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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2017

OR

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

For the transition period from __________ to __________

Commission file number 1-12744

MARTIN MARIETTA MATERIALS, INC.
(Exact name of registrant as specified in its charter)

North Carolina	**56-1848578**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
2710 Wycliff Road, Raleigh, North Carolina	**27607-3033**
(Address of principal executive offices)	**(Zip Code)**

(919) 781-4550
(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 (par value $.01 per share)	**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 ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange 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 ☒ No ☐

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 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 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, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

As of June 30, 2017, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was $11,664,571,328.26 based on the closing sale price as reported on the New York Stock Exchange.

Indicate the number of shares outstanding of each of the issuer's classes of common stock on the latest practicable date.

Class	Outstanding at February 9, 2018
Common Stock, $.01 par value per share	**62,803,002 shares**

DOCUMENTS INCORPORATED BY REFERENCE

Document	Parts Into Which Incorporated
Excerpts from Annual Report to Shareholders for the Fiscal Year Ended December 31, 2017 (Annual Report)	Parts I, II, and IV
Proxy Statement for the Annual Meeting of Shareholders to be held May 17, 2018 (Proxy Statement)	Part III

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PART I

ITEM 1. BUSINESS

General

Martin Marietta Materials, Inc. (the “Company” or “Martin Marietta”) is a natural-resource-based building materials company. The Company supplies aggregates (crushed stone, sand and gravel) through its network of 282 quarries and distribution yards to customers in 30 states, Canada, the Bahamas and the Caribbean Islands. In the western United States, Martin Marietta also provides cement and downstream products, namely, ready mixed concrete, asphalt and paving services in markets where the Company has a leading aggregates position. Specifically, the Company has two cement plants in Texas, and ready mixed concrete and asphalt operations in Texas, Colorado, Louisiana and Arkansas. Paving services are exclusively in Colorado. The Company’s heavy-side building materials are used in infrastructure, nonresidential and residential construction projects. Aggregates are also used in agricultural, utility and environmental applications and as railroad ballast. The aggregates, cement, ready mixed concrete, asphalt and paving product lines are reported collectively as the “Building Materials” business. The Company also operates a Magnesia Specialties business with production facilities in Michigan and Ohio. The Magnesia Specialties business produces magnesia-based chemicals products which are used in industrial, agricultural and environmental applications. It also produces dolomitic lime sold primarily to customers in the steel and mining industries. Magnesia Specialties’ products are shipped to customers worldwide.

The Company was formed in 1993 as a North Carolina corporation to serve as successor to the operations of the materials group of the organization that is now Lockheed Martin Corporation. An initial public offering of a portion of the Company’s Common Stock was completed in 1994, followed by a tax-free exchange transaction in 1996 that resulted in 100% of the Company’s Common Stock being publicly traded.

The Company completed over 85 smaller acquisitions from the time of its initial public offering until the present, which allowed the Company to enhance and expand its presence in the aggregates marketplace. This included an exchange of certain assets in 2011 with Lafarge North America Inc. (“Lafarge”), pursuant to which it received aggregates quarry sites, ready mixed concrete and asphalt plants, and a road paving business in and around the metropolitan Denver, Colorado, and the I-25 corridor, in exchange for which Lafarge received properties consisting of quarries, an asphalt plant and distribution yards operated by the Company along the Mississippi River (called the Company’s “River District Operations”) and a cash payment.

The business has developed further through the following transactions over the past five years.

In 2013, the Company acquired three aggregates quarries in the greater Atlanta, Georgia, area. The transaction provided over 800 million tons of permitted aggregates reserves and enhanced the Company’s existing long-term position in this market.

In 2014, the Company completed the acquisition of Texas Industries, Inc. (“TXI”), further augmenting its position as a leading supplier of aggregates and heavy building materials. TXI, as a stand-alone entity, was a leading supplier of heavy construction materials in the southwestern United States and a major supplier of natural aggregates and ready mixed concrete in Texas, northern Louisiana and, to a lesser extent, in Oklahoma

and Arkansas. TXI was the largest supplier of cement, ready mixed concrete, and concrete products in Texas. TXI enhanced the Company's position as an aggregates-led, low-cost operator in large and fast-growing geographies in the United States and provided high-quality assets in cement and ready mixed concrete.

In addition to the cement operations, the Company acquired as part of the TXI acquisition nine quarries and six aggregates distribution terminals located in Texas, Louisiana and Oklahoma. The Company also acquired approximately 120 ready mixed concrete plants, situated primarily in three areas of Texas (the Dallas/Fort Worth/Denton area of north Texas; the Austin area of central Texas; and from Beaumont to Texarkana in east Texas), in north and central Louisiana and in Southwestern Arkansas. As part of an agreement in conjunction with the United States Department of Justice's review of the transaction, the Company divested its North Troy Quarry in Oklahoma and two related rail distribution yards in Dallas and Frisco, Texas.

TXI was also a cement producer in California. In 2015, the Company divested its California cement operations acquired from TXI. These operations were not in close proximity to aggregates and other core assets of the Company and, unlike other marketplace competitors, were not vertically integrated with ready mixed concrete production. The divestiture primarily included a cement plant, two distribution terminals, mobile equipment, intangible assets and inventory. The Company also completed the integration of the TXI operations in 2015, and completed three smaller acquisitions, which included three aggregates operations and related assets.

In 2016, the Company acquired aggregates, ready mixed concrete and asphalt and paving operations in southern Colorado that provided more than 500 million tons of mineral reserves and expanded the Company's presence along the Front Range of the Rocky Mountains, home to 80% of Colorado's population. The Company also acquired the remaining interest it had not previously owned in a ready mixed concrete company that serves the I-35 corridor in central Texas between Dallas and Austin, which enhanced the Company's position and provided additional vertical integration benefits with the Company's cement product line.

Between 2001 and 2017, the Company disposed of or idled a number of underperforming operations, including aggregates, ready mixed concrete, trucking, and asphalt and road paving operations of its Building Materials business and the refractories business of its Magnesia Specialties business. In some of its divestitures, the Company concurrently entered into supply agreements to provide aggregates at market rates to certain of these divested businesses. During 2015, the Company disposed of certain non-core asphalt operations in San Antonio, Texas and divested its California cement operations. The Company will continue to evaluate opportunities to divest underperforming assets, if appropriate, during 2018 in an effort to redeploy capital for other opportunities.

On June 26, 2017, the Company announced a definitive agreement to acquire Bluegrass Materials Company ("Bluegrass Materials") for $1.625 billion in cash. The Company will not acquire any of Bluegrass Materials' cash and cash equivalents nor will it assume any of Bluegrass Materials' outstanding debt. Bluegrass Materials is the largest privately held, pure-play aggregates business in the United States and has a portfolio of 23 active sites with more than 125 years of strategically-located, high-quality reserves, in Maryland, Georgia, South Carolina, Kentucky, Tennessee and Pennsylvania. These operations complement the Company's existing southeastern footprint and provide a new growth platform within the southern portion of the Northeast megaregion. The Company and Bluegrass Materials are continuing to work closely and cooperatively with the Department of Justice in its review of the proposed transaction. The parties currently anticipate that the proposed acquisition will be completed in the first half of 2018.

Business Segment Information

The Company conducts its Building Materials business through three reportable segments, organized by geography: Mid-America Group, Southeast Group and West Group. The Mid-America and Southeast Groups provide aggregates products only. The West Group provides aggregates, cement and downstream products. The following states accounted for 74% of the Building Materials business net sales in 2017: Texas, Colorado, North Carolina, Iowa and Georgia. The Company also has the Magnesia Specialties segment, which includes its magnesia-based chemicals and dolomitic lime businesses. Information concerning the Company's total revenues, net sales, gross profit, earnings from operations, assets employed, and certain additional information attributable to each reportable business segment for each year in the three-year period ended December 31, 2017 is included in "Note O: Business Segments" of the "Notes to Financial Statements" of the Company's 2017 consolidated financial statements (the "2017 Financial Statements"), which are included under Item 8 of this Form 10-K, and are part of the Company's 2017 Annual Report to Shareholders (the "2017 Annual Report"), which information is incorporated herein by reference.

Building Materials Business

This section describes the product lines of the Building Materials business undertaken by the Company within its Mid-America Group, Southeast Group, and West Group. The Company undertakes its aggregates product line of business in all of these geographic segments within its Building Materials business. In 2017, the aggregates product line represented 59% of the Company's consolidated total revenues. The Company's cement, ready mixed concrete, and asphalt and paving operations are conducted within the Company's West Group, with its two cement plants in Texas, and the remaining ready mixed concrete and asphalt product lines in Texas, Colorado, Louisiana, and Arkansas. Paving services are exclusively in Colorado. The Company's cement product line is described below and in greater detail in the next section. Collectively, in 2017 the Building Materials business generated total revenues and earnings from operations of $3.7 billion and $707 million, respectively.

The Building Materials business serves customers in the construction marketplace. The business' profitability is sensitive to national, regional and local economic conditions and cyclical swings in construction spending, which are in turn affected by fluctuations in interest rates; access to capital markets; levels of public-sector infrastructure funding; and demographic, geographic, employment and population dynamics. The heavy- side construction business, inclusive of much of the Company's operations, is conducted outdoors. Therefore, precipitation and other weather-related conditions, including flooding, hurricanes, snowstorms and droughts, can significantly affect production schedules, shipments, costs, efficiencies and profitability. Generally, the financial results for the first and fourth quarters are significantly lower than the second and third quarters due to winter weather.

Aggregates are an engineered granular material consisting of crushed stone, sand and gravel of varying mineralogies, manufactured to specific sizes, grades and chemistry for use primarily in construction applications. The Company's operations consist primarily of open pit quarries; however, the Company is the largest operator of underground aggregates mines in the United States with14 active underground mines located in the Mid-America Group. On average, the Company's aggregates reserves exceed 60 years based on normalized production levels and approximate 100 years at current production rates.

Cement is the basic binding agent used to bind water, aggregates and sand, in the production of ready mixed concrete. The Company has a strategic and leading cement position in Texas, with production facilities in Midlothian, Texas, south of Dallas-Fort Worth, and Hunter, Texas, north of San Antonio. These plants

produce Portland and specialty cements, have a combined annual capacity of 4.5 million tons, and operated at 75% to 80% utilization in 2017. The Midlothian plant permit would allow the Company to expand production by up to 800,000 additional tons. In addition to the two production facilities, the Company operates several cement distribution terminals. Calcium carbonate in the form of limestone is the principal raw material used in the production of cement. The Company owns more than 600 million tons of limestone reserves adjacent to its cement production plants.

Ready mixed concrete, a mixture primarily of cement, water, aggregates, and sand, is measured in cubic yards and specifically batched or produced for customers' construction projects and then transported and poured at the project site. The aggregates used for ready mixed concrete is a washed material with limited amounts of fines (such as dirt and clay). The Company owns 143 ready mix operations in Texas, Colorado, Louisiana and Arkansas. Asphalt is most commonly used in surfacing roads and parking lots and consists of liquid asphalt, the binding medium, and aggregates. Similar to ready mixed concrete, each asphalt batch is produced to customer specifications. The Company's asphalt operations are located primarily in Colorado; additionally, paving services are offered in Colorado. Market dynamics for these product lines include a highly competitive environment and lower barriers to entry compared with aggregates and cement.

The Building Materials business markets its products primarily to the construction industry, with approximately 40% of the aggregates product line shipments in 2017 made to contractors in connection with highway and other public infrastructure projects and the balance of its shipments made primarily to contractors in connection with nonresidential and residential construction projects. The Company believes public-works projects have historically accounted for approximately 50% of the total annual aggregates and cement consumption in the United States. Therefore, these businesses benefit from public-works construction projects. The Company also believes exposure to fluctuations in nonresidential and residential, or private-sector, construction spending is lessened by the business' mix of public sector-related shipments. However, after uncertainty regarding the status of the highway bill in 2014, the Company experienced a slight retraction in aggregates product line shipments to the infrastructure end-use market. Consistent with this trend, the infrastructure market accounted for a lower percentage of the Company's aggregates product line shipments for the past three years compared with the most recent five-year average of 43%.

As a result of dependence upon the construction industry, the profitability of aggregates and cement producers is sensitive to national, regional and local economic conditions, and particularly to cyclical swings in construction spending, which is affected by fluctuations in interest rates, demographic and population shifts, and changes in the level of infrastructure spending funded by the public sector.

The Company's aggregates product line shipments increased in each of the three years prior to 2017, including a 1.4% increase in 2016, reflecting degrees of stability and modest growth. This trend reversed, however, in 2017, as the Company's aggregates product line shipments declined 0.6%, reflecting continuing uncertainty about federal infrastructure spending, labor constraints, and project delays. Despite some volume growth in recent years, aggregates volumes are still below historically normal levels. Prior to 2011, the economic recession resulted in United States aggregates consumption declining by almost 40% from peak volumes in 2006. Aggregates product line shipments had also suffered as states continued to balance their construction spending with the uncertainty related to long-term federal highway funding and budget shortfalls caused by decreasing tax revenues. However, most state budgets began to improve starting in 2013 as increased tax revenues helped states resolve or begin to resolve budget deficits.

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The federal highway bill provides annual funding for public-sector highway construction projects. After a decade of 36 short-term funding provisions since the expiration of the prior federal highway bill, *Moving Ahead for Progress in the 21st Century* ("MAP-21"), the five-year, $305 billion highway bill, *Fixing America's Surface Transportation Act* (the "FAST Act" or the "Act"), was signed into law on December 4, 2015. The FAST Act reauthorizes federal highway and public transportation programs and stabilizes the Highway Trust Fund. The FAST Act retains the programs supported under the predecessor bill, MAP-21, but with some changes. Specifically, *Transportation Infrastructure and Innovation Act* ("TIFIA"), a U.S. Department of Transportation ("DOT") alternative funding mechanism, which under MAP-21 provided three types of federal credit assistance for nationally or regionally significant surface transportation projects, now allows more diversification of projects. TIFIA is designed to fill market gaps and leverage substantial private co-investment by providing projects with supplemental or subordinate debt that is not subject to national debt ceiling challenges or sequestration. Since inception, TIFIA has provided more than $25 billion of credit assistance to over 50 projects representing over $90 billion in infrastructure investment. Under the FAST Act, TIFIA annual funding ranges from $275 million to $300 million and no longer requires the 20% matching funds from state DOTs. Consequently, states can advance construction projects immediately with potentially zero upfront outlay of local state DOT dollars. TIFIA requires projects to have a revenue source to pay back the credit assistance within a 30 to 40 year period. Moreover, TIFIA funds may represent up to 49% of total eligible project costs for a TIFIA-secured loan and 33% for a TIFIA standby line of credit. Therefore, the TIFIA program has the ability to significantly leverage construction dollars. Each dollar of federal funds can provide up to $10 in TIFIA credit assistance and support up to $30 in transportation infrastructure investment. Private investment in transportation projects funded through the TIFIA program is particularly attractive, in part due to the subordination of public investment to private. Management believes TIFIA could provide a substantial boost for state DOT construction programs well above what is currently budgeted. As of January 2018, TIFIA funded projects for the Company's top five sales-generating states (Texas, Colorado, North Carolina, Iowa and Georgia) exceeded $25 billion.

Public infrastructure activity has not yet experienced the anticipated benefits from funding provided by the FAST Act and the TIFIA program. State and local initiatives that support infrastructure funding, including gas tax increases and other ballot initiatives, are increasing in size and number as these governments recognize the need to play an expanded role in public infrastructure funding. Specifically, in the November 2017 election, $3.7 billion of transportation funding initiatives were approved in Texas, Colorado, Georgia, South Carolina and Kansas. The pace of construction should accelerate and shipments to the public infrastructure market should return to historical levels as monies from both the federal government and state and local governments become available. A return to historical levels is also predicated on state DOTs and contractors addressing their labor constraints.

The federal highway bill provides spending authorizations, which represent the maximum financial obligation that will result from the immediate or future outlays of federal funds for highway and transit programs. The federal government's surface transportation programs are financed mostly through the receipts of highway user taxes placed in the Highway Trust Fund, which is divided into the Highway Account and the Mass Transit Account. Revenues credited to the Highway Trust Fund are primarily derived from a federal gas tax, a federal tax on certain other motor fuels and interest on the accounts' accumulated balances. Of the currently imposed federal gas tax of $0.184 per gallon, which has been static since 1993, $0.15 is allocated to the Highway Account of the Highway Trust Fund.

Transportation investments generally boost the national economy by enhancing mobility and access and by creating jobs, which is a priority of many of the government's economic plans. According to the Federal Highway Administration, every $1 billion in federal highway investment creates approximately 28,000 jobs. The number of jobs created is dependent on the nature and aggregates intensity of the projects. Approximately half of the Building Materials business' net sales to the infrastructure market come from federal funding

authorizations, including matching funds from the states. For each dollar spent on road, highway and bridge improvements, the Federal Highway Administration estimates an average benefit of $5.20 is recognized in the form of reduced vehicle maintenance costs, reduced delays, reduced fuel consumption, improved safety, reduced road and bridge maintenance costs and reduced emissions as a result of improved traffic flow.

The Company's Building Materials business covers a wide geographic area. The Company's five largest sales-generating states (Texas, Colorado, North Carolina, Iowa and Georgia) accounted for 74% of total 2017 net sales by state of destination. The Company's Building Materials business is accordingly affected by the economies in these regions and has been adversely affected in part by recessions and weaknesses in these economies from time to time. Recent improvements in the national economy and in some of the states in which the Company operates have led to improvements in profitability in the Company's Building Materials business.

Climate change is defined as a change in global or regional climate patterns. Changes to the climate have been occurring for centuries due to minor shifts in the Earth's orbit, ultimately changing the amount of solar energy received. More recently, however, this rate of change has accelerated, and climate change is considered a leading cause of erratic weather. Production and shipment levels for the Building Materials business correlate with general construction activity, most of which occurs outdoors and, as a result, is affected by erratic weather patterns, seasonal changes and other unusual or unexpected weather-related conditions, which can significantly affect the business.

Excessive rainfall jeopardizes production, shipments and profitability in all markets served by the Company. In particular, the Company's operations in the southeastern and Gulf Coast regions of the United States and the Bahamas are at risk for hurricane activity, most notably in August, September and October. Nationally, 2017 marked the 20th wettest year on record, and the fifth consecutive year with above-average precipitation. The last few years brought an unprecedented amount of precipitation to the United States and particularly to Texas. In fact, 2015 set a new rainfall record for Texas; the 24-month period ending September 2016 set a new two-year record for the state, with an average annual rainfall of 75 inches. Hurricane Harvey, a Category 4 storm that made landfall in Houston in August 2017, brought nearly 20 trillion gallons of precipitation. In the Southeast, Hurricane Irma, also a Category 4 storm, made landfall in Florida in September 2017 and brought excessive rainfall to the southeastern United States, notably Florida and Georgia. Additionally, in 2017, Colorado experienced its fifteenth wettest nine-months for the period January through September. In October 2016, rainfall along the eastern seaboard of the United States from Hurricane Matthew, a Category 5 hurricane, approximated 13.6 trillion gallons. Hurricane Matthew was the first major hurricane on record to make landfall in the Bahamas.

NOAA reports that since 1895, the contiguous United States has experienced an average temperature increase of 1.5°F per century, with 2017 averaging 2.6°F above the 20th century average and marking it the third warmest year on record, behind 2012 and 2016. In fact, 2017 marked the 21st consecutive warmer-than-average year for the contiguous United States, and five states, including North Carolina and South Carolina, had a record warmest year. Temperature plays a significant role in the months of March and November, meaningfully affecting the first- and fourth-quarter results, respectively. Warm and/or moderate temperatures in March and November allows the construction season to start earlier and end later, respectively. In 2017, the nation experienced the ninth warmest March on record while Colorado and Texas reported its warmest and its second warmest March, respectively. The weather was also favorable in November 2017, as Colorado set another record and Texas reported its fifth warmest November.

Natural aggregates sources can be found in relatively homogeneous deposits in certain areas of the United States. As a general rule, truck shipments from an individual quarry are limited because the cost of transporting processed aggregates to customers is high in relation to the price of the product itself. As described below, the Company's distribution system mainly uses trucks, but also has access to a river barge and ocean vessel network where the per-mile unit cost of transporting aggregates is much lower. In addition, acquisitions have enabled the Company to extend its customer base through increased access to rail transportation. Proximity of quarry facilities to customers or to long-haul transportation corridors is an important factor in competition for aggregates businesses.

Product shipments are moved by rail and water through the Company's long-haul distribution network. The Company's rail network primarily serves its Texas, Florida and Gulf Coast markets while the Company's Bahamas and Nova Scotia locations transport materials via oceangoing ships. The Company's strategic focus includes expanding inland and offshore capacity and acquiring distribution yards and port locations to offload transported material. At December 31, 2017, the Company had 81 distribution yards. In 2017, 24.1 million tons of aggregates were sold from distribution yards. The long-haul distribution network can diversify market risk for locations that engage in long-haul transportation of their aggregates products. Particularly where a producing quarry serves a local market and transports products via rail and/or water to be sold in other markets, the risk of a downturn in one market may be somewhat mitigated by other markets served by the location.

The Company generally acquires contiguous property around existing quarry locations. This property can serve as buffer property or additional mineral reserve capacity, assuming the underlying geology supports economical aggregates mining. In either instance, the acquisition of additional property around an existing quarry allows the expansion of the quarry footprint and extension of quarry life. Some locations having limited reserves may be unable to expand.

A long-term capital focus for the Company, primarily in the midwestern United States due to the nature of its indigenous aggregates supply, is underground limestone aggregates mines. The Company operates 14 active underground mines, located in the Mid-America Group, and is the largest operator of underground limestone aggregate mines in the United States. Production costs are generally higher at underground mines than surface quarries since the depth of the aggregate deposits and the access to the reserves result in higher costs related to development, explosives and depreciation costs. However, these locations often possess transportation advantages that can lead to higher average selling prices than more distant surface quarries.

The Company's acquisitions and capital projects have expanded its ability to move material by rail, as discussed in more detail below. The Company has added additional capacity in a number of locations that can now accommodate larger unit train movements. These expansion projects have enhanced the Company's long-haul distribution network. The Company's process improvement efforts have also improved operational effectiveness through plant automation, mobile fleet modernization, right-sizing and other cost control improvements. Accordingly, the Company has enhanced its reach through its ability to provide cost-effective coverage of coastal markets on the east and gulf coasts, as well as geographic areas that can be accessed economically by the Company's expanded distribution system. This distribution network moves aggregates materials from domestic and offshore sources, via rail and water, to markets where aggregates supply is limited.

As the Company continues to move more aggregates by rail and water, internal freight costs are expected to reduce gross margin. This typically occurs where the Company transports aggregates from a production location to a distribution location by rail or water, and the customer pays a selling price that includes a freight component. Margins are negatively affected because the Company typically does not charge the customer a profit associated with the transportation component of the selling price of the materials. Moreover, the Company's expansion of its rail-based distribution network, coupled with the extensive use of rail service in the Southeast and West Groups, increases the Company's dependence on and exposure to railroad performance,

including track congestion, crew availability, railcar availability, and power availability, and the ability to renegotiate favorable railroad shipping contracts. The waterborne distribution network, primarily located within the Southeast Group, also increases the Company's exposure to certain risks, including, among other items, meeting minimum tonnage requirements of shipping contracts, demurrage costs, fuel costs, ship availability and weather disruptions. The Company has long-term agreements with shipping companies to provide ships to transport the Company's aggregates to various coastal ports.

The Company's long-term shipping contracts for shipment by water are generally take-or-pay contracts with minimum and maximum shipping requirements. These contracts have varying expiration dates ranging from 2023 to 2027 and generally contain renewal options. However, there can be no assurance that these contracts can be renewed upon expiration or that terms will continue without significant increases. If the Company fails to ship the annual minimum tonnages under the agreement, it is still obligated to pay the shipping company the contractually-stated minimum amount for that year. In 2017, the Company did not incur these freight costs; however a charge is possible in 2018 if shipment volumes do not meet the contractually-stated minimums.

From time to time, the Company has experienced rail transportation shortages, particularly in the Southwest and Southeast. These shortages were caused by the downsizing in personnel and equipment by certain railroads during economic downturns. Further, in response to these issues, rail transportation providers focused on increasing the number of cars per unit train under transportation contracts and are generally requiring customers, through the freight rate structure, to accommodate larger unit train movements. A unit train is a freight train moving large tonnages of a single bulk product between two points without intermediate yarding and switching. Certain of the Company's sales yards have the system capabilities to meet the unit train requirements. Over the last few years, the Company has made capital improvements to a number of its sales yards in order to better accommodate unit train unloadings. Rail availability is seasonal and can impact aggregates shipments depending on competing demands for rail service.

From time to time, we have also experienced rail and trucking shortages due to competition from other products. If there are material changes in the availability or cost of rail or trucking services, we may not be able to arrange alternative and timely means to ship our products at a reasonable cost, which could lead to interruptions or slowdowns in our businesses or increases in our costs.

The Company's management expects the multiple transportation modes that have been developed with various rail carriers and via deep-water ships should provide the Company with the flexibility to effectively serve customers in the Southwest and Southeast coastal markets.

The construction aggregates industry has been consolidating, and the Company has actively participated in the consolidation of the industry. When acquired, new locations sometimes do not satisfy the Company's internal safety, maintenance and pit development standards, and may require additional resources before benefits of the acquisitions are fully realized. Industry consolidation slowed several years ago as the number of suitable small to mid-sized acquisition targets in high-growth markets declined. During that period of fewer acquisition opportunities, the Company focused on investing in internal expansion projects in high-growth markets. The number of acquisition opportunities has increased in the last few years as the economy recovered from the protracted recession. Opportunities include public and larger private, family-owned businesses, as well as asset swaps and divestitures from companies executing their strategic plans, rationalizing non-core assets, and repairing financially-constrained balanced sheets. The Company's Board of Directors and management continue to review and monitor the Company's strategic long-term plans, which include assessing business combinations and arrangements with other companies engaged in similar businesses, increasing the Company's presence in its core businesses, investing in internal expansion projects in high-growth markets, and pursuing new opportunities related to the Company's existing markets.

The Company became more vertically integrated through various acquisitions, including the 2014 TXI acquisition, in the West Group, pursuant to which the Company acquired cement, ready mixed concrete, asphalt and paving construction operations, trucking, and other businesses, which complement the Company's aggregates operations. The Company reports vertically-integrated operations within the Building Materials business segment, and their results are affected by volatile factors, including fuel costs, operating efficiencies, and weather, to an even greater extent than the Company's aggregates operations. Liquid asphalt and cement serve as key raw materials in the production of hot mix asphalt and ready mixed concrete, respectively. Therefore, fluctuations in prices for these raw materials directly affect the Company's operating results. During 2017, prices for liquid asphalt were slightly higher than 2016. Liquid asphalt prices may not always follow other energy products (e.g., oil or diesel fuel) because of complexities in the refining process which converts a barrel of oil into other fuels and petrochemical products. We expect the Company's gross margin to continue to improve for the legacy TXI aggregates-related downstream operations, similar to the pattern experienced at the Colorado aggregates-related downstream operations.

While aggregates-led, the Company continues to review its operational portfolio to determine if there are opportunities to divest underperforming assets in an effort to redeploy capital for other opportunities. The Company also reviews other independent Building Materials operations to determine if they might present attractive acquisition opportunities in the best interest of the Company, either as part of their own independent operations or operations that might be vertically integrated with other operations owned by the Company. Based on these assessments, the Company completed the acquisitions described under *General* above, which included ready mixed concrete and asphalt and paving businesses in the Denver, Colorado, and San Antonio, Texas, markets. The 2014 business combination with TXI described under *General* above further expanded the Company's downstream operations with the addition of TXI's aggregates and ready mixed concrete operations. The TXI combination also added the cement operations, included in the West Group as the cement product line of the Company. The 2016 transactions described under *General* above further added ready mixed concrete and asphalt and paving operations along the Front Range in Colorado and ready mixed concrete operations in central Texas.

Environmental and zoning regulations have made it increasingly difficult for the aggregates industry to expand existing quarries and to develop new quarry operations. Although it cannot be predicted what policies will be adopted in the future by federal, state, and local governmental bodies regarding these matters, the Company anticipates that future restrictions will likely make zoning and permitting more difficult, thereby potentially enhancing the value of the Company's existing mineral reserves.

Management believes the aggregates product line's raw materials, or aggregates reserves, are sufficient to permit production at present operational levels for the foreseeable future. The Company does not anticipate any material difficulty in obtaining the raw materials that it uses for current production in its aggregates product line. The Company's aggregates reserves on the average exceed 60 years, based on normalized levels of production. However, certain locations may be subject to more limited reserves and may not be able to expand. Moreover, as noted above, environmental and zoning regulations will likely make it harder for the Company to expand its existing quarries or develop new quarry operations. The Company generally sells its aggregates, ready mixed concrete and asphalt products upon receipt of orders or requests from customers. The Company generally maintains inventories of aggregates products in sufficient quantities to meet the requirements of customers.

Less than 1% of the total revenues from the Building Materials business are from foreign jurisdictions, principally Canada and the Bahamas, with total revenues from customers in foreign countries totaling $10.7 million, $12.2 million, and $13.0 million during 2017, 2016, and 2015, respectively.

Cement Product Line

The cement product line of the Building Materials business produces Portland and specialty cements. Cement is the basic binding agent for concrete, a primary construction material. The principal raw material used in the production of cement is calcium carbonate in the form of limestone. The Company owns more than 600 million tons of limestone reserves adjacent to its two cement production plants in Texas. Similar to aggregates, cement is used in infrastructure projects, nonresidential and residential construction, and the railroad, agricultural, utility and environmental industries. Consequently, the cement industry is cyclical and dependent on the strength of the construction sector.

The Company has a strategic cement position in Texas, with production facilities in Midlothian, Texas, south of Dallas-Fort Worth, and in Hunter, Texas, north of San Antonio. These plants have a combined annual capacity of 4.5 million tons, as well as a current permit that would allow the Company to expand production by up to 800,000 additional tons at the Midlothian plant. In addition to these production facilities, the Company also operates, directly or through third parties, five cement distribution terminals in Texas.

Cement consumption is dependent on the time of year and prevalent weather conditions. According to the Portland Cement Association, nearly two-thirds of U.S. cement consumption occurs in the six months between May and October. Approximately 70% of all cement shipments are sent to ready-mix concrete operators. The rest are shipped to manufacturers of concrete related products, contractors, materials dealers, oil well/mining/drilling companies, as well as government entities.

Energy, including electricity and fossil fuels, accounted for approximately 22% of the cement production cost profile in 2017. Therefore, profitability of the cement product line is affected by changes in energy prices and the available supply of these products. The Company currently has fixed-price supply contracts for coal but also consumes natural gas, alternative fuel and petroleum coke. Further, profitability of the cement product line is also subject to kiln maintenance. This process typically requires a plant to be shut down for a period of time as repairs are made. In 2017 and 2016, the cement product line incurred ordinary kiln maintenance shutdown costs of $12.6 million and $20.9 million, respectively.

The cement product line is benefitting from continued strength in the Texas markets, where current demand exceeds local supply, a trend that is expected to continue for the near future. The Company shipped a total of 3.5 million tons of cement in 2017, with 2.3 million tons shipped to external customers in five states and 1.2 million tons consumed by the Company internally in the Company’s ready mixed concrete product line. Cement shipments in the last two years were negatively affected by significant amounts of rain in Texas. For 2017, the cement product line generated total revenues and earnings from operations of $384 million and $123 million, respectively.

The limestone reserves used as a raw material for cement are located on property, owned by the Company, adjacent to each of the cement plants. Management believes that its reserves of limestone are sufficient to permit production at the current operational levels for the foreseeable future.

The cement product line generally delivers its products upon receipt of orders or requests from customers. Inventory for products is generally maintained in sufficient quantities to meet rapid delivery requirements of customers.

From time to time a small percentage of the Company's cement sales may be to customers located outside the United States. The Company, however, had no such sales during the last three years.

Magnesia Specialties Business

The Magnesia Specialties business produces and sells dolomitic lime from its Woodville, Ohio facility. Additionally, at its Manistee, Michigan facility, Magnesia Specialties manufactures magnesia-based chemical products for industrial, agricultural and environmental applications. These chemical products have varying uses, including flame retardants, wastewater treatment, pulp and paper production and other environmental applications. In 2017, 71% of Magnesia Specialties' total revenues were attributable to chemical products, 28% to lime, and 1% to stone sold as construction materials. For 2017, the Magnesia Specialties business generated record total revenues and earnings from operations of $270 million and $79 million, respectively.

In 2017, 82% of the lime produced was sold to third-party customers, while the remaining 18% was used internally as a raw material in making the business' chemical products. Dolomitic lime products sold to external customers are used primarily by the steel industry. Products used in the steel industry, either directly as dolomitic lime or indirectly as a component of other industrial products, accounted for 37% of the Magnesia Specialties' total revenues in 2017, attributable primarily to the sale of dolomitic lime products. Accordingly, a portion of the revenues and profitability of the Magnesia Specialties business is affected by production and inventory trends in the steel industry. These trends are guided by the rate of consumer consumption, the flow of offshore imports, and other economic factors. The dolomitic lime business runs most profitably at 70% or greater steel capacity utilization; domestic capacity utilization averaged 74% in 2017, according to the American Iron and Steel Institute. Average steel production in 2017 increased 4.3% versus 2016.

In the Magnesia Specialties business, a significant portion of costs related to the production of dolomitic lime and magnesia chemical products is of a fixed or semi-fixed nature. The production process requires the use of natural gas, coal and petroleum coke. Therefore, fluctuations in their pricing directly affect operating results. To help mitigate this risk, the Magnesia Specialties business has fixed price agreements for 100% of its 2018 coal needs, approximately 33% of its 2018 natural gas needs and 100% of its 2018 petroleum coke needs. For 2017, the Company's average cost per MCF (thousand cubic feet) for natural gas increased 33% over 2016.

Given high fixed costs, low capacity utilization can negatively affect the segment's results from operations. Management expects future organic growth to result from increased pricing, rationalization of the current product portfolio and/or further cost reductions. Management has shifted the strategic focus of the magnesia-based business to specialty chemicals that can be produced at volume levels that support efficient operations. Accordingly, that product line is not as dependent on the steel industry as the dolomitic lime product line.

The principal raw materials used in the Magnesia Specialties business are dolomitic limestone and alkali-rich brine. Management believes that its reserves of dolomitic limestone and brine are sufficient to permit production at the current operational levels for the foreseeable future.

After the brine is used in the production process, the Magnesia Specialties business must dispose of the processed brine. In the past, the business did this by reinjecting the processed brine back into its underground brine reserve network around its facility in Manistee, Michigan. The business has also sold a portion of this processed brine to third parties. In 2003, Magnesia Specialties entered into a long-term processed brine supply agreement with The Dow Chemical Company (“Dow”) pursuant to which Dow purchases processed brine from Magnesia Specialties, at market rates, for use in Dow’s production of calcium chloride products. Magnesia Specialties also entered into a venture with Dow to construct, own and operate a processed brine supply pipeline between the Magnesia Specialties facility in Manistee, Michigan, and Dow’s facility in Ludington, Michigan. Construction of the pipeline was completed in 2003, and Dow began purchasing processed brine from Magnesia Specialties through the pipeline. In 2010, Dow sold the assets of Dow’s facility in Ludington, Michigan to Occidental Chemical Corporation (“Occidental”) and assigned to Occidental its interests in the long-term processed brine supply agreement and the pipeline venture with Magnesia Specialties.

Magnesia Specialties generally delivers its products upon receipt of orders or requests from customers. Inventory for products is generally maintained in sufficient quantities to meet rapid delivery requirements of customers. A significant portion of the 275,000 ton dolomitic lime capacity from a lime kiln completed in 2012 at Woodville, Ohio is committed under a long-term supply contract.

The Magnesia Specialties business is highly dependent on rail transportation, particularly for movement of dolomitic lime from Woodville to Manistee and direct customer shipments of dolomitic lime and magnesia chemicals products from both Woodville and Manistee. The segment can be affected by the specific transportation and other risks and uncertainties outlined under Item IA., Risk Factors, of this Form 10-K.

The revenues of the Magnesia Specialties business in 2017 were predominantly from North America, but a small amount was derived from overseas. No single foreign country accounted for 10% or more of the total revenues of the Company. Total revenues from customers in foreign countries were $53.5 million, $44.9 million, and $32.7 million, in 2017, 2016, and 2015, respectively. As a result of these foreign market sales, the financial results of the Magnesia Specialties business could be affected by foreign currency exchange rates or weak economic conditions in the foreign markets. To mitigate the short-term effects of currency exchange rates, the Magnesia Specialties business’ sales are predominately denominated in the United States dollar. However, the current strength of the United States dollar in foreign markets is negatively affecting the overall price of Magnesia Specialties’ products when compared with foreign-domiciled competitors.

Patents and Trademarks

As of February 9, 2018, the Company owns, has the right to use, or has pending applications for approximately 22 patents pending or granted by the United States and various countries and approximately 98 trademarks related to business. The Company believes that its rights under its existing patents, patent applications and trademarks are of value to its operations, but no one patent or trademark or group of patents or trademarks is material to the conduct of the Company’s business as a whole.

Customers

No material part of the business of any segment of the Company is dependent upon a single customer or upon a few customers, the loss of any one of which would have a material adverse effect on the segment. The Company’s products are sold principally to commercial customers in private industry. Although large amounts of construction materials are used in public works projects, relatively insignificant sales are made directly to federal, state, county, or municipal governments, or agencies thereof.

Competition

Because of the impact of transportation costs on the aggregates industry, competition in the aggregates product line tends to be limited to producers in proximity to each of the Company's facilities. Although all of the Company's locations experience competition, the Company believes that it is generally a leading producer in the areas it serves. Competition is based primarily on quarry or distribution location and price, but quality of aggregates and level of customer service are also factors.

There are over 5,500 companies in the United States that produce construction aggregates. These include active crushed stone companies and active sand and gravel companies. The largest ten producers account for approximately 35% of the total market. The Company's ready mixed concrete and asphalt and paving operations are also in markets with numerous operators. A national trade association estimates there are about 5,500 ready mixed concrete plants in the United States owned by over 2,200 companies, with approximately 55,000 mixer trucks delivering ready mixed concrete. Similarly, a national trade association estimates there are approximately 3,700 asphalt plants in the United States owned by over 800 companies. The Company, with its Building Materials business, including its ready mixed concrete and asphalt and paving operations, competes with a number of other large and small producers. The Company believes that its ability to transport materials by ocean vessels and rail have enhanced the Company's ability to compete in the building materials industry.

The Company's Magnesia Specialties business competes with various companies in different geographic and product areas principally on the basis of quality, price, technological advances, and technical support for its products. While the revenues of the Magnesia Specialties business in 2017 were predominantly from North America, a small amount was derived from customers located outside the United States.

According to the Portland Cement Association, United States cement production is widely dispersed with the operation of 107 cement plants in 36 states. The top five companies collectively operate 49.6% of U.S. clinker capacity with the largest company representing 14.2% of all domestic clinker capacity. An estimated 76.7% of U.S. clinker capacity is owned by companies headquartered outside of the United States. In reviewing these figures for cement plants, capacity is often stated in terms of "clinker" capacity. "Clinker" is the initial product of cement production. Cement producers mine materials such as limestone, shale, or other materials, crush and screen the materials, and place them in a cement kiln. After being heated to extremely high temperatures, these materials form marble-sized balls or pellets called "clinker" that are then very finely ground to produce Portland cement.

The Company's cement product line competes with various companies in different geographic and product areas principally on the basis of proximity, quality and price for its products, but level of customer service is also a factor. The cement product line also competes with imported cement because of the higher value of the product and the existence of major ports in some of our markets. Certain of the Company's competitors in the cement product line have greater financial resources than the Company.

The nature of the Company's competition varies among its product lines due to the widely differing amounts of capital necessary to build production facilities. Crushed stone production from stone quarries or mines, or sand and gravel production by dredging, is moderately capital intensive. The Company's major competitors in the aggregates markets are typically large, vertically-integrated companies, with international operations. Ready mixed concrete production requires relatively small amounts of capital to build a concrete batching plant and acquire delivery trucks. Accordingly, economics can lead to lower barriers to entry in some

markets. As a result, depending on the local market, the Company may face competition from small producers as well as large, vertically-integrated companies with facilities in many markets. Construction of cement production facilities is highly capital intensive and requires long lead times to complete engineering design, obtain regulatory permits, acquire equipment and construct a plant. Most domestic producers of cement are owned by large foreign companies operating in multiple international markets. Many of these producers maintain the capability to import cement from foreign production facilities.

Research and Development

The Company conducts research and development activities, principally for its magnesia-based chemicals business, at its plant in Manistee, Michigan. In general, the Company's research and development efforts are directed to applied technological development for the use of its chemicals products. The amounts spent by the Company in each of the last two years on research and development activities were not material.

Environmental and Governmental Regulations

The Company's operations are subject to and affected by federal, state, and local laws and regulations relating to the environment, health and safety, and other regulatory matters. Certain of the Company's operations may from time to time involve the use of substances that are classified as toxic or hazardous substances within the meaning of these laws and regulations. Environmental operating permits are, or may be, required for certain of the Company's operations, and such permits are subject to modification, renewal and revocation.

The Company records an accrual for environmental remediation liabilities in the period in which it is probable that a liability has been incurred and the amounts can be reasonably estimated. Such accruals are adjusted as further information develops or circumstances change. The accruals are not discounted to their present value or offset for potential insurance or other claims or potential gains from future alternative uses for a site.

The Company regularly monitors and reviews its operations, procedures, and policies for compliance with existing laws and regulations, changes in interpretations of existing laws and enforcement policies, new laws that are adopted, and new laws that the Company anticipates will be adopted that could affect its operations. The Company has a full time staff of environmental engineers and managers that perform these responsibilities. The direct costs of ongoing environmental compliance were approximately $23.4 million in 2017 and approximately $21.5 million in 2016 and are related to the Company's environmental staff, ongoing monitoring costs for various matters (including those matters disclosed in this Annual Report on Form 10-K), and asset retirement costs. Capitalized costs related to environmental control facilities were approximately $20 million in 2017 and are expected to be approximately $20 million in 2018 and 2019. The Company's capital expenditures for environmental matters were not material to its results of operations or financial condition in 2017 and 2016. However, our expenditures for environmental matters generally have increased over time and are likely to increase in the future. Despite our compliance efforts, risk of environmental liability is inherent in the operation of the Company's businesses, as it is with other companies engaged in similar businesses, and there can be no assurance that environmental liabilities will not have a material adverse effect on the Company in the future.

Many of the requirements of the environmental laws are satisfied by procedures that the Company adopts as best business practices in the ordinary course of its operations. For example, plant equipment that is used to crush aggregates products may, as an ordinary course of operations, have an attached water spray bar

that is used to clean the stone. The water spray bar also suffices as a dust control mechanism that complies with applicable environmental laws. The Company does not break out the portion of the cost, depreciation, and other financial information relating to the water spray bar that is only attributable to environmental purposes, as it would be derived from an arbitrary allocation methodology. The incremental portion of such operating costs that is attributable to environmental compliance rather than best operating practices is impractical to quantify. Accordingly, the Company expenses costs in that category when incurred as operating expenses.

The environmental accruals recorded by the Company are based on internal studies of the required remediation costs and estimates of potential costs that arise from time to time under federal, state and/or local environmental protection laws. Many of these laws and the regulations promulgated under them are complex, and are subject to challenges and new interpretations by regulators and the courts from time to time. In addition, new laws are adopted from time to time. It is often difficult to accurately and fully quantify the costs to comply with new rules until it is determined the type of operations to which they will apply and the manner in which they will be implemented is more accurately defined. This process often takes years to finalize, and the rules often change significantly from the time they are proposed to the time they are final. The Company typically has several appropriate alternatives available to satisfy compliance requirements, which could range from nominal costs to some alternatives that may be satisfied in conjunction with equipment replacement or expansion that also benefits operating efficiencies or capacities and carry significantly higher costs.

Management believes that its current accrual for environmental costs is reasonable, although those amounts may increase or decrease depending on the impact of applicable rules as they are finalized or amended from time to time and changes in facts and circumstances. The Company believes that any additional costs for ongoing environmental compliance would not have a material adverse effect on the Company's obligations or financial condition.

Future reclamation costs are estimated using statutory reclamation requirements and management's experience and knowledge in the industry, and are discounted to their present value using a credit-adjusted, risk-free rate of interest. The future reclamation costs are not offset by potential recoveries. For additional information regarding compliance with legal requirements, see "Note N: Commitments and Contingencies" of the "Notes to Financial Statements" of the 2017 Financial Statements and the 2017 Annual Report. The Company is generally required by state or local laws or pursuant to the terms of an applicable lease to reclaim quarry sites after use. The Company performs activities on an ongoing basis that may reduce the ultimate reclamation obligation. These activities are performed as an integral part of the normal quarrying process. For example, the perimeter and interior walls of an open pit quarry are sloped and benched as they are developed to prevent erosion and provide stabilization. This sloping and benching meets dual objectives — safety regulations required by the Mine Safety and Health Administration for ongoing operations and final reclamation requirements. Therefore, these types of activities are included in normal operating costs and are not a part of the asset retirement obligation. Historically, the Company has not incurred substantial reclamation costs in connection with the closing of quarries. Reclaimed quarry sites owned by the Company are available for sale, typically for commercial development or use as reservoirs.

The Company believes that its operations and facilities, both owned or leased, are in substantial compliance with applicable laws and regulations and that any noncompliance is not likely to have a material adverse effect on the Company's operations or financial condition. See "Legal Proceedings" under Item 3 of this Form 10-K, "Note N: Commitments and Contingencies" of the "Notes to Financial Statements" of the 2017 Financial Statements included under Item 8 of this Form 10-K and the 2017 Annual Report, and "Management's Discussion and Analysis of Financial Condition and Results of Operations - Environmental Regulation and Litigation" included under Item 7 of this Form 10-K and the 2017 Annual Report. However,

future events, such as changes in or modified interpretations of existing laws and regulations or enforcement policies, or further investigation or evaluation of the potential health hazards of certain products or business activities, may give rise to additional compliance and other costs that could have a material adverse effect on the Company.

In general, quarry, mining and production facilities for cement, ready mixed concrete, and asphalt must comply with air quality, water quality, and noise regulations, zoning and special use permitting requirements, applicable mining regulations, and federal health and safety requirements. As new quarry and mining sites and production facilities are located and acquired, the Company works closely with local authorities during the zoning and permitting processes to design new quarries, mines and production facilities in such a way as to minimize disturbances. The Company frequently acquires large tracts of land so that quarry, mine, and production facilities can be situated substantial distances from surrounding property owners. Also, in certain markets the Company's ability to transport material by rail and ship allows it to locate its facilities further away from residential areas. The Company has established policies designed to minimize disturbances to surrounding property owners from its operations.

As is the case with other companies in the same industry, some of the Company's products contain varying amounts of crystalline silica, a common mineral also known as quartz. Excessive, prolonged inhalation of very small-sized particles of crystalline silica has been associated with lung diseases, including silicosis, and several scientific organizations and some states, such as California, have reported that crystalline silica can cause lung cancer. The Mine Safety and Health Administration and the Occupational Safety and Health Administration have established occupational thresholds for crystalline silica exposure as respirable dust. The Company monitors occupational exposures at its facilities and implements dust control procedures and/or makes available appropriate respiratory protective equipment to maintain the occupational exposures at or below the appropriate levels. The Company, through safety information sheets and other means, also communicates what it believes to be appropriate warnings and cautions its employees and customers about the risks associated with excessive, prolonged inhalation of mineral dust in general and crystalline silica in particular.

As is the case with others in the cement industry, the Company's cement operations produce varying quantities of cement kiln dust ("CKD"). This production by-product consists of fine-grained, solid, highly alkaline material removed from cement kiln exhaust gas by air pollution control devices. Because much of the CKD is actually unreacted raw materials, it is generally permissible to recycle the CKD back into the production process, and large amounts often are treated in such manner. CKD that is not returned to the production process or sold as a product itself is disposed in landfills. CKD is currently exempted from federal hazardous waste regulations under Subtitle C of the Resource Conservation and Recovery Act.

In 2010, the United States Environmental Protection Agency ("USEPA") included the lime industry as a national enforcement priority under the federal Clean Air Act ("CAA"). As part of the industry wide effort, the USEPA issued Notices of Violation/Findings of Violation ("NOVs") to the Company in 2010 and 2011 regarding the Company's compliance with the CAA New Source Review ("NSR") program at the Magnesia Specialties dolomitic lime manufacturing plant in Woodville, Ohio. The Company has been providing information to the USEPA in response to these NOVs and has had several meetings with the USEPA. Although the Company believes it is in substantial compliance with the NSR program, it anticipates that it will reach a settlement of this matter with the USEPA. The Company believes that any costs related to any required upgrades will be spread over time and that those costs and any related penalties will not have a material adverse effect on the Company's operations or its financial condition.

In October 2014, the Company received a CAA Section 114 request for information regarding the Manistee, Michigan, operations from the USEPA, similar to the one initially received at the Woodville, Ohio, plant. The letter seeks information regarding the Company's compliance with the NSR program at the Magnesia Specialties manufacturing plant in Manistee, Michigan. No notices of violation have been received by the Company relating to alleged non-compliance at the Manistee plant. The Company believes it is in substantial compliance with the NSR program and has submitted information to the USEPA for review and is awaiting a response or additional questions. The Company cannot at this time reasonably estimate the costs, if any, that may be incurred relating to this matter.

The Company has been reviewing its operations with respect to climate change matters and its sources of greenhouse gas emissions. In December 2009, the USEPA made an endangerment finding under the Clean Air Act that the current and projected concentrations of the six key greenhouse gases ("GHG" or "GHGs") in the atmosphere threaten the public health and welfare of current and future generations. The six GHGs are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. As of 2010, facilities that emitted 25,000 metric tons or more per year of GHGs are required to annually report GHG generation to comply with the USEPA's Mandatory Greenhouse Gas Reporting Rule. In May 2010, the USEPA issued a final rule (known as the Greenhouse Gas Tailoring Rule) that would have required the Company to incorporate best available GHG control technology in any new plant that it might propose to build and in its existing plants if it modified them in a manner that would increase GHG emissions (in the Company's case, principally carbon dioxide emissions) by more than 75,000 tons per year. This rule was challenged in court by various public and private parties, and was upheld in part and invalidated in part by the United States Supreme Court in an opinion issued in June 2014. The Court concluded that the USEPA may in fact require best available control technology for GHG, but only if the plant is otherwise subject to Prevention of Significant Deterioration or Title V air permitting under the USEPA's rules. It is not known whether the USEPA will revise its rules in response to the Court's decision and, if so, what the impact will be on the Company's operations. No technologies or methods of operation for reducing or capturing GHGs such as carbon dioxide have been proven successful in large scale applications other than improvements in fuel efficiency, and it is not known what the USEPA will require as best available control technology for plants or conditions it will require for operating permits in the event of modifications to plants or construction of new plants.

In Congress, both the House and Senate had considered climate change legislation, including the "cap-and-trade" approach. Cap-and-trade is an environmental policy tool that delivers results with a mandatory cap on emissions while providing sources flexibility in how they comply by trading credits with other sources whose emissions are below the cap. Another approach that had been proposed was a tax on emissions. The Company believes that climate change legislation is not a priority item in Congress in the near future and that the primary method that greenhouse gases will be regulated is through the USEPA using its rule-making authority. It is not known whether this will be a priority of the USEPA during President Trump's administration. Various states where the Company has operations are also considering climate change initiatives, and the Company may be subject to state regulations in addition to any federal laws and rules that are passed.

The operations of the Company's aggregates, ready mixed concrete and asphalt and paving product lines are not major sources of GHG emissions. Most of the GHG emissions from aggregates operations are tailpipe emissions from mobile sources such as heavy construction and earth-moving equipment. The manufacturing operations of the Company's Magnesia Specialties business in Woodville, Ohio, releases carbon dioxide, methane and nitrous oxide during the production of lime. The Magnesia Specialties operation in Manistee, Michigan, releases carbon dioxide, methane and nitrous oxides in the manufacture of magnesium oxide and hydroxide products. Both of these operations are filing annual reports of their GHG emissions in accordance with the USEPA's Mandatory Greenhouse Gas Reporting Rule.

Cement production worldwide is estimated to comprise approximately 5% to 10% of CO_2 or GHG emissions, and the USEPA has indicated that CO_2 emitted from cement production is the second largest source of CO_2 emissions in the United States. The Company has two cement plants. During 2016, the Company, through its TXI subsidiary, filed annual reports of the GHG emissions relating to its two cement operations in Texas.

If and when Congress passes legislation on GHGs, the Woodville and Manistee operations, as well as the Company's two cement operations, will likely be subject to the new program. In addition, any additional regulatory restrictions on emissions of GHGs imposed by the USEPA will likely impact the Company's Woodville, Manistee, and cement operations. The Company anticipates that any increased operating costs or taxes relating to GHG emission limitations at the Woodville or cement operations would be passed on to customers. The magnesium oxide products produced at the Manistee operation compete against other products that emit a lower level of GHGs in their production. Therefore, the Manistee facility may be required to absorb additional costs due to the regulation of GHG emissions in order to remain competitive in pricing in that market. The Company is also continuing to review the obligations of our Manistee facility's global customer base with regards to climate change treaties and accords. The Company at this time cannot reasonably predict what the costs of compliance will be, but does not believe it will have a material adverse effect on the financial condition or results of the operations of either the Magnesia Specialties or Building Materials businesses.

In 2010, the USEPA issued rules that dramatically reduced the permitted emissions of mercury, total hydrocarbons, particulate matter and hydrochloric acid from cement plants. The compliance date for these new standards was September 2015, but the USEPA granted various extensions to verify monitoring systems are effective for mercury and hydrogen chloride emissions. The Company has conducted tests to analyze the current level of compliance of its cement plants with the new standards. All plants required the installation of continuous emissions monitoring ("CEMs"). The Company, through its subsidiary TXI, identified and installed new control and monitoring equipment for these purposes and believes that the cement plants meet the emission requirements in these rules. The Company does not believe that the costs relating to these controls and equipment will have a material adverse effect on the financial condition or results of the operations of either the Company or the cement product line.

Employees

As of January 31, 2018, the Company has approximately 8,406 employees, of which 6,344 are hourly employees and 2,062 are salaried employees. Included among these employees are 912 hourly employees represented by labor unions (10.9% of the Company's employees). Of such amount, 10.5% of our Building Materials business' hourly employees are members of a labor union and 100% of the Magnesia Specialties segment's hourly employees are represented by labor unions. The Company's principal union contracts for the Magnesia Specialties business cover employees at the Manistee, Michigan, magnesia-based chemicals plant and the Woodville, Ohio, lime plant. The Woodville collective bargaining agreement expires in May 2018. The Manistee collective bargaining agreement expires in August 2019. The Company believes it has good relations with all of its employees, including its unionized employees. While the Company's management does not expect significant difficulties in renewing these labor contracts, there can be no assurance that a successor agreement will be reached at any of these locations.

Available Information

The Company maintains an Internet address at www.martinmarietta.com. The Company makes available free of charge through its Internet web site its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports, if any, filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. These reports and any amendments are accessed via the Company's web site through a link with the Electronic Data Gathering, Analysis, and Retrieval ("EDGAR") system maintained by the Securities and Exchange Commission (the "SEC") at www.sec.gov. Accordingly, the Company's referenced reports and any amendments are made available as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to, the SEC, once EDGAR places such material in its database.

The Company has adopted a *Code of Ethical Business Conduct* that applies to all of its directors, officers, and employees. The Company's code of ethics is available on the Company's web site at www.martinmarietta.com. The Company intends to disclose on its Internet web site any waivers of or amendments to its code of ethics as it applies to its directors and executive officers.

The Company has adopted a set of *Corporate Governance Guidelines* to address issues of fundamental importance relating to the corporate governance of the Company, including director qualifications and responsibilities, responsibilities of key board committees, director compensation, and similar issues. Each of the Audit Committee, the Management Development and Compensation Committee, and the Nominating and Corporate Governance Committee of the Board of Directors of the Company has adopted a written charter addressing various issues of importance relating to each committee, including the committee's purposes and responsibilities, an annual performance evaluation of each committee, and similar issues. These *Corporate Governance Guidelines*, and the charters of each of these committees, are available on the Company's web site at www.martinmarietta.com.

