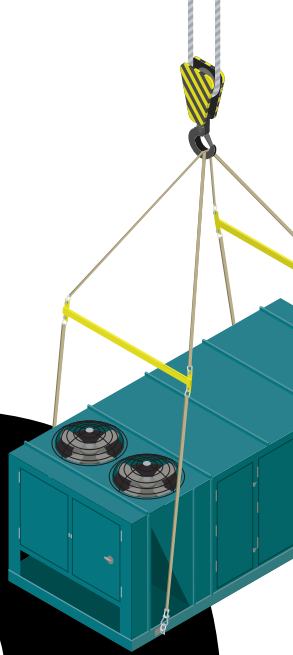


We put in more than **80 million work hours** in 2019.

800,



...and that was just **one of our accomplishments.**



Acquisitions

As we grow, our influence grows. In 2019, we welcomed seven new companies to the EMCOR family—expanding our knowledge, our skills, and our national footprint.

Projects

The work we do impacts healthcare quality, transportation improvements, digital infrastructure—and is vital to the nation's progress. Our work touches millions of lives. To us, that's huge.

Sustainability

More than ever, in everything we do, we bring an environmental consciousness to our projects. Our growing expertise in energy-saving solutions continues to help hundreds of clients conserve and save.

Community

From pet adoption events, cook-offs and 5K runs to golf outings and shelter volunteering, EMCOR people make it a point to get out there, get involved, and give back.

Safety Because we are so vigilant about working safely so we can be there for our families and loved ones, EMCOR achieved the second lowest rate of injury in our history: **1.09 TRIR for the year.**

Troop Support

Not only do we make it a priority to hire veterans, but overseas troops love our boxes filled with much-appreciated blankets, socks, food items, personal care items, and dozens of other essentials. We shipped 250 boxes in 2019, with even more planned for 2020.





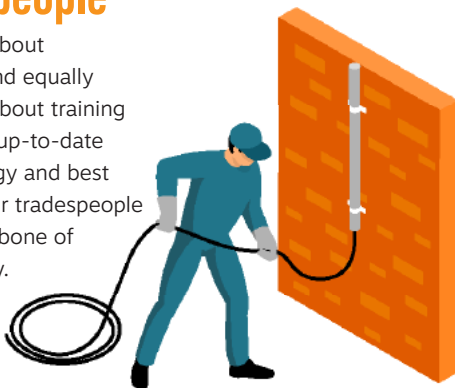
2019

was a fantastic year for EMCOR.

We worked over 80+ million hours in the field,

Most Skilled Tradespeople

Passionate about their jobs, and equally passionate about training and staying up-to-date on technology and best practices, our tradespeople are the backbone of our company.



80+ million hours worked is a stunning number and demonstrates the scope and reach of our field operations. EMCOR set financial records for revenues (\$9.17 billion), operating income (\$461 million), net income (\$325 million), and diluted earnings per share from continuing operations (\$5.75). We had strong revenue growth of 12.8% of which 9.3% was generated from organic activities in addition to the contributions from strategic acquisitions that strengthened our already diverse core operations.

Our Mechanical and Electrical Construction segments had another great year with combined underlying revenue growth of 13%. Operating income margin was a strong seven percent. We won work across end markets and geographies and built our workforce for the future. We made three important acquisitions to fill in our geographic white space and to open new end markets.

Our Building Services segment had an outstanding year, setting a record for operating income margin performance. We had excellent revenue growth and operating performance in our Mechanical Services business. During the year, we implemented several large, geographically diverse, and

important site-based and mobile technician contracts. We acquired four companies in 2019 allowing us to expand our geographic presence and increase our technical capabilities.

Our Industrial Services segment had much improved annual performance in 2019, and our trajectory continued to improve post-Hurricane Harvey. We launched several new service offerings, and this allowed us to increase our customer penetration. Our customers know that the EMCOR Industrial Services team can deliver under the most demanding job conditions with the right people at the right time.

Our U.K. segment continues to be a bright spot for EMCOR. We have built a leading Building Services business that serves some of the most demanding customers in the U.K. The team has a long and successful track record of delivering customer focused facilities services solutions over extended periods of time.

EMCOR's record financial performance and operating results were made possible because we are unified by our EMCOR Values of **Mission First, People Always**. Many have asked me why Mission First (rather than People First), and my answer is always the same: we have to perform well in order to take care of our people in a sustained way. And, our people are EMCOR's



Anthony J. Guzzi
Chairman, President and Chief Executive Officer

and we did it with **one of our best safety records.**

most important asset. We are in the business of deploying some of the most skilled tradespeople in the world to install, construct, service and maintain some of the most complex projects, facilities, industrial complexes, and manufacturing plants in the United States and the United Kingdom. We are nimble, flexible and responsive to the ever-changing needs and demands of our customers.

While we never know what our future challenges will be, I do know that our leadership team will confront them head-on and strive to deliver long-term, successful results for our shareholders.

A handwritten signature in black ink that reads "Anthony J. Guzzi". The signature is fluid and cursive.

Anthony J. Guzzi
Chairman, President and Chief Executive Officer



Our Reach

Our coast-to-coast influence is more than just geographical—EMCOR touches and improves millions of lives at every level of industry and society.



Board of Directors

John W. Altmeyer

*Former President and Chief Executive Officer
of Carlisle Construction Materials*

David A. B. Brown

*Chairman of the Board
of Concrete Pumping Holdings, Inc.*

Anthony J. Guzzi

*Chairman, President and Chief Executive Officer
of EMCOR Group, Inc.*

Richard F. Hamm, Jr.

Managing Member of Siesta Properties LLC

David H. Laidley

*Chairman Emeritus and Former Chairman
of Deloitte LLP (Canada)*

Carol P. Lowe

*Executive Vice President and Chief Financial Officer
of FLIR Systems, Inc.*

M. Kevin McEvoy

*Former Chief Executive Officer
of Oceaneering International, Inc.*

William P. Reid

*Former Chief Executive Officer
of EMCOR Industrial Services, Inc. and Ohmstede Ltd.*

Steven B. Schwarzwelder

Former Director of McKinsey & Company

Robin Walker-Lee

*Former Executive Vice President, General Counsel
and Secretary of TRW Automotive Holdings*

Corporate Officers

Anthony J. Guzzi

Chairman, President and Chief Executive Officer

Mark A. Pompa

*Executive Vice President, Chief Financial Officer
and Treasurer*

R. Kevin Matz

Executive Vice President, Shared Services

Maxine Lum Mauricio, Esq.

Senior Vice President, General Counsel and Secretary

Paul Desmarais

Vice President, Taxation

Steven H. Fried

Vice President, Compliance

Lisa H. Haight

Vice President, Human Resources

John C. Lawson

Vice President, Risk Management

Jason R. Nalbandian

Controller

Matthew R. Pierce

Vice President, Safety, Quality, and Productivity

Anthony R. Triano

Vice President, Integrated Services

FINANCIAL HIGHLIGHTS

in thousands of dollars, except per share data

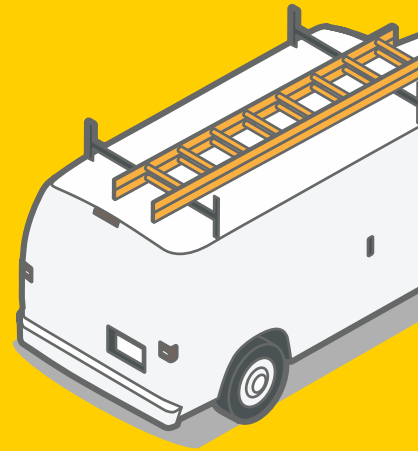
	2019	2018	2017	2016	2015
Revenues	\$9,174,611	\$8,130,631	\$7,686,999	\$7,551,524	\$6,718,726
Gross profit	\$1,355,868	\$1,205,453	\$1,147,012	\$1,037,862	\$944,479
Impairment loss on goodwill and identifiable intangible assets	—	\$907	\$57,819	\$2,428	—
Operating income	\$460,892	\$403,083	\$328,902	\$306,929	\$285,336
Net income attributable to EMCOR Group, Inc.	\$325,140	\$283,531	\$227,196	\$181,935	\$172,286
Diluted earnings per share from continuing operations	\$5.75	\$4.89	\$3.83	\$3.02	\$2.72
Equity	\$2,057,780	\$1,741,441	\$1,674,117	\$1,537,942	\$1,480,056

9.2 BILLION *in revenues*





MISSION FIRST PEOPLE ALWAYS



INTEGRITY
In everything we do

DISCIPLINE
Execution with precision, efficiency, competence and professionalism

TRANSPARENCY
Sharing information to facilitate communication

MUTUAL RESPECT AND TRUST
Treating people with dignity and consideration and encouraging openness and cooperation

COMMITMENT TO SAFETY
Zero accidents

TEAMWORK
Working together to develop and unleash our full potential to achieve exceptional results for our customers and shareholders

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-K

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

For the fiscal year ended December 31, 2019

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 1-8267

EMCOR Group, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

11-2125338

(I.R.S. Employer Identification Number)

301 Merritt Seven Norwalk, Connecticut

(Address of principal executive offices)

06851-1092

(Zip Code)

Registrant's telephone number, including area code: (203) 849-7800

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

Title of each class

Trading Symbol

Name of each exchange on which registered

Common Stock

EME

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 Securities 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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an 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 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 by Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$3,785,000,000 as of the last business day of the registrant's most recently completed second fiscal quarter, based upon the closing sale price on the New York Stock Exchange reported for such date. Shares of common stock held by each executive officer and director and by each person who owns 5% or more of the outstanding common stock (based solely on filings of such 5% holders) have been excluded from such calculation as such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares of the registrant's common stock outstanding as of the close of business on February 21, 2020: 56,259,161 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Part III. Portions of the definitive proxy statement for the 2020 Annual Meeting of Stockholders, which document will be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year to which this Form 10-K relates, are incorporated by reference into Items 10 through 14 of Part III of this Form 10-K.

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FORWARD-LOOKING STATEMENTS

Certain information included in this report, or in other materials we have filed or will file with the Securities and Exchange Commission (the “SEC”) (as well as information included in oral statements or other written statements made or to be made by us) contains or may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (the “1995 Act”). Such statements are being made pursuant to the 1995 Act and with the intention of obtaining the benefit of the “Safe Harbor” provisions of the 1995 Act. Forward-looking statements are based on information available to us and our perception of such information as of the date of this report and our current expectations, estimates, forecasts and projections about the industries in which we operate and the beliefs and assumptions of our management. You can identify these statements by the fact that they do not relate strictly to historical or current facts. They contain words such as “anticipate,” “estimate,” “expect,” “project,” “intend,” “plan,” “believe,” “may,” “can,” “could,” “might,” variations of such wording and other words or phrases of similar meaning in connection with a discussion of our future operating or financial performance, and other aspects of our business, including market share growth, gross profit, project mix, projects with varying profit margins, selling, general and administrative expenses, and trends in our business and other characterizations of future events or circumstances. From time to time, forward-looking statements are also included in our other periodic reports on Forms 10-Q and 8-K, in press releases, in our presentations, on our website and in other material released to the public. Any or all of the forward-looking statements included in this report and in any other reports or public statements made by us are only predictions and are subject to risks, uncertainties and assumptions, including those identified below in the “Risk Factors” section, the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section, and other sections of this report, and in our Forms 10-Q for the three months ended March 31, 2019, June 30, 2019 and September 30, 2019 and in other reports filed by us from time to time with the SEC as well as in press releases, in our presentations, on our website and in other material released to the public. Such risks, uncertainties and assumptions are difficult to predict, beyond our control and may turn out to be inaccurate, causing actual results to differ materially from those that might be anticipated from our forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. However, any further disclosures made on related subjects in our subsequent reports on Forms 10-K, 10-Q and 8-K should be consulted.

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PART I

ITEM 1. BUSINESS

References to the “Company,” “EMCOR,” “we,” “us,” “our” and similar words refer to EMCOR Group, Inc. and its consolidated subsidiaries unless the context indicates otherwise.

General

We are one of the largest electrical and mechanical construction and facilities services firms in the United States. In addition, we provide a number of building services and industrial services. In 2019, we had revenues of approximately \$9.2 billion. Our services are provided to a broad range of commercial, industrial, utility and institutional customers through approximately 80 operating subsidiaries and joint venture entities. Our executive offices are located at 301 Merritt Seven, Norwalk, Connecticut 06851-1092, and our telephone number at those offices is (203) 849-7800.

We specialize principally in providing construction services relating to electrical and mechanical systems in all types of facilities and in providing various services relating to the operation, maintenance and management of facilities, including refineries and petrochemical plants.

Our electrical and mechanical construction services primarily involve the design, integration, installation, start-up, operation and maintenance, and provision of services relating to:

- Electric power transmission and distribution systems;
- Premises electrical and lighting systems;
- Process instrumentation in the refining, chemical processing, food processing and mining industries;
- Low-voltage systems, such as fire alarm, security and process control systems;
- Voice and data communications systems;
- Roadway and transit lighting and fiber optic lines;
- Heating, ventilation, air conditioning, refrigeration and clean-room process ventilation systems;
- Fire protection systems;
- Plumbing, process and high-purity piping systems;
- Controls and filtration systems;
- Water and wastewater treatment systems;
- Central plant heating and cooling systems;
- Crane and rigging services;
- Millwright services; and
- Steel fabrication, erection, and welding services.

Our building services operations, which are provided to a wide range of facilities, including commercial, utility, institutional and governmental facilities, include:

- Commercial and government site-based operations and maintenance;
- Facility maintenance and services, including reception, security and catering services;
- Outage services to utilities and industrial plants;
- Military base operations support services;
- Mobile mechanical maintenance and services;

- Floor care and janitorial services;
- Landscaping, lot sweeping and snow removal;
- Facilities management;
- Vendor management;
- Call center services;
- Installation and support for building systems;
- Program development, management and maintenance for energy systems;
- Technical consulting and diagnostic services;
- Infrastructure and building projects for federal, state and local governmental agencies and bodies; and
- Small modification and retrofit projects.

Our industrial services are primarily provided to customers within the oil and gas industry and consist of:

- On-site repairs, maintenance and service of heat exchangers, towers, vessels and piping;
- Design, manufacturing, repair and hydro blast cleaning of shell and tube heat exchangers and related equipment;
- Refinery turnaround planning and engineering services;
- Specialty welding services;
- Overhaul and maintenance of critical process units in refineries and petrochemical plants;
- Specialty technical services for refineries and petrochemical plants; and
- Construction, maintenance, and support services within the upstream and midstream sectors.

We provide construction services and building services directly to corporations, municipalities and federal and state governmental entities, owners/developers, and tenants of buildings. We also provide our construction services indirectly by acting as a subcontractor to general contractors, systems suppliers, construction managers, developers, property managers and other subcontractors. Our industrial services are generally provided directly to refineries and petrochemical plants. As of December 31, 2019, we had approximately 36,000 employees.

Our revenues are derived from many different customers in numerous industries, which have operations in several different geographical areas. Of our 2019 revenues, approximately 95% were generated in the United States and approximately 5% were generated in foreign countries, substantially all in the United Kingdom. In 2019, approximately 60% of revenues were derived from our construction operations, approximately 28% of revenues were derived from our building services operations and approximately 12% of revenues were derived from our industrial services operations.

During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

The broad scope of our operations is more particularly described below. For information regarding the revenues, operating income and total assets of each of our segments with respect to each of the last three years, and our revenues and assets attributable to the United States and the United Kingdom for the last three years, see Note 19 - Segment Information of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data.

Operations

The electrical and mechanical construction services industry continues to experience growth due principally to the increased content, complexity, and sophistication of electrical and mechanical systems resulting, in part, from growth in digital processing, and cloud computing and data storage. In addition, facilities of all types require extensive electrical distribution systems, sophisticated power supplies, and networks of low-voltage and fiber-optic communications cabling. Moreover, the need for substantial environmental controls within a building, due to the heightened need to maintain extensive computer systems at optimal temperatures, and the demand for energy savings, have over the years expanded opportunities for our electrical and mechanical services businesses. The demand for these services is typically driven by non-residential construction and renovation activity.

Our electrical and mechanical construction services primarily involve the design, integration, installation and start-up of, and provision of services relating to: (a) electric power transmission and distribution systems, including power cables, conduits, distribution panels, transformers, generators, uninterruptible power supply systems and related switch gear and controls; (b) premises electrical and lighting systems, including fixtures and controls; (c) process instrumentation in the refining, chemical processing, food processing and mining industries; (d) low-voltage systems, such as fire alarm, security and process control systems; (e) voice and data communications systems, including fiber-optic and low-voltage cabling; (f) roadway and transit lighting and fiber-optic lines; (g) heating, ventilation, air conditioning, refrigeration and clean-room process ventilation systems; (h) fire protection systems; (i) plumbing, process and high-purity piping systems; (j) controls and filtration systems; (k) water and wastewater treatment systems; (l) central plant heating and cooling systems; (m) cranes and rigging; (n) millwrighting; and (o) steel fabrication, erection and welding.

Our electrical and mechanical construction services generally fall into one of three categories: (a) large installation projects with contracts often in the multi-million dollar range that involve the construction of manufacturing and commercial buildings and institutional and public works projects or the fit-out of large blocks of space within commercial buildings, (b) large and medium sized capital and maintenance projects for manufacturing, petrochemical, oil and gas, industrial and commercial clients and (c) smaller installation projects typically involving fit-out, renovation and retrofit work.

Our United States electrical and mechanical construction operations accounted for about 60% of our 2019 total revenues. Of such revenues, approximately 40% were generated by our electrical construction operations and approximately 60% were generated by our mechanical construction operations.

We provide electrical and mechanical construction services for both large and small installation and renovation projects. Our largest projects have included those: (a) for institutional purposes (such as educational and correctional facilities and research laboratories); (b) for manufacturing purposes (such as pharmaceutical plants, steel, pulp and paper mills, food processing, automotive and semiconductor manufacturing facilities and power generation); (c) for transportation purposes (such as highways, bridges, airports and transit systems); (d) for commercial purposes (such as office buildings, data centers, convention centers, sports stadiums and shopping malls); (e) for hospitality purposes (such as resorts, hotels and gaming facilities); (f) for water and wastewater purposes; (g) for healthcare purposes; (h) for process facilities (such as oil and gas refineries and chemical processing plants); and (i) for oil and gas pipeline compressor stations and terminal and metering facilities. Our largest projects, which typically range in size from \$10.0 million up to and occasionally exceeding \$150.0 million and are frequently multi-year projects, represented approximately 34% of our electrical and mechanical construction services revenues in 2019.

Our projects of less than \$10.0 million accounted for approximately 66% of our electrical and mechanical construction services revenues in 2019. These projects are typically completed in less than one year. They usually involve electrical and mechanical construction services when an end-user or owner undertakes construction or modification of a facility to accommodate a specific use. These projects frequently require electrical and mechanical systems to meet special needs such as critical systems power supply, fire protection systems, special environmental controls and high-purity air systems, sophisticated electrical and mechanical systems for data centers, new production lines in manufacturing plants, and office arrangements in existing office buildings. They are not usually dependent upon the new construction market. Demand for these projects and types of services is often prompted by the expiration of leases, changes in technology, or changes in the customer's plant or office layout in the normal course of a customer's business.

We have a broad customer base with many long-standing relationships. We perform construction services pursuant to contracts with owners (such as corporations, municipalities and other governmental entities), general contractors, systems suppliers, construction managers, developers, other subcontractors, and tenants of commercial properties. Institutional and public works projects are frequently long-term complex projects that require significant technical and management skills and the financial strength to obtain bid and performance bonds, which are often a condition to bidding for and winning these projects.

We also install and maintain lighting for streets, highways, bridges and tunnels, traffic signals, computerized traffic control systems, and signal and communication systems for mass transit systems in several metropolitan areas. In addition, in the United States, we manufacture and install sheet metal air handling systems for both our own mechanical construction operations and for unrelated mechanical contractors. We also maintain welding and pipe fabrication shops in support of some of our mechanical operations.

Our United States building services segment offers a broad range of services, including operation, maintenance and service of mechanical, electrical, plumbing, and building automation systems; commercial and government site-based operations and maintenance; facility maintenance and services, including outage services to utilities and manufacturing facilities; military base operations support services; mobile mechanical maintenance and services; floor care and janitorial services; landscaping, lot sweeping and snow removal; facilities management; vendor management; call center services; installation and support for building systems; program development, management and maintenance with respect to energy systems; technical consulting and diagnostic

services; infrastructure and building projects for federal, state and local governmental agencies and bodies; and small modification and retrofit projects.

Our building services operations, which generated approximately 28% of our 2019 total revenues, provide services to owners, operators, tenants and managers of all types of facilities both on a contractual basis for a specified period of time and on an individual task order basis. Of our 2019 building services revenues, approximately 83% were generated in the United States and approximately 17% were generated in the United Kingdom.

Our building services operations have built upon our traditional electrical and mechanical services operations and our client relationships to expand the scope of services being offered and to develop packages of services for customers on a regional and national basis.

Demand for our building services is often driven by customers' decisions to focus on their core competencies, customers' programs to reduce costs, the increasing technical complexity of their facilities and their mechanical, electrical, building automation, voice and data, and other systems, and the need for increased reliability, especially in mechanical, electrical, and building automation systems. These trends have led to outsourcing and privatization programs whereby customers in both the private and public sectors seek to contract out those activities that support, but are not directly associated with, the customer's core business. Clients of our building services business include federal and state governments, institutional organizations, utilities, independent power producers, healthcare providers, and major corporations engaged in information technology, telecommunications, pharmaceuticals, financial services, and manufacturing, as well as large retailers and other businesses with geographically dispersed portfolios throughout the United States.

We currently provide building services in a majority of the states in the United States to commercial, industrial, institutional and governmental customers and as part of our operations are responsible for: (a) the oversight of all or most of the facilities operations, including repair and maintenance; (b) servicing, upgrade and retrofit of HVAC, electrical, plumbing and industrial piping and sheet metal systems in existing facilities; (c) interior and exterior services, including floor care and janitorial services, landscaping, lot sweeping and snow removal; (d) diagnostic and solution engineering for building systems and their components; and (e) maintenance and support services to manufacturers and power producers.

We provide building services at a number of prominent buildings, including those that house the Secret Service, the Federal Deposit Insurance Corporation, the General Accountability Office (GAO), and the Department of Health and Human Services, as well as other government facilities, including the NASA Jet Propulsion Laboratory. We also provide building services, as a prime contractor or a subcontractor, to a number of military bases, including base operations support services to the Navy National Capital Region and the Army's Carlisle Barracks in Pennsylvania, and are involved in a joint venture providing building services to NASA's Armstrong Flight Research Center in Edwards, California. The agreements pursuant to which this division provides services to the federal government are frequently for a base period and a number of option years exercisable at the sole discretion of the government, are often subject to renegotiation by the government in terms of scope of services, and are subject to termination by the government prior to the expiration of the applicable term.

Our United Kingdom subsidiary primarily focuses on building services and currently provides a broad range of services under multi-year agreements to public and private sector customers, including utilities, airlines, airports, real estate property managers, manufacturers, governmental agencies and the finance sector.

Our industrial services operations, which generated approximately 12% of our 2019 total revenues, is a recognized leader in the refinery turnaround market and has a growing presence in the petrochemical market. Our industrial services businesses perform a broad range of turnaround and maintenance services for critical units of refineries and petrochemical plants so as to upgrade, repair, and maintain them. Such services include turnaround and maintenance services relating to: (a) engineering and planning services in advance of complex refinery turnarounds; (b) overhaul and maintenance of critical process units (including hydrofluoric alkylation units, fluid catalytic cracking units, coking units, heaters, heat exchangers and related mechanical equipment) during refinery and petrochemical plant shut downs; (c) replacement and new construction capital projects for refineries and petrochemical plants; and (d) other related specialty services such as (i) welding (including pipe welding) and fabrication; (ii) heater, boiler, and reformer repairs and replacements; converter repair and revamps; and vessel, exchanger and tower services; (iii) tower and column repairs in refineries and petrochemical plants; (iv) installation and repair of refractory materials for critical units in process plants so as to protect equipment from corrosion, erosion, and extreme temperatures; and (v) acid-proofing services to protect critical components at refineries from chemical exposure. In addition, these businesses: (a) provide maintenance, repair and cleaning services for highly engineered shell and tube heat exchangers for refineries and petrochemical plants both in the field and at our own shops, including tube and shell repairs, bundle repairs, and extraction services; (b) design and manufacture new highly engineered shell and tube heat exchangers; and (c) provide construction, maintenance, and support services to customers within the upstream and midstream sectors.

Competition

In our construction services, building services and industrial services businesses, we compete with national, regional and local companies, many of which are small, owner-operated entities that carry on their businesses in a limited geographic area, as well as with certain foreign companies.

We believe that the electrical and mechanical construction services industry is highly fragmented and our competition includes thousands of small companies across the United States. In the United States, there are a few public companies focused on providing either electrical and/or mechanical construction services, such as Integrated Electrical Services, Inc., Comfort Systems USA, Inc. and Tutor Perini Corporation. A majority of our revenues are derived from projects requiring competitive bids; however, an invitation to bid is often conditioned upon prior experience, technical capability and financial strength. Because we have total assets, annual revenues, access to bank credit and surety bonding, and expertise significantly greater than most of our competitors, we believe we have a significant competitive advantage over our competitors in providing electrical and mechanical construction services. Competitive factors in the electrical and mechanical construction services business include: (a) the availability of qualified and/or licensed personnel; (b) reputation for integrity and quality; (c) safety record; (d) cost structure; (e) relationships with customers; (f) geographic diversity; (g) the ability to control project costs; (h) experience in specialized markets; (i) the ability to obtain surety bonding; (j) adequate working capital; (k) access to bank credit; and (l) price. However, there are relatively few significant barriers to entry to several types of our construction services.

While the building services industry is also highly fragmented, with most competitors operating in a specific geographic region, a number of large United States based corporations such as AECOM Technology Corporation, Johnson Controls, Inc., Fluor Corp., J&J Worldwide Services, Cushman & Wakefield Inc., CBRE Group, Inc., Jones Lang LaSalle Incorporated, Sodexo, Inc., Aramark Corporation and ABM Industries Incorporated are engaged in this field, as are large original equipment manufacturers such as Carrier Corp. and Trane Inc. In addition, we compete with several regional firms serving all or portions of the markets we target, such as Brickman Valley Crest, Inc., Kellermeyer Bergensons Services, Inc., SMS Assist, LLC and Ferandino & Sons, Inc. Our principal services competitors in the United Kingdom include CBRE Group, Inc., Bouygues UK Ltd., ISS UK Ltd., and MITIE Group plc. The key competitive factors in the building services business include price, service, quality, technical expertise, geographic scope and the availability of qualified personnel and managers. Due to our size, both financial and geographic, and our technical capability and management experience, we believe we are in a strong competitive position in the building services business. However, there are relatively few barriers to entry to most of our building services businesses.

The market for providing industrial services includes large national providers, as well as numerous regional companies. In the manufacture of heat exchangers, we compete with both U.S. and foreign manufactures. Competitors within this industry include JV Industrial Companies Ltd., Matrix Service Company, United Plant Services, Inc., Turner Industries, Team, Inc., Cust-O-Fab, Dunn Heat, Wyatt Field Service Company, and DeepWell Energy Services, LLC, among others. The key competitive factors in the industrial services market consist of service, quality, ability to respond quickly, technical expertise, price, safety record and availability of qualified personnel. Due to our technical capabilities, safety record and skilled workforce, we believe that we are in a strong competitive position in the industrial services markets that we serve. Because of the complex tasks associated with turnarounds and the precision required in manufacturing heat exchangers, we believe that the barriers to entry in this business are significant.

Employees

At December 31, 2019, we employed approximately 36,000 people, approximately 59% of whom are represented by various unions pursuant to approximately 400 collective bargaining agreements between our individual subsidiaries and local unions. We believe that our employee relations are generally good. Only two of these collective bargaining agreements are national or regional in scope.

Remaining Unsatisfied Performance Obligations

Our remaining unsatisfied performance obligations (“remaining performance obligations”) at December 31, 2019 were \$4.04 billion. Remaining performance obligations increase with awards of new contracts and decrease as we perform work and recognize revenue on existing contracts. We include a project within our remaining performance obligations at such time as the project is awarded and agreement on contract terms has been reached. Our remaining performance obligations include amounts related to contracts for which a fixed price contract value is not assigned when a reasonable estimate of total transaction price can be made.

Remaining performance obligations include unrecognized revenues to be realized from uncompleted construction contracts. Although many of our construction contracts are subject to cancellation at the election of our customers, in accordance with industry practice, we do not limit the amount of unrecognized revenue included within remaining performance obligations for these contracts due to the inherent substantial economic penalty that would be incurred by our customers upon cancellation. We believe our

reported remaining performance obligations for our construction contracts are firm and contract cancellations have not had a material adverse effect on us.

Remaining performance obligations also include unrecognized revenues expected to be realized over the remaining term of service contracts. However, to the extent a service contract includes a cancellation clause which allows for the termination of such contract by either party without a substantive penalty, the remaining contract term, and therefore, the amount of unrecognized revenues included within remaining performance obligations, is limited to the notice period required for the termination.

Our remaining performance obligations are comprised of: (a) original contract amounts, (b) change orders for which we have received written confirmations from our customers, (c) pending change orders for which we expect to receive confirmations in the ordinary course of business, (d) claim amounts that we have made against customers for which we have determined we have a legal basis under existing contractual arrangements and as to which the variable consideration constraint does not apply, and (e) other forms of variable consideration to the extent that such variable consideration has been included within the transaction price of our contracts. Such claim and other variable consideration amounts were immaterial for all periods presented.

We estimate that approximately 84% of our remaining performance obligations as of December 31, 2019 will be recognized as revenues during 2020.

Available Information

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission, which we refer to as the "SEC". These filings are available to the public over the internet at the SEC's website at <http://www.sec.gov>. You may also read and copy any document we file at the SEC's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room.

Our Internet address is www.emcorgroup.com. We make available free of charge through www.emcorgroup.com our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. References to our website addressed in this report are provided as a convenience and do not constitute, and should not be viewed as, an incorporation by reference of the information contained on, or available through, the website. Therefore, such information should not be considered part of this report.

Our Board of Directors has an audit committee, a compensation and personnel committee and a nominating and corporate governance committee. Each of these committees has a formal charter. We also have Corporate Governance Guidelines, which include guidelines regarding related party transactions, a Code of Ethics for our Chief Executive Officer and Senior Financial Officers, and a Code of Ethics and Business Conduct for Directors, Officers and Employees. Copies of these charters, guidelines and codes, and any waivers or amendments to such codes which are applicable to our executive officers, senior financial officers or directors, can be obtained free of charge on our website, www.emcorgroup.com.

You may request a copy of the foregoing filings (excluding exhibits), charters, guidelines and codes and any waivers or amendments to such codes which are applicable to our executive officers, senior financial officers or directors, at no cost by writing to us at EMCOR Group, Inc., 301 Merritt Seven, Norwalk, CT 06851-1092, Attention: Corporate Secretary, or by telephoning us at (203) 849-7800.

ITEM 1A. RISK FACTORS

Our business is subject to a variety of risks, including the risks described below as well as adverse business and market conditions and risks associated with foreign operations. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not known to us or not described below which we have not determined to be material may also impair our business operations. You should carefully consider the risks described below, together with all other information in this report, including information contained in the “Business,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Quantitative and Qualitative Disclosures about Market Risk” sections. If any of the following risks actually occur, our business, financial position, results of operations and/or cash flows could be adversely affected, and we may not be able to achieve our goals. Such events may cause actual results to differ materially from expected and historical results, and the trading price of our common stock could decline.

Economic downturns have historically led to reductions in demand for our services. Negative conditions in the credit markets may adversely impact our ability to operate our business. The level of demand from our clients for our services has been, in the past, adversely impacted by slowdowns in the industries we service, as well as in the economy in general. When the general level of economic activity has been reduced from historical levels, certain of our ultimate customers have delayed or cancelled projects or capital spending, especially with respect to more profitable private sector work, and such slowdowns adversely affect our ability to grow, reducing our revenues and profitability. A number of economic factors, including financing conditions for the industries we serve, have, in the past, adversely affected our ultimate customers and their ability or willingness to fund expenditures. General concerns about the fundamental soundness of domestic and foreign economies may cause ultimate customers to defer projects even if they have credit available to them. Worsening of financial and macroeconomic conditions could have a significant adverse effect on our revenues and profitability.

Many of our clients depend on the availability of credit to help finance their capital and maintenance projects. At times, tightened availability of credit has negatively impacted the ability of existing and prospective ultimate customers to fund projects we might otherwise perform, particularly those in the more profitable private sector. As a result, our ultimate customers may defer such projects for an unknown, and perhaps lengthy, period. Any such deferrals would inhibit our growth and would adversely affect our results of operations.

In a weak economic environment, particularly in a period of restrictive credit markets, we may experience greater difficulties in collecting payments from, and negotiating change orders and/or claims with, our clients due to, among other reasons, a diminution in our ultimate customers’ access to the credit markets. If clients delay in paying or fail to pay a significant amount of our outstanding receivables, or we fail to successfully negotiate a significant portion of our change orders and/or claims with clients, it could have an adverse effect on our liquidity, results of operations and financial position.

Our business has traditionally lagged recoveries in the general economy and, therefore, after an economic downturn we may not recover as quickly as the economy at large.

The loss of one or a few customers could have an adverse effect on us. Although we have long-standing relationships with many of our significant clients, our clients may unilaterally reduce, fail to renew or terminate their contracts with us at any time. A loss of business from a significant client, or a number of significant clients, could have a material adverse effect on our business, financial position and results of operations.

Our business is vulnerable to the cyclical nature of the markets in which our clients operate and is dependent upon the timing and funding of new awards. We provide construction and maintenance services to ultimate customers operating in a number of markets which have been, and we expect will continue to be, cyclical and subject to significant fluctuations due to a variety of factors beyond our control, including economic conditions and changes in client spending.

Regardless of economic or market conditions, investment decisions by our ultimate customers may vary by location or as a result of other factors like the availability of labor, relative construction costs or competitive conditions in their industries. Because we are dependent on the timing and funding of new awards, we are therefore vulnerable to changes in our clients’ markets and investment decisions.

Our business may be adversely affected by significant reductions in government spending or delays or disruptions in the government appropriations process. Some of our businesses derive a significant portion of their revenues from federal, state and local governmental agencies. As a result, reduced or delayed spending by the federal government and/or state and local governments may have a material and adverse impact on our business, financial condition, results of operations and cash flows. Significant reductions in spending aimed at reducing federal, state or local budget deficits, the absence of a bipartisan agreement on the federal government’s budget, the impact of sequestration or other changes in budget priorities could result in the deferral, delay, disruption or cancellation of projects or contracts that we might otherwise have sought to perform, personnel reductions, or the closure of government facilities and offices. These potential events could impact the level of demand for our services and our ability to

execute, complete and receive compensation for our current contracts, or bid for and enter into new contracts with governmental agencies.

An increase in the prices of certain materials used in our businesses and protectionist trade measures could adversely affect our businesses. We are exposed to market risk of increases in certain commodity prices of materials, such as copper and steel, which are used as components of supplies or materials utilized in our operations. We are also exposed to increases in energy prices, particularly as they relate to gasoline prices for our fleet of approximately 11,000 vehicles. While we believe we can increase our prices to adjust for some price increases in commodities, there can be no assurance that price increases of commodities, if they were to occur, would be recoverable. Additionally, our fixed price contracts do not allow us to adjust our prices and, as a result, increases in material or fuel costs could reduce our profitability with respect to such projects. Fluctuations in energy prices as well as in commodity prices of materials, whether resulting from fluctuations in market supply or demand or geopolitical conditions, including an increase in trade protection measures such as tariffs and the disruption, modification or cancellation of multilateral trade agreements, may adversely affect our customers and as a result cause them to curtail the use of our services. Volatility in the price of oil has historically caused some of our refinery customers to curtail or delay maintenance or capital projects. Prolonged volatility in the price of oil may adversely affect some of our refinery customers causing them to defer maintenance and/or capital projects performed by companies in our United States industrial services segment or delay purchases or repairs of heat exchangers that are manufactured and repaired by some of our companies.

Our industry is highly competitive. Our industry is served by numerous small, owner-operated private companies, a few public companies and several large regional companies. In addition, relatively few barriers prevent entry into most of our businesses. As a result, any organization that has adequate financial resources and access to technical expertise may become a competitor. Competition in our industry depends on numerous factors, including price. Certain of our competitors have lower overhead cost structures and, therefore, are able to provide their services at lower rates than we are currently able to provide. In addition, some of our competitors have greater resources than we do. We cannot be certain that our competitors will not develop the expertise, experience and resources necessary to provide services that are superior in quality and lower in price to ours. Similarly, we cannot be certain that we will be able to maintain or enhance our competitive position within our industries or maintain a customer base at current levels. We may also face competition from the in-house service organizations of existing or prospective customers, particularly with respect to building services. Many of our customers employ personnel who perform some of the same types of building services that we do. We cannot be certain that our existing or prospective customers will continue to outsource building services in the future.

We are subject to many laws and regulations in the jurisdictions in which we operate; changes to such laws and regulations may result in additional costs and impact our operations. We are committed to upholding the highest standards of corporate governance and legal and ethical compliance. We are subject to many laws and regulations, including various laws and regulations that apply specifically to U.S. public companies. These include the rules and regulations of the New York Stock Exchange, the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Wall Street Reform and Consumer Protection Act, as well as the various regulations, standards and guidance put forth by the SEC and other governmental agencies to implement those laws. New laws, rules and regulations, or changes to existing laws or their interpretations, could create added legal and financial costs and uncertainty for us. In addition, our United Kingdom operations are subject to laws and regulations that are in some cases different from those of the United States, including labor laws such as the U.K. Modern Slavery Act and laws and regulations governing information collected from employees, customers and others, specifically the European Union's General Data Protection Regulation, which went into effect in May 2018. These laws and regulations, and the economic, financial, political and regulatory impact of the United Kingdom's decision to leave the European Union, could increase the cost and complexity of doing business in the U.K. and negatively impact our financial position and results of operations. Our efforts to comply with evolving laws, regulations and reporting standards may increase our general and administrative expenses, divert management time and attention or limit our operational flexibility, all of which could have a material adverse effect on our business, financial position, and results of operations. Many of our non-public competitors and competitors operating solely in the U.S. are not subject to these laws and regulations and the related costs and expenses of compliance.

