

GREENBRIER COMPANIES INC

Form 10-K

October 27, 2017

Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549-1004

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)

OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended August 31, 2017

or

Transition Report Pursuant to Section 13 or 15(d)

of the Securities Exchange Act of 1934

for the transition period from _____ to _____

Commission File No. 1-13146

THE GREENBRIER COMPANIES, INC.

(Exact name of Registrant as specified in its charter)

Oregon

(State of Incorporation)

One Centerpointe Drive, Suite 200, Lake Oswego, OR 97035

(Address of principal executive offices)

(503) 684-7000

(Registrant's telephone number, including area code)

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

(Title of Each Class)

(Name of Each Exchange on Which Registered)

Common Stock without par value

New York Stock Exchange

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

None

Edgar Filing: GREENBRIER COMPANIES INC - Form 10-K

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 15 (d) of the Act. Yes No

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

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

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

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

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

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.

Aggregate market value of the Registrant's Common Stock held by non-affiliates as of February 28, 2017 (based on the closing price of such shares on such date) was \$1,140,715,538.

The number of shares outstanding of the Registrant's Common Stock on October 20, 2017 was 28,503,206 without par value.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of the Registrant's definitive Proxy Statement prepared in connection with the Annual Meeting of Stockholders to be held on January 5, 2018 are incorporated by reference into Parts II and III of this Report.

Table of Contents**THE GREENBRIER COMPANIES, INC.****FORM 10-K****TABLE OF CONTENTS**

	PAGE
	1
<u>FORWARD-LOOKING STATEMENTS</u>	
PART I	
Item 1. <u>BUSINESS</u>	4
Item 1A. <u>RISK FACTORS</u>	12
Item 1B. <u>UNRESOLVED STAFF COMMENTS</u>	31
Item 2. <u>PROPERTIES</u>	31
Item 3. <u>LEGAL PROCEEDINGS</u>	31
Item 4. <u>MINE SAFETY DISCLOSURES</u>	31
PART II	
Item 5. <u>MARKET FOR REGISTRANT S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES</u>	32
Item 6. <u>SELECTED FINANCIAL DATA</u>	34
Item 7. <u>MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>	35
Item 7A. <u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	50
Item 8. <u>FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA</u>	52
Item 9. <u>CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE</u>	88
Item 9A. <u>CONTROLS AND PROCEDURES</u>	88
Item 9B. <u>OTHER INFORMATION</u>	92
PART III	
Item 10. <u>DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE</u>	92
Item 11. <u>EXECUTIVE COMPENSATION</u>	92
Item 12. <u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS</u>	92
Item 13. <u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE</u>	92
Item 14. <u>PRINCIPAL ACCOUNTING FEES AND SERVICES</u>	92
PART IV	

Item 15.	<u>EXHIBITS AND FINANCIAL STATEMENT SCHEDULES</u>	93
Item 16.	<u>FORM 10-K SUMMARY</u>	97
	<u>SIGNATURES</u>	98
	<u>CERTIFICATIONS</u>	99

The Greenbrier Companies 2017 Annual Report

Table of Contents

Forward-Looking Statements

From time to time, The Greenbrier Companies, Inc. and its subsidiaries (Greenbrier or the Company) or their representatives have made or may make forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including, without limitation, statements as to expectations, beliefs and strategies regarding the future. Such forward-looking statements may be included in, but not limited to, press releases, oral statements made with the approval of an authorized executive officer or in various filings made by us with the Securities and Exchange Commission (SEC), including this filing on Form 10-K and in the Company's President's letter to stockholders that is typically distributed to the stockholders in conjunction with this Form 10-K and the Company's Proxy Statement. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Investors should not place undue reliance on forward-looking statements, which speak only as of the date they are made and are not guarantees of future performance. We undertake no obligations to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

These forward-looking statements rely on a number of assumptions concerning future events and include statements relating to:

- availability of financing sources and borrowing base and loan covenant flexibility for working capital, other business development activities, capital spending and leased railcars for syndication (sale of railcars with lease attached);
- ability to renew, maintain or obtain sufficient credit facilities and financial guarantees on acceptable terms including loan covenants;
- ability to utilize beneficial tax strategies;
- ability to grow our businesses;
- ability to obtain lease and sales contracts which provide adequate protection against attempted modifications or cancellations, changes in interest rates and increased costs of materials and components;
- ability to obtain adequate insurance coverage at acceptable rates;
- ability to convert backlog of railcar orders and obtain and execute lease syndication commitments;
- ability to obtain adequate certification and licensing of products; and
- short-term and long-term revenue and earnings effects of the above items.

The following factors, among others, could cause actual results or outcomes to differ materially from the forward-looking statements:

- fluctuations in demand for newly manufactured railcars or marine barges and for wheels, repair services and parts;
- delays in receipt of orders, risks that contracts may be canceled or modified during their term, not renewed, unenforceable or breached by the customer and that customers may not purchase the amount of products or services under the contracts as anticipated;
- our ability to maintain sufficient availability of credit facilities and to maintain compliance with or to obtain appropriate amendments to covenants under various credit agreements;
- domestic and international economic conditions including such matters as embargoes, quotas, tariffs, or modifications to existing trade agreements;
- domestic and international political and security conditions in the United States (U.S.), Europe, Latin America, the Gulf Cooperation Council (GCC) and other areas including such matters as terrorism, war, civil disruption and crime;

the policies and priorities of the federal government including those concerning international trade, infrastructure and corporate taxation;
sovereign risk related to international governments that includes, but is not limited to, governments stopping payments, repudiating their contracts, nationalizing private businesses and assets or altering foreign exchange regulations;
growth or reduction in the surface transportation industry, the enactment of policies favoring other types of surface transportation over rail transportation or the impact from technological advances;

Table of Contents

our ability to maintain good relationships with our labor force, third party labor providers and collective bargaining units representing our direct and indirect labor force;

our ability to maintain good relationships with our customers and suppliers;

our ability to renew or replace expiring customer contracts on satisfactory terms;

our ability to obtain and execute suitable lease contracts for leased railcars for syndication;

steel and specialty component price fluctuations and availability, scrap surcharges, steel scrap prices and other commodity price fluctuations and availability and their impact on product demand and margin;

the delay or failure of acquired businesses or joint ventures, assets, start-up operations, or new products or services to compete successfully;

changes in product mix and the mix of revenue levels among reporting segments;

labor disputes, energy shortages or operating difficulties that might disrupt operations or the flow of cargo;

production difficulties and product delivery delays as a result of, among other matters, costs or inefficiencies associated with expansion, start-up, or changing of production lines or changes in production rates, equipment failures, changing technologies, transfer of production between facilities or non-performance of alliance partners, subcontractors or suppliers;

lower than anticipated lease renewal rates, earnings on utilization-based leases or residual values for owned or managed leased equipment;

discovery of defects in railcars or services resulting in increased warranty costs or litigation;

physical damage, business interruption or product or service liability claims that exceed our insurance coverage;

commencement of and ultimate resolution or outcome of pending or future litigation and investigations;

natural disasters or severe or unusual weather patterns that may affect either us, our suppliers or our customers;

loss of business from, or a decline in the financial condition of, any of the principal customers that represent a significant portion of our total revenues;

competitive factors, including introduction of competitive products, new entrants into certain of our markets, price pressures, limited customer base, and competitiveness of our manufacturing facilities and products;

industry overcapacity and our manufacturing capacity utilization;

decreases or write-downs in carrying value of inventory, goodwill, intangibles or other assets due to impairment;

severance or other costs or charges associated with layoffs, shutdowns, or reducing the size and scope of operations;

changes in future maintenance or warranty requirements;

our ability to adjust to the cyclical nature of the industries in which we operate;

changes in interest rates and financial impacts from interest rates;

our ability and cost to maintain and renew operating permits;

actions or failures to act by various regulatory agencies including changing tank car or other rail car regulations;

potential environmental remediation obligations;

changes in commodity prices, including oil and gas;

risks associated with our intellectual property rights or those of third parties, including infringement, maintenance, protection, validity, enforcement and continued use of such rights;

expansion of warranty and product support terms beyond those which have traditionally prevailed in the rail supply industry;

availability of a trained work force at a reasonable cost and with reasonable terms of employment;

availability and/or price of essential raw materials, specialties or components, including steel castings, to permit manufacture of units on order;

our failure to successfully integrate joint ventures or acquired businesses or complete previously announced transactions;

discovery of previously unknown liabilities associated with acquired businesses;

the failure of, or our delay in implementing and using, new software or other technologies;

the impact of cybersecurity risks and the costs of mitigating and responding to a data security breach;

our ability to replace maturing lease and management services revenue and earnings from equipment sold from our lease fleet with revenue and earnings from new commercial transactions, including new railcar leases, additions to the lease fleet and new management services contracts;

Table of Contents

credit limitations upon our ability to maintain effective hedging programs;
financial impacts from currency fluctuations and currency hedging activities in our worldwide operations;
increased costs or other impacts on us or our customers due to changes in legislation, taxes, regulations or accounting pronouncements;
our ability to effectively execute our business and operating strategies if we become the target of shareholder activism; and
fraud, misconduct by employees and potential exposure to liabilities under the Foreign Corrupt Practices Act and other anti-corruption laws and regulations.

Any forward-looking statements should be considered in light of these factors. Words such as anticipates, believes, forecast, potential, goal, contemplates, expects, intends, plans, projects, hopes, seeks, estimates, would, should, likely, will, may, can, designed to, future, foreseeable future and similar expressions are forward-looking statements. These forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from the results contemplated by the forward-looking statements. Many of the important factors that will determine these results and values are beyond our ability to control or predict. You are cautioned not to place undue reliance on any forward-looking statements, which reflect management's opinions only as of the date hereof. Except as otherwise required by law, we do not assume any obligation to update any forward-looking statements.

In assessing forward-looking statements contained herein, readers are urged to read carefully all cautionary statements contained in this Form 10-K, including, without limitation, those contained under the heading, Risk Factors, contained in Part I, Item 1A of this Form 10-K.

All references to years refer to the fiscal years ended August 31st unless otherwise noted.

The Greenbrier Companies is a registered trademark of The Greenbrier Companies, Inc. Gunderson, Maxi-Stack, Auto-Max and YSD are registered trademarks of Gunderson LLC.

Table of Contents

PART I

Item 1. BUSINESS

Introduction

We are one of the leading designers, manufacturers and marketers of railroad freight car equipment in North America and Europe. We manufacture railcars in Brazil through a strategic investment that we account for under the equity method of accounting and are a manufacturer and marketer of marine barges in North America. Through our European manufacturing operations, we also deliver railcars for the Saudi Arabian market. We are a leading provider of wheel services, parts, leasing and other services to the railroad and related transportation industries in North America and a provider of railcar repair, refurbishment and retrofitting services in North America through an unconsolidated joint venture. Through other unconsolidated affiliates we produce rail and industrial castings, tank heads and other components.

We operate an integrated business model in North America that combines freight car manufacturing, wheel services, repair, refurbishment, retrofitting, component parts, leasing and fleet management services. Our model is designed to provide customers with a comprehensive set of freight car solutions utilizing our substantial engineering, mechanical and technical capabilities as well as our experienced commercial personnel. This model allows us to develop cross-selling opportunities and synergies among our various business segments and to enhance our margins. We believe our integrated model is difficult to duplicate and provides greater value for our customers.

We operate in four reportable segments: Manufacturing; Wheels & Parts; Leasing & Services; and GBW Joint Venture. Financial information about our business segments as well as geographic information is located in Note 19 Segment Information to our Consolidated Financial Statements. Segment information for equity method investments, other than GBW, are not included as they are not considered a reportable segment.

The Greenbrier Companies, Inc., is incorporated in Oregon. Our principal executive offices are located at One Centerpointe Drive, Suite 200, Lake Oswego, Oregon 97035, our telephone number is (503) 684-7000 and our Internet website is located at <http://www.gbrx.com>.

Products and Services

Manufacturing Segment

North American Railcar Manufacturing - We manufacture a broad array of railcar types in North America, which includes most railcar types other than coal cars. We have demonstrated an ability to capture high market shares in many of the car types we produce. The primary products we produce for the North American market are:

Intermodal Railcars - We manufacture a comprehensive range of intermodal railcars. Our most important intermodal product is our articulated double-stack railcar. The double-stack railcar is designed to transport containers stacked two-high on a single platform and provides significant operating and capital savings over other types of intermodal railcars.

Tank Cars - We produce a variety of tank cars, including both general and certain pressurized tank cars, which are designed for the transportation of products such as petroleum products, ethanol, liquefied petroleum gas, caustic soda, chlorine, urea ammonium nitrate, vegetable oils, bio-diesel and various other products and we continue to expand our

product lines.

Automotive - We manufacture a full line of railcar equipment specifically designed for the transportation of light vehicles. Our automotive offerings include the Auto-Max and Multi-Max products, which are designed to carry automobiles, SUVs and trucks efficiently.

4

The Greenbrier Companies 2017 Annual Report

Table of Contents

Conventional Railcars - We produce a variety of covered hopper cars for the grain, fertilizer, sand, cement and petrochemical industries as well as gondolas and open top hoppers for the steel, metals and aggregate markets. We also produce a wide range of boxcars, which are used in the transport of forest products, perishables, general merchandise and commodities. Our flat car products include center partition cars for the forest products industry, bulkhead flat cars, heavy-duty flat cars, and solid waste service flat cars.

European Railcar Manufacturing - Greenbrier-Astra Rail B.V. (Greenbrier-Astra Rail) was formed in 2017 between our existing European operations headquartered in Swidnica, Poland and Astra Rail, based in Arad, Romania. Greenbrier-Astra Rail is controlled by us with an approximate 75% interest and we consolidate Greenbrier-Astra Rail for financial reporting purposes. The combination creates Europe's largest end-to-end freight railcar manufacturing, engineering and repair business to reach markets throughout Europe, Eurasia, and GCC countries such as Saudi Arabia.

In 2016, we began production of tank cars to support industrial mining operations for the Saudi Arabian market and began delivery in 2017. Our European manufacturing operation produces a variety of tank, automotive and conventional freight railcar (wagon) types, including a comprehensive line of pressurized tank cars for liquid petroleum gas and ammonia and non-pressurized tank cars for light oil, chemicals and other products. In addition, we produce flat cars, coil cars for the steel and metals market, coal cars, gondolas, sliding wall cars and automobile transporter cars.

Marine Vessel Fabrication - Our Portland, Oregon manufacturing facility, located on a deep-water port on the Willamette River, includes marine vessel fabrication capabilities. The marine facilities also increase utilization of steel plate burning and fabrication capacity providing flexibility for railcar production. U.S. coastwise law, commonly referred to as the Jones Act, requires all commercial vessels transporting merchandise between ports in the U.S. to be built, owned, operated and manned by U.S. citizens and to be registered under the U.S. flag. We manufacture a broad range of Jones Act ocean-going and river barges for transporting merchandise between ports within the U.S. including conventional deck barges, double-hull tank barges, railcar/deck barges, barges for aggregates and other heavy industrial products and dump barges. Our primary focus is on the larger ocean-going vessels although the facility has the capability to compete in other marine-related products.

Wheels & Parts Segment

Wheel Services and Component Parts Manufacturing - We operate a large wheel services and component parts network in North America. Our wheel shops, operating in nine locations, provide complete wheel services including reconditioning of wheels and axles in addition to new axle machining and finishing and axle downsizing. Our component parts facilities, operating in four locations, recondition and manufacture railcar cushioning units, couplers, yokes, side frames, bolsters and various other parts. We also produce roofs, doors and associated parts for boxcars.

Leasing & Services Segment

Leasing - Our relationships with financial institutions, combined with our ownership of a lease fleet of approximately 8,300 railcars (7,200 railcars held as equipment on operating leases, 1,000 held as leased railcars for syndication and 100 held as finished goods inventory), enables us to offer flexible financing programs including operating leases and by the mile leases to our customers. In addition, we frequently originate leases of railcars, which are either newly built or refurbished by us, or buy railcars from the secondary market, and sell the railcars and attached leases to financial institutions and subsequently provide such institutions with management services under multi-year agreements. As an equipment owner and an originator of leases, we participate principally in the operating lease segment of the market. The majority of our leases are full service leases whereby we are responsible for maintenance and administration.

Assets from our owned lease fleet are periodically sold to take advantage of market conditions, manage risk and maintain liquidity.

Management Services - Our management services business offers a broad array of software and services that include railcar maintenance management, railcar accounting services (such as billing and revenue collection, car hire receivable and payable administration), total fleet management (including railcar tracking using proprietary

Table of Contents

software), administration and railcar remarketing. We currently provide management services for a fleet of approximately 336,000 railcars for railroads, shippers, carriers, institutional investors and other leasing and transportation companies in North America. In 2017, we formed our Regulatory Services Group which offers regulatory, engineering, process consulting and advocacy support to the tank car and petrochemical rail shipper community, among other services.

	Fleet Profile ⁽¹⁾		
	As of August 31, 2017		
	Owned	Managed	Total
	Units ⁽²⁾	Units	Units
Customer Profile:			
Leasing Companies	142	115,039	115,181
Class I Railroads	2,242	161,482	163,724
Shipping Companies	4,048	42,509	46,557
Non-Class I Railroads	1,000	16,676	17,676
En route to Customer Location	54	53	107
Off-lease	777	4	781
Total Units	8,263	335,763	344,026

⁽¹⁾ Each platform of a railcar is treated as a separate unit.

⁽²⁾ The percentage of owned units on lease excluding newly manufactured railcars not yet on lease was 92.1% at August 31, 2017 with an average remaining lease term of 2.0 years. The average age of owned units is 14 years.

GBW Joint Venture Segment

Railcar Repair, Refurbishment, Maintenance and Retrofitting - GBW Railcar Services LLC (GBW) operates the largest independent railcar repair shop network in North America with over 30 locations including repair shops certified by the Association of American Railroads (AAR). This network of repair shops performs heavy railcar repair and refurbishment, routine railcar maintenance for third parties and our leased and managed railcar fleet and retrofitting due to changes in tank car regulations. The results of GBW are included as part of Earnings (loss) from unconsolidated affiliates as we account for our interest in GBW under the equity method of accounting.

Unconsolidated Affiliates

GBW - We have a 50% ownership interest in GBW which performs railcar repair, refurbishment, maintenance and retrofitting services. GBW is considered a reportable segment for financial reporting purposes.

Brazilian Railcar Manufacturing - We have a 60% ownership interest in Amsted-Maxion Equipamentos E Serviços Ferroviários S.A. (Greenbrier-Maxion), the leading railcar manufacturer in South America, located near São Paulo, Brazil. Greenbrier-Maxion also assembles bogies and offers a range of aftermarket services including railcar overhaul and refurbishment.

Brazilian Castings and Component Parts Manufacturing - We have a 24.5% ownership interest in Amsted-Maxion Fundação E Equipamentos Ferroviários S.A. (Amsted-Maxion Cruzeiro). Based in Cruzeiro, Brazil, Amsted-Maxion Cruzeiro is a manufacturer of various castings and components for railcars and other heavy industrial equipment.

Amsted-Maxion Cruzeiro has a 40% ownership position in Greenbrier-Maxion and therefore is well-integrated with the operations of our Brazilian railcar manufacturer.

Other Unconsolidated Affiliates - We have other unconsolidated affiliates which primarily include joint ventures that produce rail and industrial castings and tank heads.

Table of Contents**Backlog**

The following table depicts our reported third party railcar backlog in number of railcars and estimated future revenue value attributable to such backlog, at the dates shown:

	2017	August 31, 2016	2015
New railcar backlog units ⁽¹⁾	28,600	27,500	41,300
Estimated future revenue value (in millions) ⁽²⁾	\$ 2,800	\$ 3,190	\$ 4,710

⁽¹⁾ Each platform of a railcar is treated as a separate unit.

⁽²⁾ Subject to change based on finalization of product mix.

Our total manufacturing backlog of railcar units as of August 31, 2017 was approximately 28,600 units with an estimated value of \$2.80 billion, of which 24,100 units are for direct sales and 4,500 units are for lease to third parties. Approximately 1% of backlog units and the estimated value as of August 31, 2017 was associated with our Brazilian manufacturing operations which is accounted for under the equity method. Based on current production schedules, approximately 16,000 units in the August 31, 2017 backlog are scheduled for delivery in 2018. The balance of the production is scheduled for delivery in 2019 and beyond. Multi-year supply agreements are a part of rail industry practice. Backlog units for lease may be syndicated to third parties or held in our own fleet depending on a variety of factors. A portion of the orders included in backlog reflects an assumed product mix. Under terms of the orders, the exact mix and pricing will be determined in the future, which may impact the dollar amount of backlog. Marine backlog as of August 31, 2017 was \$42 million compared to \$114 million as of August 31, 2016.

Our backlog of railcar units and marine vessels is not necessarily indicative of future results of operations. Certain orders in backlog are subject to customary documentation and completion of terms. Customers may attempt to cancel or modify orders in backlog. Historically, little variation has been experienced between the quantity ordered and the quantity actually delivered, though the timing of deliveries may be modified from time to time. We cannot guarantee that our reported railcar backlog will convert to revenue in any particular period, if at all.

Customers

Our customers include railroads, leasing companies, financial institutions, shippers, carriers and transportation companies. We have strong, long-term relationships with many of our customers. We believe that our customers preference for high quality products, our technological leadership in developing innovative products and competitive pricing of our railcars have helped us maintain our long-standing relationships with our customers.

In 2017, revenue from one customer, TTX Company (TTX), accounted for approximately 20% of total revenue, 23% of Manufacturing revenue and 15% of Wheels & Parts revenue. No other customers accounted for greater than 10% of total revenue.

Raw Materials and Components

Our products require a supply of materials including steel and specialty components such as brakes, wheels and axles. Specialty components purchased from third parties represent a significant amount of the cost of most freight cars. Our customers often specify particular components and suppliers of such components. Although the number of alternative suppliers of certain specialty components has declined in recent years, there are at least two suppliers for these components.

Certain materials and components are periodically in short supply which could potentially impact production at our new railcar and refurbishment facilities. In an effort to mitigate shortages and reduce supply chain costs, we have entered into strategic alliances and multi-year arrangements for the global sourcing of certain materials and components, we operate a replacement parts business and we continue to pursue strategic opportunities to protect and enhance our supply chain. We periodically make advance purchases to avoid possible shortages of material due to capacity limitations of component suppliers, shipping and transportation delays and possible price increases.

Table of Contents

In 2017, the top ten suppliers for all inventory purchases accounted for approximately 53% of total purchases. Amsted Rail Company, Inc. accounted for 22% of total inventory purchases in 2017. No other suppliers accounted for more than 10% of total inventory purchases. We believe we maintain good relationships with our suppliers.

Competition

There are currently seven major railcar manufacturers competing in North America. In addition, a number of small manufacturers have recently entered the market. We believe that in Europe we are in the top tier of railcar manufacturers. European freight car manufacturers are largely located in central and eastern Europe where labor rates are lower and work rules are more flexible. Through our 60% ownership interest in Greenbrier-Maxion, we are the leading railcar manufacturer in South America. The railcar manufacturing industry is becoming more global as customers are purchasing railcars from manufacturers outside of their geographic region. In all railcar markets that we serve or participate in, we compete on the basis of quality, price, reliability of delivery, product design and innovation, reputation and customer service and support.

Competition in the marine industry is dependent on the type of product produced. There are few competitors that build product types similar to ours. We compete on the basis of price, quality, reliability of delivery, launching capacity and experience with certain product types.

Competition in the wheels & parts and repair businesses is dependent on the type of product or service provided. There are many competitors in the railcar repair and refurbishment business and an increasing number of competitors in the wheel services and other parts businesses. We compete primarily on the basis of quality, timeliness of delivery, customer service, location of shops, price and engineering expertise.

There are at least twenty institutions that provide railcar leasing and services similar to ours. Many of them are also customers that buy new railcars from our manufacturing facilities and used railcars from our lease fleet, as well as utilize our management services. Many of these institutions have greater resources than we do on our own balance sheet. We compete primarily on the basis of quality, price, delivery, reputation, service offerings and deal structuring and syndication ability. We believe our strong servicing capability and our ability to sell railcars with a lease attached (syndicate railcars), integrated with our manufacturing, repair shops, railcar specialization and expertise in particular lease structures provide a strong competitive position.

Marketing and Product Development

In North America, we leverage an integrated marketing and sales effort to coordinate relationships in our various segments. We provide our customers with a diverse range of equipment and financing alternatives designed to satisfy each customer's unique needs, whether the customer is buying new equipment, refurbishing existing equipment or seeking to outsource the maintenance or management of equipment. These custom programs may involve a combination of railcar products, leasing, refurbishing and remarketing services. In addition, we provide customized maintenance management, equipment management, accounting and compliance services and proprietary software solutions.

In Europe and Brazil, we maintain relationships with customers through country-specific sales personnel. Our engineering and technical staff works closely with their customer counterparts on the design and certification of railcars. Many European railroads are state-owned and are subject to European Union (EU) regulations covering the tender of government contracts.

Through our research and customer relationships, insights are derived into the potential need for new products and services. Marketing and engineering personnel collaborate to evaluate opportunities and develop new products and features. For example, we continue to upgrade and expand our tank car and covered hopper product offerings in North America. Research and development costs incurred during the years ended August 31, 2017, 2016 and 2015 were \$4.2 million, \$2.7 million and \$2.5 million, respectively.

Table of Contents

Patents and Trademarks

We have a number of U.S. and non-U.S. patents of varying duration, and pending patent applications, registered trademarks, copyrights and trade names that are important to our products and product development efforts. The protection of our intellectual property is important to our business and we have a proactive program aimed at protecting our intellectual property and the results from our research and development.

Environmental Matters

We are subject to national, state and local environmental laws and regulations concerning, among other matters, air emissions, wastewater discharge, solid and hazardous waste disposal and employee health and safety. Prior to acquiring facilities, we usually conduct investigations to evaluate the environmental condition of subject properties and may negotiate contractual terms for allocation of environmental exposure arising from prior uses. We operate our facilities in a manner designed to maintain compliance with applicable environmental laws and regulations. Environmental studies have been conducted on certain of our owned and leased properties that indicate additional investigation and some remediation on certain properties may be necessary.

Portland Harbor Site

The Company's Portland, Oregon manufacturing facility is located adjacent to the Willamette River. In December 2000, the U.S. Environmental Protection Agency (EPA) classified portions of the Willamette River bed known as the Portland Harbor, including the portion fronting our manufacturing facility, as a federal National Priority List or Superfund site due to sediment contamination (the Portland Harbor Site). Our company and more than 140 other parties have received a General Notice of potential liability from the EPA relating to the Portland Harbor Site. The letter advised us that we may be liable for the costs of investigation and remediation (which liability may be joint and several with other potentially responsible parties) as well as for natural resource damages resulting from releases of hazardous substances to the site. Ten private and public entities, including us (the Lower Willamette Group or LWG), signed an Administrative Order on Consent (AOC) to perform a remedial investigation/feasibility study (RI/FS) of the Portland Harbor Site under EPA oversight, and several additional entities have not signed such consent, but nevertheless contributed money to the effort. The EPA-mandated RI/FS was produced by the LWG and cost over \$110 million during a 17-year period. We bore a percentage of the total costs incurred by the LWG in connection with the investigation. Our aggregate expenditure during the 17-year period was not material. Some or all of any such outlay may be recoverable from other responsible parties. The LWG requested in August 2017 that the AOC be terminated since the EPA issued its Record of Decision (ROD) for the Portland Harbor Site on January 6, 2017.

Separate from the process described above which focused on the type of remediation to be performed at the Portland Harbor Site and the schedule for such remediation, 83 parties, including the State of Oregon and the federal government, entered into a non-judicial mediation process to try to allocate costs associated with remediation of the Portland Harbor site. Approximately 110 additional parties signed tolling agreements related to such allocations. On April 23, 2009, we and the other AOC signatories filed suit against 69 other parties due to a possible limitations period for some such claims; *Arkema Inc. et al v. A & C Foundry Products, Inc. et al*, U.S. District Court, District of Oregon, Case #3:09-cv-453-PK. All but 12 of these parties elected to sign tolling agreements and be dismissed without prejudice, and the case has been stayed by the court. The allocation process is continuing in parallel with the process to define the remediation steps.

The EPA's January 6, 2017 ROD identifies a clean-up remedy that the EPA estimates will take 13 years of active remediation, followed by 30 years of monitoring with an estimated undiscounted cost of \$1.7 billion. The EPA typically expects its cost estimates to be accurate within a range of -30% to +50%, but this ROD states that changes in

costs are likely to occur as a result of new data it wants to collect over a 2-year period prior to final remedy design. The ROD identifies 13 Sediment Decision Units. One of the units, RM9W, includes the nearshore area of the river sediments offshore of our Portland, Oregon manufacturing facility as well as upstream and downstream of the facility. It also includes a portion of our riverbank. The ROD does not break down total remediation costs by Sediment Decision Unit.

Table of Contents

On January 30, 2017 the Confederated Tribes and Bands of Yakama Nation sued 33 parties including our company as well as the United States and the State of Oregon for costs it incurred in assessing alleged natural resource damages to the Columbia River from contaminants deposited in Portland Harbor. *Confederated Tribes and Bands of the Yakama Nation v. Air Liquide America Corp., et al.*, United States Court for the District of Oregon Case No. 3:17-CV-00164-SB. We, along with many of the other defendants, have moved to dismiss the case. That motion is pending. The complaint does not specify the amount of damages the Plaintiff will seek.

The ROD does not address responsibility for the costs of clean-up, nor does it allocate such costs among the potentially responsible parties. Responsibility for funding and implementing the EPA's selected cleanup remedy will be determined at an unspecified later date. Based on the investigation to date, we believe we did not contribute in any material way to contamination in the river sediments or the damage of natural resources in the Portland Harbor Site and that the damage in the area of the Portland Harbor Site adjacent to our property precedes our ownership of the Portland, Oregon manufacturing facility. Because these environmental investigations are still underway, including the collection of new pre-remedial design sampling data by EPA, sufficient information is currently not available to determine our liability, if any, for the cost of any required remediation or restoration of the Portland Harbor Site or to estimate a range of potential loss. Based on the results of the pending investigations and future assessments of natural resource damages, we may be required to incur costs associated with additional phases of investigation or remedial action, and may be liable for damages to natural resources. In addition, we may be required to perform periodic maintenance dredging in order to continue to launch vessels from its launch ways in Portland, Oregon, on the Willamette River, and the river's classification as a Superfund site could result in some limitations on future dredging and launch activities. Any of these matters could adversely affect our business and Consolidated Financial Statements, or the value of our Portland property.

We have entered into a Voluntary Cleanup Agreement with the Oregon Department of Environmental Quality (DEQ) in which we agreed to conduct an investigation of whether, and to what extent, past or present operations at the Portland property may have released hazardous substances into the environment. We have also signed an Order on Consent with the DEQ to finalize the investigation of potential onsite sources of contamination that may have a release pathway to the Willamette River. Interim precautionary measures are also required in the order and we are discussing with the DEQ potential remedial actions which may be required. Our aggregate expenditure has not been material, however we could incur significant expenses for remediation. Some or all of any such outlay may be recoverable from other responsible parties.

Regulation

We must comply with the rules of the U.S. Department of Transportation (USDOT) and the administrative agencies it oversees including the Federal Railroad Administration in the U.S. and Transport Canada in Canada who administer and enforce laws and regulations relating to railroad safety. These regulations govern equipment and safety appliance standards for freight cars and other rail equipment used in interstate commerce. The AAR promulgates a wide variety of rules and regulations governing the safety and design of equipment, relationships among railroads and other railcar owners with respect to railcars in interchange, and other matters. The AAR also certifies railcar builders and component manufacturers that provide equipment for use on North American railroads. These regulations require maintaining certifications with the AAR as a railcar builder, repair and service provider and component manufacturer, and products sold and leased by us in North America must meet AAR, Transport Canada, and Federal Railroad Administration standards.

The primary regulatory and industry authorities involved in the regulation of the ocean-going barge industry are the U.S. Coast Guard, the Maritime Administration of the USDOT, and private industry organizations such as the American Bureau of Shipping.

The regulatory environment in Europe consists of a combination of EU regulations and country specific regulations, including a harmonized set of Technical Standards for Interoperability of freight wagons throughout the EU. The regulatory environment in Brazil consists of oversight from the Ministry of Transportation, the National Agency of Ground Transportation and the National Association of Railroad Transporters.

Table of Contents

Employees

As of August 31, 2017, we had 11,917 full-time employees at our consolidated entities, consisting of 11,174 employees in Manufacturing, 481 in Wheels & Parts and 262 employees in Leasing & Services and corporate. In Manufacturing, 7,697 employees, all of whom are located in Mexico and Europe, are represented by unions. At our Wheels & Parts locations, 14 employees are represented by a union. We believe that our relations with our employees are generally good.