The Company's Chief Executive Officer and Chief Financial Officer are required to file with the SEC each quarter and each year certifications regarding the quality of the Company's public disclosure of its financial condition. The annual certifications are included as Exhibits to this Annual Report on Form 10-K. The Company's Chief Executive Officer is also required to certify to the New York Stock Exchange each year that he is not aware of any violation by the Company of the New York Stock Exchange corporate governance listing standards.

ITEM 1A. RISK FACTORS

General Risk Factors

An investment in our common stock or debt securities involves risks and uncertainties. You should consider the following factors carefully, in addition to the other information contained in this Form 10-K, before deciding to purchase or otherwise trade our securities.

This Form 10-K and other written reports and oral statements made from time to time by the Company contain statements which, to the extent they are not recitations of historical fact, constitute forward-looking statements within the meaning of federal securities law. Investors are cautioned that all forward-looking statements involve risks and uncertainties, and are based on assumptions that the Company believes in good faith are reasonable, but which may be materially different from actual results. Investors can identify these statements by the fact that they do not relate only to historic or current facts. The words "may," "will," "could,"

"should," "anticipate," "believe," "estimate," "expect," "forecast," "intend," "outlook," "plan," "project," "scheduled," and similar expressions in connection with future events or future operating or financial performance are intended to identify forward-looking statements. Any or all of the Company's forward-looking statements in this Form 10-K and in other publications may turn out to be wrong.

Statements and assumptions on future revenues, income and cash flows, performance, economic trends, the outcome of litigation, regulatory compliance, and environmental remediation cost estimates are examples of forward-looking statements. Numerous factors, including potentially the risk factors described in this section, could affect our forward-looking statements and actual performance.

Investors are also cautioned that it is not possible to predict or identify all such factors. Consequently, the reader should not consider any such list to be a complete statement of all potential risks or uncertainties. Other factors besides those listed may also adversely affect the Company and may be material to the Company. The Company has listed the known material risks it considers relevant in evaluating the Company and its operations. The forward-looking statements in this document are intended to be subject to the safe harbor protection provided by Sections 27A and 21E of the Securities Exchange Act of 1934. These forward-looking statements are made as of the date hereof based on management's current expectations, and the Company does not undertake an obligation to update such statements, whether as a result of new information, future events, or otherwise.

For a discussion identifying some important factors that could cause actual results to vary materially from those anticipated in the forward-looking statements, see the factors listed below, along with the discussion of "Competition" under Item 1 of this Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operations" under Item 7 of this Form 10-K and the 2017 Annual Report, and "Note A: Accounting Policies" and "Note N: Commitments and Contingencies" of the "Notes to Financial Statements" of the 2017 Financial Statements included under Item 8 of this Form 10-K and the 2017 Annual Report.

Our business is cyclical and depends on activity within the construction industry.

Economic and political uncertainty can impede growth in the markets in which we operate. Demand for our products, particularly in the nonresidential and residential construction markets, could fall if companies and consumers are unable to get credit for construction projects or if an economic slowdown causes delays or cancellations of capital projects. State and federal budget issues may also hurt the funding available for infrastructure spending. The lack of available credit may limit the ability of states to issue bonds to finance construction projects. Several of our top sales generating states, from time-to-time, stop or slow bidding projects in their transportation departments.

We sell most of our aggregates products, our primary business, and our cement products, to the construction industry, so our results depend on the strength of the construction industry. Since our businesses depend on construction spending, which can be cyclical, our profits are sensitive to national, regional, and local economic conditions and the intensity of the underlying spending on aggregates and cement products. Construction spending is affected by economic conditions, changes in interest rates, demographic and population shifts, and changes in construction spending by federal, state, and local governments. If economic conditions change, a recession in the construction industry may occur and affect the demand for our products. The Great Recession was an example, and our business suffered. Construction spending can also be disrupted by terrorist activity and armed conflicts.

While our business operations cover a wide geographic area, our earnings depend on the strength of the local economies in which we operate because of the high cost to transport our products relative to their price. If economic conditions and construction spending decline significantly in one or more areas, particularly in our top five sales-generating states of our Building Materials business (based on net sales by state of destination) of Texas, Colorado, North Carolina, Iowa, and Georgia, our profitability will decrease. We experienced this situation with the Great Recession.

The Great Recession of 2008 resulted in large declines in shipments of aggregates products in our industry. Recent years, however, have shown a slow turnaround in this trend. The United States is currently experiencing the third-longest economic recovery since the Great Depression. As of December 31, 2017, the current expansion, which started in June 2009, the approximate end of the Great Recession, has lasted 102 months. By comparison, the average trough-to-peak expansionary cycle since 1938 was 60 months and, in May 2018, the current cycle will become the second-longest economic recovery since the Great Depression. During this current economic expansion, however, governmental uncertainty, labor shortages and record levels of precipitation have slowed the pace of heavy construction activity, resulting in what we believe to be a slow, steady, extended construction cycle. The Company’s overall aggregates product line shipments remain approximately 10% below mid-cycle demand. Importantly, the level of recovery varies within the Company’s geographic footprint. Specifically, North Carolina and Georgia, key states in the Mid-America and Southeast Groups, respectively, are approximately 20% below mid-cycle demand, while Texas, a key state in the West Group, is modestly above mid-cycle demand. During 2017 our aggregates product line shipments showed a 0.6% decline compared with 2016 levels, after a 1.4% increase in 2016.

While historical spending on public infrastructure projects has been comparatively more stable as governmental appropriations and expenditures are typically less interest rate-sensitive than private sector spending, we experienced a slight retraction in aggregates product line shipments to the infrastructure market after uncertainty regarding the solvency of the federal highway bill in 2014. Contractors were not able to get any certainty on the availability of federal infrastructure funding until late 2015 with the enactment of a new federal highway bill, which has had insignificant impact at the federal level to date. This time lag with commencement of federal infrastructure funding was accompanied by a reduction in some states’ investment in highway maintenance.

The public infrastructure market accounted for approximately 40% of the Company’s aggregates product line shipments in 2017, consistent with 2016 and 2015. Government uncertainty, attendant project delays and tight labor markets have exerted disproportionate downward pressure on public construction activity and, for the past three years, as these headwinds have worsened, the Company’s shipments to this end use market have remained below the most recent five-year average of 43% and ten-year average of 48%. Our aggregates shipments to the infrastructure construction market increased 2% in 2017 compared with 2016.

The nonresidential construction market accounted for approximately 31% of the Company’s aggregates product line shipments in 2017. Our aggregates shipments to the nonresidential construction market decreased 3% in 2017 compared with 2016. According to the U.S. Census Bureau, spending for the private nonresidential construction market increased in 2017 compared with 2016. The Dodge Momentum Index (DMI), a twelve-month leading indicator of construction spending for nonresidential building compiled by McGraw-Hill Construction and where the year 2000 serves as an index basis of 100, remained strong at a nine-year high of 153.9 in December 2017, a 21% increase over prior year. Historically, half of the Company’s nonresidential construction shipments have been used for office and retail projects, while the remainder has been used for heavy industrial and capacity-related projects, including energy-related projects. Since the latter part of 2015, low oil prices have suppressed shipments directly into shale exploration activities. In 2017, the Company shipped approximately 1.8 million tons for shale exploration compared with approximately 1.5 million tons in 2016 and 3.6 million tons in 2015.

The residential construction market accounted for approximately 21% of the Company's aggregates product line shipments in 2017. Our aggregates shipments to the residential construction market increased 1% in 2017 compared with 2016. Private residential construction spending increased 12% in 2017 compared with 2016, according to the U.S. Census Bureau. The residential construction market, like the nonresidential construction market, is interest rate-sensitive and typically moves in direct correlation with economic cycles. The Company's exposure to residential construction is split between aggregates used in the construction of subdivisions (including roads, sidewalks, and storm and sewage drainage), aggregates used in new single-family home construction and aggregates used in construction of multi-family units. Construction of both subdivisions and single-family homes is more aggregates intensive than construction of multi-family units. Through an economic cycle, multi-family construction generally begins early in the cycle and then transitions to single-family construction. Therefore, the timing of new subdivision starts, as well as new single-family housing permits, are strong indicators of residential volumes. While residential housing starts were approximately 1.3 million units in 2017, they still remain below the 50-year historical annual average of 1.5 million units.

Our business is dependent on funding from a combination of federal, state and local sources.

Our aggregates and cement products are used in public infrastructure projects, which include the construction, maintenance, and improvement of highways, streets, roads, bridges, schools, and similar projects. Accordingly, our business is dependent on the level of federal, state, and local spending on these projects. The visibility into future federal infrastructure funding was clarified near the end of 2015 with the passage of the current federal highway bill, the FAST Act, which reauthorizes federal highway and transportation funding programs. The FAST Act also changes the *Transportation Infrastructure and Innovation Act* ("TIFIA") funding, a federal alternative funding mechanism for transportation projects. Under the FAST Act TIFIA funding ranges from $275 million to $300 million, and no longer requires the 20% matching funds from state DOTs. While the total value of United States overall public-works spending increased in 2017, federal funding through the FAST Act did not impact highway spending in any meaningful way. This increase in overall public works spending in 2017 demonstrates the commitment of states to address the underlying demand for infrastructure investment. We expect to see some increased infrastructure spending at the state level in 2018, but no meaningful impact from the FAST Act funding or an enhanced federal infrastructure bill until 2019 or later. Any enhanced federal infrastructure bill will require Congressional approval. We cannot be assured, however, of such approval or of the existence, amount, and timing of appropriations for spending on future projects.

Federal highway bills provide spending authorizations that represent maximum amounts. Each year, an appropriation act is passed establishing the amount that can actually be used for particular programs. The annual funding level is generally tied to receipts of highway user taxes placed in the Highway Trust Fund. Once the annual appropriation is passed, funds are distributed to each state based on formulas (apportionments) or other procedures (allocations). Apportioned and allocated funds generally must be spent on specific programs as outlined in the federal legislation. The Highway Trust Fund has experienced shortfalls in recent years, due to high gas prices, fewer miles driven and improved automobile fuel efficiency. These shortfalls created a significant decline in federal highway funding levels. In response to the projected shortfalls, money has been transferred from the General Fund into the Highway Trust Fund over the past several years. Timely Congressional action is needed to address the funding mechanism for the Highway Trust Fund. We cannot be assured of the existence, timing or amount of federal highway funding levels in the future. We also cannot be assured of the impact of the recent sharp reduction in gasoline prices on the levels of highway user taxes that might be collected in the future and the corresponding levels of funding to the Highway Trust Fund.

At the state level, each state funds its infrastructure spending from specially allocated amounts collected from various taxes, typically gasoline taxes and vehicle fees, along with voter-approved bond programs. Shortages in state tax revenues can reduce the amounts spent on state infrastructure projects, even below amounts awarded under legislative bills. Delays in state infrastructure spending can hurt our business. Many states after the Great Recession experienced state-level funding pressures caused by lower tax revenues and an inability to finance approved projects. For example, North Carolina was among the states that experienced these pressures, and this state disproportionately affects our revenues and profits. Most state budgets, including North Carolina, improved in 2014 and later years as increased tax revenues helped resolve budget deficits.

During the past 36 months, many states have taken on a significantly larger role in funding infrastructure investment, including initiating special-purpose taxes and raising gas taxes. In the November 2017 election, $3.7 billion of transportation funding initiatives were approved in Texas, Colorado, Georgia, South Carolina and Kansas. We anticipate further growth in state-level funding initiatives, such as bond issues, toll roads, and special purpose taxes, as states address infrastructure needs, particularly in periods of federal funding uncertainty. Nevertheless, it is a continuing risk to our business that sufficient funding from federal, state, and local sources will not be available to address infrastructure needs.

With most states in recovery or expansion, the sustained decline in energy costs may be the catalyst in some markets to boost construction and help our business. But those markets that are heavily dependent on the energy sector, namely Oklahoma and West Virginia, may, with the decrease in oil production, experience recessions or continued recessions, which would adversely impact our business.

Our Building Materials business is seasonal and subject to the weather, which can significantly impact operations.

Since the heavy-side construction business is conducted outdoors, erratic weather patterns, seasonal changes and other weather-related conditions affect our business. Adverse weather conditions, including hurricanes and tropical storms, cold weather, snow, and heavy or sustained rainfall, reduce construction activity, restrict the demand for our products, and impede our ability to efficiently transport material. Adverse weather conditions also increase our costs and reduce our production output as a result of power loss, needed plant and equipment repairs, time required to remove water from flooded operations, and similar events. Severe drought conditions can restrict available water supplies and restrict production. The Building Materials product lines' production and shipment levels follow activity in the construction industry, which typically occur in the spring, summer and fall. Because of the weather's effect on the construction industry's activity, the production and shipment levels for the Company's Building Materials business, including all of its aggregates-related downstream operations, vary by quarter. The second and third quarters are generally the most profitable and the first quarter is generally the least profitable. Weather-related hindrances were exacerbated over the last two years by record precipitation in many of our key markets. Nationally, 2017 marked the 20th wettest year on record, and the fifth consecutive year with above-average precipitation. The last few years brought an unprecedented amount of precipitation to the United States and particularly to Texas. Importantly, inclement weather was most significant during the second and third quarters, which represents the zenith of the construction season. For the six-month period from April through September, for the 123 years the National Oceanic Atmospheric Administration (NOAA) has been tracking data, most areas experienced above-average rainfall. These weather events reduced the Company's overall profitability in 2017 and 2016, so our results for those years, or in comparison to other years, may not be indicative of our future operating results.

The Company's operations in the southeastern and Gulf Coast regions of the United States and the Bahamas are at risk for hurricane activity, most notably in August, September and October. In Texas, Hurricane Harvey, a Category 4 storm that made landfall in Houston in August 2017, brought nearly 20 trillion gallons of precipitation. In the Southeast, Hurricane Irma, also a Category 4 storm, made landfall in Florida in September 2017 and brought excessive rainfall to the southeastern United States, notably Florida and Georgia. In October 2016, rainfall along the eastern seaboard of the United States from Hurricane Matthew, a category-5 hurricane, approximated 13.6 trillion gallons. Hurricane Matthew was the first major hurricane on record to make landfall in the Bahamas, where the Company has a facility. These hurricanes generated winds, rainfall, and flooding which disrupted operations in Texas, Louisiana, Florida, Georgia, the Carolinas, and the Bahamas.

Our Building Materials business depends on the availability of aggregate reserves or deposits and our ability to mine them economically.

Our challenge is to find aggregates deposits that we can mine economically, with appropriate permits, near either growing markets or long-haul transportation corridors that economically serve growing markets. As communities have grown, they have taken up attractive quarrying locations and have imposed restrictions on mining. We try to meet this challenge by identifying and permitting sites prior to economic expansion, buying more land around our existing quarries to increase our mineral reserves, developing underground mines, and developing a distribution network that transports aggregates products by various transportation methods, including rail and water, that allows us to transport our products longer distances than would normally be considered economical, but we can give no assurances that we will be successful.

Our business is a capital-intensive business.

The property and machinery needed to produce our products are very expensive. Therefore, we require large amounts of cash to operate our businesses. We believe that our cash on hand, along with our projected internal cash flows and our available financing resources, will be enough to give us the cash we need to support our anticipated operating and capital needs. Our ability to generate sufficient cash flow depends on future performance, which will be subject to general economic conditions, industry cycles and financial, business, and other factors affecting our operations, many of which are beyond our control. If we are unable to generate sufficient cash to operate our business, we may be required, among other things, to further reduce or delay planned capital or operating expenditures.

Our businesses face many competitors.

Our businesses have many competitors, some of whom are bigger and have more resources than we do. Some of our competitors also operate on a worldwide basis. Our results are affected by the number of competitors in a market, the production capacity that a particular market can accommodate, the pricing practices of other competitors, and the entry of new competitors in a market. We also face competition for some of our products from alternative products. For example, our Magnesia Specialties business may compete with other chemical products that could be used instead of our magnesia-based products. As other examples, our aggregates, ready mix concrete, and asphalt and paving product lines may compete with recycled asphalt and concrete products that could be used instead of new products and our cement product line may compete with international competitors who are importing product to the United States with lower production and regulatory costs.

Our businesses could be impacted by rising interest rates.

As discussed previously, our operations are highly dependent upon the interest rate-sensitive construction and steelmaking industries. Therefore, business in these industries and for us may decline if interest rates rise and costs increase.

For example, demand in the residential construction market in which we sell our aggregate products is affected by interest rates. In 2017, the Federal Reserve raised the federal funds rate to over one percent for the first time in nearly a decade. The residential construction market accounted for 21% of our aggregates product line shipments in 2017.

Aside from these inherent risks from within our operations, our earnings are also affected by changes in short-term interest rates. However, rising interest rates are not necessarily predictive of weaker operating results. Historically, our profitability increased during period of rising interest rates. In essence, our underlying business generally serves as a natural hedge to rising interest rates.

Rising interest rates could also result in disruptions in the credit markets, which could affect our business, as described in greater detail under "*Disruptions in the credit markets could affect our business"* below.

Our future growth may depend in part on acquiring other businesses in our industry.

We expect to continue to grow, in part, by buying other businesses. We will continue to look for strategic businesses to acquire, like our acquisition of TXI in 2014 and our pending acquisition of Bluegrass Materials. In the past, we have made acquisitions to strengthen our existing locations, expand our operations and enter new geographic markets. We will continue to make selective acquisitions, joint ventures or other business arrangements we believe will help our company. However, the continued success of our acquisition program will depend on our ability to find and buy other attractive businesses at a reasonable price and our ability to integrate acquired businesses into our existing operations. We cannot assume there will continue to be attractive acquisition opportunities for sale at reasonable prices that we can successfully integrate into our operations.

We may decide to pay all or part of the purchase price of any future acquisition (excluding Bluegrass Materials) with shares of our common stock. For example, we used our common stock in our acquisition of TXI. We may also use our stock to make strategic investments in other companies to complement and expand our operations. If we use our common stock in this way, the ownership interests of our shareholders will be diluted and the price of our stock could fall. We operate our businesses with the objective of maximizing long-term shareholder return.

We cannot be assured our proposed acquisition of Bluegrass Materials will be completed or will be completed in the timeframe or on the terms or in the manner we currently anticipate.

There are a number of risks and uncertainties relating to our proposed acquisition of Bluegrass Materials. For example, the acquisition may not be completed, or may not be completed in the timeframe, on the terms or in the manner we currently anticipate, as a result of a number of factors, including the failure of one or more of the conditions to closing the proposed acquisition. We cannot be assured the conditions to closing the proposed acquisition will be satisfied or waived or that other events will not intervene to delay or result in the failure to close the acquisition. The acquisition agreement may be terminated by the parties under certain circumstances. Any delay in closing or a failure to close could have a negative impact on our business and the trading prices of our securities.

We and Bluegrass Materials will be subject to business uncertainties while the proposed acquisition is pending that could adversely affect our and their business.

Uncertainty about the effect of the proposed acquisition of Bluegrass Materials on employees and customers may have an adverse effect on us and Bluegrass Materials. Although we and Bluegrass Materials intend to take actions to reduce any adverse effects, these uncertainties may impair our and their ability to attract, retain and motivate key personnel until the proposed acquisition is completed and for a period of time thereafter. These uncertainties could cause customers, suppliers, and others that transact business with us and/or Bluegrass Materials to seek to change existing business relationships. In addition, employee retention could be reduced during the pendency of the proposed acquisition, as employees may experience uncertainty about their future roles. If, despite our and Bluegrass Materials' retention efforts, key employees depart because of concerns relating to the uncertainty and difficulty of the integration process or a desire not to remain with us, our business could be harmed.

Before the proposed acquisition may be completed, the applicable waiting period must expire or terminate under federal law, and we may be required to divest certain assets in order to obtain all necessary regulatory approvals. In addition to this regulatory approval, the proposed acquisition is subject to certain other conditions that may prevent, delay, or otherwise materially adversely affect completion of the transaction. We cannot predict whether and when these other conditions will be satisfied. The requirements for satisfying such conditions could delay completion of the proposed acquisition of Bluegrass Materials for a period of time, reducing or eliminating some anticipated benefits of the transaction, or prevent completion of the Acquisition from occurring at all.

Our integration of the acquisition of or business combination with other businesses may not be as successful as projected.

We have a successful history of business combinations and integration of these businesses into our heritage operations. Our largest business acquisition has been our business combination with TXI, which closed in July 2014. In 2015 we completed the integration of TXI's operations into our own operations ahead of schedule, which allowed us to achieve and exceed the synergies, cost savings, and operating efficiencies we had forecasted from the TXI acquisition. However, in connection with the integration of any business that we may acquire, including our proposed acquisition of Bluegrass Materials, it is a risk factor that we will not be able to achieve such integration in a successful manner or on the time schedule we have projected or in a way that will achieve the level of synergies, cost savings, or operating efficiencies we have forecast from the acquisition.

Any other significant business acquisition or combination we might choose to do, similar to the acquisition of TXI or Bluegrass Materials, would require that we devote significant management attention and resources to preparing for and then integrating our business practices and operations. We believe we would be successful in this integration process. Nevertheless, we may fail to realize some of the anticipated benefits of any potential acquisition or other business combination that we might choose to pursue in the future, if the integration process takes longer than expected or is more costly than expected. Potential difficulties we may encounter in the integration process include:

- the inability to successfully combine operations in a manner that permits us to achieve the cost savings and revenue synergies anticipated to result from the proposed acquisition or business combination, which would result in the anticipated benefits of the acquisition or business combination not being realized partly or wholly in the time frame currently anticipated or at all;

- lost sales and customers as a result of certain customers of either the Company or former customers of the acquired or combined company deciding not to do business with the Company;
- complexities associated with managing the combined operations;
- integrating personnel;
- creation of uniform standards, internal controls, procedures, policies and information systems;
- potential unknown liabilities and unforeseen increased expenses, delays or regulatory issues associated with integrating the remaining operations; and
- performance shortfalls at business units as a result of the diversion of management attention caused by completing the remaining integration of the operations.

Our ready mixed concrete and asphalt and paving product lines have lower profit margins and operating results can be more volatile.

Our ready mixed concrete and asphalt and paving businesses typically provide lower profit margins than our aggregates product line due to potentially volatile input costs, highly competitive market dynamics, and lower barriers to entry. Therefore, as we expand these operations, our overall gross margin is likely to be adversely affected. Our overall ready mixed concrete and asphalt and paving operations' gross margin was 12.7% for 2017 and 13.1% for 2016. The overall gross margin of our Building Materials business will continue to be reduced by the lower gross margins for our ready mixed concrete and asphalt and paving product lines.

Short supplies and high costs of fuel, energy and raw materials affect our businesses.

Our businesses require a continued supply of diesel fuel, natural gas, coal, petroleum coke and other energy. The financial results of these businesses have been affected by the short supply or high costs of these fuels and energy. Changes in energy costs also affect the prices that the Company pays for related supplies, including explosives, conveyor belting and tires. While we can contract for some fuels and sources of energy, such as fixed-price supply contracts for coal and petroleum coke, significant increases in costs or reduced availability of these items have and may in the future reduce our financial results. Moreover, fluctuations in the supply and costs of these fuels and energy can make planning our businesses more difficult. Because of the fluctuating trends in diesel fuel prices, we enter into fixed-price fuel agreements from time to time for a portion of our diesel fuel to reduce our diesel fuel price risk. Our last fixed-price commitment for a portion of our diesel fuel requirements expired at the end of 2016.

To illustrate how diesel fuel price fluctuations and other energy costs have impacted our business, consider the recent years. In 2013 the average price we paid per gallon of diesel fuel was 4% lower than we paid in 2012, but the average cost of natural gas was 18% higher than 2012. Similarly, in 2014 the average price we paid per gallon of diesel fuel was 8% lower compared to 2013, but the average cost of natural gas increased 24% from 2013. Diesel fuel, which averaged $2.82 per gallon in 2014 and $2.98 per gallon in 2013, represents the single largest component of energy costs for our aggregates, ready mixed concrete and asphalt and paving product lines. Diesel fuel prices declined rapidly during December 2014, ending the year at a per

gallon price that was 26% below the 2014 average. This trend continued in 2015, as the Company's average price per gallon of diesel fuel in 2015 was $2.05 compared with $3.02 in 2014. Natural gas costs also declined in 2015, down 28% from the 2014 average cost. These trends continued in 2016 and 2017 for diesel fuel prices. Average diesel fuel prices per gallon fell to $1.81 in 2017 compared to $1.96 in 2016, which compared with $2.05 in 2015. Our average diesel fuel prices for 2015 and 2016 were higher than spot market prices by $0.30 per gallon since we purchased approximately 40% of our diesel fuel under a fixed price fuel agreement, which has expired, that had locked in a higher price at an earlier time. Natural gas costs increased in 2017 approximately 33% from 2016 levels, which had declined in 2016, down 25% from the 2015 average cost.

The Company has fixed price agreements for 100% of its 2018 coal needs, approximately 33% of its 2018 natural gas needs, and 100% of its 2018 petroleum coke needs.

Cement production requires large amounts of energy, including electricity and fossil fuels. Energy costs represented approximately 22% of the 2017 direct production costs of our cement product line. Therefore, the cost of energy is one of our largest expenses. Prices for energy are subject to market forces largely beyond our control and can be quite volatile. Price increases that we are unable to pass through in the form of price increases for our products, or disruption of the uninterrupted supply of fuel and electricity, could adversely affect us. Accordingly, volatility in energy costs can adversely affect the financial results of our cement product line. Profitability of the cement product line is also subject to kiln maintenance, which requires the plant to be shut down for a period of time as repairs are made. The cement product line incurred shutdown costs of $12.6 and $20.9 million during 2017 and 2016, respectively.

Similarly our ready mixed concrete and asphalt and paving operations also require a continued supply of liquid asphalt and cement, which serve as key raw materials in the production of hot mix asphalt and ready mixed concrete, respectively. Some of these raw materials we can produce internally but most are purchased from third parties. These purchased raw materials are subject to potential supply constraints and significant price fluctuations, which are beyond our control. The financial results of our ready mixed concrete and asphalt and paving operations have been affected by the short supply or high costs of these raw materials. We generally see frequent volatility in the costs for these raw materials. For 2014, we saw higher prices for these raw materials than 2013. This trend reversed in 2015, when we saw lower prices for these raw materials than 2014. Liquid asphalt prices in 2016 were again lower than in 2015. The trend reversed itself again in 2017 when liquid asphalt prices were slightly higher than in 2016. Liquid asphalt prices may not always follow other energy products (e.g., oil or diesel fuel) because of complexities in the refining process which converts a barrel of oil into other fuels and petrochemical products.

Cement is a commodity sensitive to supply and price volatility.

Cement is a commodity, and competition is often based mainly on price, which is highly sensitive to changes in supply and demand. Prices fluctuate significantly in response to relatively minor changes in supply and demand, general economic conditions and other market conditions, which we cannot control. When cement producers increase production capacity or more cement is imported into the market, an oversupply of cement in the market may occur if supply exceeds demand. In that case cement prices generally fall. We cannot be assured that prices for our cement products sold will not decline in the future or that such decline will not have a material adverse effect on our cement product line.

Unexpected equipment failures, catastrophic events and scheduled maintenance may lead to production curtailments or shutdowns.

Our manufacturing processes are dependent upon critical pieces of equipment, such as our kilns and finishing mills. This equipment, on occasion, may be out of service as a result of unanticipated failures or damage during accidents. In addition to equipment failures, our facilities are also subject to the risk of catastrophic loss due to unanticipated events such as fires, explosions or violent weather conditions. We have one to two-week scheduled outages at least once a year to refurbish our cement and dolomitic lime production facilities. In 2017, the cement product line incurred shutdown costs of $12.6 million during the year. In 2017, the Magnesia Specialties business incurred shutdown costs of $5.1 million during the year. Any significant interruption in production capability may require us to make significant capital expenditures to remedy problems or damage as well as cause us to lose revenue due to lost production time.

Our cement product line and Magnesia Specialties business may become capacity constrained.

If our cement product line or Magnesia Specialties business becomes capacity constrained, they may be unable to satisfy on a timely basis the demand for some of their products, and any resulting changes in customers would introduce volatility to the earnings of these segments. We can address capacity needs by enhancing our manufacturing productivity, increasing the operational availability of equipment, reducing machinery down time and extending machinery useful life. Future demand for our products may require us to expand further our manufacturing capacity, particularly through the purchase of additional manufacturing equipment. However, we may not be able to increase our capacity in time to satisfy increases in demand that may occur from time to time. Capacity constraints may prevent us from satisfying customer orders and result in a loss of sales to competitors that are not capacity constrained. In addition, we may suffer excess capacity if we increase our capacity to meet actual or anticipated demand and that demand decreases or does not materialize.

Our cement product line could suffer if cement imports from other countries significantly increase or are sold in the U.S. in violation of U.S. fair trade laws.

The cement industry has in the past obtained antidumping orders imposing duties on imports of cement and clinker from other countries that violated U.S. fair trade laws. Currently, an antidumping order against cement and clinker from Japan is set to expire but is under review for extension by the Federal Trade Commission. As has always been the case, cement operators with import facilities can purchase cement from other countries, such as those in Latin America and Asia, which could compete with domestic producers. In addition, if environmental regulations increase the costs of domestic producers compared to foreign producers that are not subject to similar regulations, imported cement could achieve a significant cost advantage over domestically produced cement. An influx of cement or clinker products from countries not subject to antidumping orders, or sales of imported cement or clinker in violation of U.S. fair trade laws, could adversely affect our cement product line.

Our paving operations present additional risks to our business.

Our paving operations face challenges when our contracts have penalties for late completion. In some instances, including many of our fixed price contracts, we guarantee that we will complete a project by a certain date. If we subsequently fail to complete the project as scheduled we may be held responsible for costs resulting from the delay, generally in the form of contractually agreed-upon liquidated damages. Under these circumstances, the total project cost could exceed our original estimate, and we could experience a loss of profit or a loss on the project. In our paving operations, we also have fixed price and fixed unit price contracts where our profits can be adversely affected by a number of factors beyond our control, which can cause our actual costs to materially exceed the costs estimated at the time of our original bid. These same issues and risks can also impact some of our contacts in our asphalt and ready mixed concrete operations. These risks are somewhat mitigated by the fact that a majority of our road paving contracts are for short duration projects.

Changes in legal requirements and governmental policies concerning zoning, land use, the environment, and other areas of the law, and litigation relating to these matters, affect our businesses. Our operations expose us to the risk of material environmental liabilities.

Many federal, state and local laws and regulations relating to zoning, land use, the environment, health, safety and other regulatory matters govern our operations. We take great pride in our operations and try to remain in strict compliance at all times with all applicable laws and regulations. Despite our extensive compliance efforts, risk of liabilities, particularly environmental liabilities, is inherent in the operation of our businesses, as it is with our competitors. We cannot assume that these liabilities will not negatively affect us in the future.

We are also subject to future events, including changes in existing laws or regulations or enforcement policies, or further investigation or evaluation of the potential health hazards of some of our products or business activities, which may result in additional compliance and other costs. We could be forced to invest in preventive or remedial action, like pollution control facilities, which could be substantial.

Our operations are subject to manufacturing, operating, and handling risks associated with the products we produce and the products we use in our operations, including the related storage and transportation of raw materials, products, hazardous substances, and wastes. We are exposed to hazards including storage tank leaks, explosions, discharges or releases of hazardous substances, exposure to dust, and the operation of mobile equipment and manufacturing machinery.

These risks can subject us to potentially significant liabilities relating to personal injury or death, or property damage, and may result in civil or criminal penalties, which could hurt our productivity or profitability. For example, from time to time we investigate and remediate environmental contamination relating to our prior or current operations, as well as operations we have acquired from others, and in some cases we have been or could be named as a defendant in litigation brought by governmental agencies or private parties.

We are involved from time to time in litigation and claims arising from our operations. While we do not believe the outcome of pending or threatened litigation will have a material adverse effect on our operations or our financial condition, we cannot assume that an adverse outcome in a pending or future legal action would not negatively affect us.

Labor disputes could disrupt operations of our businesses.

Labor unions represent 10.5% of the hourly employees of our Building Materials business and 100% of the hourly employees of our Magnesia Specialties business. Our collective bargaining agreements for employees of our Magnesia Specialties business at the Manistee, Michigan magnesia chemicals plant and the Woodville, Ohio, lime plant expire in August 2019 and May 2018, respectively.

Disputes with our trade unions, or the inability to renew our labor agreements, could lead to strikes or other actions that could disrupt our businesses, raise costs, and reduce revenues and earnings from the affected locations.

Delays or interruptions in shipping products of our businesses could affect our operations.

Transportation logistics play an important role in allowing us to supply products to our customers, whether by truck, rail or ship. We also rely heavily on third-party truck and rail transportation to ship coal, natural gas and other fuels to our plants. Any significant delays, disruptions, or the non-availability of our transportation support system could negatively affect our operations. Transportation operations are subject to capacity constraints, high fuel costs and various hazards, including extreme weather conditions and slowdowns due to labor strikes and other work stoppages. In Texas, we compete for third-party trucking services with operations in the oil and gas fields, which can significantly constrain the availability of those services to us. If there are material changes in the availability or cost of transportation services, we may not be able to arrange alternative and timely means to ship our products or fuels at a reasonable cost, which could lead to interruptions or slowdowns in our businesses or increases in our costs.

The availability of rail cars can also affect our ability to transport our products. Rail cars can be used to transport many different types of products across all of our segments. If owners sell or lease rail cars for use in other industries, we may not have enough rail cars to transport our products.

We have long-term agreements with shipping companies to provide ships to transport our aggregates products from our Bahamas and Nova Scotia operations to various coastal ports. These contracts have varying expiration dates ranging from 2023 to 2027 and generally contain renewal options. Our inability to renew these agreements or enter into new ones with other shipping companies could affect our ability to transport our products.

When we sold our River District operations in 2011 as part of our asset exchange with Lafarge, we sold most of our barge long-haul distribution network. As a result, we reduced our risks from distributing our products by barges, especially along the Mississippi River. We still distribute some of our product by barge along rivers in West Virginia. We may continue to experience, to a lesser degree, risks associated with distributing our products by barges, including significant delays, disruptions or the non-availability of our barge transportation system that could negatively affect our operations, water levels that could affect our ability to transport our products by barge, and barges that may not be available in quantities that we might need from time to time to support our operations.

Our earnings are affected by the application of accounting standards and our critical accounting policies, which involve subjective judgments and estimates by our management. Our estimates and assumptions could be wrong.

The accounting standards we use in preparing our financial statements are often complex and require that we make significant estimates and assumptions in interpreting and applying those standards. We make critical estimates and assumptions involving accounting matters including our goodwill impairment testing, our expenses and cash requirements for our pension plans, our estimated income taxes, and how we account for our property, plant and equipment, and inventory. These estimates and assumptions involve matters that are inherently uncertain and require our subjective and complex judgments. If we used different estimates and assumptions or used different ways to determine these estimates, our financial results could differ.

While we believe our estimates and assumptions are appropriate, we could be wrong. Accordingly, our financial results could be different, either higher or lower. We urge you to read about our critical accounting policies in our Management’s Discussion and Analysis of Financial Condition and Results of Operations.

The adoption of new accounting standards may affect our financial results.

The accounting standards we apply in preparing our financial statements are reviewed by regulatory bodies and are changed from time to time. New or revised accounting standards could, either positively or negatively, affect results reported for periods after adoption of the standards as compared to the prior periods, or require retrospective application changing results reported for prior periods. We urge you to read about our accounting policies in Note A of our 2017 Financial Statements.

Reports from the Public Company Accounting Oversight Board's ("PCAOB") inspections of public accounting firms continue to outline findings and recommendations which could require these firms to perform additional work as part of their financial statement audits. The Company's costs to respond to these additional requirements may increase.

We depend on the recruitment and retention of qualified personnel, and our failure to attract and retain such personnel could affect our business.

Our success depends to a significant degree upon the continued services of our key personnel and executive officers. Our prospects depend upon our ability to attract and retain qualified personnel for our operations. Competition for personnel is intense, and we may not be successful in attracting or retaining qualified personnel, which could negatively affect our business.

Disruptions in the credit markets could affect our business.

We have considered the current economic environment and its potential impact to the Company's business. Demand for aggregates products, particularly in the infrastructure construction market, has already been negatively affected by federal and state budget and deficit issues and the uncertainty over future highway funding levels, until the recent enactment of a new federal highway bill. Further, delays or cancellations to capital projects in the nonresidential and residential construction markets could occur if companies and consumers are unable to obtain financing for construction projects or if consumer confidence continues to be eroded by economic uncertainty.

A recessionary construction economy can also increase the likelihood we will not be able to collect on all of our accounts receivable with our customers. We are protected in part, however, by payment bonds posted by many of our customers or end-users. Nevertheless, we experienced a delay in payment from some of our customers during the construction downturn, which can negatively affect operating cash flows. Historically, our bad debt write-offs have not been significant to our operating results, and we believe our allowance for doubtful accounts is adequate.

The credit environment could impact the Company's ability to borrow money in the future. Additional financing or refinancing might not be available and, if available, may not be at economically favorable terms. Further, an increase in leverage could lead to deterioration in our credit ratings. A reduction in our credit ratings, regardless of the cause, could also limit our ability to obtain additional financing and/or increase our cost of obtaining financing. There is no guarantee we will be able to access the capital markets at financially economical interest rates, which could negatively affect our business.

We may be required to obtain financing in order to fund certain strategic acquisitions, if they arise, or to refinance our outstanding debt. Any large strategic acquisition would require that we issue both newly issued equity and debt securities, like we did with the acquisition of TXI, in order to maintain our investment grade

credit rating and could result in a ratings downgrade notwithstanding our issuance of equity securities to fund the transaction. We are also exposed to risks from tightening credit markets, through the interest payable on our outstanding debt and the interest cost on our commercial paper program, to the extent it is available to us. While management believes our credit ratings will remain at a composite investment-grade level, we cannot be assured these ratings will remain at those levels. While management believes the Company will continue to have credit available to it adequate to meet its needs, there can be no assurance of that.

Our Magnesia Specialties business depends in part on the steel industry and the supply of reasonably priced fuels.

Our Magnesia Specialties business sells some of its products to companies in the steel industry. While we have reduced this risk over the last few years, this business is still dependent, in part, on the strength of the cyclical steel industry. The Magnesia Specialties business also requires significant amounts of natural gas, coal, and petroleum coke, and financial results are negatively affected by increases in fuel prices or shortages.

Our Magnesia Specialties business faces currency risks from its overseas operations.

Our Magnesia Specialties business sells some of its products to companies located outside the United States. Therefore the operations of the Magnesia Specialties business are affected from time to time by the fluctuating values of the currency exchange rates of the countries in which it does business in relation to the value of the U.S. Dollar. The business tries to mitigate the short-term effects of currency exchange rates by primarily denominating sales in the U.S. Dollar. This still leaves the business subject to certain risks, depending on the strength of the U.S. Dollar. In 2017, the strength of the U.S. Dollar in foreign markets negatively affected the overall price of the products of the Magnesia Specialties business when compared to foreign-domiciled competitors.

Our acquisitions could harm our results of operations.

In pursuing our business strategy, we conduct discussions, evaluate opportunities and enter into acquisition agreements. Acquisitions involve significant challenges and risks, including risks that:

- We may not realize a satisfactory return on the investment we make;
- We may not be able to retain key personnel of the acquired business;
- We may experience difficulty in integrating new employees, business systems and technology;
- Our due diligence process may not identify compliance issues or other liabilities that are in existence at the time of our acquisition;
- We may have difficulty entering into new geographic markets in which we are not experienced; or
- We may be unable to retain the customers and partners of acquired businesses following the acquisition.

Our articles of incorporation and bylaws and North Carolina law may inhibit a change in control that you may favor.

Our restated articles of incorporation and restated bylaws and North Carolina law contain provisions that may delay, deter or inhibit a future acquisition of us not approved by our Board of Directors. This could occur even if our shareholders are offered an attractive value for their shares or if many or even a majority of our shareholders believe the takeover is in their best interest. These provisions are intended to encourage any person interested in acquiring us to negotiate with and obtain the approval of our Board of Directors in connection with the transaction. Provisions that could delay, deter, or inhibit a future acquisition include the following:

- the ability of the Board of Directors to establish the terms of, and issue, preferred stock without shareholder approval;
- the requirement that our shareholders may only remove directors for cause;
- the inability of shareholders to call special meetings of shareholders; and
- super majority shareholder approval requirements for business combination transactions with certain five percent shareholders.

Additionally, the occurrence of certain change-of-control events could result in an event of default under certain of our existing or future debt instruments.

Increases in our effective income tax rate may harm our results of operations.

A number of factors may increase our future effective income tax rate, including:

- Governmental authorities increasing taxes or eliminating deductions, particularly the depletion deduction;
- The jurisdictions in which earnings are taxed;
- The resolution of issues arising from tax audits with various tax authorities;
- Changes in the valuation of our deferred tax assets and liabilities;
- Adjustments to estimated taxes upon finalization of various tax returns;
- Changes in available tax credits;
- Changes in stock-based compensation;
- Other changes in tax laws, and
- The interpretation of tax laws and/or administrative practices.

Any significant increase in our future effective income tax rate could reduce net earnings and free cash flow for future periods.

The 2017 Tax Act, which was signed into law on December 22, 2017, included a reduction in the federal corporate tax rate to 21%. In accordance with U.S. generally accepted accounting practices, we performed a provisional re-measurement of our deferred tax assets and liabilities at the new rate as of December 31, 2017, which resulted in a one-time, non-cash income tax benefit to us of $258.1 million. We recorded this income tax benefit on a provisional basis, subject to adjustment, as described below.

In December 2017, the SEC issued guidance to address the application of authoritative tax accounting guidance in situations where companies do not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the 2017 Tax Act for the reporting period in which the 2017 Tax Act was enacted. In these instances, the SEC's guidance allows us to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. We have recorded the provisional tax benefit in our 2017 consolidated financial statements to reflect the impact of the 2017 Tax Act, as we have yet to complete our analysis of the impact. Any adjustment to this provisional amount as we complete our analysis could have a material impact on our 2018 results of operations.

We are dependent on information technology and our systems and infrastructure face certain risks, including cybersecurity risks and data leakage risks.

We are dependent on information technology systems and infrastructure. Any significant breakdown, invasion, destruction or interruption of these 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 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 information technology to reduce these risks and routinely 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.

ITEM 1B. UNRESOLVED STAFF COMMENTS

There are no unresolved written comments that were received from the staff of the SEC one hundred and eighty (180) days or more before the end of our fiscal year relating to our periodic or current reports under the Securities Exchange Act of 1934.

ITEM 2. PROPERTIES

Building Materials Business

As of December 31, 2017, the Company processed or shipped aggregates from 282 quarries, underground mines, and distribution yards in 26 states, Canada, and the Bahamas, of which 108 are located on land owned by the Company free of major encumbrances, 59 are on land owned in part and leased in part, 107 are on leased land, and eight are on facilities neither owned nor leased, where raw materials are removed under an agreement. The Company's aggregates reserves, on the average, exceed 60 years based on normalized levels of production, and approximate 100 years at current production rates. However, certain locations may be subject to more limited reserves and may not be able to expand. In addition, as of December 31, 2017, the Company processed and shipped ready mixed concrete and/or asphalt products from 152 properties in five states, of which 127 are located on land owned by the Company free of major encumbrances, one is on land owned in part and leased in part, and 24 are on leased land.

The Company uses various drilling methods, depending on the type of aggregate, to estimate aggregates reserves that are economically mineable. The extent of drilling varies and depends on whether the location is a potential new site (greensite), an existing location, or a potential acquisition. More extensive drilling is performed for potential greensites and acquisitions, and in rare cases, the Company may rely on existing geological data or results of prior drilling by third parties. Subsequent to drilling, selected core samples are tested for soundness, abrasion resistance, and other physical properties relevant to the aggregates industry. If the reserves meet the Company’s standards and are economically mineable, then they are either leased or purchased.

The Company estimates proven and probable reserves based on the results of drilling. Proven reserves are reserves of deposits designated using closely spaced drill data, and based on that data the reserves are believed to be relatively homogenous. Proven reserves have a certainty of 85% to 90%. Probable reserves are reserves that are inferred utilizing fewer drill holes and/or assumptions about the economically mineable reserves based on local geology or drill results from adjacent properties. The degree of certainty for probable reserves is 70% to 75%. In determining the amount of reserves, the Company’s policy is to not include calculations that exceed certain depths, so for deposits, such as granite, that typically continue to depths well below the ground, there may be additional deposits that are not included in the reserve calculations. The Company also deducts reserves not available due to property boundaries, set-backs, and plant configurations, as deemed appropriate when estimating reserves. The Company uses the same methods of analysis to evaluate and estimate the amount of its aggregates reserves used in the cement manufacturing process for its cement product line as it does for its aggregates product line. For additional information on the Company’s assessment of reserves, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Other Financial Information - Critical Accounting Policies and Estimates- Property, Plant and Equipment” under Item 7 of this Form 10-K and the 2017 Annual Report for discussion of reserves evaluation by the Company.

Set forth in the tables below are the Company’s estimates of reserves of recoverable aggregates of suitable quality for economic extraction, shown on a state-by-state basis, and the Company’s total annual production for the last three years, along with the Company’s estimate of years of production available, shown on a segment-by-segment basis. The number of producing quarries shown on the table includes underground mines. The Company’s reserve estimates for the last two years are shown for comparison purposes on a state-by-state basis. The changes in reserve estimates at a particular state level from year to year reflect the tonnages of reserves on locations that have been opened or closed during the year, whether by acquisition, disposition, or otherwise; production and sales in the normal course of business; additional reserve estimates or refinements of the Company’s existing reserve estimates; opening of additional reserves at existing locations; the depletion of reserves at existing locations; and other factors. The Company evaluates its reserve estimates primarily on a Company-wide, or segment-by-segment basis, and does not believe comparisons of changes in reserve estimates on a state-by-state basis from year to year are particularly meaningful. The Company’s estimate of reserves shown in the tables below include reserves used in the Company’s cement product line and Magnesia Specialties business.

State	Number of Producing Quarries 2017	Tonnage of Reserves for each general type of aggregate at 12/31/16 (Add 000) Hard Rock	S & G	Tonnage of Reserves for each general type of aggregate at 12/31/17 (Add 000) Hard Rock	S & G	Change in Tonnage from 2016 (Add 000) Hard Rock	S & G	Percentage of aggregate reserves located at an existing quarry, and reserves not located at an existing quarry. At Quarry	Not at Quarry	Percentage of aggregate reserves on land that has not been zoned for quarrying.* **	Percent of reserves owned and percent leased Owned	Leased
Alabama	4	127,485	11,623	126,447	11,623	(1,038)	0	100%	0%	0%	14%	86%
Arkansas	3	218,333	0	223,326	0	4,993	0	100%	0%	0%	47%	53%
Colorado	11	754,369	103,346	749,238	98,888	(5,132)	(4,457)	99%	1%	0%	22%	78%
Florida	1	123,892	0	123,385	0	(507)	0	100%	0%	0%	35%	65%
Georgia	15	2,078,744	0	2,062,738	0	(16,006)	0	97%	3%	0%	87%	13%
Indiana	10	491,197	48,814	486,057	46,530	(5,139)	(2,284)	100%	0%	0%	35%	65%
Iowa	26	750,749	18,811	738,800	17,150	(11,949)	(1,661)	100%	0%	0%	29%	71%
Kansas	3	79,250	0	78,102	0	(1,148)	0	100%	0%	8%	36%	64%
Kentucky	1	0	24,891	0	24,595	0	(297)	100%	0%	0%	100%	0%
Louisiana	3	0	8,545	0	8,158	0	(388)	100%	0%	0%	0%	100%
Maryland	2	121,757	0	120,524	0	(1,233)	0	100%	0%	0%	100%	0%
Minnesota	2	325,774	0	323,298	0	(2,476)	0	67%	33%	0%	64%	36%
Mississippi	0	0	67,238	0	67,238	0	0	100%	0%	0%	100%	0%
Missouri	4	374,160	0	362,892	0	(11,268)	0	90%	10%	0%	6%	94%
Nebraska	4	176,446	0	171,174	0	(5,272)	0	100%	0%	0%	53%	47%
Nevada	1	136,189	0	135,338	0	(851)	0	100%	0%	0%	91%	9%
North Carolina	37	3,354,993	2,500	3,266,317	1,807	(88,676)	(693)	74%	26%	0%	70%	30%
Ohio***	10	564,657	124,919	576,166	117,978	11,510	(6,941)	46%	54%	0%	96%	4%
Oklahoma	9	1,213,986	13,101	1,203,406	11,892	(10,580)	(1,209)	100%	0%	0%	86%	14%
South Carolina	6	702,995	28,123	707,437	27,481	4,442	(642)	96%	4%	0%	44%	56%
Tennessee	1	35,483	0	35,101	0	(381)	0	100%	0%	0%	100%	0%
Texas****	25	2,465,161	145,089	2,462,794	125,561	(2,367)	(19,528)	100%	0%	0%	59%	41%
Utah	1	23,636	0	22,472	0	(1,165)	0	100%	0%	0%	0%	100%
Virginia	5	357,068	0	337,285	0	(19,783)	0	100%	0%	0%	60%	40%
Washington	1	21,780	0	6,585	17,484	(15,195)	17,484	100%	0%	0%	73%	27%
West Virginia	1	44,087	0	23,956	0	(20,130)	0	100%	0%	0%	76%	24%
Wyoming	2	156,943	0	156,891	0	(52)	0	100%	0%	0%	41%	59%
U. S. Total	**188**	**14,699,134**	**597,001**	**14,499,731**	**576,386**	**(199,404)**	**(20,615)**	**90%**	**10%**	**0%**	**63%**	**37%**
Non-U. S.	2	855,364	0	848,190	0	(7,175)	0	100%	0%	0%	100%	0%
Grand Total	**190**	**15,554,498**	**597,001**	**15,347,920**	**576,386**	**(206,578)**	**(20,615)**					

* The Company calculates its aggregate reserves for purposes of this table based on land that has been zoned for quarrying and land for which the Company has determined zoning is not required.

** The Company may own additional land adjacent or near existing quarries on which reserves may be located but does not include such reserves in these calculations if zoning is required but has not been obtained.

*** The Company's reserves presented in the State of Ohio include dolomitic limestone reserves used in the business of the Magnesia Specialties segment.

**** The Company's reserves presented in the State of Texas include limestone reserves used in the business of the cement product line.

Reportable Segment*	Total Annual Production (in tons) (add 000) For year ended December 31			Number of years of production available at December 31, 2017
	2017	2016	2015	
Mid-America Group	70,340	67,431	62,846	100.8
Southeast Group	22,274	20,468	21,148	147.0
West Group	74,184	75,421	69,223	75.0
Total Aggregates Product Line	**166,798**	**163,320**	**153,217**	**95.5**

* Prior year segment information has been reclassified to conform to the presentation of the Company's current reportable segments.

Cement Product Line

As of December 31, 2017, the Company, through its subsidiaries, processed or shipped cement from six properties in one state, of which four are located on land owned by the Company free of major encumbrances and two are on leased land. The Company's cement product line has production facilities located at two sites in Texas: Midlothian, Texas, south of Dallas/Fort Worth; Hunter, Texas, north of San Antonio. The following table summarizes certain information about the Company's cement manufacturing facilities at December 31, 2017:

Plant	Rated Annual Productive Capacity-Tons of Clinker	Manufacturing Process	Service Date	Internally Estimated Minimum Reserves—Years
Midlothian, TX	2,200,000	Dry	2001	52
Hunter, TX	2,250,000	Dry	2013 and 1981	140
Total	**4,450,000**			

Reserves identified with the facilities shown above are contained on approximately 2,844 acres of land owned by the Company. As of December 31, 2017, the Company estimated its total proven and probable limestone reserves on such land to be approximately 692 million tons.

The Company's cement manufacturing facilities include kilns, crushers, pre-heaters/calciners, coolers, finish mills and other equipment used to process limestone and other raw materials into cement, as well as equipment used to extract and transport the limestone from the adjacent quarries. These cement manufacturing facilities are served by rail and truck.

As of December 31, 2017, the Company, through its subsidiaries, also operated, directly or through third parties, five cement distribution terminals and owned the real estate at the California cement grinding and packaging facility it sold on September 30, 2015, which it expects to sell for non-cement use.

Magnesia Specialties Business

The Magnesia Specialties business currently operates major manufacturing facilities in Manistee, Michigan, and Woodville, Ohio. Both of these facilities are owned.

Other Properties

The Company's principal corporate office, which it owns, is located in Raleigh, North Carolina. The Company owns and leases various administrative offices for its five reportable business segments.

Condition and Utilization

The Company's principal properties, which are of varying ages and are of different construction types, are believed to be generally in good condition, are generally well maintained, and are generally suitable and adequate for the purposes for which they are used.

During 2017, the principal properties of the aggregates product line were believed to be utilized at average productive capacities of approximately 65% and were capable of supporting a higher level of market demand. However, during the Great Recession, the Company adjusted its production schedules to meet reduced demand for its products. For example, the Company has reduced operating hours at a number of its facilities, closed some of its facilities, and temporarily idled some of its facilities. In 2017, the Company's aggregates product line operated at a level significantly below capacity, which restricted the Company's ability to capitalize $36.5 million of costs that could have been inventoried under normal operating conditions. If demand does not improve over the near term, such reductions and temporary idling could continue. The Company expects, however, as the economy continues to recover, it will be able to resume production at its normalized levels and increase production again as demand for its products increases.

During 2017 the Texas cement plants operated on average at 75% to 80% utilization. The Portland Cement Association ("PCA") forecasts a 2.6% increase in demand in Texas in 2018 over 2017. The cement product line's leadership, in collaboration with the aggregates and ready mixed concrete teams, have developed strategic plans regarding interplant efficiencies, as well as tactical plans addressing plant utilization and efficiency. Due to the 24/7/365 nature of cement operations, significant gains in plant utilization and efficiency are typically achieved only during plant shutdowns.

The Company expects future organic earnings growth to result from increased pricing, rationalization of the current product portfolio and/or further cost reductions. In the current operating environment where steel utilization is at levels close to or below 70% and the strength of the United States dollar pressures product competitiveness in international markets, any unplanned change in costs or customers introduces volatility to the earnings of the Magnesia Specialties segment. The dolomitic lime business of the Magnesia Specialties segment operated at 71% utilization in 2017.

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ITEM 3. LEGAL PROCEEDINGS

From time to time claims of various types are asserted against the Company arising out of its operations in the normal course of business, including claims relating to land use and permits, safety, health, and environmental matters (such as noise abatement, blasting, vibrations, air emissions, and water discharges). Such matters are subject to many uncertainties, and it is not possible to determine the probable outcome of, or the amount of liability, if any, from, these matters. In the opinion of management of the Company (which opinion is based in part upon consideration of the opinion of counsel), based upon currently-available facts, it is remote that the ultimate outcome of any litigation and other proceedings will have a material adverse effect on the overall results of the Company's operations, its cash flows, or its financial condition. However, there can be no assurance that an adverse outcome in any of such litigation would not have a material adverse effect on the Company or its operating segments.

The Company was not required to pay any penalties in 2017 for failure to disclose certain "reportable transactions" under Section 6707A of the Internal Revenue Code.

See also "Note N: Commitments and Contingencies" of the "Notes to Financial Statements" of the 2017 Financial Statements included under Item 8 of this Form 10-K and the 2017 Annual Report and "Management's Discussion and Analysis of Financial Condition and Results of Operations - Environmental Regulation and Litigation" under Item 7 of this Form 10-K and the 2017 Annual Report.