The Tax Cuts and Jobs Act of 2017 could have negative or unexpected consequences for our customers; reduced government spending may adversely affect our own business. The long-term impact of the Tax Cuts and Jobs Act of 2017 on the general economy cannot be reliably predicted at this time. To the extent that certain of our customers are negatively affected by the new tax law, they may reduce spending and defer, delay or cancel projects or contracts. Reduced government revenues resulting from the new tax law may also lead to reduced long-term government spending, which may negatively impact our government contracting business.

We are a decentralized company, which presents certain risks. While we believe decentralization has enhanced our growth and enabled us to remain responsive to opportunities and to our customers' needs, it necessarily places significant control and decision-making powers in the hands of local management. This presents various risks, including the risk that we may be slower or less able to identify or react to problems affecting a key business than we would in a more centralized environment.

Our business may be affected by weather conditions. Adverse weather conditions, particularly during the winter season, could impact our construction services operations as those conditions affect our ability to perform efficient work outdoors in certain regions of the United States, adversely affecting the revenues and profitability of those operations. However, the absence of snow in certain regions of the United States during the winter could also cause us to experience reduced revenues and profitability in our United States building services segment, which has meaningful snow removal operations. In addition, cooler than normal temperatures during the summer months could reduce the need for our services, particularly in our businesses that install or service air conditioning units, and result in reduced revenues and profitability during the period such unseasonal weather conditions persist. Hurricanes and other severe weather may cause our projects to be delayed or canceled by our customers. The increased incidence of severe weather and its related impacts, such as hurricanes, flooding and wildfires, could adversely impact our operations.

Natural disasters, terrorist attacks and other catastrophic events could disrupt our operations and services. Natural disasters, acts of terrorism and other catastrophic events, and the actions taken by the United States and/or other governments or actors in response to such events, may result in property damage, supply disruption or economic dislocations throughout the country. Although it is not possible to predict such events or their consequences, these events could increase the volatility of our financial results due to decreased demand and unforeseen costs, with partial or no corresponding compensation from clients.

Our business may be affected by the work environment. We perform our work under a variety of conditions, including but not limited to, difficult terrain, difficult site conditions and busy urban centers where delivery of materials and availability of labor may be impacted, clean-room environments where strict procedures must be followed, and sites which contain harsh or hazardous conditions, especially at chemical plants, refineries and other process facilities. Performing work under these conditions can increase the cost of such work or negatively affect efficiency and, therefore, our profitability.

Our dependence upon fixed price contracts could adversely affect our business. We currently generate, and expect to continue to generate, a significant portion of our revenues from fixed price contracts. We must estimate the total costs of a particular project to bid for fixed price contracts. The actual cost of labor and materials, however, may vary from the costs we originally estimated. These variations, along with other risks, inherent in performing fixed price contracts, may cause actual gross profits from projects to differ from those we originally estimated and could result in reduced profitability or losses on projects. Depending upon the size of a particular project, variations from the estimated contract costs can have a significant impact on our operating results for any fiscal quarter or year.

We could incur additional costs to cover certain guarantees or other contractual requirements. In some instances, we guarantee completion of a project by a specific date or price, cost savings, achievement of certain performance standards or performance of our services at a certain standard of quality. For other arrangements, including those within our government services operations, the terms of our contracts may include provisions which require us to achieve certain minority participation or small or disadvantaged business “set-aside” goals. If we subsequently fail to meet such guarantees, or comply with such provisions, we may be held responsible for costs resulting from such failures, including payment of penalties or liquidated or other damages. To the extent that any of these events occur, the total costs of a project could exceed the original estimated costs, and we would experience reduced profits or, in some cases, a loss.

Many of our contracts, especially our building services contracts for governmental and non-governmental entities, may be canceled on short notice, and we may be unsuccessful in replacing such contracts if they are canceled or as they are completed or expire. We could experience a decrease in revenues, net income and liquidity if any of the following occur:

- customers cancel a significant number of contracts;
- we fail to win a significant number of our existing contracts upon re-bid;
- we complete a significant number of non-recurring projects and cannot replace them with similar projects; or
- we fail to reduce operating and overhead expenses consistent with any decrease in our revenues.

We may be unsuccessful in generating internal growth. Our ability to generate internal growth will be affected by, among other factors, our ability to:

- expand the range of services offered to customers to address their evolving needs;
- attract new customers; and
- retain and/or increase the number of projects performed for existing customers.

In addition, existing and potential customers may reduce the number or size of projects available to us because of general economic conditions or due to their inability to obtain capital or pay for services we provide. Many of the factors affecting our ability to generate internal growth are beyond our control, and we cannot be certain that our strategies will be successful or that we will be able to generate cash flow sufficient to fund our operations and to support internal growth. If we are not successful, we may not be able to achieve internal growth, expand operations or grow our business.

The departure of key personnel could disrupt our business. We depend on the continued efforts of our senior management. The loss of key personnel, or the inability to hire and retain qualified executives, could negatively impact our ability to manage our business.

We may be unable to attract and retain skilled employees. Our ability to grow and maintain productivity and profitability will be limited by our ability to employ, train and retain skilled personnel necessary to meet our requirements. We are dependent upon our project managers and field supervisors who are responsible for managing our projects, and there can be no assurance that any individual will continue in his or her capacity for any particular period of time. The loss of such qualified employees could have an adverse effect on our business. We cannot be certain that we will be able to maintain an adequate skilled labor force necessary to operate efficiently and to support our business strategy or that labor expenses will not increase as a result of a shortage in the supply of these skilled personnel. The availability and cost of a skilled labor force could be impacted by factors we cannot control, including changes in the unemployment rate, prevailing wage rates, benefit costs and competition for labor from our competitors in the markets we serve. Labor shortages or increased labor costs could impair our ability to maintain our business or grow our revenues.

Our unionized workforce could adversely affect our operations; our participation in many multiemployer union pension plans could result in substantial liabilities being incurred. As of December 31, 2019, approximately 59% of our employees were covered by collective bargaining agreements. Although the majority of these agreements prohibit strikes and work stoppages, we cannot be certain that strikes or work stoppages will not occur in the future. However, only two of our collective bargaining agreements are national or regional in scope, and not all of our collective bargaining agreements expire at the same time. Strikes or work stoppages likely would adversely impact our relationships with our customers and could have a material adverse effect on our financial position, results of operations and cash flows. We contribute to approximately 200 multiemployer union pension plans based upon wages paid to our union employees that could result in our being responsible for a portion of the unfunded liabilities under such plans. Our potential liability for unfunded liabilities could be material. Under the Employee Retirement Income Security Act, we may become liable for our proportionate share of a multiemployer pension plan's underfunding if we cease to contribute to that pension plan or significantly reduce the employees in respect of which we make contributions to that pension plan. See Note 15 - Retirement Plans of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for additional information regarding multiemployer plans.

Fluctuating foreign currency exchange rates impact our financial results. We have operations in the United Kingdom, which in 2019 accounted for approximately 5% of our revenues. Our reported financial position and results of operations are exposed to the effects (both positive and negative) that fluctuating exchange rates have on the process of translating the financial statements of our United Kingdom operations, which are denominated in local currencies, into the U.S. dollar. It is unclear at this time what effect, if any, the United Kingdom's exit from the European Union may have on such exchange rates.

Our failure to comply with environmental laws could result in significant liabilities. Our operations are subject to various laws, including environmental laws and regulations, among which many deal with the handling and disposal of asbestos and other hazardous or universal waste products, PCBs and fuel storage. A violation of such laws and regulations may expose us to various claims, including claims by third parties, as well as remediation costs and fines. We own and lease many facilities. Some of these facilities contain hazardous materials, such as lead and asbestos, and fuel storage tanks, which may be above or below ground. If these tanks were to leak, we could be responsible for the cost of remediation as well as potential fines. As a part of our business, we also install fuel storage tanks and are sometimes required to deal with hazardous materials, all of which may expose us to environmental liability.

In addition, new laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or leaks, the imposition of new clean-up requirements, or the exposure of our employees or other contractors to hazardous materials, could require us to incur significant costs or become the basis for new or increased liabilities that could harm our financial position and results of operations, although certain of these costs might be covered by insurance. In some instances, we have obtained indemnification or covenants from third parties (including predecessors or lessors) for such clean-up and other obligations and liabilities, and we believe such indemnities and covenants are adequate to cover such obligations and liabilities. However, such third-party indemnities or covenants may not cover all of such costs or third-party indemnitors may default on their obligations. In addition, unanticipated obligations or liabilities, or future obligations and liabilities, may have a material adverse effect on our business operations. Further, we cannot be certain that we will be able to identify, or be indemnified for, all potential environmental liabilities relating to any acquired business.

Adverse resolution of litigation and other legal and regulatory proceedings may harm our operating results or financial position. From time to time, we are a party to lawsuits and other legal proceedings, most of which occur in the normal course of our business. These actions and proceedings may involve actual or threatened claims by customers, employees or other third parties for, among other things, compensation for alleged personal injury, workers' compensation, employment discrimination, breach of contract, property damage or other general commercial disputes. In addition, we may be subject to class action claims alleging violations of the Fair Labor Standards Act and state wage and hour laws. Litigation and other legal proceedings can be expensive, lengthy and disruptive to normal business operations, and their outcome is inherently uncertain and difficult to accurately predict or quantify. In addition, plaintiffs in many types of actions may seek punitive damages, civil penalties, consequential damages or other losses, or injunctive or declaratory relief. An unfavorable resolution of a particular legal proceeding or claim, whether through a settlement, mediation, court judgment or otherwise, could have a material adverse effect on our business, operating results, financial position and cash flows, and in some cases, on our reputation or our ability to obtain projects from customers, including governmental entities. See Item 3. Legal Proceedings and Note 16 - Commitments and Contingencies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data, for more information regarding legal proceedings in which we are involved.

Opportunities within the government sector could lead to increased governmental rules and regulations applicable to us. As a government contractor we are subject to a number of procurement rules and other regulations, any deemed violation of which could lead to fines or penalties or a loss of business. Government agencies routinely audit and investigate government contractors. Government agencies may review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. If government agencies determine through these audits or reviews that costs are improperly allocated to specific contracts, they will not reimburse the contractor for those costs or may require the contractor to refund previously reimbursed costs. If government agencies determine that we are engaged in improper activity, we may be subject to civil and criminal penalties and debarment or suspension from doing business with the government. Government contracts are also subject to renegotiation of terms by the government, termination by the government prior to the expiration of the term, and non-renewal by the government.

A material portion of our business depends on our ability to provide surety bonds. We may be unable to compete for or work on certain projects if we are not able to obtain the necessary surety bonds. Our construction contracts frequently require that we obtain from surety companies and provide to our customers payment and performance bonds as a condition to the award of such contracts. Such surety bonds secure our payment and performance obligations. Under standard terms in the surety market, surety companies issue bonds on a project-by-project basis and can decline to issue bonds at any time or require the posting of collateral as a condition to issuing any bonds. Current or future market conditions, as well as changes in our sureties' assessment of our or their own operating and financial risk, could cause our surety companies to decline to issue, or substantially reduce the amount of, bonds for our work or to increase our bonding costs. These actions can be taken on short notice. If our surety companies were to limit or eliminate our access to bonding, our alternatives would include seeking bonding capacity from other surety companies, increasing business with clients that do not require bonds and posting other forms of collateral for project performance, such as letters of credit, parent company guarantees or cash. We may be unable to secure these alternatives in a timely manner, on acceptable terms, or at all. Accordingly, if we were to experience an interruption or reduction in the availability of bonding, we may be unable to compete for or work on certain projects. Increases in the costs of surety bonds could also adversely impact our profitability.

We are effectively self-insured against many potential liabilities. Although we maintain insurance policies with respect to a broad range of risks, including automobile liability, general liability, workers' compensation and employee group health, these policies do not cover all possible claims and certain of the policies are subject to large deductibles. Accordingly, we are effectively self-insured for a substantial number of actual and potential claims. In addition, if any of our insurance carriers defaulted on its obligations to provide insurance coverage by reason of its insolvency or for other reasons, our exposure to claims would increase and our profits would be adversely affected. Our estimates for unpaid claims and expenses are based on known facts, historical trends and industry averages, utilizing the assistance of an actuary. The determination of such estimated liabilities and their appropriateness are reviewed and updated at least quarterly. However, these liabilities are difficult to assess and estimate due to many relevant factors, the effects of which are often unknown, including the severity of an injury or damage, the determination of liability in proportion to other parties, the timeliness of reported claims, the effectiveness of our risk management and safety programs and the terms and conditions of our insurance policies. Our accruals are based upon known facts, historical trends and our reasonable estimate of future expenses, and we believe such accruals are adequate. However, unknown or changing trends, risks or circumstances, such as increases in claims, a weakening economy, increases in medical costs, changes in case law or legislation, or changes in the nature of the work we perform, could render our current estimates and accruals inadequate. In such case, adjustments to our balance sheet may be required and these increased liabilities would be recorded in the period that the experience becomes known. Insurance carriers may be unwilling, in the future, to provide our current levels of coverage without a significant increase in insurance premiums, self-insured retention limits, or collateral requirements to cover our obligations to them. Increased collateral requirements may be in the form of additional letters of credit and/or cash, and an increase in collateral requirements could significantly reduce our liquidity. If insurance premiums or self-insured retention limits increase, and/or if insurance claims are higher than our estimates, our profitability could be adversely affected.

We may incur liabilities or suffer negative financial impacts relating to occupational, health and safety matters. Our operations are subject to extensive laws and regulations relating to the maintenance of safe conditions in the workplace. While we have invested, and will continue to invest, substantial resources in our robust occupational, health and safety programs, many of our businesses involve a high degree of operational risk, and there can be no assurance that we will avoid significant exposure. These hazards can cause personal injury and loss of life, severe damage to or destruction of property and equipment and other consequential damages and could lead to suspension of operations, large damage claims and, in extreme cases, criminal liability.

Our customers seek to minimize safety risks on their sites and they frequently review the safety records of contractors during the bidding process. If our safety record were to substantially deteriorate over time, we might become ineligible to bid on certain work and our customers could cancel our contracts and/or not award us future business.

Acquisitions could adversely affect our business and results of operations. As part of our growth strategy, we acquire companies that expand, complement and/or diversify our businesses. Realization of the anticipated benefits of an acquisition, and avoiding or mitigating the potential risks associated with an acquisition, will depend, among other things, upon our ability to: (a) effectively conduct due diligence on companies we propose to acquire to identify problems at these companies and (b) recognize incompatibilities or other obstacles to successful integration of the acquired business with our other operations and gain greater efficiencies and scale that will translate into reduced costs in a timely manner. However, there can be no assurance that an acquisition we may make in the future will provide the benefits anticipated when entering into the transaction. Acquisitions we have made and future acquisitions may expose us to operational challenges and risks, including the diversion of management's attention from our existing businesses, the failure to retain key personnel or customers of the acquired business, and the assumption of unknown liabilities of the acquired business for which there are inadequate reserves. Our ability to sustain our growth and maintain our competitive position may be affected by our ability to identify and acquire desirable businesses and successfully integrate any acquired business.

In addition, while we work to rapidly implement or maintain our internal controls and financial reporting standards and procedures in the businesses we acquire, including integrating such acquired businesses into our consolidated financial reporting systems and controls, we cannot be certain that such implementation and integration will be quickly and effectively completed. Our internal control processes and procedures with respect to such businesses may need to be adjusted or enhanced in order to ensure that such businesses are in compliance with the regulations we are subject to as well as our internal policies and standards. Such changes could result in significant additional costs to us and could require the diversion of management's attention from our existing businesses.

Our results of operations could be adversely affected as a result of goodwill and other identifiable intangible asset impairments. When we acquire a business, we record an asset called "goodwill" equal to the excess of the consideration transferred over the fair value of the net assets acquired. The Financial Accounting Standards Board ("FASB") requires that all business combinations be accounted for using the acquisition method of accounting and that certain identifiable intangible assets acquired in a business combination be recognized as assets apart from goodwill. FASB Accounting Standards Codification Topic 350, "Intangibles-Goodwill and Other" ("ASC 350"), provides that goodwill and other identifiable intangible assets that have indefinite useful lives not be amortized, but instead be tested at least annually for impairment, and identifiable intangible assets that have finite useful lives should continue to be amortized over their useful lives and be tested for impairment whenever facts and circumstances indicate that the carrying values may not be fully recoverable. ASC 350 also provides specific guidance for testing goodwill and other non-amortized identifiable intangible assets for impairment, which we test annually each October 1. ASC 350 requires management to make certain estimates and assumptions to allocate goodwill to reporting units and to determine the fair value of reporting unit net assets and liabilities. Such fair value is determined using discounted estimated future cash flows. Our development of these future cash flow projections is based upon assumptions and estimates by management from a review of our operating results and business plans as well as forecasts of anticipated growth rates and margins, among other considerations. In addition, estimates of the weighted average cost of capital for each reporting unit are developed with the assistance of a third-party valuation specialist. Those assumptions and estimates can change in future periods and other factors used in assessing fair value, such as interest rates, are outside the control of management. There can be no assurance that our estimates and assumptions made for purposes of our goodwill and identifiable intangible asset impairment testing will prove to be accurate predictions of the future. If our assumptions regarding business plans including anticipated growth rates and margins are not achieved, or there is a rise in interest rates, we may be required to record goodwill and/or identifiable intangible asset impairment charges in future periods. It is not possible at this time to determine if any such impairment charge would result or, if it does, whether such a charge would be material to our results of operations.

Amounts included in our remaining performance obligations may not result in actual revenues or translate into profits. Many contracts are subject to cancellation or suspension on short notice at the discretion of the client, and the contracts in our remaining performance obligations are subject to changes in the scope of services to be provided as well as adjustments to the costs relating to the contract. Accordingly, there is no assurance that revenue from remaining performance obligations will actually be realized. If our remaining performance obligations fail to materialize, we could experience a decline in profitability, which could result in a deterioration of our financial position and liquidity.

We recognize revenue for the majority of our construction projects based on estimates; therefore, variations of actual results from our assumptions may reduce our profitability. In accordance with United States generally accepted accounting principles, we record revenue as work on the contract progresses. The cumulative amount of revenues recorded on a contract at a specified point in time is that percentage of total estimated revenues that costs incurred to date bear to estimated total costs. Accordingly, contract revenues and total cost estimates are reviewed and revised as the work progresses. Adjustments are reflected in contract revenues in the period when such estimates are revised. Estimates are based on management's reasonable assumptions and experience, but are only estimates. Variations of actual results from assumptions on an unusually large project or on a number of average size projects could be material. We are also required to immediately recognize the full amount of the estimated loss on a contract when estimates indicate such a loss. Such adjustments and accrued losses could result in reduced profitability, which could negatively impact our cash flow from operations.

Failure to maintain effective internal controls over financial reporting could adversely impact our ability to timely and accurately report financial results and comply with our reporting obligations, which could materially affect our business. We maintain robust internal control over financial reporting. However, regardless of how internal control systems are designed, implemented, and enforced, they cannot ensure with absolute certainty that our policy objectives will be met in every instance. Because of the inherent limitations of all such systems, our internal controls over financial reporting may not always prevent or detect misstatements. Failure to maintain effective internal control over financial reporting could adversely affect our ability to accurately and timely report financial results, to prevent or detect fraud, or to comply with the requirements of the SEC or the Sarbanes-Oxley Act of 2002, which could necessitate a restatement of our financial statements, and/or result in an investigation, or the imposition of sanctions, by regulators. Such failure could additionally expose us to litigation and/or reputational harm, impair our ability to obtain financing, or increase the cost of any financing we obtain. All of these impacts could adversely affect the price of our common stock and our business overall.

We are increasingly dependent on sophisticated information technology systems; our business and results of operations are subject to adverse impacts due to disruption, failure, and cybersecurity breaches of these systems. We and our customers and third party providers rely on information technology systems, hardware, and software to run critical accounting, project management, and financial information systems. We rely upon security measures, products, and services to attempt to secure our information technology systems and the confidential, proprietary, and sensitive information they contain. However, our information technology systems and those of our customers and third-party providers are subject to cyber-attacks, hacking, other intrusions, failure, and damage, which result in operational disruption and could result in information misappropriation, such as theft of intellectual property or inappropriate disclosure of customer data or confidential or personal information. On February 15, 2020, for example, we became aware of an infiltration and encryption of portions of our information technology network. This attack disrupted our operations that utilize the impacted portions of the network. We continue to assess the magnitude of the consequences and we are actively seeking to mitigate the effects. As of the date of this filing, the Company continues its efforts to restore the portions of such systems that remain impacted and is unable to predict when the entire network will be functional. In addition, the proper functioning of our information technology systems could be impacted by other causes and circumstances beyond our control, including the decision by software vendors to discontinue further development, integration or long-term software maintenance support for our information systems, or hardware interruption, damage or disruption as a result of power outages, natural disasters, or computer network failures. Key business processes are subject to interruption to the extent that our information technology systems, or those of our customers or third party providers, are disabled for a long period of time. Such operational disruptions and/or misappropriation or inappropriate disclosure of information results in lost or reduced revenues, negative publicity, or business delays that could have a material adverse effect on our business, financial position and results of operations. We may expend significant resources to protect against such system disruptions and security breaches or to alleviate or remediate problems caused by such disruptions and breaches.

Our failure to comply with anti-bribery statutes such as the Foreign Corrupt Practices Act and the U.K. Bribery Act of 2010 could result in fines, criminal penalties and other sanctions that could have an adverse effect on our business. The U.S. Foreign Corrupt Practices Act (the "FCPA"), the U.K. Bribery Act of 2010 (the "Bribery Act") and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or retaining business or securing an improper advantage. We conduct a modest amount of business in a few countries that have experienced corruption to some degree. Our policies require that all of our employees, subcontractors, vendors and agents worldwide must comply with applicable anti-bribery laws. However, there is no assurance that our policies and procedures to ensure compliance with the FCPA, the Bribery Act and similar anti-bribery laws will eliminate the possibility of liability under such laws for actions taken by our employees, agents and intermediaries. If we were found to be liable for violations under the FCPA, the Bribery Act or similar anti-bribery laws, either due to our own acts or omissions or due to the acts or omissions of others, we could incur substantial legal expenses and suffer civil and criminal penalties or other sanctions, which could have a material adverse effect on our business, financial condition and results of operations, as well as our reputation. In addition, whether or not such expenses, penalties or sanctions are actually incurred, the actual or alleged violation of the FCPA, the Bribery Act or any similar anti-bribery laws could have a negative impact on our reputation.

Certain provisions of our corporate governance documents could make an acquisition of us, or a substantial interest in us, more difficult. The following provisions of our certificate of incorporation and by-laws, as currently in effect, as well as Delaware law, could discourage potential proposals to acquire us, delay or prevent a change in control of us, or limit the price that investors may be willing to pay in the future for shares of our common stock:

- our certificate of incorporation permits our board of directors to issue “blank check” preferred stock and to adopt amendments to our by-laws;
- our by-laws contain restrictions regarding the right of our stockholders to nominate directors and to submit proposals to be considered at stockholder meetings;
- our certificate of incorporation and by-laws limit the right of our stockholders to call a special meeting of stockholders and to act by written consent; and
- we are subject to provisions of Delaware law, which prohibit us from engaging in any of a broad range of business transactions with an “interested stockholder” for a period of three years following the date such stockholder becomes classified as an interested stockholder.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our operations are conducted primarily at leased properties. The following table lists facilities over 50,000 square feet, both leased and owned, and identifies the business segment that is the principal user of each such facility.

	Approximate Square Feet	Lease Expiration Date, Unless Owned
17905 and 18101 S. Broadway Carson, California (b)	68,160	7/31/2020
1168 Fesler Street El Cajon, California (b)	67,560	8/31/2025
22302 Hathaway Avenue Hayward, California (b)	105,000	7/31/2021
4462 Corporate Center Drive Los Alamitos, California (a)	57,863	12/31/2026
3535 Medford Street Los Angeles, California (a)	60,000	5/31/2021
940 Remillard Court San Jose, California (c)	119,560	7/31/2029
55 Gerber Road South Windsor, Connecticut (c)	60,047	12/31/2028
2227 Plunkett Road Conyers, Georgia (b)	100,400	10/31/2029
3100 Woodcreek Drive Downers Grove, Illinois (a)	56,551	7/31/2027
2219 Contractors Drive Fort Wayne, Indiana (b)	175,000	7/31/2023
5210 Investment Drive Fort Wayne, Indiana (b)	99,579	10/31/2023
7614 and 7720 Opportunity Drive Fort Wayne, Indiana (b)	156,993	7/31/2031
2655 Garfield Avenue Highland, Indiana (a)	58,065	6/30/2034
4250 Highway 30 St. Gabriel, Louisiana (d)	90,000	Owned
1750 Swisco Road Sulphur, Louisiana (d)	112,000	Owned
111-01 and 111-21 14th Avenue College Point, New York (a)	73,013	2/29/2024
70 Schmitt Boulevard Farmingdale, New York (b)	76,380	7/31/2026
3000 Comfort Court Raleigh, North Carolina (c)	70,000	12/31/2023
6101 and 6025 Triangle Drive Raleigh, North Carolina (b)	53,394	12/31/2024
2900 Newpark Drive Barberton, Ohio (b)	113,663	10/31/2027
3976 Southern Avenue Cincinnati, Ohio (b)	60,575	10/31/2025
16251 SE 98th Avenue Clackamas, Oregon (a)	98,860	12/31/2020
1700 Markley Street Norristown, Pennsylvania (c)	90,767	9/30/2021

	<u>Approximate Square Feet</u>	<u>Lease Expiration Date, Unless Owned</u>
6045 East Shelby Drive Memphis, Tennessee (c)	53,618	5/31/2023
937 Pine Street Beaumont, Texas (d)	78,962	Owned
895 North Main Street Beaumont, Texas (d)	75,000	Owned
410 Flato Road Corpus Christi, Texas (d)	57,000	Owned
5550 Airline Drive and 25 Tidwell Road Houston, Texas (b)	97,936	12/31/2024
12415 Highway 225 La Porte, Texas (d)	78,000	Owned
2455 West 1500 South Salt Lake City, Utah (a)	59,677	4/30/2025
2345 South CCI Way West Valley City, Utah (c)	69,229	8/31/2032

We believe that our property, plant and equipment are well maintained, in good operating condition and suitable for the purposes for which they are used.

See Note 17 - Leases of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for additional information regarding lease costs. We utilize substantially all of our leased or owned facilities and believe there will be no difficulty either in negotiating the renewal of such leases as they expire or in finding alternative space, if necessary.

- (a) Principally used by a company engaged in the “United States electrical construction and facilities services” segment.
- (b) Principally used by a company engaged in the “United States mechanical construction and facilities services” segment.
- (c) Principally used by a company engaged in the “United States building services” segment.
- (d) Principally used by a company engaged in the “United States industrial services” segment.

ITEM 3. LEGAL PROCEEDINGS

We are involved in several legal proceedings in which damages and claims have been asserted against us. We believe that we have a number of valid defenses to such proceedings and claims and intend to vigorously defend ourselves. Other potential claims may exist that have not yet been asserted against us. We do not believe that any such matters will have a material adverse effect on our financial position, results of operations or liquidity. Litigation is subject to many uncertainties and the outcome of litigation is not predictable with assurance. It is possible that some litigation matters for which liabilities have not been recorded could be decided unfavorably to us, and that any such unfavorable decisions could have a material adverse effect on our financial position, results of operations or liquidity.

ITEM 4. MINE SAFETY DISCLOSURES

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 Form 10-K.

EXECUTIVE OFFICERS OF THE REGISTRANT

Anthony J. Guzzi, Age 55; President since October 2004, Chief Executive Officer since January 2011 and Chairman of the Board since June 2018. From October 2004 to January 2011, Mr. Guzzi served as Chief Operating Officer of the Company. From August 2001 until he joined the Company, Mr. Guzzi was President of the North American Distribution and Aftermarket Division of Carrier Corporation (“Carrier”). Carrier is a manufacturer and distributor of commercial and residential HVAC and refrigeration systems and equipment and a provider of aftermarket services and components of its own products and those of other manufacturers in both the HVAC and refrigeration industries.

Mark A. Pompa, Age 55; Executive Vice President and Chief Financial Officer of the Company since April 2006 and Treasurer since October 2019. From June 2003 to April 2006, Mr. Pompa was Senior Vice President-Chief Accounting Officer of the Company, and from June 2003 to January 2007, Mr. Pompa also served as Treasurer of the Company. From September 1994 to June 2003, Mr. Pompa was Vice President and Controller of the Company.

R. Kevin Matz, Age 61; Executive Vice President-Shared Services of the Company since December 2007 and Senior Vice President-Shared Services from June 2003 to December 2007. From April 1996 to June 2003, Mr. Matz served as Vice President and Treasurer of the Company and Staff Vice President-Financial Services of the Company from March 1993 to April 1996.

Maxine L. Mauricio, Age 48; Senior Vice President, General Counsel and Secretary of the Company since January 2016. From January 2012 to December 2015, Ms. Mauricio was Vice President and Deputy General Counsel of the Company, and from May 2002 to December 2011, she served as Assistant General Counsel of the Company. Prior to joining the Company, Ms. Mauricio was an associate at Ropes & Gray LLP.

PART II

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

Market Information. Our common stock trades on the New York Stock Exchange under the symbol "EME".

The following table sets forth high and low sales prices for our common stock for the periods indicated as reported by the New York Stock Exchange:

<u>2019</u>	<u>High</u>	<u>Low</u>
First Quarter	\$ 74.60	\$ 58.05
Second Quarter	\$ 88.27	\$ 73.46
Third Quarter	\$ 89.55	\$ 79.59
Fourth Quarter	\$ 93.54	\$ 81.65
<u>2018</u>	<u>High</u>	<u>Low</u>
First Quarter	\$ 85.08	\$ 73.26
Second Quarter	\$ 82.04	\$ 72.26
Third Quarter	\$ 81.37	\$ 73.73
Fourth Quarter	\$ 76.18	\$ 57.29

Holdings. As of February 21, 2020, there were approximately 400 stockholders of record and, as of that date, we estimate there were 58,382 beneficial owners holding our common stock in nominee or "street" name.

Dividends. We have paid quarterly dividends since October 25, 2011. We expect that such quarterly dividends will be paid in the foreseeable future. Prior to October 25, 2011, no cash dividends had been paid on the Company's common stock. We currently pay a regular quarterly dividend of \$0.08 per share. Our 2016 Credit Agreement places limitations on the payment of dividends on our common stock. However, we do not believe that the terms of such agreement currently materially limit our ability to pay a quarterly dividend of \$0.08 per share for the foreseeable future. See Note 10 - Debt of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for further information regarding our 2016 Credit Agreement.

Securities Authorized for Issuance Under Equity Compensation Plans. The following table summarizes, as of December 31, 2019, certain information regarding equity compensation plans that were approved by stockholders and equity compensation plans that were not approved by stockholders. The information in the table and in the notes thereto has been adjusted for stock splits.

Plan Category	Equity Compensation Plan Information		
	A	B	C
	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column A)
Equity Compensation Plans Approved by Security Holders	509,888 ⁽¹⁾	\$ 0.96 ⁽¹⁾	1,160,086 ⁽²⁾
Equity Compensation Plans Not Approved by Security Holders	—	—	—
Total	509,888	\$ 0.96	1,160,086

(1) Included within this amount are 489,888 restricted stock units awarded to our non-employee directors and employees. The weighted average exercise price would have been \$24.48 had the weighted average exercise price calculation excluded such restricted stock units.

(2) Represents shares of our common stock available for future issuance under our 2010 Incentive Plan (the "2010 Plan"), which may be issuable in respect of options and/or stock appreciation rights granted under the 2010 Plan and/or may also be issued pursuant to the award of restricted stock, unrestricted stock and/or awards that are valued in whole or in part by reference to, or are otherwise based on the fair market value of, our common stock.

Purchase of Equity Securities by the Issuer and Affiliated Purchasers

The following table summarizes repurchases of our common stock made by us during the quarter ended December 31, 2019:

Period	Total Number of Shares Purchased (1)(2)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares That May Yet be Purchased Under the Plan or Programs
October 1, 2019 to October 31, 2019	—	—	—	\$158,506,898
November 1, 2019 to November 30, 2019	—	—	—	\$158,506,898
December 1, 2019 to December 31, 2019	—	—	—	\$158,506,898
Total	—	—	—	

- (1) On September 26, 2011, our Board of Directors (the “Board”) authorized us to repurchase up to \$100.0 million of our outstanding common stock. Subsequently, the Board has from time to time increased the amount of our common stock that we may repurchase. Since the inception of the repurchase program, the Board has authorized us to repurchase up to \$950.0 million of our outstanding common stock. As of December 31, 2019, there remained authorization for us to repurchase approximately \$158.5 million of our shares. No shares have been repurchased by us since the program was announced other than pursuant to such program. The repurchase program has no expiration, does not obligate the Company to acquire any particular amount of common stock and may be suspended, recommenced or discontinued at any time or from time to time without prior notice. We may repurchase our shares from time to time to the extent permitted by securities laws and other legal requirements, including provisions in our credit agreement, placing limitations on such repurchases.
- (2) Excludes 28,839 shares surrendered to the Company by participants in our share-based compensation plans to satisfy minimum tax withholdings for common stock issued under such plans.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data has been derived from our audited financial statements and should be read in conjunction with the consolidated financial statements, the related notes thereto and the report of our independent registered public accounting firm thereon included elsewhere in this and our previously filed annual reports on Form 10-K.

See Note 4 - Acquisitions of Businesses and Note 5 - Disposition of Assets of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for a discussion regarding acquisitions and dispositions. During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

Income Statement Data

(In thousands, except per share data)

	Years Ended December 31,				
	2019	2018	2017	2016	2015
Revenues	\$9,174,611	\$8,130,631	\$7,686,999	\$7,551,524	\$6,718,726
Gross profit	\$1,355,868	\$1,205,453	\$1,147,012	\$1,037,862	\$ 944,479
Impairment loss on goodwill and identifiable intangible assets	\$ —	\$ 907	\$ 57,819	\$ 2,428	\$ —
Operating income	\$ 460,892	\$ 403,083	\$ 328,902	\$ 306,929	\$ 285,336
Net income attributable to EMCOR Group, Inc.	\$ 325,140	\$ 283,531	\$ 227,196	\$ 181,935	\$ 172,286
Basic earnings (loss) per common share:					
From continuing operations	\$ 5.78	\$ 4.92	\$ 3.85	\$ 3.05	\$ 2.74
From discontinued operations	—	(0.04)	(0.01)	(0.05)	(0.00)
	\$ 5.78	\$ 4.88	\$ 3.84	\$ 3.00	\$ 2.74
Diluted earnings (loss) per common share:					
From continuing operations	\$ 5.75	\$ 4.89	\$ 3.83	\$ 3.02	\$ 2.72
From discontinued operations	—	(0.04)	(0.01)	(0.05)	(0.00)
	\$ 5.75	\$ 4.85	\$ 3.82	\$ 2.97	\$ 2.72

Balance Sheet Data

(In thousands)

	As of December 31,				
	2019	2018	2017	2016	2015
Equity ⁽¹⁾	\$2,057,780	\$1,741,441	\$1,674,117	\$1,537,942	\$1,480,056
Total assets	\$4,830,358	\$4,088,807	\$3,965,904	\$3,852,438	\$3,506,706
Goodwill	\$1,063,911	\$ 990,887	\$ 964,893	\$ 979,628	\$ 843,170
Borrowings under revolving credit facility	\$ 50,000	\$ 25,000	\$ 25,000	\$ 125,000	\$ —
Term loan, including current maturities	\$ 254,431	\$ 269,620	\$ 284,810	\$ 300,000	\$ 315,000
Other long-term debt, including current maturities	\$ —	\$ 9	\$ 20	\$ 31	\$ 44
Finance lease liabilities, including current maturities	\$ 9,679	\$ 4,213	\$ 4,571	\$ 3,732	\$ 3,869

- (1) Since the inception of our common stock repurchase program in 2011 through December 31, 2019, we have repurchased approximately 15.9 million shares of our common stock for approximately \$791.5 million. We have paid quarterly dividends since October 25, 2011. We currently pay a regular quarterly dividend of \$0.08 per share, and we expect that quarterly dividends will be paid in the foreseeable future. These transactions result in a reduction of our equity.

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

We are one of the largest electrical and mechanical construction and facilities services firms in the United States. In addition, we provide a number of building services and industrial services. Our services are provided to a broad range of commercial, industrial, utility and institutional customers through approximately 80 operating subsidiaries and joint venture entities. Our offices are located in the United States and the United Kingdom.

Operating Segments

Our reportable segments reflect certain reclassifications of prior year amounts from our United States mechanical construction and facilities services segment to our United States building services and our United States industrial services segments due to changes in our internal reporting structure.

We have the following reportable segments, which provide services associated with the design, integration, installation, start-up, operation and maintenance of various systems: (a) United States electrical construction and facilities services (involving systems for electrical power transmission and distribution; premises electrical and lighting systems; process instrumentation in the refining, chemical processing, food processing and mining industries; low-voltage systems, such as fire alarm, security and process control; voice and data communication; roadway and transit lighting; and fiber optic lines); (b) United States mechanical construction and facilities services (involving systems for heating, ventilation, air conditioning, refrigeration and clean-room process ventilation; fire protection; plumbing, process and high-purity piping; controls and filtration; water and wastewater treatment; central plant heating and cooling; cranes and rigging; millwrighting; and steel fabrication, erection and welding); (c) United States building services; (d) United States industrial services; and (e) United Kingdom building services. The “United States building services” and “United Kingdom building services” segments principally consist of those operations which provide a portfolio of services needed to support the operation and maintenance of customers’ facilities, including commercial and government site-based operations and maintenance; facility maintenance and services, including reception, security and catering services; outage services to utilities and industrial plants; military base operations support services; mobile mechanical maintenance and services; floor care and janitorial services; landscaping, lot sweeping and snow removal; facilities management; vendor management; call center services; installation and support for building systems; program development, management and maintenance for energy systems; technical consulting and diagnostic services; infrastructure and building projects for federal, state and local governmental agencies and bodies; and small modification and retrofit projects, which services are not generally related to customers’ construction programs. The “United States industrial services” segment principally consists of those operations which provide industrial maintenance and services for refineries, petrochemical plants, and other customers within the oil and gas industry. Services of this segment include refinery turnaround planning and engineering; specialty welding; overhaul and maintenance of critical process units; specialty technical services; on-site repairs, maintenance and service of heat exchangers, towers, vessels and piping; design, manufacturing, repair, and hydro blast cleaning of shell and tube heat exchangers and related equipment; and construction, maintenance, and other support services for customers within the upstream and midstream sectors.

