE, TX	2	1	0	0	0	0	0.3	0	No
ATHENS QUARRY, TN	1	1	0	0	0	0	0.3	0	No
AUGUSTA QUARRY, VA	2	1	0	0	0	0	0.7	0	No
BACA S&G. NM	2	1	0	0	0	0	1.2	0	No
BARIN, GA	4	1	0	0	0	0	0.4	0	No
BENTON COUNTY QY, TN	2	2	0	0	0	0	0.4	0	No
BLACK ANGUS S&G, AZ	1	1	0	0	0	0	0.7	0	No
BOLINGBROOK STONE, IL	4	2	0	0	0	0	2.3	ō	No
BROWNWOOD STONE, TX	2	2	0	0	0	0	0.6	ő	No
CALERA, AL	3	2	0	0	0	0	0.6	0	No
CHEROKEE QUARRY, AL	2	1	0	0	0	1	1.7	0	No
CHULA VISTA QUARRY, CA	3	1	0	0	0	0	0.2	0	No
CLEVELAND QUARRY, TN	4	2	0	0	0	0	0.5	0	No
CORP IT CONTRACTOR ID, AL	1	1	0	0	0	0	0.1	0	No
DAYTON, TN	2	1	0	0	0	0	0	0	No
DEKALB QUARRY, IL	3	2	0	0	0	0	0.8	0	No
DREYFUS QUARRY, SC	2	1	0	0	0	0	0.8	0	No
FORT KNOX, KY	2	1	0	0	0	0	1.5	0	No
FORT MYERS MINE, FL	2	2	0	0	0	0	0.2	0	No
FRANKLIN QUARRY, TN	4	1	0	0	0	0	0.2	0	No
GLENCOE, AL	3	1	0	0	0	1	0.7	0	No
GRAND RIVERS QUARRY, KY	6	3	0	0	0	0	0.2	0	No
HAVRE DE GRACE QUARRY, MD	5	1	0	0	0	0	0.9	0	No
HERMITAGE QUARRY, TN	1	1	0	0	0	0	0.1	0	No
KANKAKEE, IL	2	1	0	0	0	0	0.2	0	No
LEMONT, IL	4	2	0	0	0	0	0	0	No
LENOIR, NC	2	1	0	0	0	0	0.1	0	No
LITHONIA, GA	3	1	0	0	0	0	0.1	0	No
MANTENO, IL	2	4	0	0	0	0	0.7	0	No
MARANA S&G, AZ	2	2	0	0	0	0	1	0	No
MARYVILLE QUARRY, TN	3	3	0	0	0	0	0.8	0	No
MCCOOK, IL	5	6	0	0	0	0	9.2	0	No
MIAMI QUARRY, FL	2	1	0	0	0	0	0.3	0	No
NEWPORT QUARRY, TN	1	1	0	0	0	0	0.3	0	No
NORTH TROY QUARRY, OK	2	2	0	0	0	0	0.2	0	No
NOTASULGA QUARRY, AL	3	1	0	0	0	0	0.8	0	No
OHATCHEE, AL	3	1	0	0	0	0	0.2	0	No
PACOLET, SC	2	1	0	0	0	0	0	0	No
PILARCITOS QUARRY, CA	1 3	1	0	0	0	0	0.6	0	No
PINEVILLE QUARRY, NC		1	0	0	0	0	0.2	0	No
PLACITAS SAND & GRAVEL, NM PLEASANTON S&G. CA	3	1	0	0	0	0	0.6 0.5	0	No No
Contraction of the Contract of	3	2	0	0	1977	0	0.73.7	0	0.000
PUDDLEDOCK, VA RELIANCE S&G, CA	2	1	0	0	0	0	0	0	No No
RICHMOND RD QUARRY, KY	6	1	0	0	0	0	0.3	0	No
SACRAMENTO PLANT, CA	2	1	0	0	0	0	0.3	0	No
SANDLAND PLANT, FL	2	1	0	0	0	0	0.2	0	No
SAVANNAH QUARRY, TN	2	0	0	3	0	0	0.1	1	No
SHELBYVILLE QUARRY, TN	3	3	0	0	0	0	0	0	No
SIMONTON S&G, TX	3	1	0	0	0	0	0	0	No
SPRINGFIELD QUARRY, TN	3	2	0	0	0	0	0.2	0	No
STAFFORD QUARRY, VA	2	1	0	0	0	0	0.2	0	No
SUN VALLEY S&G, CA	3	2	0	0	0	0	0	0	No
TABLE MOUNTAIN PLANT, CA	3	1	0	0	0	0	0.3	0	No
VAL VISTA S&G, AZ	2	2	0	0	0	0	0.7	0	No
WEST 43RD SAND & GRAVEL, AZ	2	2	0	0	0	0	0	0	No
OTHER OPERATIONS - 159	350	0	0	0	0	0	0	0	No
	500	85	0	3	0	2	33.3	1	

The total dollar value of proposed assessments received during the twelve months ended December 31, 2016 for all other citations, as well as proposed assessments received during the reporting period for citations previously issued, is \$38,582.

The table below sets forth, by mine, category of legal action and number of legal actions pending before the Federal Mine Safety and Health Review Commission as of December 31, 2016.

			Number of Legal Actions
			Complaint of
	Contest	Contest	Discharge,
Name of Operation	Penalty	Citations	Discrimination
BRISTOL QUARRY, TN	0	0	2
HAVRE DE GRACE QUARRY, MD	1	0	0

The table below sets forth, by mine, category of legal action and number of legal actions filed before the Federal Mine Safety and Health Review Commission during the twelve months ended December 31, 2016.

			Number of Legal Actions
			Complaint of
	Contest	Contest	Discharge,
Name of Operation	Penalty	Citations	Discrimination
COLUMBIA QUARRY, SC	1	0	0
GRAHAM-VIRGINIA, VA	1	0	0
WEST PLANT, AZ	2	0	0

The table below sets forth, by mine, category of legal action and number of legal actions resolved by the Federal Mine Safety and Health Review Commission during the twelve months ended December 31, 2016.

			Number of Legal Actions
			Complaint of
	Contest	Contest	Discharge,
Name of Operation	Penalty	Citations	Discrimination
AUGUSTA QUARRY, VA	2	0	0
BENTON COUNTY QUARRY, TN	1	0	0
BOLINGBROOK UNDERGROUND, IL	16	0	0
BOONE QUARRY, NC	1	0	0
CALERA QUARRY, AL	1	0	0
ELKIN, NC	1	0	0
FORT PIERCE MINE, FL	1	0	0
GRAND RIVERS QUARRY, KY	3	0	0
GURLEY QUARRY, AL	1	0	0
HUEBNER ROAD QUARRY, TX	2	0	0
NORTH TROY, OK	2	0	0
NOTASULGA QUARRY, AL	1	0	0
READYVILLE QUARRY, TN	1	0	0
SCOTTSBORO QUARRY, AL	1	0	0
TAZWELL QUARRY, TN	1	0	0
VAL VISTA-CITRUS GROVE 150, AZ	1	0	0

VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

SUPPLEMENTAL INFORMATION (UNAUDITED) — NOT FILED IN THE FORM 10-K INDEX

11-YEAR SCHEDULES

- 2 Enterprise Financial Data
- 3 Continuing Operations Supplementary Data
- 4 Consolidated Statements of Earnings and Supplementary Data
- 5 Consolidated Balance Sheets and Other Financial Data
- 6 Consolidated Statements of Cash Flows
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VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