Additional Information

We are a reporting company and file annual, quarterly, current and special reports, proxy statements and other information with the SEC. Through a link on the Investor Relations section of our website, <http://www.gbrx.com>, we make available the following filings as soon as reasonably practicable after they are electronically filed with or furnished to the SEC: our Annual Report on Form 10-K; Quarterly Reports on Form 10-Q; Current Reports on Form 8-K; and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended. All such filings are available free of charge. Copies of our Audit Committee Charter, Compensation Committee Charter, Nominating and Corporate Governance Committee Charter and the Company's Corporate Governance Guidelines are also available on our web site at <http://www.gbrx.com>. In addition, each of the reports and documents listed above are available free of charge by contacting our Investor Relations Department at The Greenbrier Companies, Inc., One Centerpointe Drive, Suite 200, Lake Oswego, Oregon 97035.

Table of Contents

Item 1A. RISK FACTORS

In addition to the risks outlined in this annual report under the heading Forward-Looking Statements, as well as other comments included herein regarding risks and uncertainties, the following risk factors should be carefully considered when evaluating our company. Our business, financial condition or financial results could be materially and adversely affected by any of these risks. In addition, new risks may emerge at any time, and we cannot predict those risks or estimate the extent to which they may affect us.

The cyclical nature of our business, economic downturns or a rising interest rate environment can result in lower demand for our products and services and reduced revenue.

Our business is cyclical. Overall economic conditions and the purchasing practices of buyers have a significant effect upon our business due to the impact on demand for our products and services. As a result, during downturns, we could operate with a lower level of backlog and may slow down or halt production at some or all of our facilities. Economic conditions that result in higher interest rates increase the cost of new leasing arrangements, which could cause some of our leasing customers to lease fewer of our railcars or demand shorter lease terms. An economic downturn or increase in interest rates may reduce demand for our products and services, resulting in lower sales volumes, lower prices, lower lease utilization rates and decreased profits.

Interest rates remain close to historically low levels. Higher interest rates could increase the cost of, or potentially deter, new leasing arrangements with our customers, reduce our ability to syndicate railcars under lease to financial institutions, or impact the sales price we may receive on such syndications, any of which could materially adversely affect our business, financial condition and results of operations.

A change in our product mix due to shifts in demand or fluctuations in commodity and energy prices could have an adverse effect on our profitability.

We manufacture and, through GBW, repair a variety of railcars. The demand for specific types of these railcars and mix of repair and refurbishment work varies from time to time. In addition, fluctuations in commodity and energy prices, including crude oil and gas prices, could negatively impact the activities of our customers resulting in a corresponding adverse effect on the demand for our products and services. These shifts in demand could affect our results of operations and could have an adverse effect on our profitability. Demand for railcars that are used to transport crude oil and other energy related products is dependent on the demand for these commodities. Prices for oil and gas are subject to large fluctuations in response to relatively minor changes in the supply of, and demand for, oil and gas, market uncertainty and a variety of other economic factors that are beyond our control.

A decline in performance of the rail freight industry would have an adverse effect on our financial condition and results of operations.

Our future success depends in part upon the performance of the rail freight industry, which in large part depends on the health of the economy. If railcar loadings, railcar and railcar components replacement rates or refurbishment rates or industry demand for our railcar products weaken or otherwise do not materialize, if railcar transportation becomes more efficient from an increase in velocity or a decrease in dwell times, if there is a negative impact due to technological advances or if the rail freight industry becomes oversupplied, our financial condition and results of operations would be adversely affected.

Our backlog is not necessarily indicative of the level of our future revenues.

Our manufacturing backlog represents future production for which we have written orders from our customers in various periods, and estimated potential revenue attributable to those orders. Some of this backlog is subject to

Table of Contents

certain conditions, including potential adjustment to prices due to changes in prevailing market prices, or due to lower prices for new orders accepted by us from other customers for similar cars on similar terms and conditions during relevant time periods. Our reported backlog may not be converted to revenue in any particular period and some of our contracts permit cancellations with limited compensation that would not replace lost revenue or margins. In addition, some customers may attempt to cancel or modify a contract even if the contract does not allow for such cancellation or modification, and we may not be able to recover all revenue or earnings lost due to a breach of contract. The likelihood of attempted cancellations or modifications of contracts generally increases during periods of market weakness. Actual revenue from such contracts may not equal our anticipated revenues based on our backlog, and therefore, our backlog is not necessarily indicative of the level of our future revenues.

We derive a significant amount of our revenue from a limited number of customers, the loss of or reduction of business from one or more of which could have an adverse effect on our business.

A significant portion of our revenue is generated from a few major customers. Although we have some long-term contractual relationships with our major customers, we cannot be assured that our customers will continue to purchase or lease our products or services or that they will continue to do so at historical levels. A reduction in the purchasing or leasing of our products or a termination of our services by one or more of our major customers could have an adverse effect on our business and operating results.

We could be unable to lease railcars at satisfactory rates, remarket leased railcars on favorable terms upon lease termination or realize the expected residual values due to changes in scrap prices upon lease termination, which could reduce our revenue and decrease our overall return or effect our ability to sell leased assets in the future.

The profitability of our railcar leasing business depends on our ability to lease railcars to our customers at satisfactory rates, and to re-market, sell or scrap railcars we own or manage upon the expiration of existing lease terms. The total rental payments we receive under our operating leases do not fully amortize the acquisition costs of the leased equipment, which exposes us to risks associated with remarketing the railcars and the risk of not realizing the expected residual values. Our ability to lease or remarket leased railcars profitably is dependent upon several factors, including, but not limited to, market and industry conditions, cost of and demand for competing used or newer models, costs associated with the refurbishment of the railcars, market demand or governmental mandate for refurbishment, assumptions related to expected residual values and interest rates. A downturn in the industries in which our lessees operate and decreased demand for railcars could also increase our exposure to re-marketing risk because lessees may demand shorter lease terms, requiring us to re-market leased railcars more frequently. Furthermore, the resale market for previously leased railcars has a limited number of potential buyers. From August 31, 2014 to August 31, 2017, the percentage of railcars in the fleet on lease has declined from approximately 98% to 92%. Our inability to lease, re-market or sell leased railcars on favorable terms could result in reduced revenues and margins or net gain on disposition of equipment and decrease our overall returns and affect our ability to syndicate railcars to investors.

Risks related to our operations outside of the U.S. could adversely affect our operating results.

Our current operations outside of the U.S. and any future expansion of our international operations are subject to the risks associated with foreign and cross-border business transactions and activities. Political, legal, trade, financial market or economic changes or instability could limit or curtail our foreign business activities and operations. Some foreign countries in which we operate or may operate have regulatory authorities that regulate railroad safety, railcar design and railcar component part design, performance and manufacturing. If we fail to obtain and maintain certifications of our railcars and railcar parts within the various foreign countries where we operate or may operate, we may be unable to market and sell our railcars in those countries. In addition, unexpected changes in regulatory

requirements, tariffs and other trade barriers, more stringent rules relating to labor or the environment, adverse tax consequences and currency and price exchange controls could limit operations and make the manufacture and distribution of our products difficult. Sovereign risk exists related to international governments that include, but may not be limited to, governments stopping payments or

Table of Contents

repudiating, renegotiating or nullifying their contracts, nationalizing private businesses and assets or altering banking, foreign exchange or tax regulations. The uncertainty of the legal environment or geo-political risks in these and other areas could limit our ability to enforce our rights effectively. We may experience longer customer payment cycles, difficulty in collecting accounts receivable or an inability to effectively protect intellectual property. Because we have operations outside the U.S., we could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act and similar worldwide anti-corruption laws. We operate in parts of the world that have experienced governmental corruption to some degree, and in certain circumstances, strict compliance with anti-corruption laws may conflict with local customs and practices. The failure to comply with laws governing international business practices may result in substantial penalties and fines. Any international expansion or acquisition that we undertake could amplify these risks related to operating outside of the U.S. In addition, in 2015, we began to establish a presence in the GCC region and Latin America and are exploring market opportunities in Eastern Europe and other emerging markets. Our development of customer relationships in these areas may expose us to uncertainties arising from local business practices, judicial processes, cultural considerations and international political and trade tensions and our limited knowledge of foreign markets or our inability to protect our interests.

If we are unable to successfully manage the risks associated with our global business, our results of operations, financial condition, liquidity and cash flows may be negatively impacted.

Changes impacting international trade and corporate tax provisions related to the global sales and production of our products may have an adverse effect on our financial condition and results of operations.

We own, lease, operate or have invested in joint ventures or entities which have manufacturing facilities in Mexico, Brazil and Europe. Our business benefits from free trade agreements such as the North American Free Trade Agreement (NAFTA) and we also rely on various U.S. corporate tax provisions related to international commerce as we build, market and sell our products globally. NAFTA and future import taxes are under scrutiny by the current U.S. administration. On August 16, 2017 the U.S. Trade Representative opened the renegotiation of NAFTA with the governments of Canada and Mexico. Negotiations continue and the U.S. administration has periodically indicated a willingness to exercise its right to declare its intent to withdraw from NAFTA after a six month notice period. Any changes in trade treaties, corporate tax policy, import taxes and foreign policies could adversely and significantly affect our financial condition and results of operations.

The rail freight industry could become oversupplied and the use of railcars as a significant mode of transporting freight could decline, become more efficient over time, experience a shift in types of modal transportation, and/or certain railcar types could become obsolete.

The rail freight industry could become oversupplied which could have a significant impact on the pricing, lease rates or demand for new railcars. In addition, if railcar transportation becomes more efficient from an increase in velocity or a decrease in idle times, especially if coupled with lower freight volumes, some of which may be permanent due to a reduction in coal volumes, this could significantly reduce the demand for our products and could adversely affect our results of operations. As the freight transportation markets we serve continue to evolve and become more efficient or are disrupted through technological developments, the use of railcars may decline in favor of other more economic modes of transportation. Features and functionality specific to certain railcar types could result in those railcars becoming obsolete as customer requirements for freight delivery change. Our operations may be adversely impacted by changes in the preferred method used by customers to ship their products or changes in demand for particular products. The industries in which our customers operate are driven by dynamic market forces and trends, which are in turn influenced by economic and political factors. Demand for our railcars may be significantly affected by changes in the markets in which our customers operate. A significant reduction in customer demand for transportation or manufacture of a particular product or change in the preferred method of transportation used by customers to ship their

products could result in reduced demand for railcars and the economic obsolescence of our railcars, including those leased by our customers.

Table of Contents

We face aggressive competition by a concentrated group of competitors and a number of factors may influence our performance. If we are unable to compete successfully, our market share, margin and results of operations may be adversely affected.

We face aggressive competition by a concentrated group of competitors in all geographic markets and in each area of our business. In addition, other companies may attempt to enter markets in which we compete. Some of these competitors are owned or financially supported by foreign countries or sovereign wealth funds, and may potentially sell products and services below cost, or otherwise to compete unfairly, in order to gain market share. These markets are intensely competitive and we expect it to remain so in the foreseeable future. Competitive factors, including introduction of competitive products, new entrants into certain of our markets, price pressures, limited customer base and the relative competitiveness of our manufacturing facilities and products affect our ability to compete effectively. In addition, new technologies or the introduction of new railcars or other product offerings by our competitors could render our products obsolete or less competitive. If we do not compete successfully, our market share, margin and results of operation may be adversely affected.

We may pursue strategic opportunities, including new joint ventures, acquisitions and new business endeavors that involve inherent risks, any of which may cause us not to realize anticipated benefits and we could have difficulty integrating the operations of companies that we acquire or joint ventures we enter into, which could adversely affect our results of operations.

We may not be able to successfully identify suitable joint venture, acquisition and new business endeavors to invest in or complete potential transactions on acceptable terms. Our identification of suitable joint venture opportunities, acquisition candidates and new business endeavors involve risks inherent in assessing the values, strengths, weaknesses, risks and profitability of these opportunities. Our failure to identify suitable joint ventures, acquisition opportunities and new business endeavors may restrict our ability to grow our business. If we are successful in pursuing such opportunities, we may be required to expend significant funds or incur additional debt, which could materially adversely affect our results of operations and limit our ability to obtain financing for working capital or other purposes and we may be more vulnerable to economic downturns and competitive pressures.

The success of our acquisition and joint venture strategies depends upon our ability to successfully complete acquisitions, to enter into joint ventures and to integrate any businesses that we acquire into our existing business. The integration of acquired business operations could disrupt our business by causing unforeseen operating difficulties, diverting management's attention from day-to-day operations and requiring significant financial resources that would otherwise be used for the ongoing development of our business. The difficulties of integration could be increased by the necessity of coordinating geographically dispersed organizations, integrating personnel with disparate business backgrounds and combining different corporate cultures. Each of these circumstances could be more likely to occur or be more severe in consequence in the case of an acquisition or joint venture involving a business that is outside of our core areas of expertise. In addition, we could be unable to retain key employees or customers of the combined businesses. We could face integration issues including those related to operations, internal controls, information systems and operational functions of the acquired companies and we also could fail to realize cost efficiencies or synergies that we anticipated when selecting our acquisition candidates and joint ventures. Any of these items could adversely affect our results of operations.

If we or our joint ventures fail to complete capital expenditure projects on time and within budget, or if these projects, once completed, fail to operate as anticipated, such failure could adversely affect our business, financial condition and results of operations.

From time-to-time, we, or our joint ventures, undertake strategic capital projects in order to enhance, expand and/or upgrade facilities and operational capabilities. Our ability, and our joint ventures' ability, to complete these projects on time and within budget, and for us to realize the anticipated increased revenues or otherwise realize acceptable returns on these investments or other strategic capital projects that may be undertaken is subject to a number of risks. Many of these risks are beyond our control, including a variety of market, operational, permitting, and labor related factors. In addition, the cost to implement any given strategic capital project

Table of Contents

ultimately may prove to be greater than originally anticipated. If we, or our joint ventures, are not able to achieve the anticipated results from the implementation of any of these strategic capital projects, or if unanticipated implementation costs are incurred, our business, financial condition and results of operations may be adversely affected.

A failure to design or manufacture products or technologies or to achieve timely certification or market acceptance of new products or technologies could have an adverse effect on our profitability.

We continue to introduce new railcar product innovations and technologies, and we periodically accept orders prior to receipt of railcar certification or proof of ability to manufacture a quality product that meets customer standards. We could be unable to successfully design or manufacture these new railcar product innovations or technologies. Our inability to develop and manufacture such new product innovations or technologies in a timely fashion and profitable manner, obtain timely certification, or achieve market acceptance, or the existence of quality problems in our new products, could have a material adverse effect on our revenue and results of operations and subject us to penalties, cancellation of orders and/or other damages.

Our relationships with our joint venture and alliance partners could be unsuccessful, which could adversely affect our business.

We have entered into several joint venture agreements and other alliances or investments with other companies to increase our sourcing alternatives, reduce costs, to produce new railcars or components and repair and retrofit railcars. We may seek to expand our relationships or enter into new agreements with other companies. If our joint venture or alliance partners are unable to fulfill their contractual obligations or if these relationships are otherwise not successful in the future, our manufacturing and other costs could increase, we could encounter production disruptions, growth opportunities could fail to materialize, or we could be required to fund such joint venture or alliances in amounts significantly greater than initially anticipated, any of which could adversely affect our business.

If any of our joint ventures generate significant losses, including future potential intangible asset or goodwill impairment charges, it could adversely affect our results of operations or cause our investment to be impaired.

We have potential exposure to environmental liabilities, which could increase costs or have an adverse effect on results of operations.

We are subject to extensive national, state, foreign, provincial and local environmental laws and regulations concerning, among other things, air emissions, water discharge, solid waste and hazardous substances handling and disposal and employee health and safety. These laws and regulations are complex and frequently change. We could incur unexpected costs, penalties and other civil and criminal liability if we, or in certain circumstances others, fail to comply with environmental laws or permits issued pursuant to those laws. We also could incur costs or liabilities related to off-site waste disposal or remediating soil or groundwater contamination at our properties, including as set forth below. In addition, future environmental laws and regulations may require significant capital expenditures or changes to our operations, or may impose liability on us in the future for actions that complied with then applicable laws and regulations when the action was taken.

Our Portland, Oregon manufacturing facility is located adjacent to the Willamette River. In December 2000, the U.S. Environmental Protection Agency (EPA) classified portions of the Willamette River bed, known as the Portland Harbor, including the portion fronting our manufacturing facility, as a federal National Priority List or Superfund site due to sediment contamination (the Portland Harbor Site). We, along with more than 140 other parties, have received a General Notice of potential liability from the EPA relating to the Portland Harbor Site. The letter advised us that we

may be liable for the costs of investigation and remediation (which liability may be joint and several with other potentially responsible parties) as well as for natural resource damages resulting from releases of hazardous substances to the site. Ten private and public entities, including us (the Lower Willamette

Table of Contents

Group or LWG), signed an Administrative Order on Consent (AOC) to perform a remedial investigation/feasibility study (RI/FS) of the Portland Harbor Site under EPA oversight, and several additional entities have not signed such consent, but nevertheless contributed money to the effort. The EPA-mandated RI/FS was produced by the LWG and cost over \$110 million during a 17-year period. We bore a percentage of the total costs incurred by the LWG in connection with the investigation. We cannot provide assurance that some or all of any such outlay will be recoverable from other responsible parties. The LWG requested in August 2017 that the AOC be terminated since EPA issued its ROD for the Portland Harbor Site on January 6, 2017.

Separate from the process described above which focused on the type of remediation to be performed at the Portland Harbor Site and the schedule for such remediation, 83 parties, including the State of Oregon and the federal government, have entered into a non-judicial mediation process to try to allocate costs associated with remediation of the Portland Harbor Site. Approximately 110 additional parties have signed tolling agreements related to such allocations. On April 23, 2009, we and the other AOC signatories filed suit against 69 other parties due to a possible limitations period for some such claims; *Arkema Inc. et al v. A & C Foundry Products, Inc. et al*, U.S. District Court, District of Oregon, Case #3:09-cv-453-PK. All but 12 of these parties elected to sign tolling agreements and be dismissed without prejudice, and the case was stayed by the court, pending the EPA's ROD, which was issued by the EPA on January 6, 2017. The continuing status of the stay has not yet been determined by the court. The allocation process is continuing in parallel with the process to define the remediation steps.

The EPA's January 6, 2017 ROD selects a remedy that the EPA estimates will take 13 years of active remediation, followed by 30 years of monitoring, with an estimated undiscounted cost of \$1.7 billion. The EPA expects its cost estimates to be within a range of -30% to +50%. However, the EPA has acknowledged that more data needs to be collected before a remedy can be designed and that costs may change significantly based upon that additional data. The EPA's ROD identifies 13 Sediment Decision Units. One of the units, RM9W, includes the nearshore area of the river sediments offshore of our Portland, Oregon manufacturing facility as well as upstream and downstream of the facility. The ROD does not break down total remediation costs by unit.

On January 30, 2017 the Confederated Tribes and Bands of Yakama Nation sued 33 parties including our company as well as the United States and the State of Oregon for costs it incurred in assessing alleged natural resource damages to the Columbia River from contaminants deposited in Portland Harbor. *Confederated Tribes and Bands of the Yakama Nation v. Air Liquide America Corp., et. al.*, United States Court for the District of Oregon Case No. 3:17-CV-00164-SB. We, along with many of the other defendants, have moved to dismiss the case. That motion is pending. The complaint does not specify the amount of damages the Plaintiff will seek.

The ROD does not assign responsibility for the costs of clean-up, allocate such costs among the potentially responsible parties, nor define precise boundaries for the cleanup. Responsibility for funding and implementing the EPA's selected cleanup option will be determined at a later date.

Based on the investigation to date, we believe that we did not contribute in any material way to contamination in the river sediments or the damage of natural resources in the Portland Harbor Site and that the damage in the area of the Portland Harbor Site adjacent to our property precedes our ownership of the Portland, Oregon manufacturing facility. Because these environmental investigations are still underway, sufficient information is currently not available to determine our liability, if any, for the cost of any required remediation or restoration of the Portland Harbor Site or to estimate a range of potential loss. Based on the results of the pending investigations and future assessments of natural resource damages, we may be required to incur costs associated with additional phases of investigation or remedial action, and may be liable for damages to natural resources. In addition, we may be required to perform periodic maintenance dredging in order to continue to launch vessels from our launch ways in Portland, Oregon, on the Willamette River, and the river's classification as a Superfund site could result in some limitations on future dredging

and launch activities. Any of these matters could adversely affect our business and Consolidated Financial Statements, or the value of our Portland property.

We have entered into a Voluntary Cleanup Agreement with the Oregon Department of Environmental Quality (DEQ) in which we agreed to conduct an investigation of whether, and to what extent, past or present operations at the Portland property may have released hazardous substances into the environment. We have also signed an

Table of Contents

Order on Consent with the DEQ to finalize the investigation of potential onsite sources of contamination that may have a release pathway to the Willamette River. Interim precautionary measures are also required in the order and we are currently discussing with the DEQ potential remedial actions which may be required. We could incur significant expenses for remediation and we cannot provide assurance that some or all of any such outlay will be recoverable from other responsible parties.

The timing of our asset sales and related revenue recognition could cause significant differences in our quarterly results and liquidity.

We may build railcars or marine barges in anticipation of a customer order, or that are leased to a customer and ultimately planned to be sold to a third party. The difference in timing of production and the ultimate sale subjects our company to operational and market risks. In addition, we periodically sell railcars from our own lease fleet and the timing and volume of such sales is difficult to predict. As a result, comparisons of our manufacturing revenue, deliveries, quarterly net gain on disposition of equipment, income and liquidity between quarterly periods within one year and between comparable periods in different years may not be meaningful and should not be relied upon as indicators of our future performance.

We depend on our senior management team and other key employees, and significant attrition within our management team or unsuccessful succession planning for members of our senior management team and other key employees who are at or nearing retirement age, could adversely affect our business.

Our success depends in part on our ability to attract, retain and motivate senior management and other key employees. Achieving this objective may be difficult due to many factors, including fluctuations in global economic and industry conditions, competitors' hiring practices, cost reduction activities, and the effectiveness of our compensation programs. Competition for qualified personnel can be very intense. We must continue to recruit, retain and motivate senior management and other key employees sufficient to maintain our current business and support our future projects and growth objectives. We are vulnerable to attrition among our current senior management team and other key employees. A loss of any such personnel, or the inability to recruit and retain qualified personnel in the future, could have an adverse effect on our business, financial condition and results of operations.

Many members of our senior management team and other key employees are at or nearing retirement age. If we are unsuccessful in our succession planning efforts, the continuity of our business and results of operations could be adversely affected.

Changes in the credit markets and the financial services industry could negatively impact our business, results of operations, financial condition or liquidity.

The credit markets and the financial services industry may experience volatility which can result in tighter availability of credit on more restrictive terms and limit our ability to sell railcar assets. Our liquidity, financial condition and results of operations could be negatively impacted if our ability to borrow money to finance operations, obtain credit from trade creditors, offer leasing products to our customers or sell railcar assets were to be impaired. In addition, scarcity of capital could also adversely affect our customers' ability to purchase or pay for products from us or our suppliers' ability to provide us with product, either of which could negatively affect our business and results of operations.

Volatility in the global financial markets may adversely affect our business, financial condition and results of operation.

During periods of volatility in the global financial markets, certain of our customers could delay or otherwise reduce their purchases of railcars and other products and services. If volatile conditions in the global credit markets impact our customers' access to credit, product order volumes may decrease or customers may default on payments owed to us.

Table of Contents

Likewise, if our suppliers face challenges obtaining credit, or otherwise operating their businesses, the supply of materials we purchase from them to manufacture our products may be interrupted. Any of these conditions or events could result in reductions in our revenues, increased price competition, or increased operating costs, which could adversely affect our business, financial condition and results of operations.

On June 23, 2016, the United Kingdom (UK) held a non-binding advisory referendum in which voters voted for the UK to exit the EU (Brexit). Brexit has caused volatility in global stock markets and currency exchange rate fluctuations, including the strengthening of the U.S. dollar against foreign currencies. Continuing political uncertainties related to Brexit may create further uncertainty in European and worldwide markets, which may cause our customers or potential customers to delay or reduce spending on our products or services, and may limit our suppliers' access to credit. Any of these effects of Brexit, among others, could negatively impact our business, results of operations and financial condition.

Our actual results may differ significantly from our announced expectations.

From time to time, we have released, and may continue to release guidance estimates in our quarterly and annual earnings releases, quarterly and annual earnings conference calls, or otherwise, regarding our future performance that represents our management's estimates as of the date of release. Although we believe that any such guidance or estimates would provide investors and analysts with a better understanding of management's expectations for the future and could be useful to our shareholders and potential shareholders, such guidance or estimates would consist of forward-looking statements subject to the risks and uncertainties described in this report and in our other public filings and public statements. Guidance and estimates are necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying the guidance or estimates may not materialize or may vary significantly from actual results. Our actual results may not always be in line with or exceed any guidance or estimates we may provide, especially in times of economic uncertainty. If our financial results for a particular period do not meet our guidance or estimates or the expectations of investors or research analysts, or if we reduce our guidance or estimates for future period, the trading volume or market price of our common stock may decline. In light of the foregoing, investors are urged not to unduly rely upon any guidance or estimates in making an investment decision regarding our common stock.

We rely on limited suppliers for certain components and services needed in our production. If we are not able to procure specialty components or services on commercially reasonable terms or on a timely basis, our business, financial condition and results of operations would be adversely affected.

Our manufacturing operations depend in part on our ability to obtain timely deliveries of materials, components and services in acceptable quantities and quality from our suppliers. In 2017, the top ten suppliers for all inventory purchases accounted for approximately 53% of total purchases. Amsted Rail Company, Inc. accounted for 22% of total inventory purchases in 2017. No other suppliers accounted for more than 10% of total inventory purchases. Certain components of our products, particularly specialized components like castings, bolsters, trucks, wheels and axels, and certain services, such as lining capabilities, are currently only available from a limited number of suppliers. Increases in the number of railcars manufactured could increase the demand for such components and services and strong demand may cause industry-wide shortages if suppliers are in the process of ramping up production or reach capacity production. Our dependence on a limited number of suppliers involves risks, including limited control over pricing, availability and delivery schedules. If any one or more of our suppliers cease to provide us with sufficient quantities of our components or services in a timely manner or on terms acceptable to us, or cease to provide services or manufacture components of acceptable quality, we could incur disruptions or be limited in our production of our products and we could have to seek alternative sources for these components or services. We could also incur delays while we attempt to locate and engage alternative qualified suppliers and we might be unable to engage acceptable

alternative suppliers on favorable terms, if at all. In addition, we are increasing the number of components and services we manufacture or provide ourselves, directly or through joint ventures. If we are not successful at manufacturing such components or providing such services or have production problems after transitioning to self-produced supplies, we may not be able to replace such components or services from third party suppliers in a timely manner. Any such disruption in

Table of Contents

our supply of specialized components and services or increased costs of those components or services could harm our business and adversely affect our results of operations.

Train derailments or other accidents or claims could subject us to legal claims that adversely impact our business, financial condition and our results of operations.

We provide a number of services which include the manufacture and supply of new railcars, wheels, components and parts and the lease and repair of railcars for our customers that transport a variety of commodities, including tank railcars that transport hazardous materials such as crude oil, ethanol and other products. We could be subject to various legal claims, including claims for negligence, personal injury, physical damage and product or service liability, or in some cases strict liability, as well as potential penalties and liability under environmental laws and regulations, in the event of a derailment or other accident involving railcars, including tank railcars. Additionally, the severity of injury or property damage arising from an incident may influence the causation responsibility analysis exposing us to potentially greater liability. If we become subject to any such claims and are unable successfully to resolve them or have inadequate insurance for such claims, our business, financial condition and results of operations could be materially adversely affected.

Changes in or failure to comply with legal and regulatory requirements applicable to the industries in which we operate may adversely impact our business, financial condition and results of operations.

Our operations and the industry we serve, including our customers, are subject to extensive regulation by governmental, regulatory and industry authorities and by federal, state, local and foreign agencies. These organizations establish rules and regulations for the railcar industry, including construction specifications and standards for the design and manufacture of railcars; mechanical, maintenance and related standards; and railroad safety. New regulatory rulings and regulations from these entities could impact our financial results, demand for our products and the economic value of our assets. In addition, if we fail to comply with the requirements and regulations of these entities, we could face sanctions and penalties that could negatively affect our financial results.

The risks of substantial costs and liabilities related to compliance with these laws and regulations are an inherent part of our business. Despite our intention to comply with these laws and regulations, we cannot guarantee that we will be able to do so at all times and compliance may prove to be more costly and limiting than we currently anticipate and compliance requirements could increase in future years. These laws and regulations are complex, change frequently and may become more stringent over time, which could impact our business, financial condition and results of operations.

Regulatory changes, along with prevailing market conditions, could materially affect new tank railcar manufacturing and retrofitting activities industry-wide, including negative impacts to customer demand for our products and services. Additional laws and regulations have been proposed or adopted that will potentially have a significant impact on railroad operations, including the implementation of positive train control (PTC) requirements. PTC is a collision avoidance technology intended to override engineer controlled locomotives and stop certain types of train accidents. While certain of these legal and regulatory changes could result in increased levels of repair or refurbishment work for GBW and/or new tank car manufacturing activity, if we are unable to manage to adapt our business successfully to changing regulations, our business and results of operations could be adversely affected.

Compliance with health care legislation and increases in the cost of providing health care plans to our employees may adversely affect our business.

In the U.S., the cost of providing health care plans to a company's employees has increased at annual rates in excess of inflation. Continued significant annual increases in the cost of providing employee health coverage may adversely affect our business and results of operations. It remains unclear whether changes will be made to applicable health care laws.

Table of Contents

An adverse outcome in any pending or future litigation could negatively impact our business and results of operations.

We are a defendant in several pending cases in various jurisdictions. If we are unsuccessful in resolving these claims, our business and results of operations could be adversely affected. In addition, future claims that may arise relating to any pending or new matters, whether brought against us or initiated by us against third parties, could distract management's attention from business operations and increase our legal and related costs, which could also negatively impact our business and results of operations.

Risks related to potential misconduct by employees may adversely impact us.

Our employees may engage in misconduct or other improper activities, including noncompliance with our policies or regulatory standards and requirements, which could subject us to regulatory sanctions and materially harm our business. It is not always possible to deter employee misconduct, and the precautions we take to prevent and detect this activity may not be effective in controlling unknown or unmanaged risks or losses, including risks associated with whistleblower complaints and litigation. There can be no assurance that we will succeed in preventing misconduct by employees in the future. In addition, the investigation of alleged misconduct disrupts our operations and may be costly. Any such events in the future may have a material adverse impact on our financial condition or results of operations.

Shortages of skilled labor could adversely affect our operations.

We depend on skilled labor in the manufacture of railcars and marine barges, repair, refurbishment, retrofitting and maintenance of railcars and provision of wheel services and supply of parts. Some of our facilities are located in areas where demand for skilled laborers often exceeds supply. Shortages of some types of skilled laborers such as welders and machine operators could restrict our ability to maintain or increase production rates, lead to production inefficiencies and increase our labor costs.

Some of our employees belong to labor unions and strikes or work stoppages could adversely affect our operations.

We are a party to collective bargaining agreements with various labor unions at some of our operations. Disputes with regard to the terms and conditions of these agreements or our potential inability to negotiate acceptable contracts with these unions in the future could result in, among other things, strikes, work stoppages or other slowdowns by the affected workers. We cannot be assured that our relations with our workforce will remain positive. Union organizers are actively working to organize employees at some of our other facilities. If our workers were to engage in a strike, work stoppage or other slowdown, or other employees were to become unionized or the terms and conditions in future labor agreements were renegotiated, or if union representation is implemented at such sites and we are unable to agree with the union on reasonable employment terms, including wages, benefits, and work rules, we could experience a significant disruption of our operations and incur higher ongoing labor costs. In addition, we could face higher labor costs in the future as a result of severance or other charges associated with lay-offs, shutdowns or reductions in the size and scope of our operations or due to the difficulties of restarting our operations that have been temporarily suspended.

Our stock price has been volatile and may continue to experience large fluctuations.

The price of our common stock has experienced rapid and severe price fluctuations. Our stock price ranged from a low of \$28.95 per share to a high of \$51.25 per share for the year ended August 31, 2017 and \$19.89 per share to a high of \$42.04 per share for the year ended August 31, 2016. The price for our common stock is likely to

The Greenbrier Companies 2017 Annual Report

Table of Contents

continue to be volatile and subject to price and volume fluctuations in response to market and other factors, including the factors discussed elsewhere in these risk factors and the following:

- quarter-to-quarter variations in our operating results;
- the depth and liquidity of the market for our common stock;
- shortfalls in revenue or earnings from levels expected by securities analysts and investors; including the level of our backlog and number of orders received during the period;
- changes in securities analysts' estimates of our future performance;
- shareholder activism;
- dissemination of false or misleading statements through the use of social and other media to discredit us, disparage our products or to harm our reputation;
- any developments that materially impact investors' or customers' perceptions of our business prospects;
- dilution resulting from our sale of additional shares of common stock or from the conversion of convertible notes;
- changes in governmental regulation;
- significant railcar industry announcements or developments;
- the introduction of new products or technologies by us or our competitors;
- actual or anticipated variations in our or our competitors' quarterly or annual financial results;
- the general health and outlook of our industry;
- general financial and other market conditions; and
- domestic and international economic conditions.