2019 versus 2018

Overview

The following table presents selected financial data for the fiscal years ended December 31, 2019 and 2018 (in thousands, except percentages and per share data):

	2019	2018
Revenues	\$ 9,174,611	\$ 8,130,631
Revenues increase from prior year	12.8%	5.8%
Restructuring expenses	\$ 1,523	\$ 2,306
Impairment loss on identifiable intangible assets	\$ —	\$ 907
Operating income	\$ 460,892	\$ 403,083
Operating income as a percentage of revenues	5.0%	5.0%
Income from continuing operations	\$ 325,140	\$ 285,922
Net income attributable to EMCOR Group, Inc.	\$ 325,140	\$ 283,531
Diluted earnings per common share from continuing operations	\$ 5.75	\$ 4.89

The results of our operations for 2019 set new company records in terms of revenues, operating income, net income attributable to EMCOR Group, Inc., and diluted earnings per common share from continuing operations. Operating margin (operating income as a percentage of revenues) for 2019 remained consistent with our previously established annual record of 5.0%.

Revenues increased by 12.8% from \$8.1 billion for the year ended December 31, 2018 to \$9.2 billion for the year ended December 31, 2019. Operating income for 2019 of \$460.9 million, or 5.0% of revenues, increased by \$57.8 million compared to operating income of \$403.1 million, or 5.0% of revenues, in 2018.

The strong operating results were due to revenue growth and an increase in operating income within all of our reportable segments, as well as operating margin expansion across all such segments, except for our United States mechanical construction and facilities services segment due to a change in revenue mix compared to the prior year.

Impact of Acquisitions

In order to provide a more meaningful period-over-period discussion of our operating results, we may discuss amounts generated or incurred (revenues, gross profit, selling, general and administrative expenses and operating income) from companies acquired. The amounts discussed reflect the acquired companies' operating results in the current reported period only for the time period these entities were not owned by EMCOR in the comparable prior reported period.

During 2019, we completed the acquisition of Batchelor & Kimball, Inc. ("BKI"), a leading full service provider of mechanical construction and maintenance services. This acquisition strengthens our position and broadens our capabilities in the Southern and Southeastern regions of the United States, and the results of its operations have been included within our United States mechanical construction and facilities services segment. In addition to BKI, during 2019, we acquired: (a) a company which provides electrical contracting services in central Iowa, the results of operations of which have been included within our United States electrical construction and facilities services segment, (b) a company which provides mechanical contracting services in south-central and eastern Texas, the results of operations of which have been included within our United States mechanical construction and facilities services segment, and (c) four companies included within our United States building services segment, consisting of: (i) a company which provides mobile mechanical services in the Southern region of the United States and (ii) three companies, the results of operations of which were de minimis, which bolster our presence in geographies where we have existing operations and provide either mobile mechanical services or building automation and controls solutions.

We acquired four companies in 2018. Two companies provide mobile mechanical services, one within the Eastern region and the other within the Western region of the United States. The third company is a full service provider of mechanical services within the Southern region of the United States. The results of operations for these three companies have been included in our United States building services segment. The fourth company provides electrical construction and maintenance services for industrial and commercial buildings in North Texas, and its results have been included in our United States electrical construction and facilities services segment.

Companies acquired in 2019 and 2018 generated incremental revenues of \$290.3 million and incremental operating income of \$16.6 million, inclusive of \$9.3 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2019.

Discussion and Analysis of Results of Operations

Revenues

The following table presents our revenues for each of our operating segments and the approximate percentages that each segment's revenues were of total revenues for the years ended December 31, 2019 and 2018 (in thousands, except for percentages):

	<u>2019</u>	<u>% of Total</u>	<u>2018</u>	<u>% of Total</u>
Revenues from unrelated entities:				
United States electrical construction and facilities services	\$ 2,216,600	24%	\$ 1,954,323	24%
United States mechanical construction and facilities services	3,340,337	36%	2,962,843	37%
United States building services	2,106,872	23%	1,875,485	23%
United States industrial services	1,087,543	12%	923,109	11%
Total United States operations	<u>8,751,352</u>	<u>95%</u>	<u>7,715,760</u>	<u>95%</u>
United Kingdom building services	423,259	5%	414,871	5%
Total worldwide operations	<u>\$ 9,174,611</u>	<u>100%</u>	<u>\$ 8,130,631</u>	<u>100%</u>

As described in more detail below, revenues for the year ended December 31, 2019 increased to \$9.2 billion compared to \$8.1 billion for the year ended December 31, 2018, with all reportable segments experiencing revenue growth year over year. Companies acquired in 2019 and 2018, which are reported in our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment and our United States building services segment, generated incremental revenues of \$290.3 million in 2019.

Revenues of our United States electrical construction and facilities services segment were \$2,216.6 million for the year ended December 31, 2019 compared to revenues of \$1,954.3 million for the year ended December 31, 2018. The increase in revenues was attributable to: (a) an increase in revenues from the commercial market sector, primarily as a result of several large telecommunication construction projects, and (b) an increase in project activities within the manufacturing and institutional market sectors. In addition, the results for the year ended December 31, 2019 included \$134.5 million of incremental revenues generated by companies acquired in 2019 and 2018. These increases were partially offset by a decrease in revenues due to the completion or substantial completion of certain large construction projects within the transportation, healthcare, and hospitality market sectors.

Our United States mechanical construction and facilities services segment revenues for the year ended December 31, 2019 were \$3,340.3 million, a \$377.5 million increase compared to revenues of \$2,962.8 million for the year ended December 31, 2018. The increase in revenues was primarily attributable to an increase in revenues from the majority of the market sectors in which we operate, including: (a) the manufacturing market sector, due to several food processing construction projects, (b) the commercial market sector, primarily as a result of certain telecommunication and technology construction projects currently in process, and (c) the healthcare, water and wastewater, and institutional market sectors due to increased project activity. In addition, the results for the year ended December 31, 2019 included \$49.1 million of incremental revenues generated by companies acquired in 2019. These increases were partially offset by decreased revenues within the hospitality market sector as a result of the completion of certain large projects.

Revenues of our United States building services segment were \$2,106.9 million and \$1,875.5 million for the years ended December 31, 2019 and 2018, respectively. The \$231.4 million increase in this segment's revenues was due to: (a) incremental revenues of \$106.7 million generated by companies acquired in 2019 and 2018 within our mobile mechanical services operations, (b) greater project, controls, and service repair and maintenance activities within our mobile mechanical services operations, (c) an increase in revenues within our commercial site-based services operations, partially as a result of: (i) scope expansion on certain contracts with existing customers and (ii) new contract awards, and (d) increased large project activity within our energy services operations. These increases were partially offset by revenue declines within our government site-based services operations due to the loss of certain contracts not renewed pursuant to rebid, which resulted in a reduction in both base maintenance and indefinite-delivery, indefinite-quantity project revenues.

Revenues of our United States industrial services segment for the year ended December 31, 2019 were \$1,087.5 million, a \$164.4 million increase compared to revenues of \$923.1 million for the year ended December 31, 2018. The increase in revenues was primarily due to increased maintenance and capital project activity within our field services operations. In addition, the results for the year ended December 31, 2019 benefited from a more normalized demand pattern for our turnaround services as compared to the prior year, which was negatively impacted by the lingering effects of Hurricane Harvey, which led to the cancellation or deferral of certain previously scheduled maintenance activities with our customers in the first half of 2018. The increased revenues for the

year ended December 31, 2019 were partially offset by a decrease in revenues from our shop services operations, primarily as a result of a reduction in new build heat exchanger sales.

Our United Kingdom building services segment revenues were \$423.3 million in 2019 compared to \$414.9 million in 2018. The increase in revenues within this segment was primarily the result of: (a) new contract awards within the commercial and institutional market sectors and (b) increased project activity with existing customers. Unfavorable exchange rates for the British pound versus the United States dollar negatively impacted this segment's revenues for the year ended December 31, 2019 by \$19.5 million.

Cost of sales and Gross profit

The following table presents cost of sales, gross profit (revenues less cost of sales), and gross profit margin (gross profit as a percentage of revenues) for the years ended December 31, 2019 and 2018 (in thousands, except for percentages):

	2019	2018
Cost of sales	\$ 7,818,743	\$ 6,925,178
Gross profit	\$ 1,355,868	\$ 1,205,453
Gross profit margin	14.8%	14.8%

Our gross profit for the year ended December 31, 2019 was \$1,355.9 million, a \$150.4 million increase compared to gross profit of \$1,205.5 million for the year ended December 31, 2018. Our gross profit margin was 14.8% for 2019 and 2018. The increase in consolidated gross profit was due to an increase in gross profit from all of our reportable segments, partially as a result of an increase in revenues within each segment during 2019. Additionally, gross profit within our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, and our United States building services segment was favorably impacted by incremental gross profit generated by companies acquired.

Selling, general and administrative expenses

The following table presents selling, general and administrative expenses and SG&A margin (selling, general and administrative expenses as a percentage of revenues) for the years ended December 31, 2019 and 2018 (in thousands, except for percentages):

	2019	2018
Selling, general and administrative expenses	\$ 893,453	\$ 799,157
Selling, general and administrative expenses as a percentage of revenues	9.7%	9.8%

Our selling, general and administrative expenses for the year ended December 31, 2019 were \$893.5 million, a \$94.3 million increase compared to selling, general and administrative expenses of \$799.2 million for the year ended December 31, 2018. Selling, general and administrative expenses as a percentage of revenues were 9.7% and 9.8% for 2019 and 2018, respectively. The increase in selling, general and administrative expenses for the year ended December 31, 2019 included \$35.1 million of incremental expenses directly related to companies acquired in 2019 and 2018, including amortization expense attributable to identifiable intangible assets of \$4.5 million. In addition to the impact of acquisitions, selling, general and administrative expenses increased due to: (a) an increase in salaries and related employee benefit costs, partially as a result of an increase in headcount to support our revenue growth, (b) an increase in incentive compensation expense, due to higher annual operating results than in the prior year, (c) an increase in information technology costs related to various initiatives currently in process, and (d) an increase in certain non-income based taxes. The decrease in SG&A margin for the year ended December 31, 2019 was primarily due to an increase in revenues without commensurate increases in our overhead cost structure.

Restructuring expenses

Restructuring expenses, primarily relating to employee severance obligations, were \$1.5 million and \$2.3 million for the years ended December 31, 2019 and 2018, respectively. As of December 31, 2019 and 2018, the balance of restructuring related obligations yet to be paid was \$1.6 million. The obligations outstanding as of December 31, 2019 will be paid pursuant to our contractual obligations throughout 2020 and 2021. No material expenses in connection with restructuring from continuing operations are expected to be incurred during 2020.

Impairment loss on goodwill and identifiable intangible assets

No impairment of our identifiable intangible assets was recognized for the year ended December 31, 2019. During 2018, we recorded a \$0.9 million non-cash impairment charge associated with a finite-lived subsidiary trade name within our United States industrial services segment. No impairment of our goodwill was recognized for the years ended December 31, 2019 and 2018.

Operating income (loss)

The following table presents by segment our operating income (loss) and each segment's operating income (loss) as a percentage of such segment's revenues from unrelated entities for the years ended December 31, 2019 and 2018 (in thousands, except for percentages):

	2019	% of Segment Revenues	2018	% of Segment Revenues
Operating income (loss):				
United States electrical construction and facilities services	\$ 161,684	7.3%	\$ 139,430	7.1%
United States mechanical construction and facilities services	225,040	6.7%	219,853	7.4%
United States building services	114,754	5.4%	93,827	5.0%
United States industrial services	44,340	4.1%	27,671	3.0%
Total United States operations	<u>545,818</u>	6.2%	<u>480,781</u>	6.2%
United Kingdom building services	18,323	4.3%	15,930	3.8%
Corporate administration	(101,726)	—	(90,415)	—
Restructuring expenses	(1,523)	—	(2,306)	—
Impairment loss on identifiable intangible assets	—	—	(907)	—
Total worldwide operations	<u>460,892</u>	5.0%	<u>403,083</u>	5.0%
Other corporate items:				
Net periodic pension (cost) income	1,553		2,743	
Interest expense	(13,821)		(13,544)	
Interest income	2,265		2,746	
Income from continuing operations before income taxes	<u>\$ 450,889</u>		<u>\$ 395,028</u>	

As described in more detail below, we had operating income of \$460.9 million for the year ended December 31, 2019 compared to operating income of \$403.1 million for the year ended December 31, 2018. Operating margin was 5.0% for both periods. Operating income and operating margin increased within all of our reportable segments except, in the case of operating margin, our United States mechanical construction and facilities services segment, which experienced a 0.7% decline in operating margin as a result of a change in revenue mix compared to the prior year.

Operating income of our United States electrical construction and facilities services segment for the year ended December 31, 2019 was \$161.7 million, or 7.3% of revenues, compared to operating income of \$139.4 million, or 7.1% of revenues, for the year ended December 31, 2018. The \$22.3 million increase in operating income for the year ended December 31, 2019 was primarily attributable to an increase in gross profit within the commercial market sector, inclusive of certain telecommunication construction projects, partially offset by a decrease in gross profit within the transportation market sector as a result of the completion or substantial completion of certain multi-year construction projects. Additionally, companies acquired in 2019 and 2018 contributed incremental operating income of \$6.1 million, inclusive of \$1.7 million of amortization expense associated with identifiable intangible assets. The increase in operating margin for the year ended December 31, 2019 was attributable to an increase in gross profit margin, partially as a result of improved project execution.

Our United States mechanical construction and facilities services segment's operating income for the year ended December 31, 2019 was \$225.0 million, a \$5.2 million increase compared to operating income of \$219.9 million for the year ended December 31, 2018. Companies acquired in 2019 contributed incremental operating income of \$0.1 million, inclusive of \$2.8 million of amortization expense associated with identifiable intangible assets. The increase in operating income for the year ended December 31, 2019 was primarily attributable to an increase in gross profit from activities within the commercial and institutional market sectors, partially offset by a decrease in gross profit from construction projects within the manufacturing and hospitality market sectors. Operating margins within this segment for the years ended December 31, 2019 and 2018 were 6.7% and 7.4%, respectively. The decrease in operating margin year over year was attributable to a decrease in gross profit margin, primarily within the manufacturing market sector as a result of a change in the mix of work in the current year, including several large food processing projects, that have not yet achieved key milestones and are therefore being recognized at lower gross profit margins. This segment's operating margin for the prior year was favorably impacted by the successful close-out of certain large manufacturing and hospitality construction projects.

Operating income of our United States building services segment was \$114.8 million, or 5.4% of revenues, and \$93.8 million, or 5.0% of revenues, in 2019 and 2018, respectively. The increase in operating income for the year ended December 31, 2019 was primarily attributable to our mobile mechanical services operations, as a result of increased gross profit from project, controls, and service repair and maintenance activities. In addition, operating income benefited from increased gross profit within our commercial site-based services operations, as a result of scope expansion on certain existing contracts, and our energy services operations, due to an increase in large project activity. Companies acquired in 2019 and 2018 contributed incremental operating income of \$10.4 million, inclusive of \$4.8 million of amortization expense associated with identifiable intangible assets. These increases were partially offset by a reduction in operating income from our government site-based services operations as a result of a decrease in gross profit due to the loss of certain contracts within their portfolio, which were not renewed pursuant to rebid. The increase in operating margin of this segment for the year ended December 31, 2019 was attributable to an increase in gross profit margin, primarily from building automation and controls and repair project activities within our mobile mechanical services operations.

Our United States industrial services segment operating income for the year ended December 31, 2019 was \$44.3 million, a \$16.7 million increase compared to operating income of \$27.7 million for the year ended December 31, 2018. Operating margin of this segment was 4.1% and 3.0% for 2019 and 2018, respectively. The increase in operating income for the year ended December 31, 2019 was primarily due to an increase in demand for our service offerings during the year as we experienced a more normalized demand pattern within our field services operations as compared to the prior year. The increase in operating margin for the year ended December 31, 2019 was primarily attributable to a decrease in the ratio of selling, general and administrative expenses to revenues, partially as a result of an increase in revenues without commensurate increases in this segment's overhead cost structure.

Our United Kingdom building services segment operating income for the year ended December 31, 2019 was \$18.3 million, or 4.3% of revenues, compared to operating income of \$15.9 million, or 3.8% of revenues, for the year ended December 31, 2018. Operating income increased primarily as a result of increased gross profit within the commercial market sector due to: (a) an increase in project activity with existing customers and (b) new contract awards. This segment's operating income was negatively impacted by \$0.9 million for the year ended December 31, 2019 related to the effect of unfavorable exchange rates for the British pound versus the United States dollar. The increase in operating margin for the year ended December 31, 2019 was attributable to an increase in gross profit margin, partially as a result of a favorable project mix during the year.

Our corporate administration operating loss was \$101.7 million for 2019 compared to \$90.4 million in 2018. The increase in corporate administration expenses for the year ended December 31, 2019 was primarily due to: (a) an increase in employment costs, such as incentive compensation and salaries, (b) an increase in professional fees as a result of various information technology initiatives currently in process, and (c) an increase in certain non-income based taxes.

Non-operating items

Interest expense was \$13.8 million and \$13.5 million for 2019 and 2018, respectively. Interest income was \$2.3 million and \$2.7 million for 2019 and 2018, respectively. The increase in interest expense for 2019 was due to higher average interest rates, partially offset by the impact of reduced average outstanding borrowings. The decrease in interest income was a result of lower average daily cash balances during the first half of 2019.

For joint ventures that have been accounted for using the consolidation method of accounting, noncontrolling interests represent the allocation of earnings to our joint venture partners who either have a minority-ownership interest in the joint venture or are not at risk for the majority of losses of the joint venture.

Our 2019 income tax provision from continuing operations was \$125.7 million compared to \$109.1 million for 2018. The actual income tax rate on income from continuing operations before income taxes, less amounts attributable to noncontrolling interests, was 27.9% and 27.6% for 2019 and 2018, respectively. The increase in the 2019 income tax provision was primarily driven by increased income from continuing operations before income taxes. The increase in the income tax rate was primarily due to: (a) an increase in our state deferred tax rate, partially as a result of a change in the mix of income, and (b) the continued application of the Tax Cuts and Jobs Act (the "Tax Act"), including the application of guidance regarding certain permanent differences and other nondeductible expenses.

Discontinued operations

During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented in the Consolidated Financial Statements as discontinued operations.

Remaining Unsatisfied Performance Obligations

The following table presents the transaction price allocated to remaining unsatisfied performance obligations (“remaining performance obligations”) in accordance with Accounting Standards Codification Topic 606, “Revenue from Contracts with Customers” (“ASC 606”) for each of our reportable segments and their respective percentage of total remaining performance obligations (in thousands, except for percentages):

	December 31, 2019	% of Total	December 31, 2018	% of Total
Remaining performance obligations:				
United States electrical construction and facilities services	\$ 1,036,216	26%	\$ 1,085,571	28%
United States mechanical construction and facilities services	2,229,090	55%	2,226,183	56%
United States building services	542,269	13%	435,074	11%
United States industrial services	104,613	3%	86,930	2%
Total United States operations	3,912,188	97%	3,833,758	97%
United Kingdom building services	124,176	3%	130,524	3%
Total worldwide operations	\$ 4,036,364	100%	\$ 3,964,282	100%

Remaining performance obligations increase with awards of new contracts and decrease as we perform work and recognize revenue on existing contracts. We include a project within our remaining performance obligations at such time as the project is awarded and agreement on contract terms has been reached. Our remaining performance obligations include amounts related to contracts for which a fixed price contract value is not assigned when a reasonable estimate of total transaction price can be made.

Remaining performance obligations include unrecognized revenues to be realized from uncompleted construction contracts. Although many of our construction contracts are subject to cancellation at the election of our customers, in accordance with industry practice, we do not limit the amount of unrecognized revenue included within remaining performance obligations for these contracts due to the inherent substantial economic penalty that would be incurred by our customers upon cancellation. We believe our reported remaining performance obligations for our construction contracts are firm and contract cancellations have not had a material adverse effect on us.

Remaining performance obligations also include unrecognized revenues expected to be realized over the remaining term of service contracts. However, to the extent a service contract includes a cancellation clause which allows for the termination of such contract by either party without a substantive penalty, the remaining contract term, and therefore, the amount of unrecognized revenues included within remaining performance obligations, is limited to the notice period required for the termination.

Our remaining performance obligations are comprised of: (a) original contract amounts, (b) change orders for which we have received written confirmations from our customers, (c) pending change orders for which we expect to receive confirmations in the ordinary course of business, (d) claim amounts that we have made against customers for which we have determined we have a legal basis under existing contractual arrangements and as to which the variable consideration constraint does not apply, and (e) other forms of variable consideration to the extent that such variable consideration has been included within the transaction price of our contracts. Such claim and other variable consideration amounts were immaterial for all periods presented.

Our remaining performance obligations at December 31, 2019 were \$4.04 billion compared to \$3.96 billion at December 31, 2018. The increase in remaining performance obligations at December 31, 2019 was attributable to a increase in remaining performance obligations within all of our domestic segments, except for our United States electrical construction and facilities services segment.

Computer System Attack

On February 15, 2020, we became aware of an infiltration and encryption of portions of our information technology network. This attack disrupted our operations that utilize the impacted portions of the network. We continue to assess the magnitude of the consequences and we are actively seeking to mitigate the effects. As of the date of this filing, we continue our efforts to restore the portions of such systems that remain impacted. We are unable to predict when the entire network will be functional. We are additionally unable to estimate precisely the total costs which will result from the attack and the remediation efforts. We maintain insurance coverage for these types of incidents, however, such policies may not completely provide coverage for, or offset the costs of, this infiltration.

2018 versus 2017

Overview

The following table presents selected financial data for the fiscal years ended December 31, 2018 and 2017 (in thousands, except percentages and per share data):

	2018	2017
Revenues	\$ 8,130,631	\$ 7,686,999
Revenues increase from prior year	5.8%	1.8%
Restructuring expenses	\$ 2,306	\$ 1,577
Impairment loss on goodwill and identifiable intangible assets	\$ 907	\$ 57,819
Operating income	\$ 403,083	\$ 328,902
Operating income as a percentage of revenues	5.0%	4.3%
Income from continuing operations	\$ 285,922	\$ 228,050
Net income attributable to EMCOR Group, Inc.	\$ 283,531	\$ 227,196
Diluted earnings per common share from continuing operations	\$ 4.89	\$ 3.83

Revenue for the year ended December 31, 2018 increased by approximately 5.8% compared to revenue for the year ended December 31, 2017 as a result of revenue growth within all of our reportable segments.

Operating income increased to \$403.1 million, or 5.0% of revenues, in 2018 from \$328.9 million, or 4.3% of revenues in 2017. Operating income increased within all of our reportable segments, except for our United States electrical construction and facilities services segment and our United States industrial services segment. Operating margin increased within our United States mechanical construction and facilities services segment and our United States building services segment, while operating margin declined within our United States electrical construction and facilities services segment and our United States industrial services segment. Operating margin remained flat within our United Kingdom building services segment. The decrease in operating income and operating margin within our United States electrical construction and facilities services segment was attributable to \$10.0 million of losses incurred in 2018 on a transportation construction project in the Western region of the United States, which negatively impacted operating margin of this segment by 0.6% and our consolidated operating margin by 0.1%. Operating income and operating margin within our United States industrial services segment declined as the results for the year ended December 31, 2017 benefited from \$18.1 million of gross profit related to the recovery of certain contract costs previously disputed on a project completed in 2016, which favorably impacted operating margin of this segment by 2.1%, and consolidated operating margin by 0.2%, in 2017.

Operating income for 2017 included \$57.8 million of non-cash impairment charges, which resulted in a 0.8% negative impact on the Company's operating margin.

The increase in net income attributable to EMCOR Group, Inc. and diluted earnings per common share from continuing operations in 2018 was due to an increase in operating income and the reduction in the U.S federal corporate tax rate due to the enactment of the Tax Act. Our diluted earnings per common share from continuing operations for 2018 additionally benefited from a decrease in the weighted average number of shares outstanding as a result of the continued repurchase of our common stock.

Impact of Acquisitions

We acquired four companies in 2018. Two companies provide mobile mechanical services, one within the Eastern region and the other within the Western region of the United States. The third company is a full service provider of mechanical services within the Southern region of the United States. The results of these three companies have been included in our United States building services segment. The fourth company provides electrical construction and maintenance services for industrial and commercial buildings in North Texas, and its results have been included in our United States electrical construction and facilities services segment.

We acquired three companies during 2017. One company provides fire protection and alarm services primarily in the Southern region of the United States. The second company provides millwright services for manufacturing companies throughout the United States. Both of their results have been included in our United States mechanical construction and facilities services segment. The third company provides mobile mechanical services within the Western region of the United States, and its results have been included in our United States building services segment.

Companies acquired in 2018 and 2017 generated incremental revenues of \$90.1 million and incremental operating income of \$5.8 million, inclusive of \$2.9 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2018.

Discussion and Analysis of Results of Operations

Revenues

The following table presents our revenues for each of our operating segments and the approximate percentages that each segment's revenues were of total revenues for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	<u>2018</u>	<u>% of Total</u>	<u>2017</u>	<u>% of Total</u>
Revenues from unrelated entities:				
United States electrical construction and facilities services	\$ 1,954,323	24%	\$ 1,829,567	24%
United States mechanical construction and facilities services	2,962,843	37%	2,880,148	37%
United States building services	1,875,485	23%	1,753,703	23%
United States industrial services	923,109	11%	882,836	12%
Total United States operations	<u>7,715,760</u>	<u>95%</u>	<u>7,346,254</u>	<u>96%</u>
United Kingdom building services	414,871	5%	340,745	4%
Total worldwide operations	<u>\$ 8,130,631</u>	<u>100%</u>	<u>\$ 7,686,999</u>	<u>100%</u>

As described in more detail below, revenues for 2018 were \$8.1 billion compared to \$7.7 billion for 2017. The increase in revenues was attributable to increased revenues from all of our reportable segments. Companies acquired in 2018 and 2017, which are reported in our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, and our United States building services segment, generated incremental revenues of \$90.1 million in 2018.

Revenues of our United States electrical construction and facilities services segment were \$1,954.3 million for the year ended December 31, 2018 compared to revenues of \$1,829.6 million for the year ended December 31, 2017. The increase in revenues was attributable to an increase in activity within all of the market sectors in which we operate, except for the transportation market sector, as we approached substantial completion on several large multi-year transportation construction projects in 2018. In addition, the results for the year ended December 31, 2018 included \$20.2 million of incremental revenues generated by a company acquired in 2018.

Our United States mechanical construction and facilities services segment revenues for the year ended December 31, 2018 were \$2,962.8 million, an \$82.7 million increase compared to revenues of \$2,880.1 million for the year ended December 31, 2017. The increase in revenues was primarily attributable to an increase in revenues from commercial and institutional construction projects, partially offset by a decrease in revenues from large projects within the manufacturing market sector. In addition, the results for the year ended December 31, 2018 included \$35.3 million of incremental revenues generated by a company acquired in 2017.

Revenues of our United States building services segment were \$1,875.5 million and \$1,753.7 million in 2018 and 2017, respectively. The increase in revenues was due to: (a) greater project and repair service activities within our mobile mechanical services operations, (b) large project activity within our energy services operations, (c) increased revenues from government site-based operations, partially as a result of additional indefinite-delivery, indefinite-quantity project activity, and (d) an increase in snow removal activity within our commercial site-based services operations. In addition, the results for the year ended December 31, 2018 included \$34.6 million of incremental revenues generated by companies acquired in 2018 and 2017. These increases were partially offset by a decrease in revenues due to the loss of certain contracts not renewed pursuant to rebid within our commercial site-based services operations.

Revenues of our United States industrial services segment for the year ended December 31, 2018 increased by \$40.3 million compared to the year ended December 31, 2017. The increase in revenues was due to an increase in revenues from both our field and shop services operations. The increase in revenues from our field services operations was due to an increase in turnaround project activity during the second half of 2018 as this division began to recover from the negative impact of Hurricane Harvey, which resulted in the cancellation of previously scheduled turnarounds during 2017 and early 2018. The increase in revenues from our shop services operations was due to increases in demand for new build heat exchangers, as well as our cleaning, repair and maintenance services.

Our United Kingdom building services segment revenues were \$414.9 million in 2018 compared to \$340.7 million in 2017. The increase in revenues was the result of increased project activity with existing customers and new contract awards within the commercial, institutional and water and wastewater market sectors. This segment's revenues were positively impacted by \$15.2 million related to the effect of favorable exchange rates for the British pound versus the United States dollar.

Cost of sales and Gross profit

The following table presents cost of sales, gross profit, and gross profit margin for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	2017
Cost of sales	\$ 6,925,178	\$ 6,539,987
Gross profit	\$ 1,205,453	\$ 1,147,012
Gross profit margin	14.8%	14.9%

Our gross profit for the year ended December 31, 2018 was \$1,205.5 million, a \$58.4 million increase compared to gross profit of \$1,147.0 million for the year ended December 31, 2017. Our gross profit margin was 14.8% and 14.9% for 2018 and 2017, respectively. The increase in gross profit was attributable to improved operating performance within all of our reportable segments, except for the United States electrical construction and facilities services segment. Gross profit and gross profit margin for the year ended December 31, 2017 were favorably impacted by the recovery of certain contract costs previously disputed on a project that was completed in 2016 within our United States industrial services segment, resulting in \$18.1 million of gross profit and a 0.2% favorable impact on the Company's 2017 gross profit margin.

Selling, general and administrative expenses

The following table presents selling, general and administrative expenses and SG&A margin, for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	2017
Selling, general and administrative expenses	\$ 799,157	\$ 758,714
Selling, general and administrative expenses as a percentage of revenues	9.8%	9.9%

Our selling, general and administrative expenses for the year ended December 31, 2018 were \$799.2 million, a \$40.4 million increase compared to selling, general and administrative expenses of \$758.7 million for the year ended December 31, 2017. Selling, general and administrative expenses as a percentage of revenues were 9.8% and 9.9% for 2018 and 2017, respectively. The increase in selling, general and administrative expenses for the year ended December 31, 2018 included \$12.5 million of incremental expenses directly related to companies acquired in 2018 and 2017, including amortization expense attributable to identifiable intangible assets of \$1.3 million. In addition to the impact of acquisitions, selling, general and administrative expenses increased due to: (a) an increase in salaries, partially as a result of an increase in headcount due to higher revenues than in the prior year, (b) an increase in incentive compensation expense, due to higher annual operating results than in the prior year, and (c) increases in other selling, general and administrative expenses, such as information technology, consulting and other professional fees. The decrease in SG&A margin for the year ended December 31, 2018 was partially due to a reduction in the provision for doubtful accounts, primarily within our United States electrical construction and facilities services segment and our United States building services segment, as well as an increase in revenues without commensurate increases in our overhead cost structure.

Restructuring expenses

Restructuring expenses, primarily relating to severance obligations, were \$2.3 million and \$1.6 million for the years ended December 31, 2018 and 2017, respectively. As of December 31, 2018 and 2017, the balance of restructuring related obligations yet to be paid was \$1.6 million and \$0.5 million, respectively. The majority of such obligations outstanding as of December 31, 2018 and 2017 were paid during 2019 and 2018, respectively, and the remainder will be paid pursuant to our contractual obligations throughout 2020 and 2021.

Impairment loss on goodwill and identifiable intangible assets

During the second quarter of 2018 and prior to our 2018 annual impairment test on October 1, we recorded a \$0.9 million non-cash impairment charge associated with a finite-lived subsidiary trade name within our United States industrial services segment. No additional impairment of our identifiable intangible assets was recognized for the year ended December 31, 2018. Additionally, no impairment of our goodwill was recognized for the year ended December 31, 2018.

In conjunction with our 2017 annual impairment test, we recognized \$57.8 million of non-cash impairment charges. Of this amount, \$57.5 million related to goodwill within our United States industrial services segment and \$0.3 million related to a subsidiary trade name within our United States building services segment. The goodwill impairment primarily resulted from both lower forecasted revenues and operating margins from our United States industrial services segment, which had been adversely affected by poor market conditions, predominately within its shop services operations due to: (a) a prolonged curtailment in capital spending from customers, (b) increased foreign competition and (c) economic uncertainty within certain South American markets which caused us to limit our pursuit of opportunities within such countries.

Operating income (loss)

The following table presents by segment our operating income (loss) and each segment's operating income (loss) as a percentage of such segment's revenues from unrelated entities for the years ended December 31, 2018 and 2017 (in thousands, except for percentages):

	2018	% of Segment Revenues	2017	% of Segment Revenues
Operating income (loss):				
United States electrical construction and facilities services	\$ 139,430	7.1%	\$ 150,001	8.2%
United States mechanical construction and facilities services	219,853	7.4%	192,167	6.7%
United States building services	93,827	5.0%	81,720	4.7%
United States industrial services	27,671	3.0%	39,313	4.5%
Total United States operations	<u>480,781</u>	6.2%	<u>463,201</u>	6.3%
United Kingdom building services	15,930	3.8%	12,905	3.8%
Corporate administration	(90,415)	—	(87,808)	—
Restructuring expenses	(2,306)	—	(1,577)	—
Impairment loss on goodwill and identifiable intangible assets	(907)	—	(57,819)	—
Total worldwide operations	<u>403,083</u>	5.0%	<u>328,902</u>	4.3%
Other corporate items:				
Net periodic pension (cost) income	2,743		1,652	
Interest expense	(13,544)		(12,770)	
Interest income	2,746		965	
Income from continuing operations before income taxes	<u>\$ 395,028</u>		<u>\$ 318,749</u>	

As described in more detail below, we had operating income of \$403.1 million for 2018 compared to operating income of \$328.9 million for 2017. Operating margin was 5.0% and 4.3% for 2018 and 2017, respectively. Operating income increased within all of our reportable segments, except for our United States electrical construction and facilities services segment and our United States industrial services segment. Operating margin increased within our United States mechanical construction and facilities services segment and our United States building services segment, while operating margin declined within our United States electrical construction and facilities services segment and our United States industrial services segment. Operating margin remained flat within our United Kingdom building services segment.

The Company's operating income and operating margin for the year ended December 31, 2017 included \$57.8 million of non-cash impairment charges, which resulted in a 0.8% negative impact on the Company's operating margin. Operating income and operating margin for the year ended December 31, 2017 benefited from the recovery of certain contract costs previously disputed on a project completed in 2016 within our United States industrial services segment, which resulted in a 0.2% favorable impact on the Company's operating margin.

Operating income of our United States electrical construction and facilities services segment for the year ended December 31, 2018 was \$139.4 million, or 7.1% of revenues, compared to operating income of \$150.0 million, or 8.2% of revenues, for the year ended December 31, 2017. The decrease in operating income was attributable to a decrease in gross profit from institutional and healthcare construction projects, partially offset by an increase in gross profit from manufacturing, hospitality and commercial construction projects. In addition, otherwise strong performance by this segment within the transportation market sector in 2018 was negatively impacted by \$10.0 million of losses incurred on a construction project in the Western region of the United States, resulting in part from contract scope issues. The decrease in operating margin year over year was primarily due to the loss discussed above, which negatively impacted this segment's operating margin by 0.6% for the year ended December 31, 2018.

Our United States mechanical construction and facilities services segment operating income for the year ended December 31, 2018 was \$219.9 million, a \$27.7 million increase compared to operating income of \$192.2 million for the year ended December 31, 2017. The increase in operating income for the year ended December 31, 2018 was attributable to an increase in gross profit from commercial, manufacturing, and hospitality construction projects, partially offset by a decrease in gross profit from institutional construction projects. A company acquired in 2017 contributed incremental operating income of \$3.6 million, inclusive of \$0.8 million of amortization expense associated with identifiable intangible assets. Operating margin was 7.4% and 6.7% in 2018 and 2017, respectively. The increase in operating margin for the year ended December 31, 2018 was attributable to an increase

in gross profit margin, partially as a result of the successful close-out of certain large hospitality and food processing construction projects.

Operating income of our United States building services segment was \$93.8 million, or 5.0% of revenues, and \$81.7 million, or 4.7% of revenues, in 2018 and 2017, respectively. The increase in operating income for the year ended December 31, 2018 was due to increases in operating income from: (a) our energy services operations, due to large project activity, (b) our government site-based services operations, partially as a result of an increase in indefinite-delivery, indefinite-quantity project activity, (c) our mobile mechanical services operations, as a result of increases in gross profit from project, service and control activities, and (d) our commercial site-based operations, partially as a result of (i) scope expansion on existing contracts and (ii) an increase in snow removal activities from contracts that are based on a per snow event basis. Additionally, companies acquired in 2018 and 2017 within our mobile mechanical services division, contributed incremental operating income of \$2.4 million, inclusive of \$1.7 million of amortization expense associated with identifiable intangible assets, for the year ended December 31, 2018. The increase in operating margin for the year ended December 31, 2018 was attributable to an increase in gross profit margin and a decrease in the ratio of selling, general and administrative expenses to revenues.

Operating income of our United States industrial services segment of \$27.7 million for the year ended December 31, 2018 decreased by \$11.6 million compared to operating income of \$39.3 million for the year ended December 31, 2017 as the results for 2017 benefited from the recognition of \$18.1 million of gross profit associated with the recovery of certain contract costs which were previously disputed on a project completed in 2016. Such decrease was partially offset by increased demand and improved operating performance within both our shop and field services operations, partially as a result of greater turnaround project activity during the second half of 2018 as this division began to recover from the negative impact of Hurricane Harvey, which resulted in the cancellation of previously scheduled turnarounds during 2017 and early 2018. Operating margin for the year ended December 31, 2018 was 3.0% compared to operating margin of 4.5% for the year ended December 31, 2017. The decrease in operating margin was primarily attributable to the resolution of the aforementioned project dispute, which favorably impacted this segment's operating margin by 2.1% in 2017. Excluding the impact of this recovery, operating margin for the year ended December 31, 2018, improved year over year, primarily as a result of a decrease in the ratio of selling, general and administrative expenses to revenues.