ENTERPRISE FINANCIAL DATA

in millions	2016		2015	2014		2013		2012	2011		2010	2009	2008		2007		2006
Average Capital Employed 1																	
Continuing operations	\$ 7,757.3	\$	7,674.3	\$ 7,480.6	\$	7,660.6	\$	7,662.4	\$ 7,845.9	\$	8,070.5	\$ 8,385.2	\$ 8,527.7	\$.	4,115.0	\$:	2,979.5
Cash items	207.3		179.0	215.4		197.1		208.8	112.7		82.7	52.5	104.2		52.7		123.5
Subtotal	\$ 7,964.6	\$	7,853.3	\$ 7,696.0	\$	7,857.7	\$	7,871.2	\$ 7,958.6	\$	8,153.2	\$ 8,437.7	\$ 8,631.9	\$.	4,167.7	\$:	3,103.0
Discontinued operations	4.4		3.6	9.1		(1.0)		(8.3)	6.9		2.2	4.6	1.3		1.4		11.1
Total	\$ 7,969.0	\$	7,856.9	\$ 7,705.1	\$	7,856.7	\$	7,862.9	\$ 7,965.5	\$	8,155.4	\$ 8,442.3	\$ 8,633.2	\$.	4,169.1	\$:	3,114.1
Capital Expenditures 2																	
Continuing operations	\$ 344.9	\$	304.0	\$ 223.1	\$	284.6	\$	95.8	\$ 97.9	\$	79.4	\$ 106.5	\$ 354.2	\$	480.5	\$	458.9
Property, Plant & Equipment																	
from Acquisitions -																	
Continuing Operations	\$ 15.5	\$	26.6	\$ 194.0	\$	76.2	\$	0.0	\$ 56.6	\$	51.2	\$ 14.2	\$ 85.4	\$	1,648.3	\$	20.5
Depreciation, Depletion,																	_
Accretion and																	
Amortization from																	
Continuing Operations	\$ 284.9	\$	274.8	\$ 279.5	\$	307.1	\$	332.0	\$ 361.7	\$	382.1	\$ 394.6	\$ 389.1	\$	271.5	\$	226.4
Increase (Decrease)																	
in Working Capital																	
Continuing operations	\$ 51.0	\$	(29.9)	\$ 15.9	\$	34.6	\$	(12.6)	\$ 2.4	\$	(20.8)	\$ (102.4)	\$ (153.4)	\$	(341.3)	\$	(25.5)
Cash, debt and other																	
financing working capital	(17.2)		292.4	(199.7)		69.2		104.3	263.0		351.0	756.7	755.2	(1,282.3)		(314.8)
Subtotal	33.8		262.5	(183.8)		103.8		91.7	265.4		330.2	654.3	601.8	(1,623.6)		(340.3)
Discontinued operations	0.0		0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0		0.0		(9.8)
Total	\$ 33.8	\$	262.5	\$ (183.8)	\$	103.8	\$	91.7	\$ 265.4	\$	330.2	\$ 654.3	\$ 601.8	\$(1,623.6)	\$	(350.1)
Gain on Sale of Property, Plant																	
& Equipment and Businesses																	
Continuing operations	\$ 15.4	\$	9.9	\$ 244.2	\$	39.3	\$	68.5	\$ 47.8	\$	59.3	\$ 27.1	\$ 94.2	\$	58.7	\$	5.6
Discontinued operations	0.0		0.0	0.0		11.7		10.2	11.0		8.8	0.8	0.0		0.0		0.0
Total	\$ 15.4	\$	9.9	\$ 244.2	\$	51.0	\$	78.7	\$ 58.8	\$	68.1	\$ 27.9	\$ 94.2	\$	58.7	\$	5.6
Cash Proceeds from Sale of																	
Property, Plant & Equipment,																	
Businesses and Volumetric																	
Production Payment 3																	
Continuing operations	\$ 23.3	\$	8.2	\$ 747.4	\$	209.3	\$	164.3	\$ 76.1	\$	55.8	\$ 22.3	\$ 241.3	\$	89.5	\$	7.8
Discontinued operations	0.0	154	0.0	 0.0	1000	13.0	1910	11.3	12.3	950	8.8	11.5	 10.0		30.0		142.0
Total	\$ 23.3	\$	8.2	\$ 747.4	\$	222.3	\$	175.6	\$ 88.4	\$	64.6	\$ 33.8	\$ 251.3	\$	119.5	\$	149.8

¹ Capital employed is the sum of interest-bearing debt, other noncurrent liabilities and equity. Average capital employed is a 12-month average.

² Capital expenditures include capitalized replacements of and additions to property, plant & equipment, including capitalized leases, renewals and betterments. Capital expenditures exclude property, plant & equipment obtained by business acquisitions.

³ Cash proceeds for 2013 and 2012 include \$153.1 million and \$73.6 million, respectively, of Volumetric Production Payments as described in Note 1, caption Deferred Revenue.

VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

CONTINUING OPERATIONS—SUPPLEMENTARY DATA

in millions, except per unit data		2016		2015		2014		2013		2012		2011		2010		2009		2008		2007	2006
Total Revenues																					
Aggregates 1	\$	2,961.8	\$	2,777.8	\$	2,346.4	\$	2,025.0	\$	1,863.9	\$	1,891.7	\$	1,919.9	\$	1,985.4	\$	2,605.1	\$	2,685.9	\$ 2,706.9
Asphalt Mix		512.3		530.7		445.6		407.7		398.4		399.0		369.9		393.7		533.4		514.5	500.2
Concrete ²		330.1		299.2		375.8		471.7		406.4		374.7		383.2		439.4		667.8		251.4	260.7
Calcium ³		8.9		8.6		25.0		99.0		85.8		71.9		80.2		72.5		106.5		14.1	0.0
Segment sales	\$	3,813.1	\$	3,616.3	\$	3,192.8	\$	3,003.4	\$	2,754.5	\$	2,737.3	\$	2,753.2	\$	2,891.0	\$	3,912.8	\$	3,465.9	\$ 3,467.8
Aggregates intersegment sales		(220.4)		(194.1)		(189.4)		(185.4)		(148.2)		(142.6)		(154.1)		(165.3)		(206.8)		(138.1)	(125.3)
Calcium intersegment sales		0.0		0.0		(9.2)		(47.3)		(39.0)		(30.1)		(40.2)		(35.2)		(54.6)		0.0	0.0
Total revenues	\$	3,592.7	\$	3,422.2	\$	2,994.2	\$	2,770.7	\$	2,567.3	\$	2,564.6	\$	2,558.9	\$	2,690.5	\$	3,651.4	\$	3,327.8	\$ 3,342.5
Average Unit Sales Price and Unit Shipments Aggregates	200			Adv. in asset the		10 St 501 St 10		to see the en		Wee #20 32 (65)		a Secience to		De Subspresson de		io Districtione		and Malandia U		PACE servicino (1) Esco	SID SHIP SHOW
Freight-adjusted revenues 4	\$	2,294.2	\$	2,112.5	\$	1000	\$	1,576.0	\$	1,471.6	\$	1,466.1	\$	1,495.1	\$	1,553.9	\$	2,038.4	\$	2,162.0	\$ 2,117.3
Aggregates — tons 5		181.4		178.3		162.4		145.9		141.0		143.0		147.6		150.9		204.3		231.2	255.4
Freight-adjusted sales price ⁶	\$	12.65	\$	11.85	\$	11.05	\$	10.80	\$	10.44	\$	10.25	\$	10.13	\$	10.30	\$	9.98	\$	9.35	\$ 8.29
Other products Asphalt Mix — tons Asphalt Mix — sales price	\$	9.4 53.45	\$	9.7 54.27	\$	7.4 54.39	\$	6.9 54.83	\$	6.7 55.33	\$	7.2 54.71	\$	7.2 50.58	\$	7.4 52.66	\$	9.5 55.16	\$	10.5 48.47	\$ 11.6 43.12
Ready-mixed concrete — cubic yards Ready-mixed concrete — sales price	\$	3.0 110.02	\$	2.8	\$	3.7 99.46	\$	4.8 93.10	\$	4.2 92.19	\$	3.9 92.16	\$	4.1 86.95	\$	4.3 96.53	\$	6.4 97.75	\$	2.5 95.56	\$ 2.9 90.14
Calcium — tons		0.3		0.3		0.3		0.3		0.3		0.3		0.3		0.2		0.3		0.0	0.0
Calcium — sales price	\$	27.08	\$	26.70	\$	26.50	\$	25.44	\$	24.55	\$	23.80	\$	28.42	\$	29.75	\$	22.90	\$	21.33	N/A
Cement — tons Cement — sales price	\$	0.0 0.00	\$	0.0	\$	0.2 92.51	\$	1.1 83.05	\$	0.9 77.77	\$	0.8 73.66	\$	0.8 79.27	\$	0.6 95.70	\$	1.0 96.75	\$	0.2 93.85	0.0 N/A
Aggregates Sales Volume by End Use (estimated)	Ψ	0.00	Ψ	0.00	Ψ	92.51	Ψ	00.00	Ψ	11.11	Ψ	73.00	Ψ	10.21	Ψ	90.70	Ψ	90.73	Ψ	90.00	IWA
Highways		26%		26%		26%		27%		30%		31%		30%		27%		25%		25%	23%
Other nonbuilding infrastructure		14%		16%		16%		17%		19%		19%		20%		15%		13%		11%	10%
Residential construction		20%		19%		19%		19%		17%		16%		15%		16%		17%		19%	25%
Nonresidential construction		37%		36%		35%		33%		29%		28%		29%		37%		42%		42%	39%
Nonconstruction		3%		3%		4%		4%		5%		6%		6%		5%		3%		3%	3%
Total		100%		100%		100%		100%		100%		100%		100%		100%		100%		100%	100%
Using public funds		47%		49%		50%		52%		54%		55%		55%		50%		45%		47%	44%
Using private funds		53%		51%		50%		48%		46%		45%		45%		50%		55%		53%	56%
Total		100%		100%		100%		100%		100%		100%		100%		100%		100%		100%	100%