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 (17 CFR 229.104) is included in Exhibit 95 to this Annual Report on Form 10-K.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information regarding the executive officers of Martin Marietta Materials, Inc. as of February 9, 2018:

Name	*Age*	*Present Position*	*Year Assumed Present Position*	*Other Positions and Other Business Experience Within the Last Five Years*
C. Howard Nye	55	Chairman of the Board;	2014	
		Chief Executive Officer;	2010	
		President;	2006	
		President of Aggregates Business;	2010	
		Chairman of Magnesia Specialties Business	2007	

James A. J. Nickolas	47	Senior Vice President, Chief Financial Officer	2017	Head, Corporate Development group, Caterpillar Inc. (January-July 2017), Group Chief Financial Officer of Caterpillar's Resources Industries segment (October 2014-December 2016), Group Chief Financial Officer of Caterpillar's Global Mining business unit (December 2012-September 2014)
Roselyn R. Bar	59	Executive Vice President; General Counsel; Corporate Secretary	2015 2001 1997	Senior Vice President (2005-2015)
Daniel L. Grant	63	Senior Vice President, Strategy & Development	2013	Senior Vice President, Strategy & Development, Lehigh Hanson, Inc., a producer of construction materials, and a subsidiary of Heidelberg Cement (1995-2013)
Dana F. Guzzo	52	Senior Vice President; Chief Accounting Officer; Controller	2011 2006 2005	Chief Information Officer (2011-2015)
Donald A. McCunniff	60	Senior Vice President, Human Resources	2011	

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information, Holders, and Dividends

The Company's Common Stock, $.01 par value, is traded on the New York Stock Exchange ("NYSE") (Symbol: MLM). Information concerning stock prices and dividends paid is included under the caption "Quarterly Performance (Unaudited)" of the 2017 Annual Report, and that information is incorporated herein by reference. There were 912 holders of record of the Company's Common Stock as of February 9, 2018.

Recent Sales of Unregistered Securities

None.

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Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(1)	Maximum Number of Shares that May Yet be Purchased Under the Plans or Programs
October 1, 2017 – October 31, 2017	457,742	$ 218.46	457,742	14,668,891
November 1, 2017 – November 30, 2017	0	$ —	0	14,668,891
December 1, 2017 – December 31, 2017	0	$ —	0	14,668,891
Total	457,742	$ 218.46	457,742	14,668,891

(1) The Company's stock repurchase program, which currently authorizes the repurchase of 20 million shares of common stock, is approved by the Company's Board of Directors from time to time, and updated as appropriate by the Board, and announced to the public by press release. The latest announcement on this topic was the Company's press release dated February 10, 2015 that its Board of Directors had authorized the repurchase of up to 20 million shares of its outstanding common stock, which included 5 million shares authorized under the Company's previous share repurchase program. Previous press releases announcing prior share repurchase programs and the related amounts of common stock included under the share repurchase authorizations were as follows: (i) press release dated August 15, 2007 (5 million shares); (ii) press release dated February 22, 2006 (5 million shares); and (iii) May 6, 1994 (2.5 million shares).

ITEM 6. SELECTED FINANCIAL DATA

The information required in response to this Item 6 is included under the caption "Five Year Summary" of the 2017 Annual Report, and that information is incorporated herein by reference.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The information required in response to this Item 7 is included under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the 2017 Annual Report, and that information is incorporated herein by reference, except that the information contained under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations—Outlook 2018" in the 2017 Annual Report is not incorporated herein by reference.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information required in response to this Item 7A is included under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations-Quantitative and Qualitative Disclosures About Market Risk" of the 2017 Annual Report, and that information is incorporated herein by reference.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required in response to this Item 8 is included under the caption “Consolidated Statements of Earnings,” “Consolidated Statements of Comprehensive Earnings,” “Consolidated Balance Sheets,” “Consolidated Statements of Cash Flows,” “Consolidated Statements of Total Equity,” “Notes to Financial Statements,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and “Quarterly Performance (Unaudited)” of the 2017 Annual Report, and that information is incorporated herein by reference, except that the information contained under the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Outlook 2018” in the 2017 Annual Report is not incorporated herein by reference.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of December 31, 2017, an evaluation was performed under the supervision and with the participation of the Company’s management, including the Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), of the effectiveness of the design and operation of the Company’s disclosure controls and procedures. Based on that evaluation, the Company’s CEO and CFO concluded that the Company’s disclosure controls and procedures were effective at the reasonable assurance level.

The foregoing evaluation of the Company’s disclosure controls and procedures was based on the definition in Exchange Act Rule 13a-15(e), which requires that disclosure controls and procedures are effectively designed to provide reasonable assurance that information required to be disclosed by an issuer in the reports that it files or submits with the SEC under the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in the SEC’s rules and forms, and is accumulated and communicated to the issuer’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management’s Report on Internal Control over Financial Reporting

Our management’s report on internal control over financial reporting is included under Item 8 of this Annual Report on Form 10K, “Statement of Financial Responsibility and Management’s Report on Internal Controls over Financial Reporting,” and is incorporated by reference. The Company’s management concluded that the Company’s internal control over financial reporting was effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of the Company’s financial statements for external purposes in accordance with generally accepted accounting principles as of December 31, 2017.

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Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the most recently completed fiscal quarter ended December 31, 2017 that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Limitations on the Effectiveness of Controls

The Company's management, including the CEO and CFO, does not expect that the Company's control system will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

CEO and CFO Certifications

Included among the Exhibits to this Form 10-K are forms of "Certifications" of the Company's CEO and CFO as required in accordance with Section 302 of the Sarbanes-Oxley Act of 2002 (the "Section 302 Certification"). The Section 302 Certifications refer to this evaluation of the Company's disclosure policies and procedures and internal control over financial reporting. The information in this section should be read in conjunction with the Section 302 Certifications for a more complete understanding of the topics presented.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information concerning directors of the Company, the Audit Committee of the Board of Directors, and the Audit Committee financial expert serving on the Audit Committee, all as required in response to this Item 10, is included under the captions “Corporate Governance Matters” and “Section 16(a) Beneficial Ownership Reporting Compliance” in the Company’s definitive proxy statement to be filed with the SEC pursuant to Regulation 14A within 120 days after the close of the Company’s fiscal year ended December 31, 2017 (the “2018 Proxy Statement”), and that information is hereby incorporated by reference in this Form 10-K. Information concerning executive officers of the Company required in response to this Item 10 is included in Part I, under the heading “Executive Officers of the Registrant,” of this Form 10-K. The information concerning the Company’s code of ethics required in response to this Item 10 is included in Part I, under the heading “Available Information,” of this Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

The information required in response to this Item 11 is included under the captions “Executive Compensation,” “Compensation Discussion and Analysis,” “Corporate Governance Matters,” “Management Development and Compensation Committee Report,” and “Compensation Committee Interlocks and Insider Participation” in the Company’s 2018 Proxy Statement, and that information is hereby incorporated by reference in this Form 10-K.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required in response to this Item 12 is included under the captions “General Information,” “Security Ownership of Certain Beneficial Owners and Management,” and “Securities Authorized for Issuance Under Equity Compensation Plans” in the Company’s 2018 Proxy Statement, and that information is hereby incorporated by reference in this Form 10-K.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required in response to this Item 13 is included under the captions “Compensation Committee Interlocks and Insider Participation in Compensation Decisions” and “Corporate Governance Matters” in the Company’s 2018 Proxy Statement, and that information is hereby incorporated by reference in this Form 10-K.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required in response to this Item 14 is included under the caption “Independent Auditors” in the Company’s 2018 Proxy Statement, and that information is hereby incorporated by reference in this Form 10-K.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1)List of financial statements filed as part of this Form 10-K.

The following consolidated financial statements of Martin Marietta Materials, Inc. and consolidated subsidiaries, included in the 2017 Annual Report and incorporated by reference under Item 8 of this Form 10-K:

Consolidated Statements of Earnings—
for years ended December 31, 2017, 2016, and 2015

Consolidated Statements of Comprehensive Earnings—
for years ended December 31, 2017, 2016, and 2015

Consolidated Balance Sheets—
at December 31, 2017 and 2016

Consolidated Statements of Cash Flows—
for years ended December 31, 2017, 2016, and 2015

Consolidated Statements of Total Equity—
for years ended December 31, 2017, 2016, and 2015

Notes to Financial Statements

(2) List of financial statement schedules filed as part of this Form 10-K

The following financial statement schedule of Martin Marietta Materials, Inc. and consolidated subsidiaries is included in Item 15(c) of this Form 10-K.

Schedule II - Valuation and Qualifying Accounts

All other schedules have been omitted because they are not applicable, not required, or the information has been otherwise supplied in the financial statements or notes to the financial statements.

The report of the Company’s independent registered public accounting firm with respect to the above-referenced financial statements is included in the 2017 Annual Report, and that report is hereby incorporated by reference in this Form 10-K. The report on the financial statement schedule and the consent of the Company’s independent registered public accounting firm are attached as Exhibit 23.01 to this Form 10-K.

(3) Exhibits

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The list of Exhibits on the accompanying Index of Exhibits included in Item 15(b) of this Form 10-K is hereby incorporated by reference. Each management contract or compensatory plan or arrangement required to be filed as an exhibit is indicated by asterisks.

(b) Index of Exhibits

Exhibit No.	
3.01	—Restated Articles of Incorporation of the Company, as amended (incorporated by reference to Exhibit 3.01 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed on February 24, 2017) (Commission File No. 1-12744)
3.02	—Restated Bylaws of the Company (incorporated by reference to Exhibit 3.2 to the Martin Marietta Materials, Inc. Current Report on Form 8-K, filed on February 22, 2018) (Commission File No. 1-12744)
4.01	—Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.01 to the Martin Marietta Materials, Inc. registration statement on Form S-1, filed on December 8, 1993 (SEC Registration No. 33-72648) (P)
4.02	—Article 5 of the Company's Restated Articles of Incorporation, as amended (incorporated by reference to Exhibit 3.01 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed on February 24, 2017) (Commission File No. 1-12744)
4.03	—Article 1 of the Company's Restated Bylaws, as amended (incorporated by reference to Exhibit 3.2 to the Martin Marietta Materials, Inc. Current Report on Form 8-K, filed on February 22, 2018) (Commission File No. 1-12744)
4.04	—Indenture dated as of December 1, 1995 between Martin Marietta Materials, Inc. and First Union National Bank of North Carolina (incorporated by reference to Exhibit 4(a) to the Martin Marietta Materials, Inc. registration statement on Form S-3 (SEC Registration No. 33-99082))
4.05	—Form of Martin Marietta Materials, Inc. 7% Debenture due 2025 (incorporated by reference to Exhibit 4(a)(i) to the Martin Marietta Materials, Inc. registration statement on Form S-3 (SEC Registration No. 33-99082)) (P)
4.06	—Indenture dated as of April 30, 2007 between Martin Marietta Materials, Inc. and Branch Banking and Trust Company, Inc., as trustee (incorporated by reference to Exhibit 4.1 to the Martin Marietta Materials, Inc. Current Report on Form 8-K, filed on April 30, 2007 (Commission File No. 1-12744))
4.07	—Second Supplemental Indenture, dated as of April 30, 2007, between Martin Marietta Materials, Inc. and Branch Banking and Trust Company, Inc., as trustee, to that certain Indenture dated as of April 30, 2007 between Martin Marietta Materials, Inc. and Branch Banking and Trust Company, Inc., as trustee, pursuant to which were issued $250,000,000 aggregate principal amount of 6 1⁄4% Senior Notes due 2037 of Martin Marietta Materials, Inc. (incorporated by reference to Exhibit 4.3 to the Martin Marietta Materials, Inc. Current Report on Form 8-K, filed on April 30, 2007 (Commission File No. 1-12744))
4.08	—Third Supplemental Indenture, dated as of April 21, 2008, between Martin Marietta Materials, Inc. and Branch Banking and Trust Company, Inc., as trustee, to that certain Indenture dated as of April 30, 2007 between Martin Marietta Materials, Inc. and Branch Banking and Trust Company, Inc., as trustee, pursuant to which were issued $300,000,000 aggregate principal amount of 6.60% Senior Notes due 2018 of Martin Marietta Materials, Inc. (incorporated by reference to Exhibit 4.1 to the Martin Marietta Materials, Inc. Current Report on Form 8-K, filed on April 21, 2008 (Commission File No. 1-12744))
4.09	—Purchase Agreement dated as of June 23, 2014 among Martin Marietta Materials, Inc. and Deutsche Bank Securities Inc. and J.P. Morgan Securities LLC, as representatives of the several initial purchasers named in Schedule 1 thereto (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K, filed on June 24, 2014) (Commission File No. 1-12744)

4.10	—Indenture, dated as of July 2, 2014, between Martin Marietta Materials, Inc. and Regions Bank, as trustee (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K, filed on July 2, 2014) (Commission File No. 1-12744)
4.11	—Form of 4.250% Senior Notes due 2024 (included in Exhibit 4.09)
4.12	—Indenture, dated as of May 22, 2017, between Martin Marietta Materials, Inc. and Regions Bank, as trustee (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K, filed on May 22, 2017) (Commission File No. 1-12744)
4.13	—First Supplemental Indenture, dated as of May 22, 2017, between Martin Marietta Materials, Inc. and Regions Bank, as trustee, governing the Senior Notes issued by the Company on May 22, 2017, in the form of the $300 million aggregate principal amount of Floating Rate Senior Notes due 2020 and $300 million aggregate principal amount of 3.450% Senior Notes due 2027 (incorporated by reference to Exhibit 4.2 to the Martin Marietta Materials, Inc. Current Report on Form 8-K, filed on May 22, 2017 (Commission File No. 1-12744))
4.14	—Form of Floating Rate Senior Notes due 2020 (included in Exhibit 4.13)
4.15	—Second Supplemental Indenture, dated as of December 20, 2017, between Martin Marietta Materials, Inc. and Regions Bank, as trustee, governing the Senior Notes issued by the Company on December 20, 2017, in the form of the $300 million aggregate principal amount of Floating Rate Senior Notes due 2019, $500 million aggregate principal amount of 3.500% Senior Notes due 2027, and $600 million aggregate principal amount of 4.250% Senior Notes due 2047 (incorporated by reference to Exhibit 4.2 to the Martin Marietta Materials, Inc. Current Report on Form 8-K, filed on December 20, 2017 (Commission File No. 1-12744))
4.16	—Form of Floating Rate Senior Notes due 2019 (included in Exhibit 4.15)
4.17	—Form of 3.500% Senior Notes due 2027 (included in Exhibit 4.15)
4.18	—Form of 4.250% Senior Notes due 2047 (included in Exhibit 4.15)
10.01	—$700,000,000 Credit Agreement dated as of December 5, 2016 among Martin Marietta Materials, Inc., JPMorgan Chase Bank, N.A., as Administrative Agent, and Wells Fargo Bank, N.A., Branch Banking and Trust Company, SunTrust Bank, and Deutsche Bank Securities Inc., as Co-Syndication Agents (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc., Current Report on Form 8-K filed on December 7, 2016) (Commission File No. 1-12744)
10.02	— Credit and Security Agreement dated as of April 19, 2013, among Martin Marietta Funding LLC, as borrower, Martin Marietta Materials, Inc., as servicer, and SunTrust Bank, as lender together with the other lenders from time to time party thereto, and SunTrust Bank, as administrative agent for the lenders (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc. Current Report on Form 8-K filed on April 24, 2013) (Commission File No. 1-12744)
10.03	—Commitment Letter dated as of June 20, 2014 to the Credit and Security Agreement, dated as of April 19, 2013 (as last amended April 18, 2014), among Martin Marietta Funding LLC, as borrower, Martin Marietta Materials, Inc., as servicer, and SunTrust Bank, as lender together with the other lenders from time to time party thereto, and SunTrust Bank, as administrative agent for the lenders (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc. Current Report on Form 8-K filed on June 25, 2014) (Commission File No. 1-12744)
10.04	—Second Amendment to Credit and Security Agreement, dated as of April 18, 2014, among Martin Marietta Funding LLC, as borrower, Martin Marietta Materials, Inc., as servicer, and SunTrust Bank, as lender together with the other lenders from time to time party thereto, and SunTrust Bank, as administrative agent for the lenders (incorporated by reference to Exhibit 10.02 to the Martin Marietta Materials, Inc. Current Report on Form 8-K filed on April 24, 2014) (Commission File No. 1-12744)

10.05	—Fifth Amendment to Credit and Security Agreement, dated as of September 30, 2014, among Martin Marietta Funding LLC, as borrower, Martin Marietta Materials, Inc., as servicer, and SunTrust Bank, as lender together with the other lenders from time to time party thereto, and SunTrust Bank, as administrative agent for the lenders (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc. Current Report on Form 8-K filed on October 3, 2014) (Commission File No. 1-12744)
10.06	—Seventh Amendment to Credit and Security Agreement, dated as of September 28, 2016, among Martin Marietta Funding LLC, as borrower, Martin Marietta Materials, Inc., as servicer, and SunTrust Bank, as lender together with the other lenders from time to time party thereto, and SunTrust Bank, as administrative agent for the lenders (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc. Current Report on Form 8-K filed on September 30, 2016) (Commission File No. 1-12744)
10.07	—Purchase and Contribution Agreement dated as of April 19, 2013, between Martin Marietta Materials, Inc., as seller and as servicer, and Martin Marietta Funding LLC, as buyer (incorporated by reference to Exhibit 10.02 to the Martin Marietta Materials, Inc. Current Report on Form 8-K filed on April 24, 2013) (Commission File No. 1-12744)
10.08	—Form of Martin Marietta Materials, Inc. Third Amended and Restated Employment Protection Agreement (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc. Current Report on Form 8-K, filed on August 19, 2008) (Commission File No. 1-12744)**
10.09	—Amended and Restated Martin Marietta Materials, Inc. Common Stock Purchase Plan for Directors (incorporated by reference to Exhibit 10.05 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2013) (Commission File No. 1-12744)**
10.10	—Martin Marietta Materials, Inc. Amended and Restated Executive Incentive Plan (incorporated by reference to Exhibit 10.05 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2008) (Commission File No. 1-12744)**
10.11	—Martin Marietta Materials, Inc. Incentive Stock Plan, as Amended (incorporated by reference to Exhibit 10.06 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2008) (Commission File No. 1-12744)**
10.12	—Martin Marietta Amended and Restated Stock-Based Award Plan last amended and restated February 18, 2016 (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2016) (Commission File No. 1-12744)**
10.13	—Martin Marietta Executive Cash Incentive Plan adopted February 18, 2016 (incorporated by reference to Exhibit 10.02 to the Martin Marietta Materials, Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2016) (Commission File No. 1-12744)**
10.14	—Martin Marietta Materials, Inc. Amended Omnibus Securities Award Plan (incorporated by reference to Exhibit 10.16 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2000) (Commission File No. 1-12744)**

10.15	—Martin Marietta Materials, Inc. Third Amended and Restated Supplemental Excess Retirement Plan (incorporated by reference to Exhibit 10 to the Martin Marietta Materials, Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2012) (Commission File No. 1-12744)**
10.16	—Form of Option Award Agreement under the Martin Marietta Materials, Inc. Amended and Restated Stock-Based Award Plan (incorporated by reference to Exhibit 10.11 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2008) (Commission File No. 1-12744)**
10.17	—Form of Restricted Stock Unit Award Agreement under the Martin Marietta Materials, Inc. Amended and Restated Stock-Based Award Plan (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc. Quarterly Report on Form 10-Q for the quarter ended March 31, 2016) (Commission File No. 1-12744)**
10.18	—Form of Amendment to the Stock Unit Agreement under the Martin Marietta Materials, Inc. Amended and Restated Stock-Based Award Plan (incorporated by reference to Exhibit 10.13 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2008) (Commission File No. 1-12744)**
10.19	—Form of Restricted Stock Unit Agreement for Directors under the Martin Marietta Materials, Inc. Amended and Restated Stock-Based Award Plan (incorporated by reference to Exhibit 10.14 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2013) (Commission File No. 1-12744)**
10.20	—Form of Special Restricted Stock Unit Agreement under the Martin Marietta Materials, Inc. Amended and Restated Stock-Based Award Plan (incorporated by reference to Exhibit 10.19 to the Martin Marietta Materials, Inc. Annual Report on Form 10-K for the fiscal year ended December 31, 2014) (Commission File No. 1-12744)**
10.21	—Form of Performance Share Unit Award Agreement under the Martin Marietta Materials, Inc. Amended and Restated Stock-Based Award Plan (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc. Quarterly Report on Form 10-Q for the quarter ended March 31, 2017) (Commission File No. 1-12744)**
10.22	—Form of Performance-Based Restricted Stock Unit Award Agreement under the Martin Marietta Materials, Inc. Amended and Restated Stock-Based Award Plan (incorporated by reference to Exhibit 10.02 to the Martin Marietta Materials, Inc. Quarterly Report on Form 10-Q for the quarter ended March 31, 2017) (Commission File No. 1-12744)**
10.23	—Offer Letter, dated as of June 9, 2017, by and between Martin Marietta Materials, Inc. and James A. J. Nickolas (incorporated by reference to Exhibit 10.01 to the Martin Marietta Materials, Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2017) (Commission File No. 1-12744)**
*12.01	—Computation of ratio of earnings to fixed charges for the year ended December 31, 2017
*13.01	—Excerpts from Martin Marietta Materials, Inc. 2017 Annual Report to Shareholders, portions of which are incorporated by reference in this Form 10-K. Those portions of the 2017 Annual Report to Shareholders that are not incorporated by reference shall not be deemed to be “filed” as part of this report.
*21.01	—List of subsidiaries of Martin Marietta Materials, Inc.
*23.01	—Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm for Martin Marietta Materials, Inc. and consolidated subsidiaries
*23.02	—Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm for Martin Marietta Materials, Inc. and consolidated subsidiaries
*24.01	—Powers of Attorney (included in this Form 10-K immediately following Signatures)

*31.01	—Certification dated February 23, 2018 of Chief Executive Officer pursuant to Securities and Exchange Act of 1934, rule 13a-14, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*31.02	—Certification dated February 23, 2018 of Chief Financial Officer pursuant to Securities and Exchange Act of 1934, rule 13a-14, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*32.01	—Certification dated February 23, 2018 of Chief Executive Officer required by 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*32.02	—Certification dated February 23, 2018 of Chief Financial Officer required by 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*95	—Mine Safety Disclosure Exhibit
*101.INS	—XBRL Instance Document
*101.SCH	—XBRL Taxonomy Extension Schema Document
*101.CAL	—XBRL Taxonomy Extension Calculation Linkbase Document
*101.LAB	—XBRL Taxonomy Extension Label Linkbase Document
*101.PRE	—XBRL Taxonomy Extension Presentation Linkbase Document
*101. DEF	—XBRL Taxonomy Extension Definition Linkbase

Other material incorporated by reference:

Martin Marietta Materials, Inc.'s 2018 Proxy Statement filed pursuant to Regulation 14A, portions of which are incorporated by reference in this Form 10-K. Those portions of the 2018 Proxy Statement which are not incorporated by reference shall not be deemed to be "filed" as part of this report.

* Filed herewith
** Management contract or compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 14(c) of Form 10-K

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(c) Financial Statement Schedule

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS
MARTIN MARIETTA MATERIALS, INC. AND CONSOLIDATED SUBSIDIARIES

Col A	Col B	Col C		Col D	Col E
		Additions			
Description	Balance at beginning of period	(1) Charged to costs and expenses	(2) Charged to other accounts-describe	Deductions-describe	Balance at end of period
	(Amounts in Thousands)				
Year ended December 31, 2017					
Allowance for doubtful accounts	$ 6,266	$ —	$ —	$ 3,876(a)	$ 2,390
Allowance for uncollectible notes receivable	437	—	—	210(a)	227
Inventory valuation allowance	134,862	9,099	—	—	143,961
Year ended December 31, 2016					
Allowance for doubtful accounts	$ 6,940	$ —	$ —	$ 674(a)	$ 6,266
Allowance for uncollectible notes receivable	585	—	—	148(a)	437
Inventory valuation allowance	130,584	4,160	118(b)	—	134,862
Year ended December 31, 2015					
Allowance for doubtful accounts	$ 4,077	$ 2,863	$ —	$ —	$ 6,940
Allowance for uncollectible notes receivable	1,486	—	—	901(a)	585
Inventory valuation allowance	119,189	13,365	1,400(b)	3,370(c)	130,584

(a) Write off of uncollectible accounts and change in estimates.
(b) Application of reserve policy to acquired inventories.
(c) Divestitures.

ITEM 16. FORM 10-K SUMMARY

The Company has chosen not to include an optional summary of the information required by this Form 10-K. For a reference to the information in this Form 10-K, investors should refer to the Table of Contents to this Form 10-K.

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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.

MARTIN MARIETTA MATERIALS, INC.

By: /s/ Roselyn R. Bar
Roselyn R. Bar
Executive Vice President, General Counsel and Corporate Secretary

Dated: February 23, 2018

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below appoints Roselyn R. Bar and M. Guy Brooks, III, jointly and severally, as his or her true and lawful attorney-in-fact, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact, jointly and severally, full power and authority to do and perform each in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, jointly and severally, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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Pursuant to the requirements of the Securities and Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	*Title*	*Date*
/s/ C. Howard Nye C. Howard Nye	Chairman of the Board, President and Chief Executive Officer	February 23, 2018
/s/ James A. J. Nickolas James A. J. Nickolas	Senior Vice President and Chief Financial Officer	February 23, 2018
/s/ Dana F. Guzzo Dana F. Guzzo	Senior Vice President, Chief Accounting Officer and Controller	February 23, 2018
/s/ Sue W. Cole Sue W. Cole	Director	February 23, 2018
/s/ John J. Koraleski John J. Koraleski	Director	February 23, 2018
/s/ David G. Maffucci David G. Maffucci	Director	February 23, 2018
/s/ Laree E. Perez Laree E. Perez	Director	February 23, 2018
/s/ Michael J. Quillen Michael J. Quillen	Director	February 23, 2018
/s/ Dennis L. Rediker Dennis L. Rediker	Director	February 23, 2018
/s/ Donald W. Slager Donald W. Slager	Director	February 23, 2018
/s/ Stephen P. Zelnak, Jr. Stephen P. Zelnak, Jr.	Director	February 23, 2018

EXHIBIT 12.01

MARTIN MARIETTA MATERIALS, INC. AND CONSOLIDATED SUBSIDIARIES

COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES

For the Year Ended December 31, 2017

(add 000, except ratio)

EARNINGS:	
Earnings before income taxes*	$618,885
Gain from less than 50%-owned associated companies, net	(11,894)
Interest expense**	91,487
Portion of rents representative of an interest factor	23,944
Adjusted Earnings and Fixed Charges	$722,422
FIXED CHARGES:	
Interest expense**	$ 91,487
Capitalized interest	3,616
Portion of rents representative of an interest factor	23,944
Total Fixed Charges	$119,047
Ratio of Earnings to Fixed Charges	6.07

* Represents earnings from continuing operations plus/minus net (loss) earnings attributable to noncontrolling interests.

** Interest expense excludes a credit of $84 associated with uncertain tax provisions.

STATEMENT OF FINANCIAL RESPONSIBILITY AND MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management's Statement of Responsibility

The management of Martin Marietta Materials, Inc. (the "Company" or "Martin Marietta"), is responsible for the consolidated financial statements, the related financial information contained in this 2017 Annual Report and the establishment and maintenance of adequate internal control over financial reporting. The consolidated balance sheets for Martin Marietta, at December 31, 2017 and 2016, and the related consolidated statements of earnings, comprehensive earnings, total equity and cash flows for each of the three years in the period ended December 31, 2017, include amounts based on estimates and judgments and have been prepared in accordance with accounting principles generally accepted in the United States applied on a consistent basis.

A system of internal control over financial reporting is designed to provide reasonable assurance, in a cost-effective manner, that assets are safeguarded, transactions are executed and recorded in accordance with management's authorization, accountability for assets is maintained and financial statements are prepared and presented fairly in accordance with accounting principles generally accepted in the United States. Internal control systems over financial reporting have inherent limitations and may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

The Company operates in an environment that establishes an appropriate system of internal control over financial reporting and ensures that the system is maintained, assessed and monitored on a periodic basis. This internal control system includes examinations by internal audit staff and oversight by the Audit Committee of the Board of Directors.

The Company's management recognizes its responsibility to foster a strong ethical climate. Management has issued written policy statements that document the Company's business code of ethics. The importance of ethical behavior is regularly communicated to all employees through the distribution of the *Code of Ethical Business Conduct* booklet and through ongoing education and review programs designed to create a strong commitment to ethical business practices.

The Audit Committee of the Board of Directors, which consists of four independent, nonemployee directors, meets periodically and separately with management, the independent auditors and the internal auditors to review the activities of each. The Audit Committee meets standards established by the Securities and Exchange Commission (SEC) and the New York Stock Exchange as they relate to the composition and practices of audit committees.

Management's Report on Internal Control over Financial Reporting

The management of Martin Marietta is responsible for establishing and maintaining adequate control over financial reporting. Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (COSO). Based on management's assessment under the 2013 framework, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2017.

The 2017 consolidated financial statements and effectiveness of internal control over financial reporting have been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, whose report appears on the following page.

C. Howard Nye
Chairman, President and Chief Executive Officer
February 23, 2018

James A. J. Nickolas
Senior Vice President and Chief Financial Officer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To Board of Directors and Shareholders of Martin Marietta Materials, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Martin Marietta Materials, Inc. and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of earnings, comprehensive earnings, total equity, and cash flows for each of the two years in the period ended December 31, 2017, including the related notes and schedule of valuation and qualifying accounts for each of the two years in the period ended December 31, 2017 appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP
We have served as the Company's auditor since 2016.

Raleigh, North Carolina
February 23, 2018

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To Board of Directors and Shareholders of Martin Marietta Materials, Inc.

We have audited the accompanying consolidated statements of earnings, comprehensive earnings, total equity and cash flows of Martin Marietta Materials, Inc. and consolidated subsidiaries for the year ended December 31, 2015. 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 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 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 audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated results of operations and cash flows of Martin Marietta Materials, Inc. and consolidated subsidiaries for the year ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

Ernst & Young LLP

Raleigh, North Carolina
February 23, 2016, except for the recently adopted accounting pronouncements discussed in Note A and the effects of the segment change discussed in Note O, as to which the date is May 12, 2017

CONSOLIDATED STATEMENTS OF EARNINGS for years ended December 31

(add 000, except per share)	2017	2016	2015
Net Sales	**$ 3,721,428**	$ 3,576,767	3,268,116
Freight and delivery revenues	**244,166**	241,982	271,454
Total revenues	**3,965,594**	3,818,749	3,539,570
Cost of sales	**2,749,488**	2,665,029	2,541,196
Freight and delivery costs	**244,166**	241,982	271,454
Total cost of revenues	**2,993,654**	2,907,011	2,812,650
Gross Profit	**971,940**	911,738	726,920
Selling, general and administrative expenses	**262,128**	241,606	210,754
Acquisition-related expenses	**8,638**	909	6,346
Other operating expenses and (income), net	**793**	(8,043)	15,653
Earnings from Operations	**700,381**	677,266	494,167
Interest expense	**91,487**	81,677	76,287
Other nonoperating (income) and expenses, net	**(10,034)**	(11,439)	4,079
Earnings before income tax (benefit) expense	**618,928**	607,028	413,801
Income tax (benefit) expense	**(94,457)**	181,584	124,863
Consolidated net earnings	**713,385**	425,444	288,938
Less: Net earnings attributable to noncontrolling interests	**43**	58	146
Net Earnings Attributable to Martin Marietta	**$ 713,342**	$ 425,386	$ 288,792
Net Earnings Attributable to Martin Marietta Per Common Share (see Note A)			
– Basic attributable to common shareholders	**$ 11.30**	$ 6.66	$ 4.31
– Diluted attributable to common shareholders	**$ 11.25**	$ 6.63	$ 4.29
Weighted-Average Common Shares Outstanding			
– Basic	**62,932**	63,610	66,770
– Diluted	**63,217**	63,861	67,020

The notes on pages 15 through 41 are an integral part of these financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS for years ended December 31

(add 000)	**2017**	2016	2015
Consolidated Net Earnings	**$ 713,385**	$ 425,444	$ 288,938
Other comprehensive (loss) earnings, net of tax:			
Defined benefit pension and postretirement plans:			
Net loss arising during period, net of tax of $(2,625), $(19,734) and $(4,530), respectively	**(8,052)**	(31,620)	(7,101)
Amortization of prior service credit, net of tax of $(547), $(617) and $(731), respectively	**(883)**	(992)	(1,149)
Amortization of actuarial loss, net of tax of $5,271, $4,437 and $6,551, respectively	**8,503**	7,138	10,299
Amount recognized in net periodic pension cost due to settlement, net of tax of $8, $44 and $0, respectively	**13**	71	–
Amount recognized in net periodic pension cost due to special plan termination benefits, net of tax of $0, $293 and $811, respectively	**–**	471	1,274
	(419)	(24,932)	3,323
Foreign currency translation gain (loss)	**1,140**	(898)	(3,542)
Amortization of terminated value of forward starting interest rate swap agreements into interest expense, net of tax of $571, $541 and $509, respectively	**872**	826	771
	1,593	(25,004)	552
Consolidated comprehensive earnings	**714,978**	400,440	289,490
Less: Comprehensive earnings attributable to noncontrolling interests	**53**	119	161
Comprehensive Earnings Attributable to Martin Marietta	**$ 714,925**	$ 400,321	$ 289,329

The notes on pages 15 through 41 are an integral part of these financial statements.

CONSOLIDATED BALANCE SHEETS at December 31

Assets (add 000)	**2017**	2016
Current Assets:		
Cash and cash equivalents	**$ 1,446,364**	$ 50,038
Accounts receivable, net	**487,240**	457,910
Inventories, net	**600,591**	521,624
Other current assets	**96,965**	56,813
Total Current Assets	**2,631,160**	1,086,385
Property, plant and equipment, net	**3,592,813**	3,423,395
Goodwill	**2,160,290**	2,159,337
Operating permits, net	**439,116**	442,202
Other intangibles, net	**67,233**	69,110
Other noncurrent assets	**101,899**	120,476
Total Assets	**$ 8,992,511**	$ 7,300,905

Liabilities and Equity (add 000, except parenthetical share data)		
Current Liabilities:		
Accounts payable	**$ 186,638**	$ 178,598
Accrued salaries, benefits and payroll taxes	**44,255**	47,428
Pension and postretirement benefits	**13,652**	9,293
Accrued insurance and other taxes	**64,958**	60,093
Current maturities of long-term debt	**299,909**	180,036
Other current liabilities	**87,804**	71,140
Total Current Liabilities	**694,216**	546,588
Long-term debt	**2,727,294**	1,506,153
Pension, postretirement and postemployment benefits	**244,043**	248,086
Deferred income taxes, net	**410,723**	663,019
Other noncurrent liabilities	**233,758**	194,469
Total Liabilities	**4,310,034**	3,158,315
Equity:		
Common stock ($0.01 par value; 100,000,000 shares authorized; 62,873,000 and 63,176,000 shares outstanding at December 31, 2017 and 2016, respectively)	**628**	630
Preferred stock ($0.01 par value; 10,000,000 shares authorized; no shares outstanding)	**–**	–
Additional paid-in capital	**3,368,007**	3,334,461
Accumulated other comprehensive loss	**(129,104)**	(130,687)
Retained earnings	**1,440,069**	935,574
Total Shareholders' Equity	**4,679,600**	4,139,978
Noncontrolling interests	**2,877**	2,612
Total Equity	**4,682,477**	4,142,590
Total Liabilities and Equity	**$ 8,992,511**	$ 7,300,905

The notes on pages 15 through 41 are an integral part of these financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS for years ended December 31

(add 000)	2017	2016	2015
Cash Flows from Operating Activities:			
Consolidated net earnings	**$ 713,385**	$ 425,444	$ 288,938
Adjustments to reconcile consolidated net earnings to net cash provided by operating activities:			
Depreciation, depletion and amortization	**297,162**	285,253	263,587
Stock-based compensation expense	**30,460**	20,481	13,589
(Gain) Loss on divestitures and sales of assets	**(19,366)**	410	14,093
Deferred income taxes, net	**(239,056)**	67,050	85,225
Other items, net	**(13,157)**	(17,730)	(5,972)
Changes in operating assets and liabilities, net of effects of acquisitions and divestitures:			
Accounts receivable, net	**(29,329)**	(25,072)	12,309
Inventories, net	**(78,966)**	(47,381)	(21,525)
Accounts payable	**(17,874)**	(8,116)	(40,053)
Other assets and liabilities, net	**14,619**	(11,106)	(29,591)
Net Cash Provided by Operating Activities	**657,878**	689,233	580,600
Cash Flows from Investing Activities:			
Additions to property, plant and equipment	**(410,325)**	(387,267)	(318,232)
Acquisitions	**(12,095)**	(178,768)	(43,215)
Cash received in acquisition	**–**	4,246	63
Proceeds from divestitures and sales of assets	**35,941**	6,476	448,122
Payment of railcar construction advances	**(43,594)**	(82,910)	(25,234)
Reimbursement of railcar construction advances	**43,594**	82,910	25,234
Repayments from affiliate	**–**	–	1,808
Net Cash (Used for) Provided By Investing Activities	**(386,479)**	(555,313)	88,546
Cash Flows from Financing Activities:			
Borrowings of long-term debt	**2,408,830**	560,000	230,000
Repayments of long-term debt	**(1,065,048)**	(449,306)	(244,704)
Payments of deferred acquisition consideration	**(2,774)**	–	–
Debt issuance costs	**(2,204)**	(2,300)	–
Change in bank overdraft	**–**	(10,235)	10,052
Payments on capital lease obligations	**(3,543)**	(3,364)	(6,616)
Dividends paid	**(108,852)**	(105,036)	(107,462)
Distributions to owners of noncontrolling interest	**–**	(400)	(325)
Contributions by noncontrolling interest to joint venture	**212**	44	–
Repurchase of common stock	**(99,999)**	(259,228)	(519,962)
Proceeds from exercise of stock options	**10,110**	27,257	37,230
Shares withheld for employees' income tax obligations	**(11,805)**	(9,723)	(7,601)
Net Cash Provided by (Used for) Financing Activities	**1,124,927**	(252,291)	(609,388)
Net Increase (Decrease) in Cash and Cash Equivalents	**1,396,326**	(118,371)	59,758
Cash and Cash Equivalents, beginning of year	**50,038**	168,409	108,651
Cash and Cash Equivalents, end of year	**$ 1,446,364**	$ 50,038	$ 168,409

The notes on pages 15 through 41 are an integral part of these financial statements.

CONSOLIDATED STATEMENTS OF TOTAL EQUITY

(add 000, except per share data)	Shares of Common Stock	Common Stock	Additional Paid-In Capital	Accumulated Other Comprehensive (Loss) Earnings	Retained Earnings	Total Shareholders' Equity	Non-controlling Interests	Total Equity
Balance at December 31, 2014	67,293	$ 671	$3,243,619	$ (106,159)	$1,213,035	$ 4,351,166	$ 1,582	$4,352,748
Consolidated net earnings	–	–	–	–	288,792	288,792	146	288,938
Other comprehensive earnings	–	–	–	537	–	537	15	552
Dividends declared ($1.60 per common share)	–	–	–	–	(107,462)	(107,462)	–	(107,462)
Issuances of common stock for stock award plans	471	5	30,619	–	–	30,624	–	30,624
Repurchases of common stock	(3,285)	(33)	–	–	(519,929)	(519,962)	–	(519,962)
Stock-based compensation expense	–	–	13,589	–	–	13,589	–	13,589
Noncontrolling interest acquired from business combination	–	–	–	–	–	–	1,475	1,475
Purchase of subsidiary shares from noncontrolling interest	–	–	–	–	–	–	(325)	(325)
Balance at December 31, 2015	64,479	643	3,287,827	(105,622)	874,436	4,057,284	2,893	4,060,177
Consolidated net earnings	–	–	–	–	425,386	425,386	58	425,444
Other comprehensive (loss) earnings	–	–	–	(25,065)	–	(25,065)	61	(25,004)
Dividends declared ($1.64 per common share)	–	–	–	–	(105,036)	(105,036)	–	(105,036)
Issuances of common stock for stock award plans	285	3	26,109	–	–	26,112	–	26,112
Repurchases of common stock	(1,588)	(16)	–	–	(259,212)	(259,228)	–	(259,228)
Stock-based compensation expense	–	–	20,481	–	–	20,481	–	20,481
Distributions to owners of noncontrolling interest	–	–	–	–	–	–	(400)	(400)
Contribution from owners of noncontrolling interest	–	–	44	–	–	44	–	44
Balance at December 31, 2016	63,176	630	3,334,461	(130,687)	935,574	4,139,978	2,612	4,142,590
Consolidated net earnings	**–**	**–**	**–**	**–**	**713,342**	**713,342**	**43**	**713,385**
Other comprehensive earnings	**–**	**–**	**–**	**1,583**	**–**	**1,583**	**10**	**1,593**
Dividends declared ($1.72 per common share)	**–**	**–**	**–**	**–**	**(108,852)**	**(108,852)**	**–**	**(108,852)**
Issuances of common stock for stock award plans	**155**	**2**	**14,891**	**–**	**–**	**14,893**	**–**	**14,893**
Shares withheld for employees' income tax obligations	**–**	**–**	**(11,805)**	**–**	**–**	**(11,805)**	**–**	**(11,805)**
Repurchases of common stock	**(458)**	**(4)**	**–**	**–**	**(99,995)**	**(99,999)**	**–**	**(99,999)**
Stock-based compensation expense	**–**	**–**	**30,460**	**–**	**–**	**30,460**	**–**	**30,460**
Contribution from owners of noncontrolling interest	**–**	**–**	**–**	**–**	**–**	**–**	**212**	**212**
Balance at December 31, 2017	**62,873**	**$ 628**	**$3,368,007**	**$ (129,104)**	**$1,440,069**	**$ 4,679,600**	**$ 2,877**	**$4,682,477**

The notes on pages 15 through 41 are an integral part of these financial statements.

Note A: Accounting Policies

Organization. Martin Marietta Materials, Inc. (the "Company" or "Martin Marietta") is a natural resource-based building materials company. The Company supplies aggregates (crushed stone, sand and gravel) through its network of 282 quarries, mines and distribution yards to its customers in 30 states, Canada, the Bahamas and the Caribbean Islands. In the western United States, Martin Marietta also provides cement and downstream products, namely, ready mixed concrete, asphalt and paving services, in markets where the Company has a leading aggregates position. Specifically, the Company has two cement plants in Texas, five cement distribution facilities and 152 ready mixed concrete and asphalt plants in Texas, Colorado, Louisiana and Arkansas. The Company's heavy-side building materials are used in infrastructure, nonresidential and residential construction projects. Aggregates are also used in agricultural, utility and environmental applications and as railroad ballast. The aggregates, cement, ready mixed concrete and asphalt and paving product lines are reported collectively as the "Building Materials" business. As of December 31, 2017, the Building Materials business contains the following reportable segments: Mid-America Group, Southeast Group and West Group. The Mid-America Group operates in Indiana, Iowa, northern Kansas, Kentucky, Maryland, Minnesota, Missouri, eastern Nebraska, North Carolina, Ohio, South Carolina, Virginia, Washington and West Virginia. The Southeast Group has operations in Alabama, Florida, Georgia, Tennessee, Nova Scotia and the Bahamas. The West Group operates in Arkansas, Colorado, southern Kansas, Louisiana, western Nebraska, Nevada, Oklahoma, Texas, Utah and Wyoming. The following states accounted for 74% of the Building Materials business' 2017 net sales: Texas, Colorado, North Carolina, Iowa and Georgia.

The Company also operates a Magnesia Specialties business, which produces magnesia-based chemical products used in industrial, agricultural and environmental applications, and dolomitic lime sold primarily to customers in the steel and mining industries. Magnesia Specialties' production facilities are located in Ohio and Michigan, and products are shipped to customers worldwide.

Use of Estimates. The preparation of the Company's consolidated financial statements in conformity with accounting principles generally accepted in the United States (U.S. GAAP) requires management to make certain estimates and assumptions about future events. These estimates and the underlying assumptions affect the amounts of assets and liabilities reported, disclosures about contingent assets and liabilities and reported amounts of revenues and expenses. Such estimates include the valuation of accounts receivable, inventories, goodwill, intangible assets and other long-lived assets and assumptions used in the calculation of income tax (benefit) expense, retirement and other postemployment benefits, and the allocation of the purchase price to the fair values of assets acquired and liabilities assumed as part of business combinations. These estimates and assumptions are based on management's judgment. Management evaluates estimates and assumptions on an ongoing basis using historical experience and other factors, including the current economic environment, and adjusts such estimates and assumptions when facts and circumstances dictate. Changes in credit, equity and energy markets and changes in construction activity increase the uncertainty inherent in certain estimates and assumptions. As future events and their effects cannot be determined with precision, actual results could differ significantly from estimates. Changes in estimates, including those resulting from continuing changes in the economic environment, are reflected in the consolidated financial statements for the period in which the change in estimate occurs.

Basis of Consolidation. The consolidated financial statements include the accounts of the Company and its wholly-owned and majority-owned subsidiaries. Partially-owned affiliates are either consolidated or accounted for at cost or as equity investments, depending on the level of ownership interest or the Company's ability to exercise control over the affiliates' operations. Intercompany balances and transactions have been eliminated in consolidation.

Revenue Recognition. Total revenues include sales of materials and services provided to customers, net of discounts or allowances, if any, and include freight and delivery costs billed to customers. Revenues for product sales are recognized when risks associated with ownership have passed to unaffiliated customers. Typically, this occurs when finished products are shipped. Revenues derived from the paving business are recognized using the percentage-of-completion method under the revenue-cost approach. Under the revenue-cost approach, recognized contract revenue equals the total estimated contract revenue multiplied by the percentage of completion. Recognized costs equal the total estimated contract cost multiplied by the percentage of completion. The percentage of completion is determined by costs incurred to date as a percentage of total costs estimated for the project.

Freight and Delivery Costs. Freight and delivery costs represent pass-through transportation costs incurred and paid

by the Company to third-party carriers to deliver products to customers. These costs are then billed to the customers.

Cash and Cash Equivalents. Cash equivalents are comprised of highly-liquid instruments with original maturities of three months or less from the date of purchase. The Company manages its cash and cash equivalents to ensure short-term operating cash needs are met and excess funds are managed efficiently. When operating cash is not sufficient to meet current needs, the Company borrows money under its existing credit facilities. The Company utilizes excess cash to either pay down credit facility borrowings or invest in money market funds, money market demand deposit accounts or offshore time deposit accounts. Money market demand deposits and offshore time deposit accounts are exposed to bank solvency risk.

Customer Receivables. Customer receivables are stated at cost. The Company does not typically charge interest on customer accounts receivables. The Company records an allowance for doubtful accounts, which includes a provision for probable losses based on historical write offs and a specific reserve for accounts deemed at risk. The Company writes off customer receivables as bad debt expense when it becomes probable based upon customer facts and circumstances that such amounts will not be collected.

Inventories Valuation. Inventories are stated at the lower of cost or net realizable value. Costs for finished products and in process inventories are determined by the first-in, first-out method. Carrying value for expendable parts and supplies are determined by the weighted-average cost method. The Company records an allowance for finished product inventories based on an analysis of inventory on hand in excess of historical sales for a twelve-month period or five-year average and future demand. The Company also establishes an allowance for expendable parts over five years old and supplies over one year old.

Post-production stripping costs, which represent costs of removing overburden and waste materials to access mineral deposits, are a component of inventory production costs and recognized in cost of sales in the same period as the revenue from the sale of the inventory.

Property, Plant and Equipment. Property, plant and equipment are stated at cost.

The estimated service lives for property, plant and equipment are as follows:

Class of Assets	Range of Service Lives
Buildings	5 to 20 years
Machinery & Equipment	2 to 20 years
Land Improvements	5 to 60 years

The Company begins capitalizing quarry development costs at a point when reserves are determined to be proven or probable, economically mineable and when demand supports investment in the market. Capitalization of these costs ceases when production commences. Capitalized quarry development costs are classified as land improvements and depreciated over the life of the reserves.

The Company reviews relevant facts and circumstances to determine whether to capitalize or expense pre-production stripping costs when additional pits are developed at an existing quarry. If the additional pit operates in a separate and distinct area of the quarry, these costs are capitalized as quarry development costs and depreciated over the life of the uncovered reserves. Additionally, a separate asset retirement obligation is created for additional pits when the liability is incurred. Once a pit enters the production phase, all post-production stripping costs are charged to inventory production costs as incurred.

Mineral reserves and mineral interests acquired in connection with a business combination are valued using an income approach over the life of the reserves.

Depreciation is computed based on estimated service lives, principally using the straight-line method. Depletion of mineral reserves is calculated based on proven and probable reserves using the units-of-production method on a quarry-by-quarry basis.

Property, plant and equipment are reviewed for impairment whenever facts and circumstances indicate that the carrying amount of an asset group may not be recoverable. An impairment loss is recognized if expected future undiscounted cash flows over the estimated remaining service life of the related asset are less than the asset's carrying value.

Repair and Maintenance Costs. Repair and maintenance costs that do not substantially extend the life of the Company's plant and equipment are expensed as incurred.

Goodwill and Intangible Assets. Goodwill represents the excess purchase price paid for acquired businesses over

the estimated fair value of identifiable assets and liabilities. Other intangibles represent amounts assigned principally to contractual agreements and are amortized ratably over periods based on related contractual terms.

The Company's reporting units, which represent the level at which goodwill is tested for impairment, are based on the geographic segments of the Building Materials business. Goodwill is assigned to the respective reporting unit(s) based on the location of acquisitions at the time of consummation. Goodwill is tested for impairment by comparing the reporting unit's fair value to its carrying value, which represents Step 1 of a two-step approach. However, prior to Step 1, the Company may perform an optional qualitative assessment and evaluate macroeconomic conditions, industry and market conditions, cost factors, overall financial performance and other business or reporting unit-specific events. If the Company concludes it is more-likely-than-not (i.e., a likelihood of more than 50%) that a reporting unit's fair value is higher than its carrying value, the Company does not perform any further goodwill impairment testing for that reporting unit. Otherwise, it proceeds to Step 1 of its goodwill impairment analysis. The Company may bypass the qualitative assessment for any reporting unit in any period and proceed directly with the quantitative calculation in Step 1. If the reporting unit's fair value exceeds its carrying value, no further calculation is necessary. A reporting unit with a carrying value in excess of its fair value constitutes a Step 1 failure and may lead to an impairment charge.

The carrying values of goodwill and other indefinite-lived intangible assets are reviewed annually, as of October 1, for impairment. An interim review is performed between annual tests if facts and circumstances indicate potential impairment. The carrying value of other amortizable intangibles is reviewed if facts and circumstances indicate potential impairment. If a review indicates the carrying value is impaired, a charge is recorded.

Retirement Plans and Postretirement Benefits. The Company sponsors defined benefit retirement plans and also provides other postretirement benefits. The Company recognizes the funded status, defined as the difference between the fair value of plan assets and the benefit obligation, of its pension plans and other postretirement benefits as an asset or liability on the consolidated balance sheets. Actuarial gains or losses that arise during the year are not recognized as net periodic benefit cost in the same year, but rather are recognized as a component of accumulated other comprehensive earnings or loss. Those amounts are amortized over the participants' average remaining service period and recognized as a component of net periodic benefit cost. The amount amortized is determined using a corridor approach and represents the excess over 10% of the greater of the projected benefit obligation or pension plan assets.

Stock-Based Compensation. The Company has stock-based compensation plans for employees and its Board of Directors. The Company recognizes all forms of stock-based awards that vest, including stock options, as compensation expense. The compensation expense is the fair value of the awards at the measurement date and is recognized over the requisite service period.

The fair value of restricted stock awards, incentive compensation stock awards and Board of Directors' fees paid in the form of common stock are based on the closing price of the Company's common stock on the awards' respective grant dates. The fair value of performance stock awards is determined by a Monte Carlo simulation methodology.

In 2017 and 2016, the Company did not issue any stock options. For stock options issued prior to 2016, the Company used the accelerated expense recognition method. The accelerated recognition method requires stock options that vest ratably to be divided into tranches. The expense for each tranche is allocated to its particular vesting period.

The Company uses the lattice valuation model to determine the fair value of stock option awards. The lattice valuation model takes into account employees' exercise patterns based on changes in the Company's stock price and other variables. The period of time for which options are expected to be outstanding is a derived output of the lattice valuation model and includes the following considerations: vesting period of the award, expected volatility of the underlying stock and employees' ages.

Key assumptions used in determining the fair value of the stock options awarded in 2015 were:

Risk-free interest rate	2.20%
Dividend yield	1.20%
Volatility factor	36.10%
Expected term	8.5 years

Based on these assumptions, the weighted-average fair value of each stock option granted in 2015 was $57.71.

The risk-free interest rate reflects the interest rate on zero-coupon U.S. government bonds, available at the time each option was granted, having a remaining life approximately equal to the option's expected life. The dividend yield represents the dividend rate expected to be paid over the option's expected life. The Company's volatility factor measures the amount by which its stock price is expected to fluctuate during the expected life of the option and is based on historical stock price changes. Forfeitures are required to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company estimates forfeitures and will ultimately recognize compensation cost only for those stock-based awards that vest.

Environmental Matters. The Company records a liability for an asset retirement obligation at fair value in the period in which it is incurred. The asset retirement obligation is recorded at the acquisition date of a long-lived tangible asset if the fair value can be reasonably estimated. A corresponding amount is capitalized as part of the asset's carrying amount. The fair value is affected by management's assumptions regarding the scope of the work required, inflation rates and quarry closure dates.

Further, the Company records an accrual for other environmental remediation liabilities in the period in which it is probable that a liability has been incurred and the appropriate amounts can be estimated reasonably. Such accruals are adjusted as further information develops or circumstances change. Generally, these costs are not discounted to their present value or offset for potential insurance or other claims or potential gains from future alternative uses for a site.

Income Taxes. Deferred income taxes, net, on the consolidated balance sheets reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, net of valuation allowances. The effect on deferred income tax assets and liabilities attributable to changes in enacted tax rates are charged or credited to income tax expense or benefit in the period of enactment.

Uncertain Tax Positions. The Company recognizes a tax benefit when it is more-likely-than-not, based on the technical merits, that a tax position would be sustained upon examination by a taxing authority. The amount to be recognized is measured as the largest amount of tax benefit that is greater than 50% likely of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. The Company's unrecognized tax benefits are recorded in other liabilities on the consolidated balance sheets or as an offset to the deferred tax asset for tax carryforwards where available.

The Company records interest accrued in relation to unrecognized tax benefits as income tax expense. Penalties, if incurred, are recorded as operating expenses in the consolidated statements of earnings.

Sales Taxes. Sales taxes collected from customers are recorded as liabilities until remitted to taxing authorities and therefore are not reflected in the consolidated statements of earnings.

Start-Up Costs. Noncapital start-up costs for new facilities and products are charged to operations as incurred.

Warranties. The Company's construction contracts contain warranty provisions covering defects in materials, design or workmanship that generally run from nine months to one year after project completion. Due to the nature of its projects, including contract owner inspections of the work both during construction and prior to acceptance, the Company has not experienced material warranty costs for these short-term warranties and therefore does not believe an accrual for these costs is necessary. The ready mixed concrete product line carries a longer warranty period, for which the Company has accrued an estimate of warranty cost based on experience with the type of work and any known risks relative to the projects. These costs were not material to the Company's consolidated results of operations for the years ended December 31, 2017, 2016 and 2015.

Consolidated Comprehensive Earnings and Accumulated Other Comprehensive Loss. Consolidated comprehensive earnings for the Company consist of consolidated net earnings, adjustments for the funded status of pension and postretirement benefit plans, foreign currency translation adjustments and the amortization of the value of terminated forward starting interest rate swap agreements into interest expense, and are presented in the Company's consolidated statements of comprehensive earnings.

Accumulated other comprehensive loss consists of unrecognized gains and losses related to the funded status of the pension and postretirement benefit plans, foreign currency translation and the unamortized value of terminated forward starting interest rate swap agreements, and is presented on the Company's consolidated balance sheets.