In addition, public stock markets have experienced, and may in the future experience, extreme price and trading volume volatility. This volatility has significantly affected the market prices of securities of many companies for reasons frequently unrelated to, or that disproportionately impact, the operating performance of these companies and may adversely affect the price of our common stock. These broad market fluctuations may adversely affect the market price of our common stock in the future.

A material decline in the price of our common stock may result in the assertion of certain claims against us, and/or the commencement of inquiries and/or investigations against us. A prolonged decline in the price of our common stock could result in a reduction in the liquidity of our common stock, a reduction in our ability to raise capital, and the inability of investors to obtain a favorable selling price for their shares. Any reduction in our ability to raise equity capital in the future may force us to reallocate funds from other planned uses and could have a significant negative effect on our business plans and operations.

Following periods of volatility in the market price of their stock, historically many companies have been the subject of securities class action litigation. If we became involved in securities class action litigation in the future, it could result in substantial costs and diversion of our management's attention and our resources and could harm our stock price, business, prospects, financial condition and results of operations.

Our product and service warranties could expose us to potentially significant claims.

We offer our customers limited warranties for many of our products and services. Accordingly, we may be subject to significant warranty claims in the future, such as multiple claims based on one defect repeated throughout our production or servicing processes or claims for which the cost of repairing the defective part is highly disproportionate to the original cost of the part. These types of warranty claims could result in costly product recalls, customers seeking monetary damages, significant repair costs and damage to our reputation.

If warranty claims attributable to actions of third party component manufacturers are not recoverable from such parties due to their poor financial condition or other reasons, we could be liable for warranty claims and other risks for using

these materials on our products.

22

The Greenbrier Companies 2017 Annual Report

Table of Contents

Many of our products are sold to third parties who may misuse, improperly install or improperly or inadequately maintain or repair such products thereby potentially exposing us to claims that could increase our costs and weaken our financial condition.

The products we manufacture are designed to work optimally when properly operated, installed, repaired, maintained and used to transport the intended cargo. When this does not occur, we may be subjected to claims or litigation associated with product damage, injuries or property damage that could increase our costs and weaken our financial condition.

Our financial performance and market value could cause future write-downs of goodwill or intangibles in future periods.

We are required to perform an annual impairment review of goodwill and indefinite lived assets which could result in an impairment charge if it is determined that the carrying value of the asset is in excess of the fair value. We perform a goodwill impairment test annually during our third quarter. Goodwill is also tested more frequently if changes in circumstances or the occurrence of events indicates that a potential impairment exists.

When we have continued underperforming operations or changes in circumstances, such as a decline in the market price of our common stock, changes in demand or in the numerous variables associated with the judgments, assumptions and estimates made in assessing the appropriate valuation of goodwill indicate the carrying amount of certain indefinite lived assets may not be recoverable, the assets are evaluated for impairment. Among other things, our assumptions used in the valuation of goodwill include growth of revenue and margins and increased cash flows over time. If actual operating results were to differ from these assumptions, it may result in an impairment of goodwill. As of August 31, 2017, we had \$43.3 million of goodwill in our Wheels & Parts segment, \$25.3 million in our Manufacturing segment and GBW had \$41.5 million of goodwill. Impairment charges to our or GBW's goodwill or our indefinite lived assets would impact our results of operations. Future write-downs of goodwill and intangibles could affect certain of the financial covenants under debt instruments and could restrict our financial flexibility. In the event of goodwill impairment, we may have to test other assets for impairment.

We have indebtedness, which could have negative consequences to our business or results of operations.

As of August 31, 2017, our total consolidated indebtedness was approximately \$597.6 million (excluding \$30.8 million of debt discount and \$8.6 million of debt issuance costs). As of August 31, 2017, approximately \$188.3 million (excluding \$0.8 million of debt issuance costs) of our consolidated indebtedness was secured. Our indebtedness consists of convertible notes, a senior secured revolving credit facility and term loans. Our level of indebtedness could have a material adverse effect on our business and make it more difficult for us to satisfy our obligations under our outstanding indebtedness and the notes. As a result of our debt and debt service obligations, we face increased risks regarding, among other things, the following:

- our ability to borrow additional amounts or refinance existing indebtedness in the future for working capital, capital expenditures, acquisitions, debt service requirements, investments, stock repurchases, execution of our growth strategy, or other purposes may be limited or such financing may be more costly;
- our availability of cash flow to fund working capital requirements, capital expenditures, investments, acquisitions or other strategic initiatives and other general corporate purposes because a portion of our cash flow is needed to pay principal and interest on our debt;
- our vulnerability to competitive pressures and to general adverse economic or industry conditions, including fluctuations in market interest rates or a downturn in our business;

our being at a competitive disadvantage relative to our competitors that have greater financial resources than us or more flexible capital structures than us;
our ability to satisfy our financial obligations related to our consolidated indebtedness;
our additional exposure to the risk of increased interest rates as certain of our borrowings are at variable rates of interest, which could result in higher interest expense in the event of an increase in interest rates;

Table of Contents

our restrictions under the restrictive covenants in our North American senior secured credit facility, our secured term loan, our other credit agreements, and any of the agreements governing our future indebtedness adversely restricting our financial and operating flexibility and subjecting us to other risks; and the possibility we may suffer a material adverse effect on our business and financial condition if we are unable to service our debt or obtain additional financing, as needed.

Despite our current indebtedness levels and the restrictive covenants set forth in the agreements governing our indebtedness, if we, our subsidiaries and our joint ventures are in compliance with the covenants, we, our subsidiaries and our joint ventures may be able to incur substantially more indebtedness, including secured indebtedness, and other obligations and liabilities that do not constitute indebtedness. This could increase the risks associated with our indebtedness. As of August 31, 2017, after giving effect to issued but undrawn letters of credit, we had approximately \$268.1 million of availability under our North American senior secured credit facility (based on our borrowing base as of such date) and approximately \$70.8 million of availability under our European and Mexican joint venture senior secured credit facilities.

We may need to raise additional capital to operate our business and achieve our business objectives, which could result in dilution to investors.

We require substantial working capital to fund our business. If additional funds are raised through the issuance of equity securities, the percentage ownership held by our stockholders will be reduced and these equity securities may have rights, preferences or privileges senior to those of our common stock. We evaluate opportunities to access the capital markets taking into account our financial condition and other relevant considerations. Additional financing may not be available when needed, on terms favorable to us or at all. If adequate funds are not available or are not available on acceptable terms, we may be unable to develop or enhance our business, take advantage of future opportunities or respond to competitive pressures, which would harm our business, financial condition and results of operations.

The conversion of our outstanding convertible notes would result in substantial dilution to our current stockholders.

The conversion of some or all of our convertible notes may dilute the ownership interests of existing stockholders, including holders who have previously converted their notes. Any sales in the public market of the common stock issuable upon the conversion of the notes could adversely affect prevailing market prices of our common stock. In addition, the existence of the notes may encourage short selling by market participants, because the conversion of the notes could depress the price of our common stock.

We are a holding company with no independent operations. Our ability to meet our obligations depends upon the performance of our subsidiaries and our joint ventures and their ability to make distributions to us.

As a holding company, we are dependent on the earnings and cash flows of, and dividends, distributions, loans or advances from, our subsidiaries and joint ventures to generate the funds necessary to meet certain of our obligations including the payment of principal, of premium, if any, and interest on debt obligations. Any payment of dividends, distributions, loans or advances to us by our subsidiaries could be subject to statutory restrictions on dividends or repatriation of earnings under applicable local law and monetary transfer restrictions in the jurisdictions in which our subsidiaries operate. In addition, many of our subsidiaries and our joint ventures are parties to credit facilities that contain restrictions on the timing and amount of any payment of dividends, distributions, loans or advances that our subsidiaries may make to us. Under certain circumstances, some or all of our subsidiaries may be prohibited from making any such payments.

Table of Contents

Our governing documents, the indentures governing our 2024 Convertible Notes and 2018 Convertible Notes, and Oregon law contain certain provisions that could prevent or make more difficult an attempt to acquire us.

Our Articles of Incorporation and Bylaws, as currently in effect, contain certain provisions that may have anti-takeover effects, including:

- a classified Board of Directors, with each class containing as nearly as possible one-third of the total number of members of the Board of Directors and the members of each class serving for staggered three-year terms;
- a vote of at least 55% of our voting securities to amend, repeal or adopt an inconsistent provision of certain provisions of our Articles of Incorporation;
- no less than 120 days advance notice with respect to nominations of directors or other matters to be voted on by stockholders other than by or at the direction of the Board of Directors;
- removal of directors only for cause;
- the calling of special meetings of stockholders only by the president, a majority of the Board of Directors or the holders of not less than 25% of all votes entitled to be cast on the matters to be considered at such meeting;
- the issuance of preferred stock by our board without further action by the shareholders; and
- the availability under the Articles of Series A participating preferred stock that may be issuable.

The provisions discussed above could have anti-takeover effects because they may delay, defer or prevent an unsolicited acquisition proposal that some, or a majority, of our stockholders might believe to be in their best interests or in which stockholders might receive a premium for their common stock over the then-prevailing market price.

The Oregon Control Share Act and business combination law could limit parties who acquire a significant amount of voting shares from exercising control over us for specific periods of time. These acts could lengthen the period for a proxy contest or for a stockholder to vote their shares to elect the majority of our Board and change management. Additionally, the indentures governing our 2024 Convertible Notes and 2018 Convertible Notes provide for the acceleration, at the lenders option, of all outstanding principal and interest owed on the notes upon a change of control of our company. The rights afforded to our creditors under these indentures could increase the cost of any potential acquisition of our company and have a resulting chilling effect on interest in acquiring our company.

These restrictions and provisions could have the effect of dissuading other stockholders or third parties from contesting director elections or attempting certain transactions with us, including, without limitation, acquisitions, which could cause investors to view our securities as less attractive investments and reduce the market price of our common stock and the notes.

Payments of cash dividends on our common stock may be made only at the discretion of our Board of Directors and may be restricted by Oregon law.

Any decision to pay dividends will be at the discretion of our Board of Directors and will depend upon our operating results, strategic plans, capital requirements, financial condition, provisions of our borrowing arrangements and other factors our Board of Directors considers relevant. Furthermore, Oregon law imposes restrictions on our ability to pay dividends. Accordingly, we may not be able to continue to pay dividends in any given amount in the future, or at all.

Fluctuations in foreign currency exchange rates could lead to increased costs and lower profitability.

Outside of the U.S., we currently conduct business in Mexico, Poland, other European countries, Brazil and Saudi Arabia, and our non-U.S. businesses conduct their operations in local currencies and other regional currencies. We also source materials worldwide. Fluctuations in exchange rates may affect demand for our products in foreign markets or our cost competitiveness and may adversely affect our profitability. Although we attempt to mitigate a

portion of our exposure to changes in currency rates through currency rate hedge contracts

Table of Contents

and other activities, these efforts cannot fully eliminate the risks associated with the foreign currencies. In addition, some of our borrowings are in foreign currency, giving rise to risk from fluctuations in exchange rates. A material or adverse change in exchange rates could result in significant deterioration of profits or in losses for us.

Fluctuations in the availability and price of energy, freight transportation, steel and other raw materials, and our fixed price contracts could have an adverse effect on our ability to manufacture and sell our products on a cost effective basis and could adversely affect our margins and revenue.

A significant portion of our business depends upon the adequate supply of steel, components and other raw materials at competitive prices and a small number of suppliers provide a substantial amount of our requirements. The cost of steel and all other materials used in the production of our railcars represents more than half of our direct manufacturing costs per railcar and in the production of our marine barges represents more than 30% of our direct manufacturing costs per marine barge.

Our businesses also depend upon an adequate supply of energy at competitive prices. When the price of energy increases, it adversely impacts our operating costs and could have an adverse effect upon our ability to conduct our businesses on a cost-effective basis. We cannot be assured that we will continue to have access to supplies of energy or necessary components for manufacturing railcars and marine barges. Our ability to meet demand for our products could be adversely affected by the loss of access to any of these supplies, the inability to arrange alternative access to any materials, or suppliers limiting allocation of materials to us.

In some instances, we have fixed price contracts which anticipate material price increases and surcharges, or contracts that contain actual or formulaic pass-through of material price increases and surcharges. However, if the price of steel or other raw materials were to fluctuate in excess of anticipated increases on which we have based our fixed price contracts, or if we were unable to adjust our selling prices or have adequate protection in our contracts against changes in material prices, or if we are unable to reduce operating costs to offset any price increases, our margins would be adversely affected. The loss of suppliers or their inability to meet our price, quality, quantity and delivery requirements could have an adverse effect on our ability to manufacture and sell our products on a cost-effective basis.

Decreases in the price of scrap adversely impact our Wheels & Parts and GBW Joint Venture margins and revenue and the residual value and future depreciation of our leased assets. A portion of our Wheels & Parts and GBW Joint Venture businesses involve scrapping steel parts and the resulting revenue from such scrap steel increases our margins and revenues. When the price of scrap steel declines, our revenues and margins in such business therefore decrease.

We are subject to cybersecurity risks and may incur increasing costs in an effort to minimize those risks.

Our business employs systems and websites that allow for the storage and transmission of proprietary or confidential information regarding our customers, employees, job applicants and other parties, including financial information, intellectual property and personal identification information. Security breaches and other disruptions could compromise our information, expose us to liability and harm our reputation and business. The steps we take to deter and mitigate these risks may not be successful. We may not have the resources or technical sophistication to anticipate or prevent current or rapidly evolving types of cyber-attacks. Attacks may be targeted at us, our customers, or others who have entrusted us with information. Actual or anticipated attacks may cause us to incur increasing costs, including costs to deploy additional personnel and protection technologies, train employees, and engage third-party experts or consultants. Advances in computer capabilities, or other technological developments may result in the technology and security measures used by us to protect transaction or other data being breached or compromised. In addition, data and security breaches can also occur as a result of non-technical issues, including intentional or inadvertent breach by our employees or by persons with whom we have commercial relationships. Any compromise

or breach of our security could result in a violation of applicable privacy and other laws, legal and financial exposure, negative impacts on our customers' willingness

Table of Contents

to transact business with us and a loss of confidence in our security measures, which could have an adverse effect on our results of operations and our reputation.

Updates or changes to our information technology systems may result in problems that could negatively impact our business.

We have information technology systems, comprising hardware, network, software, people, processes and other infrastructure that are important to the operation of our businesses. We continue to evaluate and implement upgrades and changes to information technology systems that support substantially all of our operating and financial functions. We could experience problems in connection with such implementations, including compatibility issues, training requirements, higher than expected implementation costs and other integration challenges and delays. A significant problem with an implementation, integration with other systems or ongoing management and operation of our systems could negatively impact our business by disrupting operations. Such a problem could also have an adverse effect on our ability to generate and interpret accurate management and financial reports and other information on a timely basis, which could have a material adverse effect on our financial reporting system and internal controls and adversely affect our ability to manage our business.

If we are unable to protect our intellectual property and prevent its improper use by third parties or if third parties assert that our products or services infringe their intellectual property rights, our ability to compete in the market may be harmed, and our business and financial condition may be adversely affected.

The protection of our intellectual property is important to our business. We rely on a combination of trademarks, copyrights, patents and trade secrets to protect our intellectual property. However, these protections might be inadequate. Our pending or future trademark, copyright and patent applications might not be approved or, if allowed, might not be sufficiently broad. If our intellectual property rights are not adequately protected we may not be able to commercialize our technologies, products or services and our competitors could commercialize our technologies, which could result in a decrease in our sales and market share and could materially adversely affect our business, financial condition and results of operations. Conversely, third parties might assert that our products, services, or other business activities infringe their patents or other intellectual property rights. Infringement and other intellectual property claims and proceedings brought against us, whether successful or not, could result in substantial costs and harm our reputation. Such claims and proceedings can also distract and divert our management and key personnel from other tasks important to the success of our business. In addition, intellectual property litigation or claims could force us to cease selling or using products that incorporate the asserted intellectual property, which would adversely affect our revenues, or cause us to pay substantial damages for past use of the asserted intellectual property or to pay substantial fees to obtain a license from the holder of the asserted intellectual property, which license may not be available on reasonable terms, if at all. In the event of an adverse determination in an intellectual property suit or proceeding, or our failure to license essential technology or redesign our products so as not to infringe third party intellectual property rights, our sales could be harmed and our costs could increase, which could materially adversely affect our business, financial condition and results of operations.

We could be liable for physical damage, business interruption or product liability claims that exceed our insurance coverage.

The nature of our business subjects us to physical damage, business interruption and product liability claims, especially in connection with the repair and manufacture of products that carry hazardous or volatile materials. Although we maintain liability insurance coverage at commercially reasonable levels compared to similarly-sized heavy equipment manufacturers, an unusually large physical damage, business interruption or product liability claim or a series of claims based on a failure repeated throughout our production process could exceed our insurance

coverage or result in damage to our reputation which could materially adversely impact our financial condition and results of operations.

Table of Contents

We could be unable to procure adequate insurance on a cost-effective basis in the future.

The ability to insure our businesses, facilities and rail assets is an important aspect of our ability to manage risk. As there are only limited providers of this insurance to the railcar industry, there is no guarantee that such insurance will be available on a cost-effective basis in the future. In addition, we cannot assure that our insurance carriers will be able to pay current or future claims.

Changes in accounting standards or inaccurate estimates or assumptions in the application of accounting policies could adversely affect our financial results.

Our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Some of these policies require use of estimates and assumptions that may affect the reported value of our assets or liabilities and financial results and are critical because they require management to make difficult, subjective, and complex judgments about matters that are inherently uncertain. Accounting standard setters and those who interpret the accounting standards (such as the Financial Accounting Standards Board, the SEC, and our independent registered public accounting firm) may amend or even reverse their previous interpretations or positions on how these standards should be applied. In some cases, we could be required to apply a new or revised standard retrospectively, resulting in the revision of prior period financial statements. Changes in accounting standards can be hard to predict and can materially impact how we record and report our financial condition and results of operations.

Fires, natural disasters, severe weather conditions or public health crises could disrupt our business and result in loss of revenue or higher expenses.

Any serious disruption at any of our facilities due to fire, hurricane, earthquake, flood, other severe weather events or any other natural disaster, or an epidemic or other public health crisis, or a panic reaction to a perceived health risk, could impair our ability to use our facilities and have a material adverse impact on our revenues and increase our costs and expenses. If there is a natural disaster or other serious disruption at any of our facilities, particularly at any of our Mexican facilities, it could impair our ability to adequately supply our customers, cause a significant disruption to our operations, cause us to incur significant costs to relocate or reestablish these functions and negatively impact our operating results. While we insure against certain business interruption risks, such insurance may not adequately compensate us for any losses incurred as a result of natural or other disasters.

Unusual weather conditions may reduce demand for our wheel-related parts and repair services.

Performing railcar wheel repair and replacing railcar wheels represents a portion of our business. Seasonal fluctuations in weather conditions may lead to greater variation in our quarterly operating results as unusually mild weather conditions will generally lead to lower demand for our wheel-related products and services. In addition, unusually mild weather conditions throughout the year may reduce overall demand for our wheel-related products and repair services. If occurring for prolonged periods, such weather could have an adverse effect on our business, results of operations and financial condition.

Business, regulatory, and legal developments regarding climate change may affect the demand for our products or the ability of our critical suppliers to meet our needs.

Scientific studies have suggested that emissions of certain gases, commonly referred to as greenhouse gases (GHGs) including carbon dioxide and methane, may be contributing to warming of the Earth's atmosphere and other climate changes. Legislation and new rules to regulate emission of GHGs have been introduced in numerous state legislatures, the U.S. Congress, and by the EPA. Some of these proposals would require industries to meet stringent new standards

that may require substantial reductions in carbon emissions. While we cannot assess the direct impact of these or other potential regulations, we recognize that new climate change

Table of Contents

protocols could affect the demand for our products and/or affect the price of materials, input factors and manufactured components which could impact our margins. Potential opportunities could include greater demand for certain types of railcars, while potential challenges could include decreased demand for certain types of railcars or other products and higher energy costs. Other adverse consequences of climate change could include an increased frequency of severe weather events and rising sea levels that could affect operations at our manufacturing facilities, the price of insuring company assets, or other unforeseen disruptions of our operations, systems, property or equipment.

Repercussions from terrorist activities or armed conflict could harm our business.

Terrorist activities, anti-terrorist efforts, and other armed conflict involving the U.S. or its interests abroad may adversely affect the U.S. and global economies, potentially preventing us from meeting our financial and other obligations. In particular, the negative impacts of these events may affect the industries in which we operate. This could result in delays in or cancellations of the purchase of our products or shortages in raw materials, parts, or components. Any of these occurrences could have a material adverse impact on our financial results.

Unanticipated changes in our tax provisions or exposure to additional income tax liabilities could affect our financial condition and profitability and we may take tax positions that the Internal Revenue Service or other tax authorities may contest.

We are subject to income taxes in both the United States and foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. Changes in estimates of projected future operating results, loss of deductibility of items, recapture of prior deductions (including related to interest on convertible notes), our ability to utilize tax net operating losses in the future or changes in assumptions regarding our ability to generate future taxable income could result in significant increases to our tax expense and liabilities that could adversely affect our financial condition and profitability.

We have in the past and may in the future take tax positions that the Internal Revenue Service (IRS) or other tax authorities may contest. We are required by an IRS regulation to disclose particular tax positions to the IRS as part of our tax returns for that year and future years. If the IRS or other tax authorities successfully contests a tax position that we take, we may be required to pay additional taxes, interest or fines that may adversely affect our results of operation and financial position.

Some of our customers place orders for our products in reliance on their ability to utilize tax benefits or tax credits such as accelerated depreciation.

There is no assurance that tax authorities will reauthorize, modify, or otherwise not allow the expiration of such tax benefits, tax credits, or reimbursement policies, and in cases where such subsidies and policies are materially modified to reduce the available benefit, credit, or reimbursement or are otherwise allowed to expire, the demand for our products could decrease, thereby creating the potential for a material adverse effect on our financial condition or results of operations.

Our share repurchase program is intended to enhance long-term shareholder value although we cannot guarantee this will occur and this program may be suspended or terminated at any time.

The Board of Directors has authorized our company to repurchase our common stock through a share repurchase program. Our share repurchase program may be modified, suspended or discontinued at any time without prior notice. Although the share repurchase program is intended to enhance long-term shareholder value, we cannot provide assurance that this will occur.

Table of Contents

Our business and operations could be negatively affected if we become subject to shareholder activism, which could cause us to incur significant expense, hinder execution of our business strategy and impact our stock price.

Shareholder activism, which could take many forms and arise in a variety of situations, has been increasing in publicly traded companies recently. Shareholder activism, including potential proxy contests, could result in substantial costs and divert management's and our Board of Directors' attention and resources from our business. Additionally, such shareholder activism could give rise to perceived uncertainties as to our future, adversely affect our relationships with service providers and make it more difficult to attract and retain qualified personnel. Also, we may be required to incur significant legal fees and other expenses related to activist shareholder matters. Our stock price could be subject to significant fluctuation or otherwise be adversely affected by the events, risks and uncertainties of any shareholder activism.

Table of Contents**Item 1B. UNRESOLVED STAFF COMMENTS**

None.

Item 2. PROPERTIES

We operate at the following primary facilities as of August 31, 2017:

Description	Location	Status
Manufacturing Segment		
Operating facilities:	Portland, Oregon	Owned
	Sahagun, Mexico	Owned
	Tlaxcala, Mexico	Owned
	Frontera, Mexico	Leased
	3 locations in Poland	Owned
	3 locations in Romania	Owned
Administrative offices:	Colleyville, Texas	Leased
Wheels & Parts Segment		
Operating facilities:	13 locations in the U.S.	Leased 7 locations
		Owned 6 locations
Administrative offices:	Birmingham, Alabama	Leased
Leasing & Services Segment		
Corporate offices, railcar marketing and leasing activities:	Lake Oswego, Oregon	Leased

We believe that our facilities are in good condition and that the facilities, together with anticipated capital improvements and additions, are adequate to meet our operating needs for the foreseeable future. We continually evaluate our facilities in order to remain competitive and to take advantage of market opportunities.

Item 3. LEGAL PROCEEDINGS

There is hereby incorporated by reference the information disclosed in Note 22 to Consolidated Financial Statements, Part II, Item 8 of this Form 10-K.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

Table of Contents**PART II****Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

Our common stock has been traded on the New York Stock Exchange under the symbol GBX since July 14, 1994. There were approximately 354 holders of record of common stock as of October 20, 2017. The following table shows the reported high and low sales prices of our common stock on the New York Stock Exchange and dividends declared for the fiscal periods indicated.

	High	Low	Dividends Declared
2017			
Fourth quarter	\$ 51.25	\$ 41.45	\$ 0.22
Third quarter	\$ 49.00	\$ 40.45	\$ 0.22
Second quarter	\$ 49.50	\$ 39.00	\$ 0.21
First quarter	\$ 39.05	\$ 28.95	\$ 0.21
2016			
Fourth quarter	\$ 34.94	\$ 25.90	\$ 0.21
Third quarter	\$ 32.78	\$ 24.27	\$ 0.20
Second quarter	\$ 36.23	\$ 19.89	\$ 0.20
First quarter	\$ 42.04	\$ 30.35	\$ 0.20
Dividends			

Any determination to pay cash dividends to our shareholders is at the discretion of our Board of Directors and will depend upon our financial condition, operating results, capital requirements, customary debt covenant restrictions, legal requirements and other factors that our Board of Directors deems relevant. As a result, there is no assurance as to the payment of future dividends.

Issuer Purchases of Equity Securities

Since October 2013, the Board of Directors has authorized the Company to repurchase in aggregate up to \$225 million of the Company's common stock. The program may be modified, suspended or discontinued at any time without prior notice. In October 2017, the expiration date of this share repurchase program was extended from January 1, 2018 to March 31, 2019. Under the share repurchase program, shares of common stock may be purchased on the open market or through privately negotiated transactions from time-to-time. The timing and amount of purchases will be based upon market conditions, securities law limitations and other factors. The share repurchase program does not obligate the Company to acquire any specific number of shares in any period.

There were no shares repurchased under the share repurchase program during the three months ended August 31, 2017.

Period

	Total Number of Shares Purchased	Average Price Paid Per Share (Including Commissions)	Total Number of Shares Purchased as Part of Publically Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
June 1, 2017 - June 30, 2017				\$ 87,989,491
July 1, 2017 - July 31, 2017				\$ 87,989,491
August 1, 2017 - August 31, 2017				\$ 87,989,491

Table of Contents

Performance Graph

The following graph demonstrates a comparison of cumulative total returns for the Company's Common Stock, the Dow Jones U.S. Industrial Transportation Index and the Standard & Poor's (S&P) 500 Index. The graph assumes an investment of \$100 on August 31, 2012 in each of the Company's Common Stock and the stocks comprising the indices. Each of the indices assumes that all dividends were reinvested and that the investment was maintained to and including August 31, 2017, the end of the Company's 2017 fiscal year.

The comparisons in this table are required by the SEC, and therefore, are not intended to forecast or be indicative of possible future performance of our Common Stock.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among The Greenbrier Companies, Inc., the S&P 500 Index
and the Dow Jones US Industrial Transportation Index

*\$100 invested on 8/31/12 in stock or index, including reinvestment of dividends.

Fiscal year ending August 31.

Copyright© 2017 S&P, a division of McGraw Hill Financial. All rights reserved.

Copyright© 2017 Dow Jones & Co. All rights reserved.

Equity Compensation Plan Information

Equity Compensation Plan Information is hereby incorporated by reference to the Equity Compensation Plan Information table in Registrant's definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after the end of the Registrant's year ended August 31, 2017.

Table of Contents**Item 6. SELECTED FINANCIAL DATA**

<i>(In thousands, except unit and per share data)</i>	YEARS ENDED AUGUST 31,				
	2017	2016	2015	2014	2013
Statement of Operations Data					
Revenue:					
Manufacturing	\$ 1,725,188	\$ 2,096,331	\$ 2,136,051	\$ 1,624,916	\$ 1,215,734
Wheels & Parts	312,679	322,395	371,237	495,627	469,222
Leasing & Services	131,297	260,798	97,990	83,419	71,462
	\$ 2,169,164	\$ 2,679,524	\$ 2,605,278	\$ 2,203,962	\$ 1,756,418
Earnings from operations	\$ 260,432	\$ 408,552	\$ 386,892	\$ 239,520	\$ 41,651
Net earnings (loss) attributable to Greenbrier	\$ 116,067 ⁽¹⁾	\$ 183,213	\$ 192,832	\$ 111,919 ⁽²⁾	\$ (11,048) ⁽³⁾
Basic earnings (loss) per common share attributable to Greenbrier:	\$ 3.97	\$ 6.28	\$ 6.85	\$ 3.97	\$ (0.41)
Diluted earnings (loss) per common share attributable to Greenbrier:	\$ 3.65	\$ 5.73	\$ 5.93	\$ 3.44	\$ (0.41)
Weighted average common shares outstanding:					
Basic	29,225	29,156	28,151	28,164	26,678
Diluted	32,562	32,468	33,328	34,209	26,678
Cash dividends paid per share	\$.86	\$.81	\$.60	\$.15	\$.00
Balance Sheet Data					
Total assets	\$ 2,397,705	\$ 1,835,774	\$ 1,787,452	\$ 1,511,199	\$ 1,284,579
Revolving notes and notes payable, net	\$ 562,552	\$ 301,853	\$ 374,258	\$ 452,203	\$ 416,936
Total equity	\$ 1,178,893	\$ 1,016,827	\$ 863,489	\$ 573,721	\$ 456,827
Other Operating Data					
New railcar units delivered	15,700	20,300	21,100	16,200	11,600
New railcar backlog (units)	28,600	27,500	41,300	31,500	14,400
New railcar backlog (value in millions)	\$ 2,800	\$ 3,190	\$ 4,710	\$ 3,330	\$ 1,520
Lease fleet:					
Units managed	335,763	264,166	259,966	237,849	223,911
Units owned	8,263	8,949	9,324	8,550	8,581
Cash Flow Data					
Capital expenditures:					
Manufacturing	\$ 54,973	\$ 51,294	\$ 84,354	\$ 55,979	\$ 37,017
Wheels & Parts	3,129	10,190	9,381	8,774	7,492
Leasing & Services	27,963	77,529	12,254	5,474	16,318
	\$ 86,065	\$ 139,013	\$ 105,989	\$ 70,227	\$ 60,827
Proceeds from sale of assets	\$ 24,149	\$ 103,715	\$ 5,295	\$ 54,235	\$ 75,338
Depreciation and amortization:					

Edgar Filing: GREENBRIER COMPANIES INC - Form 10-K

Manufacturing	\$ 33,807	\$ 27,137	\$ 20,668	\$ 15,341	\$ 13,469
Wheels & Parts	11,143	11,971	11,748	12,582	12,843
Leasing & Services	20,179	24,237	12,740	12,499	15,135
	\$ 65,129	\$ 63,345	\$ 45,156	\$ 40,422	\$ 41,447

- (1) 2017 includes our portion of a non-cash goodwill impairment charge taken by GBW, which we account for under the equity method of accounting, of \$3.5 million net of tax.
- (2) 2014 includes a non-cash gain on contribution to joint venture of \$13.6 million net of tax and a restructuring charge of \$1.0 million net of tax. The gain related to the Company contributing its repair operations to GBW.
- (3) 2013 includes a non-cash goodwill impairment charge of \$71.8 million net of tax and a restructuring charge of \$1.8 million net of tax, both related to our Wheels & Parts segment.

Table of Contents**Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS****Executive Summary**

We operate in four reportable segments: Manufacturing; Wheels & Parts; Leasing & Services; and GBW Joint Venture. Our segments are operationally integrated. The Manufacturing segment, which currently operates from facilities in the U.S., Mexico, Poland and Romania, produces double-stack intermodal railcars, tank cars, conventional railcars, automotive railcar products and marine vessels. The Wheels & Parts segment performs wheel and axle servicing, as well as production of a variety of parts for the railroad industry in North America. The Leasing & Services segment owns approximately 8,300 railcars (7,200 railcars held as equipment on operating leases, 1,000 held as leased railcars for syndication and 100 held as finished goods inventory) and provides management services for approximately 336,000 railcars for railroads, shippers, carriers, institutional investors and other leasing and transportation companies in North America as of August 31, 2017. The GBW Joint Venture segment provides repair services across North America, including facilities certified by the AAR. The results of GBW's operations were included as part of Earnings (loss) from unconsolidated affiliates as we account for our interest under the equity method of accounting. Through other unconsolidated affiliates we produce rail and industrial castings, tank heads and other components and have an ownership stake in a railcar manufacturer in Brazil.