¹ Includes crushed stone, sand and gravel, sand, other aggregates, as well as freight and delivery revenues associated with the aggregates business.

² Includes ready-mixed concrete, concrete block, precast concrete, as well as building materials purchased for resale. On March 7, 2014, we sold our concrete business in the Florida area.

 $^{^{\}rm 3}$ Includes cement and calcium products. On March 7, 2014, we sold our cement business.

⁴ Freight-adjusted revenues are total sales dollars less freight to remote distribution sites.

⁵ Includes tons marketed and sold on behalf of a third-party pursuant to volumetric production payment (VPP) agreements and tons shipped to our down-stream operations (i.e., asphalt mix and ready-mixed concrete).

⁶ Freight-adjusted sales price is calculated as freight-adjusted revenues divided by aggregates tons.

VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENTS OF EARNINGS AND SUPPLEMENTARY DATA

in millions, except per share data		2016		2015		2014		2013		2012		2011		2010		2009		2008		2007		2006
Total revenues	\$	3,592.7		3,422.2		2,994.2		2,770.7		2,567.3		2,564.6		2,558.9		2,690.5		3,651.4		3,327.8		3,342.5
Cost of revenues		2,591.9	- 2	2,564.6		2,406.6		2,343.8		2,233.3	1	2,280.7	- 2	2,258.2	-	2,244.5		2,901.7		2,376.9	4	2,410.6
Gross profit		1,000.8		857.6		587.6		426.9		334.0		283.9		300.7		446.0		749.7		950.9		931.9
Selling, administrative and		315.0		286.8		272.3		259.4		259.1		290.0		327.5		321.6		342.6		289.6		264.3
general expenses Other operating income		315.0		200.0		212.3		259.4		259.1		290.0		327.5		321.0		342.0		209.0		204.5
(expense), net		(6.2)		(21.0)		222.8		22.9		9.9		69.6		12.3		24.1		(158.0)		53.1		27.5
		679.6		549.8		538.1		190.4				63.5				148.5		249.1		714.4		695.1
Operating earnings Other income (expense), net		0.9		(1.7)		3.1		7.5		84.8 6.7		0.0		(14.5) 3.0		5.3		(4.4)		(5.3)		28.5
Interest income		0.8		0.3		1.0		0.9		1.1		3.4		0.9		2.3		3.1		6.6		6.2
Interest expense		134.0		220.5		243.4		202.5		213.0		220.6		181.6		175.3		172.8		48.2		26.3
Earnings (loss) from continuing						2.10.1				2.0.0		220.0		101.0								20.0
operations before income taxes		547.3		327.9		298.8		(3.7)		(120.4)		(153.7)		(192.2)		(19.2)		75.0		667.5		703.5
Income tax		047.0		321.3		200.0		(5.7)		(120.4)		(155.7)		(102.2)		(13.2)		75.0		007.5		700.0
expense (benefit)		124.9		94.9		91.7		(24.5)		(66.5)		(78.4)		(89.7)		(37.8)		71.7		204.4		223.3
Earnings (loss) from continuing																						
operations		422.4		233.0		207.1		20.8		(53.9)		(75.3)		(102.5)		18.6		3.3		463.1		480.2
Earnings (loss) on discontinued										(00.0)		()		()								
operations, net of tax		(2.9)		(11.8)		(2.2)		3.6		1.3		4.5		6.0		11.7		(2.4)		(12.2)		(10.0)
Net earnings (loss)	\$	419.5	\$	221.2	\$	204.9	\$	24.4	\$	(52.6)	\$	(70.8)	\$	(96.5)	\$	30.3	\$	0.9	\$	450.9	\$	470.2
Diluted earnings (loss) per share																						
Continuing operations	\$	3.11	\$	1.72	\$	1.56	\$	0.16	\$	(0.42)	\$	(0.58)	\$	(0.80)	\$	0.16	\$	0.03	\$	4.66	\$	4.81
Discontinued operations	**	(0.02)	8	(0.08)		(0.02)	55	0.03	82	0.01		0.03		0.05	20	0.09	87	(0.02)	92	(0.12)		(0.10)
Diluted net earnings (loss)																						
per share	\$	3.09	\$	1.64	\$	1.54	\$	0.19	\$	(0.41)	\$	(0.55)	\$	(0.75)	\$	0.25	\$	0.01	\$	4.54	\$	4.71
Gross profit as a percentage																						
of total revenues		27.9%		25.1%		19.6%		15.4%		13.0%		11.1%		11.8%		16.6%		20.5%		28.6%		27.9%
Net earnings																						
As a percentage of																						
total revenues		11.7%		6.5%		6.8%		0.9%		-2.0%		-2.8%		-3.8%		1.1%		0.0%		13.5%		14.1%
As a percentage of		9.4%		5.2%		5.0%		0.6%		-1.4%		-1.8%		-2.4%		0.8%		0.0%		18.4%		23.0%
average equity Effective tax rate		22.8%		29.0%		30.7%		660.5%		-1.4% 55.2%		51.0%		46.6%		197.0%		95.5%		30.6%		31.7%
		22.070		20.070		30.7 70		000.570		33.270		31.070		40.070		137.070		33.370		30.070		51.770
Supplementary Statements of																						
Earnings Data, Excluding Discontinued Operations																						
Energy	\$	180.8	\$	200.4	\$	240.7	\$	246.7	\$	240.0	s	242.6	\$	217.9	\$	190.1	\$	333.7	\$	234.8	\$	226.7
Taxes other than income	•	100.0	Ψ	200.4	Ψ	240.7	Ψ	240.7	Ψ	240.0	Ψ	242.0	Ψ	217.0	Ψ	100.1	Ψ	000.7	Ψ	204.0	Ψ	220.7
Payroll		46.8		44.0		40.0		39.7		38.8		39.0		38.8		38.1		45.6		41.2		38.2
Property, franchise, etc.		54.4		56.4		53.4		52.1		53.1		55.4		56.7		55.6		58.3		47.5		38.9
Rentals		125.1		118.7		108.3		89.9		78.6		75.0		72.4		78.7		92.4		82.1		81.7
Royalties		63.0		58.0		49.7		53.8		46.0		45.7		43.1		43.5		50.7		48.1		45.6
Research and development		0.0		0.0		0.0		0.0		0.0		1.1		1.6		1.5		1.5		1.6		1.7
Advertising		0.5		0.4		0.5		0.4		0.4		0.7		0.8		0.8		1.0		1.1		1.2

VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

CONSOLIDATED BALANCE SHEETS AND OTHER FINANCIAL DATA

dollars in millions																						
as of December 31		2016		2015		2014		2013		2012		2011		2010		2009		2008		2007		2006
		2010		2010		2017		2010		2012		2011		2010		2003		2000		2007		2000
Assets		050.0	Φ.	0044	•	444.0	\$	100.7	\$	075.5	•	455.0	Φ.	47.5	\$	00.0	•	40.0	•	040	\$	55.0
Cash and cash equivalents	\$	259.0	\$	284.1	\$	141.3 0.0	Ф	193.7 0.0	Ф	275.5 0.0	\$	155.8 0.1	\$	47.5 0.5	Ф	22.3 0.0	\$	10.2 0.0	\$	34.9 0.0	Ф	55.2 0.0
Restricted cash		9.1 0.0		1.2 0.0		0.0		0.0		0.0		0.1		0.0		4.1		36.7		0.0		0.0
Medium-term investments		491.8		418.0		373.8		339.6		297.0		314.9		317.8		268.0		357.0		421.9		391.5
Accounts and notes receivable		345.6				321.8		344.6		335.0				317.6		325.0		364.3		356.3		
Inventories Current deferred income taxes		0.0		347.1 0.0		39.7		40.4		40.7		327.7 43.0		54.7		56.9		63.2		35.3		243.5 25.6
		31.7		34.2		28.7		22.6		21.7		21.6		20.3		43.1		55.2		40.1		15.4
Prepaid expenses Assets held for sale		0.0		0.0		15.2		10.6		15.1		0.0		13.2		15.1		0.0		259.8		0.0
Total current assets		1,137.2		1,084.6		920.5		951.5		985.0		863.1		773.8		734.5		886.6		1,148.3		731.2
Investments and long-term		1,107.2		1,004.0		920.5		331.3		900.0		000.1		115.0		754.5		000.0		1,140.5		751.2
receivables		39.2		40.6		41.6		42.4		42.1		29.0		37.4		33.3		28.0		25.4		6.7
Property, plant & equipment, net		3,261.4		3,156.3		3,071.6		3,312.0		3,159.2		3,418.2		3,632.9		3,874.7		4,155.8		3,620.1		1,869.1
Goodwill		3,094.8		3,094.8		3,094.8		3,081.5		3,086.7		3,086.7		3,097.0		3,096.3		3,085.5		3,789.1		620.2
Other assets		938.9		925.3		912.6		845.7		822.4		796.1		798.4		787.7		753.4		344.5		200.6
Total	\$	8,471.5	\$	8,301.6	s	8,041.1	\$	8,233.1	\$	8,095.4	S	8,193.1	\$	8,339.5	\$	8,526.5	\$	8,909.3	\$	8,927.4	\$:	3,427.8
Liabilities and Equity														-,								_
Current maturities	\$	0.1	\$	0.1	\$	150.1	\$	0.2	\$	150.6	\$	134.8	\$	5.2	\$	385.4	\$	311.7	\$	35.2	\$	0.6
Short-term borrowings	_	0.0	*	0.0	•	0.0	•	0.0	•	0.0	•	0.0	-	285.5	•	236.5		1.082.5	•	2.091.5	•	198.9
Other current liabilities		372.1		353.4		301.3		298.9		285.0		271.5		291.5		251.1		285.5		395.2		288.0
Liabilities of assets held for sale		0.0		0.0		0.5		0.0		0.8		0.0		0.1		0.4		0.0		6.3		0.0
Long-term debt		1,982.8		1,980.3		1,834.6		2,496.2		2,495.2		2,644.5		2,427.5		2,116.1		2,153.6		1,529.8		322.1
All other noncurrent liabilities		1,544.0		1,513.6		1,577.9		1,499.7		1,402.7		1,350.7		1,373.9		1,508.9		1,546.2		1,098.6		581.3
Equity		4,572.5		4,454.2		4,176.7		3,938.1		3,761.1		3,791.6		3,955.8		4,028.1		3,529.8		3,770.8		2,036.9
Total	\$	8,471.5		8,301.6		8,041.1		8,233.1		8,095.4		8,193.1		8,339.5		8,526.5		8,909.3		8,927.4		3,427.8
Other Financial Data				k -		de		1		*		-				*				to .		*
Average Capital Employed																						
Current maturities	\$	0.1	\$	60.7	\$	12.7	\$	58.7	\$	203.4	\$	15.6	\$	315.7	\$	150.5	\$	250.9	\$	3.8	\$	49.9
Short-term borrowings	Ψ	0.0	Ψ	41.9	Ψ	4.2	Ψ	21.5	Ψ	0.0	v	137.9	Ψ	171.3	Ψ	508.1		1,544.1	Ψ	602.6	Ψ	118.1
Long-term debt		1,982.5		1,912.2		2,079.6		2,524.2		2,587.5		2,637.9		2,259.5		2,455.1		1,863.2		423.4		322.6
All other noncurrent liabilities		1,506.3		1,567.2		1,505.6		1,454.0		1,315.5		1,303.5		1,417.1		1,531.0		1,144.2		664.8		577.8
Equity		4,480.1		4,274.9		4,103.0		3,798.3		3,756.5		3,870.6		3,991.8		3,797.6		3,830.8		2,474.5		2,045.7
Total	\$	7,969.0	_	7,856.9		7,705.1		7,856.7		7,862.9		7,965.5		8,155.4		8,442.3		8,633.2		4,169.1		3,114.1
Capital Expenditures						,		,				· ·		,		'		,				
Cash purchases of property,																						
plant & equipment	\$	350.1	\$	289.3	\$	224.9	\$	275.4	\$	93.4	\$	98.9	\$	86.3	\$	109.7	\$	353.2	\$	483.3	\$	435.2
Accruals and other items for			-				77.			1808.000			*	4.57.51							_	
property, plant & equipment		(5.2)		14.7		(1.8)		9.2		2.4		(1.0)		(6.9)		(3.2)		0.6		(2.8)		23.5
Debt issued for property, plant		,																		, , ,		
& equipment		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.4		0.0		0.2
Total	\$	344.9	\$	304.0	\$	223.1	\$	284.6	\$	95.8	\$	97.9	\$	79.4	\$	106.5	\$	354.2	\$	480.5	\$	458.9
Acquisitions																						
Cash paid	\$	32.5	\$	27.2	\$	284.2	\$	90.0	\$	0.0	\$	10.5	\$	70.5	\$	37.0	\$	84.1	\$	3,297.9	\$	20.5
Cash acquired		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		2.9		0.0
Stock issued		0.0		0.0		45.2		0.0		(0.1)		18.6		0.0		0.0		25.0		1,436.5		0.0
Debt issued		0.0		0.0		0.0		0.0		0.0		0.0		0.0		2.0		0.0		0.0		0.0
Fair value - net assets swap		0.0		20.0		2.4		0.0		0.0		26.0		0.0		0.0		43.0		0.0		0.0
Total	\$	32.5	\$	47.2	\$	331.8	\$	90.0	\$	(0.1)	\$	55.1	\$	70.5	\$	39.0	\$	152.1	\$	4,737.3	\$	20.5
Working capital	\$	764.9	\$	731.1	\$	468.6	\$	652.4	\$	548.6	\$	456.8	\$	191.4	\$	(138.8)	\$	(793.2)	\$ ((1,380.0)	\$	243.7
Ratio of earnings to fixed																						
charges 1		4.0		2.2		2.1		1.0		0.5		0.4		0.1		0.9		1.3		9.2		12.9
Total debt as a percentage																						
of total capital 2		30.2%		30.8%		32.2%		39.0%		41.6%		42.6%		40.7%		40.5%		50.1%		49.2%		20.4%
Average number of employees		7,375		7,024		6,794		7,027		6,993		7,555		7,997		8,580		9,917		8,245		7,983

¹ Ratio of earnings to fixed charges is the sum of earnings from continuing operations before income taxes, minority interest in earnings of a consolidated subsidiary, amortization of capitalized interest and fixed charges net of interest capitalization credits, divided by fixed charges. Fixed charges are the sum of interest expense before capitalization credits, amortization of financing costs and one-third of rental expense.

² Total debt as a percentage of total capital is the sum of short-term borrowings, current maturities and long-term debt, divided by total capital. Total capital is the sum of total debt and equity.

VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

in millions		2016		2015		2014		2013		2012		2011		2010		2009		2008		2007		2006
Operating Activities																						
Net earnings (loss)	\$	419.5	\$	221.2	\$	204.9	\$	24.4	\$	(52.6)	\$	(70.8)	\$	(96.5)	\$	30.3	\$	0.9	\$	450.9	\$	470.2
Adjustments to reconcile net	•	11.000			-	E-8 104	-			()		()	100	()		15151.51	***	(4.5,4)	•			11111111
earnings to net cash provided																						
by operating activities																						
Depreciation, depletion,																						
accretion and amortization		284.9		274.8		279.5		307.1		332.0		361.7		382.1		394.6		389.1		271.5		226.4
(Increase) decrease in assets		20		21 1.0		210.0		001.1		002.0		001.1		002.1		00 1.0		000.1		21 1.0		220. 1
excluding the initial effects of																						
business acquisitions and																						
dispositions		(86.8)		(33.5)		(50.9)		(38.4)		(20.8)		4.4		(78.2)		95.7		16.7		25.2		(76.0)
Increase (decrease) in liabilities		(55.5)		(00.0)		(00.0)		(00.1)		(20.0)		186.6		(10.2)		00.1				20.2		(10.0)
excluding the initial effects of																						
business acquisitions and																						
dispositions		(6.0)		10.4		(42.4)		(22.1)		41.2		(16.3)		98.2		(5.4)		(101.9)		4.4		(22.6)
Other, net		33.0		46.6		(130.1)		85.5		(61.3)		(110.0)		(102.9)		(62.2)		130.4		(43.9)		(18.7)
N. C.		00.0		40.0		(100.1)		00.0		(01.0)		(110.0)		(102.0)		(02.2)		100.4		(40.0)		(10.1)
Net cash provided by operating activities	\$	644.6	\$	519.5	\$	261.0	\$	356.5	\$	238.5	\$	169.0	\$	202.7	\$	453.0	\$	435.2	\$	708.1	\$	579.3
Investing Activities	Ť	011.0	Ť	010.0	Ψ.	201.0	Ÿ	000.0	Ψ.	200.0	Ť	100.0	Ÿ	202.1	Ψ	100.0	Ψ	100.2	Ψ	100.1	Ť	010.0
Purchases of property,																						
plant & equipment		(350.1)		(289.3)		(224.9)		(275.4)		(93.4)		(98.9)		(86.3)		(109.7)		(353.2)		(483.3)		(435.2)
Proceeds from sale of property,		(330.1)		(208.5)		(224.5)		(213.4)		(33.4)		(30.3)		(00.5)		(108.7)		(333.2)		(400.0)		(455.2)
plant & equipment		23.3		8.2		26.0		17.6		80.8		13.7		13.6		17.7		25.5		88.9		7.9
Proceeds from sale of		20.0		0.2		20.0		17.0		00.0		13.7		15.0		17.7		20.0		00.8		1.5
contractual rights, net of cash																						
transaction fees		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		24.8
Proceeds from sale of businesses		0.0		0.0		721.4		51.6		21.2		74.7		51.0		16.1		225.8		30.6		141.9
Payment for business acquisitions		(32.5)				(284.2)		(90.0)		0.0				(70.5)		(37.0)		(84.1)	10			(20.5)
		(32.5)		(27.2)		(204.2)		(90.0)		0.0		(10.5)		(70.5)		(37.0)		(04.1)	(0	3,297.9)		(20.5)
(Increase) decrease in medium-term investments		0.0		0.0		0.0		0.0		0.0		0.0		3.6		33.3		(36.7)		0.0		175.1
		0.0		0.0		0.0		0.0		0.0		0.0		5.0		33.3		(30.7)		0.0		175.1
(Increase) decrease in																						
investments and		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		(1.2)		5.0		0.3
long-term receivables		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		(1.2)		5.0		0.5
Withdrawal of earnings from		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.7		0.0		0.0
nonconsolidated companies Other, net				(1.4)		0.0		0.0		1.8		1.5		0.2		(0.4)		33.1		2.4		0.7
		(5.8)	_	(1.4)		0.1		0.0		1.0		1.5		0.2		(0.4)		55.1		2.4		0.7
Net cash provided by		(005.4)	•	(000 7)	•	000.4	•	(000.0)	•	40.4	•	(40.5)	•	(00.4)	•	(00.0)	•	(400.4)	C (C	0540	•	(405.0)
(used for) investing activities	\$	(365.1)	\$	(309.7)	\$	238.4	\$	(296.2)	\$	10.4	\$	(19.5)	\$	(88.4)	Þ	(80.0)	Ъ	(189.1)	\$ (3	5,654.3)	Þ	(105.0)
Financing Activities																						
Net short-term																						
borrowings (payments)		3.0		441.0		93.0		156.0		0.0		(285.5)		49.0		(848.0)	(1,009.0)	1	,892.6		198.9
Payment of current maturities,																						
long-term debt and line of credit		(3.0)		(901.1)		(672.8)		(306.6)		(134.8)		(743.1)		(519.2)		(361.7)		(48.8)		(2.0)		(272.5)
Proceeds from issuance of		5		0.0000000000000000000000000000000000000				N-10400												V-10		
long-term debt		0.0		400.0		0.0		0.0		0.0		1,100.0		450.0		397.7		949.1	1	,223.6		0.0
Purchases of common stock		(161.5)		(21.5)		0.0		0.0		0.0		0.0		0.0		0.0		0.0		(4.8)		(522.8)
Proceeds from issuance of		2.2		10 101		200		2.0		10.0				0.00		200		22.00				0.10
common stock		0.0		0.0		30.6		3.8		0.0		4.9		41.7		606.5		55.1		0.0		0.0
Dividends paid		(106.3)		(53.2)		(28.9)		(5.2)		(5.2)		(98.2)		(127.8)		(171.5)		(214.8)		(181.3)		(144.1)
Proceeds from exercise of		212						12.0				12172										
stock options		0.0		73.0		23.5		9.8		10.5		3.6		20.5		17.3		24.6		35.1		28.9
Excess tax benefits from						2.02		2.2		2.2				2.1		20.0				200		
share-based compensation		0.0		18.4		3.5		0.2		0.3		0.1		0.8		2.1		11.2		29.2		17.4
Other, net		(36.8)		(23.6)		(0.7)		(0.1)		0.0		(23.0)		(4.1)		(3.3)		(38.2)		(66.5)		0.0
Net cash provided by	•	(004.0)	•	(07.0)		(554.0)	•	(4.40.4)	•	(400.0)	•	(44.0)	•	(00.4)	•	(000.0)	•	(070.0)	Φ	005.0	•	(004.0)
(used for) financing activities	\$	(304.6)	Э	(67.0)	\$	(551.8)	\$	(142.1)	\$	(129.2)	\$	(41.2)	\$	(89.1)	\$	(360.9)	\$	(270.8)	\$ 2	2,925.9	\$	(694.2)
Net increase (decrease) in cash		212 1131 101		9 900 0		95-000-00		22 70 80		g grander		2521 00		200-100		2001.10		55 to 100		20000000000		200 2 100
and cash equivalents		(25.1)		142.8		(52.4)		(81.8)		119.7		108.3		25.2		12.1		(24.7)		(20.3)		(219.9)
Cash and cash equivalents																						
at beginning of year		284.1		141.3		193.7		275.5		155.8		47.5		22.3		10.2		34.9		55.2		275.1
Cash and cash equivalents																						
at end of year	\$	259.0	\$	284.1	\$	141.3	\$	193.7	\$	275.5	\$	155.8	\$	47.5	\$	22.3	\$	10.2	\$	34.9	\$	55.2

VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

TOTAL REVENUES, NET EARNINGS AND EARNINGS PER SHARE

in millions, except per share data		2016		2015		2014		2013		2012		2011		2010		2009		2008		2007		2006
Total Revenues																						
First quarter	\$	754.7	\$	631.3	\$	574.4	\$	538.2	\$	535.9	\$	487.2	\$	493.3	\$	600.3	\$	817.3	\$	687.2	\$	708.7
Second quarter		956.8		895.1		791.1		738.7		694.1		702.0		736.2		721.9		1,021.6		878.8		888.2
Third quarter		1,008.1		1,038.5		873.6		813.6		728.9		760.8		743.2		778.2		1,013.3		904.9		929.3
Fourth quarter		873.1		857.3		755.1		680.2		608.4		614.6		586.2		590.1		799.2		856.9		816.3
Total	\$	3,592.7	\$	3,422.2	\$	2,994.2	\$:	2,770.7	\$	2,567.3	\$	2,564.6	\$:	2,558.9	\$	2,690.5	\$	3,651.4	\$:	3,327.8	\$	3,342.5
Operating Earnings (Loss)				e.				980		* -		*		**				1000			1	
First quarter	\$	64.9	\$	10.8	\$	194.7	\$	(50.1)	\$	(46.3)	\$	(61.2)	\$	(36.8)	\$	(1.3)	\$	66.8	\$	137.1	\$	99.0
Second quarter	•	213.8		153.8		103.2	-	86.9	*	19.7		23.5	-	1.2	*	65.7		238.5	-	217.2	. •	218.1
Third quarter		227.1		212.2		140.3		99.8		55.9		106.7		50.4		82.7		128.3		214.3		206.4
Fourth quarter		173.8		173.0		99.9		53.8		55.5		(5.5)		(29.3)		1.4		(184.5)		145.8		171.6
Total	\$	679.6	\$	549.8	\$	538.1	\$	190.4	\$	84.8	\$	63.5	\$	(14.5)	\$	148.5	\$	249.1	\$	714.4	\$	695.1
Earnings (Loss) from Continuing	_	070.0	Ψ	040.0		000.1		100.4	Ψ	04.0	-	00.0	Ψ.	(14.0)	Ψ	140.0		240.1	Ψ	7 14.4	Ψ	000.1
Operations																						
•	\$	42.0	\$	(36.7)	\$	54.5	\$	(61.6)	\$	(E7.4)	\$	(64.6)	\$	(44 E)	\$	(22.2)	\$	14.5	\$	89.3	\$	71.9
First quarter Second quarter	Φ	127.2	Φ	49.8	φ	46.5	Φ	30.1	Φ	(57.1) (17.0)	Q.	(7.1)	Φ	(44.5) (22.5)	Φ	(32.3) 15.6	Φ	141.2	Φ	143.7	Φ	152.3
		145.1		126.2		67.8		42.2		15.6		22.4		10.6		47.9		59.8		143.7		140.9
Third quarter		108.1		93.7		38.3		10.1		4.6		(26.0)		(46.1)		(12.6)		(212.2)		86.2		115.1
Fourth quarter					_		_						_		_		•		_		•	
Total	\$	422.4	\$	233.0	\$	207.1	\$	20.8	\$	(53.9)	\$	(75.3)	\$	(102.5)	\$	18.6	\$	3.3	\$	463.1	\$	480.2
Basic Earnings (Loss) Per Share																						
from Continuing Operations																						
First quarter	\$	0.31	\$	(0.28)	\$	0.42	\$	(0.47)	\$	(0.44)	\$	(0.50)	\$	(0.35)	\$	(0.29)	\$	0.13	\$	0.94	\$	0.72
Second quarter		0.95		0.37		0.35		0.23		(0.13)		(0.05)		(0.18)		0.14		1.28		1.50		1.53
Third quarter		1.09		0.95		0.51		0.32		0.12		0.17		0.08		0.38		0.54		1.50		1.47
Fourth quarter		0.82	_	0.70		0.29		0.08		0.03		(0.20)		(0.36)		(0.10)		(1.92)		0.85		1.21
Full year	\$	3.17	\$	1.75	\$	1.58	\$	0.16	\$	(0.42)	\$	(0.58)	\$	(0.80)	\$	0.16	\$	0.03	\$	4.77	\$	4.92
Diluted Earnings (Loss) Per Share																						
from Continuing Operations																						
First quarter	\$	0.31	\$	(0.28)	\$	0.41	\$	(0.47)	\$	(0.44)	\$	(0.50)	\$	(0.35)	\$	(0.29)	\$	0.13	\$	0.91	\$	0.70
Second quarter		0.93		0.37		0.35		0.23		(0.13)		(0.05)		(0.18)		0.14		1.27		1.46		1.50
Third quarter		1.07		0.93		0.51		0.32		0.12		0.17		0.08		0.38		0.54		1.47		1.44
Fourth quarter		0.80		0.69		0.29		0.08		0.03		(0.20)		(0.36)		(0.10)		(1.92)		0.83		1.19
Full year	\$	3.11	\$	1.72	\$	1.56	\$	0.16	\$	(0.42)	\$	(0.58)	\$	(0.80)	\$	0.16	\$	0.03	\$	4.66	\$	4.81
Net Earnings (Loss)																						
First quarter	\$	40.2	\$	(39.7)	\$	54.0	\$	(54.8)	\$	(52.1)	\$	(54.7)	\$	(38.7)	\$	(32.8)	\$	13.9	\$	88.9	\$	70.1
Second quarter		124.7		48.2		46.0		28.8		(18.3)		(8.1)		(24.0)		22.2		140.8		142.0		150.6
Third quarter		142.0		123.8		66.9		41.4		14.3		20.0		13.2		54.2		59.1		135.4		135.7
Fourth quarter		112.6		88.9		38.0		9.0		3.5		(28.0)		(47.0)		(13.3)		(212.9)		84.6		113.8
Total	\$	419.5	\$	221.2	\$	204.9	\$	24.4	\$	(52.6)	\$	(70.8)	\$	(96.5)	\$	30.3	\$	0.9	\$	450.9	\$	470.2
Basic Net Earnings (Loss)																						
Per Share																						
First quarter	\$	0.30	\$	(0.30)	\$	0.41	\$	(0.42)	\$	(0.40)	\$	(0.42)	\$	(0.31)	\$	(0.30)	\$	0.13	\$	0.93	\$	0.70
Second quarter		0.93		0.36		0.35		0.22		(0.14)		(0.06)		(0.19)		0.20		1.28		1.49		1.51
Third quarter		1.07		0.93		0.51		0.32		0.11		0.15		0.10		0.43		0.54		1.41		1.42
Fourth quarter		0.85		0.67		0.29		0.07		0.03		(0.22)		(0.37)		(0.11)		(1.93)		0.83		1.20
Full year	\$	3.15	\$	1.66	\$	1.56	\$	0.19	\$	(0.41)	\$	(0.55)	\$	(0.75)	\$	0.25	\$	0.01	\$	4.65	\$	4.82
Diluted Net Earnings (Loss)														*								
Per Share																						
First quarter	\$	0.30	\$	(0.30)	\$	0.41	\$	(0.42)	\$	(0.40)	\$	(0.42)	\$	(0.31)	\$	(0.30)	\$	0.13	\$	0.91	\$	0.68
Second quarter		0.92		0.36		0.35		0.22		(0.14)		(0.06)		(0.19)		0.20		1.27		1.45		1.48
Third quarter		1.05		0.91		0.50		0.31		0.11		0.15		0.10		0.43		0.53		1.38		1.39
Fourth quarter		0.83		0.65		0.28		0.07		0.03		(0.22)		(0.37)		(0.11)		(1.93)		0.82		1.17
Full year	\$	3.09	\$	1.64	\$	1.54	\$	0.19	\$	(0.41)	\$	(0.55)	\$	(0.75)	\$	0.25	\$	0.01	\$	4.54	\$	4.71
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VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