The components of the changes in accumulated other comprehensive loss and related cumulative noncurrent deferred tax assets are as follows:

years ended December 31 (add 000)	Pension and Postretirement Benefit Plans	Foreign Currency	Unamortized Value of Terminated Forward Starting Interest Rate Swap	Total
		2017		
Accumulated other comprehensive loss at beginning of period	**$ (128,373)**	**$ (1,162)**	**$ (1,152)**	**$ (130,687)**
Other comprehensive (loss) earnings before reclassifications, net of tax	**(8,062)**	**1,140**	**–**	**(6,922)**
Amounts reclassified from accumulated other comprehensive loss, net of tax	**7,633**	**–**	**872**	**8,505**
Other comprehensive (loss) earnings, net of tax	**(429)**	**1,140**	**872**	**1,583**
Accumulated other comprehensive loss at end of period	**$ (128,802)**	**$ (22)**	**$ (280)**	**$ (129,104)**
Cumulative noncurrent deferred tax assets at end of period	**$ 79,938**	**$ –**	**$ 178**	**$ 80,116**
		2016		
Accumulated other comprehensive loss at beginning of period	$ (103,380)	$ (264)	$ (1,978)	$ (105,622)
Other comprehensive loss before reclassifications, net of tax	(31,678)	(898)	–	(32,576)
Amounts reclassified from accumulated other comprehensive loss, net of tax	6,685	–	826	7,511
Other comprehensive (loss) earnings, net of tax	(24,993)	(898)	826	(25,065)
Accumulated other comprehensive loss at end of period	$ (128,373)	$ (1,162)	$ (1,152)	$ (130,687)
Cumulative noncurrent deferred tax assets at end of period	$ 82,044	$ –	$ 749	$ 82,793
		2015		
Accumulated other comprehensive (loss) earnings at beginning of period	$ (106,688)	$ 3,278	$ (2,749)	$ (106,159)
Other comprehensive loss before reclassifications, net of tax	(7,116)	(3,542)	–	(10,658)
Amounts reclassified from accumulated other comprehensive loss, net of tax	10,424	–	771	11,195
Other comprehensive earnings (loss), net of tax	3,308	(3,542)	771	537
Accumulated other comprehensive loss at end of period	$ (103,380)	$ (264)	$ (1,978)	$ (105,622)
Cumulative noncurrent deferred tax assets at end of period	$ 66,467	$ –	$ 1,290	$ 67,757

Reclassifications out of accumulated other comprehensive loss are as follows:

years ended December 31 (add 000)	**2017**	2016	2015	**Affected line items in the consolidated statements of earnings**
Pension and postretirement benefit plans				
Special plan termination benefit	**$ –**	$ 764	$ 2,085	
Settlement charge	**21**	115	–	
Amortization of:				
Prior service credit	**(1,430)**	(1,609)	(1,880)	
Actuarial loss	**13,774**	11,575	16,850	
	12,365	10,845	17,055	Other nonoperating (income) and expenses, net
Tax effect	**(4,732)**	(4,160)	(6,631)	Income tax (benefit) expense
Total	**$ 7,633**	$ 6,685	$10,424	
Unamortized value of terminated forward starting interest rate swap				
Additional interest expense	**$ 1,443**	$ 1,367	$ 1,280	Interest expense
Tax effect	**(571)**	(541)	(509)	Income tax (benefit) expense
Total	**$ 872**	$ 826	$ 771	

Earnings Per Common Share. The Company computes earnings per share (EPS) pursuant to the two-class method. The two-class method determines EPS for each class of common stock and participating securities according to dividends or dividend equivalents and their respective participation rights in undistributed earnings. The Company pays nonforfeitable dividend equivalents during the vesting period on its restricted stock awards and incentive stock awards made prior to 2016, which results in these being considered participating securities.

The numerator for basic and diluted earnings per common share is net earnings attributable to Martin Marietta, reduced by dividends and undistributed earnings attributable to the Company's unvested restricted stock awards and incentive stock awards issued prior to 2016. The denominator for basic earnings per common share is the weighted-average number of common shares outstanding during the period. Diluted earnings per common share are computed assuming that the weighted-average number of common shares is increased by the conversion, using the treasury stock method, of awards issued to employees and nonemployee members of the Company's Board of Directors under certain stock-based compensation arrangements if the conversion is dilutive.

The following table reconciles the numerator and denominator for basic and diluted earnings per common share:

years ended December 31 (add 000)	2017	2016	2015
Net earnings attributable to Martin Marietta	**$ 713,342**	$425,386	$288,792
Less: Distributed and undistributed earnings attributable to unvested awards	**2,029**	1,775	1,252
Basic and diluted net earnings attributable to common shareholders attributable to Martin Marietta	**$ 711,313**	$423,611	$287,540
Basic weighted-average common shares outstanding	**62,932**	63,610	66,770
Effect of dilutive employee and director awards	**285**	251	250
Diluted common weighted-average shares outstanding	**63,217**	63,861	67,020

New Accounting Pronouncements

Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost

In March 2017, the Financial Accounting Standards Board (FASB) issued an accounting standards update (ASU), *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* (ASU 2017-07), which revises the financial statement presentation for periodic pension and postretirement expense or credit, other than service cost. ASU 2017-07 requires net periodic benefit cost or credit, with the exception of service cost, to be presented retrospectively as nonoperating expense. As permitted by ASU 2017-07, the Company used the pension and other postretirement benefit plan disclosures for the comparative prior periods as a practical expedient to estimate amounts for retrospective application. Service cost remains a component of earnings from operations and represent the only cost of pension and postretirement expense eligible for capitalization, notably in the Company's inventory standards. The Company early adopted this standard effective January 1, 2017. For the year ended December 31, 2016, the Company reclassified $2,772,000, $6,399,000 and $774,000 from cost of sales; selling, general and administrative expenses; and other operating income and expenses, respectively, to nonoperating expense. For the year ended December 31, 2015, the Company reclassified $5,153,000, $7,480,000 and $2,118,000 from cost of sales; selling, general and administrative expenses; and other operating income and expenses, respectively, to nonoperating expense.

Stock Compensation

The FASB issued ASU *Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (ASU 2016-09) on accounting for stock compensation. The new standard was effective January 1, 2017 and requires, prospectively, all excess tax benefits and tax deficiencies to be recorded as income tax benefit or expense in the income statement in the period the awards vest or are settled as a discrete item. Additionally, ASU 2016-09 requires any excess tax benefits be reflected as an operating activity in the statement of cash flows retrospectively. Further, any shares withheld for personal income taxes are classified as a financing activity in the statement of cash flows and retrospectively applied. As a result of the Company's adoption of ASU 2016-09, for the years ended December 31, 2016 and 2015, shares withheld for employees' income tax obligations reclassified from operating activities were $3,787,000 and

$7,449,000, respectively. The Company reclassified excess tax benefits from stock-based compensation of $6,792,000 for the year ended December 31, 2016, from financing activities to operating activities. There was no excess tax benefit from stock-based compensation for the year ended December 31, 2015. Although the adoption of the new standard did not have a cumulative effect, it creates volatility in the Company's income tax rate in periods when share-based compensation awards either vest or are exercised.

Pending Accounting Pronouncements

Revenue Recognition Standard

The FASB issued ASU *Revenue From Contracts with Customers* (ASU 2014-09), which amends the accounting guidance on revenue recognition. The new standard intends to provide a more robust framework for addressing revenue issues, improve comparability of revenue recognition practices and improve disclosure requirements. The new standard is effective January 1, 2018 and the Company expects to adopt using a full retrospective approach. The Company has completed its assessment of the provisions of the new standard and determined the impact of adoption will not be material to its consolidated financial statements.

Lease Standard

In February 2016, the FASB issued a new accounting standard, *Accounting Codification Standard 842 – Leases,* intending to improve financial reporting of leases and to provide more transparency of off-balance sheet leasing obligations. The guidance requires virtually all leases, excluding mineral interest leases, to be recorded on the balance sheet and provides guidance on the recognition of lease expense and income. The new standard is effective January 1, 2019 and must be applied on a modified retrospective approach. However, the FASB is proposing an option for transition that would permit the application of the new standard at the adoption date instead of the earliest comparative period presented in the financial statements. The Company is currently assessing the impact of the new standard on its financial statements. The Company believes the new standard will have a material effect on its consolidated balance sheet but has not quantified the impact at this time.

In January 2018, the FASB issued ASU *Land Easement Practical Expedient for Transition to Topic 842* (ASU 2018-01). ASU 2018-01 permits the election to not evaluate land easements under the new lease guidance that existed or expired before the adoption of the new standard and that were not previously accounted for as leases under current guidance. The Company will adopt ASU 2018-01 concurrently with the new lease standard.

Note B: Goodwill and Other Intangible Assets

The following table shows the changes in goodwill by reportable segment and in total:

December 31 (add 000)	Mid-America Group	Southeast Group	West Group	Total
		2017		
Balance at beginning of period	**$281,403**	**$ 50,346**	**$1,827,588**	**$2,159,337**
Acquisitions	**–**	**–**	**230**	**230**
Purchase price adjustments	**–**	**–**	**723**	**723**
Balance at end of period	**$281,403**	**$ 50,346**	**$1,828,541**	**$2,160,290**
		2016		
Balance at beginning of period	$281,403	$ 50,346	$1,736,486	$2,068,235
Acquisitions	–	–	91,174	91,174
Divestitures	–	–	(72)	(72)
Balance at end of period	$281,403	$ 50,346	$1,827,588	$2,159,337

Intangible assets subject to amortization consist of the following:

December 31 (add 000)	Gross Amount	Accumulated Amortization	Net Balance
		2017	
Noncompetition agreements	**$ 6,274**	**$ (6,144)**	**$ 130**
Customer relationships	**45,755**	**(17,351)**	**28,404**
Operating permits	**458,952**	**(26,436)**	**432,516**
Use rights and other	**16,946**	**(10,377)**	**6,569**
Trade names	**12,800**	**(7,947)**	**4,853**
Total	**$ 540,727**	**$ (68,255)**	**$ 472,472**
		2016	
Noncompetition agreements	$ 6,274	$ (6,106)	$ 168
Customer relationships	45,755	(13,636)	32,119
Operating permits	455,095	(19,493)	435,602
Use rights and other	16,946	(9,239)	7,707
Trade names	12,800	(5,681)	7,119
Total	$ 536,870	$ (54,155)	$ 482,715

Intangible assets deemed to have an indefinite life and not being amortized consist of the following:

December 31 (add 000)	Building Materials Business	Magnesia Specialties	Total
		2017	
Operating permits	**$ 6,600**	**$ –**	**$ 6,600**
Use rights	**24,432**	**–**	**24,432**
Trade names	**280**	**2,565**	**2,845**
Total	**$ 31,312**	**$ 2,565**	**$ 33,877**
		2016	
Operating permits	$ 6,600	$ –	$ 6,600
Use rights	19,152	–	19,152
Trade names	280	2,565	2,845
Total	$ 26,032	$ 2,565	$ 28,597

During 2017, the Company acquired $10,270,000 of intangibles, consisting of the following:

(add 000, except year data)	Amount	Weighted-average amortization period
Subject to amortization:		
Operating permits	$ 4,990	40 years
Not subject to amortization:		
Use rights	5,280	N/A
Total	$ 10,270	

Total amortization expense for intangible assets for the years ended December 31, 2017, 2016 and 2015 was $14,178,000, $13,922,000 and $13,962,000, respectively.

The estimated amortization expense for intangible assets for each of the next five years and thereafter is as follows:

(add 000)	
2018	$ 13,070
2019	12,114
2020	12,078
2021	11,387
2022	9,805
Thereafter	414,018
Total	$ 472,472

Note C: Business Combinations

Completed Acquisitions

In February 2016, the Company acquired the outstanding stock of Rocky Mountain Materials and Asphalt, Inc. and Rocky Mountain Premix, Inc. The acquisition provides more than 500 million tons of mineral reserves and expands the Company's presence along the Front Range of the Rocky Mountains, home to 80% of Colorado's population. The acquired operations are reported within the West Group.

In July 2016, the Company acquired the remaining interest in Ratliff Ready-Mix, L.P. (Ratliff), which operates ready mixed concrete plants in central Texas. These operations are reported in the West Group. Prior to the acquisition, the Company owned a 40% interest in Ratliff which was accounted for under the equity method. The Company was required to remeasure the existing 40% interest in Ratliff at fair value upon closing of the transaction, resulting in a gain of $5,863,000, which is recorded in other nonoperating income, net.

The impact of these acquisitions on the operating results was not considered material; therefore, pro forma financial information is not included.

Pending Acquisition of Bluegrass Materials

On June 26, 2017, the Company announced a definitive agreement to acquire Bluegrass Materials Company (Bluegrass) for $1,625,000,000 in cash. The Company will not acquire any of Bluegrass' cash and cash equivalents nor will it assume any of Bluegrass' outstanding debt. Bluegrass is the largest privately held, pure-play aggregates business in the United States and has a portfolio of 23 active sites with more than 125 years of strategically-located, high-quality reserves, in Maryland, Georgia, South Carolina, Kentucky, Tennessee and Pennsylvania. These operations complement the Company's existing southeastern footprint and provide a new growth platform within the southern portion of the Northeast. The Company and Bluegrass are continuing to work closely and cooperatively with the Department of Justice in its review of the proposed transaction. The parties currently anticipate that the proposed acquisition will be completed in the first half of 2018. In 2017, the Company incurred acquisition-related expenses of $8,638,000 for this pending transaction.

Note D: Accounts Receivable, Net

December 31 (add 000)	2017	2016
Customer receivables	**$ 480,073**	$ 456,508
Other current receivables	**9,557**	7,668
	489,630	464,176
Less allowances	**(2,390)**	(6,266)
Total	**$ 487,240**	$ 457,910

Of the total accounts receivable, net, balances, $2,819,000 and $2,578,000 at December 31, 2017 and 2016, respectively, were due from unconsolidated affiliates.

Note E: Inventories, Net

December 31 (add 000)	2017	2016
Finished products	**$ 552,999**	$ 479,291
Products in process and raw materials	**62,761**	61,171
Supplies and expendable parts	**128,792**	116,024
	744,552	656,486
Less allowances	**(143,961)**	(134,862)
Total	**$ 600,591**	$ 521,624

Note F: Property, Plant and Equipment, Net

December 31 (add 000)	2017	2016
Land and land improvements	**$ 974,622**	$ 915,158
Mineral reserves and interests	**1,162,289**	1,114,560
Buildings	**154,564**	151,115
Machinery and equipment	**4,006,619**	3,766,975
Construction in progress	**199,973**	167,722
	6,498,067	6,115,530
Less accumulated depreciation, depletion and amortization	**(2,905,254)**	(2,692,135)
Total	**$ 3,592,813**	$ 3,423,395

The gross asset value and accumulated amortization for machinery and equipment recorded under capital leases at December 31 were as follows:

(add 000)	2017	2016
Machinery and equipment under capital leases	**$ 23,919**	$ 23,117
Less accumulated amortization	**(11,243)**	(8,077)
Total	**$ 12,676**	$ 15,040

Depreciation, depletion and amortization expense related to property, plant and equipment was $279,808,000, $268,935,000 and $246,874,000 for the years ended December 31, 2017, 2016 and 2015, respectively. Depreciation, depletion and amortization expense includes amortization of machinery and equipment under capital leases.

Interest cost of $3,616,000, $3,543,000 and $5,832,000 was capitalized during 2017, 2016 and 2015, respectively.

At December 31, 2017 and 2016, $57,665,000 and $58,332,000, respectively, of the Building Materials business' net property, plant and equipment were located in foreign countries, namely the Bahamas and Canada.

Note G: Long-Term Debt

December 31 (add 000)	2017	2016
6.60% Senior Notes, due 2018	**$ 299,871**	$ 299,483
4.25% Senior Notes, due 2024	**395,814**	395,252
7% Debentures, due 2025	**124,180**	124,090
3.450% Senior Notes, due 2027	**296,628**	–
3.500% Senior Notes, due 2027	**494,352**	–
6.25% Senior Notes, due 2037	**228,033**	227,975
4.250% Senior Notes, due 2047	**591,688**	–
Floating Rate Senior Notes, due 2019, interest rate of 2.13% at December 31, 2017	**298,102**	–
Floating Rate Senior Notes, due, 2020 interest rate of 2.10% at December 31, 2017	**298,227**	–
Floating Rate Senior Notes, due 2017, interest rate of 2.10% at December 31, 2016	**–**	299,033
Revolving Facility, due 2022, interest rate of 1.86% at December 31, 2016	**–**	160,000
Trade Receivable Facility, interest rate of 1.34% at December 31, 2016	**–**	180,000
Other notes	**308**	356
Total	**3,027,203**	1,686,189
Less current maturities	**(299,909)**	(180,036)
Long-term debt	**$ 2,727,294**	$ 1,506,153

The Company's 6.60% Senior Notes due 2018, 7% Debentures due 2025, 6.25% Senior Notes due 2037, 4.25% Senior Notes due 2024, 3.450% Senior Notes due 2027, 3.500% Senior Notes due 2027, 4.250% Senior Notes due 2047, Floating Rate Senior Notes due 2019 and Floating Rate Senior Notes due 2020 (collectively, the "Senior Notes") are senior unsecured obligations of the Company, ranking equal in right of payment with the Company's existing and future unsubordinated indebtedness. Upon a change-of-control repurchase event and a resulting below-investment-grade credit rating, the Company would be required to make an offer to repurchase all outstanding Senior Notes, with the exception of the 7% Debentures due 2025, at a price in cash equal to 101% of the principal amount of the Senior Notes, plus any accrued and unpaid interest to, but not including, the purchase date.

The Senior Notes are carried net of original issue discount, which is being amortized by the effective interest method over the life of the issue. With the exception of the Floating Rate Senior Notes due 2019 and the Floating Rate Senior Notes due 2020, the Senior Notes are redeemable prior to their respective maturity dates at a make-whole redemption price. The principal amount, effective interest rate and maturity date for the Company's Senior Notes are as follows:

	Principal Amount (add 000)	Effective Interest Rate	Maturity Date
6.60% Senior Notes	$300,000	6.81%	April 15, 2018
4.25% Senior Notes	$400,000	4.25%	July 2, 2024
7% Debentures	$125,000	7.12%	December 1, 2025
3.450% Senior Notes	$300,000	3.47%	June 1, 2027
3.500% Senior Notes	$500,000	3.53%	December 15, 2027
6.25% Senior Notes	$230,000	6.45%	May 1, 2037
4.250% Senior Notes	$600,000	4.27%	December 15, 2047
Floating Rate Senior Notes, due 2019	$300,000	Three-month LIBOR + 0.50%	December 20, 2019
Floating Rate Senior Notes, due 2020	$300,000	Three-month LIBOR + 0.65%	May 22, 2020

On May 22, 2017, the Company issued $300,000,000 aggregate principal amount of Floating Rate Senior Notes due in 2020 (the "2020 Floating Rate Notes") and $300,000,000 aggregate principal amount of 3.450% Senior Notes due in 2027 (the "3.450% Senior Notes"), unsecured obligations of the Company. The 3.450% Senior Notes may be redeemed in whole or in part prior to March 1, 2027 at a make-whole redemption price, or on or after March 1, 2027 at a redemption price equal to 100% of the principal amount of the notes to be redeemed, and in either case plus unpaid interest, if any, accrued thereon to, but excluding, the date of redemption. The 2020 Floating Rate Notes bear interest at a rate, reset quarterly, equal to the three-month London Interbank Offered Rate (LIBOR) for U.S. Dollars plus 0.65% (or 65 basis points) and may not be redeemed prior to their stated maturity date of May 22, 2020.

On December 20, 2017, the Company issued $300,000,000 aggregate principal amount of Floating Rate Senior Notes due 2019 (the "2019 Floating Rate Notes"), $500,000,000 aggregate principal amount of 3.500% Senior Notes due 2027 (the "2027 3.500% Fixed Rate Notes") and $600,000,000 aggregate principal amount of 4.250% Senior Notes due 2047 (the "2047 Fixed Rate Notes"), all of which are unsecured obligations of the Company and rank equally in right of payment with all of its existing and future unsubordinated indebtedness. The net proceeds of the offering are expected to be used to finance, in part, the previously announced Bluegrass acquisition (the "Acquisition") and to repay the $300,000,000 6.60% Senior Notes due April 15, 2018. The Company may not redeem the 2019 Floating Rate Notes prior to their stated maturity date of December 20, 2019. If the Acquisition is not consummated prior to September 30, 2018, the purchase agreement is terminated prior to September 30, 2018, or the Company publicly announces at any time prior to September 30, 2018 that it will no longer pursue the consummation of the Acquisition, the Company will be required to redeem all of the outstanding 2027 3.500% Fixed Rate Notes and the 2047 Fixed Rate Notes pursuant to a special mandatory redemption at a price equal to 101% of the aggregate principal amounts, plus accrued and unpaid interest. The 2019 Floating Rate Notes are not subject to the special mandatory redemption.

The Company has a credit agreement with JPMorgan Chase Bank, N.A., as Administrative Agent, Branch Banking and Trust Company (BB&T), Deutsche Bank Securities, Inc., SunTrust Bank, and Wells Fargo Bank, N.A., as Co-Syndication Agents, and the lenders party thereto (the "Credit Agreement"), which provides for a $700,000,000 five-year senior unsecured revolving facility (the "Revolving Facility"). Borrowings under the Revolving Facility bear interest, at the Company's option, at rates based upon LIBOR or a base rate, plus, for each rate, a margin determined in accordance with a ratings-based pricing grid.

The Credit Agreement requires the Company's ratio of consolidated net debt-to-consolidated earnings before interest, taxes, depreciation, depletion and amortization (EBITDA), as defined, for the trailing-twelve months (the "Ratio") to not exceed 3.50x as of the end of any fiscal quarter, provided that the Company may exclude from the Ratio debt incurred in connection with certain acquisitions during the quarter or three preceding quarters so long as the Ratio calculated without such exclusion does not exceed 3.75x. Additionally, if no amounts are outstanding under both the Revolving Facility and the trade receivable securitization facility (discussed later), consolidated debt, including debt for which the Company is a co-borrower (see Note N), may be reduced by the Company's unrestricted cash and cash equivalents in excess of $50,000,000, such reduction not to exceed $200,000,000, for purposes of the covenant calculation.

In December 2017, the Company amended its credit agreement to exclude debt obtained to fund the pending Bluegrass acquisition from the Ratio. The Company was in compliance with this Ratio at December 31, 2017.

On December 5, 2017, the Company extended its Revolving Facility by one year. The Revolving Facility expires on December 5, 2022, with any outstanding principal amounts, together with interest accrued thereon, due in full on that date. Available borrowings under the Revolving Facility are reduced by any outstanding letters of credit issued by the Company under the Revolving Facility. At December 31, 2017 and 2016, the Company had $2,301,000 and $2,507,000, respectively, of outstanding letters of credit issued under the Revolving Facility. The Company paid the bank group an upfront loan commitment fee that is being amortized over the life of the Revolving Facility. The Revolving Facility includes an annual facility fee.

The Company, through a wholly-owned special-purpose subsidiary, has a $300,000,000 trade receivable securitization facility (the “Trade Receivable Facility”). On September 27, 2017, the Company extended the maturity to September 26, 2018. The Trade Receivable Facility, with SunTrust Bank, Regions Bank, PNC Bank, N.A., The Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, and certain other lenders that may become a party to the facility from time to time, is backed by eligible trade receivables, as defined. Borrowings are limited to the lesser of the facility limit or the borrowing base, as defined, of $338,784,000 and $332,302,000 at December 31, 2017 and 2016, respectively. These receivables are originated by the Company and then sold or contributed to the wholly-owned special-purpose subsidiary. The Company continues to be responsible for the servicing and administration of the receivables purchased by the wholly-owned special-purpose subsidiary. Borrowings under the Trade Receivable Facility bear interest at a rate equal to one-month LIBOR plus 0.725%, subject to change in the event that this rate no longer reflects the lender’s cost of lending. The Trade Receivable Facility contains a cross-default provision to the Company’s other debt agreements.

The Company’s long-term debt maturities for the five years following December 31, 2017, and thereafter are:

(add 000)	
2018	$ 299,909
2019	298,157
2020	298,286
2021	65
2022	90
Thereafter	2,130,696
Total	$ 3,027,203

The Company has a $5,000,000 short-term line of credit. No amounts were outstanding under this line of credit at December 31, 2017 or 2016.

Accumulated other comprehensive loss includes the unamortized value of terminated forward starting interest rate swap agreements. For the years ended December 31, 2017, 2016 and 2015, the Company recognized $1,443,000, $1,367,000 and $1,280,000, respectively, as additional interest expense. The amortization of the terminated value of the forward starting interest rate swap agreements will be completed in April 2018 and will increase 2018 interest expense by approximately $463,000.

Note H: Financial Instruments

The Company’s financial instruments include temporary cash investments, accounts receivable, notes receivable, bank overdraft, accounts payable, publicly-registered long-term notes, debentures and other long-term debt.

Temporary cash investments are placed primarily in money market funds and money market demand deposit accounts with financial institutions. The Company’s cash equivalents have maturities of less than three months. Due to the short maturity of these investments, they are carried on the consolidated balance sheets at cost, which approximates fair value.

Accounts receivable are due from a large number of customers, primarily in the construction industry, and are dispersed across wide geographic and economic regions. However, accounts receivable are more heavily concentrated in certain states, namely Texas, Colorado, North Carolina, Iowa and Georgia. The estimated fair values of accounts receivable approximate their carrying amounts.

Notes receivable are primarily promissory notes with customers and are not publicly traded. Management estimates that the fair value of notes receivable approximates its carrying amount.

Bank overdraft represents amounts to be funded to financial institutions for checks that have cleared the bank. The estimated fair value of the bank overdraft approximates its carrying value.

Accounts payable represent amounts owed to suppliers and vendors. The estimated fair value of accounts payable approximates its carrying amount due to the short-term nature of the payables.

The carrying values and fair values of the Company's long-term debt were $3,027,203,000 and $3,144,902,000, respectively, at December 31, 2017 and $1,686,189,000 and $1,752,338,000, respectively, at December 31, 2016. The estimated fair value of the Company's publicly-registered long-term debt was estimated based on Level 2 of the fair value hierarchy using quoted market prices. The estimated fair values of other borrowings, which primarily represent variable-rate debt, approximate their carrying amounts as the interest rates reset periodically.

Note I: Income Taxes

On December 22, 2017, the U.S. government enacted the Tax Cuts and Jobs Act of 2017 (the "2017 Tax Act"). The 2017 Tax Act is comprehensive legislation that includes provisions that lower the federal statutory corporate income tax rate from 35% to 21% beginning in 2018 and imposes a one-time transition tax on undistributed foreign earnings. U.S. GAAP generally requires the effects of a tax law change to be recorded as a component of income tax expense in the period of enactment. However, the SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118) to address situations when a registrant does not have the necessary information available, prepared or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the 2017 Tax Act.

The Company has recognized the net tax benefit related to the impact of the 2017 Tax Act for the remeasurement of deferred tax assets and liabilities and included this amount in its consolidated financial statements for the year ended December 31, 2017, on a provisional basis. The ultimate impact may differ from this provisional amount, possibly materially, due to among other things, additional analysis, changes in interpretations and assumptions the Company has made, and additional interpretive regulatory guidance that may be issued. The Company has not recorded a provisional amount to account for the transition tax on undistributed foreign earnings, as it is not expected to be material to its results of operations. In accordance with SAB 118, the Company may record additional provisional amounts during a measurement period not to extend beyond one year of the enactment date of the 2017 Tax Act. The accounting is expected to be complete when the Company's 2017 U.S. corporate income tax return is filed in 2018 and any measurement period adjustments will be recognized as income tax expense or benefit in 2018.

The components of the Company's income tax (benefit) expense are as follows:

years ended December 31 (add 000)	2017	2016	2015
Federal income taxes:			
Current	**$ 129,236**	$ 97,975	$ 20,627
Deferred	**(239,304)**	68,899	85,295
Total federal income tax (benefit) expense	**(110,068)**	166,874	105,922
State income taxes:			
Current	**14,843**	15,189	18,153
Deferred	**(882)**	(1,149)	930
Total state income taxes	**13,961**	14,040	19,083
Foreign income taxes:			
Current	**1,175**	1,064	99
Deferred	**475**	(394)	(241)
Total foreign income taxes	**1,650**	670	(142)
Income tax (benefit) expense	**$ (94,457)**	$ 181,584	$ 124,863

As discussed above, deferred tax expense for the year ended December 31, 2017 includes a tax benefit in the amount of $258,103,000 for the provisional impact of the 2017 Tax Act.

The increase in 2016 federal current tax expense compared with 2015 is primarily attributable to an increase in earnings. For the years ended December 31, 2016 and 2015, the benefit related to the utilization of federal net operating loss (NOL) carryforwards, reflected in current tax expense, was $11,852,000 and $156,554,000, respectively.

For the year ended December 31, 2016, excess tax benefits attributable to stock-based compensation transactions that were recorded to shareholders' equity amounted to $6,792,000. For the year ended December 31, 2015, the realized tax benefit for stock-based compensation transactions was $871,000 less than the amounts estimated during the vesting periods, resulting in a decrease in the pool of excess tax credits.

For the years ended December 31, 2017 and 2016, foreign pretax earnings were $10,566,000 and $3,865,000, respectively.

For the year ended December 31, 2015 foreign pretax loss was $1,175,000.

The Company's effective income tax rate varied from the statutory United States income tax rate because of the following tax differences:

years ended December 31	2017	2016	2015
Statutory tax rate	**35.0%**	35.0%	35.0%
(Reduction) increase resulting from:			
Provisional remeasurement of deferred taxes	**(41.7)**	–	–
Effect of statutory depletion	**(5.6)**	(5.4)	(7.8)
State income taxes, net of federal tax benefit	**1.5**	1.5	3.0
Domestic production deduction	**(2.2)**	(2.0)	(0.1)
Stock based compensation	**(1.0)**	(0.1)	(0.3)
Other items	**(1.3)**	0.9	0.4
Effective income tax rate	**(15.3%)**	29.9%	30.2%

The change in the effective income tax rate in 2017 compared with 2016 is attributable to the impact of the 2017 Tax Act. The statutory depletion deduction for all years is calculated as a percentage of sales, subject to certain limitations. Due to these limitations, the impact of changes in the sales volumes and earnings may not proportionately affect the Company's statutory depletion deduction and the corresponding impact on the effective income tax rate. The growth in non-depletable income reduced the impact of the statutory depletion deduction on the effective income tax rate in 2017 and 2016 compared with 2015.

The 2016 state tax impact on the effective income tax rate decreased compared to 2015 due to changes in apportionment of taxable income to states with lower tax rates and the reduction in certain states' statutory tax rates.

The Company is entitled to receive a 9% tax deduction related to income from domestic (i.e., United States) production activities. The deduction reduced income tax expense and increased consolidated net earnings by $15,461,000, or $0.25 per diluted share, in 2017; $13,583,000, or $0.21 per diluted share, in 2016; and $222,000, or less than $0.01 per diluted share, in 2015. The impact on the 2015 effective income tax rate was limited by the significant utilization of NOL carryforwards. The domestic production deduction was eliminated by the 2017 Tax Act and will not generate a tax benefit in future years.

The principal components of the Company's deferred tax assets and liabilities are as follows:

December 31 (add 000)	Deferred Assets (Liabilities) 2017	2016
Deferred tax assets related to:		
Employee benefits	**$ 16,059**	$ 61,462
Inventories	**56,242**	71,490
Valuation and other reserves	**22,989**	38,206
Net operating loss carryforwards	**11,780**	10,507
Accumulated other comprehensive loss	**80,116**	82,793
AMT credit carryforward	**–**	2,771
Gross deferred tax assets	**187,186**	267,229
Valuation allowance on deferred tax assets	**(10,349)**	(8,521)
Total net deferred tax assets	**176,837**	258,708
Deferred tax liabilities related to:		
Property, plant and equipment	**(407,400)**	(635,576)
Goodwill and other intangibles	**(168,506)**	(268,999)
Other items, net	**(11,654)**	(17,152)
Total deferred tax liabilities	**(587,560)**	(921,727)
Deferred income taxes, net	**$ (410,723)**	$ (663,019)

Deferred tax assets for employee benefits result from the temporary differences between the deductions for pension and post-retirement obligations, incentive compensation and stock-based compensation transactions. For financial reporting purposes, such amounts are expensed based on authoritative accounting guidance. For income tax purposes, amounts related to pension and postretirement obligations and incentive compensation are deductible as funded. Amounts related to stock-based compensation transactions are deductible for income tax purposes upon vesting or exercise of the underlying award.

The Company had no domestic federal NOL carryforwards at December 31, 2017 and 2016. The Company had domestic state NOL carryforwards of $197,916,000 and $220,532,000 at December 31, 2017 and 2016, respectively. These carryforwards have various expiration dates through 2036. At December 31, 2017 and 2016, deferred tax assets associated with these carryforwards were $11,780,000 and $10,507,000, respectively, net of the federal benefit of the state deduction, for which valuation allowances of $10,085,000 and $8,303,000, respectively, were recorded. The Company also had domestic tax credit carryforwards of $1,342,000 and $1,441,000 at December 31, 2017 and 2016, respectively, which expire in 2031. At December 31, 2017 and 2016, deferred tax assets associated with these carryforwards were $1,060,000 and $937,000, respectively, net of the federal benefit of the state deduction, for which valuation allowances of $264,000 and

$218,000, respectively, were recorded. At December 31, 2016 the Company also had an Alternative Minimum Tax credit carryforward of $17,192,000, which was fully utilized during 2017. The deferred tax asset associated with this carryforward, net of unrecognized tax benefits, was $2,771,000.

Deferred tax liabilities for property, plant and equipment result from accelerated depreciation methods being used for income tax purposes as compared with the straight-line method for financial reporting purposes.

Deferred tax liabilities related to goodwill and other intangibles reflect the cessation of goodwill amortization for financial reporting purposes, while amortization continues for income tax purposes.

The Company provides deferred taxes, as required, on the undistributed net earnings of all non-U.S. subsidiaries for which the indefinite reversal criterion has not been met. The Company expects to permanently reinvest the earnings from its wholly-owned Canadian and Bahamian subsidiaries, and accordingly, has not provided deferred taxes on the subsidiaries' undistributed net earnings. The wholly-owned Canadian subsidiary's undistributed net earnings are estimated to be $43,587,000 at December 31, 2017. The determination of the unrecognized deferred tax liability for temporary differences related to the investment in the wholly-owned Canadian subsidiary is not practicable due to the lack of clarity in the tax repatriation statutes included in the 2017 Tax Act. The Bahamian subsidiary has no undistributed net earnings.

The 2017 Tax Act requires mandatory deemed repatriation of undistributed foreign earnings, through a one-time transition tax based on post-1986 earnings and profits that were previously deferred from U.S. income taxes. The transition tax will be finalized during a measurement period not to extend beyond one year of the enactment date of the 2017 Tax Act. The Company does not believe the tax will be material to its results of operations.

The 2017 Tax Act also changed the deduction allowed for executive compensation by expanding the definition of employees subject to the $1 million deduction limitation and by eliminating the exception from the limitation for performance-based compensation. The 2017 Tax Act includes a transition rule that exempts from these changes compensation provided pursuant to a written binding contract in effect on November 2, 2017. The Company has interpreted this transition rule such that there is no impact to its current provision or to its deferred tax assets recorded for employee benefits. However, should the Internal Revenue Service issue further guidance on what qualifies as a written binding contract, the Company may have to recognize additional tax expense.

The following table summarizes the Company's unrecognized tax benefits, excluding interest and correlative effects:

years ended December 31 (add 000)	**2017**	2016	2015
Unrecognized tax benefits at beginning of year	**$ 21,807**	$ 18,727	$ 21,107
Gross increases – tax positions in prior years	**1,396**	2,401	3,079
Gross decreases – tax positions in prior years	**(672)**	(1,924)	(3,512)
Gross increases – tax positions in current year	**4,961**	4,650	4,978
Gross decreases – tax positions in current year	**(946)**	(2,047)	(594)
Lapse of statute of limitations	**(4,179)**	–	(6,331)
Unrecognized tax benefits at end of year	**$ 22,367**	$ 21,807	$ 18,727

At December 31, 2017, 2016 and 2015, unrecognized tax benefits of $10,399,000, $11,603,000 and $7,975,000, respectively, related to interest accruals and permanent income tax differences, net of federal tax benefits, would have favorably affected the Company's effective income tax rate if recognized.

Unrecognized tax benefits are reversed as a discrete event if an examination of applicable tax returns is not initiated by a federal or state tax authority within the statute of limitations or upon effective settlement with federal or state tax authorities. Management believes its accrual for unrecognized tax benefits is sufficient to cover uncertain tax positions reviewed during audits by taxing authorities. The Company anticipates that it is reasonably possible that its unrecognized tax benefits may decrease up to $3,333,000, excluding indirect benefits, during the twelve-months ending December 31, 2018, due to the expiration of the statute of limitations for the 2014 tax year.

For the years ended December 31, 2017 and 2015, $3,922,000 or $0.06 per diluted share, and $2,364,000 or $0.04 per diluted share, respectively, were reversed into income upon the statute of limitations expiration for the 2010 through 2013 tax years.

The Company's open tax years subject to federal, state or foreign examinations are 2011 through 2017.

Note J: Retirement Plans, Postretirement and Postemployment Benefits

The Company sponsors defined benefit retirement plans that cover substantially all employees. Additionally, the Company provides other postretirement benefits for certain employees, including medical benefits for retirees and their spouses and retiree life insurance. Employees starting on or after January 1, 2002 are not eligible for postretirement welfare plans. The Company also provides certain benefits, such as disability benefits, to former or inactive employees after employment but before retirement.

The measurement date for the Company's defined benefit plans, postretirement benefit plans and postemployment benefit plans is December 31.

Defined Benefit Retirement Plans. Retirement plan assets are invested in listed stocks, bonds, hedge funds, real estate and cash equivalents. Defined retirement benefits for salaried employees are based on each employee's years of service and average compensation for a specified period of time before retirement. Defined retirement benefits for hourly employees are generally stated amounts for specified periods of service.

The Company sponsors a Supplemental Excess Retirement Plan (SERP) that generally provides for the payment of retirement benefits in excess of allowable Internal Revenue Code limits. The SERP generally provides for a lump-sum payment of vested benefits. When these benefit payments exceed the sum of the service and interest costs for the SERP during a year, the Company recognizes a pro-rata portion of the SERP's unrecognized actuarial loss as settlement expense.

The net periodic retirement benefit cost of defined benefit plans includes the following components:

years ended December 31 (add 000)	**2017**	2016	2015
Service cost	**$ 26,805**	$ 22,167	$ 23,001
Interest cost	**36,101**	35,879	33,151
Expected return on assets	**(39,759)**	(37,699)	(36,385)
Amortization of:			
Prior service cost	**311**	350	422
Actuarial loss	**14,138**	12,074	17,159
Transition asset	**(1)**	(1)	(1)
Settlement charge	**21**	124	–
Termination benefit charge	**–**	764	2,085
Net periodic benefit cost	**$ 37,616**	$ 33,658	$ 39,432

The components of net periodic benefit cost other than service cost are included in the line item *Other nonoperating (income) and expenses, net,* in the consolidated statements of earnings.

The expected return on assets is a calculation based on applying an annually selected expected rate of return assumption to the estimated fair value of the plan assets, giving consideration to contributions and benefits paid. The termination benefit charge represents the increased benefits payable to former Texas Industries, Inc. (TXI) executives as part of their change-in-control agreements.

The Company recognized the following amounts in consolidated comprehensive earnings:

years ended December 31 (add 000)	**2017**	2016	2015
Actuarial loss	**$ 13,343**	$ 52,028	$ 9,916
Amortization of:			
Prior service cost	**(311)**	(350)	(422)
Actuarial loss	**(14,138)**	(12,074)	(17,159)
Transition asset	**1**	1	1
Special plan termination benefits	**–**	(764)	(2,085)
Settlement charge	**(21)**	(124)	–
Net prior service cost	**–**	–	2,338
Total	**$ (1,126)**	$ 38,717	$ (7,411)

Accumulated other comprehensive loss includes the following amounts that have not yet been recognized in net periodic benefit cost:

December 31	**2017**		2016	
(add 000)	**Gross**	**Net of tax**	Gross	Net of tax
Prior service cost	**$ 115**	**$ 71**	$ 425	$ 261
Actuarial loss	**217,240**	**134,066**	218,056	133,083
Transition asset	**(6)**	**(4)**	(7)	(4)
Total	**$ 217,349**	**$ 134,133**	$ 218,474	$ 133,340

The prior service cost, actuarial loss and transition asset expected to be recognized in net periodic benefit cost during 2018 are $104,000 (net of deferred taxes of $26,000), $13,184,000 (net of deferred taxes of $3,263,000) and $1,000, respectively. These amounts are included in accumulated other comprehensive loss at December 31, 2017.

The defined benefit plans' change in projected benefit obligation is as follows:

years ended December 31 (add 000)	2017	2016
Net projected benefit obligation at beginning of year	**$ 831,849**	$ 754,543
Service cost	**26,805**	22,167
Interest cost	**36,101**	35,879
Actuarial loss	**56,675**	49,760
Gross benefits paid	**(72,095)**	(30,500)
Net projected benefit obligation at end of year	**$ 879,335**	$ 831,849

The Company's change in plan assets, funded status and amounts recognized on the Company's consolidated balance sheets are as follows:

years ended December 31 (add 000)	2017	2016
Change in plan assets:		
Fair value of plan assets at beginning of year	**$ 596,207**	$ 546,512
Actual return on plan assets, net	**83,091**	35,432
Employer contributions	**30,903**	44,763
Gross benefits paid	**(72,095)**	(30,500)
Fair value of plan assets at end of year	**$ 638,106**	$ 596,207

December 31 (add 000)	2017	2016
Funded status of the plan at end of year	**$ (241,229)**	$(235,642)
Accrued benefit cost	**$ (241,229)**	$(235,642)

December 31 (add 000)	2017	2016
Amounts recognized on consolidated balance sheets consist of:		
Current liability	**$ (11,092)**	$ (6,223)
Noncurrent liability	**(230,137)**	(229,419)
Net amount recognized at end of year	**$ (241,229)**	$(235,642)

The accumulated benefit obligation for all defined benefit pension plans was $792,912,000 and $752,659,000 at December 31, 2017 and 2016, respectively.

Benefit obligations and fair value of plan assets for pension plans with accumulated benefit obligations in excess of plan assets are as follows:

December 31 (add 000)	2017	2016
Projected benefit obligation	**$ 879,335**	$ 831,849
Accumulated benefit obligation	**$ 792,912**	$ 752,659
Fair value of plan assets	**$ 638,106**	$ 596,207

Weighted-average assumptions used to determine benefit obligations as of December 31 are:

	2017	2016
Discount rate	**3.76%**	4.29%
Rate of increase in future compensation levels	**4.50%**	4.50%

Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31 are:

	2017	2016	2015
Discount rate	**4.29%**	4.67%	4.25%
Rate of increase in future compensation levels	**4.50%**	4.50%	4.50%
Expected long-term rate of return on assets	**6.75%**	7.00%	7.00%

The expected long-term rate of return on assets is based on a building-block approach, whereby the components are weighted based on the allocation of pension plan assets.

For 2017 and 2016, the Company estimated the remaining lives of participants in the pension plans using the RP-2014 Base Table. The no-collar table was used for salaried participants and the blue-collar table, reflecting the experience of the Company's participants, was used for hourly participants. The Company used mortality improvement scales MP-2017 and MP-2016 for the years 2017 and 2016, respectively. The change in mortality improvement scale in 2017 did not have a material impact on the projected benefit obligation.

The target allocation for 2017 and the actual pension plan asset allocation by asset class are as follows:

	Percentage of Plan Assets		
	2017	**December 31**	
Asset Class	Target Allocation	2017	2016
Equity securities	54%	**57%**	57%
Debt securities	30%	**29%**	28%
Hedge funds	8%	**7%**	7%
Real estate	8%	**7%**	8%
Total	100%	**100%**	100%

The Company's investment strategy is for approximately 50% of equity securities to be invested in mid-sized to large capitalization U.S. funds, with the remaining invested in small capitalization, emerging markets and international funds. Debt securities, or fixed income investments, are invested in funds benchmarked to the Barclays U.S. Aggregate Bond Index.

The fair values of pension plan assets by asset class and fair value hierarchy level are as follows:

December 31 (add 000)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
	2017			
Equity securities:				
Mid-sized to large cap	**$ –**	**$ 177,497**	**$ –**	**$ 177,497**
Small cap, international and emerging growth funds	**–**	**186,272**	**–**	**186,272**
Debt securities:				
Core fixed income	**–**	**182,225**	**–**	**182,225**
Real estate	**–**	**–**	**46,467**	**46,467**
Hedge funds	**–**	**–**	**45,604**	**45,604**
Cash	**41**	**–**	**–**	**41**
Total	**$ 41**	**$ 545,994**	**$ 92,071**	**$ 638,106**
	2016			
Equity securities:				
Mid-sized to large cap	$ –	$ 169,176	$ –	$ 169,176
Small cap, international and emerging growth funds	–	169,678	–	169,678
Debt securities:				
Core fixed income	–	168,282	–	168,282
Real estate	–	–	44,890	44,890
Hedge funds	–	–	44,036	44,036
Cash	145	–	–	145
Total	$ 145	$ 507,136	$ 88,926	$ 596,207

Real estate investments are stated at estimated fair value, which is 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 values of real estate investments generally do not reflect transaction costs which may be incurred upon disposition of the real estate investments and do not necessarily represent the prices at which the real estate investments would be sold or repaid, since market prices of real estate investments can only be determined by negotiation between a willing buyer and seller. An independent valuation consultant is employed to determine the fair value of the real estate investments. The value of hedge funds is based on the values of the sub-fund investments. In determining the fair value of each sub-fund's investment, the hedge funds' Board of Trustees uses the values provided by the sub-funds and any other considerations that may, in its judgment, increase or decrease such estimated value.

The change in the fair value of pension plan assets valued using significant unobservable inputs (Level 3) is as follows:

years ended December 31 (add 000)	Real Estate	Hedge Funds
	2017	
Balance at beginning of year	**$ 44,890**	**$ 44,036**
Purchases, sales, settlements, net	**(83)**	**–**
Actual return on plan assets held at period end	**1,660**	**1,568**
Balance at end of year	**$ 46,467**	**$ 45,604**
	2016	
Balance at beginning of year	$ 23,242	$ 39,219
Purchases, sales, settlements, net	18,579	3,100
Actual return on plan assets held at period end	3,069	1,717
Balance at end of year	$ 44,890	$ 44,036

In 2017 and 2016, the Company made combined pension plan and SERP contributions of $30,903,000 and $44,763,000, respectively. The Company currently estimates that it will contribute $37,400,000 to its pension and SERP plans in 2018.

The expected benefit payments to be paid from plan assets for each of the next five years and the five-year period thereafter are as follows:

(add 000)	
2018	$ 43,090
2019	$ 40,894
2020	$ 43,143
2021	$ 44,568
2022	$ 46,359
Years 2023 - 2027	$ 261,475

Postretirement Benefits. The net periodic postretirement benefit credit cost for postretirement plans includes the following components:

years ended December 31 (add 000)	**2017**	2016	2015
Service cost	**$ 80**	$ 85	$ 137
Interest cost	**727**	863	928
Amortization of:			
Prior service credit	**(1,741)**	(1,959)	(2,302)
Actuarial gain	**(364)**	(499)	(309)
Settlement credit	**–**	(9)	–
Total net periodic benefit credit	**$ (1,298)**	$ (1,519)	$ (1,546)

The components of net periodic benefit credit other than service cost are included in the line item *Other nonoperating (income) and expenses, net*, in the consolidated statements of earnings.

The Company recognized the following amounts in consolidated comprehensive earnings:

years ended December 31 (add 000)	2017	2016	2015
Actuarial loss (gain)	**$ 1,236**	$ 686	$ (626)
Net prior service credit	**(3,902)**	(1,326)	–
Settlement credit	**–**	9	–
Amortization of:			
Prior service credit	**1,741**	1,959	2,302
Actuarial gain	**364**	499	309
Total	**$ (561)**	$ 1,827	$ 1,985

Accumulated other comprehensive loss includes the following amounts that have not yet been recognized in net periodic benefit credit or cost:

	2017		2016	
(add 000)	Gross	Net of tax	Gross	Net of tax
Prior service credit	**$ (6,314)**	**$ (3,899)**	$ (4,153)	$ (2,551)
Actuarial gain	**(2,256)**	**(1,393)**	(3,857)	(2,369)
Total	**$ (8,570)**	**$ (5,292)**	$ (8,010)	$ (4,920)

The prior service credit and actuarial gain expected to be recognized in net periodic benefit cost during 2018 is $2,445,000 (net of a deferred tax liability of $605,000) and $226,000 (net of a deferred tax liability of $56,000), respectively, and are included in accumulated other comprehensive loss at December 31, 2017.

The postretirement health care plans' change in benefit obligation is as follows:

years ended December 31 (add 000)	2017	2016
Net benefit obligation at beginning of year	**$ 20,591**	$ 23,408
Service cost	**80**	85
Interest cost	**727**	863
Participants' contributions	**3,421**	2,616
Actuarial loss	**1,236**	688
Gross benefits paid	**(6,806)**	(5,743)
Plan amendments	**(3,902)**	(1,326)
Net benefit obligation at end of year	**$ 15,347**	$ 20,591

The Company's change in plan assets, funded status and amounts recognized on the Company's consolidated balance sheets are as follows:

years ended December 31 (add 000)	2017	2016
Change in plan assets:		
Fair value of plan assets at beginning of year	**$ –**	$ –
Employer contributions	**3,385**	3,127
Participants' contributions	**3,421**	2,616
Gross benefits paid	**(6,806)**	(5,743)
Fair value of plan assets at end of year	**$ –**	$ –

December 31 (add 000)	2017	2016
Funded status of the plan at end of year	**$ (15,347)**	$ (20,591)
Accrued benefit cost	**$ (15,347)**	$ (20,591)

December 31 (add 000)	2017	2016
Amounts recognized on consolidated balance sheets consist of:		
Current liability	**$ (2,560)**	$ (3,070)
Noncurrent liability	**(12,787)**	(17,521)
Net amount recognized at end of year	**$ (15,347)**	$ (20,591)

Weighted-average assumptions used to determine the post-retirement benefit obligations as of December 31 are:

	2017	2016
Discount rate	**3.47%**	3.78%

Weighted-average assumptions used to determine net post-retirement benefit cost for the years ended December 31 are:

	2017	2016	2015
Discount rate	**3.78%**	4.25%	3.83%

For 2017 and 2016, the Company estimated the remaining lives of participants in the postretirement plan using the RP-2014 Base Table. The no-collar table was used for salaried participants and the blue-collar table, reflecting the experience of the Company's participants, was used for hourly participants. The Company used mortality improvement scales MP-2017 and MP-2016 for the years 2017 and 2016, respectively. The change in mortality improvement scale in 2017 did not have a material impact on the projected benefit obligation.

Assumed health care cost trend rates at December 31 are:

	2017	2016
Health care cost trend rate assumed for next year	**7.0%**	7.0%
Rate to which the cost trend rate gradually declines	**5.0%**	5.0%
Year the rate reaches the ultimate rate	**2022**	2021

Assumed health care cost trend rates have a significant effect on the amounts reported for the Company's health care plans. A one percentage-point change in assumed health care cost trend rates would have the following effects:

	One Percentage Point	
(add 000)	Increase	(Decrease)
Total service and interest cost components	$ 41	$ (34)
Postretirement benefit obligation	$ 783	$ (631)

The Company estimates that it will contribute $2,560,000 to its postretirement health care plans in 2018.

The total expected benefit payments to be paid by the Company, net of participant contributions, for each of the next five years and the five-year period thereafter are as follows:

(add 000)	
2018	$ 2,560
2019	$ 1,610
2020	$ 1,557
2021	$ 1,470
2022	$ 1,393
Years 2023 - 2027	$ 4,888

Defined Contribution Plans. The Company maintains defined contribution plans that cover substantially all employees. These plans, qualified under Section 401(a) of the Internal Revenue Code, are retirement savings and investment plans for the Company's salaried and hourly employees. Under certain provisions of these plans, the Company, at established rates, matches employees' eligible contributions. The Company's matching obligations were $14,893,000 in 2017, $13,235,000 in 2016 and $12,444,000 in 2015.

Postemployment Benefits. The Company had accrued postemployment benefits of $1,119,000 and $1,146,000 at December 31, 2017 and 2016, respectively.

Note K: Stock-Based Compensation

The shareholders approved, on May 19, 2016, the Martin Marietta Amended and Restated Stock-Based Award Plan. The Martin Marietta Materials, Inc. Stock-Based Award Plan, as amended from time to time (along with the Amended Omnibus Securities Award Plan, originally approved in 1994, the "Plans") is still effective for awards made prior to 2017. The Company has been authorized by the Board of Directors to repurchase shares of the Company's common stock for issuance under the stock-based award plans (see Note M).

The Company grants restricted stock awards under the Plans to a group of executive officers, key personnel and nonemployee members of the Board of Directors. The vesting of certain restricted stock awards is based on certain performance criteria over a specified period of time. In addition, certain awards are granted to individuals to encourage retention and motivate key employees. These awards generally vest if the employee is continuously employed over a specified period of time and require no payment from the employee. Awards granted to nonemployee members of the Board of Directors vest immediately.

Additionally, an incentive compensation stock plan has been adopted under the Plans whereby certain participants may elect to use up to 50% of their annual incentive compensation to acquire units representing shares of the Company's common stock at a 20% discount to the market value on the date of the incentive compensation award. Certain executive officers are required to participate in the incentive compensation stock plan at certain minimum levels. Participants receive unrestricted shares of common stock in an amount equal to their respective units generally at the end of a 34-month period of additional employment from the date of award or at retirement beginning at age 62. All rights of ownership of the common stock convey to the participants upon the issuance of their respective shares at the end of the ownership-vesting period.

The following table summarizes information for restricted stock awards and incentive compensation stock awards for 2017:

	Restricted Stock – Service Based		Restricted Stock – Performance Based		Incentive Compensation Stock	
	Number of Awards	Weighted-Average Grant-Date Fair Value	Number of Awards	Weighted-Average Grant-Date Fair Value	Number of Awards	Weighted-Average Grant-Date Fair Value
January 1, 2017	307,317	$ 125.36	111,317	$ 122.22	40,549	$ 114.44
Awarded	80,181	$ 213.76	47,997	$ 207.73	19,981	$ 208.68
Distributed	(68,828)	$ 121.40	(17,692)	$ 129.14	(21,784)	$ 108.44
Forfeited	(3,830)	$ 156.40	(1,623)	$ 150.38	(236)	$ 124.41
December 31, 2017	314,840	$ 151.84	139,999	$ 150.34	38,510	$ 166.67

The weighted-average grant-date fair value of service-based restricted stock awards granted during 2017, 2016 and 2015 was $213.76, $128.48 and $154.26, respectively. The weighted-average grant-date fair value of performance-based restricted stock awards granted during 2017, 2016 and 2015 was $207.73, $124.41 and $108.53, respectively. The weighted-average grant-date fair value of incentive compensation stock awards granted during 2017, 2016 and 2015 was $208.68, $124.41 and $108.53, respectively.

The aggregate intrinsic values for unvested restricted stock awards and unvested incentive compensation stock awards at December 31, 2017 were $100,538,000 and $3,377,000, respectively, and were based on the closing price of the Company's common stock at December 31, 2017, which was $221.04. The aggregate intrinsic values of restricted stock awards distributed during the years ended December 31, 2017, 2016 and 2015 were $15,771,000, $9,738,000 and $11,387,000, respectively. The aggregate intrinsic values of incentive compensation stock awards distributed during the years ended December 31, 2017, 2016 and 2015 were $2,601,000, $1,941,000 and $983,000, respectively. The aggregate intrinsic values for distributed awards were based on the closing prices of the Company's common stock on the dates of distribution.

Under the Plans, prior to 2016, the Company granted options to employees to purchase its common stock at a price equal to the closing market value at the date of grant. Options become exercisable in four annual installments beginning one year after date of grant. Options granted starting 2013 expire ten years after the grant date while outstanding options granted prior to 2013 expire eight years after the grant date.

In connection with the TXI acquisition, completed in 2014, the Company issued 821,282 Martin Marietta stock options (Replacement Options) to holders of outstanding TXI stock options at the acquisition date. The Company issued 0.7 Replacement Options for each outstanding TXI stock option, and the Replacement Option prices reflected the exchange ratio. The Replacement Options will expire on the original contractual dates when the TXI stock options were initially issued. Consistent with the terms of the Company's other outstanding stock options, Replacement Options expire 90 days after employment is terminated.

Prior to 2009, each nonemployee member of the Board of Directors received 3,000 non-qualified stock options annually. These options have an exercise price equal to the market value at the date of grant, vested immediately and expire ten years from the grant date.