Our total manufacturing backlog of railcar units as of August 31, 2017 was approximately 28,600 units with an estimated value of \$2.80 billion, of which 24,100 units are for direct sales and 4,500 units are for lease to third parties. Approximately 1% of backlog units and the estimated value as of August 31, 2017 was associated with our Brazilian manufacturing operations which is accounted for under the equity method. Backlog units for lease may be syndicated to third parties or held in our own fleet depending on a variety of factors. Multi-year supply agreements are a part of rail industry practice. A portion of the orders included in backlog reflects an assumed product mix. Under terms of the orders, the exact mix and pricing will be determined in the future, which may impact the dollar amount of backlog. Marine backlog as of August 31, 2017 was \$42 million.

Our backlog of railcar units and marine vessels is not necessarily indicative of future results of operations. Certain orders in backlog are subject to customary documentation and completion of terms. Customers may attempt to cancel or modify orders in backlog. Historically, little variation has been experienced between the quantity ordered and the quantity actually delivered, though the timing of deliveries may be modified from time to time. We cannot guarantee that our reported railcar backlog will convert to revenue in any particular period, if at all.

In May 2017, we completed a \$20 million investment in Greenbrier-Maxion, a railcar manufacturer in Brazil resulting in an increase in our ownership interest from 19.5% to 60%. Simultaneously we increased our ownership interest in Amsted-Maxion Cruzeiro, a manufacturer of castings and components for railcars and other heavy equipment, from 19.5% to 24.5% for \$3.25 million. Proceeds from our increased ownership in Amsted-Maxion Cruzeiro, along with loans from each of the partners, were used to retire third-party debt at Amsted-Maxion Cruzeiro. We retain an option to increase our ownership in Amsted-Maxion Cruzeiro to 29.5% subject to certain conditions. With an increased ownership position in both companies, we expect to benefit from the anticipated economic growth and infrastructure development in Brazil. Our investments in Greenbrier-Maxion and Amsted-Maxion Cruzeiro improved the capital structure of both companies, positioning each business for growth. We account for these investments under the equity method of accounting.

In June 2017, Greenbrier-Astra Rail was formed which combined our European operations headquartered in Swidnica, Poland with Astra Rail, based in Arad, Romania. The combination creates Europe's largest end-to-end freight railcar manufacturing, engineering and repair business. Greenbrier-Astra Rail is controlled by us with an approximate 75% interest and we consolidate Greenbrier-Astra Rail for financial reporting purposes. We paid \$30 million in June 2017

and will pay an additional 30 million in June 2018 as consideration for this transaction.

Table of Contents

In June 2017, we completed agreements with Mitsubishi UFJ Lease & Finance Company Limited (MUL) to expand our existing commercial relationship in North America consistent with the previously announced Memorandum of Understanding. MUL intends to grow its portfolio from 5,000 railcars to a total of 25,000 railcars over the next four years. As part of these growth plans, MUL has ordered 6,000 newly-manufactured railcars from us, with deliveries commencing during the fourth calendar quarter of 2017 and continuing through calendar 2020. Further, MUL will obtain all its newly-manufactured railcars exclusively from us through calendar 2023. In addition to the new equipment ordered, over the next several years, MUL will supplement its portfolio growth through a combination of lease syndications and used equipment originated and owned by us. As part of this agreement, MUL paid us an upfront fee of \$40 million for various management services which we have recorded in deferred revenue and will recognize as revenue as services are performed. The parties have also formed MUL Greenbrier Management Services, LLC, a new railcar management services entity owned 50% by each company that will solely manage all railcars in the MUL fleet. We will receive fee income related to the ongoing railcar asset management services provided for the MUL fleet.

In June 2017, we purchased a 40% interest in a newly formed entity that buys and sells railcar assets that are leased to third parties; the remaining 60% is owned by a third party. We also provide administrative and remarketing services to this entity and earn management fees for these services. The railcars are principally built by and purchased from us and, prior to sale, principally included on our balance sheet as Leased railcars for syndication. The entity holds these railcars in the short or medium term with the intent to sell them to third parties, on an ongoing basis. We account for this investment under the equity method of accounting. As of August 31, 2017, the carrying amount of the investment was \$7.0 million which is classified in Investment in unconsolidated affiliates in our Consolidated Balance Sheet.

Table of Contents**Overview**

Revenue, cost of revenue, margin and operating profit presented below, include amounts from external parties and exclude intersegment activity that is eliminated in consolidation.

<i>(In thousands)</i>	2017	2016	2015
Revenue:			
Manufacturing	\$ 1,725,188	\$ 2,096,331	\$ 2,136,051
Wheels & Parts	312,679	322,395	371,237
Leasing & Services	131,297	260,798	97,990
	2,169,164	2,679,524	2,605,278
Cost of revenue:			
Manufacturing	1,373,967	1,630,554	1,691,414
Wheels & Parts	288,336	293,751	334,680
Leasing & Services	85,562	203,782	41,831
	1,747,865	2,128,087	2,067,925
Margin:			
Manufacturing	351,221	465,777	444,637
Wheels & Parts	24,343	28,644	36,557
Leasing & Services	45,735	57,016	56,159
	421,299	551,437	537,353
Selling and administrative	170,607	158,681	151,791
Net gain on disposition of equipment	(9,740)	(15,796)	(1,330)
Earnings from operations	260,432	408,552	386,892
Interest and foreign exchange	24,192	13,502	11,179
Earnings before income tax and earnings from unconsolidated affiliates	236,240	395,050	375,713
Income tax expense	(64,014)	(112,322)	(112,160)
Earnings before earnings from unconsolidated affiliates	172,226	282,728	263,553
Earnings (loss) from unconsolidated affiliates	(11,764)	2,096	1,756
Net earnings	160,462	284,824	265,309
Net earnings attributable to noncontrolling interest	(44,395)	(101,611)	(72,477)
Net earnings attributable to Greenbrier	\$ 116,067	\$ 183,213	\$ 192,832
Diluted earnings per common share	\$ 3.65	\$ 5.73	\$ 5.93

Performance for our segments is evaluated based on operating profit. Corporate includes selling and administrative costs not directly related to goods and services and certain costs that are intertwined among segments due to our integrated business model. Management does not allocate Interest and foreign exchange or Income tax expense for

either external or internal reporting purposes.

<i>(In thousands)</i>	2017	2016	2015
Operating profit:			
Manufacturing	\$ 295,334	\$ 415,094	\$ 396,921
Wheels & Parts	14,984	19,948	27,563
Leasing & Services	31,904	51,723	41,887
Corporate	(81,790)	(78,213)	(79,479)
	\$ 260,432	\$ 408,552	\$ 386,892

Table of Contents**Consolidated Results**

	Years ended August 31,			2017 vs 2016		2016 vs 2015	
	2017	2016	2015	Increase (Decrease)	% Change	Increase (Decrease)	% Change
<i>(In thousands)</i>							
Revenue	\$ 2,169,164	\$ 2,679,524	\$ 2,605,278	\$ (510,360)	(19.0%)	\$ 74,246	2.8%
Cost of revenue	\$ 1,747,865	\$ 2,128,087	\$ 2,067,925	\$ (380,222)	(17.9%)	\$ 60,162	2.9%
Margin (%)	19.4%	20.6%	20.6%	(1.2%)	*	0.0%	*
Net earnings attributable to Greenbrier	\$ 116,067	\$ 183,213	\$ 192,832	\$ (67,146)	(36.6%)	\$ (9,619)	(5.0%)

* Not meaningful

Through our integrated business model, we provide a broad range of custom products and services in each of our segments, which have various average selling prices and margins. The demand for and mix of products and services delivered changes from period to period, which causes fluctuations in our results of operations.

The 19.0% decrease in revenue for the year ended August 31, 2017 as compared to the year ended August 31, 2016 was primarily due to a 17.7% decrease in Manufacturing revenue. The decrease in Manufacturing revenue was primarily due to a 22.7% decrease in the volume of railcar deliveries which was partially offset by a higher average selling price. The decrease was also due to a 49.7% decrease in Leasing & Services revenue, primarily the result of a decrease in the sale of railcars which we had purchased from third parties with the intent to resell them. The 2.8% increase in revenue for the year ended August 31, 2016 as compared to the year ended August 31, 2015 was primarily due to a 166.1% increase in Leasing & Services revenue which was primarily the result of the sale of railcars that we purchased from a related third party.

The 17.9% decrease in cost of revenue for the year ended August 31, 2017 as compared to the year ended August 31, 2016 was primarily due to a 15.7% decrease in Manufacturing cost of revenue. The decrease in Manufacturing cost of revenue was primarily due to a 22.7% decrease in the volume of railcar deliveries which was partially offset by a product mix which had a higher average labor and material content. The decrease was also due to a 58.0% decrease in Leasing & Services cost of revenue primarily due to a decrease in costs associated with a decline in the volume of railcars sold that we purchased from third parties. The 2.9% increase in cost of revenue for the year ended August 31, 2016 as compared to the year ended August 31, 2015 was primarily due to a 387.2% increase in Leasing & Services cost of revenue which was primarily the result of costs associated with the sale of railcars that we purchased from a related third party.

Margin as a percentage of revenue was 19.4% for the year ended August 31, 2017 and 20.6% for the year ended August 31, 2016. The overall margin as a percentage of revenue was negatively impacted by a decrease in Manufacturing margin to 20.4% from 22.2% primarily due to a change in product mix and a reduction in the volume of railcar deliveries. In addition, the overall margin as a percentage of revenue was negatively impacted by a decrease in Wheels & Parts margin to 7.8% from 8.9%, primarily due to lower wheel set and component volumes. The overall margin as a percentage of revenue was positively impacted by an increase in Leasing & Services margin to 34.8% from 21.9% which was primarily a result of a decrease in the syndication, or sale, of railcars that we purchased from third parties which have lower margin percentages. Margin as a percentage of revenue was 20.6% for both the years ended August 31, 2016 and 2015. The overall margin as a percentage of revenue was positively impacted by an increase in Manufacturing margin to 22.2% from 20.8% primarily due to a change in product mix and improved production efficiencies. This was offset by a decrease in Leasing & Services margin to 21.9% from 57.3% primarily

as a result of a lower margin percentage on the syndication, or sale, of railcars purchased from a related third party. In addition, the increase in Manufacturing margin percentage was offset by a decrease in Wheels & Parts margin to 8.9% from 9.8% due to lower wheel set and component volumes and a decrease in scrap metal pricing.

Net earnings attributable to Greenbrier is impacted by our operating activities and noncontrolling interest associated with our 50/50 joint venture at one of our Mexican railcar manufacturing facilities and our 75% interest in Greenbrier-Astra Rail, both of which we consolidate for financial reporting purposes. The \$67.1 million decrease in net earnings for the year ended August 31, 2017 as compared to the year ended August 31, 2016 was primarily attributable to a decrease in margin, net of tax, due to lower railcar deliveries,

Table of Contents

which was partially offset by lower Net earnings attributable to noncontrolling interest in 2017 as a result of our Mexican railcar manufacturing 50/50 joint venture operating at lower volumes and margins. Our Mexican joint venture operated at higher volumes and margins in 2016 which resulted in higher Net earnings attributable to noncontrolling interest which was the primary reason for the \$9.6 million decrease in Net earnings attributable to Greenbrier for the year ended August 31, 2016 as compared to the year ended August 31, 2015. This was partially offset by an increase in Net gain on disposition of equipment in 2016 as compared to 2015.

Manufacturing Segment

<i>(In thousands)</i>	Years ended August 31,			2017 vs 2016		2016 vs 2015	
	2017	2016	2015	Increase (Decrease)	% Change	Increase (Decrease)	% Change
Revenue	\$ 1,725,188	\$ 2,096,331	\$ 2,136,051	\$ (371,143)	(17.7%)	\$ (39,720)	(1.9%)
Cost of revenue	\$ 1,373,967	\$ 1,630,554	\$ 1,691,414	\$ (256,587)	(15.7%)	\$ (60,860)	(3.6%)
Margin (%)	20.4%	22.2%	20.8%	(1.8%)	*	1.4%	*
Operating profit (\$)	\$ 295,334	\$ 415,094	\$ 396,921	\$ (119,760)	(28.9%)	\$ 18,173	4.6%
Operating profit (%)	17.1%	19.8%	18.6%	(2.7%)	*	1.2%	*
Deliveries	15,700	20,300	21,100	(4,600)	(22.7%)	(800)	(3.8%)

* Not meaningful

As of June 1, 2017, the Manufacturing segment included the results of Greenbrier-Astra Rail which is consolidated for financial reporting purposes.

Manufacturing revenue decreased \$371.1 million or 17.7% in 2017 compared to 2016 primarily due to a 22.7% decrease in the volume of railcar deliveries which was partially offset by a higher average selling price due to a change in product mix. Manufacturing revenue decreased \$39.7 million or 1.9% in 2016 compared to 2015 primarily due to a 3.8% decrease in the volume of railcar deliveries. However, the manufacturing product mix in 2016 had a higher average selling price as compared to 2015.

Manufacturing cost of revenue decreased \$256.6 million or 15.7% in 2017 compared to 2016 due to a decrease of 22.7% in the volume of railcar deliveries which was partially offset by a product mix that had a higher average labor and material content. Cost of revenue decreased \$60.9 million or 3.6% in 2016 compared to 2015 due to a decrease of 3.8% in the volume of railcar deliveries. This was partially offset by a mix which had a higher average labor and material content and improved production efficiencies.

Manufacturing margin as a percentage of revenue decreased 1.8% in 2017 compared to 2016 primarily due to a change in product mix and a reduction in the volume of railcar deliveries. These were partially offset by customer order renegotiation fees received during the year ended August 31, 2017. The 1.4% increase in margin percentage in 2016 compared to 2015 was primarily due to a change in product mix and improved production efficiencies. This was partially offset by lower volumes of new railcar sales with leases attached which typically result in higher sales prices and margins.

Manufacturing operating profit decreased \$119.8 million or 28.9% in 2017 compared to 2016 primarily attributed to a decrease in margin due to lower railcar deliveries. The \$18.2 million or 4.6% increase in operating profit in 2016 compared to 2015 was primarily attributed to higher margins.

Wheels & Parts Segment

<i>(In thousands)</i>	Years ended August 31,			2017 vs 2016		2016 vs 2015	
	2017	2016	2015	Increase (Decrease)	% Change	Increase (Decrease)	% Change
Revenue	\$ 312,679	\$ 322,395	\$ 371,237	\$ (9,716)	(3.0%)	\$ (48,842)	(13.2%)
Cost of revenue	\$ 288,336	\$ 293,751	\$ 334,680	\$ (5,415)	(1.8%)	\$ (40,929)	(12.2%)
Margin (%)	7.8%	8.9%	9.8%	(1.1%)	*	(0.9%)	*
Operating profit (\$)	\$ 14,984	\$ 19,948	\$ 27,563	\$ (4,964)	(24.9%)	\$ (7,615)	(27.6%)
Operating profit (%)	4.8%	6.2%	7.4%	(1.4%)	*	(1.2%)	*

* Not meaningful

Table of Contents

Wheels & Parts revenue decreased \$9.7 million or 3.0% in 2017 compared to 2016 primarily as a result of lower wheel set and component volumes due to a decrease in demand partially offset by an increase in parts volume. The \$48.8 million or 13.2% decrease in revenue in 2016 compared to 2015 was primarily a result of lower wheel set, component and parts volumes due to a decrease in demand and a decrease in scrap metal volume and pricing.

Wheels & Parts cost of revenue decreased \$5.4 million or 1.8% in 2017 compared to 2016 primarily due to lower wheel set and component costs associated with decreased volumes. Cost of revenue decreased \$40.9 million or 12.2% in 2016 compared to 2015 primarily due to lower wheel set, component and parts costs associated with decreased volumes.

Wheels & Parts margin as a percentage of revenue decreased 1.1% in 2017 compared to 2016 due to lower wheel set and component volumes. This was partially offset by a more favorable parts product mix and an increase in scrap metal pricing. The 0.9% decrease in margin percentage in 2016 compared to 2015 was due to lower wheel set and component volumes and a decrease in scrap metal pricing. These were partially offset by a more favorable parts product mix.

Wheels & Parts operating profit decreased \$5.0 million or 24.9% in 2017 compared to 2016 primarily attributable to a decrease in margin due to a decrease in wheel set and component volumes. The \$7.6 million or 27.6% decrease in operating profit in 2016 compared to 2015 was primarily attributable to a decrease in margin due to a decrease in volumes partially offset by \$2.3 million in insurance proceeds received in excess of net book value on assets destroyed in a fire at a Wheels & Parts facility in 2015.

Leasing & Services Segment

	Years ended August 31,			2017 vs 2016		2016 vs 2015	
	2017	2016	2015	Increase (Decrease)	Change %	Increase (Decrease)	Change %
<i>(In thousands)</i>							
Revenue	\$ 131,297	\$ 260,798	\$ 97,990	\$ (129,501)	(49.7%)	\$ 162,808	166.1%
Cost of revenue	\$ 85,562	\$ 203,782	\$ 41,831	\$ (118,220)	(58.0%)	\$ 161,951	387.2%
Margin (%)	34.8%	21.9%	57.3%	12.9%	*	(35.4%)	*
Operating profit (\$)	\$ 31,904	\$ 51,723	\$ 41,887	\$ (19,819)	(38.3%)	\$ 9,836	23.5%
Operating profit (%)	24.3%	19.8%	42.7%	4.5%	*	(22.9%)	*

* Not meaningful

The Leasing & Services segment primarily generates revenue from leasing railcars from our lease fleet and providing various management services. From time to time, railcars are purchased from third parties with the intent to resell them. The gross proceeds from the sale of these railcars with leases attached are recorded in revenue and the cost of purchasing these railcars are recorded in cost of revenue. We earn revenue from rent-producing leased railcars for syndication, which are held short term and classified as Leased railcars for syndication on our Consolidated Balance Sheet.

Leasing & Services revenue decreased \$129.5 million or 49.7% in 2017 compared to 2016 primarily as the result of a \$116.5 million decrease in the sale of railcars which we had purchased from third parties with the intent to resell them. The decrease in revenue was also due to lower average volume of rent-producing leased railcars held for syndication. The \$162.8 million or 166.1% increase in revenue in 2016 compared to 2015 was primarily the result of the sale of railcars for \$159.4 million that we purchased from a related third party with the intent to resell them and a 14%

increase in management services revenue due to the addition of new management service agreements. This was partially offset by a lower average volume of rent-producing leased railcars for syndication.

Leasing & Services cost of revenue decreased \$118.2 million or 58.0% in 2017 compared to 2016 primarily due to a decrease in costs associated with a decline in the volume of railcars sold that we purchased from third parties. This was partially offset by higher transportation and storage costs. Cost of revenue increased \$162.0 million or 387.2% in 2016 compared to 2015 primarily due to costs associated with the sale of railcars that we purchased from a related third party.

Table of Contents

Leasing & Services margin as a percentage of revenue increased 12.9% in 2017 compared to 2016 primarily as a result of a benefit from fewer sales of railcars that we purchased from third parties which have lower margin percentages. The margin percentage in 2017 compared to 2016 was negatively impacted by higher transportation and storage costs. The 35.4% decrease in margin percentage in 2016 compared to 2015 was primarily as a result of a lower margin percentage on the syndication, or sale, of railcars purchased from a related third party and a lower average volume of newly built rent-producing railcars.

Leasing & Services operating profit decreased \$19.8 million or 38.3% in 2017 compared to 2016 primarily attributed to a decrease in margin and a decrease in net gain on disposition of equipment. The \$9.8 million or 23.5% increase in operating profit in 2016 compared to 2015 was primarily attributed to an \$11.3 million increase in net gain on disposition of equipment and profit from the sale of railcars that we purchased from a related third party. This was partially offset by accelerated depreciation and amortization due to changes in the estimated useful lives of certain assets.

The percentage of owned units on lease was 92.1% at August 31, 2017, 91.0% at August 31, 2016 and 98.6% at August 31, 2015. These percentages exclude newly manufactured railcars not yet on lease. The percentage of owned units on lease as of August 31, 2016 also included a railcar portfolio acquisition that we purchased with the intent to sell and have subsequently sold.

GBW Joint Venture Segment

GBW, an unconsolidated 50/50 joint venture, generated total revenue of \$253.4 million, \$373.5 million and \$349.8 million for the years ended August 31, 2017, 2016 and 2015, respectively. The decrease in revenue of \$120.1 million and 32.2% in 2017 compared to 2016 was primarily due to a decrease in the volume of repair work. The increase in revenue of \$23.7 million in 2016 compared to 2015 was primarily due to an increase in volume and favorable pricing.

GBW margin as a percentage of revenue for the year ended August 31, 2017 was negative 1.6% compared to 9.1% for the year ended August 31, 2016 and 6.2% for the year ended August 31, 2015. The decrease in margin percentage in 2017 compared to 2016 was primarily due to operating at lower volumes of repair work. The increase in margin percentage in 2016 compared to 2015 was primarily attributed to an increase in labor efficiencies in 2016.

During the fourth quarter of 2017, GBW performed an interim goodwill test as sales and profitability trends declined beyond what was anticipated. As a result of the interim goodwill test, GBW recorded a pre-tax impairment loss of \$11.2 million for the year ended August 31, 2017. As of August 31, 2017, GBW had \$41.5 million of goodwill remaining.

To reflect our 50% share of GBW's results, we recorded a net loss of \$9.7 million for the year ended August 31, 2017 and earnings of \$3.2 million and \$0.8 million for the years ended August 31, 2016 and 2015, respectively. As we account for GBW under the equity method of accounting, our 50% share of the non-cash impairment loss recognized by GBW was \$3.5 million after-tax and is included as part of Earnings (loss) from unconsolidated affiliates on our Consolidated Statement of Income.

Selling and Administrative**Years ended August 31,****2017 vs 2016****2016 vs 2015**

					%		%
	2017	2016	2015	Increase (Decrease)	Change	Increase (Decrease)	Change
<i>(In thousands)</i>							
Selling and Administrative	\$ 170,607	\$ 158,681	\$ 151,791	\$ 11,926	7.5%	\$ 6,890	4.5%

Selling and administrative expense was \$170.6 million, or 7.9% of revenue for the year ended August 31, 2017, \$158.7 million, or 5.9% of revenue for the year ended August 31, 2016 and \$151.8 million, or 5.8% of revenue for the year ended August 31, 2015.

Table of Contents

The \$11.9 million increase in 2017 compared to 2016 was primarily attributed to a \$9.2 million increase in legal and consulting costs primarily associated with strategic business development, litigation and IT initiatives. The increase was also attributed to the addition of Astra Rail's selling and administrative costs which totaled \$2.6 million since its acquisition on June 1, 2017 and a \$0.8 million increase in research and development costs primarily related to our European manufacturing operations. This was partially offset by a \$1.7 million decrease in the revenue-based fees paid to our joint venture partner in Mexico.

The \$6.9 million increase in 2016 compared to 2015 was primarily attributed to a \$13.7 million increase in employee-related costs including long-term and short-term incentive compensation, additional headcount and employee separation costs. The increase was also attributed to a \$5.1 million increase in consulting costs primarily associated with strategic business development and IT initiatives. These increases were partially offset by lower professional expenses in 2016 as 2015 included \$10.5 million in costs associated with strategic initiatives and internal investigations.

Net Gain on Disposition of Equipment

Net gain on disposition of equipment was \$9.7 million, \$15.8 million and \$1.3 million for the years ended August 31, 2017, 2016 and 2015, respectively. Net gain on disposition of equipment is composed of the sale of assets from our lease fleet (Equipment on operating leases, net) that are periodically sold in the normal course of business in order to take advantage of market conditions and to manage risk and liquidity, along with the disposition of property, plant and equipment.

The gain for the year ended August 31, 2017 primarily consisted of \$5.2 million in insurance proceeds received in excess of net book value on assets destroyed in fires at two of our manufacturing facilities and \$4.5 million in gains realized on the disposition of leased assets and property, plant and equipment. The gain for the year ended August 31, 2016 primarily consisted of \$12.0 million in gains realized on the disposition of leased assets and property, plant and equipment and \$3.5 million in insurance proceeds received in excess of net book value on assets destroyed in fires at a manufacturing facility and a Wheels & Parts facility. All of the gain for the year ended August 31, 2015 was realized on the disposition of leased assets.

Interest and Foreign Exchange

Interest and foreign exchange expense was composed of the following:

<i>(In thousands)</i>	Years ended August 31,			Increase (decrease)	
	2017	2016	2015	2017 vs 2016	2016 vs 2015
Interest and foreign exchange:					
Interest and other expense	\$ 23,519	\$ 17,268	\$ 18,975	\$ 6,251	\$ (1,707)
Foreign exchange loss (gain)	673	(3,766)	(7,796)	4,439	4,030
	\$ 24,192	\$ 13,502	\$ 11,179	\$ 10,690	\$ 2,323

Interest and other expense increased \$10.7 million in 2017 from 2016 primarily attributed to interest expense associated with our \$275 million convertible senior notes due 2024 which we issued in February 2017. In addition, the increase was attributed to a \$0.7 million foreign exchange loss in 2017 compared to \$3.8 million gain in 2016. The change in foreign exchange loss (gain) was primarily attributed to the change in the Mexican Peso and Polish Zloty

exchange rates relative to the U.S. Dollar and the change in the Polish Zloty exchange rates relative to the Euro.

Interest and other expense increased \$2.3 million in 2016 from 2015 primarily due a \$4.0 million decrease in foreign exchange gain as compared to the prior comparable period primarily attributed to the change in the Mexican Peso exchange rates relative to the U.S. Dollar. This was partially offset by a \$1.7 million decrease in interest expense as a result of lower average borrowings as compared to the prior year.

Table of Contents**Income Tax**

In 2017 our income tax expense was \$64.0 million on \$236.2 million of pre-tax earnings for an effective tax rate of 27.1%. In 2016 our income tax expense was \$112.3 million on \$395.0 million of pre-tax earnings for an effective tax rate of 28.4%. In 2015 our income tax expense was \$112.2 million on \$375.7 million of pre-tax earnings for an effective tax rate of 29.9%.

The tax rate can fluctuate year-to-year due to changes in the mix of foreign and domestic pre-tax earnings. It can also fluctuate with changes in the proportion of pre-tax earnings attributable to our Mexican railcar manufacturing joint venture because the joint venture is predominantly treated as a partnership for tax purposes and, as a result, the partnership's entire pre-tax earnings are included in Earnings before income taxes and earnings from unconsolidated affiliates, whereas only our 50% share of the tax is included in Income tax expense.

Earnings from Unconsolidated Affiliates

Earnings (loss) from unconsolidated affiliates primarily included our share of after-tax results from our GBW joint venture including eliminations associated with GBW transactions with other Greenbrier entities, our castings joint venture, our tank head joint venture and our Brazil operations which include a castings joint venture and a railcar manufacturing joint venture.

Earnings (loss) from unconsolidated affiliates was a loss of \$11.8 million for the year ended August 31, 2017 and earnings of \$2.1 million and \$1.8 million for the years ended August 31, 2016 and 2015, respectively. The \$13.9 million decrease in Earnings (loss) from unconsolidated affiliates in 2017 from 2016 was primarily attributed to a loss at GBW from a non-cash goodwill impairment that GBW recognized and lower repair volumes and our increased ownership stake in our Brazil operations which had losses in 2017. As we account for GBW under the equity method of accounting, our 50% share of the non-cash impairment loss recognized by GBW was \$3.5 million after-tax. The \$0.3 million increase in Earnings (loss) from unconsolidated affiliates in 2016 from 2015 was primarily attributed to an increase in earnings at GBW primarily the result of an increase in volumes, partially offset by losses at our Brazil operations.

Net Earnings Attributable to Noncontrolling Interest

The years ended August 31, 2017, 2016 and 2015 include Net earnings attributable to noncontrolling interest of \$44.4 million, \$101.6 million and \$72.5 million, respectively, which primarily represents our joint venture partner's share in the results of operations of our Mexican railcar manufacturing joint venture, adjusted for intercompany sales. As of June 1, 2017, Net earnings attributable to noncontrolling interest includes our partner's share in the results of Greenbrier-Astra Rail. The decrease of \$57.2 million in 2017 compared to 2016 is primarily a result of a decrease in the volume of railcar deliveries and lower margins. The increase of \$29.1 million in 2016 compared to 2015 is primarily a result of an increase in the volume of railcar deliveries with higher margins.

Liquidity and Capital Resources

<i>(In thousands)</i>	Years Ended August 31,		
	2017	2016	2015
Net cash provided by operating activities	\$ 280,389	\$ 331,670	\$ 192,333
Net cash used in investing activities	(113,738)	(55,708)	(131,531)

Net cash provided by (used in) financing activities	209,637	(221,915)	(62,824)
Effect of exchange rate changes	12,499	(4,298)	(9,964)
Net (decrease) increase in cash and cash equivalents	\$ 388,787	\$ 49,749	\$ (11,986)

We have been financed through cash generated from operations and borrowings. At August 31, 2017 cash and cash equivalents was \$611.5 million, an increase of \$388.8 million from \$222.7 million at the prior year end.

Table of Contents

The decrease in cash provided by operating activities in 2017 compared to 2016 was primarily due to lower earnings and a net change in working capital. The increase in 2016 compared to 2015 was primarily due to higher earnings, a net change in working capital and a change in cash flows associated with leased railcars for syndication.

Cash used in investing activities primarily related to capital expenditures net of proceeds from the sale of assets. The change in cash used in investing activities in 2017 compared to 2016 was primarily attributable to lower proceeds from the sale of assets, investment related to the Greenbrier-Astra Rail transaction and an increase in investment in and advances to unconsolidated affiliates, primarily related to our Brazil operations. This was partially offset by lower capital expenditures for the year ended August 31, 2017 compared to 2016 and less restricted cash compared to the prior year. The change in 2016 compared to 2015 was primarily attributable to higher proceeds from the sale of assets partially offset by higher capital expenditures for the year ended August 31, 2016 compared to 2015.

Capital expenditures totaled \$86.1 million, \$139.0 million and \$106.0 million for the years ended August 31, 2017, 2016 and 2015, respectively. Manufacturing capital expenditures were approximately \$55.0 million, \$51.3 million and \$84.4 million for the years ended August 31, 2017, 2016 and 2015, respectively. Capital expenditures for Manufacturing are expected to be approximately \$70 million in 2018 and primarily relate to enhancements of our existing manufacturing facilities. Wheels & Parts capital expenditures were approximately \$3.1 million, \$10.2 million and \$9.4 million for the years ended August 31, 2017, 2016 and 2015, respectively. Capital expenditures for Wheels & Parts are expected to be approximately \$5 million in 2018 for maintenance and enhancements of our existing facilities. Leasing & Services and corporate capital expenditures were approximately \$28.0 million, \$77.5 million and \$12.2 million for the years ended August 31, 2017, 2016 and 2015, respectively. Leasing & Services and corporate capital expenditures for 2018 are expected to be approximately \$90 million. Proceeds from sales of leased railcar equipment are expected to be \$150 million for 2018. Assets from our lease fleet are periodically sold in the normal course of business in order to take advantage of market conditions and to manage risk and liquidity.

Proceeds from the sale of assets, which primarily related to sales of railcars from our lease fleet within Leasing & Services, were approximately \$24.1 million, \$103.7 million and \$5.3 million for the years ended August 31, 2017, 2016 and 2015, respectively. These proceeds included approximately \$7.7 million and \$44.1 million of equipment sold pursuant to sale leaseback transactions for the years ended August 31, 2017 and 2016, respectively. The gain resulting from the sale leaseback transactions was deferred and is being recognized over the lease term in Net gain on disposition of equipment. In addition, proceeds from the sale of assets for the years ended August 31, 2017 and 2016 included \$6.2 million and \$3.8 million, respectively, of insurance proceeds associated with our Manufacturing segment in 2017 and 2016 and Wheels & Parts segment in 2016.

The change in cash provided by (used in) financing activities in 2017 compared to 2016 was primarily attributed to proceeds from the issuance of convertible senior notes, a reduction in cash distribution to our joint venture partner and reduced share repurchases. The change in cash used in financing activities in 2016 compared to 2015 was primarily attributed to a net repayment of debt, an increase in cash distributions to our joint venture partner and an increase in dividends. These were partially offset by a decrease in the repurchase of our stock.

A quarterly dividend of \$0.23 per share was declared on October 24, 2017.

The Board of Directors has authorized our company to repurchase in aggregate up to \$225 million of our common stock. We did not repurchase any shares during the year ended August 31, 2017. As of August 31, 2017, we had cumulatively repurchased 3,206,226 shares for approximately \$137.0 million since October 2013 and had \$88.0 million available under the share repurchase program. In October 2017, the expiration date of this share repurchase program was extended from January 1, 2018 to March 31, 2019.

In February 2017, we issued \$275 million of convertible senior notes due 2024. The notes are senior unsecured obligations and rank equally with other senior unsecured debt. The notes bear interest at an annual rate of 2.875% payable semiannually in arrears on February 1 and August 1 of each year, commencing August 1, 2017. The notes will mature on February 1, 2024, unless earlier repurchased or converted in accordance with their terms.