COMMON STOCK PRICES, DIVIDENDS AND RELATED DATA

			2016		2015		2014		2013	2012		2011		2010		2009		2008	2007		2006
Common Stock	Prices																				
First quarter	High Low Close	\$	106.78 78.83 105.57	\$	86.25 64.28 84.30	\$	69.50 57.55 66.45	\$	59.48 49.95 51.70	\$ 48.09 38.78 42.73	\$	47.18 39.77 45.60	\$	54.36 41.80 47.24	\$	71.26 34.30 44.29	\$	79.75 60.20 65.98	\$ 125.79 87.27 116.48	\$	89.16 66.98 86.65
Second quarter	High Low Close		121.22 104.61 120.36		93.07 80.58 83.93		68.29 58.88 63.75		55.74 45.42 48.41	43.91 32.31 39.71		46.80 36.51 38.53		59.90 43.60 43.83		53.94 39.65 43.10		84.73 59.26 59.78	128.62 111.46 114.54		93.85 70.44 78.00
Third quarter	High Low Close		127.20 106.42 113.73		102.65 84.10 89.20		66.55 60.20 60.23		54.37 46.21 51.81	49.99 35.69 47.30		39.99 27.44 27.56		48.04 35.61 36.92		62.00 39.14 54.07		100.25 49.39 74.50	116.52 80.50 89.15		80.18 65.85 78.25
Fourth quarter	High Low Close		138.18 105.71 125.15		106.84 87.40 94.97		69.10 54.10 65.73		60.14 50.32 59.42	53.85 44.19 52.05		45.00 25.06 39.35		48.26 35.40 44.36		54.37 44.70 52.67		77.95 39.52 69.58	96.09 77.04 79.09		92.00 76.81 89.87
Year	High Low Close		138.18 78.83 125.15		106.84 64.28 94.97		69.50 54.10 65.73		60.14 45.42 59.42	53.85 32.31 52.05		47.18 25.06 39.35		59.90 35.40 44.36		71.26 34.30 52.67		100.25 39.52 69.58	128.62 77.04 79.09		93.85 65.85 89.87
Dividends Decla																					
of Common St	ock ¹																				
First quarter		\$	0.20	\$	0.10	\$	0.05	\$	0.01	\$ 0.01	\$	0.25	\$	0.25	\$	0.49	\$	0.49	\$ 0.46	\$	0.37
Second quarter			0.20		0.10		0.05		0.01	0.01		0.25		0.25		0.49		0.49	0.46		0.37
Third quarter			0.20		0.10		0.06		0.01	0.01		0.25		0.25 0.25		0.25		0.49	0.46		0.37
Fourth quarter Full year		\$	0.20	\$	0.10	\$	0.06	\$	0.01	\$ 0.01	\$	0.01	\$	1.00	\$	0.25 1.48	\$	0.49 1.96	\$ 0.46 1.84	\$	0.37 1.48
Other Data					20000000	_	*********		100,000-12	 		75.000		300000000				1000			
Market value of o	lebt (in millions)	\$	2,243	\$	2,205	\$	2,275	\$	2,821	\$ 2,917	\$	2,931	\$	2,564	\$	2,686	\$	2,155	\$ 1,583	\$	333
Market value of e	o Non Con Man	-	16,562	7	12.623	•	8.622	,	7.722	6,752	•	5.085	7	5,703	•	6,631	•	7,671	8,557	•	8,498
Total enterprise		\$	18,805	\$	14,828	\$	10,896	\$	10,543	\$ 9,669	\$	8,016	\$	8,267	\$	9,317	\$	9,826	\$ 10,140	\$	8,831
Price earnings ra					fe .		- dec		16									<u> </u>			
Thee carrings to	High		44.7		65.1		45.1		316.5	N/A		N/A		N/A		285.0		N/A	28.4		20.0
	Low		25.5		39.2		35.1		239.1	N/A		N/A		N/A		137.2		N/A	17.0		14.1
	Close		40.5		57.9		42.7		312.7	N/A		N/A		N/A		210.7		N/A	17.4		19.2
Dividends paid a	s a percentage																				
	arnings per share		25.9%		24.4%		14.3%		21.6%	N/A		N/A		N/A		N/A		N/A	40.6%		31.6%
Equity per comm		\$	34.33	\$	33.44	\$	31.77	\$	30.23	\$ 28.99	\$	29.31	\$	30.96	\$	33.96	\$	32.24	\$ 37.93	\$	20.87
Ratio of stock pri	ce to equity per		3.6		2.8		2.1		2.0	1.8		1.3		1.4		1.6		2.2	2.1		4.3
Common shares at year end (in r			132.3		133.2		131.9		130.2	129.7		129.2		128.6		125.9		110.3	108.2		94.6
outstanding (in			133.2		133.2		131.5		130.3	129.7		129.4		128.1		118.9		109.8	97.0		97.6
outstanding, as: (in millions)	ge common shares suming dilution		135.8		135.1		133.0		131.5	129.7		129.4		128.1		119.4		111.0	99.4		99.8

Dividends paid in 2016 totaled \$106,333,000 as compared with \$53,214,000 paid in 2015. On February 10, 2017, our Board of Directors authorized a quarterly dividend of 25 cents per common share payable March 10, 2017.

VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

RECONCILIATION OF NON-GAAP MEASURES

in millions	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Reconciliation of Net											
Earnings to EBITDA											
Net earnings (loss)	\$ 419.5	\$ 221.2	\$ 204.9	\$ 24.4	\$ (52.6)	\$ (70.8)	\$ (96.5)	\$ 30.3	\$ 0.9	\$ 450.9	\$ 470.2
Income tax expense (benefit)	124.9	94.9	91.7	(24.5)	(66.5)	(78.4)	(89.7)	(37.8)	71.7	204.4	223.3
Interest expense, net	133.2	220.2	242.4	201.7	211.9	217.2	180.7	173.0	169.7	41.6	20.1
(Earnings) loss on discontinued											
operations, net of tax	2.9	11.8	2.2	(3.6)	(1.3)	(4.5)	(6.0)	(11.7)	2.4	12.2	10.0
EBIT	680.5	548.1	541.2	198.0	91.5	63.5	(11.5)	153.8	244.7	709.1	723.6
Plus											
Goodwill impairment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	252.7	0.0	0.0
Depreciation, depletion, accretion											
and amortization from											
continuing operations	285.0	274.8	279.5	307.1	332.0	361.7	382.1	394.6	389.1	271.5	226.4
EBITDA	\$ 965.5	\$ 822.9	\$ 820.7	\$ 505.1	\$ 423.5	\$ 425.2	\$ 370.6	\$ 548.4	\$ 886.5	\$ 980.6	\$ 950.0

EBITDA is an acronym for Earnings Before Interest, Taxes, Depreciation and Amortization. Generally Accepted Accounting Principles (GAAP) does not define this metric. EBITDA should not be considered as an alternative to earnings measures defined by GAAP.

We present EBIT and EBITDA for the convenience of investment professionals who use such metrics in their analyses and for shareholders who need to understand the metrics we use to assess performance. We use EBITDA and other such measures to assess the operating performance of our various business units and the consolidated company. We do not use these metrics as a measure to allocate resources.

VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES BOARD OF DIRECTORS AND COMMITTEES

BOARD OF DIRECTORS

J. THOMAS HILL Chairman, President and Chief Executive Officer Vulcan Materials Company

THOMAS A. FANNING Chairman, President and Chief Executive Officer Southern Company

O. B. GRAYSON HALL, JR. Chairman, President and Chief Executive Officer Regions Financial Corporation

CYNTHIA L. HOSTETLER Trustee Aberdeen Investment Funds

DOUGLAS J. MCGREGOR Senior Advisor Blue Point Capital Partners Former President and Chief Operating Officer Burlington Industries

RICHARD T. O'BRIEN Former President and Chief Executive Officer Boart Longyear Ltd. JAMES T. PROKOPANKO Former President and Chief Executive Officer The Mosaic Company

DAVID P. STEINER Former President and Chief Executive Officer Waste Management, Inc.

LEE J. STYSLINGER, III Chairman and Chief Executive Officer Altec, Inc.