The following table includes summary information for stock options as of December 31, 2017:

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (years)
Outstanding at January 1, 2017	406,891	$ 93.27	
Exercised	(104,093)	$ 98.68	
Terminated	(840)	$ 80.52	
Outstanding at December 31, 2017	301,958	$ 91.44	3.6
Exercisable at December 31, 2017	261,380	$ 83.37	3.1

The weighted-average grant-date exercise price of options granted during 2015 was $154.58. The aggregate intrinsic values of options exercised during the years ended December 31, 2017, 2016 and 2015 were $13,247,000,

$22,571,000 and $7,318,000, respectively, and were based on the closing prices of the Company's common stock on the dates of exercise. The aggregate intrinsic values for options outstanding and exercisable at December 31, 2017 were $39,135,000 and $35,984,000, respectively, and were based on the closing price of the Company's common stock at December 31, 2017, which was $221.04. The excess tax benefits for stock options exercised during the years ended December 31, 2017, 2016 and 2015 were $3,483,000, $4,238,000 and $551,000, respectively.

At December 31, 2017, there are approximately 836,000 awards available for grant under the Plans. In 2016, the Company's shareholders approved the registration of an additional 800,000 shares of common stock under the Plans. As part of approving the registered shares, the Company agreed to not issue any additional awards under the legacy TXI plan. The awards available for grant under the Plans at December 31, 2017 reflect no awards available under the legacy TXI plan.

In 1996, the Company adopted the Shareholder Value Achievement Plan to award shares of the Company's common stock to key senior employees based on certain common stock performance criteria over a long-term period. Under the terms of this plan, 250,000 shares of common stock were reserved for issuance. Through December 31, 2017, 42,025 shares have been issued under this plan. No awards have been granted under this plan after 2000.

The Company adopted and the shareholders approved the Common Stock Purchase Plan for Directors in 1996, which provides nonemployee members of the Board of Directors the election to receive all or a portion of their total fees in the form of the Company's common stock. Beginning in 2016, members of the Board of Directors were not required to defer any of their fees in the form of the Company's common stock. Under the terms of this plan, 300,000 shares of common stock were reserved for issuance. Nonemployee members of the Board of Directors elected to defer portions of their fees representing 2,132, 3,699 and 4,035 shares of the Company's common stock under this plan during 2017, 2016 and 2015, respectively.

The following table summarizes stock-based compensation expense for the years ended December 31, 2017, 2016 and 2015, unrecognized compensation cost for nonvested awards at December 31, 2017 and the weighted-average period over which unrecognized compensation cost will be recognized:

(add 000, except year data)	Stock Options	Restricted Stock	Incentive Compen-sation Stock	Directors' Awards	Total
Stock-based compensation expense recognized for years ended December 31:					
2017	**$ 684**	**$ 28,657**	**$ 661**	**$ 458**	**$ 30,460**
2016	$ 1,646	$ 17,747	$ 442	$ 646	$ 20,481
2015	$ 2,679	$ 9,809	$ 376	$ 725	$ 13,589
Unrecognized compensation cost at December 31, 2017:	**$ 292**	**$ 24,116**	**$ 458**	**$ –**	**$ 24,866**
Weighted-average period over which unrecognized compensation cost will be recognized:	1.1 years	2.0 years	1.6 years	–	

The following presents expected stock-based compensation expense in future periods for outstanding awards as of December 31, 2017:

(add 000)	
2018	$ 15,559
2019	8,299
2020	645
2021	269
2022	94
Total	$ 24,866

Stock-based compensation expense is included in selling, general and administrative expenses in the Company's consolidated statements of earnings.

Note L: Leases

Total lease expense for operating leases was $90,731,000, $85,945,000 and $80,417,000 for the years ended December 31, 2017, 2016 and 2015, respectively. The Company's operating leases generally contain renewal and/ or purchase options with varying terms. The Company has royalty agreements that generally require royalty payments based on tons produced or total sales dollars and also contain minimum payments. Total royalties, principally for leased properties, were $51,827,000, $55,257,000 and $53,658,000 for the years ended December 31, 2017, 2016 and 2015, respectively. The Company also has capital lease obligations for machinery and equipment.

Future minimum lease and royalty commitments for all non-cancelable agreements and capital lease obligations as of December 31, 2017 are as follows:

(add 000)	Capital Leases	Operating Leases and Royalty Commitments
2018	$ 4,205	$ 121,234
2019	3,750	64,504
2020	2,247	58,731
2021	1,371	55,290
2022	913	52,781
Thereafter	3,993	345,860
Total	16,479	$ 698,400
Less: imputed interest	(3,231)	
Present value of minimum lease payments	13,248	
Less: current capital lease obligations	(3,623)	
Long-term capital lease obligations	$ 9,625	

Of the total future minimum commitments, $204,418,000 relates to the Company's contracts of affreightment.

Note M: Shareholders' Equity

The authorized capital structure of the Company includes 100,000,000 shares of common stock, with a par value of $0.01 a share. At December 31, 2017, approximately 1,986,000 common shares were reserved for issuance under stock-based award plans.

Pursuant to authority granted by its Board of Directors, the Company can repurchase up to 20,000,000 shares of common stock. The Company repurchased 457,742, 1,587,987 and 3,285,380 shares of common stock during 2017, 2016 and 2015, respectively. At December 31, 2017, 14,668,891 shares of common stock were remaining under the Company's repurchase authorization.

In addition to common stock, the Company's capital structure includes 10,000,000 shares of preferred stock with a par value of $0.01 a share. On October 21, 2006, the Board of Directors adopted a Rights Agreement (the "Rights Agreement") and reserved 200,000 shares of Junior Participating Class B Preferred Stock for issuance. In accordance with the Rights Agreement, the Company issued a dividend of one right for each share of the Company's common stock outstanding as of October 21, 2006, and one right continues to attach to each share of common stock issued thereafter. The rights will become exercisable if any person or group acquires beneficial ownership of 15% or more of the Company's common stock. Once exercisable and upon a person or group acquiring 15% or more of the Company's common stock, each right (other than rights owned by such person or group) entitles its holder to purchase, for an exercise price of $315 per share, a number of shares of the Company's common stock (or in certain circumstances, cash, property or other securities of the Company) having a market value of twice the exercise price, and under certain conditions, common stock of an acquiring company having a market value of twice the exercise price. If any person or group acquires beneficial ownership of 15% or more of the Company's common stock, the Company may, at its option, exchange the outstanding rights (other than rights owned by such acquiring person or group) for shares of the Company's common stock or Company equity securities deemed to have the same value as one share of common stock or a combination thereof, at an exchange ratio of one share of common stock per right. The Company's Rights Agreement expired on October 21, 2016.

Note N: Commitments and Contingencies

Legal and Administrative Proceedings. The Company is engaged in certain legal and administrative proceedings incidental to its normal business activities. In the opinion of management and counsel, based upon currently-available facts, it is remote that the ultimate outcome of any litigation and other proceedings, including those pertaining to environmental matters (see Note A), relating to the Company and its subsidiaries, will have a material adverse effect on the overall results of the Company's operations, its cash flows or its financial position.

Asset Retirement Obligations. The Company incurs reclamation and teardown costs as part of its mining and production processes. Estimated future obligations are discounted to their present value and accreted to their projected future obligations via charges to operating expenses. Additionally, the fixed assets recorded concurrently with the liabilities are depreciated over the period until retirement activities are expected to occur. Total accretion and depreciation expenses for 2017, 2016 and 2015 were $8,682,000, $8,823,000 and $6,767,000, respectively, and are included in other operating income and expenses, net, in the consolidated statements of earnings.

The following shows the changes in the asset retirement obligations:

years ended December 31 (add 000)	2017	2016
Balance at beginning of year	**$ 101,106**	$ 89,604
Accretion expense	**4,768**	4,288
Liabilities incurred and liabilities assumed in business combinations	**7,940**	6,700
Liabilities settled	**(309)**	166
Revisions in estimated cash flows	**(3,852)**	348
Balance at end of year	**$ 109,653**	$ 101,106

Other Environmental Matters. The Company's operations are subject to and affected by federal, state and local laws and regulations relating to the environment, health and safety and other regulatory matters. Certain of the Company's operations may, from time to time, involve the use of substances that are classified as toxic or hazardous within the meaning of these laws and regulations. Environmental operating permits are, or may be, required for certain of the Company's operations, and such permits are subject to modification, renewal and revocation. The Company regularly monitors and reviews its operations, procedures and policies for compliance with these laws and regulations. Despite these compliance efforts, risk of environmental remediation liability is inherent in the operation of the Company's businesses, as it is with other companies engaged in similar businesses. The Company has no material provisions for environmental remediation liabilities and does not believe such liabilities will have a material adverse effect on the Company in the future.

The United States Environmental Protection Agency (EPA) includes the lime industry as a national enforcement priority under the federal Clean Air Act (CAA). As part of the industry-wide effort, the EPA issued Notices of Violation/Findings of Violation (NOVs) to the Company in 2010 and 2011 regarding its compliance with the CAA New Source Review (NSR) program at its Magnesia Specialties dolomitic lime manufacturing plant in Woodville, Ohio. The Company has been providing information to the EPA in response to these NOVs and has had several meetings with the EPA. Although the Company believes it is in substantial compliance with the NSR program, it anticipates that it will reach a settlement of this matter with the EPA. The Company believes any costs related to any required upgrades to capital equipment will be spread over time and that those costs and any related penalties will not have a material adverse effect on the Company's results of operations or its financial condition.

Insurance Reserves. The Company has insurance coverage with large deductibles for workers' compensation, automobile liability, marine liability and general liability claims. The Company is also self-insured for health claims. At December 31, 2017 and 2016, reserves of $48,061,000 and $42,184,000, respectively, were recorded for all such insurance claims. The Company carries various risk deductible workers' compensation policies related to its workers' compensation liabilities. The Company records the workers' compensation reserves based on an actuarial-determined analysis. This analysis calculates development factors, which are applied to total reserves within the workers' compensation program. While the Company believes the assumptions used to calculate these liabilities are appropriate, significant differences in actual experience and/or significant changes in these assumptions may materially affect workers' compensation costs.

Letters of Credit. In the normal course of business, the Company provides certain third parties with standby letter of credit agreements guaranteeing its payment for certain insurance claims, contract performance and permit requirements. At December 31, 2017, the Company was contingently liable for $45,028,000 in letters of credit, of which $2,301,000 were issued under the Company's Revolving Facility. The obligations for insurance claims are accrued on the Company's consolidated balance sheets.

Surety Bonds. In the normal course of business, at December 31, 2017, the Company was contingently liable for $348,253,000 in surety bonds required by certain states and municipalities and their related agencies. The bonds are principally for certain insurance claims, construction contracts, reclamation obligations and mining permits guaranteeing the Company's own performance. Certain of these underlying obligations, including those for asset retirement requirements and insurance claims, are accrued on the Company's consolidated balance sheets. Five of these bonds total $90,625,000, or 26%, of all outstanding surety bonds. The Company has indemnified the underwriting insurance companies, Liberty Mutual and W.R. Berkley, against any exposure under the surety bonds. In the Company's past experience, no material claims have been made against these financial instruments.

Borrowing Arrangements with Affiliate. The Company is a co-borrower with an unconsolidated affiliate for a revolving line of credit agreement with BB&T, of which $15,775,000 was outstanding as of December 31, 2017. The line of credit was amended in January 2018 to extend the maturity to March 2020 and reduce the line of credit from $25,000,000 to $15,500,000. The affiliate has agreed to reimburse and indemnify the Company for any payments and expenses the Company may incur from this agreement. The Company holds a lien on the affiliate's membership interest in a joint venture as collateral for payment under the revolving line of credit.

In 2014, the Company loaned the unconsolidated affiliate a total of $6,000,000 as an interest-only note due December 31, 2019.

Purchase Commitments. The Company had purchase commitments for property, plant and equipment of $191,582,000 as of December 31, 2017. The Company also had other purchase obligations related to energy and service contracts of $123,883,000 as of December 31, 2017. The Company's contractual purchase commitments as of December 31, 2017 are as follows:

(add 000)	
2018	$ 238,280
2019	37,275
2020	10,983
2021	8,809
2022	1,616
Thereafter	18,502
Total	$ 315,465

Capital expenditures in 2017, 2016 and 2015 that were purchase commitments as of the prior year end were $83,748,000, $62,927,000 and $116,681,000, respectively.

Employees. Approximately 11% of the Company's employees are represented by a labor union. All such employees are hourly employees. The Company maintains collective bargaining agreements relating to the union employees within the Building Materials business and Magnesia Specialties segment. Of the Magnesia Specialties segment, located in Manistee, Michigan and Woodville, Ohio, 100% of its hourly employees are represented by labor unions. The Manistee collective bargaining agreement expires in August 2019. The Woodville collective bargaining agreement expires in May 2018.

Note O: Segments

The Building Materials business is comprised of divisions which represent operating segments. Certain divisions are consolidated into reportable segments for financial reporting purposes as they meet the aggregation criteria. The Building Materials business contains three reportable segments: Mid-America Group, Southeast Group and West Group. The Magnesia Specialties business represents an individual operating and reportable segment. The accounting policies used for segment reporting are the same as those described in Note A.

The Company's evaluation of performance and allocation of resources are based primarily on earnings from operations. Consolidated earnings from operations include net sales less cost of sales, selling, general and administrative expenses, acquisition-related expenses, other operating income and expenses, net, and exclude interest expense, other nonoperating income and expenses, net, and tax expense/benefit. Corporate consolidated earnings from operations primarily include depreciation on capitalized interest, expenses for corporate administrative functions, acquisition-related expenses, net, and other nonrecurring and/or non-operational income and expenses excluded from the Company's evaluation of segment performance and resource allocation. All long-term debt and related interest expense are held at Corporate.

Assets employed by segment include assets directly identified with those operations. Corporate assets consist primarily of cash and cash equivalents; property, plant and equipment for corporate operations; investments and other assets not directly identifiable with a reportable segment.

In connection with a management change effective January 1, 2017, the cement product line is reported in the West Group. All segment information has been reclassified to conform to the presentation of the Company's current reportable segments and for the adoption of ASU 2017-07.

The following tables display selected financial data for the Company's reportable segments.

years ended December 31
(add 000)

Total revenues	**2017**	2016	2015
Mid-America Group	**$ 1,053,325**	$ 1,017,098	$ 926,251
Southeast Group	**362,555**	321,078	304,472
West Group	**2,279,723**	2,223,515	2,062,968
Total Building Materials Business	**3,695,603**	3,561,691	3,293,691
Magnesia Specialties	**269,991**	257,058	245,879
Total	**$ 3,965,594**	$ 3,818,749	$ 3,539,570
Net sales			
Mid-America Group	**$ 982,109**	$ 945,123	$ 851,854
Southeast Group	**348,409**	304,451	285,302
West Group	**2,142,839**	2,089,192	1,903,452
Total Building Materials Business	**3,473,357**	3,338,766	3,040,608
Magnesia Specialties	**248,071**	238,001	227,508
Total	**$ 3,721,428**	$ 3,576,767	$ 3,268,116
Gross profit (loss)			
Mid-America Group	**$ 335,394**	$ 306,560	$ 257,002
Southeast Group	**74,642**	57,286	34,359
West Group	**465,595**	466,790	360,667
Total Building Materials Business	**875,631**	830,636	652,028
Magnesia Specialties	**89,399**	89,603	79,057
Corporate	**6,910**	(8,501)	(4,165)
Total	**$ 971,940**	$ 911,738	$ 726,920
Selling, general and administrative expenses			
Mid-America Group	**$ 53,937**	$ 52,712	$ 52,227
Southeast Group	**17,144**	17,245	18,353
West Group	**102,650**	95,631	92,988
Total Building Materials Business	**173,731**	165,588	163,568
Magnesia Specialties	**9,537**	9,617	9,408
Corporate	**78,860**	66,401	37,778
Total	**$ 262,128**	$ 241,606	$ 210,754
Earnings (Loss) from operations			
Mid-America Group	**$ 284,789**	$ 258,422	$ 207,619
Southeast Group	**61,238**	41,653	16,712
West Group	**360,544**	379,417	256,042
Total Building Materials Business	**706,571**	679,492	480,373
Magnesia Specialties	**79,431**	79,306	69,301
Corporate	**(85,621)**	(81,532)	(55,507)
Total	**$ 700,381**	$ 677,266	$ 494,167

years ended December 31
(add 000)

Assets employed	**2017**	2016	2015
Mid-America Group	**$ 1,532,867**	$ 1,406,526	$ 1,304,574
Southeast Group	**616,344**	594,967	583,369
West Group	**5,014,231**	4,904,018	4,561,432
Total Building Materials Business	**7,163,442**	6,905,511	6,449,375
Magnesia Specialties	**152,257**	150,969	147,795
Corporate	**1,676,812**	244,425	360,441
Total	**$ 8,992,511**	$ 7,300,905	$ 6,957,611
Depreciation, depletion and amortization			
Mid-America Group	**$ 69,691**	$ 64,295	$ 61,693
Southeast Group	**30,780**	30,590	31,644
West Group	**169,853**	164,653	147,619
Total Building Materials Business	**270,324**	259,538	240,956
Magnesia Specialties	**10,070**	10,354	9,992
Corporate	**16,768**	15,361	12,639
Total	**$ 297,162**	$ 285,253	$ 263,587
Total property additions			
Mid-America Group	**$ 139,505**	$ 152,014	$ 77,640
Southeast Group	**34,636**	30,588	12,155
West Group	**240,793**	338,795	244,844
Total Building Materials Business	**414,934**	521,397	334,639
Magnesia Specialties	**11,129**	8,944	8,916
Corporate	**12,558**	10,430	20,561
Total	**$ 438,621**	$ 540,771	$ 364,116
Property additions through acquisitions			
Mid-America Group	**$ 60**	$ 1,524	$ 4,385
Southeast Group	**–**	–	–
West Group	**2,420**	132,112	35,965
Total Building Materials Business	**2,480**	133,636	40,350
Magnesia Specialties	**–**	–	–
Corporate	**–**	–	–
Total	**$ 2,480**	$ 133,636	$ 40,350

The Building Materials business includes the aggregates, cement, ready mixed concrete and asphalt and paving product lines. All cement, ready mixed concrete and asphalt and paving product lines are reported within in the West Group. The following tables, which are reconciled to consolidated amounts, provide total revenues, net sales and gross profit by line of business: Building Materials (further divided by product line) and Magnesia Specialties. Interproduct revenues and interproduct sales represent sales from the aggregates product line to the ready mixed concrete and asphalt and paving product lines and sales from the cement product line to the ready mixed concrete product line.

years ended December 31 (add 000) Total revenues	2017	2016	2015
Aggregates	$ 2,341,540	$ 2,267,574	$ 2,120,245
Cement	384,112	375,814	475,725
Ready Mixed Concrete	936,979	903,803	657,831
Asphalt and Paving[1]	296,956	261,612	229,561
Less: Interproduct revenues[1]	(263,984)	(247,112)	(189,671)
Total Building Materials Business	3,695,603	3,561,691	3,293,691
Magnesia Specialties	269,991	257,058	245,879
Total	$ 3,965,594	$ 3,818,749	$ 3,539,570

Net sales	2017	2016	2015
Aggregates	$ 2,137,225	$ 2,060,876	$ 1,896,143
Cement	371,525	364,445	455,382
Ready Mixed Concrete	936,062	902,635	656,531
Asphalt and Paving[1]	292,529	257,922	222,223
Less: Interproduct sales[1]	(263,984)	(247,112)	(189,671)
Total Building Materials Business	3,473,357	3,338,766	3,040,608
Magnesia Specialties	248,071	238,001	227,508
Total	$ 3,721,428	$ 3,576,767	$ 3,268,116

[1] *2016 and 2015 amounts have been revised to reflect the elimination of $83,500,000 and $ 61,400,000, respectively, of asphalt sales to the paving operations within that product line.*

Gross profit (loss)	2017	2016	2015
Aggregates	$ 601,968	$ 558,318	$ 470,688
Cement	117,313	120,201	103,813
Ready Mixed Concrete	91,670	99,042	42,110
Asphalt and Paving	64,680	53,075	35,417
Total Building Materials Business	875,631	830,636	652,028
Magnesia Specialties	89,399	89,603	79,057
Corporate	6,910	(8,501)	(4,165)
Total	$ 971,940	$ 911,738	$ 726,920

Domestic and foreign total revenues are as follows:

years ended December 31 (add 000)	2017	2016	2015
Domestic	$ 3,901,323	$ 3,761,651	$ 3,493,462
Foreign	64,271	57,098	46,108
Total	$ 3,965,594	$ 3,818,749	$ 3,539,570

Note P: Supplemental Cash Flow Information

The components of the change in other assets and liabilities, net, are as follows:

years ended December 31 (add 000)	2017	2016	2015
Other current and noncurrent assets	$ (19,424)	$ 9,171	$ (3,631)
Accrued salaries, benefits and payroll taxes	136	16,942	(4,854)
Accrued insurance and other taxes	4,866	(2,688)	4,425
Accrued income taxes	(11,044)	(12,523)	(4,364)
Accrued pension, postretirement and postemployment benefits	1,980	(15,955)	(18,153)
Other current and noncurrent liabilities	38,105	(6,053)	(3,014)
Change in other assets and liabilities, net	$ 14,619	$ (11,106)	$ (29,591)

Noncash investing and financing activities are as follows:

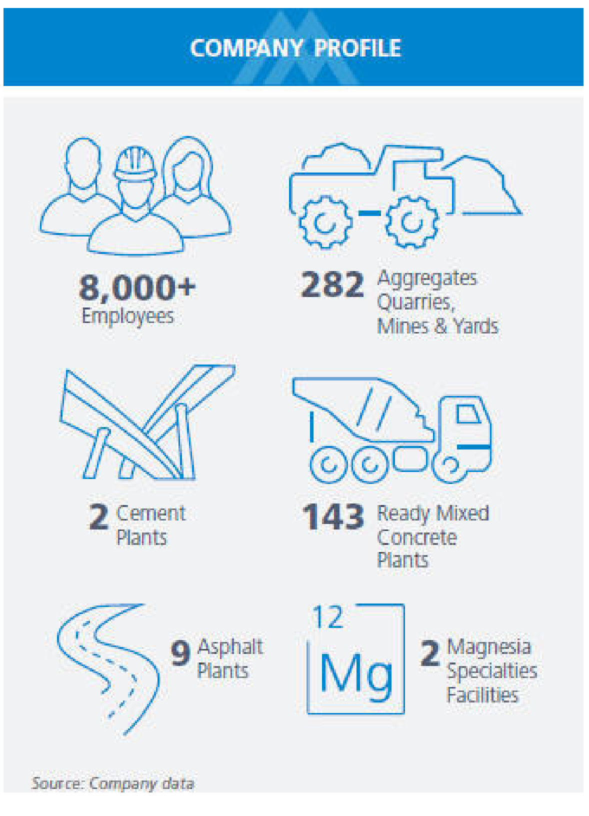
years ended December 31 (add 000)	2017	2016	2015
Accrued liabilities for purchases of property, plant and equipment	$ 61,644	$ 38,566	$ 22,285
Acquisition of assets through capital lease	$ 811	$ 1,399	$ 1,445
Acquisition of assets through asset exchange	$ 2,476	$ –	$ 5,000
Sale of asset to settle liability	$ 900	$ –	$ –

Supplemental disclosures of cash flow information are as follows:

years ended December 31 (add 000)	2017	2016	2015
Cash paid for interest	$ 78,902	$ 73,664	$ 71,011
Cash paid for income taxes	$ 155,771	$ 124,342	$ 46,774

Note Q: Other Operating Expenses and (Income), Net

Other operating expenses and income, net, are comprised generally of gains and losses on the sale of assets; gains and losses related to certain customer accounts receivable; rental, royalty and services income; accretion expense, depreciation expense and gains and losses related to asset retirement obligations. These net amounts represented an expense of $793,000 in 2017, income of $8,043,000 in 2016 and an expense of $15,653,000 in 2015. The 2017 amount primarily reflects $19,366,000 of gains on the sale of assets, offset by $12,668,000 of nonrecurring repair costs related to certain of the Company's leased railcars and approximately $10,813,000 of executive retirement expense. The net expense for 2015 reflects the net impact of the divestitures of the California cement operations and the San Antonio asphalt operations.



INTRODUCTORY OVERVIEW

Martin Marietta Materials, Inc. (the "Company" or "Martin Marietta"), is a natural resource-based building materials company. The Company supplies aggregates (crushed stone, sand and gravel) through its network of 282 quarries and distribution yards to customers in 30 states, Canada, the Bahamas and the Caribbean Islands. In the western United States, Martin Marietta also provides cement and downstream products, namely ready mixed concrete, asphalt and paving services, in markets where the Company has a leading aggregates position. Specifically, the Company has two cement plants in Texas and ready mixed concrete and asphalt operations in Texas, Colorado, Louisiana and Arkansas. Paving services are exclusively in Colorado. The Company's heavy-side building materials are used in infrastructure, nonresidential and residential construction projects. Aggregates are also used in agricultural, utility and environmental applications and as railroad ballast. The aggregates, cement, ready mixed concrete, asphalt and paving product lines are reported collectively as the "Building Materials" business.

As more fully discussed in the *Consolidated Strategic Objectives* section, geography is critically important for the Building Materials business. The Company conducts its Building Materials business through three reportable segments, organized by geography: Mid-America Group, Southeast Group and West Group. The Mid-America and Southeast Groups provide aggregates products only. The West Group provides aggregates, cement and downstream products. Further, the following states accounted for 74% of the Building Materials business net sales in 2017: Texas, Colorado, North Carolina, Iowa and Georgia.

The Building Materials business is a mature, cyclical business, dependent on activity within the construction marketplace. The United States is currently experiencing the third-longest economic recovery since the Great Depression. As of December 31, 2017, the current expansion, which started in June 2009, has lasted 102 months. By comparison, the average trough-to-peak expansionary cycle since 1938 was 60 months

BUILDING MATERIALS BUSINESS

Reportable Segments	Mid-America Group	Southeast Group	West Group
Operating Locations	Indiana, Iowa, northern Kansas, Kentucky, Maryland, Minnesota, Missouri, eastern Nebraska, North Carolina, Ohio, South Carolina, Virginia, Washington and West Virginia	Alabama, Florida, Georgia, Tennessee, Nova Scotia and the Bahamas	Arkansas, Colorado, southern Kansas, Louisiana, western Nebraska, Nevada, Oklahoma, Texas, Utah and Wyoming
Product Lines	Aggregates	Aggregates	Aggregates, Cement, Ready Mixed Concrete, Asphalt and Paving Services
Plant Types	Quarries, Mines and Distribution Facilities	Quarries, Mines and Distribution Facilities	Quarries, Mines, Plants and Distribution Facilities
Modes of Transportation	Truck and Railcar	Truck, Railcar and Ship	Truck and Railcar

and, in May 2018, the current cycle will become the second-longest economic recovery since the Great Depression. During this current economic expansion, however, governmental uncertainty, labor shortages and record levels of precipitation have slowed the pace of heavy construction activity, resulting in a slow, steady, extended construction cycle that is expected to continue over the next several years. The Company's overall aggregates product line shipments remain approximately 10% below mid-cycle demand. Importantly, the level of recovery varies within the Company's geographic footprint. Specifically, North Carolina and Georgia, key states in the Mid-America and Southeast Groups, respectively, are approximately 20% below mid-cycle demand, while Texas, a key state in the West Group, is modestly above mid-cycle demand.

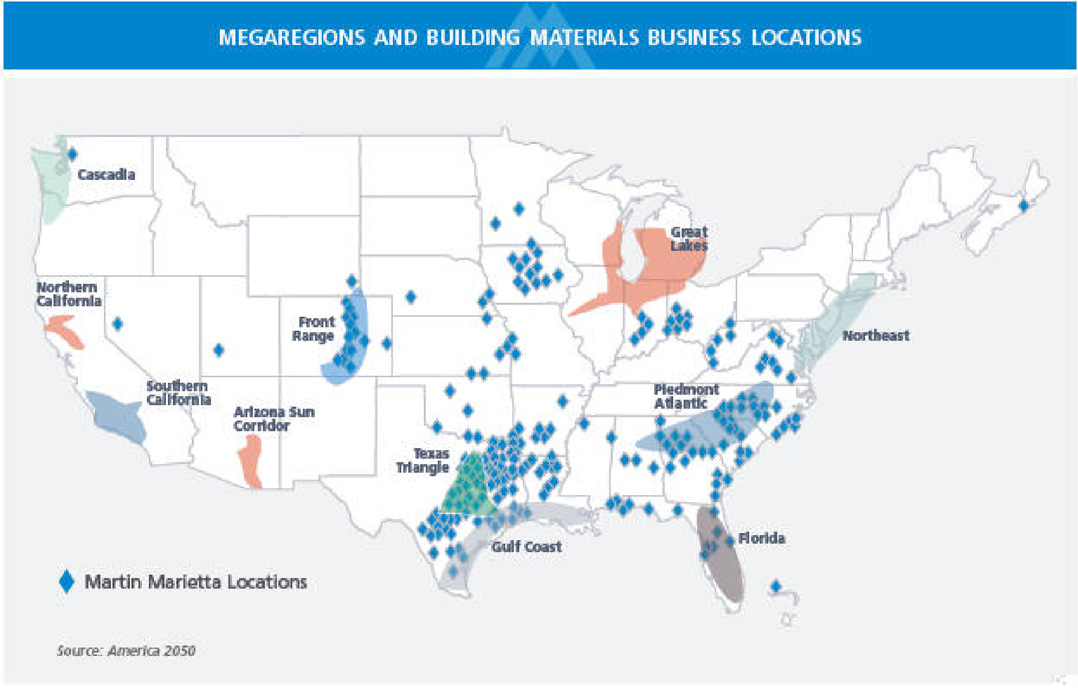
Magnesia Specialties

The Company also operates a Magnesia Specialties business with production facilities in Michigan and Ohio. The Magnesia Specialties business produces magnesia-based chemicals products which are used in industrial, agricultural and environmental applications. It also produces dolomitic lime sold primarily to customers in the steel and mining industries. Magnesia Specialties' products are shipped to customers worldwide.

Consolidated Strategic Objectives

The Company's strategic planning process, or Strategic Operating Analysis and Review (SOAR), provides the framework for execution of Martin Marietta's long-term strategic plan. Guided by this framework and giving consideration to the cyclicality of the Building Materials business, the Company determines capital allocation priorities to maximize long-term shareholder value. The Company's strategy includes ongoing evaluation of aggregates-led opportunities of scale in new domestic markets (i.e., platform acquisitions), expansion through acquisitions that complement existing operations (i.e., bolt-on acquisitions), divestitures of assets that are not consistent with stated strategic goals, and arrangements with other companies engaged in similar or complementary businesses. The Company finances such opportunities with the goal of preserving its financial flexibility by having a leverage ratio (consolidated debt-to-consolidated earnings before interest, taxes, depreciation and amortization, or EBITDA) within a target range of 2.0 times to 2.5 times within a reasonable time following the completion of a transaction.

By purposeful design, the Company, currently with leading positions in 85% of its markets, will continue to be an aggregates-led business, focusing on markets with strong, underlying growth fundamentals and where it can sustain or achieve a leading market position. In 2017, the aggregates product line represented 59% of consolidated total revenues. As part of its long-term strategic plan, the Company may pursue strategic cement and targeted downstream opportunities. For Martin Marietta, strategic cement and targeted downstream operations are located in vertically-integrated markets where the Company has, or envisions a clear path toward, a leading aggregates position. Additionally, strategic cement operations are those where market supply cannot be meaningfully interdicted by water.



Generally, the Company's building materials products are both sourced and sold locally. As a result, geography is critically important when assessing market attractiveness and growth opportunities. Attractive geographies a) exhibit population growth and/or population density, both of which are drivers of heavy-side building materials consumption; b) have business and employment diversity, drivers of greater economic stability; and c) have a superior state financial position, a driver of public infrastructure growth and support.

In order to assess population growth and density, the Company focuses on the megaregions of the United States. Megaregions are large networks of metropolitan population centers covering thousands of square miles. According to *America 2050,* a planning and policy program of the Regional Plan Association (RPA), a majority of the nation's population and economic growth through 2050 will occur in 11 megaregions. The Company has a significant strategic presence in five of the megaregions. The Company's leading positions in the Front Range and Texas Triangle megaregions and its enhanced position in the Piedmont Atlantic, primarily the Atlanta area, are the results of acquisitions since 2011, evidence of the successful execution of SOAR. The megaregions and the key states for the Company are more fully discussed in the *Building Materials Business' Key Considerations* section.

In considering business and employment diversity, the Company focuses its geographic footprint along significant transportation corridors, particularly where land is readily available for the construction of fulfillment centers and data centers. The retail sector values transportation corridors, as logistics and distribution are critical considerations for construction supporting that industry. In addition, technology companies view these areas as attractive locations for data centers.

In line with the Company's strategic objectives, management's overall focus is on the following items, among other things:

- Upholding the Company's commitment to its mission, vision and values
- Navigating effectively through a slow-and-steady economic recovery cycle, balancing investment and cost decisions against slower-than-expected volume growth

- Tracking shifts in population trends as well as local, state and national economic conditions to ensure changing trends are reflected in execution against the strategic plan
- Integrating acquired businesses efficiently to achieve maximum value
- Allocating capital in a manner consistent with the following long-standing priorities while maintaining financial flexibility
  - Acquisitions
  - Organic capital investment
  - Return of cash to shareholders through dividends and share repurchases

2017 Performance Highlights

Achieved Record Safety Performance

- Company-wide Lost Time Incident Rate (LTIR) of 0.13, surpassing world-class LTIR of 0.20 or lower
- Total Injury Incident Rate (TIIR) of 1.07, a 19% improvement compared with 2016
- Nineteen sites reached 500,000 consecutive hours worked without any incident and 11 sites surpassed one million hours of incident-free work

Expanded the Business Through Execution Against Disciplined Growth Strategy

On June 26, 2017, the Company announced a definitive agreement to acquire Bluegrass Materials Company (Bluegrass) for $1.625 billion in cash. Bluegrass is the largest privately held, pure-play aggregates business in the United States and has a portfolio of 23 active sites with more than 125 years of strategically-located, high-quality reserves, in Georgia, South Carolina, Tennessee, Maryland, Kentucky and Pennsylvania. These operations complement the Company's existing southeastern footprint and provide a new growth platform within the southern portion of the Northeast megaregion. The Company and Bluegrass are working closely and cooperatively with the Department of Justice in its review of the proposed transaction. The parties currently anticipate that the proposed acquisition will be completed in the first half of 2018. In anticipation of closing the Bluegrass acquisition, the Company successfully completed a debt offering in December 2017, which included $300 million aggregate principal amount of Floating Rate Senior Notes due 2019, $500 million aggregate principal amount of 3.500% Senior Notes due in 2027 and $600 million aggregate principal amount of 4.250% Senior Notes due in 2047, the proceeds of which will be used in part to finance the pending acquisition.

Achieved Record Financial Performance

The Company achieved record total revenues, gross profit, earnings from operations and earnings per diluted share despite externally-driven headwinds, notably the significant amount of precipitation, which was exacerbated by weather-related events, across a majority of the Company's geographies. Importantly, inclement weather was most significant during the second and third quarters, which represents the zenith of the construction season. According to the 2017 statewide precipitation map for the six-month period from April through September, for the 123 years the National Oceanic Atmospheric Administration (NOAA) has been tracking data, most areas experienced above-average rainfall. This, coupled with government uncertainty regarding additional infrastructure investment, attendant project delays and tight labor markets, exerted downward pressure on 2017 shipment and production levels. However, the Company's commitment to operational excellence led to achieving the following metrics (comparisons with 2016, unless otherwise noted):

- Record earnings per diluted share of $11.25, inclusive of a $4.07 per diluted share benefit from the provisional assessment of the Tax Cuts and Jobs Act of 2017 (2017 Tax Act)
  - Even excluding the provisional benefits of the 2017 Tax Act, record earnings per diluted share achieved
- Record net earnings attributable to Martin Marietta of $713.3 million, an increase of 68%, inclusive of a $258.1 million one-time income tax benefit from the provisional remeasurement of deferred tax assets and liabilities following enactment of the 2017 Tax Act
- Record consolidated EBITDA of $1.0 billion, a 3% improvement, and a 25% EBITDA margin (as a percentage of total revenues)
- Aggregates product line pricing increase of 4.5% and volume decline of 0.6%
- Record Magnesia Specialties' total revenues of $270.0 million and earnings from operations of $79.4 million
- Effective management of controllable production costs, as evidenced by a 60-basis-point improvement in consolidated gross margin
- Selling, general and administrative (SG&A) expenses representing 6.6% of total revenues

Cash Flows

- Operating cash flow of $657.9 million
- Return of $208.9 million of cash to shareholders through share repurchases ($100.0 million) and dividends ($108.9 million)
- Ratio of consolidated net debt-to-consolidated EBITDA of 1.6 times for the trailing-twelve months ended December 31, 2017, calculated as prescribed in the Company's bank credit agreements and in compliance with the covenant maximum of 3.5 times

BUSINESS ENVIRONMENT

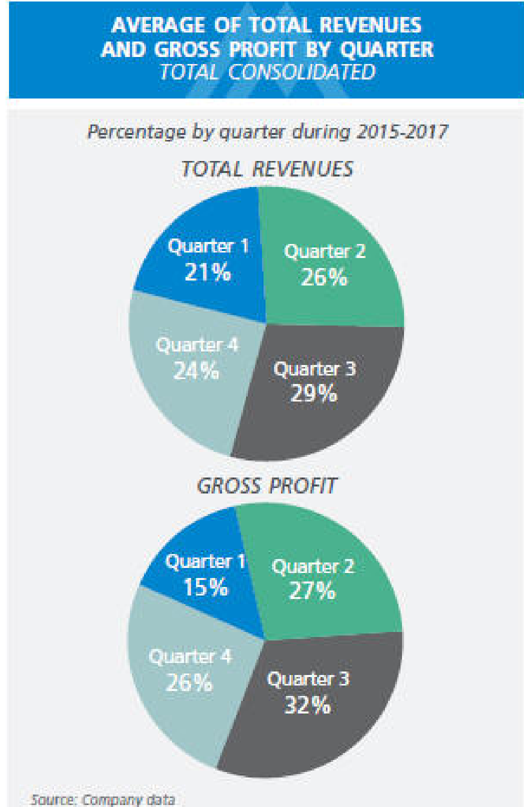
Building Materials Business

The Building Materials business serves customers in the construction marketplace. The business' profitability is sensitive to national, regional and local economic conditions and cyclical swings in construction spending, which are in turn affected by fluctuations in interest rates; access to capital markets; levels of public-sector infrastructure funding; and demographic, geographic, employment and population dynamics.

The heavy-side construction business, inclusive of much of the Company's operations, is conducted outdoors. Therefore, erratic weather patterns, precipitation and other weather related conditions, including flooding, hurricanes, snowstorms and droughts, can significantly affect production schedules, shipments, costs, efficiencies and profitability. Generally, the financial results for the first and fourth quarters are significantly lower than the second and third quarters due to winter weather. The impacts of erratic weather patterns are more fully discussed in the *Building Materials Business' Key Considerations* section.

Product Lines

Aggregates are an engineered granular material consisting of crushed stone, sand and gravel of varying mineralogies, manufactured to specific sizes, grades and chemistry for use primarily in construction applications. The Company's operations consist primarily of open pit quarries; however, the Company is the largest operator of underground aggregates mines in the United States, with 14 active underground mines located in the Mid-America Group. On average, the Company's aggregates reserves exceed 60 years based on normalized production levels and approximate 100 years at current production rates.



Cement is the basic binding agent used to bind water, aggregates and sand, in the production of ready mixed concrete. The Company has a strategic and leading cement position in the Texas markets, with production facilities in Midlothian, Texas, south of Dallas-Fort Worth, and Hunter, Texas, north of San Antonio. These plants produce Portland and specialty cements, have a combined annual capacity of 4.5 million tons, and operated at 75% to 80% utilization in 2017. The Midlothian plant has a permit that provides an 800,000-ton-expansion opportunity. In addition to the two production facilities, the Company operates several cement distribution terminals. Calcium carbonate in the form of limestone is the principal raw material used in the production of cement. The Company owns more than 600 million tons of limestone reserves adjacent to its cement production plants.

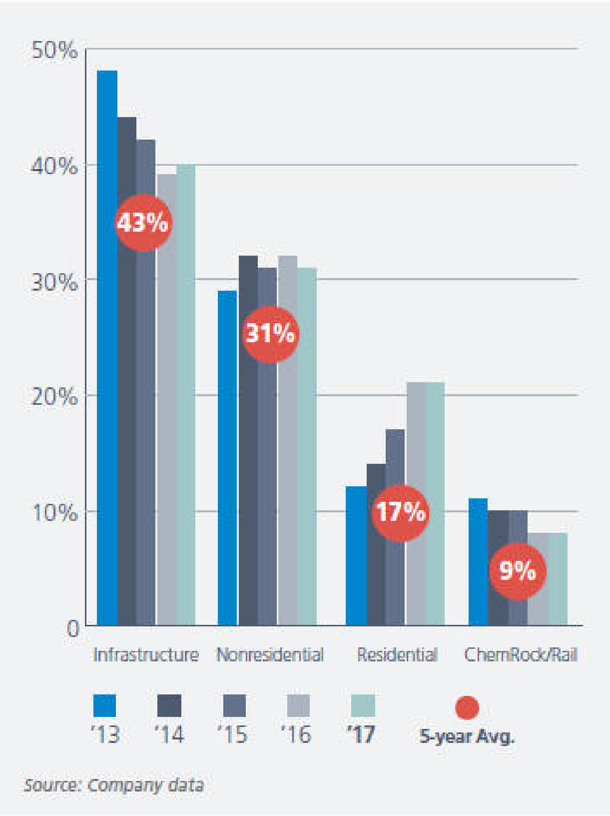
Ready mixed concrete, a mixture primarily of cement, water and aggregates, is measured in cubic yards and specifically batched or produced for customers' construction projects and then transported and poured at the project site. The aggregates used for ready mixed concrete is a washed type material with limited amounts of fines (i.e., dirt and clay). The Company owns 143 ready mix operations in Texas, Colorado, Louisiana and Arkansas. Asphalt is most commonly used in surfacing roads and parking lots and consists of liquid asphalt, the binding medium, and aggregates. Similar to ready mixed concrete, each asphalt batch is produced to customer specifications. The Company's asphalt operations are located primarily in Colorado; additionally, paving services are offered in Colorado. Market dynamics for these product lines include a highly competitive environment and lower barriers to entry compared with aggregates and cement.

End-Use Trends

- *According to the U.S. Geological Survey, for the nine-months ended September 30, 2017, the latest available governmental data, estimated construction aggregates consumption decreased 4% and estimated cement consumption increased 2%, both compared with the nine-months ended September 30, 2016*
- *Spending statistics for 2017 versus 2016, according to U.S. Census Bureau:*
  - *Total value of construction put in place increased 3%*
  - *Public-works construction spending increased 4%*
  - *Private nonresidential construction market spending decreased 3%*
  - *Private residential construction market spending increased 6%*

The principal end-use markets of the Building Materials business are public infrastructure (i.e., highways; streets; roads; bridges; and schools); nonresidential construction (i.e., manufacturing and distribution facilities; industrial complexes; office buildings; large retailers and wholesalers; malls; and energy-related activity); and residential construction (i.e., subdivision development; and single- and multi-family housing). Aggregates are also used in agricultural, utility and environmental applications and as railroad ballast, collectively, the ChemRock/Rail market.

Public infrastructure jobs can require several years to complete, while residential and non-residential construction jobs are usually completed within one year. Generally, the purchase orders the Company receives from its customers do not contain firm quantity commitments, regardless of end use market. Therefore, management does not utilize a Company backlog in managing its business.



Public Infrastructure

The public infrastructure market accounted for approximately 40% of the Company's aggregates product line shipments in 2017, consistent with 2016 and 2015. Government uncertainty, attendant project delays and tight labor markets have exerted disproportionate downward pressure on public construction activity and, for the past three years, as these headwinds have worsened, the Company's shipments to this end-use market have remained below the most recent five-year average of 43% and ten-year average of 48%.

While construction spending in the public and private market sectors is affected by economic cycles, the historic level of spending on public infrastructure projects has been comparatively more stable due to predictability of funding from federal, state and local governments, with approximately half

of the funding from federal government and half from state and local governments. However, public infrastructure activity has not yet experienced the anticipated benefits from funding provided by the Fixing America's Surface Transportation Act (FAST Act), signed into law on December 4, 2015. The FAST Act, the first long-term transportation funding bill in nearly a decade, authorizes $305 billion over fiscal years 2016 through 2020. State and local initiatives that support infrastructure funding, including gas tax increases and other ballot initiatives, are increasing in size and number as these governments recognize the need to play an expanded role in public infrastructure funding. Specifically, in the November 2017 election, $3.7 billion of transportation funding initiatives were approved in Texas, Colorado, Georgia, South Carolina and Kansas. The pace of construction should accelerate and shipments to the public infrastructure market should return to historical levels as monies from both the federal government and state and local governments become available. A return to historical levels is also predicated as state Departments of Transportations (DOTs) and contractors address their respective labor constraints.

Nonresidential

The nonresidential construction market accounted for approximately 31% of the Company's aggregates product line shipments in 2017. According to the U.S. Census Bureau, spending for the private nonresidential construction market increased in 2017 compared with 2016. The Dodge Momentum Index (DMI), a twelve-month leading indicator of construction spending for nonresidential building compiled by McGraw-Hill Construction and where the year 2000 serves as an index basis of 100, remained strong at a nine-year high of 153.9 in December 2017, a 21% increase over prior year. The DMI suggests nonresidential construction activity will remain healthy over the next several years. Historically, half of the Company's nonresidential construction shipments have been used for office and retail projects, while the remainder has been used for heavy industrial and capacity-related projects, including energy-related projects. Since the latter part of 2015, low oil prices have suppressed shipments directly into shale exploration activities. In 2017, the Company shipped approximately 1.8 million tons for shale exploration compared with approximately 1.5 million tons in 2016 and 3.6 million tons in 2015. Large, energy-related projects, which were completed in 2016 and required the full suite of the Building Materials products in the West Group, contributed favorably to shipments and profitability through the life of the projects. Management expects the next large wave of energy-related projects along the Gulf Coast to bid in the latter part of 2018.

Residential

The residential construction market accounted for approximately 21% of the Company's aggregates product line shipments in 2017. Private residential construction spending increased 12% in 2017 compared with 2016, according to the U.S. Census Bureau. The residential construction market, like the nonresidential construction market, is interest rate sensitive and typically moves in direct correlation with economic cycles. The Company's exposure to residential construction is split between aggregates used in the construction of subdivisions (including roads, sidewalks, and storm and sewage drainage), aggregates used in new single-family home construction and aggregates used in construction of multi-family units. Construction of both subdivisions and single-family homes is more aggregates intensive than construction of multi-family units. Through an economic cycle, multi-family construction generally begins early in the cycle and then transitions to single-family construction. Therefore, the timing of new subdivision starts, as well as new single-family housing permits, are strong indicators of residential volumes. While residential housing starts were approximately 1.3 million units in 2017, they remain below the 50-year historical annual average of 1.5 million units. For the year ended December 2017, six of the Company's key states rank in the top ten for single-family housing starts. The Company expects continued growth in the residential market.

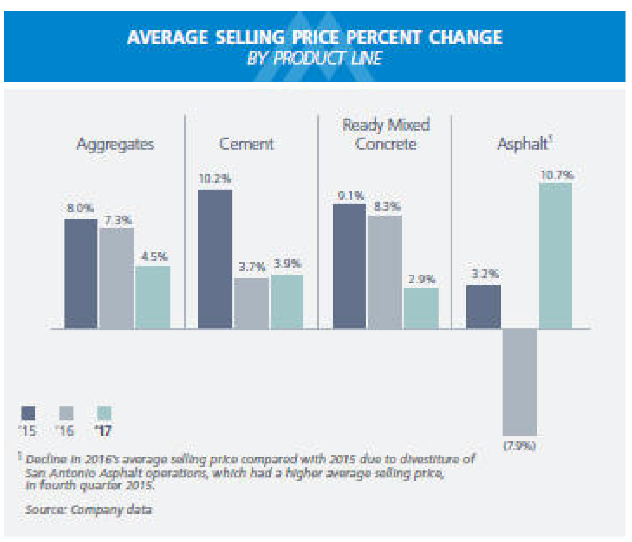
ChemRock/Rail

Approximately 8% of the Company's 2017 aggregates product line shipments was to the ChemRock/Rail market, which includes ballast and agricultural limestone. Ballast is an aggregates product used to stabilize railroad track beds and, increasingly, concrete rail ties are being used as a substitute for wooden ties. Ballast shipments declined in 2017 due to lower railroad activity, largely correlating with lower energy-related rail shipments. Agricultural lime, a high-calcium carbonate material, is used as a supplement in animal feed, a soil acidity neutralizer and agricultural growth enhancer. Additionally, ChemRock/Rail includes rip rap, which is used as a stabilizing material to control erosion caused by water runoff at ocean beaches, inlets, rivers and streams, and high-calcium limestone, which is used as filler in glass, plastic, paint, rubber, adhesives, grease and paper. Chemical-grade, high-calcium limestone is used as a desulfurization material in utility plants.

Pricing Trends

Pricing for construction projects is generally based on terms committing to the availability of specified products of a stated quantity at an agreed-upon price during a definitive period. Due to infrastructure projects spanning multiple years, announced changes in prices can have a lag time before taking effect while the Company sells products under existing price agreements. Pricing escalators included in multi-year infrastructure contracts somewhat mitigate this effect. However, during periods of sharp or rapid increases in production costs, multi-year infrastructure contract pricing may provide only nominal pricing growth. Additionally, the Company may implement mid-year price increases, on a market-by-market basis, where appropriate. Pricing is determined locally and is affected by supply and demand characteristics of the local market.

In 2017, the average selling price for the aggregates product line increased 4.5%, in line with management's expectations. Management believes 2018 aggregates product line pricing growth will be consistent with 2017 and slightly better than the Company's 20-year annual average of 4.3%.



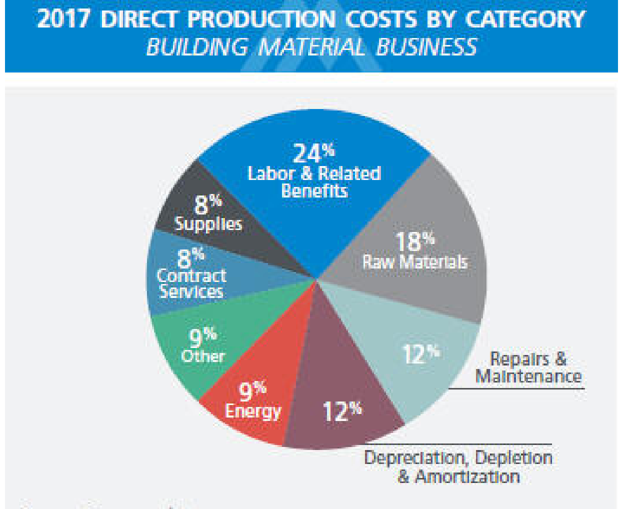
Cost Structure

- *Top four cost categories, details which follow, represent 66% of the Building Materials business' total direct production costs*
- *Health and welfare costs increased approximately 5% per year over past five years compared with the national average of 6% over same period; Company's costs expected to increase 4% in 2018*
- *Pension expense increased from $32.9 million in 2016 to $37.6 million in 2017 (2016 amounts exclude $0.8 million of nonrecurring termination benefits related to the acquisition of TXI); pension costs are expected to approximate $41.3 million in 2018 primarily due to a lower discount rate*

Direct production costs for the Building Materials business are components of cost of sales incurred at the quarries, mines, distribution yards and facilities, cement plants, ready mixed concrete plants and asphalt plants. Cost of sales also includes the cost of resale materials, freight expenses to transport materials from a producing quarry to a distribution yard and production overhead costs.

Generally, the top seven categories of direct production costs for the Building Materials business are (1) labor and related benefits; (2) raw materials; (3) repairs and maintenance; (4) depreciation, depletion and amortization (DDA); (5) energy; (6) contract services; and (7) supplies. In 2017, these categories represented 91% of the Building Materials business' total direct production costs.

Fixed costs are expenses that do not vary based on production or sales volume while variable costs are expenses that fluctuate with the level of production volume. Management estimates that, under normal operating capacity, approximately 40% of the Building Materials business' direct production cost is fixed, another 27% is semi-fixed and 33% is variable. Accordingly, the Company's operating leverage can be substantial. Production is the key driver in determining



the levels of variable costs, as it affects the number of hourly employees and related labor hours. Further, components of energy, supplies and repairs and maintenance costs also increase in connection with higher production volumes.

Generally, when the Company invests capital in facilities and equipment, increased capacity and productivity, along with reduced repair costs, can offset increased fixed depreciation costs. However, when aggregates demand weakens, the increased productivity and related efficiencies may not be fully realized, resulting in under absorption of fixed costs. Further, the aggregates facilities continue to operate at a level significantly below capacity, thereby, restricting the Company's ability to capitalize $36.5 million and $35.7 million of costs at December 31, 2017 and 2016, respectively, in inventories.

The Company's ready mixed concrete and asphalt product lines require the use of raw materials in the production of their products. Cement and liquid asphalt, or bitumen, are key raw materials in the production of ready mixed concrete and asphalt, respectively. Therefore, fluctuations in prices for these raw materials directly affect the Company's operating results. Liquid asphalt prices in 2017 were slightly higher than in 2016, but may not always follow other energy products (e.g., oil or diesel fuel) because of complexities in the refining process which converts a barrel of oil into other fuels and petrochemical products.

The cement product line is a capital-intensive operation with high-fixed costs to run plants that operate all day, every day, with the exception of maintenance shut downs. Kiln maintenance typically requires a plant to be shut down for a period of time as repairs are made. In 2017, 2016 and 2015, the cement product line incurred kiln maintenance costs of $12.6 million, $20.9 million and $26.0 million, respectively. The 2015 expense is inclusive of maintenance costs for the California plant that was divested in fourth quarter 2015. The Company adjusts production levels in anticipation of planned maintenance shut downs.

Diesel fuel represents the single largest component of energy costs for the Building Materials business. The average cost per gallon of diesel fuel was $1.81, $1.96 and $2.05 in 2017, 2016 and 2015, respectively. Pricing in 2016 and 2015 reflects an unfavorable fixed-price agreement which expired on December 31, 2016. Changes in energy costs also affect the prices that the Company pays for related supplies, including explosives, conveyor belting and tires. Further, the Company's contracts of affreightment for shipping products on its rail and waterborne distribution network typically include provisions for escalations or reductions in the amounts paid by the Company if the price of fuel moves outside a stated range.

Wage inflation and increases in labor costs may be somewhat mitigated by enhanced productivity in an expanding economy. Further, workforce reductions resulting from process automation and mobile fleet right-sizing have mitigated rising labor costs. During economic downturns, the Company reviews its operations and, where practical, temporarily idles certain sites. The Company is able to serve these markets with other open facilities that are in close proximity. Further, in certain markets, management can create production "super crews" that work at various locations within a district. For example, within a market, a crew may work three days per week at one quarry and the other two workdays at another quarry within that market. This has allowed the Company to responsibly manage headcount in periods of lower demand.

Rising health care costs continue to affect expenses related to labor and benefits. Over the past five years, national health care costs have increased 6% on average; costs are expected to continue rising at this rate. The Company has

experienced net per-employee health care cost increases averaging less than 5% per year from 2013 through 2017. These lower-than-average increases were driven in large part by favorable claims experience, plan design changes and payroll contribution increases to its health care plans. In 2017, the Company's net health and welfare plan costs per employee decreased about 3% compared with 2016 due in large part to plan changes. For 2018, health and welfare costs are expected to increase approximately 4%, slightly below general marketplace trends. While potential changes to the Affordable Care Act may affect costs in the future, any impact cannot be predicted at this time.

A lower discount rate is expected to increase the Company's pension expense from $37.6 million in 2017 to an estimated $41.3 million in 2018 (see section *Critical Accounting Policies and Estimates – Pension Expense – Selection of Assumptions)*.

The impact of inflation on the Company's businesses has not been significant. Historically, the Company has achieved real pricing growth in periods of inflation based on its ability to increase its selling prices in a normal economic environment. There is a risk of long-lived asset impairment at temporarily-idled locations. The timing of increased demand will determine when these locations are fully reopened. During the time that locations are temporarily idled, the locations' plant and equipment continue to be depreciated. When appropriate, mobile equipment is transferred and used at an open location. As the Company continues to have long-term access to the supply of aggregates reserves and useful lives of equipment are extended, these locations are not impaired. When temporarily-idled locations are reopened, it is typical for equipment repair costs to temporarily increase.