As part of the formation of Greenbrier Astra-Rail, we acquired \$24.4 million in Notes payable in June 2017.

Table of Contents

Senior secured credit facilities, consisting of three components, aggregated to \$625.1 million as of August 31, 2017. We had an aggregate of \$338.9 million available to draw down under committed credit facilities as of August 31, 2017. This amount consists of \$268.1 million available on the North American credit facility, \$20.8 million on the European credit facilities and \$50.0 million on the Mexican railcar manufacturing joint venture credit facilities.

As of August 31, 2017, a \$550.0 million revolving line of credit, maturing October 2020, secured by substantially all of our assets in the U.S. not otherwise pledged as security for term loans, was available to provide working capital and interim financing of equipment, principally for the U.S. and Mexican operations. Advances under this facility bear interest at LIBOR plus 1.75% or Prime plus 0.75% depending on the type of borrowing. Available borrowings under the credit facility are generally based on defined levels of inventory, receivables, property, plant and equipment and leased equipment, as well as total debt to consolidated capitalization and fixed charges coverage ratios.

As of August 31, 2017, lines of credit totaling \$25.1 million secured by certain of our European assets, with variable rates that range from Warsaw Interbank Offered Rate (WIBOR) plus 1.2% to WIBOR plus 1.3% and Euro Interbank Offered Rate (EURIBOR) plus 1.9%, were available for working capital needs of our European manufacturing operation. European credit facilities are continually being renewed. Currently these European credit facilities have maturities that range from February 2018 through June 2019.

As of August 31, 2017, our Mexican railcar manufacturing joint venture had two lines of credit totaling \$50.0 million. The first line of credit provides up to \$30.0 million and is fully guaranteed by us and our joint venture partner. Advances under this facility bear interest at LIBOR plus 2.0%. The Mexican railcar manufacturing joint venture will be able to draw against this facility through January 2019. The second line of credit provides up to \$20.0 million, of which we and our joint venture partner have each guaranteed 50%. Advances under this facility bear interest at LIBOR plus 2.0%. The Mexican railcar manufacturing joint venture will be able to draw amounts available under this facility through July 2019.

As of August 31, 2017, outstanding commitments under the senior secured credit facilities consisted of \$77.6 million in letters of credit under our North American credit facility and \$4.3 million outstanding under our European credit facilities.

The revolving and operating lines of credit, along with notes payable, contain covenants with respect to us and our various subsidiaries, the most restrictive of which, among other things, limit our ability to: incur additional indebtedness or guarantees; pay dividends or repurchase stock; enter into capital leases; create liens; sell assets; engage in transactions with affiliates, including joint ventures and non U.S. subsidiaries, including but not limited to loans, advances, equity investments and guarantees; enter into mergers, consolidations or sales of substantially all our assets; and enter into new lines of business. The covenants also require certain maximum ratios of debt to total capitalization and minimum levels of fixed charges (interest plus rent) coverage. As of August 31, 2017, we were in compliance with all such restrictive covenants.

From time to time, we may seek to repurchase or otherwise retire or exchange securities, including outstanding notes, borrowings and equity securities, and take other steps to reduce our debt or otherwise improve our balance sheet. These actions may include open market repurchases, unsolicited or solicited privately negotiated transactions or other retirements, repurchases or exchanges. Such retirements, repurchases or exchanges, if any, will depend on a number of factors, including, but not limited to, prevailing market conditions, trading levels of our debt, our liquidity requirements and contractual restrictions, if applicable. The amounts involved in any such transactions may, individually or in the aggregate, be material and may involve all or a portion of a particular series of notes or other indebtedness which may reduce the float and impact the trading market of notes or other indebtedness which remain outstanding.

We have global operations that conduct business in their local currencies as well as other currencies. To mitigate the exposure to transactions denominated in currencies other than the functional currency, we enter into foreign currency forward exchange contracts with established financial institutions to protect the margin on a portion of foreign currency sales in firm backlog. Given the strong credit standing of the counterparties, no provision has been made for credit loss due to counterparty non-performance.

Table of Contents

We made \$0.6 million in cash contributions to GBW, an unconsolidated 50/50 joint venture, for the year ended August 31, 2017 which represented a reinvestment of a distribution received from GBW during the year. We are likely to make additional capital contributions or loans to GBW in the future. As of August 31, 2017, we had a \$36.5 million note receivable from GBW which is included on the Consolidated Balance Sheet in Accounts receivable, net.

As of August 31, 2017, we had a \$10.0 million note receivable from Amsted-Maxion Cruzeiro, an unconsolidated Brazilian castings and components manufacturer, which is included on the Consolidated Balance Sheet in Accounts receivable, net. In the future, we may make loans to or provide guarantees for Amsted-Maxion Cruzeiro or Greenbrier-Maxion, an unconsolidated Brazilian railcar manufacturer. In September 2017, we provided a \$3.4 million loan to Greenbrier-Maxion due in June 2018.

We expect existing funds and cash generated from operations, together with proceeds from financing activities including borrowings under existing credit facilities and long-term financings, to be sufficient to fund expected debt repayments, working capital needs, planned capital expenditures, a \$30 million payment in June 2018 as consideration for the Greenbrier-Astra Rail transaction, additional investments in our unconsolidated affiliates and dividends during the next twelve months.

The following table shows our estimated future contractual cash obligations as of August 31, 2017:

<i>(In thousands)</i>	Total	Years Ending August 31,					Thereafter
		2018	2019	2020	2021	2022	
Notes payable ⁽¹⁾	\$ 478,541	\$ 11,200	\$ 26,040	\$ 166,301	\$	\$	\$ 275,000
Interest ⁽²⁾	72,038	18,945	14,440	10,982	7,906	7,906	11,859
Railcar leases	25,558	7,363	6,177	4,832	1,792	1,792	3,602
Operating leases	15,158	5,006	3,585	3,304	2,217	705	341
Revolving notes	4,324	4,324					
Other	35,806	35,703	63	31	9		
	\$ 631,425	\$ 82,541	\$ 50,305	\$ 185,450	\$ 11,924	\$ 10,403	\$ 290,802

⁽¹⁾ The \$119.1 million of Convertible senior notes due 2018 is assumed to be settled in stock.

⁽²⁾ A portion of the estimated future cash obligation relates to interest on variable rate borrowings.

Due to uncertainty with respect to the timing of future cash flows associated with our unrecognized tax benefits at August 31, 2017, we are unable to estimate the period of cash settlement with the respective taxing authority. Therefore, approximately \$1.8 million in uncertain tax positions, including interest, have been excluded from the contractual table above. See Note 18 to the Consolidated Financial Statements for a discussion on income taxes.

Off Balance Sheet Arrangements

We do not currently have off balance sheet arrangements that have or are likely to have a material current or future effect on our Consolidated Financial Statements.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires judgment on the part of management to arrive at estimates and assumptions on matters that are inherently uncertain. These estimates may affect the amount of assets, liabilities, revenue and expenses reported in the financial statements and accompanying notes and disclosure of contingent assets and liabilities within the financial statements. Estimates and assumptions are periodically evaluated and may be adjusted in future periods. Actual results could differ from those estimates.

Income taxes - For financial reporting purposes, income tax expense is estimated based on amounts anticipated to be reported on tax return filings. Those anticipated amounts may change from when the financial statements are prepared to when the tax returns are filed. Further, because tax filings are subject to review by taxing authorities,

Table of Contents

there is risk that a position taken in preparation of a tax return may be challenged by a taxing authority. If a challenge is successful, differences in tax expense or between current and deferred tax items may arise in future periods. Any material effect of such differences would be reflected in the financial statements when management considers the effect more likely than not of occurring and the amount reasonably estimable. Valuation allowances reduce deferred tax assets to amounts more likely than not that will be realized based on information available when the financial statements are prepared. This information may include estimates of future income and other assumptions that are inherently uncertain.

Maintenance obligations - We are responsible for maintenance on a portion of the managed and owned lease fleet under the terms of maintenance obligations defined in the underlying lease or management agreement. The estimated maintenance liability is based on maintenance histories for each type and age of railcar. These estimates involve judgment as to the future costs of repairs and the types and timing of repairs required over the lease term. As we cannot predict with certainty the prices, timing and volume of maintenance needed in the future on railcars under long-term leases, this estimate is uncertain and could be materially different from maintenance requirements. The liability is periodically reviewed and updated based on maintenance trends and known future repair or refurbishment requirements. These adjustments could be material due to the inherent uncertainty in predicting future maintenance requirements.

Warranty accruals - Warranty costs to cover a defined warranty period are estimated and charged to operations. The estimated warranty cost is based on historical warranty claims for each particular product type. For new product types without a warranty history, preliminary estimates are based on historical information for similar product types. These estimates are inherently uncertain as they are based on historical data for existing products and judgment for new products. If warranty claims are made in the current period for issues that have not historically been the subject of warranty claims and were not taken into consideration in establishing the accrual or if claims for issues already considered in establishing the accrual exceed expectations, warranty expense may exceed the accrual for that particular product. Conversely, there is the possibility that claims may be lower than estimates. The warranty accrual is periodically reviewed and updated based on warranty trends. However, as we cannot predict future claims, the potential exists for the difference in any one reporting period to be material.

Environmental costs - At times we may be involved in various proceedings related to environmental matters. We estimate future costs for known environmental remediation requirements and accrue for them when it is probable that we have incurred a liability and the related costs can be reasonably estimated based on currently available information. If further developments in or resolution of an environmental matter result in facts and circumstances that are significantly different than the assumptions used to develop these reserves, the accrual for environmental remediation could be materially understated or overstated. Adjustments to these liabilities are made when additional information becomes available that affects the estimated costs to study or remediate any environmental issues or when expenditures for which reserves are established are made. Due to the uncertain nature of environmental matters, there can be no assurance that we will not become involved in future litigation or other proceedings or, if we were found to be responsible or liable in any litigation or proceeding, that such costs would not be material to us.

Revenue recognition - Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured.

Railcars are generally manufactured, repaired or refurbished and wheels and parts produced under firm orders from third parties. Revenue is recognized when these products or services are completed, accepted by an unaffiliated customer and contractual contingencies removed. Certain leases are operated under car hire arrangements whereby revenue is earned based on utilization, car hire rates and terms specified in the lease agreement. Car hire revenue is reported from a third party source two months in arrears; however, such revenue is accrued in the month earned based

on estimates of use from historical activity and is adjusted to actual when reported to us. These estimates are inherently uncertain as they involve judgment as to the estimated use of each railcar. Adjustments to actual have historically not been significant. Revenue from the construction of marine barges is either recognized on the percentage of completion method during the construction period or on the completed contract method based on the terms of the contract. Under the percentage of completion method,

Table of Contents

judgment is used to determine a definitive threshold against which progress towards completion can be measured to determine timing of revenue recognition. Under the percentage of completion method, revenue is recognized based on the progress toward contract completion measured by actual costs incurred to date in relation to the estimate of total expected costs. Under the completed contract method, revenue is not recognized until the project has been fully completed.

We will periodically sell railcars with leases attached to financial investors. Revenue and cost of revenue associated with railcars that the Company has manufactured are recognized in Manufacturing once sold. Revenue and cost of revenue associated with railcars which were obtained from a third party with the intent to resell them which are subsequently sold are recognized in Leasing & Services. In addition we will often perform management or maintenance services at market rates for these railcars. Pursuant to the guidance in Accounting Standards Codification (ASC) 840-20-40, we evaluate the terms of any remarketing agreements and any contractual provisions that represent retained risk and the level of retained risk based on those provisions. We determine whether the level of retained risk exceeds 10% of the individual fair value of the railcars with leases attached that are delivered. If retained risk exceeded 10%, the transaction would not be recognized as a sale until such time as the retained risk declined to 10% or less. For any contracts with multiple elements (i.e. railcars, maintenance, management services, etc.) we allocate revenue among the deliverables primarily based upon objective and reliable evidence of the fair value of each element in the arrangement. If objective and reliable evidence of fair value of any element is not available, we will use the element's estimated selling price for purposes of allocating the total arrangement consideration among the elements.

Impairment of long-lived assets - When changes in circumstances indicate the carrying amount of certain long-lived assets may not be recoverable, the assets are evaluated for impairment. If the forecast of undiscounted future cash flows are less than the carrying amount of the assets, an impairment charge to reduce the carrying value of the assets to fair value would be recognized in the current period. These estimates are based on the best information available at the time of the impairment and could be materially different if circumstances change. If the forecast of undiscounted future cash flows exceeds the carrying amount of the assets it would indicate that the assets were not impaired.

Goodwill and acquired intangible assets - We periodically acquire businesses in purchase transactions in which the allocation of the purchase price may result in the recognition of goodwill and other intangible assets. The determination of the value of such intangible assets requires management to make estimates and assumptions. These estimates affect the amount of future period amortization and possible impairment charges.

Goodwill and indefinite-lived intangible assets are tested for impairment annually during the third quarter. Goodwill and indefinite-lived intangible assets are also tested more frequently if changes in circumstances or the occurrence of events indicates that a potential impairment exists. When changes in circumstances, such as a decline in the market price of our common stock, changes in demand or in the numerous variables associated with the judgments, assumptions and estimates made in assessing the appropriate valuation of goodwill indicate the carrying amount of certain indefinite lived assets may not be recoverable, the assets are evaluated for impairment. Among other things, our assumptions used in the valuation of goodwill include growth of revenue and margins, market multiples, discount rates and increased cash flows over time. If actual operating results were to differ from these assumptions, it may result in an impairment of our goodwill.

The provisions of ASC 350, *Intangibles - Goodwill and Other*, require that we perform an impairment test on goodwill. We compare the fair value of each reporting unit with its carrying value. We determine the fair value of our reporting units based on a weighting of income and market approaches. Under the income approach, we calculate the fair value of a reporting unit based on the present value of estimated future cash flows. Under the market approach, we estimate the fair value based on observed market multiples for comparable businesses. An impairment loss is recorded to the extent that the reporting unit's carrying amount exceeds the reporting unit's fair value. An impairment loss cannot

exceed the total amount of goodwill allocated to the reporting unit. Goodwill was tested during the third quarter of 2017 and we concluded that goodwill was not impaired. Our goodwill balance was \$68.6 million as of August 31, 2017 of which \$43.3 million related to our Wheels & Parts segment and \$25.3 million related to our Manufacturing segment.

Table of Contents

GBW, an unconsolidated 50/50 joint venture, also separately tests its goodwill and indefinite-lived intangible assets for impairment consistent with the methodology described above. During the third quarter of 2017, GBW performed its annual impairment test and concluded that no impairment existed. However, the estimated fair value of goodwill exceeded its carrying value by approximately 4%. Since the estimated fair value was not substantially in excess of its carrying value, we disclosed in our third quarter of 2017 Form 10-Q that GBW may be at risk for an impairment loss in the future. During the fourth quarter of 2017, GBW performed an interim goodwill test as sales and profitability trends declined beyond what was anticipated. As a result of the interim goodwill test, GBW recorded a pre-tax impairment loss of \$11.2 million for the year ended August 31, 2017. As we account for GBW under the equity method of accounting, our 50% share of the non-cash impairment loss recognized by GBW was \$3.5 million after-tax and included as part of Earnings (loss) from unconsolidated affiliates on our Consolidated Statement of Income. As of August 31, 2017, GBW had \$41.5 million of goodwill remaining.

New Accounting Pronouncements

See Note 2 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Table of Contents

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK
Foreign Currency Exchange Risk

We have global operations that conduct business in their local currencies as well as other currencies. To mitigate the exposure to transactions denominated in currencies other than the functional currency of each entity, we enter into foreign currency forward exchange contracts to protect revenue or margin on a portion of forecast foreign currency sales and expenses. At August 31, 2017 exchange rates, forward exchange contracts for the purchase of Polish Zlotys and the sale of Euros and U.S. Dollars; the purchase of Mexican Pesos and the sale of U.S. Dollars; and for the purchase of U.S. Dollars and the sale of Saudi Riyals aggregated to \$287.3 million. Because of the variety of currencies in which purchases and sales are transacted and the interaction between currency rates, it is not possible to predict the impact a movement in a single foreign currency exchange rate would have on future operating results.

In addition to exposure to transaction gains or losses, we are also exposed to foreign currency exchange risk related to the net asset position of our foreign subsidiaries where the functional currency is not U.S. Dollars. At August 31, 2017, net assets of foreign subsidiaries aggregated to \$190.0 million and a 10% strengthening of the U.S. Dollar relative to the foreign currencies would result in a decrease in equity of \$19.0 million, or 1.9% of Total equity Greenbrier. This calculation assumes that each exchange rate would change in the same adverse direction relative to the U.S. Dollar.

Interest Rate Risk

We have managed a portion of our variable rate debt with interest rate swap agreements, effectively converting \$88.6 million of variable rate debt to fixed rate debt. As a result, we are exposed to interest rate risk relating to our revolving debt and a portion of term debt, which are at variable rates. At August 31, 2017, 83% of our outstanding debt had fixed rates and 17% had variable rates. At August 31, 2017, a uniform 10% increase in variable interest rates would have resulted in approximately \$0.3 million of additional annual interest expense.

Table of Contents

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders

The Greenbrier Companies, Inc. and subsidiaries:

We have audited the accompanying consolidated balance sheets of The Greenbrier Companies, Inc. and subsidiaries (the Company) as of August 31, 2017 and 2016, and the related consolidated statements of income, comprehensive income, equity, and cash flows for each of the years in the three year period ended August 31, 2017. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of The Greenbrier Companies, Inc. and subsidiaries as of August 31, 2017 and 2016, and the results of their operations and their cash flows for each of the years in the three year period ended August 31, 2017, 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), The Greenbrier Companies, Inc. and subsidiaries' internal control over financial reporting as of August 31, 2017, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated October 27, 2017 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting. Our report on the effectiveness of internal control over financial reporting as of August 31, 2017, contains an explanatory paragraph that states that management's assessment of the effectiveness of internal control over financial reporting and our audit of internal control over financial reporting of The Greenbrier Companies, Inc. and subsidiaries excludes an evaluation of internal control over financial reporting of the controlling interest acquired in the Astra subsidiaries.

/s/ KPMG LLP

Portland, Oregon

October 27, 2017

Table of Contents**Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**
Consolidated Balance Sheets

AS OF AUGUST 31,

<i>(In thousands)</i>	2017	2016
Assets		
Cash and cash equivalents	\$ 611,466	\$ 222,679
Restricted cash	8,892	24,279
Accounts receivable, net	279,964	232,517
Inventories	400,127	365,805
Leased railcars for syndication	91,272	144,932
Equipment on operating leases, net	315,941	306,266
Property, plant and equipment, net	428,021	329,990
Investment in unconsolidated affiliates	108,255	98,682
Intangibles and other assets, net	85,177	67,359
Goodwill	68,590	43,265
	\$ 2,397,705	\$ 1,835,774
Liabilities and Equity		
Revolving notes	\$ 4,324	\$
Accounts payable and accrued liabilities	415,061	369,754
Deferred income taxes	75,791	51,619
Deferred revenue	129,260	95,721
Notes payable, net	558,228	301,853
Commitments and contingencies (Notes 21 & 22)		
Contingently redeemable noncontrolling interest	36,148	
Equity:		
Greenbrier		
Preferred stock without par value; 25,000 shares authorized; none outstanding		
Common stock without par value; 50,000 shares authorized; 28,503 and 28,205 outstanding at August 31, 2017 and 2016		
Additional paid-in capital	315,306	282,886
Retained earnings	709,103	618,178
Accumulated other comprehensive loss	(6,279)	(26,753)
Total equity Greenbrier	1,018,130	874,311
Noncontrolling interest	160,763	142,516
Total equity	1,178,893	1,016,827

\$ 2,397,705 \$ 1,835,774

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

Table of Contents**Consolidated Statements of Income**

YEARS ENDED AUGUST 31,

<i>(In thousands, except per share amounts)</i>	2017	2016	2015
Revenue			
Manufacturing	\$ 1,725,188	\$ 2,096,331	\$ 2,136,051
Wheels & Parts	312,679	322,395	371,237
Leasing & Services	131,297	260,798	97,990
	2,169,164	2,679,524	2,605,278
Cost of revenue			
Manufacturing	1,373,967	1,630,554	1,691,414
Wheels & Parts	288,336	293,751	334,680
Leasing & Services	85,562	203,782	41,831
	1,747,865	2,128,087	2,067,925
Margin	421,299	551,437	537,353
Selling and administrative	170,607	158,681	151,791
Net gain on disposition of equipment	(9,740)	(15,796)	(1,330)
Earnings from operations	260,432	408,552	386,892
Other costs			
Interest and foreign exchange	24,192	13,502	11,179
Earnings before income tax and earnings (loss) from unconsolidated affiliates	236,240	395,050	375,713
Income tax expense	(64,014)	(112,322)	(112,160)
Earnings before earnings (loss) from unconsolidated affiliates	172,226	282,728	263,553
Earnings (loss) from unconsolidated affiliates	(11,764)	2,096	1,756
Net earnings	160,462	284,824	265,309
Net earnings attributable to noncontrolling interest	(44,395)	(101,611)	(72,477)
Net earnings attributable to Greenbrier	\$ 116,067	\$ 183,213	\$ 192,832
Basic earnings per common share	\$ 3.97	\$ 6.28	\$ 6.85
Diluted earnings per common share	\$ 3.65	\$ 5.73	\$ 5.93
Weighted average common shares:			
Basic	29,225	29,156	28,151
Diluted	32,562	32,468	33,328
Dividends declared per common share	\$ 0.86	\$ 0.81	\$ 0.60

Edgar Filing: GREENBRIER COMPANIES INC - Form 10-K

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

The Greenbrier Companies 2017 Annual Report

53

Table of Contents**Consolidated Statements of Comprehensive Income**

YEARS ENDED AUGUST 31,

<i>(In thousands)</i>	2017	2016	2015
Net earnings	\$ 160,462	\$ 284,824	\$ 265,309
Other comprehensive income			
Translation adjustment	15,488	(2,204)	(14,009)
Reclassification of derivative financial instruments recognized in net earnings ¹	3,729	2,544	737
Unrealized gain (loss) on derivative financial instruments ²	1,944	(5,842)	(1,330)
Other (net of tax effect)	(665)	(84)	173
	20,496	(5,586)	(14,429)
Comprehensive income	180,958	279,238	250,880
Comprehensive income attributable to noncontrolling interest	(44,417)	(101,573)	(72,321)
Comprehensive income attributable to Greenbrier	\$ 136,541	\$ 177,665	\$ 178,559

¹ Net of tax of effect of \$1.0 million, \$1.2 million and \$0.6 million for the years ended August 31, 2017, 2016 and 2015, respectively.

² Net of tax of effect of \$0.8 million, \$2.1 million and \$1.0 million for the years ended August 31, 2017, 2016 and 2015, respectively.

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

Table of Contents

Consolidated Statements of Equity

(In thousands)	Attributable to Greenbrier				Total Attributable to Greenbrier	Attributable to Noncontrolling Interest	Total Equity	Contingently Redeemable Noncontrolling Interest
	Common Stock Shares	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss				
Balance September 1, 2014	27,364	\$235,763	\$282,559	\$(6,932)	\$511,390	\$62,331	\$573,721	\$
Net earnings			192,832		192,832	72,477	265,309	
Other comprehensive loss, net				(14,273)	(14,273)	(156)	(14,429)	
Noncontrolling interest adjustments						17,215	17,215	
Purchase of noncontrolling interest						(80)	(80)	
Joint venture partner distribution declared						(21,136)	(21,136)	
Restricted stock awards (net of cancellations)	(15)	22,622			22,622		22,622	
Unamortized restricted stock		(24,477)			(24,477)		(24,477)	
Restricted stock amortization		19,459			19,459		19,459	
Excess tax benefit from restricted stock awards		2,908			2,908		2,908	
Conversion of convertible notes, net of debt issuance costs	2,945	109,387			109,387		109,387	
Dividends			(16,792)		(16,792)		(16,792)	
Repurchase of stock	(1,387)	(70,218)			(70,218)		(70,218)	

Balance August 31, 2015	28,907	\$ 295,444	\$ 458,599	\$ (21,205)	\$ 732,838	\$ 130,651	\$ 863,489	\$
Net earnings			183,213		183,213	101,611	284,824	
Other comprehensive loss, net				(5,548)	(5,548)	(38)	(5,586)	
Noncontrolling interest adjustments						526	526	
Purchase of noncontrolling interest						(1,195)	(1,195)	
Joint venture partner distribution declared						(94,439)	(94,439)	
Investment by joint venture partner						5,400	5,400	
Restricted stock awards (net of cancellations)	353	6,055			6,055		6,055	
Unamortized restricted stock		(11,555)			(11,555)		(11,555)	
Restricted stock amortization		22,502			22,502		22,502	
Excess tax benefit from restricted stock awards		2,813			2,813		2,813	
Dividends			(23,634)		(23,634)		(23,634)	
Repurchase of stock	(1,055)	(32,373)			(32,373)		(32,373)	
Balance August 31, 2016	28,205	\$ 282,886	\$ 618,178	\$ (26,753)	\$ 874,311	\$ 142,516	\$ 1,016,827	\$
Net earnings (excluding contingently redeemable noncontrolling interest)			116,067		116,067	46,535	162,602	(2,140)
Other comprehensive income, net				20,474	20,474	22	20,496	
Noncontrolling interest						(677)	(677)	

adjustments									
Joint venture partner distribution declared					(28,027)		(28,027)		
Acquisition of minority interest					394		394		
Contingently redeemable noncontrolling interest									38,288
Restricted stock awards (net of cancellations)	298	5,520			5,520		5,520		
Unamortized restricted stock		(10,734)			(10,734)		(10,734)		
Restricted stock amortization		19,826			19,826		19,826		
Tax deficiency from restricted stock awards		(2,339)			(2,339)		(2,339)		
Dividends 2024					(25,142)		(25,142)		
Convertible Senior Notes equity component, net of tax 2024		20,818			20,818		20,818		
Convertible Senior Notes issuance costs equity component, net of tax		(671)			(671)		(671)		
Balance August 31, 2017	28,503	\$ 315,306	\$ 709,103	\$ (6,279)	\$ 1,018,130	\$ 160,763	\$ 1,178,893	\$ 36,148	

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

Table of Contents**Consolidated Statements of Cash Flows**

YEARS ENDED AUGUST 31,

<i>(In thousands)</i>	2017	2016	2015
Cash flows from operating activities:			
Net earnings	\$ 160,462	\$ 284,824	\$ 265,309
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Deferred income taxes	4,377	(8,935)	(20,151)
Depreciation and amortization	65,129	63,345	45,156
Net gain on disposition of equipment	(9,740)	(15,796)	(1,330)
Stock based compensation expense	26,427	24,037	19,459
Accretion of debt discount	2,340		
Noncontrolling interest adjustments	(677)	526	17,215
Other	(845)	560	1,184
Decrease (increase) in assets:			
Accounts receivable, net	(25,272)	(32,051)	13,652
Inventories	(2,787)	53,711	(143,849)
Leased railcars for syndication	41,015	19,154	(90,614)
Other	17,558	(16,989)	575
Increase (decrease) in liabilities:			
Accounts payable and accrued liabilities	(30,637)	(91,428)	72,419
Deferred revenue	33,039	50,712	13,308
Net cash provided by operating activities	280,389	331,670	192,333
Cash flows from investing activities:			
Acquisitions, net of cash acquired	(27,127)		
Proceeds from sales of assets	24,149	103,715	5,295
Capital expenditures	(86,065)	(139,013)	(105,989)
Decrease (increase) in restricted cash	15,387	(15,410)	271
Investment in and advances to unconsolidated affiliates	(40,632)	(12,855)	(34,453)
Cash distribution from joint ventures	550	7,855	3,345
Net cash used in investing activities	(113,738)	(55,708)	(131,531)
Cash flows from financing activities:			
Net changes in revolving notes with maturities of 90 days or less	4,324	(49,000)	49,000
Proceeds from revolving notes with maturities longer than 90 days			44,451
Repayments of revolving notes with maturities longer than 90 days		(1,888)	(55,644)
Proceeds from issuance of notes payable	276,093		
Repayments of notes payable	(8,297)	(22,299)	(7,475)
Debt issuance costs	(9,082)	(4,161)	
Decrease in restricted cash			11,000
Repurchase of stock		(33,498)	(69,950)

Edgar Filing: GREENBRIER COMPANIES INC - Form 10-K

Dividends	(24,890)	(23,303)	(16,491)
Cash distribution to joint venture partner	(28,511)	(95,092)	(20,375)
Investment by joint venture partner		5,400	
Excess tax benefit from restricted stock awards		2,813	2,908
Other		(887)	(248)
Net cash provided by (used in) financing activities	209,637	(221,915)	(62,824)
Effect of exchange rate changes	12,499	(4,298)	(9,964)
Increase (decrease) in cash and cash equivalents	388,787	49,749	(11,986)
Cash and cash equivalents			
Beginning of period	222,679	172,930	184,916
End of period	\$ 611,466	\$ 222,679	\$ 172,930
Cash paid during the period for:			
Interest	\$ 13,962	\$ 12,277	\$ 15,535
Income taxes, net	\$ 45,280	\$ 125,455	\$ 139,960
Non-cash activity			
Transfer from Leased railcars for syndication to Equipment on operating leases, net	\$ 8,668	\$ 48,096	\$ 3,313
Transfer from Inventories to Equipment on operating leases, net	\$	\$ 25,069	\$
Capital expenditures accrued in Accounts payable and accrued liabilities	\$ 16,145	\$ 8,408	\$ 8,758
Change in Accounts payable and accrued liabilities associated with cash distributions to joint venture partner	\$ 484	\$ 652	\$
Change in Accounts payable and accrued liabilities associated with repurchase of stock	\$	\$ 1,125	\$ 268
Transfer of Property, plant and equipment, net to (from) Intangibles and other assets, net	\$ (63)	\$ 588	\$ 4,045
Change in Accounts payable and accrued liabilities associated with dividends declared	\$ (252)	\$ (331)	\$ 301
Conversion of convertible notes, net of debt issuance costs	\$	\$	\$ 109,387

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

Table of Contents**Notes to Consolidated Financial Statements****Note 1 - Nature of Operations**

The Greenbrier Companies, Inc. and its subsidiaries currently operate in four reportable segments: Manufacturing; Wheels & Parts; Leasing & Services; and GBW Joint Venture. The segments are operationally integrated. The Manufacturing segment which currently operates from facilities in the United States, Mexico, Poland and Romania, produces double-stack intermodal railcars, tank cars, conventional railcars, automotive railcar products and marine vessels. The Wheels & Parts segment performs wheel and axle servicing, as well as production of a variety of parts for the railroad industry in North America. The Leasing & Services segment owns approximately 8,300 railcars (7,200 railcars held as equipment on operating leases, 1,000 held as leased railcars for syndication and 100 held as finished goods inventory) and provides management services for approximately 336,000 railcars for railroads, shippers, carriers, institutional investors and other leasing and transportation companies in North America. The GBW Joint Venture segment provides repair services across North America, including facilities certified by the AAR. The results of GBW's operations were included as part of Earnings (loss) from unconsolidated affiliates as the Company accounts for their interest in GBW under the equity method of accounting. Through other unconsolidated affiliates the Company also produces rail and industrial castings, tank heads and other components and has an ownership stake in a railcar manufacturer in Brazil.

Note 2 - Summary of Significant Accounting Policies

Principles of consolidation - The financial statements include the accounts of the Company and its subsidiaries in which it has a controlling interest. All intercompany transactions and balances are eliminated upon consolidation.

Unclassified balance sheet - The balance sheets of the Company are presented in an unclassified format as a result of significant leasing activities for which the current or non-current distinction is not relevant. In addition, the activities of the Manufacturing; Wheels & Parts; and Leasing & Services segments are so intertwined that in the opinion of management, any attempt to separate the respective balance sheet categories would not be meaningful and may lead to the development of misleading conclusions by the reader.

Foreign currency translation - Certain operations outside the U.S., primarily in Europe, prepare financial statements in currencies other than the U.S. Dollar. Revenues and expenses are translated at average exchange rates for the year, while assets and liabilities are translated at year-end exchange rates. Translation adjustments are accumulated as a separate component of equity in other comprehensive income (loss). The net foreign currency translation adjustment balances were \$5.4 million, \$20.8 million and \$18.7 million as of August 31, 2017, 2016 and 2015, respectively.

Cash and cash equivalents - Cash may temporarily be invested primarily in money market funds. All highly-liquid investments with a maturity of three months or less at the date of acquisition are considered cash equivalents.

Restricted cash - Restricted cash primarily relates to amounts associated with funds temporarily held in connection with a performance guarantee as part of a 2016 transaction, amounts held to support a target minimum rate of return on certain agreements and a pass through account for activity related to management services provided for certain third party customers.