Our United Kingdom building services segment operating income for the year ended December 31, 2018 was \$15.9 million compared to operating income of \$12.9 million for the year ended December 31, 2017. Operating income increased primarily due to an increase in gross profit from project activity with existing customers. In addition, the results for the year ended December 31, 2018 benefited from an increase in gross profit from new contract awards within the commercial, institutional and water and wastewater market sectors. This segment's results included an increase in operating income of \$0.6 million relating to the effect of favorable exchange rates for the British pound versus the United States dollar.

Our corporate administration operating loss was \$90.4 million for 2018 compared to \$87.8 million in 2017. The increase in corporate administration expenses for the year ended December 31, 2018 was due to an increase in consulting and other professional fees, primarily related to certain information technology and cybersecurity initiatives currently in process.

Non-operating items

Interest expense was \$13.5 million and \$12.8 million for 2018 and 2017, respectively. Interest income was \$2.7 million and \$1.0 million for 2018 and 2017, respectively. The increase in interest expense and interest income resulted from higher interest rates. The increase in interest expense was partially offset by the impact of reduced average outstanding borrowings.

Our 2018 income tax provision from continuing operations was \$109.1 million compared to \$90.7 million for 2017. The actual income tax rates on income from continuing operations before income taxes, less amounts attributable to noncontrolling interests, for the years ended December 31, 2018 and 2017, were 27.6% and 28.5%, respectively. The increase in the 2018 income tax provision was primarily due to increased income before income taxes. The decrease in the 2018 actual income tax rate was due to the net impact of the Tax Act, including the reduction of the U.S. federal corporate tax rate from 35% in 2017 to 21% in 2018, offset by the benefit associated with the re-measurement of our net deferred tax liability balance in 2017.

Liquidity and Capital Resources

The following section discusses our principal liquidity and capital resources, as well as our primary liquidity requirements and sources and uses of cash. Our cash and cash equivalents are maintained in highly liquid investments with original maturity dates of three months or less.

Our short-term liquidity requirements primarily arise from: (a) business acquisitions and joint venture investments, (b) working capital requirements, (c) cash dividend payments, (d) interest and principal payments related to our outstanding indebtedness, and (e) payment of income taxes. We can expect to meet those requirements through our cash and cash equivalent balances, cash generated from our operations, and the borrowing capacity available under our revolving credit facility. However, negative

macroeconomic trends may have an adverse effect on liquidity. During economic downturns, there have typically been fewer small discretionary projects from the private sector and our competitors have aggressively bid larger long-term infrastructure and public sector contracts. Short-term liquidity is also impacted by: (a) the type and length of construction contracts in place as performance of long duration contracts typically requires greater amounts of working capital, (b) the level of turnaround activities within our United States industrial services segment as such projects are billed in arrears pursuant to contractual terms that are standard within the industry, and (c) the billing terms of our maintenance contracts, including those within our United States building services segment. While we strive to negotiate favorable billing terms which allow us to invoice in advance of costs incurred on certain of our contracts, there can be no assurance that such terms will be agreed to by our customers.

Long-term liquidity requirements can be expected to be met initially through cash generated from operating activities and the borrowing capacity available under our revolving credit facility. Based upon our current credit ratings and financial position, we can also reasonably expect to be able to secure long-term debt financing when required to achieve our strategic objectives. Over the long term, our primary revenue risk factor continues to be the level of demand for non-residential construction and building and industrial services, which are influenced by macroeconomic trends including interest rates and governmental economic policy. In addition, our ability to perform work is critical to meeting our long-term liquidity requirements.

We believe that our current cash and cash equivalents and the borrowing capacity available under our revolving credit facility or other forms of financing available to us through borrowings, combined with cash expected to be generated from our operations, will be sufficient to provide short-term and foreseeable long-term liquidity and meet our expected capital expenditure requirements.

Cash Flows

The following table presents our net cash provided by (used in) operating activities, investing activities, and financing activities for the years ended December 31, 2019, 2018, and 2017 (in thousands):

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Net cash provided by operating activities	\$ 355,700	\$ 271,011	\$ 366,049
Net cash used in investing activities	\$ (345,339)	\$ (117,722)	\$ (138,093)
Net cash used in financing activities	\$ (19,247)	\$ (253,042)	\$ (228,470)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	\$ 2,592	\$ (3,421)	\$ 3,242

Our consolidated cash balance, including cash equivalents and restricted cash, decreased by approximately \$6.3 million from \$366.2 million at December 31, 2018 to \$359.9 million at December 31, 2019. Net cash provided by operating activities for 2019 was \$355.7 million compared to \$271.0 million of net cash provided by operating activities for 2018. The increase in cash provided by operating activities was primarily due to: (a) a \$41.6 million increase in net income and (b) the timing of cash receipts from our customers, including payments of advanced billings on our long-term construction contracts. Net cash used in investing activities was \$345.3 million for 2019 compared to net cash used in investing activities of \$117.7 million for 2018. The increase in net cash used in investing activities was primarily due to an increase in payments for the acquisition of businesses. Net cash used in financing activities for 2019 decreased by approximately \$233.8 million compared to 2018 primarily as a result of a \$216.2 million decrease in funds used for the repurchase of our common stock and \$25.0 million in net borrowings made under our revolving credit facility during the 2019 period.

Our consolidated cash balance, including cash equivalents and restricted cash, decreased by approximately \$103.2 million from \$469.4 million at December 31, 2017 to \$366.2 million at December 31, 2018. Net cash provided by operating activities for 2018 was \$271.0 million compared to \$366.0 million of net cash provided by operating activities for 2017. The reduction in cash flows from operating activities was primarily due to organic revenue growth, which resulted in increased working capital levels. Net cash used in investing activities was \$117.7 million for 2018 compared to net cash used in investing activities of \$138.1 million for 2017. The decrease in net cash used in investing activities was primarily due to a reduction in payments for acquisitions of businesses. Net cash used in financing activities for 2018 increased by approximately \$24.6 million compared to 2017 primarily due to an increase in funds used for the repurchase of common stock, partially offset by reduced debt repayments compared to the prior year.

Debt

We have a credit agreement dated as of August 3, 2016, which provides for a \$900.0 million revolving credit facility (the “2016 Revolving Credit Facility”) and a \$400.0 million term loan (the “2016 Term Loan”) (collectively referred to as the “2016 Credit Agreement”) expiring August 3, 2021. We may increase the 2016 Revolving Credit Facility to \$1.3 billion if additional lenders are identified and/or existing lenders are willing to increase their current commitments. We may allocate up to \$300.0 million of available capacity under the 2016 Revolving Credit Facility to letters of credit for our account or for the account of any of our subsidiaries. Obligations under the 2016 Credit Agreement are guaranteed by most of our direct and indirect subsidiaries and are

secured by substantially all of our assets. The 2016 Credit Agreement contains various covenants providing for, among other things, maintenance of certain financial ratios and certain limitations on payment of dividends, common stock repurchases, investments, acquisitions, indebtedness, and capital expenditures. We were in compliance with all such covenants as of December 31, 2019 and 2018. A commitment fee is payable on the average daily unused amount of the 2016 Revolving Credit Facility, which ranges from 0.15% to 0.30%, based on certain financial tests. The fee was 0.15% of the unused amount as of December 31, 2019. Borrowings under the 2016 Credit Agreement bear interest at (1) a base rate plus a margin of 0.00% to 0.75%, based on certain financial tests, or (2) United States dollar LIBOR (1.80% at December 31, 2019) plus 1.00% to 1.75%, based on certain financial tests. The base rate is determined by the greater of (a) the prime commercial lending rate announced by Bank of Montreal from time to time (4.75% at December 31, 2019), (b) the federal funds effective rate, plus ½ of 1.00%, (c) the daily one month LIBOR rate, plus 1.00%, or (d) 0.00%. The interest rate in effect at December 31, 2019 was 2.80%. Fees for letters of credit issued under the 2016 Revolving Credit Facility range from 1.00% to 1.75% of the respective face amounts of outstanding letters of credit and are computed based on certain financial tests. Debt issuance costs are amortized over the life of the agreement and are included as part of interest expense. The 2016 Term Loan previously required us to make principal payments of \$5.0 million on the last day of March, June, September and December of each year, which commenced with the calendar quarter ended December 31, 2016. On December 30, 2016, we made a payment of \$100.0 million, of which \$5.0 million represented our required quarterly payment and \$95.0 million represented a prepayment of outstanding principal. Such prepayment was applied against the remaining mandatory quarterly payments on a ratable basis. As a result, commencing with the calendar quarter ended March 31, 2017, our required quarterly payment has been reduced to \$3.8 million. All unpaid principal and interest is due on August 3, 2021. As of December 31, 2019 and 2018, the balance of the 2016 Term Loan was \$254.4 million and \$269.6 million, respectively. As of December 31, 2019 and 2018, we had approximately \$109.0 million of letters of credit outstanding. There were \$50.0 million and \$25.0 million in borrowings outstanding under the 2016 Revolving Credit Facility as of December 31, 2019 and December 31, 2018, respectively.

Share Repurchase Program and Dividends

On September 26, 2011, our Board of Directors (the “Board”) authorized us to repurchase up to \$100.0 million of our outstanding common stock. Subsequently, the Board has from time to time increased the amount of our common stock that we may repurchase. Since the inception of the repurchase program, the Board has authorized us to repurchase up to \$950.0 million of our outstanding common stock. No shares of our common stock were repurchased during the year ended December 31, 2019. Since the inception of the repurchase program through December 31, 2019 we have repurchased approximately 15.9 million shares of our common stock for approximately \$791.5 million. As of December 31, 2019, there remained authorization for us to repurchase approximately \$158.5 million of our shares. The repurchase program has no expiration date, does not obligate the Company to acquire any particular amount of common stock, and may be suspended, recommenced or discontinued at any time or from time to time without prior notice. We may repurchase our shares from time to time to the extent permitted by securities laws and other legal requirements, including provisions in our 2016 Credit Agreement, placing limitations on such repurchases. The repurchase program has been and will be funded from our operations.

We have paid quarterly dividends since October 25, 2011. We currently pay a regular quarterly dividend of \$0.08 per share. Our 2016 Credit Agreement places limitations on the payment of dividends on our common stock. However, we do not believe that the terms of such agreement currently materially limit our ability to pay a quarterly dividend of \$0.08 per share for the foreseeable future. The payment of dividends has been and will be funded from our operations.

Off Balance Sheet Arrangements and Other Commitments

The terms of our construction contracts frequently require that we obtain from surety companies (“Surety Companies”) and provide to our customers payment and performance bonds (“Surety Bonds”) as a condition to the award of such contracts. Surety Bonds are issued in return for premiums, which vary depending on the size and type of the bond, and secure our payment and performance obligations under such contracts. We have agreed to indemnify the Surety Companies for amounts, if any, paid by them in respect of Surety Bonds issued on our behalf. Public sector contracts require Surety Bonds more frequently than private sector contracts and, accordingly, our bonding requirements typically increase as the amount of our public sector work increases. In addition, at the request of labor unions representing certain of our employees, Surety Bonds are sometimes provided to secure obligations for wages and benefits payable to or for such employees. As of December 31, 2019, based on the percentage-of-completion of our projects covered by Surety Bonds, our aggregate estimated exposure, assuming defaults on all our then existing contractual obligations, was approximately \$1.2 billion, which represents approximately 30% of our total remaining performance obligations. We are not aware of any losses in connection with Surety Bonds, which have been posted on our behalf, and we do not expect to incur significant losses in the foreseeable future.

From time to time, we discuss with our current and other Surety Bond providers the amounts of Surety Bonds that may be available to us based on our financial strength and the absence of any default by us on any Surety Bond issued on our behalf and believe those amounts are currently adequate for our needs. However, if we experience changes in our bonding relationships or if there are adverse changes in the surety industry, we may (a) seek to satisfy certain customer requests for Surety Bonds by posting other forms of collateral in lieu of Surety Bonds, such as letters of credit, parent company guarantees or cash, in order to convince

customers to forego the requirement for Surety Bonds, (b) increase our activities in our business segments that rarely require Surety Bonds, such as our building and industrial services segments, and/or (c) refrain from bidding for certain projects that require Surety Bonds. There can be no assurance that we would be able to effectuate alternatives to providing Surety Bonds to our customers or to obtain, on favorable terms, sufficient additional work that does not require Surety Bonds. Accordingly, if we were to experience a reduction in the availability of Surety Bonds, we could experience a material adverse effect on our financial position, results of operations and/or cash flows.

In the ordinary course of business, we, at times, guarantee obligations of our subsidiaries under certain contracts. Generally, we are liable under such an arrangement only if our subsidiary fails to perform its obligations under the contract. Historically, we have not incurred any substantial liabilities as a consequence of these guarantees.

We do not have any other material financial guarantees or off-balance sheet arrangements other than those disclosed herein.

Contractual Obligations

The following is a summary of material contractual obligations and other commercial commitments (in millions):

<u>Contractual Obligations</u>	Payments Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	After 5 years
Revolving credit facility (including interest at 2.80%) ⁽¹⁾	\$ 52.3	\$ 1.4	\$ 50.9	\$ —	\$ —
Term Loan (including interest at 2.80%) ⁽¹⁾	265.5	22.3	243.2	—	—
Finance leases	10.2	4.4	4.8	0.9	0.1
Operating leases	297.1	62.5	92.7	61.2	80.7
Open purchase obligations ⁽²⁾	1,212.7	1,045.0	167.1	0.6	—
Other long-term obligations, including current portion ⁽³⁾	402.6	69.3	323.5	9.8	—
Total Contractual Obligations	\$ 2,240.4	\$ 1,204.9	\$ 882.2	\$ 72.5	\$ 80.8

<u>Other Commercial Commitments</u>	Amount of Commitment Expirations by Period				
	Total Amounts Committed	Less than 1 year	1-3 years	3-5 years	After 5 years
Letters of credit	\$ 109.0	\$ 109.0	\$ —	\$ —	\$ —

(1) On August 3, 2016, we entered into a \$900.0 million revolving credit facility (the “2016 Revolving Credit Facility”) and a \$400.0 million term loan (the “2016 Term Loan”) (collectively referred to as the “2016 Credit Agreement”). As of December 31, 2019, the amount outstanding under the 2016 Term Loan was \$254.4 million. As of December 31, 2019, there were borrowings outstanding of \$50.0 million under the 2016 Revolving Credit Facility.

(2) Represents open purchase orders for material and subcontracting costs related to construction and services contracts. These purchase orders are not reflected in EMCOR’s Consolidated Balance Sheets and should not impact future cash flows as amounts should be recovered through customer billings.

(3) Primarily represents insurance related liabilities, and liabilities for deferred income taxes, incentive compensation and deferred compensation, classified as other long-term liabilities in the Consolidated Balance Sheets. Cash payments for insurance and deferred compensation related liabilities may be payable beyond three years, however it is not practical to estimate these payments; therefore, these liabilities are reflected in the 1-3 years payment period. We provide funding to our post retirement plans based on at least the minimum funding required by applicable regulations. In determining the minimum required funding, we utilize current actuarial assumptions and exchange rates to forecast amounts that may be payable for up to five years in the future. In our judgment, minimum funding estimates beyond a five year time horizon cannot be reliably estimated and, therefore, have not been included in the table.

Legal Proceedings

We are a party to lawsuits and other proceedings in which other parties seek to recover amounts from us. While litigation is subject to many uncertainties and the outcome of litigation is not predictable with assurance, we do not believe that any such matters will have a material adverse effect on our financial position, results of operations or liquidity.

Certain Insurance Matters

As of December 31, 2019 and 2018, we utilized approximately \$108.9 million of letters of credit obtained under our 2016 Revolving Credit Facility as collateral for insurance obligations.

New Accounting Pronouncements

We review new accounting standards to determine the expected impact, if any, that the adoption of such standards will have on our financial position and/or results of operations. See Note 2 - Summary of Significant Accounting Policies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for further information regarding new accounting standards, including the anticipated dates of adoption and the effects on our consolidated financial position, results of operations or liquidity.

Application of Critical Accounting Policies

Our consolidated financial statements are based on the application of significant accounting policies, which require management to make significant estimates and assumptions. Our significant accounting policies are described in Note 2 - Summary of Significant Accounting Policies of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data of this Form 10-K. We believe that some of the more critical judgment areas in the application of accounting policies that affect our financial condition and results of operations are the impact of changes in the estimates and judgments pertaining to: (a) revenue recognition from contracts with customers; (b) collectibility or valuation of accounts receivable; (c) insurance liabilities; (d) income taxes; and (e) goodwill and identifiable intangible assets.

Revenue Recognition from Contracts with Customers

We believe our most critical accounting policy is revenue recognition in accordance with Accounting Standards Codification Topic 606, "Revenue from Contracts with Customers" ("ASC 606"). In accordance with ASC 606, the Company recognizes revenue by applying the following five step model: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to performance obligations in the contract, and (5) recognize revenue as performance obligations are satisfied.

The Company recognizes revenue at the time the related performance obligation is satisfied by transferring a promised good or service to its customers. A good or service is considered to be transferred when the customer obtains control. The Company can transfer control of a good or service and satisfy its performance obligations either over time or at a point in time. The Company transfers control of a good or service over time and, therefore, satisfies a performance obligation and recognizes revenue over time if one of the following three criteria are met: (a) the customer simultaneously receives and consumes the benefits provided by the Company's performance as we perform, (b) the Company's performance creates or enhances an asset that the customer controls as the asset is created or enhanced, or (c) the Company's performance does not create an asset with an alternative use to us, and we have an enforceable right to payment for performance completed to date.

For our performance obligations satisfied over time, we recognize revenue by measuring the progress toward complete satisfaction of that performance obligation. The selection of the method to measure progress towards completion can be either an input method or an output method and requires judgment based on the nature of the goods or services to be provided.

For our construction contracts, revenue is generally recognized over time as our performance creates or enhances an asset that the customer controls as it is created or enhanced. Our fixed price construction projects generally use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. For our unit price construction contracts, progress towards complete satisfaction is measured through an output method, such as the amount of units produced or delivered, when our performance does not produce significant amounts of work in process or finished goods prior to complete satisfaction of such performance obligations.

For our services contracts, revenue is also generally recognized over time as the customer simultaneously receives and consumes the benefits of our performance as we perform the service. For our fixed price service contracts with specified service periods, revenue is generally recognized on a straight-line basis over such service period when our inputs are expended evenly, and the customer receives and consumes the benefits of our performance throughout the contract term.

The timing of revenue recognition for the manufacturing of new build heat exchangers within our United States industrial services segment depends on the payment terms of the contract, as our performance does not create an asset with an alternative use to us. For those contracts for which we have a right to payment for performance completed to date at all times throughout our performance,

inclusive of a cancellation, we recognize revenue over time. For these performance obligations, we use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. However, for those contracts for which we do not have a right, at all times, to payment for performance completed to date, we recognize revenue at the point in time when control is transferred to the customer. For bill-and-hold arrangements, revenue is recognized when the customer obtains control of the heat exchanger, which may be prior to shipping, if certain recognition criteria are met.

For certain of our revenue streams, such as call-out repair and service work, outage services, refinery turnarounds and specialty welding services that are performed under time and materials contracts, our progress towards complete satisfaction of such performance obligations is measured using an output method as the customer receives and consumes the benefits of our performance completed to date.

Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a performance obligation will be revised in the near-term. For those performance obligations for which revenue is recognized using a cost-to-cost input method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. When the current estimate of total costs for a performance obligation indicate a loss, a provision for the entire estimated loss on the unsatisfied performance obligation is made in the period in which the loss becomes evident. During 2019, there were no changes in total estimated costs that had a significant impact on our operating results. During the year ended December 31, 2018, we recognized losses of \$10.0 million related to a change in total estimated costs on a transportation project within our United States electrical construction and facilities services segment, resulting in part from contract scope issues. There were no other changes in total estimated costs that resulted in a significant impact to our operating results for the year ended December 31, 2018.

The timing of revenue recognition may differ from the timing of invoicing to customers. Contract assets include unbilled amounts from our long-term construction projects when revenues recognized under the cost-to-cost measure of progress exceed the amounts invoiced to our customers, as the amounts cannot be billed under the terms of our contracts. Such amounts are recoverable from our customers based upon various measures of performance, including achievement of certain milestones, completion of specified units or completion of a contract. In addition, many of our time and materials arrangements, as well as our contracts to perform turnaround services within the United States industrial services segment, are billed in arrears pursuant to contract terms that are standard within the industry, resulting in contract assets and/or unbilled receivables being recorded, as revenue is recognized in advance of billings. Also included in contract assets are amounts we seek or will seek to collect from customers or others for errors or changes in contract specifications or design, contract change orders or modifications in dispute or unapproved as to scope and/or price, or other customer-related causes of unanticipated additional contract costs (claims and unapproved change orders). Our contract assets do not include capitalized costs to obtain and fulfill a contract. Contract assets are generally classified as current within the Consolidated Balance Sheets.

As of December 31, 2019 and 2018, contract assets included unbilled revenues for unapproved change orders of approximately \$33.1 million and \$25.2 million, respectively. As of December 31, 2019 and 2018, there were no claim amounts included within contract assets or accounts receivable. There were contractually billed amounts and retention related to contracts with unapproved change orders and claims of approximately \$89.0 million and \$96.1 million as of December 31, 2019 and 2018, respectively. For contracts in claim status, contractually billed amounts will generally not be paid by the customer to us until final resolution of the related claims.

Contract liabilities from our long-term construction contracts arise when amounts invoiced to our customers exceed revenues recognized under the cost-to-cost measure of progress. Contract liabilities additionally include advanced payments from our customers on certain contracts. Contract liabilities decrease as we recognize revenue from the satisfaction of the related performance obligation and are recorded as either current or long-term, depending upon when we expect to recognize such revenue. The long-term portion of contract liabilities is included in "Other long-term obligations" in the Consolidated Balance Sheets.

See Note 3 - Revenue from Contracts with Customers of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data for further disclosure regarding revenue recognition.

Accounts Receivable

Accounts receivable are recognized in the period we deliver goods or provide services to our customers or when our right to consideration is unconditional. We are required to estimate the collectibility of accounts receivable. A considerable amount of judgment is required in assessing the likelihood of realization of receivables. Relevant assessment factors include the creditworthiness of the customer, our prior collection history with the customer and related aging of the past due balances. The provision for doubtful accounts during 2019, 2018, and 2017 amounted to approximately \$2.6 million, \$2.1 million, and \$7.3 million, respectively. At December 31, 2019 and 2018, our accounts receivable of \$2,030.8 million and \$1,773.6 million,

respectively, were recorded net of allowances for doubtful accounts of \$14.5 million and \$15.4 million, respectively. The decrease in our allowance for doubtful accounts was primarily due to the write-off of previously reserved accounts receivable. Specific accounts receivable are evaluated when we believe a customer may not be able to meet its financial obligations due to the deterioration of its financial condition or its credit ratings. The allowance for doubtful accounts requirements are based on the best facts available and are re-evaluated and adjusted on a regular basis as additional information is received.

Insurance Liabilities

We have loss payment deductibles for certain workers' compensation, automobile liability, general liability and property claims, have self-insured retentions for certain other casualty claims and are self-insured for employee-related healthcare claims. In addition, we maintain a wholly-owned captive insurance subsidiary to manage certain of our insurance liabilities. Losses are recorded based upon estimates of our liability for claims incurred and for claims incurred but not reported. The liabilities are derived from known facts, historical trends and industry averages utilizing the assistance of an actuary to determine the best estimate for the majority of these obligations. We believe the liabilities recognized on the Consolidated Balance Sheets for these obligations are adequate. However, such obligations are difficult to assess and estimate due to numerous factors, including severity of injury, determination of liability in proportion to other parties, timely reporting of occurrences and effectiveness of safety and risk management programs. Therefore, if our actual experience differs from the assumptions and estimates used for recording the liabilities, adjustments may be required and will be recorded in the period that the experience becomes known. Our estimated net insurance liabilities for workers' compensation, automobile liability, general liability and property claims increased by \$7.8 million for the year ended December 31, 2019 compared to the year ended December 31, 2018, partially as a result of greater potential exposures, including the impact of acquired companies. If our estimated insurance liabilities for workers' compensation, automobile liability, general liability and property claims were to increase by 10%, it would have resulted in \$17.0 million of additional expense for the year ended December 31, 2019.

Income Taxes

We had net deferred income tax liabilities at December 31, 2019 and 2018 of \$71.7 million and \$70.8 million, respectively, primarily resulting from differences between the carrying value and income tax basis of certain identifiable intangible assets, goodwill, and depreciable fixed assets, which will impact our taxable income in future periods. Included within these net deferred income tax liabilities are \$176.2 million and \$104.1 million of deferred income tax assets as of December 31, 2019 and 2018, respectively. A valuation allowance is required when it is more likely than not that all or a portion of a deferred income tax asset will not be realized. As of December 31, 2019 and 2018, the total valuation allowance on deferred income tax assets, related to state net operating loss carryforwards, was approximately \$3.5 million and \$3.9 million, respectively. The ultimate realization of deferred income tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Based on our taxable income, which has generally exceeded the amount of our net deferred tax asset balance and projections of future taxable income, we have determined that it is more likely than not that the net deferred income tax assets will be realized.

Goodwill and Identifiable Intangible Assets

As of December 31, 2019, we had \$1,063.9 million and \$611.4 million, respectively, of goodwill and net identifiable intangible assets (primarily consisting of our contract backlog, developed technology/vendor network, customer relationships, and trade names) arising out of the acquisition of companies. As of December 31, 2018, goodwill and net identifiable intangible assets were \$990.9 million and \$488.3 million, respectively. As of December 31, 2019, approximately 13.4% of our goodwill related to our United States electrical construction and facilities services segment, approximately 28.1% related to our United States mechanical construction and facilities services segment, approximately 27.2% related to our United States building services segment, and approximately 31.3% related to our United States industrial services segment. The changes to goodwill since December 31, 2018 were the result of acquisitions completed in 2019 and purchase price adjustments related to acquisitions completed in the fourth quarter of 2018. The determination of related estimated useful lives for identifiable intangible assets and whether those assets are impaired involves significant judgments based upon short and long-term projections of future performance. These forecasts reflect assumptions regarding the ability to successfully integrate acquired companies, as well as macroeconomic conditions. Accounting Standards Codification Topic 350, "Intangibles – Goodwill and Other" ("ASC 350") requires that goodwill and other identifiable intangible assets with indefinite useful lives not be amortized, but instead be tested at least annually for impairment (which we test each October 1, absent any earlier identified impairment indicators), and be written down if impaired. ASC 350 requires that goodwill be allocated to its respective reporting unit and that identifiable intangible assets with finite lives be amortized over their useful lives.

We test for impairment of our goodwill at the reporting unit level. Our reporting units are consistent with the reportable segments identified in Note 19, “Segment Information”, of the notes to consolidated financial statements included in Item 8. Financial Statements and Supplementary Data. In assessing whether our goodwill is impaired, we compare the fair value of the reporting unit to its carrying amount, including goodwill. If the fair value exceeds the carrying amount, no impairment loss is recognized. However, if the carrying amount of the reporting unit exceeds the fair value, the goodwill of the reporting unit is impaired and an impairment loss in the amount of the excess is recognized and charged to operations. The fair value of each of our reporting units is generally determined using discounted estimated future cash flows; however, in certain circumstances, consideration is given to a market approach whereby fair value is measured based on a multiple of earnings.

As of the date of our latest impairment test (October 1, 2019), the carrying values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment were approximately \$331.0 million, \$369.5 million, \$546.8 million and \$705.2 million, respectively. The fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment, and our United States industrial services segment exceeded their carrying values by approximately \$1,321.8 million, \$2,011.5 million, \$922.3 million and \$40.5 million, respectively.

For the years ended December 31, 2019 and 2018, no impairment of our goodwill was recognized. As part of our annual impairment testing for the year ended December 31, 2017, and as a result of continued adverse market conditions, we tempered our expectations regarding the strength of a near-term recovery within our United States industrial services segment, resulting in a non-cash impairment charge of \$57.5 million.

The weighted average cost of capital used in our annual testing for impairment as of October 1, 2019 was 9.5%, 9.1% and 10.5% for our domestic construction segments, our United States building services segment and our United States industrial services segment, respectively. The perpetual growth rate used for our annual testing was 2.7% for all of our domestic segments. Unfavorable changes in these key assumptions may affect future testing results. For example, keeping all other assumptions constant, a 50 basis point increase in the weighted average costs of capital would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment, and our United States industrial services segment to decrease by approximately \$108.8 million, \$156.7 million, \$98.0 million, and \$40.3 million, respectively. In addition, keeping all other assumptions constant, a 50 basis point reduction in the perpetual growth rate would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment, and our United States industrial services segment to decrease by approximately \$61.4 million, \$90.5 million, \$55.7 million, and \$20.5 million, respectively. Given the amounts by which the fair value exceeds the carrying value for each of our reporting units other than our United States industrial services segment, the decreases in estimated fair values described above would not have significantly impacted our 2019 impairment test. In the case of our United States industrial services segment, however, such decreases would cause the estimated fair value to approach its carrying value.

We also test for the impairment of trade names that are not subject to amortization by calculating the fair value using the “relief from royalty payments” methodology. This approach involves two steps: (a) estimating reasonable royalty rates for each trade name and (b) applying these royalty rates to a net revenue stream and discounting the resulting cash flows to determine fair value. This fair value is then compared with the carrying value of each trade name. If the carrying amount of the trade name is greater than the implied fair value of the trade name, an impairment in the amount of the excess is recognized and charged to operations. For the years ended December 31, 2019 and 2018, no impairment of our indefinite-lived trade names was recognized. The annual impairment review of our indefinite-lived trade names for the year ended December 31, 2017 resulted in a \$0.3 million non-cash impairment charge as a result of a change in the fair value of a subsidiary trade name associated with a prior acquisition reported within our United States building services segment.

In addition, we review for the impairment of other identifiable intangible assets that are being amortized whenever facts and circumstances indicate that their carrying values may not be fully recoverable. This test compares their carrying values to the undiscounted pre-tax cash flows expected to result from the use of the assets. If the assets are impaired, the assets are written down to their fair values, generally determined based on their discounted estimated future cash flows. For the years ended December 31, 2019 and 2017, no impairment of our other identifiable intangible assets was recognized. For the year ended December 31, 2018, we recorded a \$0.9 million non-cash impairment charge associated with a finite-lived trade name within our United States industrial services segment.

We have certain businesses, particularly within our United States industrial services segment, whose results are highly impacted by the demand for some of our offerings within the industrial and oil and gas markets. Future performance of this segment, along with a continued evaluation of the conditions of its end user markets, will be important to ongoing impairment assessments. Should this segment's actual results suffer a decline or expected future results be revised downward, the risk of goodwill impairment or impairment of other identifiable intangible assets would increase.

Our development of the discounted future cash flow projections used in impairment testing is based upon assumptions and estimates by management from a review of our operating results and business plans as well as forecasts of anticipated growth rates and margins, among other considerations. In addition, estimates of the weighted average cost of capital for each reporting unit are developed with the assistance of a third-party valuation specialist. Those assumptions and estimates can change in future periods and other factors used in assessing fair value, such as interest rates, are outside the control of management. There can be no assurance that estimates and assumptions made for purposes of our goodwill and identifiable intangible asset impairment testing will prove to be accurate predictions of the future. If our assumptions regarding future business performance including anticipated growth rates and margins are not achieved, or there is a rise in interest rates, we may be required to record goodwill and/or identifiable intangible asset impairment charges in future periods.

It is not possible at this time to determine if any future impairment charge will result or, if it does, whether such a charge would be material.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We have not used any derivative financial instruments during the years ended December 31, 2019 and 2018, including trading or speculating on changes in interest rates or commodity prices of materials used in our business.

We are exposed to market risk for changes in interest rates for borrowings under the 2016 Credit Agreement, which provides for a revolving credit facility and a term loan. Borrowings under the 2016 Credit Agreement bear interest at variable rates. For further information on borrowing rates and interest rate sensitivity, refer to the Liquidity and Capital Resources discussion in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. As of December 31, 2019, there were borrowings of \$50.0 million outstanding under the 2016 Revolving Credit Facility and the balance of the 2016 Term Loan was \$254.4 million. Based on the \$304.4 million borrowings outstanding under the 2016 Credit Agreement, if overall interest rates were to increase by 100 basis points, interest expense, net of income taxes, would increase by approximately \$2.2 million in the next twelve months. Conversely, if overall interest rates were to decrease by 100 basis points, interest expense, net of income taxes, would decrease by approximately \$2.2 million in the next twelve months.

It is expected that a number of banks currently reporting information used to set LIBOR will stop doing so after 2021, which could either cause LIBOR to stop publication or cause LIBOR to no longer be representative of the underlying market. We believe our exposure to market risk associated with the discontinuation of LIBOR is limited as our 2016 Credit Agreement expires prior to the end of 2021 and given that we are not exposed to any other material contracts that reference LIBOR.

We are exposed to construction market risk and its potential related impact on accounts receivable or contract assets on uncompleted contracts. The amounts recorded may be at risk if our customers' ability to pay these obligations is negatively impacted by economic conditions. We continually monitor the creditworthiness of our customers and maintain on-going discussions with customers regarding contract status with respect to change orders and billing terms. Therefore, we believe we take appropriate action to manage market and other risks, but there is no assurance that we will be able to reasonably identify all risks with respect to the collectibility of these assets. See also the previous discussions of Revenue Recognition from Contracts with Customers and Accounts Receivable under the heading "Application of Critical Accounting Policies" in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Amounts invested in our foreign operations are translated into U.S. dollars at the exchange rates in effect at year end. The resulting translation adjustments are recorded as accumulated other comprehensive (loss) income, a component of equity, in the Consolidated Balance Sheets. We believe the exposure to the effects that fluctuating foreign currencies may have on our consolidated results of operations is limited because our foreign operations primarily invoice customers and collect obligations in their respective local currencies. Additionally, expenses associated with these transactions are generally contracted and paid for in their same local currencies.

In addition, we are exposed to market risk of fluctuations in certain commodity prices of materials, such as copper and steel, which are used as components of supplies or materials utilized in our construction, building services and industrial services operations. We are also exposed to increases in energy prices, particularly as they relate to gasoline prices for our fleet of approximately 11,000 vehicles. While we believe we can increase our contract prices to adjust for some price increases in commodities, there can be no assurance that such price increases, if they were to occur, would be recoverable. Additionally, our fixed price contracts do not allow us to adjust our prices and, as a result, increases in material costs could reduce our profitability with respect to projects in progress.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

EMCOR Group, Inc. and Subsidiaries
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share data)

	December 31, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 358,818	\$ 363,907
Accounts receivable, less allowance for doubtful accounts of \$14,466 and \$15,361, respectively	2,030,813	1,773,620
Contract assets	177,830	158,243
Inventories	40,446	42,321
Prepaid expenses and other	51,976	48,116
Total current assets	<u>2,659,883</u>	<u>2,386,207</u>
Property, plant and equipment, net	156,187	134,351
Operating lease right-of-use assets	245,471	—
Goodwill	1,063,911	990,887
Identifiable intangible assets, net	611,444	488,286
Other assets	93,462	89,076
Total assets	<u>\$ 4,830,358</u>	<u>\$ 4,088,807</u>
LIABILITIES AND EQUITY		
Current liabilities:		
Current maturities of long-term debt and finance lease liabilities	\$ 18,092	\$ 16,013
Accounts payable	665,402	652,091
Contract liabilities	623,642	552,290
Accrued payroll and benefits	382,573	343,069
Other accrued expenses and liabilities	195,757	170,935
Operating lease liabilities, current	53,144	—
Total current liabilities	<u>1,938,610</u>	<u>1,734,398</u>
Borrowings under revolving credit facility	50,000	25,000
Long-term debt and finance lease liabilities	244,139	254,764
Operating lease liabilities, long-term	204,950	—
Other long-term obligations	334,879	333,204
Total liabilities	<u>2,772,578</u>	<u>2,347,366</u>
Equity:		
EMCOR Group, Inc. stockholders' equity:		
Preferred stock, \$0.10 par value, 1,000,000 shares authorized, zero issued and outstanding	—	—
Common stock, \$0.01 par value, 200,000,000 shares authorized, 60,359,252 and 60,123,184 shares issued, respectively	604	601
Capital surplus	32,274	21,103
Accumulated other comprehensive loss	(89,288)	(87,662)
Retained earnings	2,367,481	2,060,440
Treasury stock, at cost 4,139,421 shares	(253,937)	(253,937)
Total EMCOR Group, Inc. stockholders' equity	<u>2,057,134</u>	<u>1,740,545</u>
Noncontrolling interests	646	896
Total equity	<u>2,057,780</u>	<u>1,741,441</u>
Total liabilities and equity	<u>\$ 4,830,358</u>	<u>\$ 4,088,807</u>

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries
CONSOLIDATED STATEMENTS OF OPERATIONS
For The Years Ended December 31,
(In thousands, except per share data)

	2019	2018	2017
Revenues	\$ 9,174,611	\$ 8,130,631	\$ 7,686,999
Cost of sales	7,818,743	6,925,178	6,539,987
Gross profit	1,355,868	1,205,453	1,147,012
Selling, general and administrative expenses	893,453	799,157	758,714
Restructuring expenses	1,523	2,306	1,577
Impairment loss on goodwill and identifiable intangible assets	—	907	57,819
Operating income	460,892	403,083	328,902
Net periodic pension (cost) income	1,553	2,743	1,652
Interest expense	(13,821)	(13,544)	(12,770)
Interest income	2,265	2,746	965
Income from continuing operations before income taxes	450,889	395,028	318,749
Income tax provision	125,749	109,106	90,699
Income from continuing operations	325,140	285,922	228,050
Loss from discontinued operation, net of income taxes	—	(2,345)	(857)
Net income including noncontrolling interests	325,140	283,577	227,193
Less: Net (income) loss attributable to noncontrolling interests	—	(46)	3
Net income attributable to EMCOR Group, Inc.	<u>\$ 325,140</u>	<u>\$ 283,531</u>	<u>\$ 227,196</u>
Basic earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	\$ 5.78	\$ 4.92	\$ 3.85
From discontinued operation	—	(0.04)	(0.01)
Net income attributable to EMCOR Group, Inc. common stockholders	<u>\$ 5.78</u>	<u>\$ 4.88</u>	<u>\$ 3.84</u>
Diluted earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	\$ 5.75	\$ 4.89	\$ 3.83
From discontinued operation	—	(0.04)	(0.01)
Net income attributable to EMCOR Group, Inc. common stockholders	<u>\$ 5.75</u>	<u>\$ 4.85</u>	<u>\$ 3.82</u>
Dividends declared per common share	<u>\$ 0.32</u>	<u>\$ 0.32</u>	<u>\$ 0.32</u>

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For The Years Ended December 31,
(In thousands)

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Net income including noncontrolling interests	\$ 325,140	\$ 283,577	\$ 227,193
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustments	1,689	(1,322)	(1,384)
Changes in post retirement plans ⁽¹⁾	(3,315)	7,860	8,887
Other comprehensive (loss) income	<u>(1,626)</u>	<u>6,538</u>	<u>7,503</u>
Comprehensive income	323,514	290,115	234,696
Less: Comprehensive (income) loss attributable to noncontrolling interests	—	(46)	3
Comprehensive income attributable to EMCOR Group, Inc.	<u>\$ 323,514</u>	<u>\$ 290,069</u>	<u>\$ 234,699</u>

(1) Net of tax benefit (provision) of \$0.7 million, \$(2.1) million, and \$(1.8) million for the years ended December 31, 2019, 2018, and 2017, respectively.