Building Materials Business' Key Considerations

Geography is critically important as products are sourced and sold locally.

The Company's geographic footprint is primarily in attractive markets with strong, underlying growth characteristics, including population growth and/or population density and business and economic diversity, all of which generate demand for construction and the Company's Building Materials products. The majority of the nation's population currently resides in 11 megaregions; the RPA believes 75% of the population will reside in these megaregions by 2050. The Company has a significant presence in five of the megaregions: Texas Triangle, Gulf Coast, Piedmont Atlantic, Front Range and Florida. The Building Materials business' top five sales-generating states are Texas, Colorado, North Carolina, Iowa and Georgia; cumulatively they accounted for 74% of its 2017 net sales by state of destination, four of which are discussed below as part of their respective megaregion. Iowa is discussed below as a top five sales-generating state and, while not part of a megaregion, is an attractive market that has diversified its economy over the past several years. Further, the top ten sales-generating states, which also include Florida, South Carolina, Indiana, Louisiana and Nebraska, accounted for 88% of the Building Materials business' 2017 net sales by state of destination. As South Carolina is part of the Piedmont Atlantic megaregion and Florida is a separate megaregion, they are discussed below in their respective megaregion.

Texas Triangle and Gulf Coast

The Texas Triangle is primarily defined by the anchoring metropolises of Dallas-Fort Worth, San Antonio and Houston. The Texas Triangle's population surged 41% in the 15-year period ending 2015, adding 5.3 million residents. Based on RPA's *America 2050* study performed in 2010, it projects the population in this megaregion will nearly double in the forty-year period ending in 2050, with 70% of the state's population residing here. The Texas Triangle represents a diverse economy, ranging from finance, technology, transportation and goods and services sectors.

Uniquely, Houston, accounting for approximately 3% of the nation's gross domestic product (GDP) and the fourth most populous metropolitan area, is considered part of both the Gulf Coast and the Texas Triangle megaregions. In addition to Houston, cities in the Gulf Coast megaregion include New Orleans and Baton Rouge. The Gulf Coast megaregion's population is expected to exceed 16 million in 2025 and 23 million in 2050. The economy is driven by the energy, chemical and transportation sectors. According to the *Gulf Economic Survival Team,* 16% of the nation's domestic crude oil is supplied by this megaregion, supporting 430,000 jobs and contributing more than $44 billion to the national economy.

The Texas market remains one of the strongest in the United States. According to the Bureau of Economic Analysis, at the end of 2016, the state's GDP comprised nearly 9% of the nation's $19.5 trillion GDP. According to the American

Legislative Exchange Council (ALEC), Texas ranked first in economic performance in 2017, supported by growth in GDP, employment and population. Texas ranks second in the nation in employment growth for the twelve-months ended December 2017, while Dallas-Fort Worth was the top-ranked metro area in the country. Consistent with this trend, from 2010 through 2017, the state added approximately 3.1 million people. The state's Department of Transportation (TxDOT) let $6.2 billion in construction projects in fiscal 2017; TxDOT has a letting budget of $8.0 billion for fiscal 2018. Over the next ten years, TxDOT has committed to letting over $65 billion of projects. Funding for highway construction comes from dedicated sources, including Propositions 1 and 7, as opposed to the use of general funds. Proposition 1, which passed in 2014, takes a portion of the oil and gas severance tax revenues and allocates them to the state highway fund. Proposition 7 is estimated to provide an additional $2.0 billion of annual funding for non-toll roads beginning in fiscal 2018 and further increase after 2019. Further, on November 8, 2016, voters approved $990 million of additional statewide transportation funding, including a $720 million transportation bond in Austin. The strength of the Texas economy extends beyond infrastructure. According to Dodge Data and Analytics (Dodge), for the twelve-months ended December 2017, Texas reported single-family housing starts and permits of 127,000 units and 117,000 units, respectively, ranking first in growth for both metrics.

Piedmont Atlantic

The Piedmont Atlantic megaregion generally follows the Interstate 85/20 corridor, spanning across North Carolina, South Carolina, Georgia, Tennessee and Alabama and including four primary cities: Raleigh, Charlotte, Atlanta and Birmingham. The Piedmont Atlantic is a fast-growing mega-region; however, it is facing challenges, including increased traffic congestion and inadequate infrastructure that accompany a growing population.

North Carolina continues to demonstrate solid economic growth, exceeding the nation's average GDP increase for the past three years. Nationally, North Carolina ranks in the top ten states for job growth for the year ended December 2017 and has also ranked in the top six states for population growth from 2010 to 2017. Private construction is showing strength, with residential housing starts and permits increasing 18% and 16%, respectively, for the year ended December 2017. The infrastructure market has steadily grown, driven in part by the 26-mile expansion of I-77 high-occupancy toll (HOT) lanes, a $655 million, multi-year project supported by the *Transportation Infrastructure Finance and Innovation Act* (TIFIA). This project was specifically designed to address traffic congestion around Charlotte and is expected to be substantially complete in the latter part of 2018. Further, in November 2016, North Carolina voters approved all transportation referendums, totaling $1.2 billion of additional funding.

For the past three years, according to the U.S. Census Bureau, South Carolina ranked in the top ten for population growth. Supported by residential growth, South Carolina ranked 13th in employment gains in 2017. In 2016, former Governor Haley signed S.1258, also known as Act No. 275, allowing up to $4.2 billion to be devoted for highway spending over the next 10 years. South Carolina's 10-year DOT plan includes 1,000 miles of upgrades to rural roads and 140 miles of interstate highways. These are much-needed investments,

as according to the a recent report issued by the American Society of Civil Engineers, the state's infrastructure system is in need of major repair. The report further states that 16% of South Carolina's 76,000 miles of public roads are in poor condition. To fund infrastructure needs, the state passed House Bill 3516 in June 2017, which will increase the state's gas tax $0.02 per gallon per year for six years; this is the state's first gas tax increase in 30 years. The house bill institutes a fee for vehicles that do not consume motor fuel, increases sales tax on vehicle purchases and charges a one-time fee for vehicles transferred from another state and registered in South Carolina. The nonresidential market should continue to benefit from the Port of Charleston almost doubling between 2011 through 2016, making it the ninth-largest port in the United States. Construction on a new $250 million intermodal facility is expected to begin in 2018.

Georgia continues to recover from the Great Recession and, for the twelve-months ended December 2017, ranks fifth in the country for employment growth. Further, population growth has ranked in the top six for the last four years. As a result, residential housing starts increased 16% for the twelve-months ended December 2017. Nonresidential construction improved 24% for the year ended December 2017, as the state continues to attract business expansion and relocation. CyrusOne, which is developing a distribution facility in Douglasville; Nestlé Purina PetCare Co., which is investing in a manufacturing facility and distribution center in Hartwell; and Irving Consumer Products, which is investing in a state-of-the-art tissue manufacturing facility in Macon-Bibb County, will collectively invest nearly $1 billion on these projects and create over 450 new jobs. In January 2016, Governor Nathan Deal announced a comprehensive infrastructure maintenance plan, which includes a $2.2 billion, 18-month project list, and a longer term 10-year plan, representing more than $10 billion in investment. Some elements of the Governor's plan include the addition of toll lanes along the I-285 loop in Atlanta, interchange upgrades for I-20 and I-285 and additional capacity of metro sections of I-75, I-85 and GA 400. Consistent with these plans, the infrastructure construction market continues to expand and will significantly benefit from the passage of a gas tax increase and other funding mechanisms that will add approximately $1 billion, or essentially double, the state's annual construction budget. Further, in 2016, Georgia voters approved five local sales tax increases to provide $4 billion for road and transit projects, spanning a five- to 40-year period. Additionally, the Transportation Special-Purpose Local-Option Sales Tax (T-SPLOST) program is starting to provide benefit in the southern part of Georgia.

Front Range

Extending from the southern portion of Wyoming near Cheyenne, following Interstate 25 through Colorado into New Mexico, incorporating Santa Fe and Albuquerque, the Front Range megaregion is the nation's fastest-growing megaregion. Projections estimate the population to exceed 10 million in 2050, nearly double the 2010 population.

Through strategic acquisitions since 2011, the Company has built a leading position to serve the Front Range, which is home to over 85% of Colorado's population. The Colorado economy includes a diverse economic base, leading to strong employment and population growth. For the twelve-months ended December 2017, Colorado ranked 11th in employment growth. Additionally, 96% of Colorado's population growth from 2010 to 2015 settled along the Front Range. Employment and population are each expected to increase over 45% from 2012 through 2040, driving an upward trend in vehicle miles traveled and higher demand on the state's highway system. Colorado's DOT expects highway project construction to increase $300 million annually over the next five years. With support from the *Responsible Acceleration of Maintenance and Partnerships,* or RAMP, program through fiscal 2018, the Colorado DOT established a budget of $1.6 billion for fiscal 2018. Additionally, Senate Bill 17-267, enacted during 2017, includes a component that focuses on new lease-purchase agreements that is expected to generate $2.0 billion for transportation and capital construction over four years. Further, reconstruction efforts continue from the historic 2013 flooding. Single-family housing starts increased 11% for the twelve-months ended December 2017, ranking ninth in the nation for growth.

Florida

Spanning nearly the entire state, the Florida megaregion is also one of the fastest growing. Florida is the third most populous state according to the Bureau of Economic Analysis, with a high volume of its population growth from foreign residents. In fact, in the fourth quarter 2016, the latest data available, the state's GDP rose 3.1%, outperforming the national growth and other large states. Florida's tourism, agriculture and aerospace

and aviation economies, coupled with its exports and trade sector, collectively, contributed nearly half of the state's 2014 GDP.

Florida is ranked third in the country for job growth for the twelve-months ended December 2017; Orlando and Tampa are both ranked in the top 20 for metro areas. As of the end of 2017, the state's unemployment rate was below 4%. The state also added 2.1 million residents from 2010 to 2017. Florida has a strong DOT budget and continues to significantly invest in streets and highways. In fact, the state has a $46.6 billion five-year construction program that extends to 2021 and is expected to let $10 billion of projects in fiscal 2018. Florida is also experiencing growth in private-sector construction and posted a double-digit increase in single-family housing starts for the twelve-months ended December 2017, ranking second in the country. The nonresidential market also ranks in the top five for increased construction investment.

Iowa

The economy of Iowa has historically been stable and steady, and Iowa has been a top-five Martin Marietta state for decades. Iowa is the largest corn and pork-producing state in the nation and provides more than seven percent of America's food supply. The Company's agricultural lime volumes are dependent on, among other things, weather, demand for agricultural commodities, including corn and soybeans, commodity prices, farm and land values. The Iowa economy has become more diverse over the past several years, in part due to its ranking as sixth in the nation for lowest cost of doing business. The state is attractive for starting and expanding businesses due to enticing tax incentives. Further, Iowa is expected to be fossil fuel independent by 2050, making primarily wind-based energy production cost effective, and providing another driver of economic expansion. With companies including Google, Microsoft and Facebook continuing to expand operations in Iowa, non-residential construction spending is expected to benefit. The unemployment rate, 2.9%, remains one of the lowest in the nation. In 2015, Iowa increased their gas tax by $0.10 per gallon, raising an additional $515 million since enactment for state and local roads and bridges. In 2017, all 99 counties in Iowa have benefitted from the higher gas tax, with new infrastructure projects being started or existing projects expected to be completed sooner than originally estimated.

Growth markets with limited supply of indigenous stone must be served via a long-haul distribution network.

The U.S. Department of the Interior's geological map of the United States depicts the possible sources of indigenous surface rock and illustrates its limited supply in the coastal areas of the United States from Virginia to Texas. Local crushed stone supplies must be supplemented, or in many cases wholly supplied, from inland and offshore quarries proximate to the coastal regions of the southeastern and southwestern United States. Further, certain interior United States markets may experience limited resources of construction material resulting from increasingly restrictive zoning, permitting and/ or environmental laws and regulations.

Product shipments are moved by rail and water through the Company's long-haul distribution network. The Company's rail network primarily serves its Texas, Florida and Gulf Coast markets while the Company's Bahamas and Nova Scotia locations transport materials via oceangoing ships. The Company's strategic focus includes expanding inland and offshore capacity and acquiring distribution yards and port locations to offload transported material. At December 31, 2017, the Company had 81 distribution yards.

The long-haul distribution network can diversify market risk for locations that engage in long-haul transportation of their aggregates products. Particularly where a producing quarry serves a local market and transports products via rail and/or water to be sold in other markets, the risk of a downturn in one market may be somewhat mitigated by other markets served by the location.

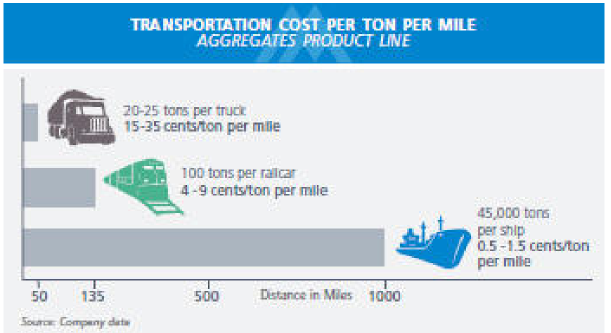
The Company's increased dependence on rail shipments has made it more reliant on railroad performance issues, including track congestion, crew and power availability, the effects of adverse weather conditions and the ability to renegotiate favorable railroad shipping contracts. Further, changes in the operating strategy of rail transportation providers can create operation inefficiencies in and increased costs from the Company's rail network.

A portion of railcars and all ships of the Company's long-haul distribution network are obtained with short- and long-

term leases, some with purchase options, and contracts of affreightment. The limited availability of water and rail transportation providers, coupled with limited distribution sites, can adversely affect lease rates for such services and ultimately the freight rate. The Company has not purchased ships.

The Company has long-term agreements providing dedicated shipping capacity from its Bahamas and Nova Scotia operations to its coastal ports. These contracts of affreightment are take-or-pay contracts with minimum and maximum shipping requirements. The Company's waterborne contracts of affreightment have varying expiration dates ranging from 2023 to 2027 and generally contain renewal options. However, there can be no assurance that such contracts can be renewed upon expiration or that terms will continue without significant increases.

The multiple transportation modes that have been developed with various rail carriers and deep-water ships provide the Company with the flexibility to effectively serve customers primarily in the Southwest and Southeast coastal markets.



Public Infrastructure, the Company's largest end-use market, is funded through a combination of federal, state and local sources.

Public-sector construction projects are funded through a combination of federal, state and local sources. The federal highway bill provides annual funding for public-sector highway construction projects and includes spending authorizations, which represent the maximum financial obligation that will result from the immediate or future outlays of federal funds for highway and transit programs. The federal government's surface transportation programs are financed mostly through the receipts of highway user taxes placed in the Highway Trust Fund, which is divided into the Highway Account and the Mass Transit Account. Revenues credited to the Highway Trust Fund are primarily derived from a federal gas tax, a federal tax on certain other motor fuels and interest on the accounts' accumulated balances. Of the currently imposed federal gas tax of $0.184 per gallon, which has been static since 1993, $0.15 is allocated to the Highway Account of the Highway Trust Fund.

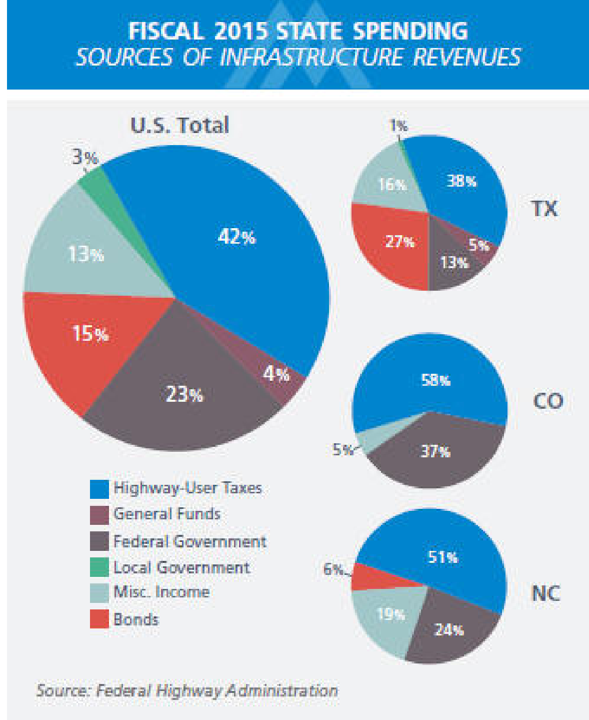
Federal highway laws require Congress to annually appropriate funding levels for highways and other programs. Once the annual appropriation is passed, federal funds are distributed to each state based on formulas (apportionments) or other procedures (allocations). Apportioned and allocated funds generally must be spent on specific programs as outlined in the federal legislation. Most federal funds are available for four years. Once the federal government approves a state project, funds are committed and considered expended regardless of when the cash is actually spent by the state and reimbursed by the federal government. According to the Federal Highway Administration, funds are generally spent by the state over a period of years, with 27% in the year of funding authorization, 41% in the succeeding year, 16% in the third year and the remaining 16% in the fourth year and beyond.

The FAST Act, a five-year, $305 billion federal highway bill, reauthorizes federal highway and public transportation programs and stabilizes the Highway Trust Fund. The FAST Act retains the programs supported under its predecessor legislation, *Moving Ahead for Progress in the 21st Century* (MAP-21), but with some changes. Specifically, TIFIA, a U.S. Department of Transportation alternative funding mechanism,

which under MAP-21 provided three types of federal credit assistance for nationally or regionally significant surface transportation projects, now allows more diversification of projects. TIFIA is designed to fill market gaps and leverage substantial private co-investment by providing projects with supplemental or subordinate debt which is not subject to national debt ceiling challenges or sequestration. Since inception, TIFIA has provided more than $25 billion of credit assistance to over 50 projects representing over $90 billion in infrastructure investment. Under the FAST Act, annual TIFIA funding decreases and ranges from $275 million to $300 million, but no longer requires the 20% matching funds from state DOTs. Consequently, states can advance construction projects immediately with potentially no upfront outlay of state department of transportation dollars. TIFIA requires projects to have a revenue source to pay back the credit assistance within a 30-to-40 year period. Moreover, TIFIA funds may represent up to 49% of total eligible project costs for a TIFIA-secured loan and 33% for a TIFIA standby line of credit. Therefore, the TIFIA program has the ability to significantly leverage construction dollars. Each dollar of federal funds can provide up to $10 in TIFIA credit assistance and support up to $30 in transportation infrastructure investment. Private investment in transportation projects funded through TIFIA is particularly attractive, in part due to the subordination of public investment to private. Management believes TIFIA could provide a substantial boost for state department of transportation construction programs well above what is currently budgeted. As of January 2018, TIFIA-funded projects for the Company's top five sales-generating states approximated $25 billion.

Excluding TIFIA-approved projects, states are required to match funds at a predetermined rate in order to receive federal funds for highways. Matching levels vary depending on the type of project. If a state is unable to match its allocated federal funds, funding is forfeited and reallocated to states providing the appropriate matching funds. Although a significant portion of state highway construction programs are financed from highway user fees, significant increases in federal infrastructure funding typically require state governments to increase highway user fees to match federal spending. While states rarely forfeit federal highway funds, the possibility of forfeiture increases when states face declining tax revenues and struggle to balance budgets.

Given that most states are required to balance their budgets, reductions in revenues generally require a reduction in states' expenditures. However, the impact of state revenue reductions on highway spending will vary depending on whether the spending comes from dedicated revenue sources, such as highway user fees, or whether portions are funded with general funds. Based on national averages, user taxes represent the largest component of highway revenues, averaging 42% in fiscal year 2015, the latest available statistic. The use of general funds as a percentage of each state's highway revenues varies, with a national average of 4% in fiscal year 2015, the latest available statistic. Therefore, state budget spending cuts typically only affect a small percentage of a state's highway spending.



States continue to play an expanding role in infrastructure investment. In addition to federal appropriations, each state funds its infrastructure spending from specifically allocated amounts collected from various user taxes, typically gasoline taxes and vehicle fees. Over the past several years, states have taken on a significantly larger role in funding infrastructure investment, including initiating special-purpose

taxes and raising gas taxes. Management believes that innovative financing at the state level, such as bond issuances, toll roads and tax initiatives, will grow at a faster rate than federal funding. State spending on infrastructure generally leads to increased growth opportunities for the Company. The level of state public-works spending is varied across the nation and dependent upon individual state economies. The degree to which the Company could be affected by a reduction or slowdown in infrastructure spending varies by state. The state economies of the Building Materials business' five largest sales-generating states may disproportionately affect the Company's financial performance.

Governmental appropriations and expenditures are typically less interest rate-sensitive than private-sector spending. Obligations of federal funds is a leading indicator of highway construction activity in the United States. Before a state or local department of transportation can solicit bids on an eligible construction project, it enters into an agreement with the Federal Highway Administration to obligate the federal government to pay its portion of the project cost. Federal obligations are subject to annual funding appropriations by Congress.

The need for surface transportation improvements significantly outpaces the amount of available funding. A large number of roads, highways and bridges built following the establishment of the Interstate Highway System in 1956 are now in need of major repair or reconstruction. According to The Road Information Program (TRIP), a national transportation research group, vehicle travel on United States highways increased 38% from 1990 to 2012, while new lane road mileage increased only 4% over the same period. TRIP also reports that 14% of the nation's major roads are in poor condition and 25% of the nation's bridges are structurally deficient or functionally obsolete. Currently, the Federal Highway Administration estimates that $170 billion is needed in annual capital investment through 2028 to significantly improve the current conditions and performance of the nation's highways. The Company is encouraged by the recent enactment of the 2017 Tax Act and its long-term benefits for both Martin Marietta and the industry. Importantly, passage of this legislation provides positive momentum in Washington D.C. to hopefully address the shortfall in sustainable funding commensurate with the nation's need for infrastructure investment. Any such measures will require Congressional approval. Additionally, the recent release of President Trump's Legislative Outline for Rebuilding Infrastructure in America provides additional momentum, increasing the likelihood that both infrastructure funding will be increased and regulatory burdens will be lightened. While state DOTs and contractors are slowly addressing their labor constraints, the Company believes that were an enhanced infrastructure bill enacted, those efforts would be more rapidly addressed. However, even in the absence of an enhanced infrastructure bill, strong customer confidence and improving sentiment leads management to believe that infrastructure activity for 2018 and beyond should benefit from the FAST Act, the 2017 Tax Act, and additional state and local infrastructure initiatives.

Transportation investments generally boost the national economy by enhancing mobility and access and by creating jobs, which is a priority of many of the government's economic plans. According to the Federal Highway Administration, every $1 billion in federal highway investment creates approximately 28,000 jobs. The number of jobs created is dependent on the nature and aggregates intensity of the projects. Approximately half of the Building Materials business' total revenues to the infrastructure market come from federal funding authorizations, including matching funds from the states. For each dollar spent on road, highway and bridge improvements, the Federal Highway Administration estimates an average benefit of $5.20 is recognized in the form of reduced vehicle maintenance costs, reduced delays, reduced fuel consumption, improved safety, reduced road and bridge maintenance costs and reduced emissions as a result of improved traffic flow.

In addition to highways and bridges, transportation infrastructure includes aviation, mass transit, and ports and waterways. Public-sector construction related to transportation infrastructure can be aggregates intensive.

According to the *American Road and Transportation Builders Association* (ARTBA), spending on airport terminals and related work was $11.7 billion and runway work was $3.6 billion during 2017; spending is forecasted to increase 14% in 2018.

Construction spending for mass transit projects, which include subways, light rail and railroads, was $20.3 billion in 2017, according to ARTBA, and is expected to increase 5% in 2018. Railroad construction continues to benefit from economic growth, which generates need for additional maintenance and improvements. According to ARTBA,

subway and light rail work is expected to benefit slightly from the FAST Act.

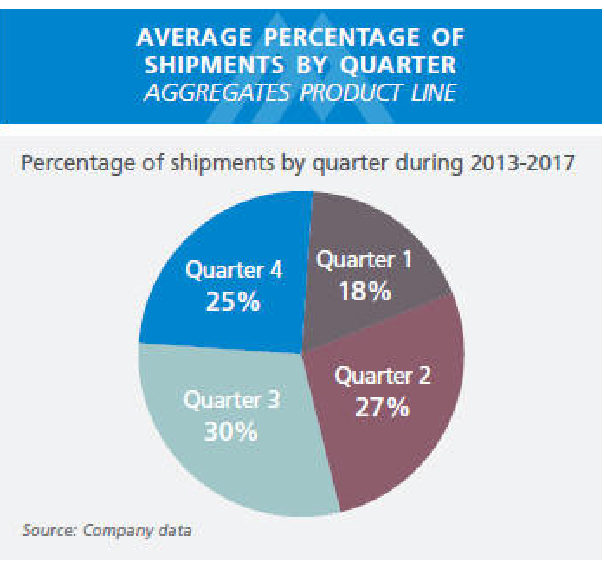
Port and waterway construction spending, according to ARTBA, was $1.8 billion in 2017 and is forecasted to be flat in 2018.

Erratic weather can significantly impact operations.

Climate change is defined as a change in global or regional climate patterns. Changes to the climate have been occurring for centuries due to minor shifts in the Earth's orbit, ultimately changing the amount of solar energy received. More recently, however, this rate of change has accelerated and climate change is considered a leading cause of erratic weather. Production and shipment levels for the Building Materials business correlate with general construction activity, most of which occurs outdoors and, as a result, is affected by erratic weather, seasonal changes and other weather-related conditions which can significantly affect the business.

Excessive rainfall jeopardizes production, shipments and profitability in all markets served by the Company. In particular, the Company's operations in the southeastern and Gulf Coast regions of the United States and the Bahamas are at risk for hurricane activity, most notably in August, September and October. Nationally, 2017 marked the 20th-wettest year on record, and the fifth consecutive year with above-average precipitation. The last few years have brought an unprecedented amount of precipitation to the United States and, particularly, to Texas. In fact, 2015 set a new rainfall record for Texas; the 24-month period ending September 2016 set a new two-year record for the state, with an average annual rainfall of 75 inches. Hurricane Harvey, a Category 4 storm that made landfall in Houston in August 2017, brought nearly 20 trillion gallons of precipitation. In the Southeast, Hurricane Irma, also a Category 4 storm, made landfall in Florida in September 2017 and brought excessive rainfall to the southeastern United States, notably Florida and Georgia. Additionally, in 2017, Colorado experienced its fifteenth wettest nine-months for the period January through September. In October 2016, rainfall along the eastern seaboard of the United States from Hurricane Matthew, a Category 5 hurricane, approximated 13.6 trillion gallons. Hurricane Matthew was the first major hurricane on record to make landfall in the Bahamas.

NOAA reports that since 1895, the contiguous United States has experienced an average temperature increase of 1.5°F per century, with 2017 averaging 2.6°F above the 20th century average and marking it the third-warmest year on record, behind 2012 and 2016. In fact, 2017 marked the 21st consecutive warmer-than-average year for the contiguous United States, and five states, including North Carolina and South Carolina, had a record year. Temperature plays a significant role in the months of March and November, meaningfully affecting the Company's first- and fourth-quarter results, respectively. Warm and/or moderate temperatures in March and November allow the construction season to start earlier and end later, respectively. In 2017, the nation experienced the ninth-warmest March on record while Colorado and Texas reported its warmest and its second-warmest March, respectively. The weather was also favorable in November 2017, as Colorado set another record and Texas reported its fifth-warmest November.



Capital investment decisions driven by capital intensity of the Building Materials business and focus on land.

The Company's organic capital program is designed to take advantage of construction market growth through investment in both permanent and portable facilities at the Company's operations. Over an economic cycle, the Company typically invests organic capital at an annual level that approximates depreciation expense. At mid-cycle and through cyclical peaks, organic capital investment typically exceeds depreciation expense, as the Company supports current capacity needs and invests for future capacity growth. Conversely, at a cyclical trough, the Company can

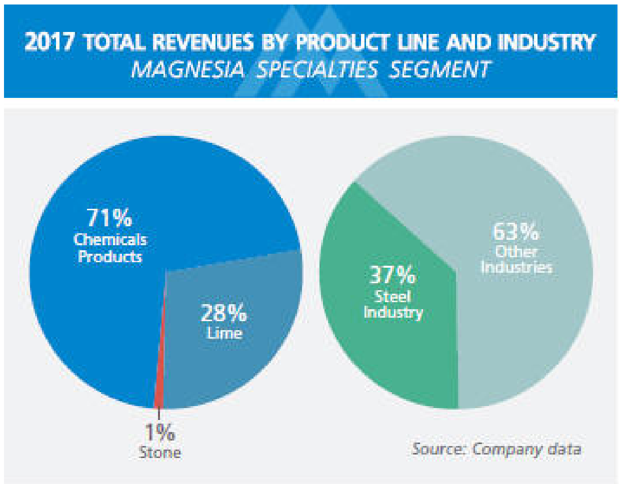
reduce levels of capital investment. Regardless of cycle, the Company sets a priority of investing capital to ensure safe, environmentally-sound and efficient operations and to provide the highest quality of customer service and establish a foundation for future growth.

The Company is diligent in its focus on land opportunities, including greensites and expanding locations. Land purchases are usually opportunistic and require the Company to be flexible in its ability to secure the land. Land purchases can include contiguous property around existing quarry locations. This property can serve as buffer property or additional mineral reserve capacity, assuming regulatory hurdles can be cleared and the underlying geology supports economical aggregates mining. In either instance, the acquisition of additional property around an existing quarry allows the expansion of the quarry footprint and extension of quarry life.

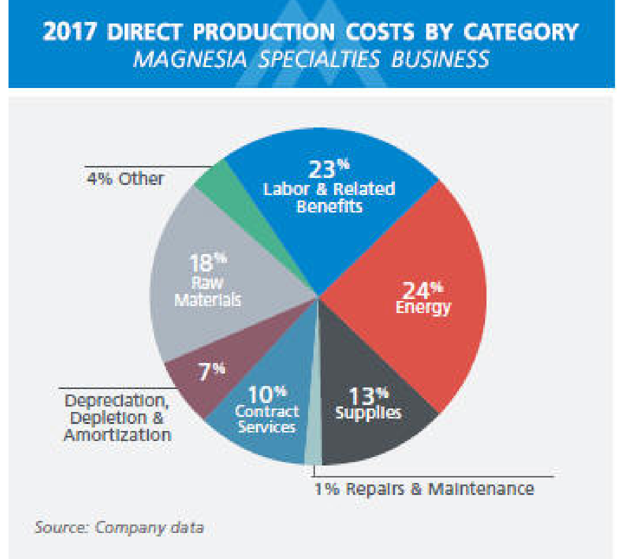
Magnesia Specialties Business

The Magnesia Specialties business produces and sells dolomitic lime from its Woodville, Ohio facility. Additionally, at its Manistee, Michigan facility, Magnesia Specialties manufactures magnesia-based chemicals products for industrial, agricultural and environmental applications. In 2017, this business achieved record total revenues and earnings from operations of $270.0 million and $79.4 million, respectively. Of 2017 total revenues, 71% were attributable to chemicals products, 28% were attributable to lime and 1% was attributable to stone.

In 2017, 82% of the lime produced was sold to third-party customers, while the remaining 18% was used internally as a raw material for the business' manufacturing of chemicals products. Dolomitic lime products sold to external customers are primarily used by the steel industry, and overall, 37% of Magnesia Specialties' 2017 total revenues related to products used in the steel industry. Accordingly, a portion of the segment's revenues and profits is affected by production and inventory trends within the steel industry, which are guided by the rate of consumer consumption, the flow of offshore imports and other economic factors. Average steel production in 2017 increased 4.3% versus 2016. The dolomitic lime business runs most profitably at 70% or greater steel capacity utilization; domestic capacity utilization averaged 74% in 2017. The chemical products business focuses on higher-margin specialty chemicals that can be produced at volumes that support efficient operations.



Total revenues of the Magnesia Specialties business in 2017 were predominantly from North America, but a small amount was derived from overseas. No single foreign country accounted for 10% or more of the total revenues for the Company. Financial results can be affected by foreign currency exchange rates, increasing transportation costs or weak economic conditions in the foreign markets. To mitigate the short-term effect of currency exchange rates, foreign transactions are denominated in United States dollars. However, the current strength of the United States dollar in foreign markets is affecting the overall price of Magnesia Specialties' products when compared to foreign-domiciled competitors.



A significant portion of the Magnesia Specialties business' costs related to the production of dolomitic lime and magnesia chemicals products is of a fixed or semi-fixed nature. The production process requires the use of natural gas, coal and petroleum coke. Therefore, fluctuations in their pricing directly affect operating results. To help mitigate this risk, the Company has fixed price agreements for 100% of its 2018 coal needs, approximately 33% of its 2018 natural gas needs and 100% of its 2018 petroleum coke needs. For 2017, the Company's average cost per MCF (thousand cubic feet) for natural gas increased 33% over 2016. Given high fixed costs, low capacity utilization can negatively affect the segment's results of operations. Management expects future organic growth to result from increased pricing, rationalization of the current product portfolio and/or further cost reductions.

The Magnesia Specialties business is highly dependent on rail transportation, particularly for movement of dolomitic lime from Woodville to Manistee and direct customer shipments of dolomitic lime and magnesia chemicals products from both Woodville and Manistee. The segment can be affected by the risks mentioned in the long-haul distribution discussion in the *Building Materials Business' Key Considerations* section. All of Magnesia Specialties' hourly workforce belongs to a labor union. Union contracts cover hourly employees at the Manistee, magnesia-based chemicals plant and the Woodville, lime plant. The labor contracts for the Woodville and Manistee locations expire in May 2018 and August 2019, respectively.

Environmental Regulation and Litigation

The expansion and growth of the aggregates industry is subject to increasing challenges from environmental and political advocates aiming to control the pace and direction of future development. Certain environmental groups have published lists of targeted municipal areas, including areas within the Company's marketplace, for environmental and suburban growth control. The effect of these initiatives on the Company's growth is typically localized. Further challenges are expected as the momentum of these initiatives ebb and flow across the United States. Rail and other transportation alternatives are being heralded by these special-interest groups as solutions to mitigate road traffic congestion and overcrowding.

The Company's operations are subject to and affected by federal, state and local laws and regulations relating to the environment, health and safety and other regulatory matters. Certain of the Company's operations may occasionally use substances classified as toxic or hazardous. The Company regularly monitors and reviews its operations, procedures and policies for compliance with these laws and regulations. Despite these compliance efforts, risk of environmental liability is inherent in the operation of the Company's businesses, as it is with other companies engaged in similar businesses.

Environmental operating permits are, or may be, required for certain of the Company's operations; such permits are subject to modification, renewal and revocation. New permits are generally required for opening new sites or for expansion at existing operations and can take several years to obtain. In the area of land use, rezoning and special or conditional use permits are increasingly difficult to obtain. Once a permit is issued, the location is required to generally operate in accordance with the approved site plan.

As is the case with others in the cement industry, the Company's cement operations produce varying quantities of cement kiln dust (CKD). This production by-product consists of fine-grained, solid, highly alkaline material removed from cement kiln exhaust gas by air pollution control devices. Because much of the CKD is actually unreacted raw materials, it is generally permissible to recycle the CKD back into the production process, and large amounts are often treated in such manner. CKD that is not returned to the production process is disposed in landfills. CKD is currently exempted from federal hazardous waste regulations under Subtitle C of the Resource Conservation and Recovery Act (RCRA).

The Clean Air Act, originally passed in 1963 and periodically updated by amendments, is the United States' national air pollution control program that granted the Environmental Protection Agency (EPA) authority to set limits on the level of various air pollutants. To be in compliance with National Ambient Air Quality Standards (NAAQS), a defined geographic area must be below established limits for six pollutants. Environmental groups have been successful in lawsuits against the federal and certain state departments of transportation, delaying highway construction in municipal areas not in compliance with the Clean Air Act. The EPA designates geographic areas as nonattainment areas when the level of air pollutants exceeds the national standard.

Nonattainment areas receive deadlines to reduce air pollutants by instituting various control strategies or otherwise face fines or control by the EPA. Included as nonattainment areas are several major metropolitan areas in the Company's markets, such as Houston/Brazoria/Galveston, Texas; Dallas/Fort Worth, Texas; Denver, Colorado; Boulder, Colorado; Fort Collins/Greeley/ Loveland, Colorado; Council Bluffs, Iowa; Atlanta, Georgia; and Indianapolis, Indiana. Federal transportation funding has been directly tied to compliance with the Clean Air Act.

The EPA includes the lime industry as a national enforcement priority under the Clean Air Act. As part of an industry-wide effort, the EPA issued notices of violation/findings of violation (NOVs) to the Company in 2010 and 2011 regarding its compliance with the Clean Air Act's New Source Review (NSR) program at its Magnesia Specialties dolomitic lime manufacturing plant in Woodville, Ohio. The Company has been providing information to the EPA in response to these NOVs and has had several meetings with the EPA. Although, the Company believes it is in substantial compliance with the NSR program, it anticipates that it will reach a settlement of this matter with the EPA. The Company believes that any costs related to any required upgrades to capital equipment will be spread over time and that those costs and any related penalties will not have a material adverse effect on the Company's results of operations or its financial condition.

Large emitters (facilities that emit 25,000 metric tons or more per year) of greenhouse gases (GHG) must report GHG generation to comply with the EPA's Mandatory Greenhouse Gases Reporting Rule (GHG Rule). The Company files annual reports in accordance with the GHG Rule relating to operations at its Magnesia Specialties facilities in Woodville, Ohio, and Manistee, Michigan, as well as the two cement plants in Texas, each of which emit certain GHG, including carbon dioxide, methane and nitrous oxide. If Congress passes legislation on GHG, these operations will likely be subject to the new program. Under President Trump's administration, it is unknown whether the EPA is likely to impose additional regulatory restrictions on emissions of GHG. However, the Company believes that any increased operating costs or taxes related to GHG emission limitations at its Woodville or cement operations would be passed on to its customers. The Manistee facility may have to absorb extra costs due to the regulation of GHG emissions in order to maintain competitive pricing in its markets. The Company cannot reasonably predict how much those increased costs may be.

The Company is engaged in certain legal and administrative proceedings incidental to its normal business activities. In the opinion of management and counsel, based upon currently available facts, the likelihood is remote that the ultimate outcome of any litigation or other proceedings, including those pertaining to environmental matters, relating to the Company and its subsidiaries, will have a material adverse effect on the overall results of the Company's operations, cash flows or financial position.

FINANCIAL OVERVIEW

By nearly all meaningful measures, 2017 was an extraordinary year for Martin Marietta. The Company delivered record revenues, profitability and earnings per diluted share for the full year. Even more noteworthy, the Company achieved these results despite the externally-driven volume headwinds previously discussed. These headwinds, including erratic weather, government uncertainty and tight labor markets, were prevalent throughout much of the year.

Highlights of 2017 Financial Performance
(all comparisons are versus 2016)

- *Record earnings per diluted share of $11.25 compared with $6.63; 2017 includes $4.07 per diluted share benefit from the provisional assessment of the 2017 Tax Act*
  - *Even excluding the provisional benefits of the 2017 Tax Act, record earnings per diluted share achieved*
- *Record net earnings attributable to Martin Marietta of $713.3 million, an increase of 68%, inclusive of a $258.1 million one-time income tax benefit from the provisional remeasurement of deferred tax assets and liabilities following enactment of the 2017 Tax Act*
- *Record consolidated EBITDA of $1.00 billion compared with $971.6 million*
- *Record consolidated total revenues of $3.97 billion compared with $3.82 billion, an increase of 3.8%*
- *Aggregates product line pricing increase of 4.5%; aggregates product line volume decline of 0.6%*
- *Cement product line total revenues of $384.1 million and gross profit of $117.3 million*
- *Magnesia Specialties total revenues of $270.0 million, a record, and gross profit of $89.4 million*
- *Record consolidated earnings from operations of $700.4 million compared with $677.3 million, a 3.4% increase*

Results of Operations

The discussion and analysis that follow reflect management's assessment of the financial condition and results of operations of the Company and should be read in conjunction with the audited consolidated financial statements. As discussed in more detail herein, the Company's operating results are highly dependent upon activity within the construction marketplace, economic cycles within the public and private business sectors and seasonal and other weather-related conditions. Accordingly, financial results for any year presented, or year-to-year comparisons of reported results, may not be indicative of future operating results.

The Company's Building Materials business generated the majority of consolidated total revenues and consolidated earnings from operations. The following comparative analysis and discussion should be read within this context. Further, sensitivity analysis and certain other data are provided to enhance the reader's understanding of Management's Discussion and Analysis of Financial Condition and Results of Operations and are not intended to be indicative of management's judgment of materiality.

The Company's consolidated operating results and operating results as a percentage of net sales are as follows:

years ended December 31 (add 000, except for % of net sales)	**2017**	**% of Total revenues**	2016	% of Total revenues	2015	% of Total revenues
Net sales	$3,721,428		$ 3,576,767		$ 3,268,116	
Freight and delivery revenues	244,166		241,982		271,454	
Total revenues	**3,965,594**	**100.0%**	**3,818,749**	**100.0%**	**3,539,570**	**100.0%**
Cost of sales	2,749,488		2,665,029		2,541,196	
Freight and delivery costs	244,166		241,982		271,454	
Total cost of revenues	2,993,654	75.5	2,907,011	76.1	2,812,650	79.5
Gross profit	**971,940**	**24.5**	**911,738**	**23.9**	**726,920**	**20.5**
Selling, general and administrative expenses	262,128	6.6	241,606	6.3	210,754	6.0
Acquisition related expenses	8,638		909		6,346	
Other operating expenses and (income), net	793		(8,043)		15,653	
Earnings from operations	**700,381**	**17.7**	**677,266**	**17.7**	**494,167**	**14.0**
Interest expense	91,487		81,677		76,287	
Other nonoperating (income) and expenses, net	(10,034)		(11,439)		4,079	
Earnings before income tax (benefit) expense	618,928		607,028		413,801	
Income tax (benefit) expense	(94,457)		181,584		124,863	
Consolidated net earnings	**713,385**	**18.0**	**425,444**	**11.1**	**288,938**	**8.2**
Less: Net earnings attributable to noncontrolling interests	43		58		146	
Net Earnings Attributable to Martin Marietta	**$ 713,342**	**18.0%**	**$ 425,386**	**11.1%**	**$ 288,792**	**8.2%**

EBITDA is a widely accepted financial indicator of a company's ability to service and/or incur indebtedness. EBITDA is not defined by generally accepted accounting principles (GAAP) and, as such, should not be construed as an alternative to net earnings or operating cash flow. Management utilizes EBITDA as a meaningful measure of the Company's operating performance. Additionally, management presents EBITDA to provide investors additional information with regard to the Company's ability to meet working capital requirements, service debt and return capital to its shareholders.

The following table presents a reconciliation of net earnings attributable to Martin Marietta to consolidated EBITDA:

Consolidated EBITDA

years ended December 31 (add 000)	2017	2016	2015
Net earnings attributable to Martin Marietta	**$ 713,342**	$ 425,386	$ 288,792
Add back (deduct):			
Interest expense	91,487	81,677	76,287
Income tax (benefit) expense for controlling interests	(94,401)	181,524	124,793
Depreciation, depletion and amortization expense	**293,951**	283,003	260,836
Consolidated EBITDA	**$ 1,004,379**	$ 971,590	$ 750,708

Total Revenues

Total revenues by reportable segment are as follows:

years ended December 31 (add 000)	2017	2016	2015
Building Materials Business:			
Mid-America Group	**$ 1,053,325**	$ 1,017,098	$ 926,251
Southeast Group	**362,555**	321,078	304,472
West Group	**2,279,723**	2,223,515	2,062,968
Total Building Materials Business	**3,695,603**	3,561,691	3,293,691
Magnesia Specialties	**269,991**	257,058	245,879
Total Consolidated Revenues	**$ 3,965,594**	$ 3,818,749	$ 3,539,570

Total revenues by product line are as follows:

years ended December 31 (add 000)	2017	2016	2015
Building Materials Business:			
Aggregates	**$ 2,341,540**	$ 2,267,574	$ 2,120,245
Cement	**384,112**	375,814	475,725
Ready Mixed Concrete	**936,979**	903,803	657,831
Asphalt and Paving Services	**296,956**	261,612	229,561
Less: Interproduct revenues	**(263,984)**	(247,112)	(189,671)
Total Building Materials Business	**3,695,603**	3,561,691	3,293,691
Magnesia Specialties	**269,991**	257,058	245,879
Total Consolidated Revenues	**$ 3,965,594**	$ 3,818,749	$ 3,539,570

Net Sales

Net sales by reportable segment are as follows:

years ended December 31 (add 000)	2017	2016	2015
Building Materials Business:			
Mid-America Group	**$ 982,109**	$ 945,123	$ 851,854
Southeast Group	**348,409**	304,451	285,302
West Group	**2,142,839**	2,089,192	1,903,452
Total Building Materials Business	**3,473,357**	3,338,766	3,040,608
Magnesia Specialties	**248,071**	238,001	227,508
Total Consolidated Net Sales	**$ 3,721,428**	$ 3,576,767	$ 3,268,116

Net sales by product line for the Company are as follows:

years ended December 31 (add 000)	2017	2016	2015
Building Materials Business:			
Aggregates	**$ 2,137,225**	$ 2,060,876	$ 1,896,143
Cement	**371,525**	364,445	455,382
Ready Mixed Concrete	**936,062**	902,635	656,531
Asphalt and Paving Services	**292,529**	257,922	222,223
Less: Interproduct sales	**(263,984)**	(247,112)	(189,671)
Total Building Materials Business	**3,473,357**	3,338,766	3,040,608
Magnesia Specialties	**248,071**	238,001	227,508
Total Consolidated Net Sales	**$ 3,721,428**	$ 3,576,767	$ 3,268,116

Aggregates Product Line. Aggregates product line average selling price increases are as follows:

years ended December 31	2017	2016	2015
Mid-America Group	**5.0%**	4.3%	4.7%
Southeast Group	**8.7%**	7.1%	5.4%
West Group	**1.7%**	10.6%	13.5%
Aggregates Product Line	**4.5%**	7.3%	8.0%

The average selling price per ton for the aggregates product line was $13.46, $12.88 and $12.00 for 2017, 2016 and 2015, respectively.

In 2017, 2016 and 2015, the average selling price increase exceeded the Company's 20- and 30-year compounded annual growth rate for the period ended December 31, 2017 of 4.3% and 3.6%, respectively.

The following presents aggregates product line shipments for each reportable segment of the Building Materials business:

years ended December 31 Tons (add 000)	2017	2016	2015
Mid-America Group	**72,539**	73,060	68,611
Southeast Group	**20,429**	19,396	19,479
West Group	**64,730**	66,170	68,332
Building Materials Business	**157,698**	158,626	156,422

Aggregates product line shipments sold externally to customers and tons used in other product lines are as follows:

years ended December 31 Tons (add 000)	2017	2016	2015
Tons to external customers	**146,818**	148,198	147,197
Internal tons used in other product lines	**10,880**	10,428	9,225
Total Aggregates Tons	**157,698**	158,626	156,422

Aggregates product line volume variance by reportable segment is as follows:

years ended December 31	2017	2016	2015
Mid-America Group	**(0.7%)**	6.5%	5.6%
Southeast Group	**5.3%**	(0.4%)	6.5%
West Group	**(2.2%)**	(3.2%)	8.6%
Aggregates Product Line	**(0.6%)**	1.4%	7.1%

2017 shipments reflect strength in private sector construction offset by underinvestment in public infrastructure. Rainfall negatively affected shipments in 2017, notably in the southwestern United States, which experienced the fourth-wettest year for this region in recorded history. Additionally, shipment volumes were suppressed by project delays, customer- and Department of Transportation-related labor constraints and government uncertainty. Notwithstanding these headwinds, the Southeast Group's 5.3% increase in shipments demonstrates the underlying strength of the Georgia and Florida markets. Volumes in 2016 were hindered by significant rainfall; certain infrastructure project delays, notably in Texas; a reduction in energy-sector shipments resulting from lower oil prices; and lower ballast shipments resulting from reduced activity on railroads. Aggregates product line volume strength in the Mid-America Group in 2016, relative to the other groups, was due to steady economic improvement, which drove growth in office, retail, industrial and residential development in North Carolina and South Carolina.

Cement, Ready Mixed Concrete, Asphalt and Paving Services. The Company's cement and downstream operations, namely ready mixed concrete, asphalt and paving services, are located in the West Group, notably in the high-growth states of Texas and Colorado.

Average selling prices for cement, ready mixed concrete and asphalt are as follows:

years ended December 31	2017	2016	2015
Cement - per ton	**$ 105.97**	$ 101.96	$ 98.35
Ready Mixed Concrete - per cubic yard	**$ 107.27**	$ 104.26	$ 96.28
Asphalt - per ton	**$ 43.41**	$ 39.20	$ 42.57

Unit shipments for cement, ready mixed concrete and asphalt are as follows:

years ended December 31 (add 000)	2017	2016	2015
Cement Product Line:			
Tons to external customers	**2,271**	2,331	3,667
Internal tons used in ready mixed concrete	**1,196**	1,194	891
Total cement tons	**3,467**	3,525	4,558
Ready Mixed Concrete – cubic yards	**8,559**	8,490	6,707
Asphalt Product Line:			
Tons to external customers	**1,123**	1,023	1,220
Internal tons used in paving operations	**2,167**	2,131	1,697
Total asphalt tons	**3,290**	3,154	2,917

Cement shipments in 2017 and 2016 were negatively affected by significant amounts of precipitation in Texas. Shipments in 2015 include the divested California operations, which accounted for 1.1 million tons prior to being sold on September 30, 2015.

The increases in ready mixed concrete and asphalt shipments are primarily attributable to market strength and more favorable weather in the Front Range region of Colorado. Ready mixed concrete shipments also reflect an acquisition in Colorado in the first quarter of 2016 and the buyout of the majority interest in a joint venture in Texas in the third quarter of 2016.

Magnesia Specialties. Magnesia Specialties' record total revenues of $270.0 million increased 5.0% compared with 2016, primarily attributable to volume increases in the chemicals product line. Total revenues of $257.1 million in 2016 increased 4.5% compared with 2015.

Freight and Delivery Revenues and Costs

Freight and delivery revenues and costs represent pass-through transportation costs incurred when the Company directly ships products from a production location to a customer by arranging for a third-party carrier to deliver the products and then charging the freight costs to the customer. These freight and delivery revenues and costs are separately presented in the consolidated statements of earnings. Such revenues and costs were $244.2 million, $242.0 million and $271.5 million in 2017, 2016 and 2015, respectively.

Cost of Sales

Cost of sales increased 3.2% in 2017 and 4.9% in 2016, both compared with the prior year and attributable to the 3.8% and 7.9% increases in total revenues, respectively. Significant precipitation hindered production efficiencies and negatively affected operating leverage, resulting in a slight increase in aggregates product line direct production cost per ton for 2017 versus 2016. On average, the Company paid $1.81 per gallon of diesel fuel in 2017 compared with $1.96 in 2016. The 2016 cost per gallon reflects a fixed-price commitment for approximately 40% of the Company's diesel consumption throughout the year. The fixed price was, on average, $0.30 per gallon higher than the spot rate for the majority of the contract period. The diesel contract was not renewed for 2017.

Aggregates product line direct production cost per ton shipped for 2016 increased 3.8% compared with 2015, reflecting higher depreciation costs related to the Medina Rock and Rail capital project completed in central Texas at the end of 2015 and higher contract services for grading, drilling and short-term equipment rentals.

Cost of sales also includes internal freight costs incurred when the Company transports aggregates, either by rail or water, from a production location to a distribution yard. These freight costs are included in the Building Materials business' cost of sales and were $250.7 million, $242.2 million and $218.8 million for 2017, 2016 and 2015, respectively.

Gross Profit

Gross profit (loss) by product line is as follows:

years ended December 31 (add 000)	2017	2016	2015
Building Materials Business:			
Aggregates	**$ 601,968**	$ 558,318	$ 470,688
Cement	**117,313**	120,201	103,813
Ready Mixed Concrete	**91,670**	99,042	42,110
Asphalt and Paving Services	**64,680**	53,075	35,417
Total Building Materials Business	**875,631**	830,636	652,028
Magnesia Specialties	**89,399**	89,603	79,057
Corporate	**6,910**	(8,501)	(4,165)
Total Consolidated Gross Profit	**$ 971,940**	$ 911,738	$ 726,920

The following presents a rollforward of the Company's consolidated gross profit:

years ended December 31 (add 000)	2017	2016
Consolidated gross profit, prior year	**$ 911,738**	$ 726,920
Aggregates product line:		
Pricing	**93,727**	138,286
Volume	**(17,951)**	26,446
Production costs	**(30,014)**	(60,270)
Internal freight costs	**(6,793)**	(22,193)
Other costs, net	**4,681**	5,361
Change in aggregates product line gross profit	**43,650**	87,630
Cement and downstream operations	**1,345**	90,978
Magnesia Specialties	**(204)**	10,546
Corporate	**15,411**	(4,336)
Change in consolidated gross profit	**60,202**	184,818
Consolidated gross profit, current year	**$ 971,940**	$ 911,738

The growth in gross profit in 2017 and 2016, both as compared with the prior year, reflects pricing strength and disciplined cost management, led by the aggregates product line. The improvement in the cement and downstream operations gross profit in 2016 is due to acquisitions, positive market dynamics, operational improvements and refunds/rebates from electrical providers. The increase in Magnesia Specialties gross profit in 2016 is attributable to increased chemical sales, a decline in natural gas pricing and effective cost control.

The change in internal freight costs from 2015 to 2016 reflects increased shipments by rail to distribution yards, coupled with increased costs from rail service providers.

Corporate gross profit (loss) includes depreciation on capitalized interest, unallocated operational expenses excluded from the Company's evaluation of business segment performance and intercompany royalty and rental revenue and expenses. For 2016, the amount includes the negative variance between the contractual rate in the diesel fuel fixed-price agreement and the spot rate. The 2017 increase in gross profit is primarily attributable to the absence of the unfavorable diesel fuel contract in place in 2016 and 2015.

Gross profit (loss) by reportable segment is as follows:

years ended December 31 (add 000)	2017	2016	2015
Building Materials Business:			
Mid-America Group	**$ 335,394**	$ 306,560	$ 257,002
Southeast Group	**74,642**	57,286	34,359
West Group	**465,595**	466,790	360,667
Total Building Materials Business	**875,631**	830,636	652,028
Magnesia Specialties	**89,399**	89,603	79,057
Corporate	**6,910**	(8,501)	(4,165)
Total Consolidated Gross Profit	**$ 971,940**	$ 911,738	$ 726,920

Gross margin by reportable segment is as follows:

years ended December 31 (add 000)	2017	2016	2015
Mid-America Group	**31.8%**	30.1%	27.7%
Southeast Group	**20.6%**	17.8%	11.3%
West Group	**20.4%**	21.0%	17.5%
Total Building Materials Business	**23.7%**	23.3%	19.8%
Magnesia Specialties	**33.1%**	34.9%	32.2%
Total Consolidated	**24.5%**	23.9%	20.5%

Gross margin improvement for the Building Materials business reflects pricing strength across all product lines and management's effective cost discipline.

Magnesia Specialties business' 2017 gross margin decline is due to higher maintenance and contract services costs, coupled with an increase in natural gas prices. The increase in 2016 is attributable to increased operating leverage attributable to effective cost management.

Selling, General and Administrative Expenses

SG&A expenses for 2017 were 6.6% of total revenues, an increase of 30 basis points, and reflect higher personnel and share-based compensation costs. In 2016, SG&A expenses increased 30 basis points over 2015, reflecting higher performance-based incentive compensation costs.

Acquisition-Related Expenses

The Company incurred business development and acquisition integration costs (collectively "acquisition-related expenses") in connection with its strategic growth plan. In 2017, these expenses were related primarily to the pending Bluegrass acquisition. In 2015, these costs were principally TXI integration costs.