Table of Contents

Accounts receivable - Accounts receivable includes receivables from related parties (see Note 17 - Related Party Transactions) and is stated net of allowance for doubtful accounts of \$1.8 million and \$2.2 million as of August 31, 2017 and 2016, respectively.

<i>(In thousands)</i>	As of August 31,		
	2017	2016	2015
Allowance for doubtful accounts			
Balance at beginning of period	\$ 2,215	\$ 2,449	\$ 2,033
Additions, net of reversals	370	70	684
Usage	(891)	(277)	(108)
Currency translation effect	74	(27)	(160)
Balance at end of period	\$ 1,768	\$ 2,215	\$ 2,449

Inventories - Inventories are valued at the lower of cost or market using the first-in first-out method. Work-in-process includes material, labor and overhead. Finished goods includes completed wheels, parts and railcars not on lease or in transit.

Leased railcars for syndication - Leased railcars for syndication consist of newly-built railcars manufactured at one of the Company's facilities or railcars purchased from third parties, which have been placed on lease to a customer and which the Company intends to sell to an investor with the lease attached. These railcars are generally anticipated to be sold within six months of delivery of the last railcar in a group or six months from when the Company acquires the railcar from a third party and are typically not depreciated during that period as the Company does not believe any economic value of a railcar is lost in the first six months. In the event the railcars are not sold in the first six months, the railcars are either held in Leased railcars for syndication and are depreciated or are transferred to Equipment on operating leases and are depreciated. As of August 31, 2017, Leased railcars for syndication was \$91.3 million compared to \$144.9 million as of August 31, 2016.

Equipment on operating leases, net - Equipment on operating leases is stated net of accumulated depreciation. Depreciation to estimated salvage value is provided on the straight-line method over the estimated useful lives of up to thirty-five years. Management periodically reviews salvage value estimates based on current scrap prices and what the Company expects to receive upon disposal.

Investment in unconsolidated affiliates - Investment in unconsolidated affiliates includes the Company's interests which are accounted for under the equity method of accounting. As of August 31, 2017 this included the Company's 50% interest in GBW Railcar Services LLC, 33% interest in Ohio Castings Company LLC, 60% interest in Greenbrier-Maxion, 24.5% interest in Amsted-Maxion Cruzeiro (which owns 40% of Greenbrier-Maxion), 50% interest in GGSynergy SA de C.V., 40% interest in Greenbrier Railcar Funding I LLC, 8% interest in MUL Greenbrier LLC and a 1% interest in each of Green Union I Trust, Green Union II Trust and Green Union III Trust.

Property, plant and equipment - Property, plant and equipment is stated at cost, net of accumulated depreciation. Depreciation is provided on the straight-line method over estimated useful lives which are as follows:

Depreciable Life

Buildings and improvements	10	25 years
Machinery and equipment	3	15 years
Other	3	7 years

Goodwill - Goodwill is recorded when the purchase price of an acquisition exceeds the fair market value of the net assets acquired. Goodwill is not amortized and is tested for impairment at least annually and more frequently if material changes in events or circumstances arise. The provisions of ASC 350, *Intangibles - Goodwill and Other*, require the Company to perform an annual impairment test on goodwill. The Company compares the fair value of each reporting unit with its carrying value. An impairment loss is recorded to the extent that the reporting unit's carrying amount exceeds the reporting unit's fair value. An impairment loss cannot exceed the total amount of goodwill allocated to the reporting unit.

Table of Contents

Intangible and other assets, net - Intangible assets are recorded when a portion of the purchase price of an acquisition is allocated to assets such as customer contracts and relationships and trade names. Intangible assets with finite lives are amortized using the straight line method over their estimated useful lives and primarily include long-term customer agreements which are amortized over 5 to 20 years. Other assets include loan fees and debt acquisition costs which are capitalized and amortized as interest expense over the life of the related borrowings.

Impairment of long-lived assets - When changes in circumstances indicate the carrying amount of certain long-lived assets may not be recoverable, the assets are evaluated for impairment. If the forecasted undiscounted future cash flows are less than the carrying amount of the assets, an impairment charge to reduce the carrying value of the assets to estimated realizable value is recognized in the current period. No impairment was recorded in the years ended August 31, 2017, 2016 and 2015.

Maintenance obligations - The Company is responsible for maintenance on a portion of the managed and owned lease fleet under the terms of maintenance obligations defined in the underlying lease or management agreement. The estimated liability is based on maintenance histories for each type and age of railcar. The liability, included in Accounts payable and accrued liabilities, is reviewed periodically and updated based on maintenance trends and known future repair or refurbishment requirements.

Warranty accruals - Warranty costs are estimated and charged to operations to cover a defined warranty period. The estimated warranty cost is based on history of warranty claims for each particular product type. For new product types without a warranty history, preliminary estimates are based on historical information for similar product types. The warranty accruals, included in Accounts payable and accrued liabilities, are reviewed periodically and updated based on warranty trends.

Income taxes - The liability method is used to account for income taxes. Deferred income taxes are provided for the temporary effects of differences between assets and liabilities recognized for financial statement and income tax reporting purposes. Valuation allowances reduce deferred tax assets to an amount that will more likely than not be realized. We recognize liabilities for uncertain tax positions based on whether evidence indicates that it is more likely than not that the position will be sustained on audit. It is inherently difficult and subjective to estimate such amounts, as this requires us to estimate the probability of various possible outcomes. The Company reevaluates these uncertain tax positions on a quarterly basis. Changes in assumptions may result in the recognition of a tax benefit or an additional charge to the tax provision.

Deferred revenue - Cash payments received prior to meeting revenue recognition criteria are recorded in Deferred revenue. Amounts are reclassified out of Deferred revenue once the revenue recognition criteria have been met. Deferred revenue primarily consists of customer prepayments and the unrecognized portion of the \$40 million upfront fee from MUL. In addition, we purchased a 40% interest in a newly formed entity that buys and sells railcar assets that are leased to third parties. Deferred revenue includes 40% of the revenue and margin of railcars sold to this entity until the railcars are ultimately sold to a third party. The Deferred revenue balance was \$129.3 million and \$95.7 million as of August 31, 2017 and 2016, respectively.

Noncontrolling interest and Contingently redeemable noncontrolling interest - The Company has a joint venture with Grupo Industrial Monclova, S.A. (GIMSA) that manufactures new railroad freight cars for the North American marketplace at GIMSA's existing manufacturing facility located in Frontera, Mexico. Each party owns a 50% interest in the joint venture. The financial results of this operation are consolidated for financial reporting purposes as the Company maintains a controlling interest as evidenced by the right to appoint the majority of the Board of Directors, control over accounting, financing, marketing and engineering and approval and design of products. The noncontrolling interest related to the partner's 50% interest in the joint venture is included in Noncontrolling interest in

the equity section of the Company's Consolidated Balance Sheet.

Greenbrier-Astra Rail was formed in 2017 between the Company's existing European operations headquartered in Swidnica, Poland and Astra Rail, based in Arad, Romania. Greenbrier-Astra Rail is controlled by the Company with an approximate 75% interest. The Company consolidates Greenbrier-Astra Rail for financial

Table of Contents

reporting purposes and includes the noncontrolling interest in the mezzanine section of the Consolidated Balance Sheet in Contingently redeemable noncontrolling interest (see Note 3 Acquisitions).

Net earnings attributable to noncontrolling interest on the Company's Consolidated Statement of Income represents the Company's partners' share of results from operations.

Accumulated other comprehensive loss Accumulated other comprehensive loss, net of tax as appropriate, consisted of the following:

<i>(In thousands)</i>	Unrealized Gain (Loss) on Derivative Financial Instruments	Foreign Currency Translation Adjustment⁽¹⁾	Other	Accumulated Other Comprehensive Loss
Balance, August 31, 2016	\$ (5,492)	\$ (20,832)	\$ (429)	\$ (26,753)
Other comprehensive loss before reclassifications	1,944	15,466	(665)	16,745
Amounts reclassified from accumulated other comprehensive loss	3,729			3,729
Balance, August 31, 2017	\$ 181	\$ (5,366)	\$ (1,094)	\$ (6,279)

¹ Primarily relates to the foreign currency translation of the Company's Leu functional currency operations in Romania and the Zloty functional currency operations in Poland to U.S. Dollars.

The amounts reclassified out of Accumulated other comprehensive loss into the Consolidated Statements of Income, with the financial statement caption, were as follows:

<i>(In thousands)</i>	Year Ended August 31,		Financial Statement
	2017	2016	Caption
(Gain) loss on derivative financial instruments:			
Foreign exchange contracts	\$ 3,644	\$ 2,135	Revenue and Cost of revenue
Interest rate swap contracts	1,057	1,561	Interest and foreign exchange
	4,701	3,696	Total before tax
	(972)	(1,152)	Tax benefit
	\$ 3,729	\$ 2,544	Net of tax

Revenue recognition - Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured.

Railcars are generally manufactured, repaired or refurbished under firm orders from third parties. Revenue is recognized when new, used, refurbished or repaired railcars are completed, accepted by an unaffiliated customer and contractual contingencies removed. Marine revenue is either recognized on the percentage of completion method during the construction period or on the completed contract method based on the terms of the contract. Under the percentage of completion method, revenue is recognized based on the progress toward contract completion measured by actual costs incurred to date in relation to the estimate of total expected costs. Under the completed contract method, revenue is not recognized until the project has been fully completed. Cash payments received prior to meeting revenue recognition criteria are accounted for in Deferred revenue. Operating lease revenue is recognized as earned under the lease terms. Certain leases are operated under car hire arrangements whereby revenue is earned based on utilization, car hire rates and terms specified in the lease agreement.

The Company sells railcars with leases attached to financial investors. Revenue and cost of revenue associated with railcars that the Company has manufactured are recognized in Manufacturing once sold. Revenue and cost of revenue associated with railcars which were obtained from a third party with the intent to resell them and

Table of Contents

subsequently sold are recognized in Leasing & Services. In addition the Company will often perform management or maintenance services at market rates for these railcars. The Company evaluates the terms of any remarketing agreements and any contractual provisions that represent retained risk and the level of retained risk based on those provisions. The Company applies a 10% threshold to determine whether the level of retained risk exceeds 10% of the individual fair value of the rail cars delivered. If retained risk exceeded 10%, the transaction would not be recognized as a sale until such time as the retained risk declined to 10% or less. For any contracts with multiple elements (i.e. railcars, maintenance, management services, etc.) the Company allocates revenue among the deliverables primarily based upon objective and reliable evidence of the fair value of each element in the arrangement. If objective and reliable evidence of fair value of any element is not available, the Company will use its estimated selling price for purposes of allocating the total arrangement consideration among the elements.

Interest and foreign exchange - Includes foreign exchange transaction gains and losses, amortization of loan fee expense, accretion of debt discounts and external interest expense.

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Interest and foreign exchange:			
Interest and other expense	\$ 23,519	\$ 17,268	\$ 18,975
Foreign exchange (gain) loss	673	(3,766)	(7,796)
	\$ 24,192	\$ 13,502	\$ 11,179

Research and development - Research and development costs are expensed as incurred. Research and development costs incurred for new product development during the years ended August 31, 2017, 2016 and 2015 were \$4.2 million, \$2.7 million and \$2.5 million, respectively, included in Selling and administrative expenses.

Forward exchange contracts - Foreign operations give rise to risks from changes in foreign currency exchange rates. Forward exchange contracts with established financial institutions are used to hedge a portion of such risk. Realized and unrealized gains and losses on effective hedges are deferred in other comprehensive income (loss) and recognized in earnings concurrent with the hedged transaction or when the occurrence of the hedged transaction is no longer considered probable. Ineffectiveness is measured and any gain or loss is recognized in foreign exchange gain or loss. Even though forward exchange contracts are entered into to mitigate the impact of currency fluctuations, certain exposure remains, which may affect operating results. In addition, there is risk for counterparty non-performance.

Interest rate instruments - Interest rate swap agreements are used to reduce the impact of changes in interest rates on certain debt. The net cash amounts paid or received under the agreements are recognized as an adjustment to interest expense.

Net earnings per share - Basic earnings per common share (EPS) excludes the potential dilution that would occur if additional shares were issued upon conversion of bonds. Restricted share grants are treated as outstanding when issued and restricted stock units are not treated as outstanding when issued. Restricted share grants and restricted stock units are included in weighted average basic common shares outstanding when calculating EPS when the Company is in a net earnings position.

Diluted EPS is calculated using the more dilutive of two approaches. The first approach includes the dilutive effect, using the treasury stock method, associated with shares underlying the 2024 Convertible notes and performance based

restricted stock units subject to performance criteria, for which actual levels of performance above target have been achieved. The second approach supplements the first by including the if converted effect of the 2018 Convertible notes. Under the if converted method, debt issuance and interest costs, both net of tax, associated with the convertible notes are added back to net earnings and the share count is increased by the shares underlying the convertible notes. The 2024 Convertible notes are included in the calculation of both approaches using the treasury stock method when the average stock price is greater than the applicable conversion price.

Table of Contents

Stock-based compensation - The value of stock based compensation awards is amortized as compensation expense from the date of grant through the earlier of the vesting period or the recipient's eligible retirement date. Awards are expensed upon grant when the recipient's eligible retirement date precedes the grant date. Stock based compensation expense consists of restricted stock units, restricted stock and phantom stock units awards. Stock based compensation expense for the years ended August 31, 2017, 2016 and 2015 was \$26.4 million, \$24.0 million and \$19.5 million, respectively and was recorded in Selling and administrative on the Consolidated Statements of Income.

Restricted stock units and restricted stock are accounted for as equity based awards (see Note 15 - Equity). Phantom stock units are accounted for as liability based awards.

The Company began granting phantom stock units during the year ended August 31, 2016. Every phantom stock unit entitles the participant to receive a cash payment equal to the value of a single share of the Company's common stock upon vesting. The holders of unvested phantom stock units are entitled to participate in dividend equivalents.

During the years ended August 31, 2017 and 2016, the Company awarded 151,634 and 268,161 phantom stock units, respectively, which include performance-based grants. As of August 31, 2017, there were a total of 203,768 phantom stock units associated with unvested performance-based grants. The actual number of phantom stock units that will vest associated with performance-based phantom stock units will vary depending on the Company's performance. Approximately 203,768 additional phantom stock units may be granted if performance-based phantom stock units vest at stretch level of performance. These additional units are associated with phantom stock unit awards granted during the years ended August 31, 2016 and 2017. The grant date fair value of phantom stock awards was \$6.7 million and \$7.9 million for the years ended August 31, 2017 and 2016, respectively.

Our phantom stock unit grants are considered liability based awards and therefore are re-measured at the end of each reporting period. Compensation expense is recognized through the earlier of the vesting period or the recipient's eligible retirement date. Time-based awards to employees are expensed upon grant when the recipient's eligible retirement date precedes the grant date or during the vesting period if the grantee becomes retirement eligible before the vesting period is complete. Compensation expense related to phantom stock unit grants is recorded in Selling and administrative expense and Cost of revenue on the Company's Consolidated Statements of Income. Compensation expense recognized related to phantom stock units for the years ended August 31, 2017 and 2016 was \$6.2 million and \$1.5 million, respectively. Unamortized compensation cost related to phantom stock unit grants was \$10.9 million and \$7.5 million as of August 31, 2017 and 2016, respectively.

Management estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires judgment on the part of management to arrive at estimates and assumptions on matters that are inherently uncertain. These estimates may affect the amount of assets, liabilities, revenue and expenses reported in the financial statements and accompanying notes and disclosure of contingent assets and liabilities within the financial statements. Estimates and assumptions are periodically evaluated and may be adjusted in future periods. Actual results could differ from those estimates.

Initial Adoption of Accounting Policies - In the first quarter of 2017, the Company adopted Accounting Standards Update 2015-03, *Simplifying the Presentation of Debt Issuance Costs* (ASU 2015-03). The FASB issued this update to simplify the presentation of debt issuance costs related to a recognized debt liability to present the debt issuance costs as a direct deduction from the carrying value of the debt liability rather than showing the debt issuance costs as an asset. As the adoption of this new guidance only amended presentation and disclosure requirements and did not impact its recognition and measurement, the adoption did not materially affect the Company's financial position, results of operations or cash flows. As ASU 2015-03 requires retrospective application, the Company reclassified \$2.1 million of debt issuance costs included in Intangibles and other assets, net to Notes payable, net at August 31,

2016.

In the first quarter of 2017, the Company adopted Accounting Standards Update 2015-15, *Interest-Imputation of Interest: Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line of Credit*

62

The Greenbrier Companies 2017 Annual Report

Table of Contents

Arrangements (ASU 2015-15). This update was released because the guidance within ASU 2015-03 for debt issuance costs does not address presentation or subsequent measurement of debt issuance costs related to line of credit arrangements. The SEC staff would not object to an entity deferring and presenting debt issuance costs as an asset and subsequently amortizing the deferred debt issuance costs ratably over the term of the line of credit arrangement, regardless of whether there are any outstanding borrowings on the line of credit arrangement. Upon adoption, the Company continued to present debt issuance costs related to line of credit arrangements as an asset. The adoption of this new guidance did not affect the Company's financial position, results of operations or cash flows.

In the second quarter of 2017, the Company adopted Accounting Standards Update 2017-04, *Simplifying the Test for Goodwill Impairment* (ASU 2017-04) which was issued by the FASB in January 2017. This update simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the new guidance, an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. However, the loss should not exceed the total amount of goodwill allocated to that reporting unit. This new guidance is effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The early adoption of ASU 2017-04 by the Company reduced the complexity surrounding the evaluation of its goodwill for impairment and did not have a material impact on its consolidated financial statements.

Prospective Accounting Changes - In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update 2014-09, *Revenue from Contracts with Customers* (ASU 2014-09), providing a common revenue recognition model under U.S. GAAP. Under ASU 2014-09, an entity recognizes revenue in a way that depicts the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for the goods or services. It also requires additional disclosures to sufficiently describe the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The new standard may be adopted using either a full retrospective or a modified retrospective approach. The FASB issued a one year deferral and the new standard is effective for fiscal years and interim periods within those years beginning after December 15, 2017. The Company plans to adopt ASU 2014-09 effective September 1, 2018 using the modified retrospective method. Under this method, the new standard will be applied only to the most current period presented in the financial statements and the cumulative effect of initially applying the standard will result in an adjustment to the opening balance of retained earnings as of the adoption date. The Company continues to evaluate the requirements of the standard and its impact on the Company's consolidated financial statements and disclosures. The Company expects revenue recognition policies to remain substantially unchanged as a result of adopting ASU 2014-09, although this could change based on the Company's continued evaluation.

In February 2016, the FASB issued Accounting Standards Update 2016-02, *Leases* (ASU 2016-02). The new guidance supersedes existing guidance on accounting for leases in Topic 840 and is intended to increase the transparency and comparability of accounting for lease transactions. ASU 2016-02 requires most leases to be recognized on the balance sheet. Lessees will need to recognize a right-of-use asset and a lease liability for virtually all leases. The liability will be equal to the present value of lease payments. The asset will be based on the liability, subject to adjustment, such as for initial direct costs. For income statement purposes, the FASB retained a dual model, requiring leases to be classified as either operating or finance. Lessor accounting remains similar to the current model, but updated to align with certain changes to the lessee model and the new revenue recognition standard. The ASU will require both quantitative and qualitative disclosures regarding key information about leasing arrangements. The standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted. The new standard must be adopted using a modified retrospective transition, and provides for certain practical expedients. Transition will require application of the new guidance at the beginning of the earliest

comparative period presented. The Company plans to adopt this guidance beginning September 1, 2019. The Company is currently evaluating the impact of this standard on its consolidated financial statements and disclosures.

In March 2016, the FASB issued Accounting Standards Update 2016-09, *Improvements to Employee Share-Based Payment Accounting* (ASU 2016-09). This update will change how companies account for certain aspects

Table of Contents

of share-based payments to employees. Excess tax benefits or deficiencies related to vested awards, previously recognized in stockholders' equity, will be required to be recognized in the income statement when the awards vest. The new guidance is effective for fiscal years and interim periods within those years beginning after December 15, 2016, with early adoption permitted. The Company plans to adopt this guidance beginning September 1, 2017. The effect of adopting this standard will result in volatility in the provision for income taxes depending on fluctuations in the price of the Company's stock.

In December 2016, the FASB issued Accounting Standards Update 2016-18, *Restricted Cash* (ASU 2016-18). This update requires additional disclosure and that the Statement of Cash Flow explain the change during the period in the total cash, cash equivalents and amounts generally described as restricted cash. Therefore, amounts generally described as restricted cash should be included with cash & cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the Statement of Cash Flows. The new guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017 with early adoption permitted. The Company plans to adopt this guidance beginning September 1, 2018.

Note 3 Acquisitions

On June 1, 2017, Greenbrier and Astra Holding GmbH (Astra) contributed their European operations to a newly formed company, Greenbrier-Astra Rail, a Europe-based freight railcar manufacturing, engineering and repair business. As consideration for an approximate 75% controlling interest, Greenbrier agreed to pay Astra \$30 million at closing and \$30 million 12 months after closing and issue an approximate 25% noncontrolling interest in the new company. The total net assets acquired of \$114.6 million includes \$38.3 million representing the fair value of the noncontrolling interest at the acquisition date.

Astra also received a put option to sell its entire noncontrolling interest to Greenbrier at an exercise price equal to the higher of fair value or a defined EBITDA multiple as measured on the exercise date. The option is exercisable 30 days prior to and up until June 1, 2022. Due to Astra's redemption right under the put option, the noncontrolling interest has been classified as a Contingently redeemable noncontrolling interest in the mezzanine section of the Consolidated Balance Sheets. The carrying value of the noncontrolling interest cannot be less than the maximum redemption amount, which is the amount Greenbrier will settle the put option for if exercised. Adjustments to reconcile the carrying value to the maximum redemption amount are recorded to retained earnings. There were no such adjustments during the period ended August 31, 2017.

For the period from acquisition through August 31, 2017, the European operations contributed by Astra generated revenues of \$23.9 million and losses from operations of \$3.0 million, which are reported in the Company's consolidated financial statements as part of the Manufacturing segment. The impact of the acquisition was not material to the Company's consolidated results of operations, therefore pro forma financial information has not been included.

Table of Contents

The allocation of the purchase price among certain assets and liabilities is still in process. As a result, the allocation is preliminary and subject to further refinement upon completion of the analysis and valuation. The preliminary allocation of the purchase price based on the fair value of the net assets acquired from Astra was as follows as of June 1, 2017:

(in thousands)

Cash and cash equivalents	\$ 6,562
Accounts receivable	10,984
Inventories	30,130
Property, plant and equipment	74,332
Intangibles and other assets	17,624
Goodwill	25,325
Total assets acquired	164,957
Accounts payable and accrued liabilities	17,879
Deferred income taxes	7,137
Deferred revenue	964
Notes payable	24,382
Total liabilities assumed	50,362
Net assets acquired	\$ 114,595

Note 4 - Inventories

<i>(In thousands)</i>	As of August 31,	
	2017	2016
Manufacturing supplies and raw materials	\$ 222,080	\$ 240,865
Work-in-process	86,794	68,727
Finished goods	95,389	59,470
Excess and obsolete adjustment	(4,136)	(3,257)
	\$ 400,127	\$ 365,805

<i>(In thousands)</i>	As of August 31,		
	2017	2016	2015
Excess and obsolete adjustment			
Balance at beginning of period	\$ 3,257	\$ 2,679	\$ 2,866
Charge to cost of revenue	2,781	2,422	2,564
Disposition of inventory	(2,003)	(1,792)	(2,434)
Currency translation effect	101	(52)	(317)

Balance at end of period	\$ 4,136	\$ 3,257	\$ 2,679
--------------------------	----------	----------	----------

The Greenbrier Companies 2017 Annual Report

65

Table of Contents**Note 5 - Equipment on Operating Leases, net**

Equipment on operating leases is reported net of accumulated depreciation of \$91.1 million and \$92.6 million as of August 31, 2017 and 2016, respectively. Depreciation expense was \$12.1 million, \$16.6 million and \$9.4 million as of August 31, 2017, 2016 and 2015, respectively. In addition, certain railcar equipment leased-in by the Company on operating leases (see Note 21 Lease Commitments) is subleased to customers under non-cancelable operating leases. Aggregate minimum future amounts receivable under all non-cancelable operating leases and subleases are as follows:

(In thousands)

Year ending August 31, 2018	\$ 29,168
2019	22,762
2020	16,159
2021	8,232
2022	5,377
Thereafter	5,487
	\$ 87,185

Certain equipment is also operated under daily, monthly or car hire utilization arrangements. Associated revenue amounted to \$13.0 million, \$14.7 million and \$20.2 million for the years ended August 31, 2017, 2016 and 2015, respectively.

Note 6 - Property, Plant and Equipment, net

<i>(In thousands)</i>	As of August 31,	
	2017	2016
Land and improvements	\$ 84,594	\$ 50,979
Machinery and equipment	378,311	325,100
Buildings and improvements	186,960	147,160
Construction in progress	39,417	42,879
Other	60,747	46,428
	750,029	612,546
Accumulated depreciation	(322,008)	(282,556)
	\$ 428,021	\$ 329,990

Depreciation expense was \$45.5 million, \$39.2 million and \$31.4 million as of August 31, 2017, 2016 and 2015, respectively.

Note 7 - Investments In Unconsolidated Affiliates**GBW**

The Company has a 50% ownership interest in GBW which performs railcar repair, refurbishment, maintenance and retrofitting services. The Company accounts for its interest in GBW under the equity method of accounting.

Summarized financial data for GBW is as follows:

<i>(In thousands)</i>	Years ended August 31,	
	2017	2016
Current assets	\$ 81,860	\$ 109,651
Total assets	\$ 206,009	\$ 247,610
Current liabilities	\$ 33,033	\$ 37,123
Total liabilities	\$ 111,384	\$ 116,077

Table of Contents

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Revenue	\$ 253,436	\$ 373,490	\$ 349,849
Margin	\$ (4,058)	\$ 33,929	\$ 21,752
Net income (loss) ⁽¹⁾	\$ (36,947)	\$ 4,006	\$ (2,551)

⁽¹⁾ In 2017, GBW recorded a pre-tax goodwill impairment loss of \$11.2 million which reduced the goodwill balance to \$41.5 million. The Company's portion of the non-cash goodwill impairment was \$3.5 million after-tax.

Greenbrier-Maxion

In May 2017, the Company completed a \$20 million investment in Greenbrier-Maxion, a railcar manufacturer in Brazil resulting in an increase in the Company's ownership interest from 19.5% to 60%. Greenbrier-Maxion also assembles bogies and offers a range of aftermarket services including railcar overhaul and refurbishment. The Company does not consolidate Greenbrier-Maxion for financial reporting purposes and accounts for its interest under the equity method of accounting as the entity's governance provisions require that all significant decisions of Greenbrier-Maxion are subject to shared consent of its shareholders.

Summarized financial data for Greenbrier-Maxion is as follows:

<i>(In thousands)</i>	Years ended August 31,	
	2017	2016
Current assets	\$ 48,012	\$ 49,104
Total assets	\$ 71,455	\$ 70,788
Current liabilities	\$ 38,055	\$ 59,967
Total liabilities	\$ 42,197	\$ 63,242

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Revenue	\$ 228,510	\$ 168,465	\$ 71,204
Margin	\$ 24,372	\$ 14,245	\$ 6,323
Net income (loss)	\$ 1,378	\$ (4,051)	\$ 805

Amsted-Maxion Cruzeiro

In May 2017, the Company increased its ownership interest in Amsted-Maxion Cruzeiro, a manufacturer of castings and components for railcars and other heavy equipment, from 19.5% to 24.5% for \$3.25 million. Proceeds from the Company's increased ownership in Amsted-Maxion Cruzeiro, along with loans from each of the partners, were used to retire third-party debt at Amsted-Maxion Cruzeiro. The Company retains an option to increase its ownership in Amsted-Maxion Cruzeiro to 29.5% subject to certain conditions. Amsted-Maxion Cruzeiro has a 40% ownership position in Greenbrier-Maxion. The Company accounts for its interest in Amsted-Maxion Cruzeiro under the equity method of accounting.

Summarized financial data for Amsted-Maxion Cruzeiro is as follows:

<i>(In thousands)</i>	Years ended August 31,	
	2017	2016
Current assets	\$ 23,777	\$ 22,944
Total assets	\$ 142,583	\$ 164,182
Current liabilities	\$ 28,084	\$ 59,696
Total liabilities	\$ 94,846	\$ 100,872

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Revenue	\$ 90,114	\$ 87,833	\$ 36,696
Margin	\$ 5,983	\$ 8,256	\$ 4,083
Net income (loss)	\$(20,114)	\$(12,640)	\$ 48,113

Table of Contents**Other Unconsolidated Affiliates**

The Company has various other unconsolidated affiliates which are accounted for under the equity method of accounting. This includes the Company's 33% interest in Ohio Castings Company LLC, 50% interest in GGSynergy SA de C.V., 40% interest in Greenbrier Railcar Funding I LLC, 8% interest in MUL Greenbrier LLC and a 1% interest in each of Green Union I Trust, Green Union II Trust and Green Union III Trust.

Summarized financial data for these other unconsolidated affiliates in aggregate are as follows:

<i>(In thousands)</i>	Years ended August 31,	
	2017	2016
Current assets	\$ 16,996	\$ 19,852
Total assets	\$ 283,895	\$ 162,073
Current liabilities	\$ 3,003	\$ 6,586
Total liabilities	\$ 90,064	\$ 6,951

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Revenue	\$ 39,161	\$ 75,851	\$ 98,385
Margin	\$ 8,015	\$ 11,087	\$ 14,025
Net income (loss)	\$ 5,202	\$ 6,051	\$ 10,022

Note 8 - Goodwill

Changes in the carrying value of goodwill are as follows:

<i>(In thousands)</i>	Wheels			Leasing & Services	Total
	Manufacturing	& Parts			
Balance August 31, 2016	\$	\$ 43,265	\$	\$ 43,265	
Addition ⁽¹⁾	25,325			25,325	
Balance August 31, 2017	\$ 25,325	\$ 43,265	\$	\$ 68,590	

⁽¹⁾ Addition to goodwill relates to Greenbrier-Astra Rail transaction. See Note 3 Acquisitions.

<i>(In thousands)</i>	Goodwill
Gross goodwill balance before accumulated goodwill impairment losses and other reductions	\$ 221,115
Accumulated goodwill impairment losses	(128,209)
Accumulated other reductions	(24,316)
Balance August 31, 2017	\$ 68,590

The Company performs a goodwill impairment test annually during the third quarter. Goodwill is also tested more frequently if changes in circumstances or the occurrence of events indicates that a potential impairment exists. The provisions of ASC 350, *Intangibles - Goodwill and Other*, require the performance of an impairment test on goodwill. The Company compares the fair value of each reporting unit with its carrying value. The Company determines the fair value of the reporting unit based on a weighting of income and market approaches. Under the income approach, the Company calculates the fair value of a reporting unit based on the present value of estimated future cash flows. Under the market approach, the Company estimates the fair value based on observed market multiples for comparable businesses. An impairment loss is recorded to the extent that the reporting unit's carrying amount exceeds the reporting unit's fair value. An impairment loss cannot exceed the total amount of goodwill allocated to the reporting unit. Goodwill was tested during the third quarter of 2017 and the Company concluded that goodwill was not impaired.

Table of Contents**Note 9 - Intangibles and Other Assets, net**

Intangible assets that are determined to have finite lives are amortized over their useful lives. Intangible assets with indefinite useful lives are not amortized and are periodically evaluated for impairment.

The following table summarizes the Company's identifiable intangible and other assets balance:

<i>(In thousands)</i>	As of August 31,	
	2017	2016
Intangible assets subject to amortization:		
Customer relationships	\$ 64,521	\$ 65,023
Accumulated amortization	(40,153)	(37,251)
Other intangibles	20,207	6,298
Accumulated amortization	(4,866)	(5,967)
	39,709	28,103
Intangible assets not subject to amortization	912	912
Prepaid and other assets	16,914	14,891
Nonqualified savings plan investments	20,974	15,864
Debt issuance costs, net	2,623	3,481
Assets held for sale	4,045	4,108
	\$ 85,177	\$ 67,359

Amortization expense for the years ended August 31, 2017, 2016 and 2015 was \$4.8 million, \$6.3 million and \$3.7 million, respectively. Amortization expense for the years ending August 31, 2018, 2019, 2020, 2021 and 2022 is expected to be \$5.8 million, \$5.4 million, \$5.7 million, \$5.4 million and \$4.0 million, respectively.

Note 10 - Revolving Notes

Senior secured credit facilities, consisting of three components, aggregated to \$625.1 million as of August 31, 2017.

As of August 31, 2017, a \$550.0 million revolving line of credit, maturing October 2020, secured by substantially all the Company's assets in the U.S. not otherwise pledged as security for term loans, was available to provide working capital and interim financing of equipment, principally for the U.S. and Mexican operations. Advances under this facility bear interest at LIBOR plus 1.75% or Prime plus 0.75% depending on the type of borrowing. Available borrowings under the credit facility are generally based on defined levels of inventory, receivables, property, plant and equipment and leased equipment, as well as total debt to consolidated capitalization and fixed charges coverage ratios.