VINCENT J. TROSINO Former President, Chief Operating Officer and Vice Chairman of the Board State Farm Mutual Automobile Insurance Company

KATHLEEN WILSON-THOMPSON Executive Vice President and Global Chief Human Resources Officer Walgreens Boots Alliance, Inc. CHAIRMAN EMERITI Donald M. James Herbert A. Sklenar

DIRECTORS EMERITI Marion H. Antonini Phillip W. Farmer H. Allen Franklin John K. Greene Ann M. Korologos John J. McKetta James V. Napier Donald B. Rice

BOARD COMMITTEES

EXECUTIVE
O. B. Grayson Hall, Jr.
J. Thomas Hill*
Cynthia L. Hostetler
Richard T. O'Brien
James T. Prokopanko
Kathleen Wilson-Thompson

AUDIT Thomas A. Fanning Cynthia L. Hostetler Douglas J. McGregor Richard T. O'Brien* Vincent J. Trosino COMPENSATION Thomas A. Fanning James T. Prokopanko* Lee J. Styslinger, III Kathleen Wilson-Thompson

FINANCE
O. B. Grayson Hall, Jr.
Cynthia L. Hostetler*
Douglas J. McGregor

GOVERNANCE
O. B. Grayson Hall, Jr.*
James T. Prokopanko
David P. Steiner
Vincent J. Trosino

SAFETY, HEALTH AND ENVIRONMENTAL AFFAIRS Richard T. O'Brien David P. Steiner Lee J. Styslinger, III Kathleen Wilson-Thompson*

* Chair

VULCAN MATERIALS COMPANY AND SUBSIDIARY COMPANIES

CORPORATE AND CONSTRUCTION MATERIALS OFFICERS

CORPORATE OFFICERS

J. THOMAS HILL Chairman, President and Chief Executive Officer (2015/1996) Age 57

JOHN R. MCPHERSON Executive Vice President, Chief Financial and Strategy Officer (2014/2011) Age 48

STANLEY G. BASS Chief Growth Officer (2016/1996) Age 55

MICHAEL R. MILLS Chief Administrative Officer (2016/1991) Age 56

JERRY F. PERKINS JR. General Counsel and Secretary (2016/2002) Age 47

JAMES R. AVERITT Vice President, Risk Management (2013/1984) Age 64 C. WES BURTON, JR. Vice President and Treasurer (2011/2011) Age 51

DAVID A. DONALDSON Vice President, External Affairs and Corporate Communications (2016/1980) Age 63

KEVIN T. HALCOMB Vice President, Tax (2014/2009) Age 40

NORMAN JETMUNDSEN, JR. Vice President and Associate General Counsel (2011/2002) Age 63

JANET F. KAVINOKY Vice President, Federal and State Governmental Relations (2016/2015) Age 44

EJAZ A. KHAN Vice President, Controller and Chief Information Officer (2000/1979) Age 59 CHARLES D. LOCKHART Vice President, Compensation and Benefits (2013/1985) Age 63

SCOTT L. MCCALEB President, Vulcan Lands (2013/1994) Age 64

LARRY W. MILLER Vice President, Human Resources (2016/2000) Age 60

LINDSAY L. SINOR Vice President Vulcan Lands and Assistant General Counsel (2015/1992) Age 56

JASON P. TETER Vice President, Finance (2017/2013) Age 42

CONSTRUCTION MATERIALS OFFICERS

CHRISTINA M. ALVORD President, Southern and Gulf Coast Division (2017/2016) Age 49

DAVID P. CLEMENT President, Central Division (2014/2004) Age 56

WILLIAM KIM DUKE President, Southeast Division (2017/1985) Age 61

ERNESTO ENRIQUEZ-CASTILLO President, International Division (2015/2013) Age 42

C. BROCKWAY LODGE, JR. President, Western Division (2016/2001) Age 44

JEFFERY G. LOTT President, Southwest Division (2014/2001) Age 58 DAVID B. PASLEY President, Mountain West Division (2014/1999) Age 58

S. MARTIN THORPE President, Mideast Division (2017/2000) Age 60

JAMES F. FLEMING, JR. Vice President, Permitting and External Relations (2015/1987) Age 56

SEAN H. HAWLEY Vice President, Financial Planning, Analysis and Reporting (2016/2014) Age 42

FRANK G. LIETH Vice President, Geological Services (2015/1999) Age 46

SIDNEY F. MAYS Vice President, Marketing Support Services (2007/1986) Age 55 JEFFREY L. MCCORMICK Vice President, Finance – Construction Materials (2012/1981) Age 61

BERT O'NEAL, JR. Vice President, Transportation and Procurement (2015/2015) Age 37

JAMES D. PEASE Vice President, Market Development (2012/1987) Age 62

RICHARD S. REESE Vice President, National Accounts (2013/1985) Age 64

Dates indicate year appointed to present position/year employed by Vulcan.

Ages are as of March 1, 2017.

SHAREHOLDER INFORMATION

HOW TO REACH US

Shareholder Services

Our transfer agent and registrar, Computershare Shareowner Services LLC (Computershare), has a direct response system for handling shareholders' inquiries about change of address, account balances, recent dividend information, dividend checks, reportable income and dividend reinvestment.

Telephone

(866) 886-9902 (toll-free inside the U.S. and Canada) (201) 680-6578 (outside the U.S. and Canada, may call collect) (800) 231-5469 (TDD, hearing impaired)

Mail

Vulcan Materials Company c/o Computershare PO Box 30170 College Station, TX 77842-3170 Internet: www.computershare.com/investor

Investor Relations

Mark D. Warren

Telephone: (205) 298-3220 E-mail: ir@vmcmail.com

Community & Governmental Relations

David A. Donaldson Telephone: (205) 298-3220 E-mail: cr@vmcmail.com

Internet Address

Our Internet address is vulcanmaterials.com. This website includes general Company information, Securities and Exchange Commission filings, investor information and an archive of recent news releases.

Corporate Headquarters

Vulcan Materials Company 1200 Urban Center Drive Birmingham, Alabama 35242-2545

Telephone: (205) 298-3000 Fax: (205) 298-2963

New York Stock Exchange (NYSE) Assertions

Our common stock is listed and traded on the NYSE under the symbol VMC.

On May 20, 2016, J. Thomas Hill, chairman, president and chief executive officer, submitted to the NYSE the Written Affirmation required by the rules of the NYSE certifying that he was not aware of any violations by Vulcan Materials Company of NYSE Corporate Governance listing standards.

The certifications of Mr. Hill and John R. McPherson, executive vice president and chief financial and strategy officer, made pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, have been filed as exhibits to our 2016 Annual Report on Form 10-K.

GENERAL INFORMATION

Notice of Annual Meeting

The annual meeting of shareholders will be held at the Grand Bohemian Hotel, 2655 Lane Park Road, Birmingham, Alabama 35223, on Friday, May 12, 2017, at 9:00 a.m., Central Daylight Time. All shareholders are urged to attend. A formal notice of the meeting and proxy materials accompany this report.

Electronic Deposit of Dividends

Registered holders of our common stock may have their quarterly dividends deposited to their checking or savings account free of charge. Contact Computershare personnel to sign up for this service.

Telephone: (866) 886-9902

Internet: www.computershare.com/investor

Direct Stock Purchase and Dividend Reinvestment Plan

The Computershare CIP direct purchase and dividend reinvestment plan offers both existing registered shareholders and first-time investors an affordable alternative for investing in the Company, including the ability to purchase additional shares of our common stock. A brochure describing this service may be obtained by calling or visiting:

Telephone: (866) 886-9902

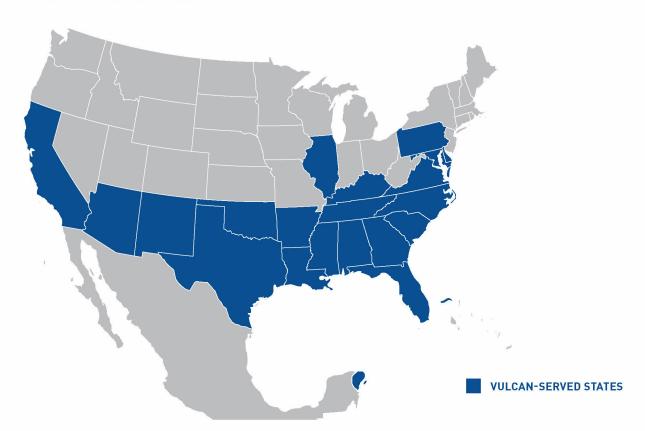
Internet: www.computershare.com/investor

Independent Auditors

Deloitte & Touche LLP Birmingham, Alabama

VULCAN'S COAST-TO-COAST FOOTPRINT

VULCAN MATERIALS COMPANY IS THE NATION'S LARGEST SUPPLIER OF CONSTRUCTION AGGREGATES—PRIMARILY CRUSHED STONE, SAND AND GRAVEL—AND A MAJOR PRODUCER OF AGGREGATES-BASED CONSTRUCTION MATERIALS, INCLUDING ASPHALT AND READY-MIXED CONCRETE. OUR COAST-TO-COAST FOOTPRINT AND STRATEGIC DISTRIBUTION NETWORK ALIGN WITH AND SERVE THE NATION'S GROWTH CENTERS.



www.vulcanmaterials.com