Other Operating Expenses and (Income), Net

Other operating expenses and income, net, are comprised generally of gains and losses on the sale of assets; gains and losses related to certain customer accounts receivable; rental, royalty and services income; accretion expense, depreciation expense and gains and losses related to asset retirement obligations. These net amounts represented an expense of $0.8 million in 2017, income of $8.0 million in 2016 and an expense of $15.7 million in 2015. The 2017 amount primarily reflects $19.4 million of gains on the sale of assets, offset by $12.7 million of nonrecurring repair costs related to certain of the Company's leased railcars and approximately $10.8 million of executive retirement expense. The net expense for 2015 reflects the net impact of sales of the California cement operations and the San Antonio asphalt operations.

Earnings from Operations

Consolidated earnings from operations were $700.4 million, $677.3 million and $494.2 million in 2017, 2016 and 2015, respectively.

Interest Expense

Interest expense of $91.5 million in 2017 increased $9.8 million over 2016, reflecting the issuance of additional debt during 2017 in anticipation of closing the Bluegrass acquisition and maturity of the $300 million 6.6% Senior Notes due in April 2018. In 2016, interest expense of $81.7 million increased $5.4 million over 2015 due to an increase in average debt outstanding, coupled with an increase in variable interest rates in 2016.

Other Nonoperating (Income) and Expenses, Net

Other nonoperating income and expenses, net, are comprised generally of interest income; foreign currency transaction gains and losses; pension and postretirement benefit cost, excluding service cost; and net equity earnings from nonconsolidated investments. Consolidated other nonoperating income and expenses, net, was income of $10.0 million and $11.4 million, in 2017 and 2016, respectively. The income in 2017 reflects increased earnings from nonconsolidated investments. The 2016 income includes the gain from the remeasurement of an interest held in a joint venture due to the purchase of the remaining interest. Other nonoperating expense, net, for 2015 was a $4.1 million expense, which reflects higher pension expense compared with 2016.

Income Tax (Benefit) Expense

On December 22, 2017, the President signed the 2017 Tax Act into law. As a result, the Company remeasured its deferred tax assets and liabilities as of the enactment date at the new statutory corporate income tax rate of 21% and recorded a provisional one-time income tax benefit of $258.1 million. For 2018, the Company anticipates that the effective tax rate will be 20% to 22%, which is lower than the historical rate, and estimates additional earnings and cash flow of approximately $95 million. In December 2017, the Securities and Exchange Commission (SEC) issued guidance to address the application of authoritative tax accounting guidance in situations where companies do not have the necessary information available, prepared or analyzed in reasonable detail to complete the accounting for certain income tax effects of the 2017 Tax Act for the reporting period in which the 2017 Tax Act was enacted. In these instances, the SEC's guidance allows companies to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. The Company has recorded the provisional tax benefit in its 2017 consolidated financial statements to reflect the impact of the 2017 Tax Act, as it has yet to complete its analysis of the impact.

Variances in the estimated effective income tax rates, when compared with the statutory corporate income tax rate, are due primarily to the statutory depletion deduction for mineral reserves, the effect of state income taxes, the domestic production deduction and the impact of foreign income or losses for which no tax expense or benefit is recognized. Additionally, certain acquisition-related expenses have limited deductibility for income tax purposes.

The permanent benefit associated with the statutory depletion deduction for mineral reserves is typically the significant driver of the estimated effective income tax rate. The statutory depletion deduction is calculated as a percentage of sales subject to certain limitations. Due to these limitations, changes in sales volumes and pretax earnings may not proportionately affect the statutory depletion deduction and the corresponding impact on the effective income tax rate. However, the impact of the depletion deduction on the estimated effective tax rate is inversely affected by increases or decreases in pretax earnings.

The Company's estimated effective income tax rate for the years ended December 31 are as follows:

2017	**(15.3%)**
2016	29.9%
2015	30.2%

Net Earnings Attributable to Martin Marietta and Earnings Per Diluted Share

Net earnings attributable to Martin Marietta were $713.3 million, or $11.25 per diluted share, for 2017. This amount includes the income tax benefit from the 2017 Tax Act of $258.1 million, or $4.07 per diluted share. For 2016, net earnings attributable to Martin Marietta were $425.4 million, or $6.63 per diluted share. For 2015, net earnings attributable to Martin Marietta were $288.8 million, or $4.29 per diluted share.

Liquidity and Cash Flows

Operating Activities

Generally, the Company's primary source of liquidity is cash generated from operating activities. Operating cash flow is substantially derived from consolidated net earnings, before deducting depreciation, depletion and amortization, and offset by working capital requirements. Cash provided by operations was $657.9 million in 2017, $689.2 million in 2016 and $580.6 million in 2015. Cash provided by operations in 2017 reflects a higher buildup of inventories resulting from lower-than-expected shipment volumes. The increase in 2016 compared with 2015 was primarily attributable to higher earnings before depreciation, depletion and amortization expense.

Depreciation, depletion and amortization were as follows:

years ended December 31 (add 000)	2017	2016	2015
Depreciation	**$ 262,382**	$ 253,028	$ 232,527
Depletion	**17,391**	15,907	14,347
Amortization	**17,389**	16,318	16,713
Total	**$ 297,162**	$ 285,253	$ 263,587

The Company accelerated $38 million of capital spending on mobile equipment in the latter part of 2016, contributing to the increase in depreciation expense in 2017. The increase in 2016 is primarily due to the Medina Rock and Rail capital project, which was completed at the end of 2015.

Investing Activities

Net cash used for investing activities was $386.5 million in 2017 and $555.3 million in 2016. Net cash provided by investing activities was $88.5 million in 2015.

Property, plant and equipment capitalized by reportable segment, excluding acquisitions, was as follows:

years ended December 31 (add 000)	2017	2016	2015
Building Materials Business:			
Mid-America Group	**$ 139,445**	$ 150,490	$ 73,255
Southeast Group	**34,636**	30,588	12,155
West Group	**234,853**	204,495	208,169
Total Building Materials Business	**408,934**	385,573	293,579
Magnesia Specialties	**11,129**	8,944	8,916
Corporate	**12,291**	9,031	15,737
Total Consolidated	**$ 432,354**	$ 403,548	$ 318,232

Spending for the Mid-America Group for 2017 and 2016 includes the ongoing new underground mine project at the Fort Calhoun operation in Nebraska. Spending for the West Group for 2017 and 2016 includes the completion of Hunter Stone Plant, a new aggregates operation that consolidates mining operations with Hunter Cement Plant, and a rail-served facility in Colorado.

The Company paid cash of $12.1 million, $178.8 million and $43.2 million for acquisitions in 2017, 2016 and 2015, respectively.

Proceeds from divestitures and sales of assets were $35.9 million in 2017, $6.5 million in 2016 and $448.1 million in 2015. This pretax cash is generated from the sales of surplus land and equipment. In 2015, the amount also reflects the divestiture of the California cement operations.

Financing Activities

Cash provided by financing activities was $1.12 billion in 2017. The Company used $252.3 million and $609.4 million of cash for financing activities during 2016 and 2015, respectively.

Net borrowings of long-term debt were $1.34 billion in 2017 and $110.7 million in 2016. Net repayments of long-term debt were $14.7 million in 2015. As discussed in Note G of the audited consolidated financial statements, in May 2017, the Company issued $300 million aggregate principal amount of Floating Rate Senior Notes due in 2020 (the "2020 Floating Rate Notes") and $300 million aggregate principal amount of 3.450% Senior Notes due in 2027. The 2020 Floating Rate Notes bear interest at a rate, reset quarterly, equal to the three-month LIBOR for U.S. dollars plus 0.65% (or 65 basis points). The net proceeds from the issuance of these notes were used to repay $300 million aggregate principal amount of floating rate notes that matured in June 2017 and to pay down borrowings under the Revolving Facility and the Trade Receivable Facility (as defined below). Additionally, in December 2017, the Company issued $300 million aggregate principal amount of Floating Rate Senior Notes due 2019 (the "2019 Floating Rate Notes"), $500 million aggregate principal amount of 3.500% Senior Notes due 2027 and $600 million aggregate principal amount of 4.250% Senior Notes due 2047. The 2019 Floating Rate Notes will mature on December 20, 2019 and will bear interest at a per annum floating rate, reset quarterly, equal to three-month LIBOR for U.S. dollars plus 0.500% (or 50 basis points). Net proceeds will be used to repay the $300 million aggregate principal amount of 6.6% Senior Notes due in April 2018 and, in part, to finance the pending Bluegrass acquisition.

The Company repurchased 0.5 million shares of its common stock for a total cost of $100.0 million, or $218.46 per share, in 2017. During 2016, the Company repurchased 1.6 million shares for a total cost of $259.2 million, or $163.24 per share. In 2015, 3.3 million shares were repurchased for a total cost of $520.0 million, or $158.28 per share.

For the years ended December 31, 2017, 2016 and 2015, the Board of Directors approved total cash dividends on the Company's common stock of $1.72 per share, $1.64 per share and $1.60 per share, respectively. Total cash dividends were $108.9 million in 2017, $105.0 million in 2016 and $107.5 million in 2015.

Cash provided by issuances of common stock, which represents the exercises of stock options, excluding the impact of shares withheld for taxes, was $10.1 million, $27.3 million and $37.2 million in 2017, 2016 and 2015, respectively.

Capital Structure and Resources

Long-term debt, including current maturities, was $3.03 billion at December 31, 2017, and was principally in the form of publicly-issued long-term notes and debentures.

On September 27, 2017, the Company, through a wholly-owned special-purpose subsidiary, extended the maturity of its $300 million trade receivable securitization facility (the "Trade Receivable Facility") to September 26, 2018. The Trade Receivable Facility is backed by eligible trade receivables, as defined. Borrowings are limited to the lesser of the facility limit or the borrowing base, as defined, of $338.8 million at December 31, 2017. These receivables are originated by the Company and then sold or contributed to the wholly-owned special-purpose subsidiary. The Company continues to be responsible for the servicing and administration of the receivables purchased by the wholly-owned special-purpose subsidiary. The Trade Receivable Facility contains a cross-default provision to the Company's other debt agreements.

The $700 million five-year senior unsecured revolving facility (the "Revolving Facility") requires the Company's ratio of consolidated net debt-to-consolidated EBITDA, as defined, for the trailing-twelve month period (the "Ratio") to not exceed 3.50x as of the end of any fiscal quarter, provided that the Company may exclude from the Ratio debt incurred in connection with certain acquisitions during the quarter or the three preceding quarters so long as the Ratio calculated without such exclusion does not exceed 3.75x. Additionally, if there are no amounts outstanding under the Revolving Facility and the $300 million Trade Receivable Facility, consolidated debt, including debt for which the Company is a co-borrower, may be reduced by the Company's unrestricted cash and cash equivalents in excess of $50 million, such reduction not to exceed $200 million,

for purposes of the covenant calculation. In December 2017, the Company amended its credit agreement to exclude debt obtained to fund the pending Bluegrass acquisition from the Ratio. In 2017, the Company extended the maturity of the Revolving Facility to December 2022.

At December 31, 2017, the Company's ratio of consolidated net debt-to-consolidated EBITDA, as defined by the Company's Credit Agreement, for the trailing-twelve month EBITDA was 1.58 times and was calculated as follows (dollars in thousands):

	Twelve-Month Period January 1, 2017 to December 31, 2017
Net earnings attributable to Martin Marietta	$ 713,342
Add back:	
Interest expense	91,487
Depreciation, depletion and amortization expense	293,787
Stock-based compensation expense	30,460
Acquisition-related expenses	8,616
Deduct:	
Interest income	(587)
Income tax benefit	(94,514)
Consolidated EBITDA, as defined by the Company's Credit Agreement	$1,042,591
Consolidated net debt, as defined and including debt for which the Company is a co-borrower, at December 31, 2017	$1,642,979
Consolidated net debt-to-consolidated EBITDA, as defined by the Company's Credit Agreement, at December 31, 2017 for trailing-twelve month EBITDA	1.58x

Total equity was $4.68 billion at December 31, 2017. At that date, the Company had an accumulated other comprehensive loss of $129.1 million, primarily resulting from unrecognized actuarial losses and prior service costs related to pension and postretirement benefits.

Pursuant to authority granted by its Board of Directors, the Company can repurchase up to 20,000,000 shares of common stock. As of December 31, 2017, the Company had 14.7 million shares remaining under the repurchase authorization. The Company expects to allocate capital for additional share repurchases based on available excess free cash flow, defined as operating cash flow less capital expenditures and dividends, subject to a leverage target (net debt-to-consolidated EBITDA) of 2.0 to 2.5 times and with consideration of other capital needs. Future repurchases are expected to be carried out through a variety of methods, which may include open market purchases, privately negotiated transactions, block trades, accelerated share purchase transactions, or any combination of such methods. Share repurchases will be executed based on then-current business and market factors so the actual return of capital in any single quarter may vary. The repurchase program may be modified, suspended or discontinued by the Board of Directors at any time without prior notice.

At December 31, 2017, the Company had $1.45 billion in cash and short-term investments that are considered cash equivalents. A significant portion of the cash is attributable to the December 2017 debt issuance and will be used, in combination with borrowings under existing credit facilities, to repay $300 million of aggregate principal Senior Notes due in April 2018 and to finance, in part, the Bluegrass acquisition. The Company manages its cash and cash equivalents to ensure short-term operating cash needs are met and excess funds are managed efficiently. The Company subsidizes shortages in operating cash through credit facilities. The Company utilizes excess cash to either pay-down credit facility borrowings or invest in money market funds, money market demand deposit accounts or offshore time deposit accounts. Money market demand deposits and offshore time deposit accounts are exposed to bank solvency risk. Money market demand deposit accounts are FDIC insured up to $250,000. The Company's investments in bank funds generally exceed the $250,000 FDIC insurance limit.

Cash on hand, along with the Company's projected internal cash flows and availability of financing resources, including its access to debt and equity capital markets, is expected to continue to be sufficient to provide the capital resources necessary to support anticipated operating needs, cover debt service requirements, meet capital expenditures and discretionary investment needs, fund certain acquisition opportunities that may arise and allow for payment of dividends for the foreseeable future. Borrowings under the Revolving Facility are unsecured and may be used for general corporate purposes. The Company's ability to borrow or issue securities is dependent upon, among other things, prevailing economic, financial and market conditions. At December 31, 2017, the Company had $997.7 million of unused borrowing capacity under its Revolving Facility and Trade Receivable Facility. The Revolving Facility expires on December 5, 2022 and the Trade Receivable Facility matures on September 26, 2018.

The Company may be required to obtain additional financing in order to fund certain strategic acquisitions or to refinance outstanding debt. Any strategic acquisition of size would likely require an appropriate balance of newly-issued equity with debt in order to maintain a composite investment-grade credit rating. Furthermore, the Company is exposed to credit markets through the interest cost related to its variable-rate debt, which includes the 2019 Floating Rate Notes, the 2020 Floating Rate Notes and borrowings under its Revolving Facility and Trade Receivable Facility.

Contractual and Off Balance Sheet Obligations

Postretirement medical benefits will be paid from the Company's assets. The obligation, if any, for retiree medical payments is subject to the terms of the plan. At December 31, 2017, the Company's recorded benefit obligation related to these benefits totaled $15.3 million.

The Company has other retirement benefits related to pension plans. At December 31, 2017, the qualified pension plans were underfunded by $133.3 million. Inclusive of required amounts, the Company estimates that it will make contributions of $25.0 million to qualified pension plans in 2018. Any contributions beyond 2018 are currently undeterminable and will depend on the investment return on the related pension assets. However, management's practice is to fund at least the service cost annually. At December 31, 2017, the Company had a total obligation of $107.8 million related to unfunded nonqualified pension plans and expects to make contributions of $12.4 million to these plans in 2018.

At December 31, 2017, the Company had $22.4 million accrued for uncertain tax positions. Such liabilities may become payable if the tax positions are not sustained upon examination by a taxing authority.

In connection with normal, ongoing operations, the Company enters into market-rate leases for property, plant and equipment and royalty commitments principally associated with leased land. Additionally, the Company enters into equipment rentals to meet shorter-term, nonrecurring and intermittent needs. At December 31, 2017, the Company had $13.2 million in capital lease obligations. Amounts due for operating leases and royalty agreements are expensed in the period incurred. Management anticipates that, in the ordinary course of business, the Company will enter into additional royalty agreements for land and mineral reserves during 2018.

The Company has purchase commitments for property, plant and equipment of $191.6 million as of December 31, 2017. The Company also has other purchase obligations related to energy and service contracts which totaled $123.9 million as of December 31, 2017.

The Company's contractual commitments as of December 31, 2017 are as follows:

(add 000)	**Total**	**< 1 Year**	**1 to 3 Years**	**3 to 5 Years**	**> 5 Years**
ON BALANCE SHEET:					
Long-term debt	$3,027,203	$299,909	$ 596,443	$ 155	$2,130,696
Postretirement benefits	15,347	2,560	3,167	2,863	6,757
Qualified pension plan contributions[1]	25,023	25,023	–	–	–
Unfunded pension plan contributions	107,773	12,366	23,865	22,674	48,868
Uncertain tax positions	22,367	22,367	–	–	–
Capital leases - principal portion	13,248	3,623	5,313	1,958	2,354
Other commitments	433	64	128	128	113
OFF BALANCE SHEET:					
Interest on publicly-traded long-term debt and capital lease obligations	1,533,373	109,222	203,473	187,276	1,033,402
Operating leases[2]	616,499	107,393	105,940	94,716	308,450
Royalty agreements[2]	81,901	13,841	17,295	13,355	37,410
Purchase commitments - capital	191,582	184,326	7,256	–	–
Other commitments - energy and services	123,883	53,954	41,002	10,425	18,502
Total	$5,758,632	$834,648	$1,003,882	$ 333,550	$3,586,552

[1] *Qualified pension plan contributions beyond 2018 are not determinable at this time*
[2] *Represents future minimum payments*

Notes A, G, I, J, L and N to the audited consolidated financial statements contain additional information regarding these commitments and should be read in conjunction with the above table.

Contingent Liabilities and Commitments

The Company has a $5 million short-term line of credit. No amounts were outstanding under this line of credit at December 31, 2017.

The Company has entered into standby letter of credit agreements relating to certain insurance claims, contract performance and permit requirements. At December 31, 2017, the Company had contingent liabilities guaranteeing its own performance under these outstanding letters of credit of $45.0 million, of which $2.3 million were issued under the Company's Revolving Facility. Certain of these underlying obligations are accrued on the Company's consolidated balance sheets.

In the normal course of business, at December 31, 2017, the Company was contingently liable for $348.3 million in surety bonds underwritten by Liberty Mutual and W. R. Berkley, which guarantee its own performance and are required by certain states and municipalities and their related agencies. Certain of the bonds guaranteeing performance of obligations, including those for asset retirement requirements and insurance claims, are accrued on the Company's balance sheet. Five of these bonds are for certain construction contracts and reclamation obligations and total $90.6 million, or 26% of all outstanding surety bonds. The Company has indemnified the underwriting insurance companies against any exposure under the surety bonds. In the Company's past experience, no material claims have been made against these financial instruments.

The Company is a co-borrower with an unconsolidated affiliate for a revolving line of credit agreement with Branch Banking & Trust. The line of credit was amended in January 2018 to extend the maturity to March 2020 and reduce the line of credit from $25.0 million to $15.5 million. The affiliate has agreed to reimburse and indemnify the Company for any payments and expenses the Company may incur from this agreement. The Company holds a lien on the affiliate's membership interest in a joint venture as collateral for payment under the revolving line of credit.

Quantitative and Qualitative Disclosures about Market Risk

As discussed earlier, the Company's operations are highly dependent upon the interest rate-sensitive construction and steelmaking industries. Consequently, these marketplaces could experience lower levels of economic activity in an environment of rising interest rates or escalating costs (see *Business Environment* section).

Management has considered the current economic environment and its potential impact to the Company's business. Demand for aggregates products, particularly in the infrastructure construction market, is affected by federal and state budget and deficit issues. Further, delays or cancellations of capital projects in the nonresidential and residential construction markets could occur if companies and consumers are unable to obtain financing for construction projects or if consumer confidence is eroded by economic uncertainty.

Demand in the residential construction market is affected by interest rates. In 2017, the Federal Reserve raised the federal funds rate to over one percent for the first time in nearly a decade. The residential construction market accounted for approximately 21% of the Company's aggregates product line shipments in 2017.

Aside from these inherent risks from within its operations, the Company's earnings are also affected by changes in short-term interest rates. However, rising interest rates are not necessarily predictive of weaker operating results. Historically, the Company's profitability has increased during periods of rising interest rates. In essence, the Company's underlying business generally serves as a natural hedge to rising interest rates.

Variable-Rate Borrowing Facilities

At December 31, 2017, the Company had a $700 million Revolving Facility and a $300 million Trade Receivable Facility. The Company also has $600 million variable-rate senior notes. Borrowings under these facilities bear interest at a variable interest rate. A hypothetical 100-basis-point increase in interest rates on borrowings of $600 million, which was the collective outstanding balance at December 31, 2017, would increase interest expense by $6.0 million on an annual basis.

Pension Expense

The Company's results of operations are affected by its pension expense. Assumptions that affect pension expense include the discount rate and, for the defined benefit pension plans only, the expected long-term rate of return on assets. Therefore, the Company has interest rate risk associated with

these factors. The impact of hypothetical changes in these assumptions on the Company's annual pension expense is discussed in the section *Critical Accounting Policies and Estimates – Pension Expense – Selection of Assumptions.*

Energy Costs

Energy costs, including diesel fuel, natural gas, coal and liquid asphalt, represent significant production costs of the Company. The cement product line and Magnesia Specialties business each have fixed-price agreements on their coal requirements. The cement product line's contract covers 90% of the Midlothian plant's needs while the Magnesia Specialties contract covers 100% of its coal requirements. A hypothetical 10% change in the Company's energy prices in 2018 as compared with 2017, assuming constant volumes, would change 2018 energy expense by $25.0 million.

Commodity Risk

Cement is a commodity and competition is based principally on price, which is highly sensitive to changes in supply and demand. Prices are often subject to material changes in response to relatively minor fluctuations in supply and demand, general economic conditions and other market conditions beyond the Company's control. Increases in the production capacity of industry participants or increases in cement imports tend to create an oversupply of such products leading to an imbalance between supply and demand, which can have a negative impact on product prices. There can be no assurance that product prices will not decline in the future or that such declines will not have a material adverse effect on the Company's business, financial condition and results of operations. A hypothetical 10% change in sales price of the cement product line would impact total revenues by $38.4 million.

Cement is a key raw material in the production of ready mixed concrete. A hypothetical 10% change in cement costs in 2018 compared with 2017, assuming constant volumes, would change ready mixed concrete cost of sales by $23.6 million.

OTHER FINANCIAL INFORMATION

Critical Accounting Policies and Estimates

The Company's audited consolidated financial statements include certain critical estimates regarding the effect of matters that are inherently uncertain. These estimates require management's subjective and complex judgments. Amounts reported in the Company's consolidated financial statements could differ materially if management used different assumptions in making these estimates, resulting in actual results differing from those estimates. Methodologies used and assumptions selected by management in making these estimates, as well as the related disclosures, have been reviewed by and discussed with the Company's Audit Committee. Management's determination of the critical nature of accounting estimates and judgments may change from time to time depending on facts and circumstances that management cannot currently predict.

Impairment Review of Goodwill

Goodwill is required to be tested annually for impairment. An interim review is performed between annual tests if facts and circumstances indicate a potential impairment may exist. The impairment review of goodwill is a critical accounting estimate because goodwill represents 24% of the Company's total assets at December 31, 2017. Further, the review requires management to apply judgment and make assumptions which may result in an impairment charge that could be material to the Company's financial condition and results of operations. The Company performs its impairment evaluation as of October 1, which represents the annual evaluation date.

The Company's reporting units, which represent the level at which goodwill is tested for impairment, are based on the operating segments of the Building Materials business. There is no goodwill related to the Magnesia Specialties business. As of October 1, 2017, the reporting units for the Building Materials business were as follows:

- *Mid-Atlantic Division,* which includes North Carolina, South Carolina, Maryland and Virginia;
- *Mideast Division,* which includes Indiana, Kentucky, Ohio and West Virginia;
- *Midwest Division,* which includes Iowa, northern Kansas, Minnesota, Missouri, eastern Nebraska and Washington;
- *Southeast Division,* which includes Alabama, Florida, Georgia, Tennessee and offshore operations in the Bahamas and Nova Scotia;
- *Southwest Division,* which includes the aggregates product line operations in Arkansas, southern Kansas, Louisiana, Oklahoma and Texas;
- *Cement and Southwest Ready Mix Division,* which includes the cement operations in Texas and the ready mixed concrete operations in Arkansas, Louisiana and Texas;

- *Rocky Mountain Division,* which includes Colorado, western Nebraska, Nevada, Utah and Wyoming.

Certain of the aforementioned reporting units within the Building Materials business meet the aggregation criteria and are consolidated as reportable segments for financial reporting purposes.

Goodwill is assigned to the respective reporting unit(s) based on the location of acquisitions at the time of consummation. Goodwill is tested for impairment by comparing the reporting unit's fair value to its carrying value, which represents Step 1 of a two-step approach. However, prior to Step 1, the Company may perform an optional qualitative assessment. As part of the qualitative assessment, the Company considers, among other things, the following events and circumstances: macroeconomic conditions, industry and market conditions, cost factors, overall financial performance and other business or reporting unit-specific events. If the Company concludes it is more-likely-than-not (i.e., a likelihood of more than 50%) that a reporting unit's fair value is higher than its carrying value, the Company does not perform any further goodwill impairment testing for that reporting unit. Otherwise, it proceeds to Step 1 of its goodwill impairment analysis. The Company may bypass the qualitative assessment for any reporting unit in any period and proceed directly with the quantitative calculation in Step 1. When the Company validates its conclusion by measuring fair value, it may resume performing a qualitative assessment for a reporting unit in any subsequent period. If the reporting unit's fair value exceeds its carrying value, no further calculation is necessary. A reporting unit with a carrying value in excess of its fair value constitutes a Step 1 failure and leads to an impairment charge. The Financial Accounting Standards Board (FASB) issued an accounting standards update simplifying the calculation of the impairment charge. Under the updated guidance, Step 2 of the analysis, which is used to determine the amount of impairment, would be removed and the impairment charge would be calculated as the excess of the carrying value over fair value. The accounting standards update is effective for impairment tests performed after December 15, 2019, with early adoption permitted.

In 2017, the Company performed a Step-1 analysis for the Cement and Southwest Ready Mix Division. The fair value was calculated using a discounted cash flow model. Key assumptions included management's estimates of future profitability, capital requirements, a discount rate of 10.0% and a terminal growth rate of 2.5%. The fair value of the Cement and Southwest Ready Mix Division reporting unit exceeded its carrying value by 24%, or $450 million. For sensitivity purposes, a 100-basis-point increase in the discount rate, holding all other assumptions constant, would result in the Cement and Southwest Ready Mix Division reporting unit passing the Step-1 analysis by $136 million, or 7%. The Cement and Southwest Ready Mix Division reporting unit had $941 million of goodwill at December 31, 2017.

Price, cost and volume changes, profitability, efficiency improvements, the discount rate and the terminal growth rate are significant assumptions in performing a Step-1 analysis. These assumptions are interdependent and have a significant impact on the results of the test.

Future profitability and capital requirements are, by their nature, estimates. Price, cost and volume assumptions were based on current forecasts, including the use of external sources, and market conditions. Capital requirements included maintenance-level needs, efficiency projects and known capacity-increasing initiatives.

A discount rate is calculated for each reporting unit that requires a Step-1 analysis and represents its weighted average cost of capital. The calculation of the discount rate includes the following components, which are primarily based on published sources: equity risk premium, historical beta, risk-free interest rate, small-stock premium, company-specific premium and borrowing rate.

The terminal growth rate was based on the projected annual increase in GDP.

Management believes that all assumptions used were reasonable based on historical operating results and expected future trends. However, if future operating results are unfavorable as compared with forecasts, the results of future goodwill impairment evaluations could be negatively affected. Further, mineral reserves, which represent underlying assets producing the reporting units' cash flows for the aggregates product line, are depleting assets by their nature. The potential write off of goodwill from future evaluations represents a risk to the Company.

Pension Expense-Selection of Assumptions

The Company sponsors noncontributory defined benefit pension plans that cover substantially all employees and a Supplemental Excess Retirement Plan (SERP) for certain retirees (see Note J to the audited consolidated financial statements). Annual pension expense (inclusive of SERP expense) consists of several components:

- *Service Cost,* which represents the present value of benefits attributed to services rendered in the current year, measured by expected future salary levels.
- *Interest Cost,* which represents one year's additional interest on the outstanding liability.
- *Expected Return on Assets,* which represents the expected investment return on pension plan assets.
- *Amortization of Prior Service Cost and Actuarial Gains and Losses,* which represents components that are recognized over time rather than immediately. Prior service cost represents credit given to employees for years of service prior to plan inception. Actuarial gains and losses arise from changes in assumptions regarding future events or when actual returns on pension assets differ from expected returns. At December 31, 2017, unrecognized actuarial loss and unrecognized prior service cost were $217.2 million and $0.1 million, respectively. Pension accounting rules currently allow companies to amortize the portion of the unrecognized actuarial loss that represents more than 10% of the greater of the projected benefit obligation or pension plan assets, using the average remaining service life for the amortization period. Therefore, the $217.2 million unrecognized actuarial loss consists of $129.3 million currently subject to amortization in 2018 and $87.9 million not subject to amortization in 2018. $13.2 million of amortization of the actuarial loss is estimated to be a component of 2018 annual pension expense.

These components are calculated annually to determine the pension expense reflected in the Company's results of operations.

Management believes the selection of assumptions related to the annual pension expense is a critical accounting estimate due to the high degree of volatility in the expense dependent on selected assumptions. The key assumptions are as follows:

- *The discount rate* is used to present value the pension obligation and represents the current rate at which the pension obligations could be effectively settled.
- The *expected long-term rate of return on pension plan assets* is used to estimate future asset returns and should reflect the average rate of long-term earnings on assets invested to provide for the benefits included in the projected benefit obligation.
- The *mortality table* represents published statistics on the expected lives of people.
- The *rate of increase in future compensation levels* is used to project the pay-related pension benefit formula and should estimate actual future compensation levels.

Management's selection of the discount rate is based on an analysis that estimates the current rate of return for high-quality, fixed-income investments with maturities matching the payment of pension benefits that could be purchased to settle the obligations. The Company selected a hypothetical portfolio of Moody's Aa bonds, with maturities that mirror the benefit obligations, to determine the discount rate. At December 31, 2017, the Company selected a discount rate assumption of 3.76%, a 53-basis-point decrease from the prior-year assumption. Of the four key assumptions, the discount rate is generally the most volatile and sensitive estimate. Accordingly, a change in this assumption has the most significant impact on the annual pension expense.

Management's selection of the rate of increase in future compensation levels is generally based on the Company's historical salary increases, including cost of living adjustments and merit and promotion increases, giving consideration to any known future trends. A higher rate of increase results in higher pension expense. The assumed long-term rate of increase of 4.5% is consistent with the prior year's assumption.

Management's selection of the expected long-term rate of return on pension fund assets is based on a building-block approach, whereby the components are weighted based on the allocation of pension plan assets. Given that these returns are long term, there are generally not significant fluctuations in the expected rate of return from year to year. Based on the currently projected returns on these assets and related expenses, the Company selected an expected return

on assets of 6.75%, the same as the prior-year rate. The following table presents the expected return on pension assets as compared with the actual return on pension assets:

(add 000)	Expected Return on Pension Assets	Actual Return on Pension Assets
2017	**$39,759**	**$83,091**
2016	$37,699	$35,432
2015	$36,385	$ (651)

The difference between expected return on pension assets and the actual return on pension assets is not immediately recognized in the consolidated statements of earnings. Rather, pension accounting rules require the difference to be included in actuarial gains and losses, which are amortized into annual pension expense as previously described.

The Company estimates the remaining lives of participants in the pension plans using the Society of Actuaries' RP-2014 Base Mortality Table. The no-collar table was used for salaried participants and the blue-collar table, reflecting the experience of the Company's participants, was used for hourly participants. The Company selected the MP-2017 scale for mortality improvement.

Assumptions are selected on December 31 to calculate the succeeding year's expense. For the 2017 pension expense, assumptions selected at December 31, 2016 were as follows:

Discount rate	4.29%
Rate of increase in future compensation levels	4.50%
Expected long-term rate of return on assets	6.75%
Average remaining service period for participants	10 years
Mortality Tables:	
Base Table	RP-2014
Mortality Improvement Scale	MP-2016

Using these assumptions, 2017 pension expense was $37.6 million. A change in the assumptions would have had the following impact on 2017 expense:

- A 25-basis-point change in the discount rate would have changed 2017 expense by approximately $3.0 million.
- A 25-basis-point change in the expected long-term rate of return on assets would have changed the 2017 expense by approximately $1.5 million.

For 2018 pension expense, assumptions selected at December 31, 2017 were as follows:

Discount rate	3.76%
Rate of increase in future compensation levels	4.50%
Expected long-term rate of return on assets	6.75%
Average remaining service period for participants	10 years
Mortality Tables:	
Base Table	RP-2014
Mortality Improvement Scale	MP-2017

Using these assumptions, 2018 pension expense is expected to be approximately $41.3 million based on current demographics and structure of the plans. Changes in the underlying assumptions would have the following estimated impact on the 2018 expected expense:

- A 25-basis-point change in the discount rate would change the 2018 expected expense by approximately $3.3 million.
- A 25-basis-point change in the expected long-term rate of return on assets would change the 2018 expected expense by approximately $1.6 million.

The Company made pension plan contributions of $30.9 million in 2017 and $184.2 million during the five-year period ended December 31, 2017. Despite these contributions, the Company's pension plans are underfunded (projected benefit obligation exceeds the fair value of plan assets) by $241.2 million at December 31, 2017. The Company's projected benefit obligation was $879.3 million at December 31, 2017, an increase of $47.5 million over the prior year, driven by the lower discount rate. The Company expects to make pension plan and SERP contributions of $37.4 million in 2018.

Estimated Effective Income Tax Rate

The Company uses the liability method to determine its provision for income taxes. Accordingly, the annual provision for income taxes reflects estimates of the current liability for income taxes, estimates of the tax effect of financial reporting versus tax basis differences using statutory income tax rates and management's judgment with respect to any valuation allowances on deferred tax assets. The result is management's estimate of the annual effective tax rate (the "ETR").

Income for tax purposes is determined through the application of the rules and regulations under the United States Internal Revenue Code and the statutes of various foreign,

state and local tax jurisdictions in which the Company conducts business. Changes in the statutory tax rates and/or tax laws in these jurisdictions can have a material effect on the ETR. The effect of these changes, if any, is recognized when the change is enacted.

As prescribed by these tax regulations, as well as generally accepted accounting principles, the manner in which revenues and expenses are recognized for financial reporting and income tax purposes is not always the same. Therefore, these differences between the Company's pretax income for financial reporting purposes and the amount of taxable income for income tax purposes are treated as either temporary or permanent, depending on their nature.

Temporary differences reflect revenues or expenses that are recognized in financial reporting in one period and taxable income in a different period. An example of a temporary difference is the use of the straight-line method of depreciation of machinery and equipment for financial reporting purposes and the use of an accelerated method for income tax purposes. Temporary differences result from differences between the financial reporting basis and tax basis of assets or liabilities and give rise to deferred tax assets or liabilities (i.e., future tax deductions or future taxable income). Therefore, when temporary differences occur, they are offset by a corresponding change in a deferred tax account. As such, total income tax expense as reported in the Company's consolidated statements of earnings is not changed by temporary differences.

The Company has deferred tax liabilities, primarily for property, plant and equipment and goodwill. The deferred tax liabilities attributable to property, plant and equipment relate to accelerated depreciation and depletion methods used for income tax purposes as compared with the straight-line and units of production methods used for financial reporting purposes. These temporary differences will reverse over the remaining useful lives of the related assets. The deferred tax liabilities attributable to goodwill arise as a result of amortizing goodwill for income tax purposes but not for financial reporting purposes. This temporary difference reverses when goodwill is written off for financial reporting purposes, either through divestitures or an impairment charge. The timing of such events cannot be estimated.

The Company has deferred tax assets, primarily for unvested stock-based compensation awards, employee pension and postretirement benefits, valuation reserves, inventories, net operating loss carryforwards and tax credit carryforwards. The deferred tax assets attributable to unvested stock-based compensation awards relate to differences in the timing of deductibility for financial reporting purposes versus income tax purposes. For financial reporting purposes, the fair value of the awards is deducted ratably over the requisite service period. For income tax purposes, no deduction is allowed until the award is vested or no longer subject to substantial risk of forfeiture. The Company records all excess tax benefits and tax deficiencies as income tax expense or benefit as a discrete event in the period the award vests or settles, increasing volatility in the income tax rate from period to period. The deferred tax assets attributable to employee pension and postretirement benefits relate to deductions as plans are funded for income tax purposes compared with deductions for financial reporting purposes based on accounting standards. The reversal of these differences depends on the timing of the Company's contributions to the related benefit plans as compared to the annual expense for financial reporting purposes. The deferred tax assets attributable to valuation reserves and inventories relate to the deduction of estimated cost reserves and various period expenses for financial reporting purposes that are deductible in a later period for income tax purposes. The reversal of these differences depends on facts and circumstances, including the timing of deduction for income tax purposes for reserves previously established and the establishment of additional reserves for financial reporting purposes.

In connection with the 2017 Tax Act, the Company preliminarily remeasured its deferred tax assets and liabilities using the newly enacted corporate income tax rate effective January 1, 2018. The provisional revaluation resulted in an income tax benefit of $258.1 million for the year ended December 31, 2017.

At December 31, 2017, the Company had state net operating loss carryforwards of $197.9 million with varying expiration dates through 2036 and related state deferred tax assets of $11.8 million. The Company recorded a valuation allowance of $10.1 million for these deferred tax assets based on the uncertainty of generating future taxable income in the respective jurisdictions during the limited period that the

net operating loss carryforwards can be utilized under state statutes. The Company had domestic state tax credit carry-forwards of $1.3 million, for which a valuation allowance of $0.3 million was recorded at December 31, 2017.

Business Combinations – Allocation of Purchase Price

The Company's Board of Directors and management regularly review strategic long-term plans, including potential investments in value-added acquisitions of related or similar businesses, which would increase the Company's market share and/or are related to the Company's existing markets. When an acquisition is completed, the Company's consolidated statements of earnings include the operating results of the acquired business starting from the date of acquisition, which is the date control is obtained. The purchase price is determined based on the fair value of assets and equity interests given to the seller and any future obligations to the seller as of the date of acquisition. Additionally, conversion of the seller's equity awards into equity awards of the Company can affect the purchase price. The Company allocates the purchase price to the fair values of the tangible and intangible assets acquired and liabilities assumed as valued at the date of acquisition. Goodwill is recorded for the excess of the purchase price over the net of the fair value of the identifiable assets acquired and liabilities assumed as of the acquisition date. The purchase price allocation is a critical accounting policy because the estimation of fair values of acquired assets and assumed liabilities is judgmental and requires various assumptions. Further, the amounts and useful lives assigned to depreciable and amortizable assets versus amounts assigned to goodwill and indefinite-lived intangible assets, which are not amortized, can significantly affect the results of operations in the period of and for periods subsequent to a business combination.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction, and, therefore, represents an exit price. A fair-value measurement assumes the highest and best use of the asset by market participants, considering the use of the asset that is physically possible, legally permissible, and financially feasible at the measurement date. The Company assigns the highest level of fair value available to assets acquired and liabilities assumed based on the following options:

- Level 1 – Quoted prices in active markets for identical assets and liabilities
- Level 2 – Observable inputs, other than quoted prices, for similar assets or liabilities in active markets
- Level 3 – Unobservable inputs are used to value the asset or liability which includes the use of valuation models

Level 1 fair values are used to value investments in publicly-traded entities and assumed obligations for publicly-traded long-term debt.

Level 2 fair values are typically used to value acquired receivables, inventories, machinery and equipment, land, buildings, deferred income tax assets and liabilities, and accruals for payables, asset retirement obligations, environmental remediation and compliance obligations, and contingencies. Additionally, Level 2 fair values are typically used to value assumed contracts at other-than-market rates.

Level 3 fair values are used to value acquired mineral reserves and mineral interests produced and sold as final products, and separately-identifiable intangible assets. The fair values of mineral reserves and mineral interests are determined using an excess earnings approach, which requires management to estimate future cash flows, net of capital investments in the specific operation and contributory asset charges. The estimate of future cash flows is based on available historical information and future expectations and assumptions determined by management, but is inherently uncertain. Key assumptions in estimating future cash flows include sales price, shipment volumes, production costs and capital needs. The present value of the projected net cash flows represents the fair value assigned to mineral reserves and mineral interests. The discount rate is a significant assumption used in the valuation model and is based on the required rate of return that a hypothetical market participant would require if purchasing the acquired business, with an adjustment for the risk of these assets not generating the projected cash flows.

The Company values separately-identifiable acquired intangible assets which may include, but are not limited to, permits, customer relationships, water rights and non-competition agreements. The fair values of these assets are typically determined by an excess earnings method, a

replacement cost method or, in the case of water rights, a market approach.

The useful lives of amortizable intangible assets and the remaining useful lives for acquired machinery and equipment have a significant impact on earnings. The selected lives are based on the expected periods that the assets will provide value to the Company subsequent to the business combination.

The Company may adjust the amounts recognized for a business combination during a measurement period after the acquisition date. Any such adjustments are based on the Company obtaining additional information that existed at the acquisition date regarding the assets acquired or the liabilities assumed. Measurement-period adjustments are generally recorded as increases or decreases to the goodwill recognized in the transaction. The measurement period ends once the Company has obtained all necessary information that existed as of the acquisition date, but does not extend beyond one year from the date of acquisition. Any adjustments to assets acquired or liabilities assumed beyond the measurement period are recorded through earnings.

Property, Plant and Equipment

Net property, plant and equipment represent 40% of total assets at December 31, 2017. Accordingly, accounting for these assets represents a critical accounting policy. Useful lives of the assets can vary depending on factors, including production levels, geographic location, portability and maintenance practices. Additionally, climate and inclement weather can reduce the useful life of an asset. Historically, the Company has not recognized significant losses on the disposal or retirement of fixed assets.

The Company evaluates aggregates reserves, including those used in the cement manufacturing process, in several ways, depending on the geology at a particular location and whether the location is a potential new site (greensite), an acquisition or an existing operation. Greensites require an extensive drilling program before any significant investment is made in terms of time, site development or efforts to obtain appropriate zoning and permitting (see *Environmental Regulation and Litigation* section). The depth of overburden and the quality and quantity of the aggregates reserves are significant factors in determining whether to pursue opening the site. Further, the estimated average selling price for products in a market is also a significant factor in concluding that reserves are economically mineable. If the Company's analysis based on these factors is satisfactory, the total aggregates reserves available are calculated and a determination is made whether to open the location. Reserve evaluation at existing locations is typically performed to evaluate purchasing adjoining properties, for quality control, calculating overburden volumes and for mine planning. Reserve evaluation of acquisitions may require a higher degree of sampling to locate any problem areas that may exist and to verify the total reserves.

Well-ordered subsurface sampling of the underlying deposit is basic to determining reserves at any location. This subsurface sampling usually involves one or more types of drilling, determined by the nature of the material to be sampled and the particular objective of the sampling. The Company's objectives are to ensure that the underlying deposit meets aggregates specifications and the total reserves on site are sufficient for mining and economically recoverable. Locations underlain with hard rock deposits, such as granite and limestone, are drilled using the diamond core method, which provides the most useful and accurate samples of the deposit. Selected core samples are tested for soundness, abrasion resistance and other physical properties relevant to the aggregates industry and depending on its use. The number and depth of the holes are determined by the size of the site and the complexity of the site-specific geology. Some geological factors that may affect the number and depth of holes include faults, folds, chemical irregularities, clay pockets, thickness of formations and weathering. A typical spacing of core holes on the area to be tested is one hole for every four acres, but wider spacing may be justified if the deposit is homogeneous.

Despite previous drilling and sampling, once accessed, the quality of reserves within a deposit can vary. Construction contracts, for the infrastructure market in particular, include specifications related to the aggregates material. If a flaw in the deposit is discovered, the aggregates material may not meet the required specifications. Although it is possible that the aggregates material can still be used for non-specification uses, this can have an adverse effect on the Company's

ability to serve certain customers or on the Company's profitability. In addition, other issues can arise that limit the Company's ability to access reserves in a particular quarry, including geological occurrences, blasting practices and zoning issues.

Locations underlain with sand and gravel are typically drilled using the auger method, whereby a 6-inch corkscrew brings up material from below the ground which is then sampled. Deposits in these locations are typically limited in thickness, and the quality and sand-to-gravel ratio of the deposit can vary both horizontally and vertically. Hole spacing at these locations is approximately one hole for every acre to ensure a representative sampling.

The geologist conducting the reserve evaluation makes the decision as to the number of holes and the spacing in accordance with standards and procedures established by the Company. Further, the anticipated heterogeneity of the deposit, based on U.S. geological maps, also dictates the number of holes drilled.

The generally accepted reserve categories for the aggregates industry and the designations the Company uses for reserve categories are summarized as follows:

Proven Reserves – These reserves are designated using closely spaced drill data as described above and a determination by a professional geologist that the deposit is relatively homogeneous based on the drilling results and exploration data provided in U.S. geologic maps, the U.S. Department of Agriculture soil maps, aerial photographs and/or electromagnetic, seismic or other surveys conducted by independent geotechnical engineering firms. The proven reserves that are recorded reflect reductions incurred as a result of quarrying that result from leaving ramps, safety benches, pillars (underground) and the fines (small particles) that will be generated during processing. Proven reserves are further reduced by reserves that are under the plant and stockpile areas, as well as setbacks from neighboring property lines. The Company typically assumes a loss factor of 25%. However, the assumed loss factor at coastal operations is approximately 40% due to the nature of the material. The assumed loss factor for underground operations is 35% primarily due to pillars.

Probable Reserves – These reserves are inferred utilizing fewer drill holes and/or assumptions about the economically recoverable reserves based on local geology or drill results from adjacent properties.

The Company's proven and probable reserves reflect reasonable economic and operating constraints as to maximum depth of overburden and stone excavation, and also include reserves at the Company's inactive and undeveloped sites, including some sites where permitting and zoning applications will not be filed until warranted by expected future growth. The Company has historically been successful in obtaining and maintaining appropriate zoning and permitting (see *Environmental Regulation and Litigation* section).

Mineral reserves and mineral interests, when acquired in connection with a business combination, are valued using an excess earnings approach for the life of the proven and probable reserves.

The Company uses proven and probable reserves as the denominator in its units-of-production calculation to record depletion expense for its mineral reserves and mineral interests. For 2017, depletion expense was $17.4 million.

The Company begins capitalizing quarry development costs at a point when reserves are determined to be proven or probable, economically mineable and when demand supports investment in the market. Capitalization of these costs ceases when production commences. Capitalized quarry development costs are classified as land improvements.

New mining areas may be developed at existing quarries in order to access additional reserves. When this occurs, management reviews the facts and circumstances of each situation in making a determination as to the appropriateness of capitalizing or expensing the related pre-production development costs. If the additional mining location operates in a separate and distinct area of a quarry, the costs are capitalized as quarry development costs and depreciated over the life of the uncovered reserves. Further, a separate asset retirement obligation is created for additional mining areas when the liability is incurred. Once a new mining area enters the production phase, all post-production stripping costs are expensed as incurred as periodic inventory production costs.

Inventory Standards

The Company values its finished goods inventories under the first-in, first-out methodology using standard costs. For quarries, standards are developed using production costs for a twelve-month period, in addition to complying with the principle of lower of cost or net realizable value, and adjusting, if necessary, for normal capacity levels and abnormal costs. In addition to production costs, standards for distribution yards include a freight component for the cost of transporting the inventory from a quarry to the distribution yard and materials handling costs. Pre-operating start-up costs are expensed as incurred and not capitalized as part of inventory costs. In periods in which production costs, in particular, energy costs, and/or production volumes have changed significantly from the prior period, the revision of standards can have a significant impact on the Company's operating results (see section *Cost Structure)*.

Standard costs for the aggregates product lines are recalculated on a quarterly basis to match finished goods inventory values with changes in production costs and production volumes.

2018 OUTLOOK

Martin Marietta remains optimistic about its near-term and long-term outlook given its continued ability to successfully execute its strategic business plan and the largely positive trends in the markets it serves. The fundamental drivers for the Company's expected growth remain intact as the current broad-based recovery continues on a steady and extended basis. Notably:

- Infrastructure construction activity should see benefits from the funding provided by the FAST Act as state DOTs and contractors address labor constraints and further regulatory reform emerges. Additionally, state and local initiatives that support infrastructure funding, including gas tax increases and other ballot initiatives passed over the previous 24 months, continue to gain overwhelming voter support and will play an expanded role in public-sector activity. Third-party forecasts support increased infrastructure spending in 2018, particularly spending for aggregates-intensive highways and streets.
- Nonresidential construction is expected to modestly increase in both the heavy industrial and commercial sectors for the next several years as supported by third-party forecasts. Management expects new energy-related projects will bid in 2018 with construction activity in 2019 and beyond as permitting and final investment decisions are either made and/or approved.
- Residential construction is expected to continue growing, particularly in key Martin Marietta markets, driven by employment gains, historically low levels of construction activity over the previous years, low mortgage rates and higher lot development. Notably, six of Martin Marietta's key states rank in the top ten for single-family housing unit permits.

Management's 2018 outlook anticipates growth in all three primary construction end-use markets and faster expansion in the West and Southeast Groups and comparatively slower growth in the Mid-America Group, which historically has generated the Company's highest margins. Specifically:

- Aggregates product line end-use markets compared with 2017 levels are as follows:
  - Infrastructure market to increase in the mid-single digits.
  - Nonresidential market to increase in the low- to mid-single digits.
  - Residential market to increase in the high-single digits.
  - ChemRock/Rail market to remain stable.

As a result of the recent 2017 Tax Act, management expects the Company's effective tax rate, excluding discrete events, to range from 20% to 22%.

Martin Marietta's 2018 guidance excludes any benefit from a potential increase in federal infrastructure funding as well as any impact from the pending acquisition of Bluegrass Materials which is expected to be accretive to earnings per share and cash flow in the first full year of Martin Marietta's ownership.

2018 GUIDANCE

(dollars and tons in millions, except per ton)

	Low	High
Consolidated Results		
Consolidated total revenues[1]	$ 4,160	$ 4,355
Consolidated gross profit	$ 1,040	$ 1,140
SG&A	$ 275	$ 285
Interest expense	$ 125	$ 130
Estimated tax rate (excluding discrete events)	20%	22%
Net earnings attributable to Martin Marietta	$ 490	$ 595
EBITDA[2]	$ 1,075	$ 1,185
Capital Expenditures	$ 450	$ 500
Building Materials Business		
Aggregates Product Line		
Volume (total tons)[3]	164	167
% growth[3]	*4%*	*6%*
Average selling price per ton	$ 13.85	$ 14.10
% growth[4]	*3%*	*5%*
Total revenues	$ 2,490	$ 2,595
Gross profit	$ 655	$ 715
Cement Product Line		
Total revenues	$ 415	$ 445
Gross profit	$ 140	$ 160
Ready Mixed Concrete and Asphalt and Paving Services		
Total revenues	$ 1,370	$ 1,445
Gross profit	$ 160	$ 175
Magnesia Specialties		
Total revenues	$ 265	$ 270
Gross profit	$ 85	$ 90

1 *2018 consolidated total revenues exclude $380 million to $400 million related to estimated interproduct revenues.*

2 *The 2018 guidance range for EBITDA is calculated in a manner consistent with the presentation of EBITDA.*

Reconciliation of 2018 EBITDA to net earnings

(dollars in millions)	2018E
Net earnings attributable to Martin Marietta	542.5
Add back:	
Interest expense	127.5
Income tax expense for controlling interests	145.0
Depreciation, depletion and amortization expense	315.0
EBITDA	1,130.0

3 *Represents 2018 total aggregates volumes, which include approximately 11.2 million internal tons. Volume growth ranges are in comparison to total volumes of 157.7 million tons for the full year 2017, which includes 10.9 million internal tons.*

4 *ASP growth ranges are in comparison to ASP of $13.46 per ton for the full year 2017.*

Risks To Outlook

The outlook includes management's assessment of the likelihood of certain risks and uncertainties that may affect performance, including but not limited to: both price and volume, and a widespread decline in aggregates volume negatively affecting aggregates price; the termination, capping and/ or reduction of the federal and/or state gasoline tax(es) or other revenue related to infrastructure construction; a significant change in the funding patterns for traditional federal, state and/or local infrastructure projects; the United States Congress' inability to reach agreement among themselves or with the current Administration on policy issues that impact the federal budget; the volatility in the commencement of infrastructure projects; a reduction in defense spending, and the subsequent impact on construction activity on or near military bases; a decline in nonresidential construction; a further decline in energy-related construction activity resulting from a sustained period of low global oil prices or changes in oil production patterns in response to this decline and certain regulatory or other economic factors; a slowdown in the residential construction recovery; a sustained reduction in capital investment by the railroads; an increase in the cost of compliance with governmental laws, rules and regulations; construction labor shortages and/or supply-chain challenges; and unexpected equipment failures, unscheduled maintenance, industrial accident or other prolonged and/or significant disruption to its cement and/or its Magnesia Specialties production facilities. Further, increased highway construction funding pressures resulting from either federal or state issues can affect profitability. If these negatively affect transportation budgets more than in the past, construction spending could be reduced. Cement is subject to cyclical supply and demand and price fluctuations. The Magnesia Specialties business essentially runs at capacity; therefore, any unplanned changes in costs or realignment of customers introduce volatility to the earnings of this segment.

The Company's principal business serves customers in construction markets. This concentration could increase the risk of potential losses on customer receivables; however, payment bonds normally posted on public projects, together with lien rights on private projects, mitigate the risk of uncollectible receivables. The level of demand in the Company's end-use markets, production levels and the

management of production costs will affect the operating leverage of the Building Materials business and, therefore, profitability. Production costs in the Building Materials business are also sensitive to energy and raw material prices, both directly and indirectly. Diesel fuel, coal and other consumables change production costs directly through consumption or indirectly by increased energy-related input costs, such as steel, explosives, tires and conveyor belts. Fluctuating diesel fuel pricing also affects transportation costs, primarily through fuel surcharges in the Company's long-haul distribution network. The Magnesia Specialties business is sensitive to changes in domestic steel capacity utilization as well as the absolute price and fluctuation in the cost of natural gas.

Transportation in the Company's long-haul network, particularly the supply of rail cars and locomotive power and condition of rail infrastructure to move trains, affects the Company's efficient transportation of aggregates products in certain markets, most notably Texas, Colorado, Florida, North Carolina and the Gulf Coast. In addition, availability of rail cars and locomotives affects the Company's movement of essential dolomitic lime for magnesia chemicals, to both the Company's plant in Manistee, Michigan, and its customers. The availability of trucks, drivers and railcars to transport the Company's products, particularly in markets experiencing high growth and increased demand, is also a risk and pressures the associated costs.

All of the Company's businesses are also subject to weather-related risks that can significantly affect production schedules and profitability. The first and fourth quarters are most adversely affected by winter weather. Hurricane activity in the Atlantic Ocean and Gulf Coast generally is most active during the third and fourth quarters. In fact, in August and September 2017, respectively, Hurricanes Harvey and Irma generated winds, rainfall and flooding which disrupted operations in Texas, Louisiana, Florida, Georgia and the Carolinas. However, after flood waters recede, management typically expects an increase in construction activity as roads, homes and businesses are repaired.

Risks to the outlook also include shipment declines resulting from economic events beyond the Company's control.

Forward-Looking Statements – Safe Harbor Provisions

If you are interested in Martin Marietta Materials, Inc. stock, management recommends that, at a minimum, you read the Company's Forms 10-K, 10-Q and 8-K reports to the Securities and Exchange Commission (SEC) over the past year, in addition to the Annual Report. The Company's recent proxy statement for the annual meeting of shareholders also contains important information. These and other materials that have been filed with the SEC are accessible through the Company's website at www.martinmarietta.com and are also available at the SEC's website at www.sec.gov. You may also write or call the Company's Corporate Secretary, who will provide copies of such reports.