As of August 31, 2017, lines of credit totaling \$25.1 million secured by certain of the Company's European assets, with variable rates that range from Warsaw Interbank Offered Rate (WIBOR) plus 1.2% to WIBOR plus 1.3% and Euro Interbank Offered Rate (EURIBOR) plus 1.9%, were available for working capital needs of the European manufacturing operation. European credit facilities are continually being renewed. Currently these European credit facilities have maturities that range from February 2018 through June 2019.

As of August 31, 2017, the Company's Mexican railcar manufacturing joint venture had two lines of credit totaling \$50.0 million. The first line of credit provides up to \$30.0 million and is fully guaranteed by the Company and its joint venture partner. Advances under this facility bear interest at LIBOR plus 2.0%. The Mexican railcar manufacturing joint venture will be able to draw against this facility through January 2019. The second line of credit provides up to \$20.0 million, of which the Company and its joint venture partner have each guaranteed 50%. Advances under this facility bear interest at LIBOR plus 2.0%. The Mexican railcar manufacturing joint venture will be able to draw amounts available under this facility through July 2019.

Table of Contents

As of August 31, 2017, outstanding commitments under the senior secured credit facilities consisted of \$77.6 million in letters of credit under the North American credit facility and \$4.3 million outstanding under the European credit facilities.

As of August 31, 2016, outstanding commitments under the senior secured credit facilities consisted of \$81.3 million in letters of credit under the North American credit facility.

Note 11 - Accounts Payable and Accrued Liabilities

<i>(In thousands)</i>	As of August 31,	
	2017	2016
Trade payables	\$ 180,592	\$ 182,334
Other accrued liabilities	107,002	71,260
Accrued payroll and related liabilities	84,749	76,058
Accrued warranty	20,737	12,159
Accrued maintenance	17,667	18,646
Income taxes payable		3,991
Other	4,314	5,306
	\$ 415,061	\$ 369,754

Note 12 - Maintenance and Warranty Accruals

<i>(In thousands)</i>	As of August 31,		
	2017	2016	2015
Accrued maintenance			
Balance at beginning of period	\$ 18,646	\$ 18,642	\$ 14,329
Charged to cost of revenue	10,609	12,926	13,622
Payments	(11,588)	(12,922)	(9,309)
Balance at end of period	\$ 17,667	\$ 18,646	\$ 18,642
Accrued warranty			
Balance at beginning of period	\$ 12,159	\$ 11,512	\$ 9,340
Charged to cost of revenue	6,872	6,069	7,206
Acquisition	3,526		
Payments	(2,649)	(5,299)	(4,703)
Currency translation effect	829	(123)	(331)
Balance at end of period	\$ 20,737	\$ 12,159	\$ 11,512

Note 13 - Notes Payable, net

<i>(In thousands)</i>	As of August 31,	
	2017	2016
Convertible senior notes, due 2018	\$ 119,063	\$ 119,063
Convertible senior notes, due 2024	275,000	
Term loans	184,001	184,906
Other notes payable	19,540	
	\$ 597,604	\$ 303,969
Debt discount and issuance costs	(39,376)	(2,116)
	\$ 558,228	\$ 301,853

Convertible senior notes, due 2018, bear interest at a fixed rate of 3.5%, paid semi-annually in arrears on April 1st and October 1st. The convertible notes mature on April 1, 2018, unless earlier repurchased by the Company or

Table of Contents

converted in accordance with their terms. Holders may convert at their option at any time prior to the business day immediately preceding the stated maturity date. The convertible notes are senior unsecured obligations and rank equally with other senior unsecured debt. The convertible notes are convertible into shares of the Company's common stock, at an initial conversion rate of 26.2838 shares per \$1,000 principal amount of the notes (which is equal to an initial conversion price of \$38.05 per share). The initial conversion rate and conversion price are subject to adjustment upon the occurrence of certain events, such as distributions, dividends or stock splits. There were \$7.9 million in original debt issuance costs, included in Notes Payable, net on the Consolidated Balance Sheets, which are being amortized using the effective interest method. The amortization expense is being included in Interest and foreign exchange on the Consolidated Statements of Income. During 2015, \$110.9 million in principal of the original \$230.0 million was converted into 2.9 million shares of the Company's common stock which resulted in a principal balance of \$119.1 million. Associated debt issuance costs of \$1.6 million were removed from Notes Payable, net and charged against additional paid in capital in 2015.

Convertible senior notes, due 2024, bear interest at a fixed rate of 2.875%, paid semi-annually in arrears on February 1st and August 1st. The convertible notes mature on February 1, 2024, unless earlier repurchased by the Company or converted in accordance with their terms. Holders may convert at their option at any time prior to the business day immediately preceding the stated maturity date. The convertible notes are senior unsecured obligations and rank equally with other senior unsecured debt. The convertible notes are convertible into shares of the Company's common stock, at an initial conversion rate of 16.6234 shares per \$1,000 principal amount of the notes (which is equal to an initial conversion price of \$60.16 per share). The initial conversion rate and conversion price are subject to adjustment upon the occurrence of certain events, such as distributions, dividends or stock splits. There were \$33.1 million of initial debt discount and \$8.0 million of original debt issuance costs included in Notes Payable, net on the Company's Consolidated Balance Sheet. The debt discount represents the difference between the debt principal and the value of a similar debt instrument that does not have a conversion feature at issuance. The debt discount is being amortized using the effective interest rate method through February 2024 and the amortization expense is included in Interest and Foreign exchange on the Company's Consolidated Statement of Income. In accordance with ASC 470-20, the Company separately accounts for the liability component (debt principal net of debt discount) and equity component. The liability component is recognized as the fair value of a similar instrument that does not have a conversion feature at issuance. To determine the fair value of the liability component, the Company assumed an interest rate of approximately 5% which resulted in a fair value of \$241.9 million. The equity component, which is the conversion feature at issuance, is recognized as the difference between the proceeds from the issuance of the notes (\$275 million) and the fair value of the liability component (\$241.9 million). As of August 31, 2017, the equity component was \$33.1 million which was recorded on the Company's Consolidated Balance Sheet in Additional paid-in capital, net of tax of \$12.3 million.

Term loans are primarily composed of:

\$200 million of senior term debt, with a maturity date of March 2020, which is secured by a pool of leased railcars. The debt bears a floating interest rate of LIBOR plus 1.75% with principal of \$1.75 million paid quarterly in arrears and a balloon payment of \$159.8 million due at maturity. An interest rate swap agreement was entered into on 50% of the initial balance to swap the floating interest rate of LIBOR plus 1.75% to a fixed rate of 3.7375%. The principal balance as of August 31, 2017 was \$177.3 million.

Other term loans with an aggregate balance of \$11.2 million as of August 31, 2017 and maturity dates ranging from February 2018 to April 2020.

\$15.1 million of unsecured related party debt (see Note 17 - Related Party Transactions).

The notes payable, along with the revolving and operating lines of credit, contain certain covenants with respect to the Company and various subsidiaries, the most restrictive of which, among other things, limit the ability to: incur additional indebtedness or guarantees; pay dividends or repurchase stock; enter into capital leases; create liens; sell

assets; engage in transactions with affiliates, including joint ventures and non U.S. subsidiaries, including but not limited to loans, advances, equity investments and guarantees; enter into mergers, consolidations or sales of substantially all the Company's assets; and enter into new lines of business. The covenants also require certain maximum ratios of debt to total capitalization and minimum levels of fixed charges (interest and rent) coverage.

Table of Contents

Principal payments on the notes payable are expected as follows:

(In thousands)

Year ending August 31,	
2018 ⁽¹⁾	\$ 130,263
2019	26,040
2020	166,301
2021	
2022	
Thereafter ⁽²⁾	275,000
	\$ 597,604

(1)The repayment of the \$119.1 million of Convertible senior notes due 2018 is assumed to occur in stock at the scheduled maturity in 2018 instead of assuming an earlier conversion by the holders.

(2)The repayment of the \$275.0 million of Convertible senior notes due 2024 is assumed to occur at the scheduled maturity in 2024 instead of assuming an earlier conversion by the holders.

Note 14 - Derivative Instruments

Foreign operations give rise to market risks from changes in foreign currency exchange rates. Foreign currency forward exchange contracts with established financial institutions are utilized to hedge a portion of that risk. Interest rate swap agreements are used to reduce the impact of changes in interest rates on certain debt. The Company's foreign currency forward exchange contracts and interest rate swap agreements are designated as cash flow hedges, and therefore the effective portion of unrealized gains and losses is recorded in accumulated other comprehensive income or loss.

At August 31, 2017 exchange rates, forward exchange contracts for the purchase of Polish Zlotys and the sale of Euros and U.S. Dollars; the purchase of Mexican Pesos and the sale of U.S. Dollars; and for the purchase of U.S. Dollars and the sale of Saudi Riyals aggregated to \$287.3 million. The fair value of the contracts is included on the Consolidated Balance Sheets as Accounts payable and accrued liabilities when there is a loss, or as Accounts receivable, net when there is a gain. As the contracts mature at various dates through July 2019, any such gain or loss remaining will be recognized in manufacturing revenue or cost of revenue along with the related transactions. In the event that the underlying transaction does not occur or does not occur in the period designated at the inception of the hedge, the amount classified in accumulated other comprehensive loss would be reclassified to the results of operations in Interest and foreign exchange at the time of occurrence. At August 31, 2017 exchange rates, approximately \$0.8 million would be reclassified to revenue or cost of revenue in the next 12 months.

At August 31, 2017, an interest rate swap agreement maturing in March 2020 had a notional amount of \$88.6 million. The fair value of the contract is included in Accounts payable and accrued liabilities on the Consolidated Balance Sheets. As interest expense on the underlying debt is recognized, amounts corresponding to the interest rate swap are reclassified from Accumulated other comprehensive loss and charged or credited to interest expense. At August 31, 2017 interest rates, approximately \$0.7 million would be reclassified to interest expense in the next 12 months.

Table of Contents**Fair Values of Derivative Instruments**

<i>(In thousands)</i>	Balance sheet caption	Asset Derivatives		Liability Derivatives		
		August 31,		August 31,		
		2017	2016	2017	2016	2016
		Fair Value	Fair Value	Balance sheet caption	Fair Value	Fair Value
Derivatives designated as hedging instruments						
Foreign forward exchange contracts	Accounts receivable, net	\$ 2,341	\$ 1,570	Accounts payable and accrued liabilities	\$ 1,761	\$ 4,287
Interest rate swap contracts	Intangibles and other assets, net			Accounts payable and accrued liabilities	1,125	3,157
		\$ 2,341	\$ 1,570		\$ 2,886	\$ 7,444

Derivatives not designated as hedging instruments

Foreign forward exchange contracts	Accounts receivable, net	\$ 1,473	\$ 25	Accounts payable and accrued liabilities	\$	\$ 22
------------------------------------	--------------------------	----------	-------	--	----	-------

The Effect of Derivative Instruments on the Consolidated Statements of Income

Derivatives in cash flow hedging relationships	Financial statement caption of gain recognized in income on derivative	Gain recognized in income on derivatives	
		Years ended August 31,	
		2017	2016
Foreign forward exchange contract	Interest and foreign exchange	\$ 3,207	\$ 336
Interest rate swap contracts	Interest and foreign exchange	23	90
		\$ 3,230	\$ 426

Derivatives in	Gain (loss)	Financial	Gain (loss)	Financial	Gain (loss)
cash flow	recognized in	statement	reclassified from	statement	recognized on
hedging	OCI on	caption of	accumulated OCI	caption of gain	derivative
relationships	derivatives	gain (loss)	into	(loss) in income	(ineffective
	(effective	reclassified	income (effective		

	portion) Years ended August 31,		from accumulated OCI into income	portion) Years ended August 31,		on derivative (ineffective portion and amount excluded from effectiveness testing) effectiveness testing)	portion and amount excluded from effectiveness testing) Years ended August 31, 2017 2016	
	2017	2016		2017	2016		2017	2016
Foreign forward exchange contracts	\$ 1,746	\$ (4,698)	Revenue	\$ (3,980)	\$ (1,224)	Revenue	\$ (2,843)	\$ 138
Foreign forward exchange contracts	385	(944)	Cost of revenue	336	(911)	Cost of revenue	248	121
Interest rate swap contracts	1,042	(2,354)	Interest and foreign exchange	(1,057)	(1,561)	Interest and foreign exchange		
	\$ 3,173	\$ (7,996)		\$ (4,701)	\$ (3,696)		\$ (2,595)	\$ 259

Table of Contents**Note 15 - Equity****Stock Incentive Plan**

The 2014 Amended and Restated Stock Incentive Plan provides for the grant of incentive stock options, non-statutory stock options, restricted shares, restricted stock units and stock appreciation rights. The maximum aggregate number of the Company's common shares authorized for issuance under this plan is 4,325,000. On August 31, 2017 there were 233,271 shares available for grant compared to 476,770 and 905,139 shares available for grant as of the years ended August 31, 2016 and 2015, respectively. There are no stock options or stock appreciation rights outstanding as of August 31, 2017. The Company currently grants restricted shares and restricted stock units. Restricted share grants are considered outstanding shares of common stock at the time they are issued. The holders of unvested restricted shares are entitled to voting rights and participation in dividends. The dividends are not forfeitable if the awards are later forfeited prior to vesting. Shares associated with restricted stock unit awards are not considered legally outstanding shares of common stock until vested. Restricted stock unit awards, including performance-based awards, are entitled to participate in dividends and these awards are considered participating securities and are considered outstanding for earnings per share purposes when the effect is dilutive.

During the years ended August 31, 2017, 2016 and 2015, the Company awarded restricted share and restricted stock unit grants totaling 269,705, 447,895 and 402,196 shares, respectively, which include performance-based grants. As of August 31, 2017, there were a total of 492,886 shares associated with unvested performance-based grants. The actual number of shares that will vest associated with performance-based grants will vary depending on the Company's performance. Approximately 492,886 additional shares may be granted if performance-based restricted stock unit awards vest at stretch levels of performance. These additional shares are associated with restricted stock unit awards granted during the years ended August 31, 2017, 2016 and 2015. The fair value of awards granted was \$11.3 million, \$12.5 million and \$24.6 million for the years ended August 31, 2017, 2016 and 2015, respectively.

The value, at the date of grant, of stock awarded under restricted share grants and restricted stock unit grants is amortized as compensation expense over the lesser of the vesting period of one to three years or to the recipients eligible retirement date. Compensation expense recognized related to restricted share grants and restricted stock unit grants for the years ended August 31, 2017, 2016 and 2015 was \$20.2 million, \$22.5 million and \$19.5 million, respectively, and was recorded in Selling and administrative and Cost of Revenue on the Consolidated Statements of Income. Unamortized compensation cost related to restricted stock grants was \$14.1 million as of August 31, 2017.

Total unvested restricted share and restricted stock unit grants were 837,654 and 902,068 as of August 31, 2017 and 2016. The following table summarizes restricted share and restricted stock unit grant transactions for shares, both vested and unvested, under the 2014 Amended and Restated Stock Incentive Plan:

	Shares
Balance at August 31, 2014 ⁽¹⁾	3,180,857
Granted	402,196
Forfeited	(163,192)
Balance at August 31, 2015 ⁽¹⁾	3,419,861
Granted	447,895
Forfeited	(19,526)

Balance at August 31, 2016 ⁽¹⁾	3,848,230
Granted	269,705
Forfeited	(26,206)

Balance at August 31, 2017 ⁽¹⁾ 4,091,729

(1) Balance represents cumulative grants net of forfeitures.

Table of Contents**Share Repurchase Program**

The Board of Directors has authorized the Company to repurchase in aggregate up to \$225 million of the Company's common stock. The program may be modified, suspended or discontinued at any time without prior notice. Under the share repurchase program, shares of common stock may be purchased on the open market or through privately negotiated transactions from time-to-time. The timing and amount of purchases will be based upon market conditions, securities law limitations and other factors. The share repurchase program does not obligate the Company to acquire any specific number of shares in any period.

There were no shares repurchased during the year ended August 31, 2017. During August 31, 2016, the Company repurchased a total of 1,054,687 shares for approximately \$32.4 million under these share repurchase programs. As of August 31, 2017 the Company had cumulatively repurchased 3,206,226 shares for approximately \$137.0 million and had \$88.0 million available under the share repurchase program. In October 2017, the expiration date of this share repurchase program was extended from January 1, 2018 to March 31, 2019.

Note 16 - Earnings Per Share

The shares used in the computation of the Company's basic and diluted earnings per common share are reconciled as follows:

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Weighted average basic common shares outstanding ⁽¹⁾	29,225	29,156	28,151
Dilutive effect of 2018 Convertible notes ⁽²⁾	3,295	3,214	5,130
Dilutive effect of 2024 Convertible notes ⁽³⁾		n/a	n/a
Dilutive effect of 2026 Convertible notes ⁽⁴⁾	n/a		2
Dilutive effect of performance based restricted stock units ⁽⁵⁾	42	98	45
Weighted average diluted common shares outstanding	32,562	32,468	33,328

(1) Restricted stock grants and restricted stock units, including some grants subject to certain performance criteria, are included in weighted average basic common shares outstanding when the Company is in a net earnings position. No restricted stock and restricted stock units were anti-dilutive for the years ended August 31, 2017, 2016 and 2015.

(2) The dilutive effect of the 2018 Convertible notes was included as they were considered dilutive under the "if converted" method as further discussed below.

(3) The 2024 Convertible notes were issued in February 2017. The dilutive effect of the 2024 Convertible notes was excluded for the year ended August 31, 2017 as the average stock price was less than the applicable conversion price and therefore was considered anti-dilutive.

(4) The 2026 Convertible notes were retired in August 2016. The effect of the 2026 Convertible notes was excluded for the year ended August 31, 2016 as the average stock price was less than the applicable conversion price and therefore the notes were considered anti-dilutive. The dilutive effect of the 2026 Convertible notes was included for the year ended August 31, 2015 as the average stock price was greater than the applicable conversion price, as further described below.

(5) Restricted stock units subject to performance criteria, for which actual levels of performance above target have been achieved, are included in weighted average diluted common shares outstanding when the Company is in a net

earnings position.

The Greenbrier Companies 2017 Annual Report

75

Table of Contents

Diluted EPS is calculated using the more dilutive of two approaches. The first approach includes the dilutive effect, using the treasury stock method, associated with shares underlying the 2024 Convertible notes and 2026 Convertible notes and performance based restricted stock units subject to performance criteria, for which actual levels of performance above target have been achieved. The second approach supplements the first by including the if converted effect of the 2018 Convertible notes. Under the if converted method, debt issuance and interest costs, both net of tax, associated with the convertible notes are added back to net earnings and the share count is increased by the shares underlying the convertible notes. The 2024 Convertible notes and 2026 Convertible notes are included in the calculation of both approaches using the treasury stock method when the average stock price is greater than the applicable conversion price.

	Years ended August 31,		
	2017	2016	2015
Net earnings attributable to Greenbrier	\$ 116,067	\$ 183,213	\$ 192,832
Add back:			
Interest and debt issuance costs on the 2018 Convertible notes, net of tax	2,932	2,695	4,818
Earnings before interest and debt issuance costs on convertible notes	\$ 118,999	\$ 185,908	\$ 197,650
Weighted average diluted common shares outstanding	32,562	32,468	33,328
Diluted earnings per share ⁽¹⁾	\$ 3.65	\$ 5.73	\$ 5.93

(1) Diluted earnings per share was calculated as follows:

Earnings before interest and debt issuance costs on convertible notes

Weighted average diluted common shares outstanding

Note 17 - Related Party Transactions

In June 2017, the Company purchased a 40% interest in an entity that buys and sells railcar assets that are leased to third parties and which is 60% owned by a third party. The Company accounts for this investment under the equity method of accounting. As of August 31, 2017, the carrying amount of the investment was \$7.0 million which is classified in Investment in unconsolidated affiliates in the Consolidated Balance Sheet. During the year ended August 31, 2017, the Company sold approximately \$130 million in railcars to this entity from Leased railcars for syndication, of which 60% of the related revenue and margin was recognized and 40% was deferred until the railcars are ultimately sold by the entity. The Company also provides administrative and remarketing services to this entity and earns management fees for these services.

The Company has a 24.5% ownership interest in Amsted-Maxion Cruzeiro, a manufacturer of various castings and components for railcars and other heavy industrial equipment in Brazil, which it accounts for under the equity method of accounting. As of August 31, 2017, the Company had a \$10.0 million note receivable from Amsted-Maxion Cruzeiro, which is included on the Consolidated Balance Sheet in Accounts receivable, net.

In July 2014, the Company and Watco Companies LLC completed the formation of GBW, an unconsolidated 50/50 joint venture. The Company accounts for its interest in GBW under the equity method of accounting. The Company leases real and personal property to GBW with lease revenue totaling \$4.9 million for the years ended August 31, 2017, 2016 and 2015. The Company sold wheel sets and components to GBW which totaled \$18.3 million, \$28.5 million and \$25.4 million for the years ended August 31, 2017, 2016 and 2015, respectively. GBW provided

services to the Company which totaled \$1.0 million, \$1.3 million and \$2.4 million for the years ended August 31, 2017, 2016 and 2015, respectively. As of August 31, 2017, the Company had a \$36.5 million note receivable balance from GBW.

In April 2010, WLR Greenbrier Rail Inc. (WLR-GBX) was formed and acquired a lease fleet of nearly 4,000 railcars valued at approximately \$256.0 million. WLR-GBX was wholly owned by affiliates of WL Ross & Co, LLC (WL Ross) and Wendy Teramoto, who was then a member of the Company's Board of Directors was also an affiliate of WL Ross. On March 14, 2017, Ms. Teramoto resigned from her position as a member of the Company's Board of Directors effective March 31, 2017. In September 2015, the Company purchased the entire remaining WLR-GBX lease fleet of 3,885 railcars for approximately \$148.0 million plus a \$1.0 million fee. The

Table of Contents

transaction was approved by the Company's disinterested, independent directors. The Company acquired the railcars with the intent to sell them with the underlying leases attached to third parties in the short-term. As of August 31, 2017 all 3,885 railcars have been either sold to third parties, scrapped or transferred to equipment on operating leases. During the first quarter of 2017, the Company paid profit sharing of \$4.5 million to WL Ross and during the second quarter of 2017, the Company paid \$3.6 million to WL Ross to satisfy all remaining obligations under this agreement.

Mr. Furman is the owner of a private aircraft managed by a private independent management company. From time to time, the Company's business requires charter use of privately-owned aircraft. In such instances, it is possible that charters may be placed on Mr. Furman's aircraft. The Company placed charters on Mr. Furman's aircraft aggregating \$0.5 million, \$0.8 million and \$0.5 million for each of the years ended August 31, 2017, 2016 and 2015, respectively.

Note 18 - Income Taxes

Components of income tax expense were as follows:

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Current			
Federal	\$ 22,710	\$ 66,455	\$ 92,525
State	305	4,595	6,349
Foreign	35,893	50,299	32,748
	58,908	121,349	131,622
Deferred			
Federal	9,418	(6,199)	(13,565)
State	(1,467)	(1,174)	(1,112)
Foreign	(2,732)	(1,644)	(4,423)
	5,219	(9,017)	(19,100)
Change in valuation allowance	(113)	(10)	(362)
Income tax expense	\$ 64,014	\$ 112,322	\$ 112,160

Income tax expense is computed at rates different from statutory rates. The reconciliation between effective and statutory tax rates on operations is as follows:

	Years ended August 31,		
	2017	2016	2015
Federal statutory rate	35.0%	35.0%	35.0%
State income taxes, net of federal benefit	0.1	0.7	1.0
Impact of foreign operations	(3.4)	0.1	(0.5)
Change in valuation allowance			(0.1)
Noncontrolling interest in flow-through entity	(6.0)	(7.4)	(5.7)

Permanent differences and other	1.4		0.2
Effective tax rate	27.1%	28.4%	29.9%

Earnings before income tax and earnings from unconsolidated affiliates for the years ended August 31, 2017, 2016 and 2015 were \$123.2 million, \$264.8 million and \$292.6 million, respectively, for our domestic U.S. operations and \$113.0 million, \$130.3 million and \$83.1 million, respectively, for our foreign operations.

Table of Contents

The tax effects of temporary differences that give rise to significant portions of deferred tax assets and deferred tax liabilities were as follows:

<i>(In thousands)</i>	As of August 31,	
	2017	2016
Deferred tax assets:		
Accrued payroll and related liabilities	\$ 28,761	\$ 26,384
Deferred revenue	7,547	18,533
Maintenance and warranty accruals	10,988	10,604
Inventories and other	13,641	7,599
Derivative instruments and translation adjustment	371	1,153
Investment and asset tax credits	1,840	511
Net operating losses	320	429
	63,468	65,213
Deferred tax liabilities:		
Fixed assets	110,429	97,490
Investment in GBW Joint Venture	14,066	16,144
Original issue discount	11,086	
Intangibles	3,605	3,212
Deferred gain on redemption of debt	859	1,718
Other	(1,319)	(2,344)
	138,726	116,220
Valuation allowance	533	612
Net deferred tax liability	\$ 75,791	\$ 51,619

As of August 31, 2017 the Company had \$1.0 million of state net operating loss (NOL) carryforwards that will begin to expire in 2020, \$2.0 million of state credit carryforwards that will begin to expire in 2021, and \$3.9 million of foreign NOL carryforwards that will begin to expire in 2020. The Company has placed valuation allowances against any deferred tax assets for which no benefit is anticipated, including those for loss and credit carryforwards likely to expire before their expiration dates. The Company uses tax law ordering for purposes of determining when excess tax benefits have been realized. During the current year the tax deduction realized in connection with the vesting of restricted stock awards was less than the cumulative stock compensation recorded in the financial statements. The stock price at the date of grant was higher than the stock price at the vesting date. As a result, the Company realized a \$2.4 million short-fall (debit) to Additional paid in capital for the tax-effected amount the book compensation exceeded the tax deduction.

The net decrease in the total valuation allowance on deferred taxes for which no benefit is anticipated was approximately \$0.1 million for the year ended August 31, 2017.

No provision has been made for U.S. income taxes on approximately \$199.8 million of cumulative undistributed earnings of certain foreign subsidiaries because the Company plans to reinvest these earnings indefinitely in operations outside the U.S. Generally, such amounts become subject to U.S. taxation upon the remittance of dividends

and under certain other circumstances. It is not practicable to estimate the amount of deferred tax liability related to investments in foreign subsidiaries.

Table of Contents

The following is a tabular reconciliation of the total amounts of unrecognized tax benefits:

<i>(In thousands)</i>		Years ended August 31,		
		2017	2016	2015
Unrecognized Tax Benefit	Opening Balance	\$ 942	\$ 1,019	\$ 1,030
Gross increases	tax positions in prior period	1,368		
Gross decreases	tax positions in prior period	(53)		
Settlements				
Lapse of statute of limitations		(437)	(77)	(11)
Unrecognized Tax Benefit	Ending Balance	\$ 1,820	\$ 942	\$ 1,019

The Company is subject to taxation in the U.S. and in various states and foreign jurisdictions. The Company is no longer subject to U.S. Federal examination for fiscal years ending before 2014, to state and local examinations before 2013, or to foreign examinations before 2012.

Unrecognized tax benefits, excluding interest, at August 31, 2017 were \$1.8 million, of which \$0.9 million, if recognized, would affect the effective tax rate. The unrecognized tax benefits at August 31, 2016 were \$0.9 million. Accrued interest on unrecognized tax benefits as of August 31, 2017 was minimal and as of August 31, 2016 was \$0.2 million. The Company recorded annual interest benefits of less than \$0.1 million for changes in the reserves during each of the years ended August 31, 2017 and 2016. The Company has not accrued any penalties on the reserves. Interest and penalties related to income taxes are not classified as a component of income tax expense. Benefits from the realization of unrecognized tax benefits for deductible differences attributable to ordinary operations will be recognized as a reduction of income tax expense. The Company does not anticipate a significant decrease in the reserves for uncertain tax positions during the next twelve months.

Note 19 - Segment Information

Greenbrier operates in four reportable segments: Manufacturing; Wheels & Parts; Leasing & Services; and GBW Joint Venture. The results of GBW Joint Venture are included as part of Earnings (loss) from unconsolidated affiliates as the Company accounts for its interest in GBW under the equity method of accounting.

The accounting policies of the segments are the same as those described in the summary of significant accounting policies. Performance is evaluated based on Earnings from operations. Corporate includes selling and administrative costs not directly related to goods and services and certain costs that are intertwined among segments due to our integrated business model. The Company does not allocate Interest and foreign exchange or Income tax expense for either external or internal reporting purposes. Intersegment sales and transfers are valued as if the sales or transfers were to third parties. Related revenue and margin are eliminated in consolidation and therefore are not included in consolidated results in the Company's Consolidated Financial Statements.

The information in the following table is derived directly from the segments' internal financial reports used for corporate management purposes. The results of operations for the GBW Joint Venture are not reflected in the tables below as the investment is accounted for under the equity method of accounting.

For the year ended August 31, 2017:

	Revenue			Earnings (loss) from operations		
	External	Intersegment	Total	External	Intersegment	Total
Manufacturing	\$ 1,725,188	\$ 19,291	\$ 1,744,479	\$ 295,334	\$ 1,022	\$ 296,356
Wheels & Parts	312,679	30,861	343,540	14,984	2,303	17,287
Leasing & Services	131,297	11,812	143,109	31,904	11,099	43,003
Eliminations		(61,964)	(61,964)		(14,424)	(14,424)
Corporate				(81,790)		(81,790)
	\$ 2,169,164	\$	\$ 2,169,164	\$ 260,432	\$	\$ 260,432

Table of Contents

For the year ended August 31, 2016:

	Revenue			Earnings (loss) from operations		
	External	Intersegment	Total	External	Intersegment	Total
Manufacturing	\$ 2,096,331	\$ 89,158	\$ 2,185,489	\$ 415,094	\$ 24,299	\$ 439,393
Wheels & Parts	322,395	32,436	354,831	19,948	2,602	22,550
Leasing & Services	260,798	13,101	273,899	51,723	13,101	64,824
Eliminations		(134,695)	(134,695)		(40,002)	(40,002)
Corporate				(78,213)		(78,213)
	\$ 2,679,524	\$	\$ 2,679,524	\$ 408,552	\$	\$ 408,552

For the year ended August 31, 2015:

	Revenue			Earnings (loss) from operations		
	External	Intersegment	Total	External	Intersegment	Total
Manufacturing	\$ 2,136,051	\$ 7,534	\$ 2,143,585	\$ 396,921	\$ 795	\$ 397,716
Wheels & Parts	371,237	27,257	398,494	27,563	2,629	30,192
Leasing & Services	97,990	62,600	160,590	41,887	62,600	104,487
Eliminations		(97,391)	(97,391)		(66,024)	(66,024)
Corporate				(79,479)		(79,479)
	\$ 2,605,278	\$	\$ 2,605,278	\$ 386,892	\$	\$ 386,892

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Assets:			
Manufacturing	\$ 914,450	\$ 701,296	\$ 675,409
Wheels & Parts	236,315	275,599	291,798
Leasing & Services	535,323	516,147	546,013
Unallocated	711,617	342,732	274,232
	\$ 2,397,705	\$ 1,835,774	\$ 1,787,452

Depreciation and amortization:

Manufacturing	\$ 33,807	\$ 27,137	\$ 20,668
Wheels & Parts	11,143	11,971	11,748
Leasing & Services	20,179	24,237	12,740
	\$ 65,129	\$ 63,345	\$ 45,156

Capital expenditures:

Edgar Filing: GREENBRIER COMPANIES INC - Form 10-K

Manufacturing	\$ 54,973	\$ 51,294	\$ 84,354
Wheels & Parts	3,129	10,190	9,381
Leasing & Services	27,963	77,529	12,254
	\$ 86,065	\$ 139,013	\$ 105,989

80

The Greenbrier Companies 2017 Annual Report

Table of Contents

The following table summarizes selected geographic information.

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Revenue ⁽¹⁾:			
U.S.	\$ 1,674,517	\$ 2,297,501	\$ 2,404,266
Foreign	494,647	382,023	201,012
	\$ 2,169,164	\$ 2,679,524	\$ 2,605,278
Assets:			
U.S.	\$ 1,307,239	\$ 955,674	\$ 1,181,751
Mexico	791,974	788,878	524,724
Europe	298,492	91,222	80,977
	\$ 2,397,705	\$ 1,835,774	\$ 1,787,452

⁽¹⁾ Revenue is presented on the basis of geographic location of customers.