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries
CONSOLIDATED STATEMENTS OF CASH FLOWS
For The Years Ended December 31,
(In thousands)

	2019	2018	2017
Cash flows - operating activities:			
Net income including noncontrolling interests	\$ 325,140	\$ 283,577	\$ 227,193
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	43,945	38,472	39,915
Amortization of identifiable intangible assets	48,142	42,443	48,594
Provision for doubtful accounts	2,628	2,123	7,264
Deferred income taxes	1,701	4,249	(53,358)
Gain on sale or disposal of property, plant and equipment	(3,981)	(517)	(1,846)
Excess tax benefits from share-based compensation	(984)	(1,646)	(1,616)
Equity loss (income) from unconsolidated entities	2,990	(347)	(864)
Non-cash expense for amortization of debt issuance costs	1,186	1,186	1,186
Non-cash expense from contingent consideration arrangements	1,373	186	317
Non-cash expense for impairment of goodwill and identifiable intangible assets	—	907	57,819
Non-cash share-based compensation expense	11,386	11,030	9,939
Non-cash income from changes in unrecognized tax benefits	—	(72)	(5,641)
Distributions from unconsolidated entities	1,074	3,110	5,506
Changes in operating assets and liabilities, excluding the effect of businesses acquired:			
Increase in accounts receivable	(135,954)	(146,101)	(80,514)
Decrease (increase) in inventories	4,345	(3,915)	(4,936)
(Increase) decrease in contract assets	(10,111)	(30,935)	12,433
(Decrease) increase in accounts payable	(33,971)	78,554	54,910
Increase in contract liabilities	51,310	20,726	24,695
Increase (decrease) in accrued payroll and benefits and other accrued expenses and liabilities	49,551	(24,715)	24,017
Changes in other assets and liabilities, net	(4,070)	(7,304)	1,036
Net cash provided by operating activities	355,700	271,011	366,049
Cash flows - investing activities:			
Payments for acquisitions of businesses, net of cash acquired	(300,980)	(72,080)	(107,223)
Proceeds from sale or disposal of property, plant and equipment	5,487	1,237	4,014
Purchase of property, plant and equipment	(48,432)	(43,479)	(34,684)
Investments in and advances to unconsolidated entities	(2,252)	(3,484)	(675)
Distributions from unconsolidated entities	838	84	475
Net cash used in investing activities	(345,339)	(117,722)	(138,093)
Cash flows - financing activities:			
Proceeds from revolving credit facility	50,000	—	—
Repayments of revolving credit facility	(25,000)	—	(100,000)
Repayments of long-term debt	(15,198)	(15,235)	(15,202)
Repayments of finance lease liabilities	(4,571)	(1,501)	(1,445)
Dividends paid to stockholders	(17,950)	(18,640)	(18,971)
Repurchase of common stock	—	(216,244)	(93,166)
Taxes paid related to net share settlements of equity awards	(6,451)	(3,848)	(3,462)
Issuance of common stock under employee stock purchase plan	6,090	5,765	4,793
Payments for contingent consideration arrangements	(5,917)	(3,339)	(1,017)
Distributions to noncontrolling interests	(250)	—	—
Net cash used in financing activities	(19,247)	(253,042)	(228,470)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	2,592	(3,421)	3,242
(Decrease) increase in cash, cash equivalents and restricted cash	(6,294)	(103,174)	2,728
Cash, cash equivalents and restricted cash at beginning of year ⁽¹⁾	366,214	469,388	466,660
Cash, cash equivalents and restricted cash at end of period ⁽¹⁾	\$ 359,920	\$ 366,214	\$ 469,388

(1) Includes \$1.1 million, \$2.3 million, \$2.0 million and \$2.0 million of restricted cash classified as “Prepaid expenses and other” in the Consolidated Balance Sheet as of December 31, 2019, 2018, 2017 and 2016, respectively.

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries
CONSOLIDATED STATEMENTS OF EQUITY
For The Years Ended December 31,
(In thousands)

	EMCOR Group, Inc. Stockholders						
	Total	Common stock	Capital surplus	Accumulated other comprehensive (loss) income ⁽¹⁾	Retained earnings	Treasury stock	Noncontrolling interests
Balance, December 31, 2016	\$ 1,537,942	\$ 606	\$ 52,219	\$ (101,703)	\$ 1,596,269	\$ (10,302)	\$ 853
Net income including noncontrolling interests	227,193	—	—	—	227,196	—	(3)
Other comprehensive income	7,503	—	—	7,503	—	—	—
Common stock issued under share-based compensation plans	1	2	(1)	—	—	—	—
Tax withholding for common stock issued under share-based compensation plans	(3,462)	—	(3,462)	—	—	—	—
Common stock issued under employee stock purchase plan	4,793	1	4,792	—	—	—	—
Common stock dividends	(18,971)	—	164	—	(19,135)	—	—
Repurchase of common stock ⁽²⁾	(90,821)	(10)	(55,646)	—	(7,774)	(27,391)	—
Share-based compensation expense	9,939	—	9,939	—	—	—	—
Balance, December 31, 2017	\$ 1,674,117	\$ 599	\$ 8,005	\$ (94,200)	\$ 1,796,556	\$ (37,693)	\$ 850
Net income including noncontrolling interests	283,577	—	—	—	283,531	—	46
Other comprehensive income	6,538	—	—	6,538	—	—	—
Cumulative-effect adjustment ⁽³⁾	(854)	—	—	—	(854)	—	—
Common stock issued under share-based compensation plans	—	1	(1)	—	—	—	—
Tax withholding for common stock issued under share-based compensation plans	(3,848)	—	(3,848)	—	—	—	—
Common stock issued under employee stock purchase plan	5,765	1	5,764	—	—	—	—
Common stock dividends	(18,640)	—	153	—	(18,793)	—	—
Repurchase of common stock ⁽²⁾	(216,244)	—	—	—	—	(216,244)	—
Share-based compensation expense	11,030	—	11,030	—	—	—	—
Balance, December 31, 2018	\$ 1,741,441	\$ 601	\$ 21,103	\$ (87,662)	\$ 2,060,440	\$ (253,937)	\$ 896
Net income including noncontrolling interests	325,140	—	—	—	325,140	—	—
Other comprehensive loss	(1,626)	—	—	(1,626)	—	—	—
Common stock issued under share-based compensation plans	—	3	(3)	—	—	—	—
Tax withholding for common stock issued under share-based compensation plans	(6,451)	—	(6,451)	—	—	—	—
Common stock issued under employee stock purchase plan	6,090	—	6,090	—	—	—	—
Common stock dividends	(17,950)	—	149	—	(18,099)	—	—
Distributions to noncontrolling interests	(250)	—	—	—	—	—	(250)
Share-based compensation expense	11,386	—	11,386	—	—	—	—
Balance, December 31, 2019	\$ 2,057,780	\$ 604	\$ 32,274	\$ (89,288)	\$ 2,367,481	\$ (253,937)	\$ 646

- (1) Represents cumulative foreign currency translation and post retirement liability adjustments of \$0.8 million and \$(90.1) million, respectively, as of December 31, 2019, \$(0.9) million and \$(86.8) million, respectively, as of December 31, 2018, and \$0.5 million and \$(94.7) million, respectively, as of December 31, 2017.
- (2) Beginning June 1, 2017, shares of common stock repurchased are held as treasury stock by the Company.
- (3) Represents adjustment to retained earnings upon the adoption of Accounting Standards Codification Topic 606.

The accompanying notes to consolidated financial statements are an integral part of these statements.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 - NATURE OF OPERATIONS

References to the “Company,” “EMCOR,” “we,” “us,” “our” and similar words refer to EMCOR Group, Inc. and its consolidated subsidiaries unless the context indicates otherwise.

We are one of the largest electrical and mechanical construction and facilities services firms in the United States. In addition, we provide a number of building services and industrial services. We specialize principally in providing construction services relating to electrical and mechanical systems in all types of facilities and in providing various services relating to the operation, maintenance and management of facilities, including refineries and petrochemical plants.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its majority-owned subsidiaries and joint ventures. Significant intercompany accounts and transactions have been eliminated. All investments over which we exercise significant influence, but do not control (a 20% to 50% ownership interest), are accounted for using the equity method of accounting. For joint ventures that have been accounted for using the consolidation method of accounting, noncontrolling interests represent the allocation of earnings to our joint venture partners who either have a minority-ownership interest in the joint venture or are not at risk for the majority of losses of the joint venture.

The results of operations of companies acquired have been included in the results of operations from the date of the respective acquisition.

Principles of Preparation

The preparation of the consolidated financial statements, in conformity with accounting principles generally accepted in the United States, requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could materially differ from those estimates.

Our reportable segments reflect certain reclassifications of prior year amounts from our United States mechanical construction and facilities services segment to our United States building services and our United States industrial services segments due to changes in our internal reporting structure.

During the third quarter of 2014, we ceased construction operations in the United Kingdom. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

Revenue Recognition

The Company adopted Accounting Standards Codification Topic 606, “Revenue from Contracts with Customers” (“ASC 606”) on January 1, 2018. In accordance with ASC 606, revenue is recognized when promised goods or services are transferred to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. Refer to Note 3 - Revenue from Contracts with Customers of the notes to consolidated financial statements for additional information.

For the periods presented prior to the adoption of ASC 606, revenues from long-term construction contracts were recognized in accordance with ASC Topic 605-35, “Revenue Recognition-Construction-Type and Production-Type Contracts.” Revenues from the performance of services for maintenance, repair and retrofit work were recognized consistent with the performance of the services, generally on a pro-rata basis over the life of the contractual arrangement. Revenues related to the engineering, manufacturing and repairing of shell and tube heat exchangers were recognized when the product was shipped and all other revenue recognition criteria were met.

Cash and cash equivalents

For purposes of the consolidated financial statements, we consider all highly liquid instruments with original maturities of three months or less to be cash equivalents. We maintain a centralized cash management system whereby our excess cash balances are invested in high quality, short-term money market instruments, which are considered cash equivalents. We have cash balances in certain of our domestic bank accounts that exceed federally insured limits.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

Allowance for Doubtful Accounts

Accounts receivable are recorded at the invoiced amount and do not bear interest. The Company maintains an allowance for doubtful accounts. This allowance is based upon the best estimate of the probable losses in existing accounts receivable. The Company determines the allowances based upon individual accounts when information indicates the customers may have an inability to meet their financial obligations, as well as historical collection and write-off experience. These amounts are re-evaluated and adjusted on a regular basis as additional information is received. Actual write-offs are charged against the allowance when collection efforts have been unsuccessful. At December 31, 2019 and 2018, our accounts receivable of \$2,030.8 million and \$1,773.6 million, respectively, were recorded net of allowances for doubtful accounts of \$14.5 million and \$15.4 million, respectively. The provision for doubtful accounts during 2019, 2018, and 2017 amounted to approximately \$2.6 million, \$2.1 million, and \$7.3 million, respectively.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined principally using the average cost method.

Property, plant and equipment

Property, plant and equipment is stated at cost. Depreciation, including amortization of assets under finance leases, is recorded principally using the straight-line method over estimated useful lives of 3 to 10 years for machinery and equipment, 3 to 7 years for vehicles, furniture and fixtures and computer hardware/software, and 25 years for buildings. Leasehold improvements are amortized over the shorter of the remaining life of the lease term or the expected useful life of the improvement.

The carrying values of property, plant and equipment are reviewed for impairment whenever facts and circumstances indicate that the carrying amount may not be fully recoverable. In performing this review for recoverability, property, plant and equipment is assessed for possible impairment by comparing their carrying values to their undiscounted net pre-tax cash flows expected to result from the use of the asset. Impaired assets are written down to their fair values, generally determined based on their estimated future discounted cash flows. Based on the results of our testing for the years ended December 31, 2019, 2018, and 2017, no impairment of property, plant and equipment was recognized.

Goodwill and Identifiable Intangible Assets

Goodwill and other identifiable intangible assets with indefinite lives that are not being amortized, such as trade names, are tested at least annually for impairment (which we test each October 1, absent any earlier identified impairment indicators) and are written down if impaired. Identifiable intangible assets with finite lives are amortized over their useful lives and are reviewed for impairment whenever facts and circumstances indicate that their carrying values may not be fully recoverable. See Note 9 - Goodwill and Identifiable Intangible Assets of the notes to consolidated financial statements for additional information.

Insurance Liabilities

Insurance liabilities for automobile liability, workers' compensation and general liability claims are determined actuarially based on claims filed and an estimate of claims incurred but not yet reported. At December 31, 2019 and 2018, the estimated current portion of such undiscounted insurance liabilities of \$48.3 million and \$44.6 million, respectively, were included in "Other accrued expenses and liabilities" in the accompanying Consolidated Balance Sheets. The estimated non-current portion of such undiscounted insurance liabilities included in "Other long-term obligations" at December 31, 2019 and 2018 were \$186.0 million and \$179.1 million, respectively. The current portion of anticipated insurance recoveries of \$13.8 million and \$12.6 million at December 31, 2019 and 2018, respectively, were included in "Prepaid expenses and other" and the non-current portion of anticipated insurance recoveries of \$50.9 million and \$49.3 million at December 31, 2019 and 2018, respectively, were included in "Other assets" in the accompanying Consolidated Balance Sheets.

Foreign Operations

The financial statements and transactions of our foreign subsidiaries are maintained in their functional currency and translated into U.S. dollars in accordance with Accounting Standards Codification Topic 830, "Foreign Currency Matters." Translation adjustments have been recorded as "Accumulated other comprehensive loss," a separate component of "Equity."

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

Income Taxes

We account for income taxes in accordance with the provisions of Accounting Standards Codification Topic 740, "Income Taxes" ("ASC 740"). ASC 740 requires an asset and liability approach which requires the recognition of deferred income tax assets and deferred income tax liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Valuation allowances are established when necessary to reduce deferred income tax assets when it is more likely than not that a tax benefit will not be realized.

We account for uncertain tax positions in accordance with the provisions of ASC 740. We recognize accruals of interest related to unrecognized tax benefits as a component of the income tax provision.

Valuation of Share-Based Compensation Plans

We have various types of share-based compensation plans and programs, which are administered by our Board of Directors or its Compensation and Personnel Committee. See Note 14 - Share-Based Compensation Plans of the notes to consolidated financial statements for additional information regarding the share-based compensation plans and programs.

We account for share-based payments in accordance with the provisions of Accounting Standards Codification Topic 718, "Compensation-Stock Compensation" ("ASC 718"). ASC 718 requires that all share-based payments issued to acquire goods or services, including grants of employee stock options, be recognized in the statement of operations based on their fair values. Compensation expense related to share-based awards is recognized over the requisite service period, which is generally the vesting period. For shares subject to graded vesting, our policy is to apply the straight-line method in recognizing compensation expense. ASC 718 requires the benefits of tax deductions in excess of recognized compensation expense to be recognized in the Consolidated Statements of Operations when the underlying awards vest or are settled.

New Accounting Pronouncements

On January 1, 2019, we adopted the accounting pronouncement issued by the Financial Accounting Standards Board ("FASB") to replace existing lease accounting guidance. This pronouncement is intended to provide enhanced transparency and comparability by requiring lessees to record right-of-use assets and corresponding lease liabilities on the balance sheet for most leases. Expenses associated with leases continue to be recognized in a manner similar to previous accounting guidance. We adopted this pronouncement utilizing the transition practical expedient added by the FASB, which eliminated the requirement that entities apply the new lease standard to the comparative periods presented in the year of adoption. The adoption of this accounting pronouncement resulted in the recognition of operating lease right-of-use assets and associated lease liabilities on our balance sheet of \$220.2 million and \$227.1 million, respectively, as of January 1, 2019. Additional required disclosures have been included within Note 17 - Leases of the notes to consolidated financial statements. Such adoption did not have an impact on our liquidity, results of operations or our compliance with the various covenants contained within our 2016 Credit Agreement as described in further detail within Note 10 - Debt of the notes to consolidated financial statements.

On January 1, 2019, we adopted the accounting pronouncement issued by the FASB related to the reporting of certain items in accumulated other comprehensive income (loss) ("AOCI"). This guidance provides entities the option to reclassify to retained earnings certain tax effects stranded in AOCI as a result of tax reform. As part of our adoption of this accounting pronouncement, we elected not to reclassify the stranded tax effects related to the retirement plans of our United States subsidiaries as such amounts are immaterial. Tax effects remaining in AOCI will be released upon liquidation of each individual retirement plan.

In June 2016, an accounting pronouncement was issued by the FASB which changes the way in which entities estimate and present credit losses for most financial assets, including accounts receivable. This pronouncement is effective for annual and interim periods beginning after December 15, 2019, with early adoption permitted. In preparation for adoption, we have substantially completed a process to identify and group financial assets with similar characteristics into collective pools. We have additionally begun implementing processes and internal controls to identify information, including macroeconomic forecasts and key credit indicators, relevant to estimating expected credit losses. As a result of the procedures performed to date, we do not anticipate that the adoption of this pronouncement will have a material impact on our financial position and/or results of operations.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - (Continued)

In December 2019, an accounting pronouncement was issued by the FASB which simplifies the accounting for income taxes by eliminating certain exceptions to the guidance in ASC 740 related to intraperiod tax allocations and the methodology for calculating income taxes in an interim period. The guidance also simplifies aspects of the accounting for franchise taxes as well as enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. The pronouncement is effective for annual and interim periods beginning after December 15, 2020, with early adoption permitted. Certain aspects of this standard must be applied retrospectively while other aspects are to be applied on a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the year of adoption. The Company intends to adopt this accounting pronouncement on January 1, 2021, and we are currently evaluating the potential impact on our financial position and/or results of operations.

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS

The Company recognizes revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services by applying the following five step model:

(1) Identify the contract with a customer

A contract with a customer exists when: (a) the parties have approved the contract and are committed to perform their respective obligations, (b) the rights of the parties can be identified, (c) payment terms can be identified, (d) the arrangement has commercial substance, and (e) collectibility of consideration is probable. Judgment is required when determining if the contractual criteria are met, specifically in the earlier stages of a project when a formally executed contract may not yet exist. In these situations, the Company evaluates all relevant facts and circumstances, including the existence of other forms of documentation or historical experience with our customers that may indicate a contractual agreement is in place and revenue should be recognized. In determining if the collectibility of consideration is probable, the Company considers the customer's ability and intention to pay such consideration through an evaluation of several factors, including an assessment of the creditworthiness of the customer and our prior collection history with such customer.

(2) Identify the performance obligations in the contract

At contract inception, the Company assesses the goods or services promised in a contract and identifies, as a separate performance obligation, each distinct promise to transfer goods or services to the customer. The identified performance obligations represent the "unit of account" for purposes of determining revenue recognition. In order to properly identify separate performance obligations, the Company applies judgment in determining whether each good or service provided is: (a) capable of being distinct, whereby the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer, and (b) distinct within the context of the contract, whereby the transfer of the good or service to the customer is separately identifiable from other promises in the contract.

In addition, when assessing performance obligations within a contract, the Company considers the warranty provisions included within such contract. To the extent the warranty terms provide the customer with an additional service, other than assurance that the promised good or service complies with agreed upon specifications, such warranty is accounted for as a separate performance obligation. In determining whether a warranty provides an additional service, the Company considers each warranty provision in comparison to warranty terms which are standard in the industry.

Our contracts are often modified through change orders to account for changes in the scope and price of the goods or services we are providing. Although the Company evaluates each change order to determine whether such modification creates a separate performance obligation, the majority of our change orders are for goods or services that are not distinct within the context of our original contract, and therefore, are not treated as separate performance obligations.

(3) Determine the transaction price

The transaction price represents the amount of consideration to which the Company expects to be entitled in exchange for transferring promised goods or services to our customers. The consideration promised within a contract may include fixed amounts, variable amounts, or both. To the extent the performance obligation includes variable consideration, including contract bonuses and penalties that can either increase or decrease the transaction price, the Company estimates the amount of variable consideration to be included in the transaction price utilizing one of two prescribed methods, depending on which method better predicts the amount of consideration to which the entity will be entitled. Such methods include: (a) the expected value method, whereby the

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

amount of variable consideration to be recognized represents the sum of probability weighted amounts in a range of possible consideration amounts, and (b) the most likely amount method, whereby the amount of variable consideration to be recognized represents the single most likely amount in a range of possible consideration amounts. When applying these methods, the Company considers all information that is reasonably available, including historical, current, and estimates of future performance. The expected value method is typically utilized in situations where a contract contains a large number of possible outcomes while the most likely amount method is typically utilized in situations where a contract has only two possible outcomes.

Variable consideration is included in the transaction price only to the extent it is probable, in the Company's judgment, that a significant future reversal in the amount of cumulative revenue recognized under the contract will not occur when the uncertainty associated with the variable consideration is subsequently resolved. This threshold is referred to as the variable consideration constraint. In assessing whether to apply the variable consideration constraint, the Company considers if factors exist that could increase the likelihood or the magnitude of a potential reversal of revenue, including, but not limited to, whether: (a) the amount of consideration is highly susceptible to factors outside of the Company's influence, such as the actions of third parties, (b) the uncertainty surrounding the amount of consideration is not expected to be resolved for a long period of time, (c) the Company's experience with similar types of contracts is limited or that experience has limited predictive value, (d) the Company has a practice of either offering a broad range of price concessions or changing the payment terms and conditions of similar contracts in similar circumstances, and (e) the contract has a large number and broad range of possible consideration amounts.

Pending change orders represent one of the most common forms of variable consideration included within contract value and typically represent contract modifications for which a change in scope has been authorized or acknowledged by our customer, but the final adjustment to contract price is yet to be negotiated. In estimating the transaction price for pending change orders, the Company considers all relevant facts, including documented correspondence with the customer regarding acknowledgment of and/or agreement with the modification, as well as historical experience with the customer or similar contractual circumstances. Based upon this assessment, the Company estimates the transaction price, including whether the variable consideration constraint should be applied.

Contract claims are another form of variable consideration which is common within our industry. Claim amounts represent revenue that has been recognized for contract modifications that are not submitted or are in dispute as to both scope and price. In estimating the transaction price for claims, the Company considers all relevant facts available. However, given the uncertainty surrounding claims, including the potential long-term nature of dispute resolution and the broad range of possible consideration amounts, there is an increased likelihood that any additional contract revenue associated with contract claims is constrained. The resolution of claims involves negotiations and, in certain cases, litigation. In the event litigation costs are incurred by us in connection with claims, such litigation costs are expensed as incurred, although we may seek to recover these costs.

For some transactions, the receipt of consideration does not match the timing of the transfer of goods or services to the customer. For such contracts, the Company evaluates whether this timing difference represents a financing arrangement within the contract. Although rare, if a contract is determined to contain a significant financing component, the Company adjusts the promised amount of consideration for the effects of the time value of money when determining the transaction price of such contract. Although our customers may retain a portion of the contract price until completion of the project and final contract settlement, these retainage amounts are not considered a significant financing component as the intent of the withheld amounts is to provide the customer with assurance that we will complete our obligations under the contract rather than to provide financing to the customer. In addition, although we may be entitled to advanced payments from our customers on certain contracts, these advanced payments generally do not represent a significant financing component as the payments are used to meet working capital demands that can be higher in the early stages of a contract, as well as to protect us from our customer failing to meet its obligations under the contract.

Changes in the estimates of transaction prices are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. Such changes in estimates can result in the recognition of revenue in a current period for performance obligations which were satisfied or partially satisfied in prior periods. Such changes in estimates may also result in the reversal of previously recognized revenue if the ultimate outcome differs from the Company's previous estimate. There were no significant amounts of revenue recognized during the year ended December 31, 2019 related to performance obligations satisfied in prior periods. For the year ended December 31, 2018, we recognized revenue of \$7.3 million associated with the final settlement of contract value for three projects which were completed in prior periods. For the years ended December 31, 2019 and 2018, there were no significant reversals of revenue recognized associated with the revision of transaction prices.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

(4) Allocate the transaction price to performance obligations in the contract

For contracts that contain multiple performance obligations, the Company allocates the transaction price to each performance obligation based on a relative standalone selling price. The Company determines the standalone selling price based on the price at which the performance obligation would have been sold separately in similar circumstances to similar customers. If the standalone selling price is not observable, the Company estimates the standalone selling price taking into account all available information such as market conditions and internal pricing guidelines. In certain circumstances, the standalone selling price is determined using an expected profit margin on anticipated costs related to the performance obligation.

(5) Recognize revenue as performance obligations are satisfied

The Company recognizes revenue at the time the related performance obligation is satisfied by transferring a promised good or service to its customers. A good or service is considered to be transferred when the customer obtains control. The Company can transfer control of a good or service and satisfy its performance obligations either over time or at a point in time. The Company transfers control of a good or service over time and, therefore, satisfies a performance obligation and recognizes revenue over time if one of the following three criteria are met: (a) the customer simultaneously receives and consumes the benefits provided by the Company's performance as we perform, (b) the Company's performance creates or enhances an asset that the customer controls as the asset is created or enhanced, or (c) the Company's performance does not create an asset with an alternative use to us, and we have an enforceable right to payment for performance completed to date.

For our performance obligations satisfied over time, we recognize revenue by measuring the progress toward complete satisfaction of that performance obligation. The selection of the method to measure progress towards completion can be either an input method or an output method and requires judgment based on the nature of the goods or services to be provided.

For our construction contracts, revenue is generally recognized over time as our performance creates or enhances an asset that the customer controls as it is created or enhanced. Our fixed price construction projects generally use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. For our unit price construction contracts, progress towards complete satisfaction is measured through an output method, such as the amount of units produced or delivered, when our performance does not produce significant amounts of work in process or finished goods prior to complete satisfaction of such performance obligations.

For our services contracts, revenue is also generally recognized over time as the customer simultaneously receives and consumes the benefits of our performance as we perform the service. For our fixed price service contracts with specified service periods, revenue is generally recognized on a straight-line basis over such service period when our inputs are expended evenly, and the customer receives and consumes the benefits of our performance throughout the contract term.

The timing of revenue recognition for the manufacturing of new build heat exchangers within our United States industrial services segment depends on the payment terms of the contract, as our performance does not create an asset with an alternative use to us. For those contracts for which we have a right to payment for performance completed to date at all times throughout our performance, inclusive of a cancellation, we recognize revenue over time. For these performance obligations, we use a cost-to-cost input method to measure our progress towards complete satisfaction of the performance obligation as we believe it best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. However, for those contracts for which we do not have a right, at all times, to payment for performance completed to date, we recognize revenue at the point in time when control is transferred to the customer. For bill-and-hold arrangements, revenue is recognized when the customer obtains control of the heat exchanger, which may be prior to shipping, if certain recognition criteria are met.

For certain of our revenue streams, such as call-out repair and service work, outage services, refinery turnarounds, and specialty welding services that are performed under time and materials contracts, our progress towards complete satisfaction of such performance obligations is measured using an output method as the customer receives and consumes the benefits of our performance completed to date.

Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a performance obligation will be revised in the near-term. For those performance obligations for which revenue is recognized using a cost-to-cost input method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized on a cumulative catch-up basis in the period in which the revisions to the estimates are made. When the current estimate

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

of total costs for a performance obligation indicate a loss, a provision for the entire estimated loss on the unsatisfied performance obligation is made in the period in which the loss becomes evident. During 2019, there were no changes in total estimated costs that had a significant impact on our operating results. During 2018, we recognized losses of \$10.0 million related to a change in total estimated costs on a transportation project within our United States electrical construction and facilities services segment, resulting in part from contract scope issues. There were no other changes in total estimated costs that resulted in a significant impact to our operating results for the year ended December 31, 2018.

Disaggregation of Revenues

Our revenues are principally derived from contracts to provide construction services relating to electrical and mechanical systems, as well as to provide a number of building services and industrial services to our customers. Our contracts are with many different customers in numerous industries. Refer to Note 19 - Segment Information of the notes to the consolidated financial statements for additional information on how we disaggregate our revenues by reportable segment, as well as a more complete description of our business.

The following tables provide further disaggregation of our revenues by categories we use to evaluate our financial performance within each of our reportable segments (in thousands):

	2019	% of Total	2018	% of Total
United States electrical construction and facilities services:				
Commercial market sector	\$1,081,737	49%	\$ 839,045	43%
Institutional market sector	125,537	6%	110,046	6%
Hospitality market sector	16,985	1%	32,338	2%
Manufacturing market sector	462,953	21%	388,157	20%
Healthcare market sector	88,752	4%	126,218	6%
Transportation market sector	210,515	9%	284,464	14%
Water and wastewater market sector	19,921	1%	23,337	1%
Short duration projects ⁽¹⁾	158,619	7%	120,109	6%
Service work	54,955	2%	34,105	2%
	<u>2,219,974</u>		<u>1,957,819</u>	
Less intersegment revenues	<u>(3,374)</u>		<u>(3,496)</u>	
Total segment revenues	<u>\$2,216,600</u>		<u>\$1,954,323</u>	

	2019	% of Total	2018	% of Total
United States mechanical construction and facilities services:				
Commercial market sector	\$1,185,129	36%	\$1,057,542	35%
Institutional market sector	313,409	9%	289,882	10%
Hospitality market sector	35,385	1%	93,827	3%
Manufacturing market sector	533,699	16%	393,637	13%
Healthcare market sector	304,622	9%	240,818	8%
Transportation market sector	32,686	1%	19,415	1%
Water and wastewater market sector	202,428	6%	176,546	6%
Short duration projects ⁽¹⁾	365,721	11%	318,413	11%
Service work	378,839	11%	385,671	13%
	<u>3,351,918</u>		<u>2,975,751</u>	
Less intersegment revenues	<u>(11,581)</u>		<u>(12,908)</u>	
Total segment revenues	<u>\$3,340,337</u>		<u>\$2,962,843</u>	

(1) Represents those projects which generally are completed within three months or less.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

	<u>2019</u>	<u>% of Total</u>	<u>2018</u>	<u>% of Total</u>
United States building services:				
Commercial site-based services	\$ 571,345	27%	\$ 519,641	28%
Government site-based services	176,282	8%	213,677	11%
Mechanical services	1,238,420	59%	1,032,082	55%
Energy services	120,825	6%	110,085	6%
Total segment revenues	<u>\$2,106,872</u>		<u>\$1,875,485</u>	
	<u>2019</u>	<u>% of Total</u>	<u>2018</u>	<u>% of Total</u>
United States industrial services:				
Field services	\$ 922,308	85%	\$ 752,458	82%
Shop services	165,235	15%	170,651	18%
Total segment revenues	<u>1,087,543</u>		<u>923,109</u>	
Total United States operations	<u>\$8,751,352</u>		<u>\$7,715,760</u>	
	<u>2019</u>	<u>% of Total</u>	<u>2018</u>	<u>% of Total</u>
United Kingdom building services:				
Service work	\$ 212,876	50%	\$ 216,880	52%
Projects & extras	210,383	50%	197,991	48%
Total segment revenues	<u>\$ 423,259</u>		<u>\$ 414,871</u>	
Total worldwide operations	<u>\$9,174,611</u>		<u>\$8,130,631</u>	

Contract Assets and Contract Liabilities

Accounts receivable are recognized in the period when our right to consideration is unconditional. Accounts receivable are recognized net of an allowance for doubtful accounts. A considerable amount of judgment is required in assessing the likelihood of realization of receivables.

The timing of revenue recognition may differ from the timing of invoicing to customers. Contract assets include unbilled amounts from our long-term construction projects when revenues recognized under the cost-to-cost measure of progress exceed the amounts invoiced to our customers, as the amounts cannot be billed under the terms of our contracts. Such amounts are recoverable from our customers based upon various measures of performance, including achievement of certain milestones, completion of specified units or completion of a contract. In addition, many of our time and materials arrangements, as well as our contracts to perform turnaround services within the United States industrial services segment, are billed in arrears pursuant to contract terms that are standard within the industry, resulting in contract assets and/or unbilled receivables being recorded, as revenue is recognized in advance of billings. Also included in contract assets are amounts we seek or will seek to collect from customers or others for errors or changes in contract specifications or design, contract change orders or modifications in dispute or unapproved as to scope and/or price, or other customer-related causes of unanticipated additional contract costs (claims and unapproved change orders). Our contract assets do not include capitalized costs to obtain and fulfill a contract. Contract assets are generally classified as current within the Consolidated Balance Sheets.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

As of December 31, 2019 and 2018, contract assets included unbilled revenues for unapproved change orders of approximately \$33.1 million and \$25.2 million, respectively. As of December 31, 2019 and 2018, there were no claim amounts included within contract assets or accounts receivable. There were contractually billed amounts and retention related to contracts with unapproved change orders and claims of approximately \$89.0 million and \$96.1 million as of December 31, 2019 and 2018, respectively. For contracts in claim status, contractually billed amounts will generally not be paid by the customer to us until final resolution of the related claims.

Contract liabilities from our long-term construction contracts arise when amounts invoiced to our customers exceed revenues recognized under the cost-to-cost measure of progress. Contract liabilities additionally include advanced payments from our customers on certain contracts. Contract liabilities decrease as we recognize revenue from the satisfaction of the related performance obligation and are recorded as either current or long-term, depending upon when we expect to recognize such revenue. The long-term portion of contract liabilities is included in "Other long-term obligations" in the Consolidated Balance Sheets.

Net contract liabilities consisted of the following (in thousands):

	2019	2018
Contract assets, current	\$ 177,830	\$ 158,243
Contract assets, non-current	—	—
Contract liabilities, current	(623,642)	(552,290)
Contract liabilities, non-current	(2,142)	(2,069)
Net contract liabilities	<u>\$ (447,954)</u>	<u>\$ (396,116)</u>

Included within net contract liabilities were \$406.6 million and \$359.2 million of net contract liabilities on uncompleted construction projects as of December 31, 2019 and 2018, respectively, as follows (in thousands):

	2019	2018
Costs incurred on uncompleted construction contracts	\$ 9,885,192	\$ 8,656,642
Estimated earnings, thereon	1,349,338	1,172,224
	11,234,530	9,828,866
Less: billings to date	11,641,082	10,188,023
	<u>\$ (406,552)</u>	<u>\$ (359,157)</u>

The \$51.8 million increase in net contract liabilities for the year ended December 31, 2019 was primarily attributable to the \$47.4 million increase in the net contract liabilities on our uncompleted long-term construction contracts, partially as a result of the timing of billings to our customers as amounts invoiced exceeded the revenue recognized on certain large projects in the earlier stages of completion. Contract assets and contract liabilities increased by approximately \$8.2 million and \$29.0 million, respectively, as a result of acquisitions made in 2019. There was no significant impairment of contract assets recognized during the period.

Contract Retentions

As of December 31, 2019 and 2018, accounts receivable included \$298.5 million and \$254.6 million, respectively, of retainage billed under terms of our contracts. These retainage amounts represent amounts which have been contractually invoiced to customers where payments have been partially withheld pending the achievement of certain milestones, satisfaction of other contractual conditions or completion of the project. We estimate that approximately 88% of this retainage will be collected during 2020.

As of December 31, 2019 and 2018, accounts payable included \$64.7 million and \$43.3 million, respectively, of retainage withheld under terms of our subcontracts. These retainage amounts represent amounts invoiced to the Company by our subcontractors where payments have been partially withheld pending the achievement of certain milestones, satisfaction of other contractual conditions or upon completion of the project. We estimate that approximately 86% of this retainage will be paid during 2020.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 3 - REVENUE FROM CONTRACTS WITH CUSTOMERS - (Continued)

Transaction Price Allocated to Remaining Unsatisfied Performance Obligations

The following table presents the transaction price allocated to remaining unsatisfied performance obligations (“remaining performance obligations”) for each of our reportable segments and their respective percentages of total remaining performance obligations (in thousands, except for percentages):

	<u>2019</u>	<u>% of Total</u>
Remaining performance obligations:		
United States electrical construction and facilities services	\$ 1,036,216	26%
United States mechanical construction and facilities services	2,229,090	55%
United States building services	542,269	13%
United States industrial services	104,613	3%
Total United States operations	<u>3,912,188</u>	<u>97%</u>
United Kingdom building services	124,176	3%
Total worldwide operations	<u>\$ 4,036,364</u>	<u>100%</u>

Our remaining performance obligations at December 31, 2019 were \$4.04 billion. Remaining performance obligations increase with awards of new contracts and decrease as we perform work and recognize revenue on existing contracts. We include a project within our remaining performance obligations at such time the project is awarded and agreement on contract terms has been reached. Our remaining performance obligations include amounts related to contracts for which a fixed price contract value is not assigned when a reasonable estimate of total transaction price can be made.

Remaining performance obligations include unrecognized revenues to be realized from uncompleted construction contracts. Although many of our construction contracts are subject to cancellation at the election of our customers, in accordance with industry practice, we do not limit the amount of unrecognized revenue included within remaining performance obligations for these contracts due to the inherent substantial economic penalty that would be incurred by our customers upon cancellation. We believe our reported remaining performance obligations for our construction contracts are firm and contract cancellations have not had a material adverse effect on us.

Remaining performance obligations also include unrecognized revenues expected to be realized over the remaining term of service contracts. However, to the extent a service contract includes a cancellation clause which allows for the termination of such contract by either party without a substantive penalty, the remaining contract term, and therefore, the amount of unrecognized revenues included within remaining performance obligations, is limited to the notice period required for the termination.