Investors are cautioned that all statements in this Annual Report that relate to the future involve risks and uncertainties, and are based on assumptions that the Company believes in good faith are reasonable but which may be materially different from actual results. Forward-looking statements give the investor the Company's expectations or forecasts of future events. These statements can be identified by the fact that they do not relate only to historical or current facts. They may use words such as "anticipate," "expect," "should be," "believe," "will," and other words of similar meaning in connection with future events or future operating or financial performance. Any or all of the Company's forward-looking statements here and in other publications may turn out to be wrong.

Factors that the Company currently believes could cause actual results to differ materially from the forward-looking statements in this Annual Report include the performance of the United States economy and the resolution and impact of the United States Congress' inability to reach agreement among themselves or with the current Administration on policy issues, including the nature, extent and/or timing of infrastructure funding, that impact the federal budget; widespread decline in aggregates pricing; the history of both cement and ready mixed concrete being subject to significant changes in supply, demand and price; the termination, capping and/ or reduction or suspension of the federal and/or state gasoline tax(es) or other revenue related to infrastructure construction; the level and timing of federal and state transportation funding, most particularly in Texas, North Carolina, Iowa, Colorado and Georgia; the ability of states and/or other entities to finance approved projects either with tax revenues or alternative financing structures; levels of construction spending in the markets the Company serves; a reduction in defense spending, and the subsequent impact on construction activity on or near military bases; a decline in the commercial component of the nonresidential construction market, notably office and retail space; a further slowdown in energy-related construction activity, particularly in Texas; a slowdown in residential construction recovery; a reduction in construction activity and related shipments due to a decline in funding under the domestic farm bill; unfavorable weather conditions, particularly Atlantic Ocean hurricane activity, the late start to spring or the early onset of winter and the impact of a drought or excessive rainfall in the markets served by the Company; the volatility of fuel costs, particularly diesel fuel, and the impact on the cost of other consumables, namely steel, explosives, tires and conveyor belts, and with respect to the Magnesia Specialties business, natural gas; continued increases in the cost of other repair and supply parts; unexpected equipment failures, unscheduled maintenance, industrial accident or other prolonged and/or significant disruption to cement production facilities; increasing governmental regulation, including environmental laws; transportation availability, notably the availability of railcars and locomotive power to move trains to supply the Company's Texas, Florida and Gulf Coast markets; increased transportation costs, including increases from higher passed-through energy and other costs to comply with tightening regulations as well as higher volumes

Forward-Looking Statements – Safe Harbor Provisions

of rail and water shipments; availability of trucks and licensed drivers for transport of the Company's materials, particularly in areas with significant energy-related activity, such as Texas and Colorado; availability and cost of construction equipment in the United States; weakening in the steel industry markets served by the Company's dolomitic lime products; proper functioning of information technology and automated operating systems to manage or support operations; inflation and its effect on both production and interest costs; ability to successfully integrate acquisitions quickly and in a cost-effective manner and achieve anticipated profitability to maintain compliance with the Company's leverage ratio debt covenant; changes in tax laws, the interpretation of such laws and/or administrative practices that would increase the Company's tax rate; violation of the Company's debt covenant if price and/or volumes return to previous levels of instability; downward pressure on the Company's common stock price and its impact on goodwill impairment evaluations; reduction of the Company's credit rating to non-investment grade resulting from strategic acquisitions or other events; and other risk factors listed from time to time found in the Company's filings with the SEC. Other factors besides those listed here may also adversely affect the Company, and may be material to the Company. The Company assumes no obligation to update any such forward-looking statements.

For a discussion identifying some important factors that could cause actual results to vary materially from those anticipated in the forward-looking statements, see the Company's SEC filings including, but not limited to, the discussion of "Competition" in the Company's Annual Report on Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report and "Note A: Accounting Policies" and "Note N: Commitments and Contingencies" of the "Notes to Financial Statements" of the audited consolidated financial statements included in this Annual Report.

QUARTERLY PERFORMANCE (UNAUDITED)
(add 000, except per share and stock prices)

	Total Revenues		Net Sales		Gross Profit		Consolidated Net Earnings		Net Earnings Attributable to Martin Marietta	
Quarter	2017	2016	2017	2016	2017	2016	2017 [2,3,4]	2016 [5,6]	2017 [2,3,4]	2016 [5,6]
First	**$ 843,859**	$ 788,734	**$ 791,684**	$ 733,960	**$ 147,067**	$ 145,250	**$ 42,307**	$ 45,055	**$ 42,334**	$ 44,994
Second	**1,063,524**	977,298	**996,289**	915,436	**274,094**	247,431	**142,241**	122,113	**142,279**	122,052
Third	**1,087,732**	1,103,901	**1,022,137**	1,038,344	**291,678**	293,307	**151,539**	159,478	**151,546**	159,479
Fourth	**970,479**	948,816	**911,318**	889,027	**259,101**	225,750	**377,298**	98,798	**377,183**	98,861
Totals	**$ 3,965,594**	$ 3,818,749	**$ 3,721,428**	$ 3,576,767	**$ 971,940**	$ 911,738	**$ 713,385**	$ 425,444	**$ 713,342**	$ 425,386

Per Common Share

	Basic Earnings[1]		Diluted Earnings[1]		Dividends Paid		Stock Prices High	Stock Prices Low	Stock Prices High	Stock Prices Low
Quarter	2017 [2,3,4]	2016 [5,6]	2017 [2,3,4]	2016 [5,6]	2017	2016	2017		2016	
First	**$ 0.67**	$ 0.70	**$ 0.67**	$ 0.69	**$ 0.42**	$ 0.40	**$ 243.98**	**$ 201.77**	$ 160.18	$ 108.31
Second	**$ 2.26**	$ 1.91	**$ 2.25**	$ 1.90	**0.42**	0.40	**$ 244.32**	**$ 209.43**	$ 193.87	$ 156.35
Third	**$ 2.40**	$ 2.50	**$ 2.39**	$ 2.49	**0.44**	0.42	**$ 231.00**	**$ 191.09**	$ 206.36	$ 172.49
Fourth	**$ 5.98**	$ 1.56	**$ 5.95**	$ 1.55	**0.44**	0.42	**$ 222.45**	**$ 200.27**	$ 236.41	$ 167.06
Full Year	**$ 11.30**	$ 6.66	**$ 11.25**	$ 6.63	**$ 1.72**	$ 1.64				

1 The sum of per-share earnings by quarter may not equal earnings per share for the year due to changes in average share calculations. This is in accordance with prescribed reporting requirements.

2 Consolidated net earnings, net earnings attributable to Martin Marietta, and basic and diluted earnings per common share in the second quarter of 2017 were reduced by $3.8 million, or $0.06 per basic and diluted share, as a result of expense related to a retirement agreement and increased by $8.3 million, or $0.13 per basic and diluted share, as a result of a gain on the sale of real property.

3 Consolidated net earnings, net earnings attributable to Martin Marietta, and basic and diluted earnings per common share in the third quarter of 2017 were reduced by $7.9 million, or $0.13 per basic and diluted share, as a result of nonrecurring repair costs related to certain of the Company's leased railcars.

4 Consolidated net earnings, net earnings attributable to Martin Marietta, and basic and diluted earnings per common share in the fourth quarter of 2017 were increased by $258.1 million, or $4.09 and $4.07 per basic and diluted share, respectively, as a result of the impact of the 2017 Tax Act.

5 Consolidated net earnings, net earnings attributable to Martin Marietta, and basic and diluted earnings per common share in the fourth quarter of 2016 were reduced by $7.5 million, or $0.12 per basic and diluted share, as a result of increased performance-based compensation expense.

6 Consolidated net earnings, net earnings attributable to Martin Marietta, and basic and diluted earnings per common share for the full year 2016 were reduced by $8.8 million, or $0.14 per basic and diluted share, as a result of increased performance-based compensation expense.

At February 15, 2018, there were 911 shareholders of record.

FIVE YEAR SELECTED FINANCIAL DATA
(add 000, except per share)

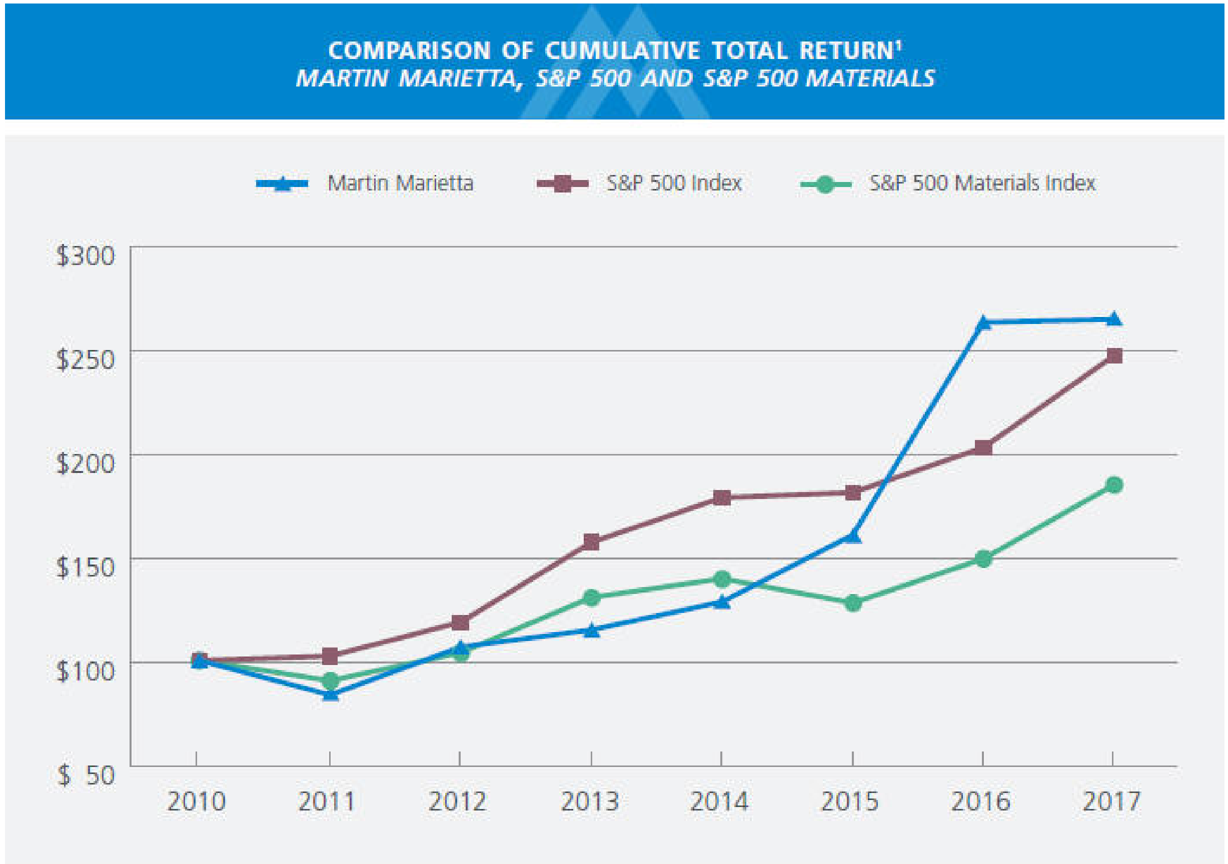
	2017	2016	2015	2014	2013
Consolidated Operating Results[1]					
Net sales	**$ 3,721,428**	$ 3,576,767	$ 3,268,116	$ 2,679,095	$ 1,943,218
Freight and delivery revenues	**244,166**	241,982	271,454	278,856	212,333
Total revenues	**3,965,594**	3,818,749	3,539,570	2,957,951	2,155,551
Cost of sales[1]	**2,749,488**	2,665,029	2,541,196	2,159,471	1,573,196
Freight and delivery costs	**244,166**	241,982	271,454	278,856	212,333
Total cost of revenues[1]	**2,993,654**	2,907,011	2,812,650	2,438,327	1,785,529
Gross Profit[1]	**971,940**	911,738	726,920	519,624	370,022
Selling, general and administrative expenses[1]	**262,128**	241,606	210,754	168,102	145,151
Acquisition-related expenses, net[1]	**8,638**	909	6,346	29,239	671
Other operating expenses and (income), net	**793**	(8,043)	15,653	(4,649)	(4,793)
Earnings from Operations[1]	**700,381**	677,266	494,167	326,932	228,993
Interest expense	**91,487**	81,677	76,287	66,057	53,467
Other nonoperating (income) and expenses, net[1]	**(10,034)**	(11,439)	4,079	11,697	11,300
Earnings from continuing operations before income tax (benefit) expense	**618,928**	607,028	413,801	249,178	164,226
Income tax (benefit) expense	**(94,457)**	181,584	124,863	94,847	44,045
Earnings from Continuing Operations	**713,385**	425,444	288,938	154,331	120,181
Discontinued operations, net of taxes	**–**	–	–	(37)	(749)
Consolidated net earnings	**713,385**	425,444	288,938	154,294	119,432
Less: Net earnings (loss) attributable to noncontrolling interests	**43**	58	146	(1,307)	(1,905)
Net Earnings Attributable to Martin Marietta	**$ 713,342**	$ 425,386	$ 288,792	$ 155,601	$ 121,337
Basic Earnings Attributable to Martin Marietta Per Common Share (see Note A):					
Earnings from continuing operations attributable to common shareholders[1]	**$ 11.30**	$ 6.66	$ 4.31	$ 2.73	$ 2.64
Discontinued operations attributable to common shareholders	**–**	–	–	–	(0.02)
Basic Earnings Per Common Share	**$ 11.30**	$ 6.66	$ 4.31	$ 2.73	$ 2.62
Diluted Earnings Attributable to Martin Marietta Per Common Share (see Note A):					
Earnings from continuing operations attributable to common shareholders	**$ 11.25**	$ 6.63	$ 4.29	$ 2.71	$ 2.63
Discontinued operations attributable to common shareholders[1]	**–**	–	–	–	(0.02)
Diluted Earnings Per Common Share	**$ 11.25**	$ 6.63	$ 4.29	$ 2.71	$ 2.61
Cash Dividends Per Common Share	**$ 1.72**	$ 1.64	$ 1.60	$ 1.60	$ 1.60
Condensed Consolidated Balance Sheet Data					
Total current assets[2]	**$ 2,631,160**	$ 1,086,385	$ 1,081,635	$ 1,043,646	$ 680,080
Property, plant and equipment, net	**3,592,813**	3,423,395	3,156,000	3,402,770	1,799,241
Goodwill	**2,160,290**	2,159,337	2,068,235	2,068,799	616,621
Other intangibles, net	**506,349**	511,312	510,552	595,205	48,591
Other noncurrent assets[2]	**101,899**	120,476	141,189	104,097	36,738
Total Assets	**$ 8,992,511**	$ 7,300,905	$ 6,957,611	$ 7,214,517	$ 3,181,271
Current liabilities – other	**$ 394,307**	$ 366,552	$ 347,945	$ 382,312	$ 198,146
Current maturities of long-term debt[2]	**299,909**	180,036	18,713	13,803	11,938
Long-term debt[2]	**2,727,294**	1,506,153	1,550,061	1,566,355	1,015,249
Pension, postretirement and postemployment benefits, noncurrent	**244,043**	248,086	224,538	249,333	78,489
Deferred income taxes, net	**410,723**	663,019	583,459	489,945	205,178
Other noncurrent liabilities	**233,758**	194,469	172,718	160,021	97,352
Shareholders' equity	**4,679,600**	4,139,978	4,057,284	4,351,166	1,537,877
Noncontrolling interests	**2,877**	2,612	2,893	1,582	37,042
Total Liabilities and Equity	**$ 8,992,511**	$ 7,300,905	$ 6,957,611	$ 7,214,517	$ 3,181,271

1 Amounts for 2013-2016 may not equal amounts reported in the Company's prior years' Forms 10-K as amounts have been reclassified to reflect the adoption of the Accounting Standards Update 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.*

2 Balance sheets reflect the adoption of Accounting Standards Update 2015-03, *Simplifying the Presentation of Debt Issuance Costs.*

COMMON STOCK PERFORMANCE GRAPH

The following graph compares the performance of the Company's common stock to that of the Standard and Poor's (S&P) 500 Index and the S&P 500 Materials Index.



Cumulative Total Return[1]
(as of December 31)

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

1 Assumes that the investment in the Company's common stock and each index was $100, with quarterly reinvestment of dividends.

EXHIBIT 21.01

SUBSIDIARIES OF MARTIN MARIETTA MATERIALS, INC.

AS OF JANUARY 31, 2018

Name of Subsidiary	Percent Owned
Alamo Gulf Coast Railroad Company, a Texas corporation	99.5%[1]
Alamo North Texas Railroad Company, a Texas corporation	99.5%[2]
American Aggregates Corporation, a North Carolina corporation	100%
American Materials Technologies, LLC, a Tennessee limited liability company	100%[3]
American Stone Company, a North Carolina corporation	50%[4]
Bahama Rock Limited, a Bahamas corporation	100%
Brookhollow of Alexandria, Inc., a Louisiana corporation	100%[5]
Brookhollow Corporation, a Delaware corporation	100%[6]
Brook Hollow Properties, Inc., a Texas corporation	100%[7]
Brookhollow of Virginia, Inc., a Virginia corporation	100%[8]
California Natural Aggregates, Inc., a California corporation	100%[9]
Campbell's C-Ment Contracting, Inc., a Colorado corporation	100%[10]

1 Alamo Gulf Coast Railroad Company is owned by Martin Marietta Materials Southwest, LLC, (99.5%) and certain individuals (0.5%).
2 Alamo North Texas Railroad Company is owned by Martin Marietta Materials Southwest, LLC, (99.5%) and certain individuals (0.5%).
3 American Materials Technologies, LLC is a wholly owned subsidiary of Meridian Aggregates Company, a Limited Partnership.
4 Martin Marietta Materials, Inc. owns a 50% interest in American Stone Company.
5 Brookhollow of Alexandria, Inc. is a wholly owned subsidiary of Brookhollow Corporation.
6 Brookhollow Corporation is a wholly owned subsidiary of Texas Industries, Inc.
7 Brook Hollow Properties, Inc. is a wholly owned subsidiary of Brookhollow Corporation.
8 Brookhollow of Virginia is a wholly owned subsidiary of Brookhollow Corporation.
9 California Natural Aggregates, Inc. is a wholly owned subsidiary of Texas Industries, Inc.
10 Campbell's C-Ment Contracting, Inc. is a wholly-owned subsidiary of Suburban Acquisition Company.

CIG MC LLC, a Colorado limited liability company	100%
Creole Corporation, a Delaware corporation	100%[11]
FRI Ready Mix of Tennessee, LLC, a Florida limited liability company	100%[12]
Front Range Aggregates LLC, a Delaware limited liability company	100%
Granite Canyon Quarry, a Wyoming joint venture	100%[13]
Harding Street Corporation, a North Carolina corporation	100%
HSMM LLC, a North Carolina limited liability company	100%
Martin Marietta Composites, Inc., a Delaware corporation	100%
Martin Marietta Fleet Management LLC, a North Carolina limited liability company	100%[14]
Martin Marietta Funding LLC, a Delaware limited liability company	100%
Martin Marietta Inc., a North Carolina corporation	100%
Martin Marietta Kansas City, LLC, a Delaware limited liability company	100%[15]
Martin Marietta Magnesia Specialties, LLC, a Delaware limited liability company	100%
Martin Marietta Materials Canada Limited, a Nova Scotia, Canada corporation	100%
Martin Marietta Materials of Missouri, Inc., a Delaware corporation	100%
Martin Marietta Materials Real Estate Investments, Inc., a North Carolina corporation	100%
Martin Marietta Materials Southwest, LLC, a Texas limited liability company	100%[16]
Material Producers, Inc., an Oklahoma corporation	100%[17]

11 Creole Corporation is a wholly owned subsidiary of Texas Industries, Inc.

12 FRI Ready Mix of Tennessee, LLC is a wholly owned subsidiary of American Materials Technologies, LLC.

13 Granite Canyon Quarry is owned 51% by Meridian Granite Company and 49% by Martin Marietta Materials Real Estate Investments, Inc.

14 Martin Marietta Fleet Management LLC, is a wholly owned subsidiary of Martin Marietta Materials Southwest, LLC

15 Martin Marietta Kansas City, LLC is owned 95% by Martin Marietta Materials, Inc. and 5% by Martin Marietta Materials of Missouri, Inc.

16 Martin Marietta Materials Southwest, LLC is a wholly owned subsidiary of Texas Industries, Inc.

17 Material Producers, Inc. is a wholly owned subsidiary of Martin Marietta Materials Southwest, LLC

Meridian Aggregates Company, a Limited Partnership, a North Carolina limited partnership	100%[18]
Meridian Aggregates Company Northwest, LLC, a North Carolina limited liability company	100%[19]
Meridian Aggregates Company Southwest, LLC, a North Carolina limited liability company	100%[20]
Meridian Aggregates Investments, LLC, a North Carolina limited liability company	100%[21]
Meridian Granite Company, a North Carolina corporation	100%[22]
Mid-State Construction & Materials, Inc., an Arkansas corporation	100%
MTD Pipeline LLC, a Delaware limited liability company	50%[23]
Partin Limestone Products, Inc., a California corporation	100%[24]
Powderly Transportation, Inc., a North Carolina corporation	100%[25]
R&S Sand & Gravel, LLC, a North Carolina limited liability company	100%[26]
Ratliff Mix Management, LLC, a Texas limited liability company	100%[27]
Ratliff Ready-Mix, LP, a Texas limited partnership	100%[28]
Riverside Cement Company, a California partnership	100%[29]
Riverside Cement Holdings Company, a Delaware corporation	100%[30]

18 Meridian Aggregates Company, a Limited Partnership, is owned 98% by Meridian Aggregates Investments, LLC. The remaining 2% is owned by Martin Marietta Materials, Inc.

19 Martin Marietta Materials, Inc. is the sole member of Meridian Aggregates Company Northwest, LLC.

20 Martin Marietta Materials Southwest, LLC is the sole member of Meridian Aggregates Company Southwest, LLC.

21 Meridian Aggregates Investments, LLC is owned 99% by Martin Marietta Materials, Inc. and 1% by Martin Marietta Materials Real Estate Investments, Inc.

22 Meridian Granite Company is a wholly owned subsidiary of Meridian Aggregates Company, a Limited Partnership.

23 Martin Marietta Magnesia Specialties, LLC, a wholly owned subsidiary of Martin Marietta Materials, Inc., owns a 50% interest in MTD Pipeline LLC.

24 Partin Limestone Products, Inc. is a wholly owned subsidiary of Riverside Cement Company.

25 Powderly Transportation, Inc. is a wholly owned subsidiary of Meridian Aggregates Company, a Limited Partnership.

26 Martin Marietta Materials, Inc. is the manager of and owns a 90% interest in R&S Sand & Gravel, LLC. The other 10% is owned by Harding Street Corporation, a wholly owned subsidiary of Martin Marietta Materials, Inc.

27 Ratliff Mix Management, LLC is a wholly owned subsidiary of TXI Operations, LP.

28 Ratliff Ready-Mix, LP is owned 99% by TXI Operations, LP and 1% by Ratliff Mix Management, LLC.

29 Riverside Cement Company is owned 49% by TXI California, Inc. and 51% by TXI Riverside Inc.

30 Riverside Cement Holdings Company is a wholly owned subsidiary of Riverside Cement Company.

Rock & Rail LLC, a Colorado limited liability company	100%
Rocky Mountain Materials and Asphalt, Inc., a Colorado corporation	100%
Rocky Mountain Premix, Inc., a Colorado corporation	100%
Rocky Mountain Ready Mix Concrete, Inc., a Colorado corporation	100%[31]
Royal Gorge Express, LLC, a Colorado Limited Liability Company	50%[32]
Southwestern Financial Corporation, a Texas Corporation	100%[33]
Suburban Acquisition Company, a Colorado corporation	100%
Texas Industries Holdings, LLC, a Delaware limited liability company	100%[34]
Texas Industries, Inc., a Delaware corporation	100%
Texas Industries Trust, a Delaware trust	100%[35]
Theodore Holding, LLC, a Delaware limited liability company	60.7%[36]
TXI Aviation, Inc. dba TXI Retail, a Texas corporation	100%[37]
TXI California Inc., a Delaware corporation	100%[38]
TXI Cement Company, a Delaware corporation	100%[39]
TXI LLC, a Delaware limited liability company	100%[40]
TXI Operating Trust, a Delaware trust	100%[41]
TXI Operations, LP, a Delaware limited partnership	100%[42]

31 Rocky Mountain Ready Mix Concrete, Inc. is a wholly owned subsidiary of Campbell's C-Ment Contracting, Inc.

32 Rock & Rail LLC, a wholly owned subsidiary of Martin Marietta Materials, Inc., owns a 50% interest in Royal Gorge Express, LLC

33 Southwestern Financial Corporation is a wholly owned subsidiary of TXI Operations, LP.

34 Texas Industries Holdings, LLC is a wholly owned subsidiary of Texas Industries, Inc.

35 Texas Industries Trust is owned 100% by Texas Industries Holdings, LLC.

36 Martin Marietta Materials, Inc. is the manager of and owns a 60.7% interest in Theodore Holdings, LLC.

37 TXI Aviation, Inc. is a wholly owned subsidiary of Texas Industries, Inc.

38 TXI California Inc. is a wholly owned subsidiary of Texas Industries, Inc.

39 TXI Cement Company is a wholly owned subsidiary of Texas Industries, Inc.

40 TXI, LLC is a wholly owned subsidiary of Texas Industries, Inc.

41 TXI Operating Trust is owned 100% by TXI LLC.

42 TXI Operations, LP is owned 99% by Texas Industries Trust and owned 1% by TXI Operating Trust.

TXI Power Company, a Texas corporation	100%[43]
TXI Riverside Inc., a Delaware corporation	100%[44]
TXI Transportation Company, a Texas corporation	100%[45]
Valley Stone LLC, a Virginia limited liability company	50%[46]

43 TXI Power Company is a wholly owned subsidiary of Texas Industries, Inc.

44 TXI Riverside Inc. is a wholly owned subsidiary of Texas Industries, Inc.

45 TXI Transportation Company is a wholly owned subsidiary of Texas Industries, Inc.

46 Martin Marietta Materials, Inc. is the manager of and owns a 50% interest in Valley Stone LLC.

EXHIBIT 23.01

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-115918, 333-85608, 333-15429, 333-211735, and 333-197201) and Form S-3 (No. 333-217991) of Martin Marietta Materials, Inc. of our report dated February 23, 2018 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in the Annual Report to Shareholders, which is incorporated in this Annual Report on Form 10-K. We also consent to the incorporation by reference of our report dated February 23, 2018 relating to the financial statement schedule, which appears in this Form 10K.

/s/ PricewaterhouseCoopers LLP
Raleigh, North Carolina
February 23, 2018

Consent of Independent Registered Public Accounting Firm and Report on Schedule

Consent

We consent to the incorporation by reference in the following Registration Statements:

1) Registration Statement (Form S-8 No. 333-115918) pertaining to the Amended and Restated Martin Marietta Materials, Inc. Common Stock Purchase Plan for Directors, Martin Marietta Materials, Inc., Performance Sharing Plan and the Martin Marietta Materials, Inc. Savings and Investment Plan for Hourly Employees,

2) Registration Statement (Form S-8 No. 333-85608) pertaining to the Martin Marietta Materials, Inc. Common Stock Purchase Plan for Directors,

3) Registration Statement (Form S-8 No. 333-15429) pertaining to the Martin Marietta Materials, Inc. Common Stock Purchase Plan for Directors, Martin Marietta Materials, Inc. Performance Sharing Plan, and the Martin Marietta Materials, Inc. Savings and Investment Plan for Hourly Employees,

4) Registration Statement (Form S-8 No. 333-211735) pertaining to the Martin Marietta Amended and Restated Stock-Based Award Plan,

5) Registration Statement (Form S-8 No. 333-197201) pertaining to the Texas Industries, Inc. 2004 Omnibus Equity Compensation Plan and the Texas Industries, Inc. Management Deferred Compensation Plan, as assumed by Martin Marietta Materials, Inc., and

6) Registration Statement (Form S-3 No. 333-217991) and related Prospectuses pertaining to Debt Securities of Martin Marietta Materials, Inc.

of our report dated February 23, 2016, except for the recently adopted accounting pronouncements discussed in Note A and the effects of the segment change discussed in Note O, as to which the date is May 12, 2017, with respect to the consolidated financial statements of Martin Marietta Materials, Inc. and consolidated subsidiaries for the year ended December 31, 2015 incorporated by reference in this Annual Report (Form 10-K) of Martin Marietta Materials, Inc. for the year ended December 31, 2017.

Report on Schedule

To the Board of Directors and Shareholders of Martin Marietta Materials, Inc.

We have audited the consolidated financial statements of Martin Marietta Materials, Inc. and consolidated subsidiaries for the year ended December 31, 2015 (the Company) for the year ended December 31, 2015 and have issued our report thereon dated February 23, 2016, except for the recently adopted accounting pronouncements discussed in Note A and the effects of the segment change discussed in Note O, as to which the date is May 12, 2017, incorporated by reference in this Annual Report (Form 10-K) of Martin Marietta Materials Inc. from the 2017 Annual Report to Shareholders of Martin Marietta Materials, Inc. Our audit of the consolidated financial statements included the financial statement schedule for the year ended December 31, 2015 listed in Item 15(a) of this Annual Report (Form 10-K) (the “schedule”). This schedule is the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s schedule based on our audit.

In our opinion, the schedule presents fairly, in all material respects, the information set forth therein when considered in conjunction with the consolidated financial statements for the year ended December 31, 2015.

/s/ Ernst & Young LLP
Raleigh, North Carolina
February 23, 2018

EXHIBIT 31.01

CERTIFICATION PURSUANT TO SECURITIES AND EXCHANGE ACT OF 1934

RULE 13a-14 AS ADOPTED PURSUANT TO SECTION 302 OF THE

SARBANES-OXLEY ACT OF 2002

CERTIFICATIONS

I, C. Howard Nye, certify that:

1. I have reviewed this Form 10-K of Martin Marietta Materials, Inc.;

2. 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(s) 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(s) 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):

(a) 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 23, 2018

By: /s/ C. Howard Nye
C. Howard Nye
Chairman, President and
Chief Executive Officer

EXHIBIT 31.02

CERTIFICATION PURSUANT TO SECURITIES AND EXCHANGE ACT OF 1934

RULE 13a-14 AS ADOPTED PURSUANT TO SECTION 302 OF THE

SARBANES-OXLEY ACT OF 2002

CERTIFICATIONS

I, James A. J. Nickolas, certify that:

1. I have reviewed this Form 10-K of Martin Marietta Materials, Inc.;
2. 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(s) 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(s) 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):

(a) 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 23, 2018

By: /s/ James A. J. Nickolas
James A. J. Nickolas
Senior Vice President and
Chief Financial Officer

EXHIBIT 32.01

WRITTEN STATEMENT PURSUANT TO 18 U.S.C. 1350,

AS ADOPTED PURSUANT TO SECTION 906 OF THE

SARBANES-OXLEY ACT OF 2002

In connection with the 2017 Annual Report on Form 10-K (the "Report") of Martin Marietta Materials, Inc. (the "Registrant"), as filed with the Securities and Exchange Commission, I, C. Howard Nye, the Chief Executive Officer of the Registrant, certify that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ C. Howard Nye

C. Howard Nye
Chief Executive Officer

Date: February 23, 2018

A signed original of this written statement required by Section 906 has been provided to Martin Marietta Materials, Inc. and will be retained by Martin Marietta Materials, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.02

WRITTEN STATEMENT PURSUANT TO 18 U.S.C. 1350,

AS ADOPTED PURSUANT TO SECTION 906 OF THE

SARBANES-OXLEY ACT OF 2002

In connection with the 2017 Annual Report on Form 10-K (the “Report”) of Martin Marietta Materials, Inc. (the “Registrant”), as filed with the Securities and Exchange Commission, I, James A. J. Nickolas, the Chief Financial Officer of the Registrant, certify that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ James A. J. Nickolas
James A. J. Nickolas
Chief Financial Officer

Date: February 23, 2018

A signed original of this written statement required by Section 906 has been provided to Martin Marietta Materials, Inc. and will be retained by Martin Marietta Materials, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 95

MINE SAFETY DISCLOSURE EXHIBIT

The operation of the Company's U.S. aggregate quarries and mines (including the mining operations of the cement product line) is subject to regulation by the federal Mine Safety and Health Administration (MSHA) under the Federal Mine Safety and Health Act of 1977 (the "Mine Act"). MSHA inspects the Company's quarries and mines (and cement plants) on a regular basis and issues various citations and orders when it believes a violation has occurred under the Mine Act. Whenever MSHA issues a citation or order, it also generally proposes a civil penalty, or fine, related to the alleged violation. Citations or orders can be contested and appealed, and as part of that process, are often reduced in severity and amount, and are sometimes dismissed.

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), the Company is required to present information regarding certain mining safety and health citations which MSHA has issued with respect to its aggregates mining operations in its periodic reports filed with the Securities and Exchange Commission (the "SEC"). In evaluating this information, consideration should be given to factors such as: (i) the number of citations and orders will vary depending on the size of the quarry or mine and type of operations (underground or surface), (ii) the number of citations issued will vary from inspector to inspector and location to location, and (iii) citations and orders can be contested and appealed, and in that process, may be reduced in severity and amount, and are sometimes dismissed.

We have provided information below in response to the rules and regulations of the SEC issued under Section 1503(a) of the Dodd-Frank Act. The disclosures reflect U.S. mining operations only, as the requirements of the Dodd-Frank Act and the SEC rules and regulations thereunder do not apply to our quarries and mines operated outside the United States.

The Company presents the following items regarding certain mining safety and health matters for the year ended December 31, 2017 (Appendix 1):

- Total number of 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 under section 104 of the Mine Act for which the Company received a citation from MSHA (hereinafter, "Section 104 S&S Citations"). If MSHA determines that a violation of a mandatory health or safety standard is reasonably likely to result in a reasonably serious injury or illness under the unique circumstance contributed to by the violation, MSHA will classify the violation as a "significant and substantial" violation (commonly referred to as a "S&S" violation). MSHA inspectors will classify each citation or order written as a "S&S" violation or not.
- Total number of orders issued under section 104(b) of the Mine Act (hereinafter, "Section 104(b) Orders"). These orders are issued for situations in which MSHA determines a previous violation covered by a Section 104(a) citation has not been totally abated within the prescribed time period, so a further order is needed to require the mine operator to immediately withdraw all persons (except certain authorized persons) from the affected area of a quarry or mine.

- Total number of citations and orders for unwarrantable failure of the mine operator to comply with mandatory health or safety standards under Section 104(d) of the Mine Act (hereinafter, “Section 104(d) Citations and Orders”). These violations are similar to those described above, but the standard is that the violation could significantly and substantially contribute to the cause and effect of a safety or health hazard, but the conditions do not cause imminent danger, and the MSHA inspector finds that the violation is caused by an unwarranted failure of the operator to comply with the health and safety standards.
- Total number of flagrant violations under section 110(b)(2) of the Mine Act (hereinafter, “Section 110(b)(2) Violations”). These violations are penalty violations issued if MSHA determines that violations are “flagrant”, for which civil penalties may be assessed. A “flagrant” violation means a reckless or repeated failure to make reasonable efforts to eliminate a known violation of a mandatory health or safety standard that substantially and proximately caused, or reasonably could have been expected to cause, death or serious bodily injury.
- Total number of imminent danger orders issued under section 107(a) of the Mine Act (hereinafter, “Section 107(a) Orders”). These orders are issued for situations in which MSHA determines an imminent danger exists in the quarry or mine and results in orders of immediate withdrawal of all persons (except certain authorized persons) from the area of the quarry or mine affected by its condition until the imminent danger and the underlying conditions causing the imminent danger no longer exist.
- Total Dollar Value of MSHA Assessments Proposed. These are the amounts of proposed assessments issued by MSHA with each citation or order for the time period covered by the report. Penalties are assessed by MSHA according to a formula that considers a number of factors, including the mine operator’s history, size, negligence, gravity of the violation, good faith in trying to correct the violation promptly, and the effect of the penalty on the operator’s ability to continue in business.
- Total Number of Mining-Related Fatalities. Mines subject to the Mine Act are required to report all fatalities occurring at their facilities unless the fatality is determined to be “non-chargeable” to the mining industry. The final rules of the SEC require disclosure of mining-related fatalities at mines subject to the Mine Act. Only fatalities determined by MSHA not to be mining-related may be excluded.
- Receipt of written notice from MSHA of a pattern (or a potential to have such 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 other mine health or safety hazards under section 104(e) of the Mine Act. If MHSA determines that a mine has a “pattern” of these types of violations, or the potential to have such a pattern, MSHA is required to notify the mine operator of the existence of such a thing.
- Legal Actions Pending as of the Last Day of Period.
- Legal Actions Initiated During Period.
- Legal Actions Resolved During Period.

The Federal Mine Safety and Health Review Commission (the “Commission”) is an independent adjudicative agency that provides administrative trial and appellate review of legal disputes arising under the Mine Act. The cases may involve, among other questions, challenges by operators to citations, orders and penalties they have received from MSHA, or complaints of discrimination by miners under Section 105 of the

Mine Act. Appendix 1 shows, for each of the Company's quarries and mines identified, as of December 31, 2017, the number of legal actions pending before the Commission, along with the number of legal actions initiated before the Commission during the year as well as resolved during the year. In addition, Appendix 1 includes a footnote to the column for legal actions before the Commission pending as of the last day of the period, which footnote breaks down that total number of legal actions pending by categories according to the type of proceeding in accordance with various categories established by the Procedural Rules of the Commission.

Appendix 1 attached

Appendix 1

Location	MSHA ID	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessment/ $ Proposed	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violation Under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)*	Legal Actions Instituted During Period (#)	Legal Actions Resolved During Period (#)
Alexander Quarry	BN5	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Amelia Quarry	4407372	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
American Stone Quarry	3100189	0	0	0	0	0	$ **135**	0	no	no	**0**	**0**	**0**
Anderson Creek	4402963	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Arrowood Quarry	3100059	1	0	0	0	0	$ **896**	0	no	no	**0**	**0**	**0**
Asheboro Quarry	3100066	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Bakers Quarry	3100071	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Belgrade Quarry	3100064	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Benson Quarry	3101979	0	0	0	0	0	$ **116**	0	no	no	**0**	**0**	**0**
Berkeley Quarry	3800072	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Bessemer City Quarry	3101105	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Black Ankle Quarry	3102220	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Bonds Gravel Pit	3101963	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Boonsboro Quarry	1800024	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Burlington Quarry	3100042	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Caldwell Quarry	3101869	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Castle Hayne Quarry	3100063	0	0	0	0	0	$ **116**	0	no	no	**0**	**0**	**0**
Cayce Quarry	3800016	2	0	0	0	0	$ **2,420**	0	no	no	**0**	**0**	**0**
Central Rock Quarry	3100050	0	0	0	0	0	$ **116**	0	no	no	**0**	**0**	**0**
Charlotte Quarry	3100057	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Clarks Quarry	3102009	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Denver	3101971	1	0	0	0	0	$ **869**	0	no	no	**0**	**0**	**0**
Doswell Quarry	4400045	0	0	0	0	0	$ **464**	0	no	no	**0**	**0**	**2**

Location	MSHA ID	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessment/ $ Proposed	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violation Under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)*	Legal Actions Instituted During Period (#)	Legal Actions Resolved During Period (#)
East Alamance	3102021	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Fountain Quarry	3100065	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Franklin Quarry	3102130	0	0	0	0	0	**$ 251**	0	no	no	**0**	**0**	**0**
Fuquay Quarry	3102055	0	0	0	0	0	**$ 251**	0	no	no	**0**	**0**	**0**
Garner Quarry	3100072	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Georgetown ll Quarry	3800525	0	0	0	0	0	**$ 160**	0	no	no	**0**	**0**	**0**
Hickory Quarry	3100043	0	0	0	0	0	**$ 872**	0	no	no	**0**	**0**	**0**
Hicone Quarry	3102088	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Jamestown Quarry	3100051	0	0	0	0	0	**$ 320**	0	no	no	**0**	**0**	**0**
Kannapolis Quarry	3100070	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Kings Mountain Quarry	3100047	0	0	0	0	0	**$ 276**	0	no	no	**0**	**0**	**0**
Lemon Springs Quarry	3101104	0	0	0	0	0	**$ 289**	0	no	no	**0**	**0**	**0**
Loamy Sand and Gravel	3800721	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Maiden Quarry	3102125	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Mallard Creek Quarry	3102006	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Matthews Quarry	3102084	0	0	0	0	0	**$ 0**	0	no	no	**0**	**1**	**1**
Midlothian Quarry	4403767	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
North Columbia Quarry	3800146	1	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Onslow Quarry	3102120	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Pinesburg	1800021	1	0	0	0	0	**$ 537**	0	no	no	**0**	**0**	**0**
Pomona Quarry	3100052	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Raleigh Durham Quarry	3101941	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Red Hill Quarry	4400072	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Reidsville Quarry	3100068	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**

Location	MSHA ID	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessment/ $ Proposed	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violation Under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)*	Legal Actions Instituted During Period (#)	Legal Actions Resolved During Period (#)
Rock Hill Quarry	3800026	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Rocky Point Quarry	3101956	0	0	0	0	0	$ **232**	0	no	no	**0**	**0**	**0**
Salem Stone Company	3102038	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Statesville Quarry	3100055	1	0	0	0	0	$ **356**	0	no	no	**0**	**0**	**0**
Thomasville Quarry	3101475	1	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Wilmington Sand	3101308	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Woodleaf Quarry	3100069	0	0	0	0	0	$ **116**	0	no	no	**0**	**0**	**0**
(45) North Indianapolis SURFACE	1200002	2	0	0	0	0	$ **1,270**	0	no	no	**0**	**0**	**0**
Apple Grove	3301676	0	0	0	0	0	$ **116**	0	no	no	**0**	**0**	**0**
Belmont Sand	1201911	0	0	0	0	0	$ **232**	0	no	no	**0**	**0**	**0**
Burning Springs	4608862	1	0	0	0	0	$ **1,491**	0	no	no	**1**	**1**	**0**
Carmel SandG	1202124	1	0	0	0	0	$ **320**	0	no	no	**0**	**0**	**0**
Cedarville	3304072	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Cloverdale	1201744	1	0	0	0	0	$ **734**	0	no	no	**0**	**0**	**0**
Cook Road	3304534	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
E-Town SandG	3304279	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Fairfield	3301396	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Franklin Gravel	3302940	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Kentucky Ave Mine	1201762	3	0	0	0	0	$ **4,477**	0	no	no	**0**	**1**	**1**
Kokomo Mine	1202105	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Kokomo Sand	1202203	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Kokomo Stone	1200142	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**

Location	MSHA ID	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessment/ $ Proposed	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violation Under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)*	Legal Actions Instituted During Period (#)	Legal Actions Resolved During Period (#)
Noblesville SandG	1201994	0	0	0	0	0	**$ 844**	0	no	no	**0**	**0**	**0**
Noblesville Stone	1202176	4	0	0	0	0	**$ 7,891**	0	no	no	**1**	**4**	**5**
North Indianapolis	1201993	2	0	0	0	0	**$ 1,849**	0	no	no	**1**	**1**	**6**
Petersburg	1516895	0	0	0	0	0	**$ 232**	0	no	no	**0**	**0**	**0**
Phillipsburg	3300006	0	0	0	0	0	**$ 135**	0	no	no	**0**	**0**	**0**
Shamrock SG	3304011	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Troy Gravel	3301678	1	0	0	0	0	**$ 280**	0	no	no	**0**	**0**	**0**
Waverly Sand	1202038	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Xenia	3301393	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Appling Quarry	901083	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Auburn, Al Quarry	100006	1	0	0	0	0	**$ 471**	0	no	no	**0**	**0**	**0**
Auburn, GA Quarry	900436	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Augusta Quarry-GA	900065	2	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Chattanooga Quarry	4003159	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Forsyth Quarry	901035	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Jefferson Quarry	901106	1	0	0	0	0	**$ 348**	0	no	no	**0**	**0**	**0**
Junction City Quarry	901029	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Lithonia Quarry	900023	0	0	0	0	0	**$ 116**	0	no	no	**0**	**1**	**2**
Maylene Quarry	100634	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Morgan Co Quarry	901126	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Newton Quarry	900899	0	0	0	0	0	**$ 251**	0	no	no	**0**	**0**	**0**
ONeal Quarry Co19	103076	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Paulding Quarry	901107	1	0	0	0	0	**$ 220**	0	no	no	**0**	**0**	**0**

Location	MSHA ID	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessment/ $ Proposed	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violation Under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)*	Legal Actions Instituted During Period (#)	Legal Actions Resolved During Period (#)
Perry Quarry	801083	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Red Oak Quarry	900069	1	0	0	0	0	**$ 239**	0	no	no	**0**	**0**	**0**
Ruby Quarry	900074	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Six Mile Quarry	901144	1	0	0	0	0	**$ 812**	0	no	no	**0**	**0**	**0**
Tyrone Quarry	900306	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Vance Quarry Co19	103022	0	0	0	0	0	**$ 348**	0	no	no	**0**	**0**	**0**
Warrenton Quarry	900580	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Alden Portable Sand	1302037	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Alden Portable Plant 1	1302031	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Alden Portable Plant 2	1302033	0	0	0	0	0	**$ 624**	0	no	no	**0**	**0**	**0**
Alden Portable Wash	1302122	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Alden Quarry - Shop	1300228	0	0	0	0	0	**$ 1,292**	0	no	no	**0**	**0**	**0**
Ames Mine	1300014	2	0	0	0	0	**$ 4,602**	0	no	no	**0**	**0**	**0**
Cedar Rapids Quarry	1300122	1	0	0	0	0	**$ 492**	0	no	no	**0**	**0**	**0**
Des Moines Portable (Plant 861)	1300150	1	0	0	0	0	**$ 6,275**	0	no	no	**1**	**2**	**1**
Dubois Quarry	2501046	1	0	0	0	0	**$ 3,435**	0	no	no	**2**	**3**	**1**
Durham Mine	1301225	4	0	0	0	0	**$ 5,384**	0	no	no	**0**	**0**	**0**
Earlham Quarry	1302123	0	0	0	0	0	**$ 116**	0	no	no	**0**	**1**	**2**
Environmental Crew (Plant 854)	1302126	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Ferguson Quarry	1300124	0	0	0	0	0	**$ 232**	0	no	no	**0**	**0**	**0**
Fort Calhoun	2500006	2	0	0	0	0	**$ 878**	0	no	no	**0**	**1**	**3**
Fort Calhoun UG	2501300	0	0	0	0	0	**$ 348**	0	no	no	**0**	**0**	**0**

Location	MSHA ID	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessment/ $ Proposed	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violation Under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)*	Legal Actions Instituted During Period (#)	Legal Actions Resolved During Period (#)
Fort Dodge Mine	1300032	3	0	0	0	0	**$ 16,462**	0	no	no	**1**	**1**	**0**
Greenwood	2300141	0	0	0	0	0	**$ 696**	0	no	no	**1**	**1**	**0**
Iowa Grading	1302316	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Linn County Sand	1302208	0	0	0	0	0	**$ 232**	0	no	no	**0**	**0**	**0**
Malcom Mine	1300112	1	0	0	0	0	**$ 1,136**	0	no	no	**0**	**0**	**0**
Marshalltown Sand	1300718	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Moore Quarry	1302188	0	0	0	0	0	**$ 1,342**	0	no	no	**0**	**0**	**0**
New Harvey Sand	1301778	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Northwest Division OH	A2354	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Ottawa Quarry	1401590	1	0	0	0	0	**$ 232**	0	no	no	**0**	**0**	**0**
Pacific Quarry	4500844	1	0	0	0	0	**$ 812**	0	no	no	**0**	**0**	**0**
Parkville Mine	2301883	6	0	0	0	0	**$ 4,324**	0	no	no	**0**	**0**	**0**
Pederson Quarry	1302192	1	0	0	0	0	**$ 420**	0	no	no	**0**	**0**	**0**
Raccoon River Sand	1302315	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Randolph Deep Mine	2302308	5	0	1	0	0	**$ 15,010**	0	no	no	**3**	**5**	**2**
Reasoner Sand	1300814	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Saylorville Sand	1302290	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Smithson Valley Quarry	4104108	2	0	1	0	0	**$ 12,917**	0	no	no	**0**	**0**	**0**
St Cloud Quarry	2100081	0	0	0	0	0	**$ 733**	0	no	no	**0**	**0**	**0**
Stamper Mine	2302232	5	0	0	0	0	**$ 5,320**	0	no	no	**3**	**3**	**0**
Sully Mine	1300063	1	0	0	0	0	**$ 1,392**	0	no	no	**0**	**0**	**0**
Sunflower	1401556	0	0	0	0	0	**$ 116**	0	no	no	**0**	**0**	**0**
Weeping Water Mine	2500998	6	0	0	0	0	**$ 12,315**	0	no	no	**1**	**6**	**10**

Location	MSHA ID	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessment/ $ Proposed	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violation Under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)*	Legal Actions Instituted During Period (#)	Legal Actions Resolved During Period (#)
Yellow Medicine Quarry	2100033	0	0	0	0	0	**$ 276**	0	no	no	**0**	**0**	**0**
211 Quarry	4103829	1	0	0	0	0	**$ 232**	0	no	no	**0**	**0**	**0**
Augusta Quarry-KS	1400126	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Beckman Quarry	4101335	7	2	0	0	0	**$ 14,308**	0	no	no	**0**	**0**	**0**
Bedrock Plant	4103283	0	0	0	0	0	**$ 483**	0	no	no	**0**	**0**	**0**
Bells Savoy SG TXI	4104019	2	0	0	0	0	**$ 462**	0	no	no	**0**	**0**	**0**
Black Rock Quarry	300011	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Black Spur Quarry	4104159	5	0	0	0	0	**$ 607**	0	no	no	**0**	**0**	**0**
Blake Quarry	1401584	3	0	0	0	0	**$ 41,335**	0	no	no	**0**	**0**	**0**
Bridgeport Stone TXI	4100007	1	0	0	0	0	**$ 4,857**	0	no	no	**0**	**2**	**2**
Broken Bow SandG	3400460	2	0	0	0	0	**$ 826**	0	no	no	**0**	**0**	**0**
Chico	4103360	0	0	0	0	0	**$ 232**	0	no	no	**0**	**1**	**1**
Davis	3401299	2	0	0	0	0	**$ 750**	0	no	no	**0**	**0**	**0**
Garfield SG TXI	4103909	0	0	0	0	0	**$ 348**	0	no	no	**0**	**0**	**0**
Garwood	4102886	0	0	0	0	0	**$ 462**	0	no	no	**0**	**0**	**0**
GMS - TXI	C335	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Hatton Quarry	301614	0	0	0	0	0	**$ 232**	0	no	no	**0**	**0**	**0**
Helotes	4103137	1	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Hondo	4104708	1	0	0	0	0	**$ 715**	0	no	no	**0**	**0**	**0**
Hondo-1	4104090	0	0	0	0	0	**$ 0**	0	no	no	**0**	**1**	**3**
Hugo	3400061	0	0	0	0	0	**$ 0**	0	no	no	**0**	**0**	**0**
Hunter Stone	4105230	0	0	0	0	0	**$ 232**	0	no	no	**0**	**0**	**0**
Idabel	3400507	0	0	0	0	0	**$ 126**	0	no	no	**0**	**0**	**0**

Location	MSHA ID	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessment/ $ Proposed	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violation Under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)*	Legal Actions Instituted During Period (#)	Legal Actions Resolved During Period (#)
Jena Aggregates TXI	1601298	2	0	0	0	0	$ **1,250**	0	no	no	**0**	**0**	**0**
Jones Mill Quarry	301586	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Medina Rock and Rail	4105170	1	0	0	0	0	$ **3,633**	0	no	no	**0**	**0**	**1**
Mill Creek	3401285	2	0	1	0	0	$ **13,000**	0	no	no	**0**	**0**	**0**
Mill Creek TXI	3401859	0	0	0	0	0	$ **148**	0	no	no	**0**	**0**	**0**
Perryville Aggregates TXI	1601417	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Poteet (Sand Plant)	4101342	1	0	0	0	0	$ **646**	0	no	no	**0**	**0**	**0**
Rio Medina	4103594	0	0	0	0	0	$ **464**	0	no	no	**0**	**0**	**0**
San Pedro Quarry	4101337	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Sawyer	3401634	0	0	0	0	0	$ **289**	0	no	no	**0**	**0**	**0**
Snyder	3401651	1	0	0	0	0	$ **792**	0	no	no	**1**	**2**	**1**
South Texas Port No.2	4104204	1	0	0	0	0	$ **204**	0	no	no	**0**	**0**	**0**
Tin Top SG TXI	4102852	1	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Washita Quarry	3402049	0	0	0	0	0	$ **232**	0	no	no	**0**	**0**	**0**
Webberville TXI	4104363	3	0	0	0	0	$ **1,535**	0	no	no	**0**	**0**	**0**
Woodworth Aggregates TXI	1601070	0	0	0	0	0	$ **831**	0	no	no	**0**	**0**	**0**
Cottonwood Sand and Gravel	504418	0	0	0	0	0	$ **116**	0	no	no	**0**	**0**	**0**
Fountain Sand and Gravel	503821	1	0	0	0	0	$ **13,437**	0	no	no	**0**	**0**	**0**
Granite Canyon Quarry	4800018	1	0	0	0	0	$ **346**	0	no	no	**0**	**0**	**0**
Greeley 35th Ready Mix	503215	0	0	0	0	0	$ **232**	0	no	no	**0**	**0**	**0**
Greeley 35th Sand and Gravel	504613	1	0	0	0	0	$ **625**	0	no	no	**0**	**0**	**0**
Guernsey	4800004	1	0	0	0	0	$ **5,135**	0	no	no	**0**	**0**	**0**
Milford	4202177	0	0	0	0	0	$ **251**	0	no	no	**0**	**0**	**0**

Location	MSHA ID	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessment/ $ Proposed	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violation Under Section 104(e) (yes/no)	Received Notice of Potential to have Pattern under Section 104(e) (yes/no)	Legal Actions Pending as of Last Day of Period (#)*	Legal Actions Instituted During Period (#)	Legal Actions Resolved During Period (#)
Northern Portable Plant #4	4801565	0	0	0	0	0	$ **348**	0	no	no	**0**	**0**	**0**
Parkdale Quarry	504635	1	0	0	0	0	$ **25,434**	0	no	no	**0**	**0**	**0**
Penrose SG	504509	1	0	0	0	0	$ **677**	0	no	no	**0**	**0**	**0**
Portable Crushing	503984	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Portable Recycle 21	504520	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Red Canyon Quarry	504136	3	0	0	0	0	$ **1,685**	0	no	no	**0**	**0**	**0**
Riverbend Sand and Gravel	504841	0	0	0	0	0	$ **116**	0	no	no	**0**	**0**	**0**
Spanish Springs Co 2	2600803	0	0	0	0	0	$ **232**	0	no	no	**0**	**0**	**6**
Spec Agg Sand and Gravel	500860	2	0	0	0	0	$ **4**	0	no	no	**0**	**0**	**0**
Taft Sand and Gravel	504526	0	0	0	0	0	$ **453**	0	no	no	**0**	**0**	**0**
Taft Shop	504735	0	0	0	0	0	$ **420**	0	no	no	**0**	**0**	**0**
Hunter Cement TXI	4102820	3	0	0	0	0	$ **10,071**	0	no	no	**0**	**0**	**0**
Midlothian Cement TXI	4100071	7	0	0	0	0	$ **36,409**	0	no	no	**2**	**3**	**1**
Salisbury Shop	3101235	0	0	0	0	0	$ **0**	0	no	no	**0**	**0**	**0**
Woodville	3300156	9	0	0	0	0	$ **13,919**	0	no	no	**4**	**4**	**0**
Totals		**140**	**2**	**3**	**0**	0	$ **330,110**	0			**22**	**45**	**51**

* Of the 22 legal actions pending on December 31, 2017, 15 were contests of citations or orders referenced in Subpart B of CFR Part 2700, which includes contests of citations and orders issued under Section 104 of the Mine Act and contests of imminent danger orders under Section 107 of the Mine Act and 7 were contests of proposed penalties referenced in Subpart C of 29 CFR Part 2700, which are administrative proceedings before the Commission challenging a civil penalty that MSHA has proposed for the violation contained in a citation or order.