Our remaining performance obligations are comprised of: (a) original contract amounts, (b) change orders for which we have received written confirmations from our customers, (c) pending change orders for which we expect to receive confirmations in the ordinary course of business, (d) claim amounts that we have made against customers for which we have determined we have a legal basis under existing contractual arrangements and as to which the variable consideration constraint does not apply, and (e) other forms of variable consideration to the extent that such variable consideration has been included within the transaction price of our contracts. Such claim and other variable consideration amounts were immaterial for all periods presented.

Refer to the table below for additional information regarding our remaining performance obligations, including an estimate of when we expect to recognize such remaining performance obligations as revenue (in thousands):

	<u>Within one year</u>	<u>Greater than one year</u>
Remaining performance obligations:		
United States electrical construction and facilities services	\$ 861,268	\$ 174,948
United States mechanical construction and facilities services	1,802,865	426,225
United States building services	532,540	9,729
United States industrial services	104,613	—
Total United States operations	<u>3,301,286</u>	<u>610,902</u>
United Kingdom building services	83,558	40,618
Total worldwide operations	<u>\$ 3,384,844</u>	<u>\$ 651,520</u>

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 4 - ACQUISITIONS OF BUSINESSES

Acquisitions are accounted for utilizing the acquisition method of accounting and the prices paid for them are allocated to their respective assets and liabilities based upon the estimated fair value of such assets and liabilities at the dates of their respective acquisition by us.

On November 1, 2019, we completed the acquisition of Batchelor & Kimball, Inc. (“BKI”), a leading full service provider of mechanical construction and maintenance services. This acquisition strengthens our position and broadens our capabilities in the Southern and Southeastern regions of the United States, and its results of operations have been included within our United States mechanical construction and facilities services segment. Under the terms of the transaction, we acquired 100% of BKI’s outstanding capital stock for total consideration of approximately \$220.0 million. In connection with the acquisition of BKI, we acquired working capital of \$29.8 million and other net assets of \$4.9 million and have preliminarily ascribed \$43.6 million to goodwill and \$141.7 million to identifiable intangible assets. Goodwill is calculated as the excess of the consideration transferred over the fair value of the net assets acquired and represents the future economic benefits expected from this strategic acquisition. The weighted average amortization period for the identifiable intangible assets, which consist of a trade name, customer relationships, and contract backlog, is approximately 10.5 years.

In addition to BKI, during 2019, we completed six other acquisitions for total consideration of \$85.3 million. Such companies include: (a) a company which provides electrical contracting services in central Iowa, the results of operations of which have been included within our United States electrical construction and facilities services segment, (b) a company which provides mechanical contracting services in south-central and eastern Texas, the results of operations of which have been included within our United States mechanical construction and facilities services segment, and (c) four companies within our United States building services segment which bolster our presence in geographies where we have existing operations and provide either mobile mechanical services or building automation and controls solutions. In connection with these acquisitions, we acquired working capital of \$25.3 million and other net assets of \$1.3 million and have preliminarily ascribed \$29.1 million to goodwill and \$29.6 million to identifiable intangible assets.

During 2018, we acquired four companies for total consideration of \$71.6 million. Two companies provide mobile mechanical services, one within the Eastern region and the other within the Western region of the United States. The third company is a full service provider of mechanical services within the Southern region of the United States. The results of these three companies have been included in our United States building services segment. The fourth company provides electrical construction and maintenance services for industrial and commercial buildings in north Texas, and its results have been included in our United States electrical construction and facilities services segment. In connection with these acquisitions, we acquired working capital of \$8.7 million and have ascribed \$26.3 million to goodwill and \$36.6 million to identifiable intangible assets.

During 2017, we acquired three companies for total consideration of \$111.9 million. One company provides fire protection and alarm services primarily in the Southern region of the United States. The second company provides millwright services for manufacturing companies throughout the United States. Both of their results have been included in our United States mechanical construction and facilities services segment. The third company provides mobile mechanical services within the Western region of the United States, and its results have been included in our United States building services segment. In connection with these acquisitions, we acquired working capital of \$12.3 million and other net assets of \$2.3 million and have ascribed \$40.7 million to goodwill and \$56.6 million to identifiable intangible assets.

We expect that all of the goodwill acquired in connection with these acquisitions will be deductible for tax purposes. The purchase price allocations for the businesses acquired in 2019 are preliminary and subject to change during their respective measurement periods. The purchase price allocations for the businesses acquired in 2018 and 2017 have been finalized during their respective measurement periods with an insignificant impact.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 5 - DISPOSITION OF ASSETS

Due to a historical pattern of losses in the construction operations of our United Kingdom segment and our negative assessment of construction market conditions in the United Kingdom, we ceased construction operations in the United Kingdom during the third quarter of 2014. The results of the construction operations of our United Kingdom segment for all periods are presented in the Consolidated Financial Statements as discontinued operations.

No income or expense was recognized from discontinued operations for the year ended December 31, 2019.

The results of discontinued operations for the years ended December 31, 2018 and 2017 were as follows (in thousands):

	2018	2017
Revenues	\$ —	\$ 863
Loss from discontinued operation, net of income taxes	\$ (2,345)	\$ (857)
Diluted loss per share from discontinued operation	\$ (0.04)	\$ (0.01)

The loss from discontinued operations in 2018 was primarily due to the settlement of a previously outstanding legal matter. The loss from discontinued operations in 2017 was primarily due to legal costs incurred, partially offset by revenues recognized upon the settlement of a previously outstanding contract claim.

Included in the Consolidated Balance Sheet at December 31, 2018 were approximately \$3.7 million of current liabilities associated with the discontinued operation, primarily consisting of contract retentions, contract warranty obligations and other accrued expenses. No significant liabilities remain as of December 31, 2019.

NOTE 6 - EARNINGS PER SHARE

The following tables summarize our calculation of Basic and Diluted Earnings (Loss) per Common Share (“EPS”) for the years ended December 31, 2019, 2018, and 2017 (in thousands, except share and per share data):

	2019	2018	2017
Numerator:			
Income from continuing operations attributable to EMCOR Group, Inc. common stockholders	\$ 325,140	\$ 285,876	\$ 228,053
Loss from discontinued operation, net of income taxes	—	(2,345)	(857)
Net income attributable to EMCOR Group, Inc. common stockholders	<u>\$ 325,140</u>	<u>\$ 283,531</u>	<u>\$ 227,196</u>
Denominator:			
Weighted average shares outstanding used to compute basic earnings (loss) per common share	56,208,280	58,112,838	59,254,256
Effect of dilutive securities—Share-based awards	311,001	330,629	364,713
Shares used to compute diluted earnings (loss) per common share	<u>56,519,281</u>	<u>58,443,467</u>	<u>59,618,969</u>
Basic earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	\$ 5.78	\$ 4.92	\$ 3.85
From discontinued operation	—	(0.04)	(0.01)
Net income attributable to EMCOR Group, Inc. common stockholders	<u>\$ 5.78</u>	<u>\$ 4.88</u>	<u>\$ 3.84</u>
Diluted earnings (loss) per common share:			
From continuing operations attributable to EMCOR Group, Inc. common stockholders	\$ 5.75	\$ 4.89	\$ 3.83
From discontinued operation	—	(0.04)	(0.01)
Net income attributable to EMCOR Group, Inc. common stockholders	<u>\$ 5.75</u>	<u>\$ 4.85</u>	<u>\$ 3.82</u>

The number of outstanding share-based awards excluded from the computation of diluted EPS for the years ended December 31, 2019, 2018, and 2017 because they would be anti-dilutive were 4,800, 550, and 2,700, respectively.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 7 - INVENTORIES

Inventories as of December 31, 2019 and 2018 consist of the following amounts (in thousands):

	2019	2018
Raw materials and construction materials	\$ 31,365	\$ 30,006
Work in process	9,081	12,315
Inventories	<u>\$ 40,446</u>	<u>\$ 42,321</u>

NOTE 8 - PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment in the accompanying Consolidated Balance Sheets consisted of the following amounts as of December 31, 2019 and 2018 (in thousands):

	2019	2018
Machinery and equipment	\$ 166,087	\$ 151,339
Vehicles	59,116	58,205
Furniture and fixtures	22,123	20,655
Computer hardware/software	104,916	98,415
Land, buildings and leasehold improvements	113,020	97,937
Construction in progress	10,236	14,443
Finance lease right-of-use assets ⁽¹⁾	9,609	—
	<u>485,107</u>	<u>440,994</u>
Accumulated depreciation and amortization	(328,920)	(306,643)
	<u>\$ 156,187</u>	<u>\$ 134,351</u>

(1) Finance lease right-of-use assets are recorded net of accumulated amortization. Prior to the adoption of ASC 842 on January 1, 2019, assets under capital leases were recorded as machinery and equipment or computer hardware/software.

Depreciation and amortization expense related to property, plant and equipment, including finance leases, was \$43.9 million, \$38.5 million, and \$39.9 million for the years ended December 31, 2019, 2018, and 2017, respectively.

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS

Goodwill at December 31, 2019 and 2018 was approximately \$1,063.9 million and \$990.9 million, respectively, and reflects the excess of the consideration transferred in a business combination over the fair value of the net assets acquired. Goodwill attributable to companies acquired in 2019 and 2018 has been valued at \$72.7 million and \$26.3 million, respectively. Accounting Standards Codification Topic 805, “Business Combinations” (“ASC 805”) requires that all business combinations be accounted for using the acquisition method and that certain identifiable intangible assets acquired in a business combination be recognized as assets apart from goodwill. Accounting Standards Codification Topic 350, “Intangibles-Goodwill and Other” (“ASC 350”) requires goodwill and other identifiable intangible assets with indefinite useful lives, such as trade names, not be amortized, but instead be tested at least annually for impairment (which we test each October 1, absent any earlier identified impairment indicators), and be written down if impaired. ASC 350 requires that goodwill be allocated to its respective reporting unit and that identifiable intangible assets with finite lives be amortized over their useful lives. As of December 31, 2019, approximately 13.4% of our goodwill related to our United States electrical construction and facilities services segment, approximately 28.1% of our goodwill related to our United States mechanical construction and facilities services segment, approximately 27.2% of our goodwill related to our United States building services segment and approximately 31.3% of our goodwill related to our United States industrial services segment.

We test for impairment of our goodwill at the reporting unit level. Our reporting units are consistent with the reportable segments identified in Note 19, “Segment Information,” of the notes to consolidated financial statements. In assessing whether our goodwill is impaired, we compare the fair value of the reporting unit to its carrying amount, including goodwill. If the fair value exceeds the carrying amount, no impairment loss is recognized. However, if the carrying amount of the reporting unit exceeds the fair value, the goodwill of the reporting unit is impaired and an impairment loss in the amount of the excess is recognized and charged

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS - (Continued)

to operations. The fair value of each of our reporting units is generally determined using discounted estimated future cash flows; however, in certain circumstances, consideration is given to a market approach whereby fair value is measured based on a multiple of earnings.

For the years ended December 31, 2019 and 2018, no impairment of our goodwill was recognized. As part of our annual impairment testing for the year ended December 31, 2017, we recorded a non-cash impairment charge of \$57.5 million within our United States industrial services segment.

The weighted average cost of capital used in our annual testing for impairment as of October 1, 2019 was 9.5%, 9.1% and 10.5% for our domestic construction segments, our United States building services segment and our United States industrial services segment, respectively. The perpetual growth rate used for our annual testing was 2.7% for all of our domestic segments. Unfavorable changes in these key assumptions may affect future testing results. For example, keeping all other assumptions constant, a 50 basis point increase in the weighted average costs of capital would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately \$108.8 million, \$156.7 million, \$98.0 million and \$40.3 million, respectively. In addition, keeping all other assumptions constant, a 50 basis point reduction in the perpetual growth rate would cause the estimated fair values of our United States electrical construction and facilities services segment, our United States mechanical construction and facilities services segment, our United States building services segment and our United States industrial services segment to decrease by approximately \$61.4 million, \$90.5 million, \$55.7 million and \$20.5 million, respectively. Given the amounts by which the fair value exceeds the carrying value for each of our reporting units other than our United States industrial services segment, the decreases in estimated fair values described above would not have significantly impacted our 2019 impairment test. In the case of our United States industrial services segment, however, such decreases would cause the estimated fair value to approach its carrying value.

We also test for the impairment of trade names that are not subject to amortization by calculating the fair value using the “relief from royalty payments” methodology. This approach involves two steps: (a) estimating reasonable royalty rates for each trade name and (b) applying these royalty rates to a net revenue stream and discounting the resulting cash flows to determine fair value. This fair value is then compared with the carrying value of each trade name. If the carrying amount of the trade name is greater than the implied fair value of the trade name, an impairment in the amount of the excess is recognized and charged to operations. For the years ended December 31, 2019 and 2018, no impairment of our indefinite-lived trade names was recognized. The annual impairment review of our indefinite-lived trade names for the year ended December 31, 2017 resulted in a \$0.3 million non-cash impairment charge as a result of a change in the fair value of a subsidiary trade name associated with a prior acquisition reported within our United States building services segment.

In addition, we review for the impairment of other identifiable intangible assets that are being amortized whenever facts and circumstances indicate that their carrying values may not be fully recoverable. This test compares their carrying values to the undiscounted pre-tax cash flows expected to result from the use of the assets. If the assets are impaired, the assets are written down to their fair values, generally determined based on their discounted estimated future cash flows. For the years ended December 31, 2019 and 2017, no impairment of our other identifiable intangible assets was recognized. For the year ended December 31, 2018, we recorded a \$0.9 million non-cash impairment charge associated with a finite-lived trade name within our United States industrial services segment.

Our development of the discounted future cash flow projections used in impairment testing is based upon assumptions and estimates by management from a review of our operating results and business plans, as well as forecasts of anticipated growth rates and margins, among other considerations. In addition, estimates of the weighted average cost of capital for each reporting unit are developed with the assistance of a third-party valuation specialist. Those assumptions and estimates can change in future periods and other factors used in assessing fair value, such as interest rates, are outside the control of management. There can be no assurance that estimates and assumptions made for purposes of our goodwill and identifiable intangible asset impairment testing will prove to be accurate predictions of the future. If our assumptions regarding future business performance including anticipated growth rates and margins are not achieved, or there is a rise in interest rates, we may be required to record goodwill and/or identifiable intangible asset impairment charges in future periods. It is not possible at this time to determine if any future impairment charge will result or, if it does, whether such a charge would be material to our results of operations.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS - (Continued)

The changes in the carrying amount of goodwill by reportable segment during the years ended December 31, 2019 and 2018 were as follows (in thousands):

	United States electrical construction and facilities services segment	United States mechanical construction and facilities services segment	United States building services segment	United States industrial services segment	Total
Balance at December 31, 2017	\$ 125,707	\$ 256,265	\$ 255,733	\$ 327,188	\$ 964,893
Acquisitions, sales and purchase price adjustments	7,500	56	18,438	—	25,994
Balance at December 31, 2018	133,207	256,321	274,171	327,188	990,887
Acquisitions, sales and purchase price adjustments	9,338	48,699	14,987	—	73,024
Intersegment transfers	—	(5,800)	—	5,800	—
Balance at December 31, 2019	<u>\$ 142,545</u>	<u>\$ 299,220</u>	<u>\$ 289,158</u>	<u>\$ 332,988</u>	<u>\$ 1,063,911</u>

The aggregate goodwill balance as of December 31, 2017 included \$268.1 million of accumulated impairment charges, which were comprised of \$139.5 million within the United States building services segment and \$128.6 million within the United States industrial services segment.

Identifiable intangible assets as of December 31, 2019 and 2018 consist of the following (in thousands):

	December 31, 2019			
	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment Charge	Total
Contract backlog	\$ 66,745	\$ (61,651)	\$ —	\$ 5,094
Developed technology/Vendor network	95,661	(60,156)	—	35,505
Customer relationships	644,755	(277,601)	(4,834)	362,320
Trade names (amortized)	31,148	(21,830)	—	9,318
Trade names (unamortized)	251,440	—	(52,233)	199,207
Total	<u>\$ 1,089,749</u>	<u>\$ (421,238)</u>	<u>\$ (57,067)</u>	<u>\$ 611,444</u>
	December 31, 2018			
	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment Charge	Total
Contract backlog	\$ 58,945	\$ (56,812)	\$ —	\$ 2,133
Developed technology/Vendor network	95,661	(55,318)	—	40,343
Customer relationships	522,855	(240,073)	(4,834)	277,948
Trade names (amortized)	31,148	(20,893)	—	10,255
Trade names (unamortized)	209,840	—	(52,233)	157,607
Total	<u>\$ 918,449</u>	<u>\$ (373,096)</u>	<u>\$ (57,067)</u>	<u>\$ 488,286</u>

Identifiable intangible assets attributable to businesses acquired in 2019 and 2018 have been valued at \$171.3 million and \$36.6 million, respectively, and consist of contract backlog, customer relationships, and trade names. See Note 4 - Acquisitions of Businesses of the notes to consolidated financial statements for additional information with respect to acquisitions.

Identifiable intangible amounts are amortized on a straight-line basis, as it best approximates the pattern in which the economic benefits of the identifiable intangible assets are consumed. The weighted average amortization periods for the unamortized balances remaining are, in the aggregate, approximately 8.5 years, which are comprised of the following: 0.75 years for contract backlog, 7.5 years for developed technology/vendor network, 8.75 years for customer relationships and 10.75 years for trade names.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 9 - GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS - (Continued)

Amortization expense related to identifiable intangible assets with finite lives was \$48.1 million, \$42.4 million, and \$48.6 million for the years ended December 31, 2019, 2018, and 2017, respectively. The following table presents the estimated future amortization expense of identifiable intangible assets in the following years (in thousands):

2020	\$ 56,680
2021	50,792
2022	48,589
2023	47,650
2024	47,300
Thereafter	161,226
	<u>\$ 412,237</u>

NOTE 10 - DEBT

Credit Agreement

We have a credit agreement dated as of August 3, 2016, which provides for a \$900.0 million revolving credit facility (the “2016 Revolving Credit Facility”) and a \$400.0 million term loan (the “2016 Term Loan”) (collectively referred to as the “2016 Credit Agreement”) expiring August 3, 2021. We may increase the 2016 Revolving Credit Facility to \$1.3 billion if additional lenders are identified and/or existing lenders are willing to increase their current commitments. We may allocate up to \$300.0 million of available capacity under the 2016 Revolving Credit Facility to letters of credit for our account or for the account of any of our subsidiaries. Obligations under the 2016 Credit Agreement are guaranteed by most of our direct and indirect subsidiaries and are secured by substantially all of our assets. The 2016 Credit Agreement contains various covenants providing for, among other things, maintenance of certain financial ratios and certain limitations on payment of dividends, common stock repurchases, investments, acquisitions, indebtedness and capital expenditures. We were in compliance with all such covenants as of December 31, 2019 and 2018. A commitment fee is payable on the average daily unused amount of the 2016 Revolving Credit Facility, which ranges from 0.15% to 0.30%, based on certain financial tests. The fee was 0.15% of the unused amount as of December 31, 2019. Borrowings under the 2016 Credit Agreement bear interest at (1) a base rate plus a margin of 0.00% to 0.75%, based on certain financial tests, or (2) United States dollar LIBOR (1.80% at December 31, 2019) plus 1.00% to 1.75%, based on certain financial tests. The base rate is determined by the greater of (a) the prime commercial lending rate announced by Bank of Montreal from time to time (4.75% at December 31, 2019), (b) the federal funds effective rate, plus ½ of 1.00%, (c) the daily one month LIBOR rate, plus 1.00%, or (d) 0.00%. The interest rate in effect at December 31, 2019 was 2.80%. Fees for letters of credit issued under the 2016 Revolving Credit Facility range from 1.00% to 1.75% of the respective face amounts of outstanding letters of credit and are computed based on certain financial tests. Debt issuance costs are amortized over the life of the agreement and are included as part of interest expense. The 2016 Term Loan previously required us to make principal payments of \$5.0 million on the last day of March, June, September and December of each year, which commenced with the calendar quarter ended December 31, 2016. On December 30, 2016, we made a payment of \$100.0 million, of which \$5.0 million represented our required quarterly payment and \$95.0 million represented a prepayment of outstanding principal. Such prepayment was applied against the remaining mandatory quarterly payments on a ratable basis. As a result, commencing with the calendar quarter ended March 31, 2017, our required quarterly payment has been reduced to \$3.8 million. All unpaid principal and interest is due on August 3, 2021. As of December 31, 2019 and 2018, the balance of the 2016 Term Loan was \$254.4 million and \$269.6 million, respectively. As of December 31, 2019 and 2018, we had approximately \$109.0 million of letters of credit outstanding. There were \$50.0 million and \$25.0 million in borrowings outstanding under the 2016 Revolving Credit Facility as of December 31, 2019 and December 31, 2018, respectively.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 10 - DEBT - (Continued)

Long-term debt in the accompanying Consolidated Balance Sheets consisted of the following amounts as of December 31, 2019 and 2018 (in thousands):

	2019	2018
Revolving credit facility	\$ 50,000	\$ 25,000
Term loan, interest payable at varying amounts through 2021	254,431	269,620
Unamortized debt issuance costs	(1,879)	(3,065)
Finance lease liabilities	9,679	4,213
Other	—	9
Total debt	312,231	295,777
Less: current maturities	18,092	16,013
Total long-term debt	<u>\$ 294,139</u>	<u>\$ 279,764</u>

Finance Lease Liabilities

See Note 17 - Leases of the notes to consolidated financial statements for additional information.

NOTE 11 - FAIR VALUE MEASUREMENTS

We use a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy, which gives the highest priority to quoted prices in active markets, is comprised of the following three levels:

Level 1 – Unadjusted quoted market prices in active markets for identical assets and liabilities.

Level 2 – Observable inputs, other than Level 1 inputs. Level 2 inputs would typically include quoted prices in markets that are not active or financial instruments for which all significant inputs are observable, either directly or indirectly.

Level 3 – Prices or valuations that require inputs that are both significant to the measurement and unobservable.

The following tables provide the assets and liabilities carried at fair value measured on a recurring basis as of December 31, 2019 and 2018 (in thousands):

Asset Category	Assets at Fair Value as of December 31, 2019			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents ⁽¹⁾	\$ 358,818	\$ —	\$ —	\$ 358,818
Restricted cash ⁽²⁾	1,102	—	—	1,102
Deferred compensation plan assets ⁽³⁾	30,295	—	—	30,295
Total	<u>\$ 390,215</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 390,215</u>

Asset Category	Assets at Fair Value as of December 31, 2018			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents ⁽¹⁾	\$ 363,907	\$ —	\$ —	\$ 363,907
Restricted cash ⁽²⁾	2,307	—	—	2,307
Deferred compensation plan assets ⁽³⁾	23,124	—	—	23,124
Total	<u>\$ 389,338</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 389,338</u>

(1) Cash and cash equivalents consist of deposit accounts and money market funds with original maturity dates of three months or less, which are Level 1 assets. At December 31, 2019 and 2018, we had \$164.0 million and \$161.3 million, respectively, in money market funds.

(2) Restricted cash is classified as “Prepaid expenses and other” in the Consolidated Balance Sheets. Restricted cash primarily represents cash held in account for use on customer contracts.

(3) Deferred compensation plan assets are classified as “Other assets” in the Consolidated Balance Sheets.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 11 - FAIR VALUE MEASUREMENTS - (Continued)

We believe that the carrying values of our financial instruments, which include accounts receivable and other financing commitments, approximate their fair values due primarily to their short-term maturities and low risk of counterparty default. The carrying value of our debt associated with the 2016 Credit Agreement approximates its fair value due to the variable rate on such debt.

NOTE 12 - INCOME TAXES

On December 22, 2017, the U.S. government enacted comprehensive tax legislation, commonly referred to as the Tax Cuts and Jobs Act (“the Tax Act”). The Tax Act made broad and complex changes to the U.S. tax code, including, among other things, reducing the U.S. federal corporate tax rate from 35% to 21%, eliminating certain deductions including the domestic manufacturing deduction, providing additional limitations on deductions for executive compensation, imposing a mandatory one-time transition tax on accumulated earnings from certain foreign subsidiaries, and creating new taxes on certain foreign sourced earnings. The Tax Act also extended the option to claim accelerated depreciation deductions by allowing companies to fully deduct qualified property in the year such property is placed in service.

In 2018, we finalized our accounting for the income tax effects of the Tax Act, for which we had previously recorded provisional amounts in our 2017 consolidated financial statements in accordance with Staff Accounting Bulletin No. 118. During the year ended December 31, 2017, our net federal and state deferred tax liability balances were reduced by approximately \$39.3 million, which was recorded as a reduction of income tax expense in the Company’s Consolidated Statements of Operations, as U.S. generally accepted accounting principles required a re-measurement of our deferred tax assets and liabilities as of the date of enactment.

We continue to monitor for potential future changes in certain state and local tax regulations resulting from the Tax Act which may have an impact on our consolidated income tax provision in future periods.

For the years ended December 31, 2019, 2018, and 2017, our income tax provision was calculated based on income from continuing operations before income taxes as follows (in thousands):

	2019	2018	2017
United States	\$ 430,253	\$ 375,408	\$ 303,854
Foreign	20,636	19,620	14,895
	<u>\$ 450,889</u>	<u>\$ 395,028</u>	<u>\$ 318,749</u>

The income tax provision in the accompanying Consolidated Statements of Operations for the years ended December 31, 2019, 2018, and 2017 consisted of the following (in thousands):

	2019	2018	2017
Current provision:			
Federal	\$ 89,264	\$ 75,405	\$ 120,317
State and local	31,099	28,063	23,496
Foreign	3,685	1,389	244
	<u>124,048</u>	<u>104,857</u>	<u>144,057</u>
Deferred provision (benefit)	1,701	4,249	(53,358)
	<u>\$ 125,749</u>	<u>\$ 109,106</u>	<u>\$ 90,699</u>

Our 2019 income tax provision from continuing operations was \$125.7 million compared to \$109.1 million for 2018 and \$90.7 million for 2017. The increase in the income tax provision for each year was primarily driven by increased income from continuing operations before income taxes.

The actual income tax rates on income from continuing operations before income taxes, less amounts attributable to noncontrolling interests, for the years ended December 31, 2019, 2018, and 2017, were 27.9%, 27.6%, and 28.5%, respectively. The increase in the 2019 actual income tax rate compared to 2018 was predominantly due to: (a) an increase in our state deferred tax rate, partially as a result of a change in the mix of income, and (b) the continued application of the Tax Act, including the application of guidance regarding certain permanent differences and other nondeductible expenses. The decrease in the 2018 actual income tax rate

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 12 - INCOME TAXES - (Continued)

compared to 2017 was due to the net impact of the Tax Act, including the reduction of the U.S. federal corporate tax rate from 35% to 21% in 2018, partially offset by the reduction in income tax expense associated with the re-measurement of our net deferred tax liability balance in 2017.

Items accounting for the differences between income taxes computed at the federal statutory rate and the income tax provision for the years ended December 31, 2019, 2018, and 2017 were as follows (in thousands):

	2019	2018	2017
Federal income taxes at the statutory rate	\$ 94,687	\$ 82,946	\$ 111,562
State and local income taxes, net of federal tax benefits	24,904	21,827	15,736
State tax reserves	—	(7)	(2,543)
Permanent differences	7,149	6,584	4,916
Domestic manufacturing deduction	—	—	(10,387)
Excess tax benefit from share-based compensation	(733)	(1,227)	(1,341)
Goodwill impairment	—	—	17,055
Foreign income taxes (including UK statutory rate changes)	(170)	70	(2,586)
Impact of federal rate change on net deferred tax liabilities	—	—	(39,343)
Federal tax reserves	—	(67)	(1,247)
Other	(88)	(1,020)	(1,123)
	<u>\$ 125,749</u>	<u>\$ 109,106</u>	<u>\$ 90,699</u>

Our income tax provision for the year ended December 31, 2019 and 2018 included \$0.1 million and \$0.6 million, respectively, for the minimum tax on global intangible low-taxed income for certain earnings of our foreign subsidiaries, as required under the Tax Act. The Company has elected to recognize such tax as an expense in the period incurred.

As of December 31, 2019, we had undistributed foreign earnings from certain foreign subsidiaries of approximately \$69.8 million. Based on our evaluation, and given that a significant portion of such earnings were subject to tax in prior periods or are indefinitely reinvested, we have concluded that any taxes associated with the repatriation of such foreign earnings would be immaterial. As of December 31, 2019, the amount of cash held by these foreign subsidiaries was approximately \$67.7 million which, if repatriated, should not result in any federal or state income taxes.

Tax benefits associated with uncertain tax positions are recognized only if it is “more likely than not” that the tax position would be sustained on its technical merits. For positions not meeting the “more likely than not” test, no tax benefit is recognized. As of December 31, 2019 and 2018, we had no unrecognized income tax benefits.

We file a consolidated federal income tax return including all of our U.S. subsidiaries with the Internal Revenue Service. We additionally file income tax returns with various state, local, and foreign tax agencies. The Company is currently under examination by various taxing authorities for the years 2014 through 2018.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 12 - INCOME TAXES - (Continued)

Deferred income tax assets and liabilities are recognized in the Consolidated Balance Sheets for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. The deferred income tax assets and deferred income tax liabilities recorded for the years ended December 31, 2019 and 2018 were as follows (in thousands):

	<u>2019</u>	<u>2018</u>
Deferred income tax assets:		
Excess of amounts expensed for financial statement purposes over amounts deducted for income tax purposes:		
Insurance liabilities	\$ 47,022	\$ 44,192
Pension liability	2,733	3,204
Operating lease liabilities ⁽¹⁾	68,158	—
Deferred compensation	32,685	29,300
Other (including liabilities and reserves)	25,647	27,400
Total deferred income tax assets	<u>176,245</u>	<u>104,096</u>
Valuation allowance for deferred tax assets	<u>(3,463)</u>	<u>(3,855)</u>
Net deferred income tax assets	<u>172,782</u>	<u>100,241</u>
Deferred income tax liabilities:		
Costs capitalized for financial statement purposes and deducted for income tax purposes:		
Goodwill and identifiable intangible assets	(156,604)	(152,761)
Operating lease right-of-use assets ⁽¹⁾	(65,090)	—
Depreciation of property, plant and equipment	(18,622)	(14,904)
Other	(4,212)	(3,424)
Total deferred income tax liabilities	<u>(244,528)</u>	<u>(171,089)</u>
Net deferred income tax liabilities	<u>\$ (71,746)</u>	<u>\$ (70,848)</u>

(1) As discussed in Note 2 - Summary of Significant Accounting Policies of the notes to consolidated financial statements, on January 1, 2019, we adopted the accounting pronouncement issued by the Financial Accounting Standards Board (“FASB”), which required lessees to record right-of-use assets and corresponding lease liabilities on the balance sheet for most leases. We adopted this pronouncement utilizing the transition practical expedient added by the FASB, which eliminated the requirement that entities apply the new lease standard to the comparative periods presented in the year of adoption.

The components of the net deferred income tax liabilities in the accompanying Consolidated Balance Sheets are included in “Other assets” in the amount of \$3.4 million and \$4.7 million and “Other long-term obligations” in the amount of \$75.2 million and \$75.5 million, at December 31, 2019 and 2018, respectively.

Valuation allowances are established when necessary to reduce deferred income tax assets when it is more likely than not that a tax benefit will not be realized. As of December 31, 2019 and 2018, the total valuation allowance on deferred income tax assets was approximately \$3.5 million and \$3.9 million, respectively, related to state and local net operating losses. Although realization is not assured, we believe it is more likely than not that the deferred income tax assets, net of the valuation allowance discussed above, will be realized. The amount of the deferred income tax assets considered realizable, however, could be reduced if estimates of future income are reduced.

At December 31, 2019, there are no longer any trading losses available for United Kingdom income tax purposes. At December 31, 2018, we had trading losses for United Kingdom income tax purposes of approximately \$4.2 million, which were utilized in 2019 and are subject to review by the United Kingdom taxing authority.

Realization of our deferred income tax assets is dependent on our generating sufficient taxable income in the jurisdictions in which such deferred tax assets will reverse. We believe that our deferred income tax assets will be realized through projected future income.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 13 - COMMON STOCK

As of December 31, 2019 and 2018, there were 56,219,831 and 55,983,763 shares of our common stock outstanding, respectively.

We have paid quarterly dividends since October 25, 2011. We currently pay a regular quarterly dividend of \$0.08 per share.

On September 26, 2011, our Board of Directors (the “Board”) authorized us to repurchase up to \$100.0 million of our outstanding common stock. Subsequently, the Board has from time to time increased the amount of our common stock that we may repurchase. Since the inception of the repurchase program, the Board has authorized us to repurchase up to \$950.0 million of our outstanding common stock. No shares of our common stock were repurchased during the year ended December 31, 2019. Since the inception of the repurchase program through December 31, 2019, we have repurchased approximately 15.9 million shares of our common stock for approximately \$791.5 million. As of December 31, 2019, there remained authorization for us to repurchase approximately \$158.5 million of our shares. The repurchase program has no expiration date and does not obligate the Company to acquire any particular amount of common stock and may be suspended, recommenced or discontinued at any time or from time to time without prior notice. We may repurchase our shares from time to time to the extent permitted by securities laws and other legal requirements, including provisions in our 2016 Credit Agreement placing limitations on such repurchases. The repurchase program has been and will be funded from our operations.

NOTE 14 - SHARE-BASED COMPENSATION PLANS

We have an incentive plan under which stock options, stock awards, stock units and other share-based compensation may be granted to officers, non-employee directors and key employees of the Company. Under the terms of this plan, 3,250,000 shares were authorized, and 1,160,086 shares are available for grant or issuance as of December 31, 2019. Any issuances under this plan are valued at the fair market value of the common stock on the grant date. The vesting and expiration of any stock option grants and the vesting schedule of any stock awards or stock units are determined by the Compensation and Personnel Committee of our Board of Directors at the time of the grant. Forfeitures are recognized as they occur.

The following table summarizes activity regarding our stock options and awards of shares and stock units since December 31, 2016:

Stock Options			Restricted Stock Units		
	Shares	Weighted Average Price		Shares	Weighted Average Price
Balance, December 31, 2016	143,000	\$ 23.06	Balance, December 31, 2016	492,288	\$ 44.93
Granted	—	—	Granted	198,179	\$ 68.33
Expired	—	—	Forfeited	(1,200)	\$ 60.68
Exercised	(50,000)	\$ 20.42	Vested	(180,395)	\$ 44.57
Balance, December 31, 2017	93,000	\$ 24.48	Balance, December 31, 2017	508,872	\$ 54.13
Granted	—	—	Granted	135,259	\$ 80.37
Expired	—	—	Forfeited	(1,250)	\$ 71.27
Exercised	(53,000)	\$ 24.48	Vested	(166,295)	\$ 48.44
Balance, December 31, 2018	40,000	\$ 24.48	Balance, December 31, 2018	476,586	\$ 63.52
Granted	—	—	Granted	169,766	\$ 64.34
Expired	—	—	Forfeited	(2,545)	\$ 71.88
Exercised	(20,000)	\$ 24.48	Vested	(226,229)	\$ 51.64
Balance, December 31, 2019	<u>20,000</u>	<u>\$ 24.48</u>	Balance, December 31, 2019	<u>417,578</u>	<u>\$ 70.24</u>

We recognized approximately \$11.4 million, \$11.0 million, and \$9.9 million of compensation expense for stock units awarded to non-employee directors and employees pursuant to incentive plans for the years ended December 31, 2019, 2018, and 2017, respectively. We have approximately \$8.7 million of compensation expense, net of income taxes, which will be recognized over the remaining vesting periods of up to approximately 3 years. In addition, an aggregate of 72,310 restricted stock units granted to non-employee directors vested as of December 31, 2019, but issuance has been deferred up to 5 years.

All outstanding stock options were fully vested; therefore, no compensation expense was recognized with respect to stock options for the years ended December 31, 2019, 2018, and 2017.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 14 - SHARE-BASED COMPENSATION PLANS - (Continued)

The income tax benefit derived in 2019, 2018, and 2017 as a result of stock option exercises and other share-based compensation was approximately \$2.6 million, \$3.6 million, and \$3.9 million, respectively, of which approximately \$1.0 million, \$1.6 million, and \$1.6 million, respectively, represented excess tax benefits. The total intrinsic value of options (the amounts by which the stock price exceeded the exercise price of the option on the date of exercise) that were exercised during 2019, 2018, and 2017 was approximately \$1.2 million, \$2.7 million, and \$2.3 million, respectively.

At December 31, 2019, 2018, and 2017, 20,000 options, 40,000 options and 93,000 options were outstanding and exercisable, respectively. The weighted average exercise price for all such options was \$24.48. The total aggregate intrinsic value of options outstanding and exercisable as of December 31, 2019, 2018, and 2017 were approximately \$1.2 million, \$1.4 million, and \$5.3 million, respectively.

The following table summarizes information about our outstanding stock options as of December 31, 2019:

Stock Options Outstanding and Exercisable			
Range of Exercise Prices	Number	Weighted Average Remaining Life	Weighted Average Exercise Price
\$24.48	20,000	0.45 Years	\$24.48

We have an employee stock purchase plan. Under the terms of this plan, the maximum number of shares of our common stock that may be purchased is 3,000,000 shares. Generally, our corporate employees and non-union employees of our United States subsidiaries are eligible to participate in this plan. Employees covered by collective bargaining agreements generally are not eligible to participate in this plan.

NOTE 15 - RETIREMENT PLANS

Defined Benefit Plans

Our United Kingdom subsidiary has a defined benefit pension plan covering all eligible employees (the “UK Plan”); however, no individual joining the company after October 31, 2001 may participate in the UK Plan. On May 31, 2010, we curtailed the future accrual of benefits for active employees under this plan.

We account for the UK Plan and other defined benefit plans in accordance with Accounting Standards Codification Topic 715, “Compensation-Retirement Benefits” (“ASC 715”). ASC 715 requires that (a) the funded status, which is measured as the difference between the fair value of plan assets and the projected benefit obligations, be recorded in our balance sheet with a corresponding adjustment to accumulated other comprehensive income (loss) and (b) gains and losses for the differences between actuarial assumptions and actual results, and unrecognized service costs, be recognized through accumulated other comprehensive income (loss). These amounts will be subsequently recognized as net periodic pension cost.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 15 - RETIREMENT PLANS - (Continued)

The change in benefit obligations and assets of the UK Plan for the years ended December 31, 2019 and 2018 consisted of the following components (in thousands):

	2019	2018
Change in pension benefit obligation		
Benefit obligation at beginning of year	\$ 281,776	\$ 332,618
Interest cost	7,961	8,085
Actuarial loss (gain)	32,866	(27,755)
Benefits paid	(12,059)	(14,318)
Foreign currency exchange rate changes	12,222	(16,854)
Benefit obligation at end of year	<u>322,766</u>	<u>281,776</u>
Change in pension plan assets		
Fair value of plan assets at beginning of year	264,194	295,968
Actual return on plan assets	38,808	(6,489)
Employer contributions	4,428	4,742
Benefits paid	(12,059)	(14,318)
Foreign currency exchange rate changes	11,630	(15,709)
Fair value of plan assets at end of year	<u>307,001</u>	<u>264,194</u>
Funded status at end of year	<u>\$ (15,765)</u>	<u>\$ (17,582)</u>

Amounts not yet reflected in net periodic pension cost and included in accumulated other comprehensive loss were as follows (in thousands):

	2019	2018
Unrecognized losses	<u>\$ 94,211</u>	<u>\$ 86,768</u>

The underfunded status of the UK Plan of \$15.8 million and \$17.6 million at December 31, 2019 and 2018, respectively, is included in "Other long-term obligations" in the accompanying Consolidated Balance Sheets. No plan assets are expected to be returned to us during the year ending December 31, 2020.

The weighted average assumptions used to determine benefit obligations as of December 31, 2019 and 2018 were as follows:

	2019	2018
Discount rate	2.1%	2.9%

The weighted average assumptions used to determine net periodic pension cost for the years ended December 31, 2019, 2018, and 2017 were as follows:

	2019	2018	2017
Discount rate	2.9%	2.5%	2.7%
Annual rate of return on plan assets	4.9%	5.0%	5.3%

The annual rate of return on plan assets has been determined by modeling possible returns using the actuary's portfolio return calculator and the fair value of plan assets. This models the long term expected returns of the various asset classes held in the portfolio and takes into account the additional benefits of holding a diversified portfolio. For measurement purposes of the liability, the annual rates of inflation of covered pension benefits assumed for 2019 and 2018 were 2.0% and 2.1%, respectively.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 15 - RETIREMENT PLANS - (Continued)

The components of net periodic pension cost (income) of the UK Plan for the years ended December 31, 2019, 2018, and 2017 were as follows (in thousands):

	2019	2018	2017
Interest cost	\$ 7,961	\$ 8,085	\$ 8,622
Expected return on plan assets	(12,165)	(13,797)	(13,508)
Amortization of unrecognized loss	2,342	2,630	2,942
Net periodic pension cost (income)	<u>\$ (1,862)</u>	<u>\$ (3,082)</u>	<u>\$ (1,944)</u>

Actuarial gains and losses are amortized using a corridor approach whereby cumulative gains and losses in excess of the greater of 10% of the pension benefit obligation or the fair value of plan assets are amortized over the average life expectancy of plan participants. The amortization period for 2019 was 25 years.

The reclassification adjustment, net of income taxes, for the UK Plan from accumulated other comprehensive loss into net periodic pension cost for the years ended December 31, 2019, 2018, and 2017 was approximately \$1.9 million, \$2.1 million, and \$2.3 million, respectively. The estimated unrecognized loss for the UK Plan that will be amortized from accumulated other comprehensive loss into net periodic pension cost over the next year is approximately \$2.0 million, net of income taxes.

UK Plan Assets

The investment policies and strategies for the assets of the UK Plan are established by its trustees (who are independent of the Company) to achieve a reasonable balance between risk, likely return, and administration expense, as well as to maintain funds at a level to meet minimum funding requirements. In order to ensure that an appropriate investment strategy is in place, an analysis of the UK Plan's assets and liabilities is completed periodically. Target allocation percentages vary over time depending on the perceived risk and return potential of various asset classes and market conditions. The weighted average asset allocations and weighted average target allocations at December 31, 2019 and 2018 were as follows:

<u>Asset Category</u>	Target Asset Allocation	December 31, 2019	December 31, 2018
Debt	65.0%	70.6%	71.2%
Equity	15.0%	10.5%	13.4%
Cash	10.0%	10.5%	6.1%
Real estate	10.0%	8.4%	9.3%
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Plan assets of our UK Plan are invested through third-party fund managers in various investments with underlying holdings which consist of: (a) debt securities, which include United Kingdom government debt and United States, United Kingdom, European and emerging market corporate debt, (b) equity securities, which include marketable equity and equity like instruments across developed global equity markets, and (c) real estate assets, which represent trusts which invest directly or indirectly in various properties throughout the United Kingdom.

Assets of the UK Plan are allocated within the fair value hierarchy discussed in Note 11 - Fair Value Measurements, based on the nature of the investment. Level 1 assets represent cash. Level 2 assets consist of corporate debt funds, government bond funds, and equity funds whose underlying investments are valued using observable marketplace inputs. The fair value of the level 2 assets are generally determined under a market approach using valuation models that incorporate observable inputs such as interest rates, bond yields, and quoted prices.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 15 - RETIREMENT PLANS - (Continued)

Investments valued using net asset value (“NAV”) as a practical expedient are excluded from the fair value hierarchy. These investments include: (a) funds which invest predominantly in senior secured debt instruments, targeting diversity across regions and sectors, as well as funds which invest in diversified credit vehicles that seek higher returns than traditional fixed income, primarily through investments in U.S. corporate debt, global credit, and structured debt, and (b) funds which aim to provide long-term income through investment in UK property assets. These investments are redeemable at NAV on a monthly or quarterly basis and have redemption notice periods of up to 90 days. In addition, certain of these investments are subject to a lockup period of up to 24 months.

The methods described above may produce fair values that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Company believes the valuation methodologies are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following tables set forth the fair value of assets of the UK Plan as of December 31, 2019 and 2018 (in thousands):

<u>Asset Category</u>	<u>Assets at Fair Value as of December 31, 2019</u>			
	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Corporate debt funds	\$ —	\$ 64,314	\$ —	\$ 64,314
Government bond funds	—	49,164	—	49,164
Equity funds	—	32,356	—	32,356
Cash	32,240	—	—	32,240
Total plan assets in fair value hierarchy	<u>\$ 32,240</u>	<u>\$ 145,834</u>	<u>\$ —</u>	<u>178,074</u>
Plan assets measured using NAV as a practical expedient: ⁽¹⁾				
Debt funds				103,188
Real estate funds				25,739
Total plan assets at fair value				<u>\$ 307,001</u>

<u>Asset Category</u>	<u>Assets at Fair Value as of December 31, 2018</u>			
	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Corporate debt funds	\$ —	\$ 37,703	\$ —	\$ 37,703
Government bond funds	—	52,445	—	52,445
Equity funds	—	35,425	—	35,425
Cash	16,097	—	—	16,097
Total plan assets in fair value hierarchy	<u>\$ 16,097</u>	<u>\$ 125,573</u>	<u>\$ —</u>	<u>141,670</u>
Plan assets measured using NAV as a practical expedient: ⁽¹⁾				
Debt funds				98,077
Real estate funds				24,447
Total plan assets at fair value				<u>\$ 264,194</u>

(1) Certain investments measured using NAV as a practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in the table are intended to permit reconciliation of the fair value hierarchy to the total fair value of plan assets.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 15 - RETIREMENT PLANS - (Continued)

Cash Flows:

Contributions

Our United Kingdom subsidiary expects to contribute approximately \$4.8 million to the UK Plan in 2020.

Estimated Future Benefit Payments

The following estimated benefit payments are expected to be paid in the following years (in thousands):

	Pension Benefit Payments
2020	\$ 12,887
2021	\$ 13,240
2022	\$ 13,603
2023	\$ 13,976
2024	\$ 14,358
Succeeding five years	\$ 77,912

The following table shows certain information for the UK Plan where the accumulated benefit obligation is in excess of plan assets as of December 31, 2019 and 2018 (in thousands):

	2019	2018
Projected benefit obligation	\$ 322,766	\$ 281,776
Accumulated benefit obligation	\$ 322,766	\$ 281,776
Fair value of plan assets	\$ 307,001	\$ 264,194

We also sponsor three domestic retirement plans in which participation by new individuals is frozen. The benefit obligation associated with these plans as of December 31, 2019 and 2018 was approximately \$9.2 million and \$8.5 million, respectively. The estimated fair value of the plan assets as of December 31, 2019 and 2018 was approximately \$5.7 million and \$4.9 million, respectively. The plan assets are considered Level 1 assets within the fair value hierarchy and are predominantly invested in cash, equities, and equity and bond funds. The liability balances as of December 31, 2019 and 2018 are classified as “Other long-term obligations” in the accompanying Consolidated Balance Sheets. The measurement date for these plans is December 31 of each year. The major assumptions used in the actuarial valuations to determine benefit obligations as of December 31, 2019 and 2018 included discount rates of 3.00% to 4.00% for 2019 and 4.00% to 4.25% for 2018. Also, included was an expected rate of return of 7.00% for both 2019 and 2018. The net periodic pension cost associated with the domestic plans was approximately \$0.3 million for each of the years ended December 31, 2019 and 2018. The reclassification adjustment, net of income taxes, from accumulated other comprehensive loss into net periodic pension cost was approximately \$0.2 million for each of the years ended December 31, 2019, 2018, and 2017. The estimated loss for these plans that will be amortized from accumulated other comprehensive loss into net periodic pension cost over the next year is approximately \$0.3 million, net of income taxes. The future estimated benefit payments expected to be paid from the plans for the next ten years is approximately \$0.6 million per year.

Multiemployer Plans

We participate in approximately 200 multiemployer pension plans (“MEPPs”) that provide retirement benefits to certain union employees in accordance with various collective bargaining agreements (“CBAs”). As one of many participating employers in an MEPP, we are potentially liable with the other participating employers for such plan's underfunding either through an increase in our required contributions, or in the case of our withdrawal from the plan, a payment based upon our proportionate share of the plan's unfunded benefits, in each case, as described below. Our contributions to a particular MEPP are established by the applicable CBAs; however, our required contributions may increase based on the funded status of an MEPP and legal requirements of the Pension Protection Act of 2006 (the “PPA”), which requires substantially underfunded MEPPs to implement a funding improvement plan (“FIP”) or a rehabilitation plan (“RP”) to improve their funded status. Factors that could impact the funded status of an MEPP include, without limitation, investment performance, changes in the participant demographics, decline in the number of contributing employers, changes in actuarial assumptions and the utilization of extended amortization provisions.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 15 - RETIREMENT PLANS - (Continued)

An FIP or RP requires a particular MEPP to adopt measures to correct its underfunding status. These measures may include, but are not limited to: (a) an increase in our contribution rate as a signatory to the applicable CBA, (b) a reallocation of the contributions already being made by participating employers for various benefits to individuals participating in the MEPP, and/or (c) a reduction in the benefits to be paid to future and/or current retirees. In addition, the PPA requires that a 5% surcharge be levied on employer contributions for the first year commencing after the date the employer receives notice that the MEPP is in critical status and a 10% surcharge on each succeeding year until a CBA is in place with terms and conditions consistent with the RP.

We could also be obligated to make payments to MEPPs if we either cease to have an obligation to contribute to the MEPP or significantly reduce our contributions to the MEPP because we reduce our number of employees who are covered by the relevant MEPP for various reasons, including, but not limited to, layoffs or closure of a subsidiary assuming the MEPP has unfunded vested benefits. The amount of such payments (known as a complete or partial withdrawal liability) would equal our proportionate share of the MEPPs' unfunded vested benefits. We believe that certain of the MEPPs in which we participate may have unfunded vested benefits. Due to uncertainty regarding future factors that could trigger withdrawal liability, as well as the absence of specific information regarding the MEPP's current financial situation, we are unable to determine (a) the amount and timing of a future withdrawal liability, if any, and (b) whether our participation in these MEPPs could have a material adverse impact on our financial position, results of operations or liquidity. We did not record any withdrawal liability for the years ended December 31, 2019, 2018, and 2017.

The following table lists all domestic MEPPs to which our contributions exceeded \$2.0 million in 2019. Additionally, this table also lists all domestic MEPPs to which we contributed in 2019 in excess of \$0.5 million for MEPPs in the critical status, "red zone," and \$1.0 million for MEPPs in the endangered status, "orange or yellow zones," as defined by the PPA (in thousands):

Pension Fund	EIN/ Pension Plan Number	PPA Zone Status ⁽¹⁾		FIP/RP Status	Contributions			Contributions greater than 5% of total plan contributions ⁽²⁾	Expiration date or range of expiration dates of CBA(s)
		2019	2018		2019	2018	2017		
National Electrical Benefit Fund	53-0181657 001	Green	Green	NA	\$ 16,901	\$ 10,700	\$ 11,572	No	January 2020 to November 2022
National Automatic Sprinkler Industry Pension Fund	52-6054620 001	Red	Red	Implemented	15,924	14,888	14,228	No	June 2020 to June 2022
Plumbers & Pipefitters National Pension Fund	52-6152779 001	Yellow	Yellow	Implemented	13,821	11,868	12,550	No	February 2020 to August 2026
Sheet Metal Workers National Pension Fund	52-6112463 001	Yellow	Yellow	Implemented	11,713	10,895	12,895	No	April 2020 to June 2024
Pension, Hospitalization & Benefit Plan of the Electrical Industry-Pension Trust Account	13-6123601 001	Green	Green	NA	10,075	10,469	9,489	No	April 2020 to April 2022
Electrical Workers Local No. 26 Pension Trust Fund	52-6117919 001	Green	Green	NA	8,434	5,485	4,441	Yes	January 2020 to July 2021
Plumbers Pipefitters & Mechanical Equipment Service Local Union 392 Pension Plan	31-0655223 001	Red	Red	Implemented	6,412	6,047	6,084	Yes	June 2022
Southern California IBEW-NECA Pension Trust Fund	95-6392774 001	Yellow	Yellow	Implemented	6,277	5,754	3,669	No	May 2020 to November 2022
Central Pension Fund of the IUOE & Participating Employers	36-6052390 001	Green	Green	NA	6,253	6,384	6,070	No	February 2020 to December 2023
Sheet Metal Workers Pension Plan of Northern California	51-6115939 001	Red	Red	Implemented	6,233	5,488	6,023	No	June 2020 to June 2026
Arizona Pipe Trades Pension Trust Fund	86-6025734 001	Green	Green	NA	6,071	2,640	1,662	Yes	June 2020
Edison Pension Plan	93-6061681 001	Green	Green	NA	5,361	3,140	1,628	Yes	December 2020
Pipefitters Union Local 537 Pension Fund	51-6030859 001	Green	Green	NA	4,754	6,038	4,057	Yes	September 2020 to August 2021

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 15 - RETIREMENT PLANS - (Continued)

Pension Fund	EIN/ Pension Plan Number		PPA Zone Status ⁽¹⁾		FIP/RP Status	Contributions			Contributions greater than 5% of total plan contributions ⁽²⁾	Expiration date or range of expiration dates of CBA(s)
			2019	2018		2019	2018	2017		
Heating, Piping & Refrigeration Pension Fund	52-1058013	001	Green	Green	NA	4,185	2,619	2,437	No	June 2020 to July 2021
U.A. Local 393 Pension Trust Fund Defined Benefit	94-6359772	002	Green	Green	NA	3,858	4,298	1,540	Yes	June 2020 to June 2021
San Diego Electrical Pension Plan	95-6101801	001	Green	Green	NA	3,843	3,008	2,862	Yes	May 2020 to May 2022
Eighth District Electrical Pension Fund	84-6100393	001	Green	Green	NA	3,590	3,486	3,786	Yes	May 2020 to May 2022
Southern California Pipe Trades Retirement Fund	51-6108443	001	Green	Green	NA	3,274	3,095	3,907	No	June 2020 to August 2026
Electrical Contractors Association and Local Union 134, IBEW Joint Pension Trust of Chicago Pension Plan 2	51-6030753	002	Green	Green	NA	3,204	4,308	5,537	No	May 2020
Northern California Pipe Trades Pension Plan	94-3190386	001	Green	Green	NA	3,077	3,104	2,963	No	June 2020 to June 2021
NECA-IBEW Pension Trust Fund	51-6029903	001	Green	Green	NA	2,528	2,650	3,060	No	May 2020 to December 2020
U.A. Plumbers Local 24 Pension Fund	22-6042823	001	Green	Green	NA	2,460	3,461	3,092	Yes	April 2020
Sheet Metal Workers Pension Plan of Southern California, Arizona & Nevada	95-6052257	001	Yellow	Yellow	Implemented	2,423	1,934	3,268	No	June 2020 to June 2024
Connecticut Plumbers & Pipefitters Pension Fund	06-6050353	001	Green	Green	NA	2,231	2,104	1,988	Yes	June 2021
U.A. Local 38 Defined Benefit Pension Plan	94-1285319	001	Green	Green	NA	2,030	1,551	2,097	No	June 2020 to June 2023
Plumbing & Pipe Fitting Local 219 Pension Fund	34-6682376	001	Red	Red	Implemented	1,937	2,197	1,335	Yes	May 2020
Boilermaker-Blacksmith National Pension Trust	48-6168020	001	Red	Red	Implemented	1,681	1,446	1,083	No	September 2020 to April 2022
Plumbers & Pipefitters Local Union No. 502 & 633 Pension Fund	61-6078145	001	Yellow	Yellow	Implemented	1,596	1,167	801	No	May 2020 to July 2022
Plumbers & Pipefitters Local 162 Pension Fund	31-6125999	001	Yellow	Yellow	Implemented	1,124	1,273	801	Yes	May 2020 to May 2022
Steamfitters Local Union No. 420 Pension Plan	23-2004424	001	Red	Red	Implemented	641	706	687	No	May 2020
Other Multiemployer Pension Plans						53,567	48,026	43,604		Various
Total Contributions						<u>\$215,478</u>	<u>\$190,229</u>	<u>\$179,216</u>		

- (1) The zone status represents the most recent available information for the respective MEPP, which may be 2018 or earlier for the 2019 year and 2017 or earlier for the 2018 year.
- (2) This information was obtained from the respective plan's Form 5500 ("Forms") for the most current available filing. These dates may not correspond with our fiscal year contributions. The above noted percentages of contributions are based upon disclosures contained in the plans' Forms. Those Forms, among other things, disclose the names of individual participating employers whose annual contributions account for more than 5% of the aggregate annual amount contributed by all participating employers for a plan year. Accordingly, if the annual contribution of two or more of our subsidiaries each accounted for less than 5% of such contributions, but in the aggregate accounted for in excess of 5% of such contributions, that greater percentage is not available and accordingly is not disclosed.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 15 - RETIREMENT PLANS - (Continued)

The nature and diversity of our operations may result in volatility in the amount of our contributions to a particular MEPP for any given period. That is because, in any given market, a change in the mix, volume of, or size of our projects could result in a change in our direct labor force and a corresponding change in our contributions to the MEPP(s) dictated by the applicable CBA. Additionally, the amount of contributions to a particular MEPP could also be affected by the terms of the CBA, which could require at a particular time, an increase in the contribution rate and/or surcharges. Our contributions to various MEPPs increased by approximately \$4.8 million as a result of acquisitions made by us since 2017.

We also participated in an MEPP that is located within the United Kingdom for which we have contributed less than \$0.1 million for each of the years ended December 31, 2019, 2018, and 2017. The information that we have obtained relating to this plan is not as readily available and/or as comparable as the information that has been ascertained in the United States. Based upon the most recently available information, the plan is 100% funded. This plan closed to future contributions and participants during 2019.

Additionally, we contribute to certain multiemployer plans that provide post retirement benefits such as health and welfare benefits and/or defined contribution/annuity plans, among others. Our contributions to these plans were approximately \$153.5 million, \$135.9 million, and \$130.9 million for the years ended December 31, 2019, 2018, and 2017, respectively. Our contributions to other post retirement benefit plans increased by approximately \$11.0 million as a result of acquisitions made by us since 2017. The amount of contributions to these plans is also subject for the most part to the factors discussed above in conjunction with the MEPPs.

Defined Contribution Plans

We have defined contribution retirement and savings plans that cover eligible employees in the United States. Contributions to these plans are based on a percentage of the employee's base compensation. The expenses recognized for the years ended December 31, 2019, 2018, and 2017 for these plans were approximately \$32.4 million, \$29.8 million, and \$28.1 million, respectively. At our discretion and subject to applicable plan documents, we may make additional supplemental matching contributions to one of our defined contribution retirement and savings plans. The expenses recognized related to additional supplemental matching contributions for the years ended December 31, 2019, 2018, and 2017 were approximately \$6.8 million, \$6.1 million, and \$5.5 million, respectively.

Our United Kingdom subsidiary also has defined contribution retirement plans. The expense recognized for the years ended December 31, 2019, 2018, and 2017 was approximately \$6.1 million, \$4.9 million, and \$3.9 million, respectively.

NOTE 16 - COMMITMENTS AND CONTINGENCIES

Contractual Guarantees

We have agreements with our executive officers and certain other key management personnel providing for severance benefits for such employees upon termination of their employment under certain circumstances.

In the ordinary course of business, we, at times, guarantee obligations of our subsidiaries under certain contracts. Generally, we are liable under such an arrangement only if our subsidiary fails to perform its obligations under the contract. Historically, we have not incurred any substantial liabilities as a consequence of these guarantees.

The terms of our construction contracts frequently require that we obtain from surety companies ("Surety Companies") and provide to our customers payment and performance bonds ("Surety Bonds") as a condition to the award of such contracts. Surety Bonds are issued in return for premiums, which vary depending on the size and type of the bond, and secure our payment and performance obligations under such contracts. We have agreed to indemnify the Surety Companies for amounts, if any, paid by them in respect of Surety Bonds issued on our behalf. Public sector contracts require Surety Bonds more frequently than private sector contracts and, accordingly, our bonding requirements typically increase as the amount of our public sector work increases. In addition, at the request of labor unions representing certain of our employees, Surety Bonds are sometimes provided to secure obligations for wages and benefits payable to or for such employees. As of December 31, 2019, based on the percentage-of-completion of our projects covered by Surety Bonds, our aggregate estimated exposure, assuming defaults on all our then existing contractual obligations, was approximately \$1.2 billion. We are not aware of any losses in connection with Surety Bonds, which have been posted on our behalf, and we do not expect to incur significant losses in the foreseeable future.

We are subject to regulation with respect to the handling of certain materials used in construction, which are classified as hazardous or toxic by federal, state, and local agencies. Our practice is to avoid participation in projects principally involving the remediation or removal of such materials. However, when remediation is required as part of our contract performance, we believe

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 16 - COMMITMENTS AND CONTINGENCIES (Continued)

we comply with all applicable regulations governing the discharge of hazardous materials into the environment or otherwise relating to the protection of the environment.

At December 31, 2019, we employed approximately 36,000 people, approximately 59% of whom are represented by various unions pursuant to approximately 400 collective bargaining agreements between our individual subsidiaries and local unions. We believe that our employee relations are generally good. Only two of these collective bargaining agreements are national or regional in scope.

Restructuring expenses, primarily related to employee severance obligations, were \$1.5 million, \$2.3 million, and \$1.6 million for the years ended December 31, 2019, 2018, and 2017, respectively. As of December 31, 2019, 2018, and 2017, the balance of our restructuring related obligations yet to be paid was \$1.6 million, \$1.6 million, and \$0.5 million, respectively. The majority of obligations outstanding as of December 31, 2018 and 2017 were paid during 2019 and 2018, respectively. The obligations outstanding as of December 31, 2019 will be paid pursuant to our contractual obligations throughout 2020 and 2021. No material expenses in connection with restructuring from continuing operations are expected to be incurred during 2020.

The changes in restructuring activity by reportable segment during the years ended December 31, 2019 and 2018 were as follows (in thousands):

	United States electrical construction and facilities services segment	United States building services segment	Corporate administration	Total
Balance at December 31, 2017	\$ 452	\$ 40	\$ —	\$ 492
Charges	—	882	1,424	2,306
Payments	(422)	(746)	—	(1,168)
Balance at December 31, 2018	30	176	1,424	1,630
Charges	445	1,078	—	1,523
Payments	(30)	(842)	(723)	(1,595)
Balance at December 31, 2019	<u>\$ 445</u>	<u>\$ 412</u>	<u>\$ 701</u>	<u>\$ 1,558</u>

Government Contracts

As a government contractor, we are subject to U.S. government audits and investigations relating to our operations, fines, penalties and compensatory and treble damages, and possible suspension or debarment from doing business with the government. Based on currently available information, we believe the outcome of ongoing government disputes and investigations will not have a material impact on our financial position, results of operations or liquidity.

Legal Matters

We are involved in several legal proceedings in which damages and claims have been asserted against us. We believe that we have a number of valid defenses to such proceedings and claims and intend to vigorously defend ourselves. Other potential claims may exist that have not yet been asserted against us. We do not believe that any such matters will have a material adverse effect on our financial position, results of operations or liquidity. Litigation is subject to many uncertainties and the outcome of litigation is not predictable with assurance. It is possible that some litigation matters for which liabilities have not been recorded could be decided unfavorably to us, and that any such unfavorable decisions could have a material adverse effect on our financial position, results of operations or liquidity.

NOTE 17 Leases

On January 1, 2019, we adopted Accounting Standards Codification Topic 842, “Leases” (“ASC 842”). This pronouncement requires lessees to record right-of-use assets and corresponding lease liabilities on the balance sheet for most leases. We adopted this pronouncement utilizing the transition practical expedient which eliminates the requirement that the new lease standard be applied to comparative periods presented in the year of adoption.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 17 - LEASES (Continued)

As part of our adoption, we elected to utilize the package of practical expedients permitted under the new standard, which allowed us to not reassess: (a) whether an existing contract is or contains a lease, (b) the classification for existing leases, and (c) initial direct costs. Further, as permitted by the standard, we made an accounting policy election not to record right-of-use assets or lease liabilities for leases with an initial term of 12 months or less. Instead, consistent with previous accounting guidance, we will recognize payments for such leases in the statement of operations on a straight-line basis over the lease term.

We lease real estate, vehicles and equipment under various arrangements which are classified as either operating or finance leases. A lease exists when a contract or part of a contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. In determining whether a lease exists, we consider whether a contract provides us with both: (a) the right to obtain substantially all of the economic benefits from the use of the identified asset and (b) the right to direct the use of the identified asset.

Many of our leases include base rental periods coupled with options to renew or terminate the lease, generally at our discretion. Certain leases additionally include options to purchase the leased asset. In evaluating the lease term, we consider whether we are reasonably certain to exercise such options. To the extent a significant economic incentive exists to exercise an option, that option is included within the lease term. However, based on the nature of our lease arrangements, options generally do not provide us with a significant economic incentive and are therefore excluded from the lease term for the majority of our arrangements.

Our leases typically include a combination of fixed and variable payments. Fixed payments are generally included when measuring the right-of-use asset and lease liability. Variable payments, which primarily represent payments based on usage of the underlying asset, are generally excluded from such measurement and expensed as incurred. In addition, certain of our lease arrangements may contain a lease coupled with an arrangement to provide other services, such as maintenance, or may require us to make other payments on behalf of the lessor related to the leased asset, such as payments for taxes or insurance. As permitted by ASC 842, we have elected to account for these non-lease components together with the associated lease component. This election has been made for each of our asset classes.

The measurement of right-of-use assets and lease liabilities requires us to estimate appropriate discount rates. To the extent the rate implicit in the lease is readily determinable, such rate is utilized. However, based on information available at lease commencement for the majority of our leases, the rate implicit in the lease is not known. In these instances, we utilize an incremental borrowing rate, which represents the rate of interest that we would pay to borrow on a collateralized basis over a similar term.

Our lease arrangements generally do not contain significant restrictions or covenants; however, certain of our vehicle and equipment leases include residual value guarantees, whereby we provide a guarantee to the lessor that the value of the underlying asset will be at least a specified amount at the end of the lease. Amounts probable of being owed under these guarantees are included within the measurement of the right-of-use asset and lease liability.

Lease Position as of December 31, 2019

The following table presents the lease-related assets and liabilities reported in the Consolidated Balance Sheet as of December 31, 2019 (in thousands):

Classification on the Consolidated Balance Sheet		December 31, 2019
Assets		
Operating lease assets	Operating lease right-of-use assets	\$ 245,471
Finance lease assets	Property, plant and equipment, net	9,609
Total lease assets		<u>\$ 255,080</u>
Liabilities		
Current		
Operating	Operating lease liabilities, current	\$ 53,144
Finance	Current maturities of long-term debt and finance lease liabilities	4,088
Noncurrent		
Operating	Operating lease liabilities, long-term	204,950
Finance	Long-term debt and finance lease liabilities	5,591
Total lease liabilities		<u>\$ 267,773</u>

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 17 - LEASES (Continued)

Lease Costs

The following table presents information related to lease expense for the year ended December 31, 2019 (in thousands):

	2019
Finance lease expense:	
Amortization expense	\$ 4,575
Interest expense	427
Operating lease expense	66,650
Short-term lease expense	149,528
Variable lease expense	4,924
Total lease expense	<u>\$ 226,104</u>

Rent expense for operating leases and other rental items, including short-term equipment rentals, for the years ended December 31, 2018 and 2017 was approximately \$191.8 million and \$166.5 million, respectively. For the years ended December 31, 2019, 2018, and 2017, sublease rental income was approximately \$0.5 million, \$0.6 million, and \$0.6 million, respectively.

Lease Term and Discount Rate

The following table presents certain information related to lease terms and discount rates for leases as of December 31, 2019:

	December 31, 2019
Weighted-average remaining lease term:	
Operating leases	6.7 years
Finance leases	2.9 years
Weighted-average discount rate:	
Operating leases	4.04%
Finance leases	4.16%

Other Information

The following table presents supplemental cash flow information related to leases for the year ended December 31, 2019 (in thousands):

	2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows used for operating leases	\$ 65,757
Operating cash flows used for finance leases	\$ 427
Financing cash flows used for finance leases	\$ 4,571
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 84,089
Right-of-use assets obtained in exchange for new finance lease liabilities	\$ 5,311

For the years ended December 31, 2018 and 2017 (prior to the adoption of ASC 842), assets acquired under capital leases amounted to approximately \$1.1 million and \$1.3 million, respectively.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 17 - LEASES (Continued)

Maturity of Lease Liabilities

The following table reconciles future minimum lease payments on an undiscounted cash flow basis to the lease liabilities reported in the Consolidated Balance Sheet as of December 31, 2019 (in thousands):

	Operating Leases	Finance Leases
2020	\$ 62,457	\$ 4,391
2021	50,505	3,039
2022	42,155	1,807
2023	35,223	743
2024	26,049	138
Thereafter	80,661	129
Total minimum lease payments	297,050	10,247
Less: Amount of lease payments representing interest	(38,956)	(568)
Present value of future minimum lease payments	<u>\$ 258,094</u>	<u>\$ 9,679</u>
Current portion of lease liabilities	\$ 53,144	\$ 4,088
Noncurrent portion of lease liabilities	204,950	5,591
Present value of future minimum lease payments	<u>\$ 258,094</u>	<u>\$ 9,679</u>

NOTE 18 - ADDITIONAL CASH FLOW INFORMATION

The following presents information about cash paid for interest and income taxes for the years ended December 31, 2019, 2018, and 2017 (in thousands):

	2019	2018	2017
Cash paid during the year for:			
Interest	\$ 12,683	\$ 12,435	\$ 11,456
Income taxes	\$ 126,169	\$ 123,651	\$ 130,226

NOTE 19 - SEGMENT INFORMATION

Our reportable segments reflect certain reclassifications of prior year amounts from our United States mechanical construction and facilities services segment to our United States building services and our United States industrial services segments due to changes in our internal reporting structure.

We have the following reportable segments: (a) United States electrical construction and facilities services (involving systems for electrical power transmission and distribution; premises electrical and lighting systems; process instrumentation in the refining, chemical processing, food processing and mining industries; low-voltage systems, such as fire alarm, security and process control; voice and data communication; roadway and transit lighting; and fiber optic lines); (b) United States mechanical construction and facilities services (involving systems for heating, ventilation, air conditioning, refrigeration and clean-room process ventilation; fire protection; plumbing, process and high-purity piping; controls and filtration; water and wastewater treatment and central plant heating and cooling; cranes and rigging; millwrighting; and steel fabrication, erection and welding); (c) United States building services; (d) United States industrial services; and (e) United Kingdom building services. The “United States building services” and “United Kingdom building services” segments principally consist of those operations which provide a portfolio of services needed to support the operation and maintenance of customers’ facilities, including commercial and government site-based operations and maintenance; facility maintenance and services, including reception, security and catering services; outage services to utilities and industrial plants; military base operations support services; mobile mechanical maintenance and services; floor care and janitorial services; landscaping, lot sweeping and snow removal; facilities management; vendor management; call center services; installation and support for building systems; program development, management and maintenance for energy systems; technical consulting and diagnostic services; infrastructure and building projects for federal, state and local governmental agencies

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 19 - SEGMENT INFORMATION - (Continued)

and bodies; and small modification and retrofit projects, which services are not generally related to customers' construction programs. The "United States industrial services" segment principally consists of those operations which provide industrial maintenance and services for refineries, petrochemical plants, and other customers within the oil and gas industry. Services of this segment include refinery turnaround planning and engineering; specialty welding; overhaul and maintenance of critical process units; specialty technical services; on-site repairs, maintenance and service of heat exchangers, towers, vessels and piping; design, manufacturing, repair, and hydro blast cleaning of shell and tube heat exchangers and related equipment; and construction, maintenance, and other support services for customers within the upstream and midstream sectors.

The following tables present information about industry segments and geographic areas for the years ended December 31, 2019, 2018, and 2017 (in thousands):

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Revenues from unrelated entities:			
United States electrical construction and facilities services	\$ 2,216,600	\$ 1,954,323	\$ 1,829,567
United States mechanical construction and facilities services	3,340,337	2,962,843	2,880,148
United States building services	2,106,872	1,875,485	1,753,703
United States industrial services	1,087,543	923,109	882,836
Total United States operations	<u>8,751,352</u>	<u>7,715,760</u>	<u>7,346,254</u>
United Kingdom building services	423,259	414,871	340,745
Total worldwide operations	<u>\$ 9,174,611</u>	<u>\$ 8,130,631</u>	<u>\$ 7,686,999</u>
Total revenues:			
United States electrical construction and facilities services	\$ 2,220,582	\$ 1,959,978	\$ 1,836,985
United States mechanical construction and facilities services	3,370,960	2,998,918	2,911,033
United States building services	2,182,390	1,942,663	1,812,763
United States industrial services	1,111,264	930,724	885,198
Less intersegment revenues	(133,844)	(116,523)	(99,725)
Total United States operations	<u>8,751,352</u>	<u>7,715,760</u>	<u>7,346,254</u>
United Kingdom building services	423,259	414,871	340,745
Total worldwide operations	<u>\$ 9,174,611</u>	<u>\$ 8,130,631</u>	<u>\$ 7,686,999</u>

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 19 - SEGMENT INFORMATION - (Continued)

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Operating income (loss):			
United States electrical construction and facilities services	\$ 161,684	\$ 139,430	\$ 150,001
United States mechanical construction and facilities services	225,040	219,853	192,167
United States building services	114,754	93,827	81,720
United States industrial services	44,340	27,671	39,313
Total United States operations	<u>545,818</u>	<u>480,781</u>	<u>463,201</u>
United Kingdom building services	18,323	15,930	12,905
Corporate administration	(101,726)	(90,415)	(87,808)
Restructuring expenses	(1,523)	(2,306)	(1,577)
Impairment loss on goodwill and identifiable intangible assets	—	(907)	(57,819)
Total worldwide operations	<u>460,892</u>	<u>403,083</u>	<u>328,902</u>
Other corporate items:			
Net periodic pension (cost) income	1,553	2,743	1,652
Interest expense	(13,821)	(13,544)	(12,770)
Interest income	2,265	2,746	965
Income from continuing operations before income taxes	<u>\$ 450,889</u>	<u>\$ 395,028</u>	<u>\$ 318,749</u>
Capital expenditures:			
United States electrical construction and facilities services	\$ 5,876	\$ 5,993	\$ 4,797
United States mechanical construction and facilities services	7,890	7,504	6,665
United States building services	14,291	10,414	10,745
United States industrial services	15,802	18,386	9,696
Total United States operations	<u>43,859</u>	<u>42,297</u>	<u>31,903</u>
United Kingdom building services	3,598	870	2,166
Corporate administration	975	312	615
Total worldwide operations	<u>\$ 48,432</u>	<u>\$ 43,479</u>	<u>\$ 34,684</u>
Depreciation and amortization of property, plant and equipment:			
United States electrical construction and facilities services	\$ 7,550	\$ 6,221	\$ 6,545
United States mechanical construction and facilities services	8,764	7,803	7,504
United States building services	12,728	10,324	11,051
United States industrial services	11,154	9,943	10,589
Total United States operations	<u>40,196</u>	<u>34,291</u>	<u>35,689</u>
United Kingdom building services	2,942	3,447	3,371
Corporate administration	807	734	855
Total worldwide operations	<u>\$ 43,945</u>	<u>\$ 38,472</u>	<u>\$ 39,915</u>

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 19 - SEGMENT INFORMATION - (Continued)

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Contract assets:			
United States electrical construction and facilities services	\$ 50,813	\$ 38,412	\$ 35,060
United States mechanical construction and facilities services	61,225	49,302	50,302
United States building services	30,428	33,304	26,028
United States industrial services	9,820	14,117	3,715
Total United States operations	<u>152,286</u>	<u>135,135</u>	<u>115,105</u>
United Kingdom building services	25,544	23,108	7,516
Total worldwide operations	<u>\$ 177,830</u>	<u>\$ 158,243</u>	<u>\$ 122,621</u>
Contract liabilities:			
United States electrical construction and facilities services	\$ 173,967	\$ 163,951	\$ 178,454
United States mechanical construction and facilities services	317,083	280,846	288,699
United States building services	97,588	79,281	48,481
United States industrial services	12,404	12,307	4,615
Total United States operations	<u>601,042</u>	<u>536,385</u>	<u>520,249</u>
United Kingdom building services	22,600	15,905	3,907
Total worldwide operations	<u>\$ 623,642</u>	<u>\$ 552,290</u>	<u>\$ 524,156</u>
Long-lived assets:			
United States electrical construction and facilities services	\$ 215,780	\$ 201,333	\$ 180,990
United States mechanical construction and facilities services	530,561	334,628	340,030
United States building services	458,915	436,887	409,718
United States industrial services	615,233	630,340	643,124
Total United States operations	<u>1,820,489</u>	<u>1,603,188</u>	<u>1,573,862</u>
United Kingdom building services	9,622	9,264	11,729
Corporate administration	1,431	1,072	1,494
Total worldwide operations	<u>\$ 1,831,542</u>	<u>\$ 1,613,524</u>	<u>\$ 1,587,085</u>
Total assets:			
United States electrical construction and facilities services	\$ 834,802	\$ 702,112	\$ 617,471
United States mechanical construction and facilities services	1,536,325	1,081,005	1,071,164
United States building services	996,664	846,221	764,085
United States industrial services	829,793	864,446	798,975
Total United States operations	<u>4,197,584</u>	<u>3,493,784</u>	<u>3,251,695</u>
United Kingdom building services	181,147	146,379	131,806
Corporate administration	451,627	448,644	582,403
Total worldwide operations	<u>\$ 4,830,358</u>	<u>\$ 4,088,807</u>	<u>\$ 3,965,904</u>

During 2018, we recognized losses of \$10.0 million on a transportation project within our United States electrical construction and facilities services segment, resulting in part from contract scope issues. During 2017, we recognized \$18.1 million of gross profit associated with the recovery of certain contract costs previously disputed on a project completed in 2016 within our United States industrial services segment.

EMCOR Group, Inc. and Subsidiaries
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 20 - SELECTED UNAUDITED QUARTERLY INFORMATION

(In thousands, except per share data)

Quarterly and year-to-date computations of per share amounts are made independently; therefore, the sum of per share amounts for the quarters may not equal per share amounts for the year. The results of the construction operations of our United Kingdom segment for all periods are presented as discontinued operations.

	<u>March 31</u>	<u>June 30</u>	<u>Sept. 30</u>	<u>Dec. 31</u>
2019 Quarterly Results				
Revenues	\$ 2,158,728	\$ 2,324,202	\$ 2,287,741	\$ 2,403,940
Gross profit	\$ 308,754	\$ 346,380	\$ 335,987	\$ 364,747
Net income attributable to EMCOR Group, Inc.	\$ 72,410	\$ 83,972	\$ 81,834	\$ 86,924
Basic EPS from continuing operations	\$ 1.29	\$ 1.49	\$ 1.46	\$ 1.54
Basic EPS from discontinued operation	—	—	—	—
	<u>\$ 1.29</u>	<u>\$ 1.49</u>	<u>\$ 1.46</u>	<u>\$ 1.54</u>
Diluted EPS from continuing operations	\$ 1.28	\$ 1.49	\$ 1.45	\$ 1.54
Diluted EPS from discontinued operation	—	—	—	—
	<u>\$ 1.28</u>	<u>\$ 1.49</u>	<u>\$ 1.45</u>	<u>\$ 1.54</u>

	<u>March 31</u>	<u>June 30</u>	<u>Sept. 30</u>	<u>Dec. 31</u>
2018 Quarterly Results				
Revenues	\$ 1,900,388	\$ 1,953,886	\$ 2,047,049	\$ 2,229,308
Gross profit	\$ 269,119	\$ 290,844	\$ 309,339	\$ 336,151
Impairment loss on identifiable intangible assets	\$ —	\$ 907	\$ —	\$ —
Net income attributable to EMCOR Group, Inc.	\$ 55,374	\$ 70,816	\$ 79,373	\$ 77,968
Basic EPS from continuing operations	\$ 0.95	\$ 1.22	\$ 1.37	\$ 1.39
Basic EPS from discontinued operation	(0.00)	(0.00)	(0.01)	(0.02)
	<u>\$ 0.95</u>	<u>\$ 1.22</u>	<u>\$ 1.36</u>	<u>\$ 1.37</u>
Diluted EPS from continuing operations	\$ 0.94	\$ 1.21	\$ 1.36	\$ 1.38
Diluted EPS from discontinued operation	(0.00)	(0.00)	(0.01)	(0.02)
	<u>\$ 0.94</u>	<u>\$ 1.21</u>	<u>\$ 1.35</u>	<u>\$ 1.36</u>

NOTE 21 - SUBSEQUENT EVENTS

In January 2020, we acquired a company for an immaterial amount. This company provides mobile mechanical services within the Northeastern region of the United States, and its results will be included in our United States building services segment. The acquisition of this business will be accounted for by the acquisition method, and the amount paid will be allocated to its respective assets and liabilities, based upon the estimated fair value of such assets and liabilities at the date of acquisition by us.

On February 15, 2020, we became aware of an infiltration and encryption of portions of our information technology network. This attack disrupted our operations that utilize the impacted portions of the network. We continue to assess the magnitude of the consequences and we are actively seeking to mitigate the effects. As of the date of this filing, we continue our efforts to restore the portions of such systems that remain impacted. We are unable to predict when the entire network will be functional. We are additionally unable to estimate precisely the total costs which will result from the attack and the remediation efforts. We maintain insurance coverage for these types of incidents, however, such policies may not completely provide coverage for, or offset the costs of, this infiltration.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of EMCOR Group, Inc. and subsidiaries:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of EMCOR Group, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income, equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 27, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue Recognition from Long-term Construction Contracts

Description of the Matter

As described in Note 3 to the consolidated financial statements, the Company generally recognizes revenue from long-term construction contracts over time using a cost-to-cost input method in which the extent of progress is measured based on the ratio of costs incurred to date to the total estimated costs at completion. In addition, the revenue recognition process requires the Company to determine the transaction price that represents the amount of consideration to which the Company expects to be entitled. A significant portion of the Company's revenues for the year ended December 31, 2019 were derived from long-term construction contracts.

The determination of revenue recognized from long-term construction contracts commonly requires the Company to estimate variable consideration that arises from pending change orders, contract claims, contract bonuses, and penalties, as well as to prepare estimates of the costs to complete contracts. Factors inherent in the estimation processes include, among others, historical experience with customers, the potential long-term nature of dispute resolutions, actions of third parties as well as the Company's experience with similar types of contracts. Due to uncertainties attributed to such factors, auditing revenue recognized from long-term construction contracts involved challenging, subjective, and complex judgments.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of the Company's controls related to revenue recognition from long-term construction contracts. For example, we tested controls over the Company's determination and review of estimates of variable consideration, costs to complete, and the completeness and accuracy of data utilized in conjunction with such estimation processes.

To test the amount of revenue recognized from long-term construction contracts in the current period, we selected a sample of contracts and performed procedures to test the project revenue and cost forecasts. For example, we obtained and inspected the related contract agreements, amendments, and change orders to test the existence of customer arrangements and understand the scope and pricing of the related projects; performed inquiries of management and project personnel regarding facts and circumstances relevant to the accounting for such contracts; tested key components of the estimated costs to complete, including materials, labor, and subcontractors costs; agreed actual costs incurred to supporting documentation; and recalculated revenues recognized based on the project's percentage of completion and management's estimate of transaction price. In addition, we performed certain retrospective review procedures to assess management's historical ability to accurately estimate the transaction price and costs to complete contracts as well as to identify any significant or unusual changes in project revenue and cost forecasts during the period.

Valuation of Goodwill and Indefinite Lived Intangible Assets

Description of the Matter

At December 31, 2019, the Company's goodwill and indefinite lived trade name intangible assets were approximately \$1,063.9 million and \$199.2 million, respectively. As discussed in Note 9 to the consolidated financial statements, goodwill and trade names with indefinite lives are tested for impairment at least annually.

Auditing management's annual impairment tests was complex and highly judgmental due to the significant estimation required in determining the fair value of the reporting units for goodwill and the fair value of trade name intangible assets. In particular, the fair value estimates for goodwill were sensitive to significant assumptions inherent in the Company's discounted estimated future cash flows such as the weighted average cost of capital, revenue growth rates, and operating margins. The fair value estimates for trade name intangible assets were sensitive to significant assumptions inherent in the Company's discounted estimated future cash flows such as the royalty rate, discount rate, and revenue growth rates. The fair value estimates for goodwill and trade name intangible assets are affected by expectations about future market or economic conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the Company's impairment review processes for goodwill and trade name intangible assets. For example, we tested controls over management's review of the valuation models and significant assumptions described above, including those developed by the Company's third-party valuation specialists.

To test the estimated fair value of the Company's reporting units and trade name intangible assets, with the support of a valuation specialist, we performed audit procedures that included, among others, assessing methodologies and testing the significant assumptions and completeness and accuracy of the underlying data used by the Company in its analyses. For example, we compared the significant assumptions used by management to the historical financial results of the Company's reporting units and to current industry and economic trends. We assessed the historical accuracy of management's estimates by comparing past projections to actual performance and performed sensitivity analyses of significant assumptions to evaluate the changes in fair value that would result from changes in the assumptions. In addition, we reviewed the reconciliation of the aggregate fair value of the Company's reporting units to the market capitalization of the Company.

Valuation of Intangible Assets from the Acquisition of Batchelor & Kimball, Inc.

Description of the Matter

As further described in Note 4 to the consolidated financial statements, during the year ended December 31, 2019, the Company completed the acquisition of Batchelor & Kimball, Inc. (“BKI”) for total consideration of approximately \$220.0 million. The transaction was accounted for under the acquisition method of accounting whereby the total purchase price was allocated to assets acquired and liabilities assumed based on the estimated fair value of such assets and liabilities.

Auditing the Company’s accounting for its acquisition of BKI required complex auditor judgment due to the significant estimation uncertainty inherent in determining the fair value of identified intangible assets for acquired customer relationships and trade names. The significant estimation uncertainty was primarily due to the judgmental nature of the inputs to the valuation models used to measure the fair value of these intangible assets, as well as the sensitivity of the respective fair values to the underlying significant assumptions. The significant assumptions used to estimate the fair value of the acquired intangible assets included discount rates, customer attrition rate, revenue growth rates, operating margins, and royalty rate. These significant assumptions are forward-looking and could be affected by future economic and market conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of the Company’s controls over the valuation of intangible assets from the BKI acquisition. For example, we tested controls over management’s review of the valuation models and the significant assumptions described above.

To test the estimated fair value of the acquired customer relationships asset and trade name asset, we performed audit procedures that included, among others, assessing the appropriateness of the valuation methodologies and testing the significant assumptions discussed above and the completeness and accuracy of the underlying data used by the Company. For example, we compared the revenue growth rates, operating margins, and customer attrition rate to historical results of the acquired business and compared the royalty rate to current industry licensing agreements. We further performed sensitivity analyses to evaluate the changes in the fair value of the acquired intangible assets that would result from changes in the significant assumptions. In addition, we involved internal valuation specialists to assist in our evaluation of the valuation methodologies and certain significant assumptions used by the Company.

/s/ ERNST & YOUNG LLP

We have served as the Company’s auditor since 2002.

Stamford, Connecticut
February 27, 2020

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of EMCOR Group, Inc. and subsidiaries:

Opinion on Internal Control Over Financial Reporting

We have audited EMCOR Group, Inc. and subsidiaries' control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, EMCOR Group, Inc. and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Batchelor & Kimball, Inc. ("BKI"), which is included in the 2019 consolidated financial statements of the Company and constituted 1.9% of total assets as of December 31, 2019 and 0.4% of total revenues for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of BKI.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2019 consolidated financial statements of the Company and our report dated February 27, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of 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/ ERNST & YOUNG LLP

Stamford, Connecticut
February 27, 2020

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Based on an evaluation of our disclosure controls and procedures (as required by Rules 13a-15(b) of the Securities Exchange Act of 1934), our Chairman, President and Chief Executive Officer, Anthony J. Guzzi, and our Executive Vice President, Chief Financial Officer and Treasurer, Mark A. Pompa, have concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934) are effective as of the end of the period covered by this report.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities and Exchange Act of 1934). Our internal control over financial reporting is a process designed with the participation of our principal executive officer and principal financial officer or persons performing similar functions to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

Our internal control over financial reporting includes policies and procedures that: (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of assets, (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and Board of Directors, and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, our disclosure controls and procedures may not prevent or detect misstatements. A control system, no matter how well conceived and operated, can only provide reasonable, not absolute, assurance that the objectives of the control system are met. 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, have been detected. 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.

On November 1, 2019, EMCOR acquired Batchelor & Kimball, Inc. ("BKI"). Since EMCOR has not fully incorporated the internal controls and procedures of BKI into EMCOR's internal control over financial reporting, management excluded this business from its assessment of the effectiveness of internal control over financial reporting as of December 31, 2019, as permitted by applicable regulations. EMCOR's internal control procedures surrounding the valuation of goodwill and identifiable intangible assets related to this acquisition were, however, included in management's assessment of the effectiveness of internal control over financial reporting. Excluding goodwill and identifiable intangible assets recorded in connection with this acquisition, BKI accounted for \$93.1 million, or less than 2%, of EMCOR's total assets as of December 31, 2019. Including goodwill and intangible assets recorded in connection with this acquisition, BKI accounted for \$275.9 million, or less than 6%, of EMCOR's total assets as of December 31, 2019. BKI accounted for approximately \$38.6 million, or less than 1%, of EMCOR's total revenues for the year then ended.

As of December 31, 2019, our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management has determined that EMCOR's internal control over financial reporting is effective as of December 31, 2019.

The effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report appearing in Item 8 of this Annual Report on Form 10-K, which such report expressed an unqualified opinion on the effectiveness of our internal control over financial reporting as of December 31, 2019.

Changes in Internal Control over Financial Reporting

In addition, our management with the participation of our principal executive officer and principal financial officer or persons performing similar functions has determined that no change in our internal control over financial reporting (as that term is defined in Rules 13(a)-15(f) and 15(d)-15(f) of the Securities Exchange Act of 1934) occurred during the fourth quarter of our fiscal year ended December 31, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 with respect to directors is incorporated herein by reference to the Section of our definitive Proxy Statement for the 2020 Annual Meeting of Stockholders entitled “Election of Directors,” which Proxy Statement is to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year to which this Form 10-K relates (the “Proxy Statement”). The information required by this Item 10 concerning compliance with Section 16(a) of the Securities Exchange Act of 1934 is incorporated herein by reference to the section of the Proxy Statement entitled “Section 16(a) Beneficial Ownership Reporting Compliance.” The information required by this Item 10 concerning the Audit Committee of our Board of Directors and Audit Committee financial experts is incorporated by reference to the section of the Proxy Statement entitled “Meetings and Committees of the Board of Directors” and “Corporate Governance.” The information required by this Item 10 regarding stockholder recommendations for director candidates is incorporated by reference to the section of the Proxy Statement entitled “Recommendations for Director Candidates.” Information regarding our executive officers is contained in Part I of this Form 10-K following Item 4 under the heading “Executive Officers of the Registrant.” We have adopted a Code of Ethics that applies to our Chief Executive Officer and our Senior Financial Officers, which is listed on the Exhibit Index.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 is incorporated herein by reference to the sections of the Proxy Statement entitled “Compensation Discussion and Analysis,” “Executive Compensation and Related Information,” “Potential Post Employment Payments,” “Director Compensation,” “Compensation Committee Interlocks and Insider Participation” and “Compensation Committee Report.”

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

The information required by this Item 12 (other than the information required by Section 201(d) of Regulation S-K, which is set forth in Part II, Item 5 of this Form 10-K) is incorporated herein by reference to the sections of the Proxy Statement entitled “Security Ownership of Certain Beneficial Owners” and “Security Ownership of Management.”

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this Item 13 is incorporated herein by reference to the sections of the Proxy Statement entitled “Compensation Committee Interlocks and Insider Participation” and “Corporate Governance.”

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item 14 is incorporated herein by reference to the section of the Proxy Statement entitled “Ratification of Appointment of Independent Auditors.”

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) The following consolidated financial statements of EMCOR Group, Inc. and Subsidiaries are filed as part of this report under Part II, Item 8. Financial Statements and Supplementary Data:

Financial Statements:

Consolidated Balance Sheets - December 31, 2019 and 2018

Consolidated Statements of Operations - Years Ended December 31, 2019, 2018, and 2017

Consolidated Statements Comprehensive Income - Years Ended December 31, 2019, 2018, and 2017

Consolidated Statements of Cash Flows - Years Ended December 31, 2019, 2018, and 2017

Consolidated Statements of Equity - Years Ended December 31, 2019, 2018, and 2017

Notes to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm

(a)(2) The following financial statement schedule is included in this Form 10-K report: Schedule II - Valuation and Qualifying Accounts

All other schedules are omitted because they are not required, are inapplicable, or the information is otherwise shown in the consolidated financial statements or notes thereto.

(a)(3) For the list of exhibits, see the Exhibit Index immediately following the signature page hereof, which Exhibit Index is incorporated herein by reference.

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
(In thousands)

Description	Balance at Beginning of Year	Costs and Expenses	Deductions ⁽¹⁾	Balance at End of Year
Allowance for doubtful accounts				
Year Ended December 31, 2019	\$ 15,361	2,628	(3,523)	\$ 14,466
Year Ended December 31, 2018	\$ 17,230	2,123	(3,992)	\$ 15,361
Year Ended December 31, 2017	\$ 12,252	7,264	(2,286)	\$ 17,230

(1) Deductions primarily represent uncollectible balances of accounts receivable written off, net of recoveries.

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
2(a)	Purchase and Sale Agreement, dated as of June 17, 2013 by and among Texas Turnaround LLC, a Delaware limited liability company, Altair Strickland Group, Inc., a Texas corporation, Rep Holdings LLC, a Texas limited liability company, ASG Key Employee LLC, a Texas limited liability company, Repcon Key Employee LLC, a Texas limited liability company, Gulfstar MBII, Ltd., a Texas limited partnership, The Trustee of the James T. Robinson and Diana J. Robinson 2010 Irrevocable Trust, The Trustee of the Steven Rothbauer 2012 Descendant's Trust, The Co-Trustees of the Patia Strickland 2012 Descendant's Trust, The Co-Trustees of the Carter Strickland 2012 Descendant's Trust, and The Co-Trustees of the Walton 2012 Grandchildren's Trust (collectively, "Sellers") and EMCOR Group, Inc.	<u>Exhibit 2.1 to EMCOR's Report on Form 8-K (Date of Report June 17, 2013)</u>
3(a-1)	Restated Certificate of Incorporation of EMCOR filed December 15, 1994	<u>Exhibit 3(a-5) to EMCOR's Registration Statement on Form 10 as originally filed March 17, 1995 ("Form 10")</u>
3(a-2)	Amendment dated November 28, 1995 to the Restated Certificate of Incorporation of EMCOR	<u>Exhibit 3(a-2) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 1995 ("1995 Form 10-K")</u>
3(a-3)	Amendment dated February 12, 1998 to the Restated Certificate of Incorporation of EMCOR	<u>Exhibit 3(a-3) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 1997 ("1997 Form 10-K")</u>
3(a-4)	Amendment dated January 27, 2006 to the Restated Certificate of Incorporation of EMCOR	<u>Exhibit 3(a-4) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2005 ("2005 Form 10-K")</u>
3(a-5)	Amendment dated September 18, 2007 to the Restated Certificate of Incorporation of EMCOR	<u>Exhibit A to EMCOR's Proxy Statement dated August 17, 2007 for Special Meeting of Stockholders held September 18, 2007</u>
3(b)	Amended and Restated By-Laws and Amendments thereto	<u>Exhibit 3(b) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2016 ("2016 Form 10-K")</u>
4(a)	Fifth Amended and Restated Credit Agreement dated as of August 3, 2016 by and among EMCOR Group, Inc. and a subsidiary and Bank of Montreal, as Agent and the lenders listed on the signature pages thereof (the "Credit Agreement")	<u>Exhibit 4(a) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016 ("September 2016 Form 10-Q")</u>
4(b)	Fifth Amended and Restated Security Agreement dated as of August 3, 2016 among EMCOR, certain of its U.S. subsidiaries, and Bank of Montreal, as Agent	<u>Exhibit 4(b) to the September 2016 Form 10-Q</u>
4(c)	Fifth Amended and Restated Pledge Agreement dated as of August 3, 2016 among EMCOR, certain of its U.S. subsidiaries, and Bank of Montreal, as Agent	<u>Exhibit 4(c) to the September 2016 Form 10-Q</u>
4(d)	Fourth Amended and Restated Guaranty Agreement dated as of August 3, 2016 by certain of EMCOR's U.S. subsidiaries in favor of Bank of Montreal, as Agent	<u>Exhibit 4(d) to the September 2016 Form 10-Q</u>

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
10(a)	Form of Severance Agreement (“Severance Agreement”) between EMCOR and each of R. Kevin Matz and Mark A. Pompa	<u>Exhibit 10.1 to the April 2005 Form 8-K</u>
10(b)	Form of Amendment to Severance Agreement between EMCOR and each of R. Kevin Matz and Mark A. Pompa	<u>Exhibit 10(c) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007 (“March 2007 Form 10-Q”)</u>
10(c)	Letter Agreement dated October 12, 2004 between Anthony Guzzi and EMCOR (the “Guzzi Letter Agreement”)	<u>Exhibit 10.1 to EMCOR’s Report on Form 8-K (Date of Report October 12, 2004)</u>
10(d)	Form of Confidentiality Agreement between Anthony Guzzi and EMCOR	<u>Exhibit C to the Guzzi Letter Agreement</u>
10(e)	Form of Indemnification Agreement between EMCOR and each of its officers and directors	<u>Exhibit F to the Guzzi Letter Agreement</u>
10(f-1)	Severance Agreement (“Guzzi Severance Agreement”) dated October 25, 2004 between Anthony Guzzi and EMCOR	<u>Exhibit D to the Guzzi Letter Agreement</u>
10(f-2)	Amendment to Guzzi Severance Agreement	<u>Exhibit 10(g-2) to the March 2007 Form 10-Q</u>
10(g-1)	Continuity Agreement dated as of June 22, 1998 between R. Kevin Matz and EMCOR (“Matz Continuity Agreement”)	<u>Exhibit 10(f) to the June 1998 Form 10-Q</u>
10(g-2)	Amendment dated as of May 4, 1999 to Matz Continuity Agreement	<u>Exhibit 10(m) to the June 1999 Form 10-Q</u>
10(g-3)	Amendment dated as of January 1, 2002 to Matz Continuity Agreement	<u>Exhibit 10(o-3) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2002 (“March 2002 Form 10-Q”)</u>
10(g-4)	Amendment dated as of March 1, 2007 to Matz Continuity Agreement	<u>Exhibit 10(n-4) to the March 2007 Form 10-Q</u>
10(h-1)	Continuity Agreement dated as of June 22, 1998 between Mark A. Pompa and EMCOR (“Pompa Continuity Agreement”)	<u>Exhibit 10(g) to the June 1998 Form 10-Q</u>
10(h-2)	Amendment dated as of May 4, 1999 to Pompa Continuity Agreement	<u>Exhibit 10(n) to the June 1999 Form 10-Q</u>
10(h-3)	Amendment dated as of January 1, 2002 to Pompa Continuity Agreement	<u>Exhibit 10(p-3) to the March 2002 Form 10-Q</u>
10(h-4)	Amendment dated as of March 1, 2007 to Pompa Continuity Agreement	<u>Exhibit 10(o-4) to the March 2007 Form 10-Q</u>
10(i-1)	Change of Control Agreement dated as of October 25, 2004 between Anthony Guzzi (“Guzzi”) and EMCOR (“Guzzi Continuity Agreement”)	<u>Exhibit E to the Guzzi Letter Agreement</u>
10(i-2)	Amendment dated as of March 1, 2007 to Guzzi Continuity Agreement	<u>Exhibit 10(p-2) to the March 2007 Form 10-Q</u>
10(i-3)	Amendment to Continuity Agreements and Severance Agreements with Anthony J. Guzzi, R. Kevin Matz and Mark A. Pompa	<u>Exhibit 10(q) to EMCOR’s Annual Report on Form 10-K for the year ended December 31, 2008 (“2008 Form 10-K”)</u>

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
10(j)	Amendment dated as of March 29, 2010 to Severance Agreement with Anthony J. Guzzi, R. Kevin Matz and Mark A. Pompa	<u>Exhibit 10.1 to Form 8-K (Date of Report March 29, 2010) (“March 2010 Form 8-K”)</u>
10(k-1)	Severance Agreement dated as of October 26, 2016 between EMCOR and Maxine L. Mauricio	<u>Exhibit 10(l-1) to the September 2016 Form 10-Q</u>
10(k-2)	Continuity Agreement dated as of October 26, 2016 between EMCOR and Maxine L. Mauricio (“Mauricio Continuity Agreement”)	<u>Exhibit 10(l-2) to the September 2016 Form 10-Q</u>
10(k-3)	Amendment dated April 10, 2017 to Mauricio Continuity Agreement	<u>Exhibit 10(l-3) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017</u>
10(l-1)	EMCOR Group, Inc. Long-Term Incentive Plan (“LTIP”)	<u>Exhibit 10 to Form 8-K (Date of Report December 15, 2005)</u>
10(l-2)	First Amendment to LTIP and updated Schedule A to LTIP	<u>Exhibit 10(s-2) to 2008 Form 10-K</u>
10(l-3)	Second Amendment to LTIP	<u>Exhibit 10.2 to March 2010 Form 8-K</u>
10(l-4)	Third Amendment to LTIP	<u>Exhibit 10(q-4) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 (“March 2012 Form 10-Q”)</u>
10(l-5)	Fourth Amendment to LTIP	<u>Exhibit 10(l-5) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2013</u>
10(l-6)	Form of Certificate Representing Stock Units issued under LTIP	<u>Exhibit 10(t-2) to EMCOR’s Annual Report on Form 10-K for the year ended December 31, 2007 (“2007 Form 10-K”)</u>
10(l-7)	Fifth Amendment to LTIP	<u>Exhibit 10(l-7) to EMCOR’s Annual Report on Form 10-K for the year ended December 31, 2015 (“2015 Form 10-K”)</u>
10(l-8)	Sixth Amendment to LTIP	<u>Exhibit 10(l-8) to 2015 Form 10-K</u>
10(m)	Key Executive Incentive Bonus Plan, as amended and restated	<u>Exhibit B to EMCOR’s Proxy Statement for its Annual Meeting held June 13, 2013</u>
10(n-1)	Amended and Restated 2010 Incentive Plan	<u>Exhibit 10(q-1) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2015</u>
10(n-2)	Form of Option Agreement under 2010 Incentive Plan between EMCOR and each non-employee director with respect to grant of options upon re-election at June 11, 2010 Annual Meeting of Stockholders	<u>Exhibit 10(i)(i-2) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2010</u>
10(n-3)	Form of Option Agreement under 2010 Incentive Plan, as amended, between EMCOR and each non-employee director electing to receive options as part of annual retainer	<u>Exhibit 10(q)(q) to 2011 Form 10-K</u>
10(o)	EMCOR Group, Inc. Employee Stock Purchase Plan	<u>Exhibit C to EMCOR’s Proxy Statement for its Annual Meeting held June 18, 2008</u>
10(p)	Director Award Program Adopted May 13, 2011, as amended and restated December 14, 2011	<u>Exhibit 10(n)(n) to 2011 Form 10-K</u>
10(q)	Amendment to Option Agreements	<u>Exhibit 10(r)(r) to 2011 Form 10-K</u>
10(r)	Form of Non-LTIP Stock Unit Certificate	<u>Exhibit 10(p)(p) to the March 31, 2012 Form 10-Q</u>
10(s)	Form of Director Restricted Stock Unit Agreement	<u>Exhibit 10(k)(k) to EMCOR’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012 (“June 2012 Form 10-Q”)</u>

EXHIBIT INDEX

Exhibit No.	Description	Incorporated By Reference to or Filed Herewith, as Indicated Below
10(t)	Director Award Program, as Amended and Restated December 16, 2014	<u>Exhibit 10(z) to EMCOR's Annual Report on Form 10-K for the year ended December 31, 2014</u>
10(u)	EMCOR Group, Inc. Voluntary Deferral Plan	<u>Exhibit 10(e)(e) to 2012 Form 10-K</u>
10(v)	First Amendment to EMCOR Group, Inc. Voluntary Deferral Plan	<u>Exhibit 10(e)(e) to 2013 Form 10-K</u>
10(w)	Form of Executive Restricted Stock Unit Agreement	<u>Exhibit 10(f)(f) to 2012 Form 10-K</u>
10(y)	Executive Compensation Recoupment Policy	<u>Exhibit 10(h)(h) to 2015 Form 10-K</u>
10(z)	Restricted Stock Unit Award Agreement dated June 30, 2017 between EMCOR and Mark A. Pompa	<u>Exhibit 10(f)(f) to EMCOR's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017</u>
11	Computation of Basic EPS and Diluted EPS for the years ended December 31, 2019 and 2018	<u>Note 6 of the Notes to the Consolidated Financial Statements</u>
14	Code of Ethics of EMCOR for Chief Executive Officer and Senior Financial Officers	<u>Exhibit 14 to 2003 Form 10-K</u>
21	List of Significant Subsidiaries	<u>Filed herewith</u>
23.1	Consent of Ernst & Young LLP	<u>Filed herewith</u>
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Anthony J. Guzzi, the Chairman, President and Chief Executive Officer	<u>Filed herewith</u>
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Mark A. Pompa, the Executive Vice President, Chief Financial Officer and Treasurer	<u>Filed herewith</u>
32.1	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 by the Chairman, President and Chief Executive Officer	<u>Furnished</u>
32.2	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 by the Executive Vice President, Chief Financial Officer and Treasurer	<u>Furnished</u>
95	Information concerning mine safety violations or other regulatory matters	<u>Filed herewith</u>
101	The following materials from EMCOR Group, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2019, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Equity and (vi) the Notes to Consolidated Financial Statements.	Filed

Pursuant to Item 601(b)(4)(iii) of Regulation S-K, upon request of the Securities and Exchange Commission, the Registrant hereby undertakes to furnish a copy of any unfiled instrument which defines the rights of holders of long-term debt of the Registrant's subsidiaries.

SEE NOTE 6 TO THE ACCOMPANYING CONSOLIDATED FINANCIAL STATEMENTS FOR INFORMATION RELATING TO THE CALCULATION OF BASIC EPS AND DILUTED EPS.

LIST OF SIGNIFICANT SUBSIDIARIES**JURISDICTION OF INCORPORATION**

Dyn Specialty Contracting, Inc.	Virginia
MES Holdings Corporation	Delaware
EMCOR Construction Services, Inc.	Delaware
EMCOR International, Inc.	Delaware
EMCOR Mechanical/Electrical Services (East), Inc.	Delaware
EMCOR (UK) Limited	England
EMCOR Group (UK) plc	England
EMCOR Facilities Services, Inc.	Ohio
EMCOR-CSI Holding Co.	Delaware
FR X Ohmstede Acquisitions Co.	Delaware
RepconStrickland, Inc.	Delaware

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-8 No. 333-168503) pertaining to the 2010 Incentive Plan of EMCOR Group, Inc.,
- (2) Registration Statement (Form S-8 No. 333-152764) pertaining to the EMCOR Group, Inc. Employee Stock Purchase Plan,
- (3) Registration Statement (Form S-8 No. 333-147015) pertaining to the 2007 Incentive Plan of EMCOR Group, Inc.,
- (4) Registration Statement (Form S-8 No. 333-112940) pertaining to the EMCOR Group, Inc. Stock Option Agreements dated as of January 4, 1999, May 5, 1999, January 3, 2000, January 2, 2001, December 14, 2001, January 2, 2002, June 19, 2002, October 25, 2002, January 2, 2003, February 27, 2003, and January 2, 2004, the EMCOR Group, Inc. 2003 Non-Employee Directors' Stock Option Plan and the EMCOR Group, Inc. 2003 Management Stock Incentive Plan, and
- (5) Registration Statement (Form S-8 No. 333-186926) pertaining to the EMCOR Group, Inc. Voluntary Deferral Plan;

of our reports dated February 27, 2020, with respect to the consolidated financial statements and schedule of EMCOR Group, Inc. and subsidiaries, and the effectiveness of internal control over financial reporting of EMCOR Group, Inc. and subsidiaries, included in this Annual Report (Form 10-K) of EMCOR Group, Inc. for the year ended December 31, 2019.

/s/ ERNST & YOUNG LLP

Stamford, Connecticut

February 27, 2020

CERTIFICATION

I, Anthony J. Guzzi, certify that:

1. I have reviewed this annual report on Form 10-K of EMCOR Group, 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 27, 2020

/s/ ANTHONY J. GUZZI

Anthony J. Guzzi
Chairman, President and
Chief Executive Officer

CERTIFICATION

I, Mark A. Pompa, certify that:

1. I have reviewed this annual report on Form 10-K of EMCOR Group, 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 27, 2020

/s/ MARK A. POMPA

Mark A. Pompa
Executive Vice President,
Chief Financial Officer and Treasurer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of EMCOR Group, Inc. (the “Company”) on Form 10-K for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Anthony J. Guzzi, Chairman, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 27, 2020

/s/ ANTHONY J. GUZZI

Anthony J. Guzzi
Chairman, President and
Chief Executive Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of EMCOR Group, Inc. (the “Company”) on Form 10-K for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Mark A. Pompa, Executive Vice President, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 27, 2020

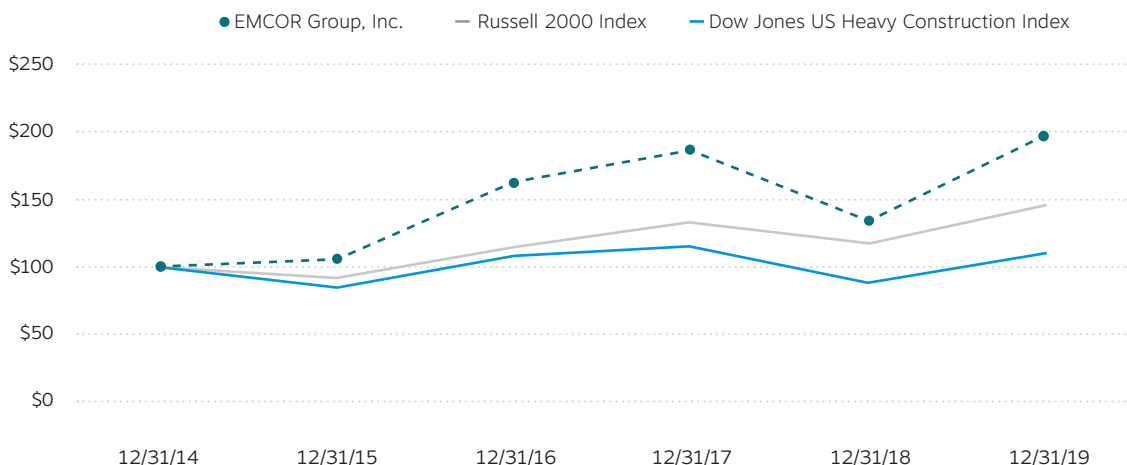
/s/ MARK A. POMPA

Mark A. Pompa
Executive Vice President,
Chief Financial Officer and Treasurer

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Comparative Five-year Total Returns

The graph assumes that \$100 was invested on December 31, 2014 in common stock of EMCOR Group, Inc., and in each of the indices and assumes reinvestment of all dividends.



Other Information

Common Stock Transfer Agent and Registrar

By Regular Mail

Computershare
PO BOX 505000
Louisville, KY 40233-5000
UNITED STATES

By Overnight Delivery

Computershare
462 South 4th Street, Suite 1600
Louisville, KY 40202-5000
UNITED STATES

Toll Free: (866) 202 6634

Toll: +1 (201) 680 6578

www.computershare.com/investor

Independent Auditors

Ernst & Young LLP
300 First Stamford Place
Stamford, CT 06902

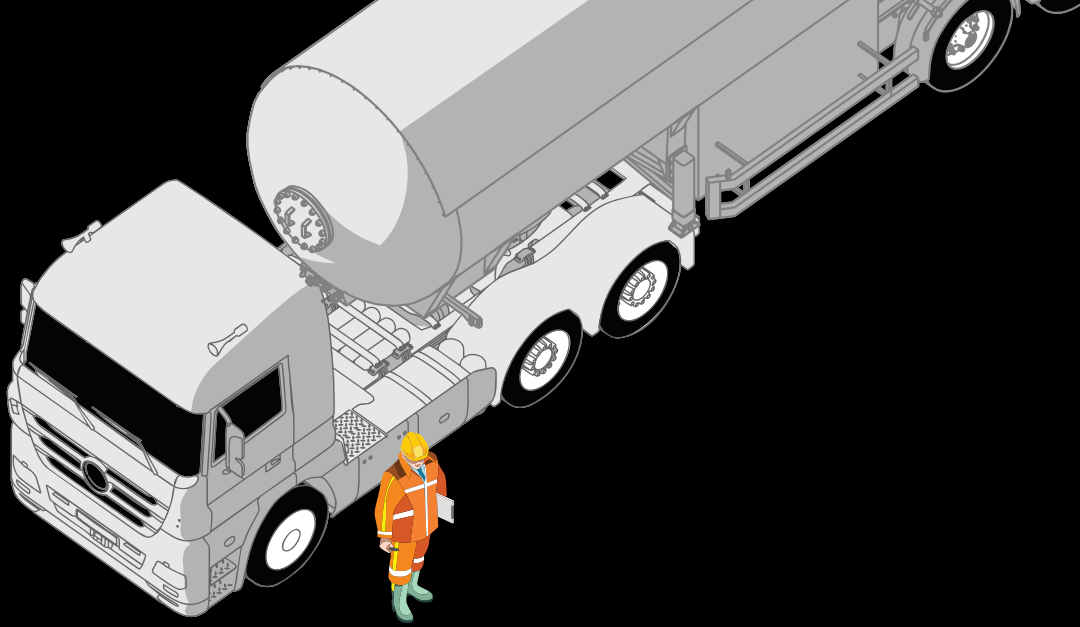
New York Stock Exchange Information

The Common Stock of EMCOR Group, Inc. is traded on the New York Stock Exchange under the symbol "EME".

The Company's Annual Report on Form 10-K as filed with the U.S. Securities and Exchange Commission may be viewed at emcorgroup.com and additional copies are available without charge upon written request to:

Investor Relations

EMCOR Group, Inc.
301 Merritt Seven
Norwalk, Connecticut 06851



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