Reconciliation of Earnings from operations to Earnings before income tax and earnings from unconsolidated affiliates:

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
Earnings from operations	\$ 260,432	\$ 408,552	\$ 386,892
Interest and foreign exchange	24,192	13,502	11,179
Earnings before income tax and earnings from unconsolidated affiliates	\$ 236,240	\$ 395,050	\$ 375,713

The results of operations for the GBW Joint Venture are accounted for under the equity method of accounting. The GBW Joint Venture is the Company's fourth reportable segment and information for 2017, 2016 and 2015 are included in the tables below.

<i>(In thousands)</i>	Years ended August 31,		
	2017	2016	2015
GBW Joint Venture:			
Revenue	\$ 253,436	\$ 373,490	\$ 349,849
Earnings (loss) from operations	\$ (32,454)	\$ 8,558	\$ (1,160)
Assets ⁽¹⁾	\$ 206,009	\$ 247,610	\$ 239,871
Depreciation and amortization	\$ 9,023	\$ 7,676	\$ 4,590
Capital expenditures	\$ 8,030	\$ 16,110	\$ 26,396

⁽¹⁾ Includes goodwill and intangible assets of \$78.8 million, \$93.4 million and \$96.9 million as of August 31, 2017, 2016 and 2015, respectively. In 2017, GBW recorded a pre-tax goodwill impairment loss of \$11.2 million which reduced the goodwill balance to \$41.5 million.

Note 20 - Customer Concentration

Customer concentration is defined as a single customer that accounts for more than 10% of total revenues or accounts receivable. In 2017, revenue from one customer represented 20% of total revenue. In 2016, revenue from two customers represented 17% and 14% of total revenue. In 2015, revenue from one customer represented 17% of total revenue. No other customers accounted for more than 10% of total revenues for the years ended August 31, 2017, 2016, or 2015. Three customers had balances that individually equaled or exceeded 10% of accounts receivable and represented 13%, 13% and 10% of the consolidated accounts receivable balance at August 31, 2017. Two customers had balances that individually equaled or exceeded 10% of accounts receivable and represented 23% and 11% of the consolidated accounts receivable balance at August 31, 2016.

Table of Contents**Note 21 - Lease Commitments**

Lease expense for railcar equipment leased-in under non-cancelable leases was \$7.6 million, \$6.6 million and \$6.3 million for the years ended August 31, 2017, 2016 and 2015, respectively. Aggregate minimum future amounts payable under these non-cancelable railcar equipment leases are as follows:

(In thousands)

Year ending August 31,	
2018	\$ 7,363
2019	6,177
2020	4,832
2021	1,792
2022	1,792
Thereafter	3,602
	\$ 25,558

Operating leases for domestic railcar repair facilities, office space and certain manufacturing and office equipment expire at various dates through August 2023. Rental expense for facilities, office space and equipment was \$9.4 million, \$9.3 million and \$9.3 million for the years ended August 31, 2017, 2016 and 2015, respectively. Aggregate minimum future amounts payable under these non-cancelable operating leases are as follows:

(In thousands)

Year ending August 31,	
2018	\$ 5,006
2019	3,585
2020	3,304
2021	2,217
2022	705
Thereafter	341
	\$ 15,158

Note 22 - Commitments and Contingencies

The Company's Portland, Oregon manufacturing facility is located adjacent to the Willamette River. In December 2000, the U.S. Environmental Protection Agency (EPA) classified portions of the Willamette River bed known as the Portland Harbor, including the portion fronting the Company's manufacturing facility, as a federal National Priority List or Superfund site due to sediment contamination (the Portland Harbor Site). The Company and more than 140 other parties have received a General Notice of potential liability from the EPA relating to the Portland Harbor Site. The letter advised the Company that it may be liable for the costs of investigation and remediation (which liability may be joint and several with other potentially responsible parties) as well as for natural resource damages resulting from releases of hazardous substances to the site. Ten private and public entities, including the Company (the Lower Willamette Group or LWG), signed an Administrative Order on Consent (AOC) to perform a remedial

investigation/feasibility study (RI/FS) of the Portland Harbor Site under EPA oversight, and several additional entities have not signed such consent, but nevertheless contributed money to the effort. The EPA-mandated RI/FS was produced by the LWG and cost over \$110 million during a 17-year period. The Company bore a percentage of the total costs incurred by the LWG in connection with the investigation. The Company's aggregate expenditure during the 17-year period was not material. Some or all of any such outlay may be recoverable from other responsible parties. The LWG requested in August 2017 that the AOC be terminated since the EPA issued its Record of Decision (ROD) for the Portland Harbor Site on January 6, 2017.

Separate from the process described above which focused on the type of remediation to be performed at the Portland Harbor Site and the schedule for such remediation, 83 parties, including the State of Oregon and the

Table of Contents

federal government, entered into a non-judicial mediation process to try to allocate costs associated with remediation of the Portland Harbor site. Approximately 110 additional parties signed tolling agreements related to such allocations. On April 23, 2009, the Company and the other AOC signatories filed suit against 69 other parties due to a possible limitations period for some such claims; *Arkema Inc. et al v. A & C Foundry Products, Inc. et al*, U.S. District Court, District of Oregon, Case #3:09-cv-453-PK. All but 12 of these parties elected to sign tolling agreements and be dismissed without prejudice, and the case has been stayed by the court. The allocation process is continuing in parallel with the process to define the remediation steps.

The EPA's January 6, 2017 ROD identifies a clean-up remedy that the EPA estimates will take 13 years of active remediation, followed by 30 years of monitoring with an estimated undiscounted cost of \$1.7 billion. The EPA typically expects its cost estimates to be accurate within a range of -30% to +50%, but this ROD states that changes in costs are likely to occur as a result of new data it wants to collect over a 2-year period prior to final remedy design. The ROD identifies 13 Sediment Decision Units. One of the units, RM9W, includes the nearshore area of the river sediments offshore of the Company's Portland, Oregon manufacturing facility as well as upstream and downstream of the facility. It also includes a portion of the Company's riverbank. The ROD does not break down total remediation costs by Sediment Decision Unit.

On January 30, 2017 the Confederated Tribes and Bands of Yakama Nation sued 33 parties including the Company as well as the United States and the State of Oregon for costs it incurred in assessing alleged natural resource damages to the Columbia River from contaminants deposited in Portland Harbor. *Confederated Tribes and Bands of the Yakama Nation v. Air Liquide America Corp., et al.*, United States Court for the District of Oregon Case No. 3:17-CV-00164-SB. The Company, along with many of the other defendants, has moved to dismiss the case. That motion is pending. The complaint does not specify the amount of damages the Plaintiff will seek.

The ROD does not address responsibility for the costs of clean-up, nor does it allocate such costs among the potentially responsible parties. Responsibility for funding and implementing the EPA's selected cleanup remedy will be determined at an unspecified later date. Based on the investigation to date, the Company believes that it did not contribute in any material way to contamination in the river sediments or the damage of natural resources in the Portland Harbor Site and that the damage in the area of the Portland Harbor Site adjacent to its property precedes its ownership of the Portland, Oregon manufacturing facility. Because these environmental investigations are still underway, including the collection of new pre-remedial design sampling data by EPA, sufficient information is currently not available to determine the Company's liability, if any, for the cost of any required remediation or restoration of the Portland Harbor Site or to estimate a range of potential loss. Based on the results of the pending investigations and future assessments of natural resource damages, the Company may be required to incur costs associated with additional phases of investigation or remedial action, and may be liable for damages to natural resources. In addition, the Company may be required to perform periodic maintenance dredging in order to continue to launch vessels from its launch ways in Portland, Oregon, on the Willamette River, and the river's classification as a Superfund site could result in some limitations on future dredging and launch activities. Any of these matters could adversely affect the Company's business and Consolidated Financial Statements, or the value of its Portland property.

The Company has entered into a Voluntary Cleanup Agreement with the Oregon Department of Environmental Quality (DEQ) in which the Company agreed to conduct an investigation of whether, and to what extent, past or present operations at the Portland property may have released hazardous substances into the environment. The Company has also signed an Order on Consent with the DEQ to finalize the investigation of potential onsite sources of contamination that may have a release pathway to the Willamette River. Interim precautionary measures are also required in the order and the Company is discussing with the DEQ potential remedial actions which may be required. The Company's aggregate expenditure has not been material, however the Company could incur significant expenses for remediation. Some or all of any such outlay may be recoverable from other responsible parties.

From time to time, Greenbrier is involved as a defendant in litigation in the ordinary course of business, the outcomes of which cannot be predicted with certainty. In the quarter ended November 30, 2016, the Company received an adverse judgment of approximately \$15 million on one matter related to commercial litigation in a

Table of Contents

foreign jurisdiction. The judgment was reversed on appeal and the case was remanded to the trial court. In June 2017 the court issued a new judgment against the Company of approximately \$10 million. The judgment has been affirmed on appeal. The Company is evaluating its options with respect to such litigation and related matters. While the ultimate outcome of such legal proceedings cannot be determined at this time, the Company believes that the resolution of pending litigation will not have a material adverse effect on the Company's Consolidated Financial Statements.

As of August 31, 2017, the Company had outstanding letters of credit aggregating \$77.6 million associated with performance guarantees, facility leases and workers compensation insurance.

The Company made \$0.6 million in cash contributions to GBW, an unconsolidated 50/50 joint venture, for the year ended August 31, 2017 which represented a reinvestment of a distribution received from GBW during the year. The Company is likely to make additional capital contributions or loans to GBW in the future. As of August 31, 2017, the Company had a \$36.5 million note receivable balance from GBW which is included on the Consolidated Balance Sheet in Accounts receivable, net.

As of August 31, 2017, the Company had a \$10.0 million note receivable from Amsted-Maxion Cruzeiro, an unconsolidated Brazilian castings and components manufacturer, which is included on the Consolidated Balance Sheet in Accounts receivable, net. In the future, the Company may make loans to or provide guarantees for Amsted-Maxion Cruzeiro or Greenbrier-Maxion, an unconsolidated Brazilian railcar manufacturer.

Note 23 - Fair Value of Financial Instruments

The estimated fair values of financial instruments and the methods and assumptions used to estimate such fair values are as follows:

	Carrying	Estimated
	Amount¹	Fair Value
<i>(In thousands)</i>		(Level 2)
Notes payable as of August 31, 2017	\$ 597,604	\$ 644,708
Notes payable as of August 31, 2016	\$ 303,969	\$ 314,687

¹ Carrying amount disclosed in this table excludes debt discount and debt issuance costs.

The carrying amount of cash and cash equivalents, accounts and notes receivable, revolving notes, accounts payable and accrued liabilities, foreign currency forward contracts and interest rate swaps is a reasonable estimate of fair value of these financial instruments. Estimated rates currently available to the Company for debt with similar terms and remaining maturities and current market data are used to estimate the fair value of notes payable.

Note 24 - Fair Value Measures

Certain assets and liabilities are reported at fair value on either a recurring or nonrecurring basis. Fair value, for this disclosure, is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants, under a three-tier fair value hierarchy which prioritizes the inputs used in measuring a fair value as follows:

- Level 1 - observable inputs such as unadjusted quoted prices in active markets for identical instruments;
- Level 2 - inputs, other than the quoted market prices in active markets for similar instruments, which are observable, either directly or indirectly; and
- Level 3 - unobservable inputs for which there is little or no market data available, which require the reporting entity to develop its own assumptions.

Table of Contents

Assets and liabilities measured at fair value on a recurring basis as of August 31, 2017 are:

<i>(In thousands)</i>	Total	Level 1	Level 2⁽¹⁾	Level 3
Assets:				
Derivative financial instruments	\$ 3,814	\$	\$ 3,814	\$
Nonqualified savings plan investments	20,974	20,974		
Cash equivalents	105,337	105,337		
	\$ 130,125	\$ 126,311	\$ 3,814	\$

Liabilities:

Derivative financial instruments	\$ 2,886	\$	\$ 2,886	\$
----------------------------------	----------	----	----------	----

(1)Level 2 assets include derivative financial instruments which are valued based on significant observable inputs. See Note 14 Derivative Instruments for further discussion.

Assets and liabilities measured at fair value on a recurring basis as of August 31, 2016 are:

<i>(In thousands)</i>	Total	Level 1	Level 2⁽¹⁾	Level 3
Assets:				
Derivative financial instruments	\$ 1,595	\$	\$ 1,595	\$
Nonqualified savings plan investments	15,864	15,864		
Cash equivalents	5,077	5,077		
	\$ 22,536	\$ 20,941	\$ 1,595	\$

Liabilities:

Derivative financial instruments	\$ 7,466	\$	\$ 7,466	\$
----------------------------------	----------	----	----------	----

(1)Level 2 assets include derivative financial instruments which are valued based on significant observable inputs. See Note 14 Derivative Instruments for further discussion.

Table of Contents**Quarterly Results of Operations (Unaudited)**

<i>(In thousands, except per share amount)</i>	First	Second	Third	Fourth	Total
2017					
Revenue					
Manufacturing	\$ 454,033	\$ 445,504	\$ 317,104	\$ 508,547	\$ 1,725,188
Wheels & Parts	69,635	82,714	85,231	75,099	312,679
Leasing & Services	28,646	38,064	36,826	27,761	131,297
	552,314	566,282	439,161	611,407	2,169,164
Cost of revenue					
Manufacturing	356,555	346,653	245,228	425,531	1,373,967
Wheels & Parts	64,978	75,497	77,985	69,876	288,336
Leasing & Services	18,030	25,207	26,247	16,078	85,562
	439,563	447,357	349,460	511,485	1,747,865
Margin	112,751	118,925	89,701	99,922	421,299
Selling and administrative	41,213	39,495	42,810	47,089	170,607
Net gain on disposition of equipment	(1,122)	(2,090)	(1,581)	(4,947)	(9,740)
Earnings from operations	72,660	81,520	48,472	57,780	260,432
Other costs					
Interest and foreign exchange	1,724	5,673	7,894	8,901	24,192
Earnings before income tax and earnings (loss) from unconsolidated affiliates	70,936	75,847	40,578	48,879	236,240
Income tax expense	(20,386)	(24,858)	(8,656)	(10,114)	(64,014)
Earnings (loss) from unconsolidated affiliates	(2,584)	(1,988)	(681)	(6,511)	(11,764)
Net earnings	47,966	49,001	31,241	32,254	160,462
Net earnings attributable to noncontrolling interest	(23,004)	(14,465)	1,582	(8,508)	(44,395)
Net earnings attributable to Greenbrier	\$ 24,962	\$ 34,536	\$ 32,823	\$ 23,746	\$ 116,067
Basic earnings per common share: ⁽¹⁾	\$ 0.86	\$ 1.19	\$ 1.12	\$ 0.81	\$ 3.97
Diluted earnings per common share: ⁽¹⁾	\$ 0.79	\$ 1.09	\$ 1.03	\$ 0.75	\$ 3.65

(1) Quarterly amounts do not total to the year to date amount as each period is calculated discretely. Diluted earnings per common share includes the dilutive effect of the 2024 Convertible Notes using the treasury stock method when dilutive and the dilutive effect of shares underlying the 2018 Convertible Notes using the if converted method in which debt issuance and interest costs, net of tax, were added back to net earnings.

Table of Contents**Quarterly Results of Operations (Unaudited)**

<i>(In thousands, except per share amount)</i>	First	Second	Third	Fourth	Total
2016					
Revenue					
Manufacturing	\$ 698,661	\$ 454,531	\$ 458,494	\$ 484,645	\$ 2,096,331
Wheels & Parts	78,729	90,458	78,417	74,791	322,395
Leasing & Services	24,999	124,090	75,955	35,754	260,798
	802,389	669,079	612,866	595,190	2,679,524
Cost of revenue					
Manufacturing	533,033	361,827	352,775	382,919	1,630,554
Wheels & Parts	73,002	81,388	69,818	69,543	293,751
Leasing & Services	11,589	105,973	63,175	23,045	203,782
	617,624	549,188	485,768	475,507	2,128,087
Margin	184,765	119,891	127,098	119,683	551,437
Selling and administrative	36,549	38,244	43,280	40,608	158,681
Net gain on disposition of equipment	(269)	(10,746)	(311)	(4,470)	(15,796)
Earnings from operations	148,485	92,393	84,129	83,545	408,552
Other costs					
Interest and foreign exchange	5,436	1,417	3,712	2,937	13,502
Earnings before income tax and earnings (loss) from unconsolidated affiliates	143,049	90,976	80,417	80,608	395,050
Income tax expense	(44,719)	(25,734)	(22,449)	(19,420)	(112,322)
Earnings (loss) from unconsolidated affiliates	383	974	1,564	(825)	2,096
Net earnings	98,713	66,216	59,532	60,363	284,824
Net earnings attributable to noncontrolling interest	(29,280)	(21,348)	(24,180)	(26,803)	(101,611)
Net earnings attributable to Greenbrier	\$ 69,433	\$ 44,868	\$ 35,352	\$ 33,560	\$ 183,213
Basic earnings per common share: ⁽¹⁾	\$ 2.36	\$ 1.54	\$ 1.22	\$ 1.15	\$ 6.28
Diluted earnings per common share: ⁽¹⁾	\$ 2.15	\$ 1.41	\$ 1.12	\$ 1.06	\$ 5.73

(1) Quarterly amounts do not total to the year to date amount as each period is calculated discretely. Diluted earnings per common share includes the dilutive effect of the 2026 Convertible Notes using the treasury stock method when dilutive and the dilutive effect of shares underlying the 2018 Convertible Notes using the if converted method in which debt issuance and interest costs, net of tax, were added back to net earnings.

Table of Contents

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

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management has evaluated, under the supervision and with the participation of our President and Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report pursuant to Rule 13a-15(b) under the Securities Exchange Act of 1934 (the Exchange Act). Based on that evaluation, our President and Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective in ensuring that information required to be disclosed in our Exchange Act reports is (1) recorded, processed, summarized and reported in a timely manner, and (2) accumulated and communicated to our management, including our President and Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Controls

There have been no changes in our internal control over financial reporting during the quarter ended August 31, 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Management of The Greenbrier Companies, Inc. together with its consolidated subsidiaries (the Company), is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed under the supervision of the Company's principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States of America.

As of the end of the Company's 2017 fiscal year, management conducted an assessment of the effectiveness of the Company's 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 (COSO). On June 1, 2017, the Company acquired a controlling interest in the European subsidiaries of Astra Holding GmbH (Astra subsidiaries) when Astra Holding GmbH contributed the Astra subsidiaries to Greenbrier-Astra Rail. Management excluded the Astra subsidiaries from our 2017 assessment of the effectiveness of our internal control over financial reporting. The Astra subsidiaries accounted for approximately 6.4% of the Company's total assets as of August 31, 2017. The Astra subsidiaries, from June 1, 2017 to August 31, 2017 accounted for 1.1% of the Company's revenues for the year ended August 31, 2017. We expect that our internal control system will be fully implemented at the Astra subsidiaries during fiscal 2018 and correspondingly evaluated by us for effectiveness at that time. Based on this assessment, management has determined that the Company's internal control over financial reporting as of August 31, 2017 is effective.

Our independent registered public accounting firm, KPMG LLP, independently assessed the effectiveness of the Company's internal control over financial reporting excluding the Astra subsidiaries, as stated in their attestation report, which is included at the end of Part II, Item 9A of this Form 10-K.

Inherent Limitations on Effectiveness of Controls

The Company's management, including the Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect

Table of Contents

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

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders

The Greenbrier Companies, Inc. and subsidiaries:

We have audited The Greenbrier Companies, Inc. and subsidiaries' internal control over financial reporting as of August 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Greenbrier Companies, Inc.'s and subsidiaries' 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 appearing under Item 9A. Our responsibility is to express an opinion on The Greenbrier Companies, Inc. and subsidiaries' internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed 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.

In our opinion, The Greenbrier Companies, Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of August 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

On June 1, 2017 the Greenbrier Companies, Inc. acquired a controlling interest in the European subsidiaries of Astra Holding GmbH (Astra subsidiaries) when Astra Holding GmbH contributed the Astra subsidiaries to Greenbrier-Astra Rail. Management excluded the Astra subsidiaries from its assessment of the effectiveness of The Greenbrier Companies, Inc.'s and subsidiaries' internal control over financial reporting as of August 31, 2017. Astra subsidiaries represent total assets of \$153,721,000 and total revenues of \$23,895,000 included in the consolidated financial

statements of The Greenbrier Companies, Inc. and subsidiaries as of and for the year ended August 31, 2017. Our audit of internal control over financial reporting of The Greenbrier Companies, Inc. and subsidiaries also excluded an evaluation of the internal control over financial reporting of the Astra subsidiaries.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of The Greenbrier Companies, Inc. and subsidiaries as of

Table of Contents

August 31, 2017 and 2016, and the related consolidated statements of income, comprehensive income, equity, and cash flows for each of the years in the three-year period ended August 31, 2017, and our report dated October 27, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Portland, Oregon

October 27, 2017

The Greenbrier Companies 2017 Annual Report

91

Table of Contents

Item 9B. OTHER INFORMATION

None

PART III

Item 10. DIRECTORS AND EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

There is hereby incorporated by reference the information under the captions Election of Directors, Board Committees, Meetings and Charters, Section 16(a) Beneficial Ownership Reporting Compliance and Executive Officers of the Company in the Company's definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after the end of Registrant's year ended August 31, 2017.

Item 11. EXECUTIVE COMPENSATION

There is hereby incorporated by reference the information under the caption Executive Compensation and Compensation Committee Report in Registrant's definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after the end of Registrant's year ended August 31, 2017.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDERS MATTERS

There is hereby incorporated by reference the information under the captions Security Ownership of Certain Beneficial Owners and Management and Equity Compensation Plan Information in Registrant's definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after the end of Registrant's year ended August 31, 2017.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

There is hereby incorporated by reference the information under the caption Transactions with Related Persons and Independence of Directors in Registrant's definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after the end of Registrant's year ended August 31, 2017.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

There is hereby incorporated by reference the information under the caption Ratification of Appointment of Auditors in Registrant's definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the Securities and Exchange Commission within 120 days after the end of the Registrant's year ended August 31, 2017.

Table of Contents

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(1) Financial Statements

See Consolidated Financial Statements in Item 8

(a) (2) Financial Statements Schedule*

* All other schedules have been omitted because they are inapplicable, not required or because the information is given in the Consolidated Financial Statements or notes thereto. This supplemental schedule should be read in conjunction with the Consolidated Financial Statements and notes thereto included in this report.

(a) (3) The following exhibits are filed herewith and this list is intended to constitute the exhibit index:

3.1 Registrant's Articles of Incorporation are incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 10-Q filed April 5, 2006.

3.2 Articles of Merger amending the Registrant's Articles of Incorporation are incorporated herein by reference to Exhibit 3.2 to the Registrant's Form 10-Q filed April 5, 2006.

3.3 Registrant's Bylaws, as amended January 11, 2006, are incorporated herein by reference to Exhibit 3.3 to the Registrant's Form 10-Q filed April 5, 2006.

3.4 Amendment to the Registrant's Bylaws, dated October 31, 2006, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed November 6, 2006.

3.5 Amendment to the Registrant's Bylaws, dated January 8, 2008, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed November 8, 2007.

3.6 Amendment to the Registrant's Bylaws, dated April 8, 2008, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed April 11, 2008.

3.7

Amendment to the Registrant's Bylaws, dated April 7, 2009, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed April 13, 2009.

3.8 Amendment to the Registrant's Bylaws, dated June 8, 2009, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed June 10, 2009.

3.9 Amendment to the Registrant's Bylaws, dated June 10, 2009, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed June 12, 2009.

3.10 Amendment to the Registrant's Bylaws, dated October 30, 2012, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed November 5, 2012.

3.11 Amendment to the Registrant's Bylaws, dated January 9, 2013, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed January 15, 2013.

3.12 Amendment to the Registrant's Bylaws, dated October 29, 2013, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed October 31, 2013.

3.13 Amendment to the Registrant's Bylaws, dated October 29, 2014, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed November 3, 2014.

3.14 Amendment to the Registrant's Bylaws, dated March 31, 2015, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed April 6, 2015.

3.15 Amendment to the Registrant's Bylaws, dated July 1, 2015, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed July 8, 2015.

3.16 Amendment to the Registrant's Bylaws, dated October 21, 2015, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed October 22, 2015.

Table of Contents

- 3.17 Amendment to the Registrant's Bylaws, dated October 30, 2015, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed November 2, 2015.
- 3.18 Amendment to the Registrant's Bylaws, dated March 31, 2017, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed March 31, 2017.
- 3.19 Amendment to the Registrant's Bylaws, dated June 23, 2017, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K filed June 29, 2017.
- 4.1 Specimen Common Stock Certificate of Registrant is incorporated herein by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-3 filed April 7, 2010 (SEC File Number 333-165924).
- 4.2 Indenture between the Registrant and U.S. Bank National Association, as Trustee, including the form of Global Note attached as Exhibit A thereto, dated April 5, 2011, is incorporated herein by reference to Exhibit 4.1 to the Registrant's Form 8-K filed April 5, 2011.
- 4.3 Indenture between the Registrant and Wells Fargo Bank, National Association, as Trustee, including the Form of Note attached as Exhibit A thereto, dated February 6, 2017, is incorporated herein by reference to Exhibit 4.1 to the Registrant's Form 8-K filed February 6, 2017.
- 10.1* Amended and Restated Employment Agreement between the Registrant and Mr. William A. Furman, dated August 28, 2012, is incorporated herein by reference to Exhibit 10.3 to the Registrant's Form 10-Q filed January 9, 2013.
- 10.2* Form of Amended and Restated Employment Agreement between the Registrant and certain of its executive officers, as amended and restated on August 28, 2012, is incorporated herein by reference to Exhibit 10.8 to the Registrant's Form 10-K filed November 1, 2012.
- 10.3* Amendment No. 1 to Form of Amended and Restated Employment Agreement between the Registrant and certain of its executive officers, as amended and restated on August 28, 2012, is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-Q filed January 8, 2014.
- 10.4* Form of Agreement concerning Indemnification and Related Matters (Directors) between Registrant and its directors is incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 10-Q filed July 1, 2015.
- 10.5*

Form of Agreement concerning Indemnification and Related Matters (Officers) between Registrant and its officers is incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 10-Q filed April 4, 2013.

- 10.6* Form of Change of Control Agreement is incorporated herein by reference to Exhibit 10.5 to the Registrant's Form 10-Q filed April 4, 2013.
- 10.7* The Greenbrier Companies, Inc. Form of Amendment to Change of Control Agreement, approved on May 28, 2013, is incorporated herein by reference to Exhibit 10.2 of the Registrant's Form 8-K filed June 6, 2013.
- 10.8* The Greenbrier Companies, Inc. 2014 Amended and Restated Stock Incentive Plan is incorporated herein by reference to Appendix A to the Registrant's Proxy Statement on Schedule 14A filed November 19, 2014.
- 10.9* Form of Director Restricted Share Agreement related to the 2014 Amended and Restated Stock Incentive Plan is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-Q filed April 3, 2014.
- 10.10* The Greenbrier Companies, Inc. Nonqualified Deferred Compensation Plan Basic Plan Document is incorporated herein by reference to Exhibit 10.38 to the Registrant's Form 10-K filed November 4, 2011.
- 10.11* The Greenbrier Companies Nonqualified Deferred Compensation Plan Adoption Agreement is incorporated herein by reference to Exhibit 10.39 to the Registrant's Form 10-K filed November 4, 2011.

Table of Contents

- 10.12* Amendment No. 1 to the Greenbrier Companies Nonqualified Deferred Compensation Plan Adoption Agreement, dated May 25, 2011, is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-Q filed July 8, 2011.
- 10.13* Amendment No. 2 to the Greenbrier Companies Nonqualified Deferred Compensation Plan Adoption Agreement, dated August 28, 2012, is incorporated herein by reference to Exhibit 10.27 to the Registrant's Form 10-K filed November 1, 2012.
- 10.14* Amendment No. 3 to the Greenbrier Companies Nonqualified Deferred Compensation Plan Adoption Agreement, dated January 1, 2014, is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-Q filed January 7, 2015.
- 10.15* Amendment No. 4 to the Greenbrier Companies Nonqualified Deferred Compensation Plan Adoption Agreement, dated October 28, 2014, is incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 10-Q filed January 7, 2015.
- 10.16* Amendment No. 5 to the Greenbrier Companies Nonqualified Deferred Compensation Plan Adoption Agreement, dated December 8, 2015, is incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 10-Q filed April 5, 2016.
- 10.17* Updated Rabbi Trust Agreements, dated October 1, 2012, related to The Greenbrier Companies, Inc. Nonqualified Deferred Compensation Plan, are incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-Q filed January 9, 2013.
- 10.18* The Greenbrier Companies Nonqualified Deferred Compensation Plan Adoption Agreement for Directors, dated July 1, 2012, is incorporated herein by reference to Exhibit 10.28 to the Registrant's Form 10-K filed November 1, 2012.
- 10.19* Amendment No. 1 to the Greenbrier Companies Nonqualified Deferred Compensation Plan Adoption Agreement for Directors, dated December 15, 2015, is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-Q filed April 5, 2016.
- 10.20* Updated Rabbi Trust Agreements, dated October 1, 2012, related to the Greenbrier Companies, Inc. Nonqualified Deferred Compensation Plan for Directors, are incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 10-Q filed January 9, 2013.
- 10.21* The Greenbrier Companies, Inc. Form of Restricted Stock Unit Agreement, approved on May 22, 2015, is incorporated herein by reference to Exhibit 10.1 of the Registrant's Form 10-Q filed July 1, 2015.

- 10.22* The Greenbrier Companies, Inc. Form of Restricted Stock Unit Agreement, approved on March 27, 2017.
- 10.23* The Greenbrier Companies, Inc. 2014 Employee Stock Purchase Plan is incorporated herein by reference to Appendix B to the Registrant's Definitive Proxy Statement on Schedule 14A filed on November 19, 2014.
- 10.24* Consulting Services Agreement between Greenbrier Leasing Company LLC and Charles J. Swindells dated January 7, 2016 is incorporated herein by reference to Exhibit 10.3 to the Registrant's Form 10-Q filed April 5, 2016.
- 10.25 Purchase Agreement among The Greenbrier Companies, Inc., Merrill Lynch, Pierce, Fenner & Smith Incorporated and Goldman, Sachs & Co., dated March 30, 2011, is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 8-K filed April 5, 2011.
- 10.26 The Greenbrier Companies, Inc. Executive Stock Ownership Guidelines, adopted as of August 28, 2012, are incorporated herein by reference to Exhibit 10.39 to the Registrant's Form 10-K filed November 1, 2012.
- 10.27 Contribution Agreement, dated July 18, 2014, by and among Watco Companies, L.L.C., the Registrant, and with respect to Article III and Article IX only, GBW Railcar Services Holdings, L.L.C., is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 8-K filed July 24, 2014.

Table of Contents

- 10.28 Amended and Restated Limited Liability Company Agreement of GBW Railcar Services Holdings, L.L.C., dated July 18, 2014, by and among the Registrant, Watco Mechanical Services, L.L.C., and Millennium Rail, Inc., is incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 8-K filed July 24, 2014.
- 10.29 Credit Agreement, dated March 20, 2014, by and among Greenbrier Leasing Company LLC, an Oregon limited liability company, Bank of America, N.A., as Administrative Agent, Union Bank, N.A., as Syndication Agent, Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Sole Lead Arranger and Sole Book Manager, and the lenders identified therein is incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 8-K filed March 26, 2014.
- 10.30 First Amendment to Credit Agreement, dated February 29, 2016, among Greenbrier Leasing Company LLC, Bank of America, N.A. as Administrative Agent, and the lenders identified therein is incorporated herein by reference to Exhibit 10.5 to the Registrant's Form 10-Q filed April 5, 2016.
- 10.31 Third Amended and Restated Credit Agreement, dated as of October 29, 2015, by and among The Greenbrier Companies, Inc., Bank of America, N.A., as Administrative Agent, MUFG Union Bank, N.A., as Syndication Agent, Bank of the West, Fifth Third Bank and Wells Fargo Bank, National Association, as Co-Documentation Agents, Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Sole Lead Arranger and Sole Bookrunner, and the lenders identified therein is incorporated herein by reference to Exhibit 10.1 of the Registrant's Form 8-K filed October 30, 2015.
- 10.32 Third Amended and Restated Security Agreement, dated as of October 29, 2015, by and among The Greenbrier Companies, Inc., and the other parties identified as Debtors therein, in favor of Bank of America, N.A., as Administrative Agent is incorporated herein by reference to Exhibit 10.2 of the Registrant's Form 8-K filed October 30, 2015.
- 10.33 Third Amended and Restated Pledge Agreement, dated as of October 29, 2015, by and among The Greenbrier Companies, Inc., and the other parties identified as Debtors therein, in favor of Bank of America, N.A., as Administrative Agent is incorporated herein by reference to Exhibit 10.3 of the Registrant's Form 8-K filed October 30, 2015.
- 10.34 Purchase Agreement, dated January 31, 2017, among The Greenbrier Companies, Inc., Merrill Lynch, Pierce, Fenner & Smith Incorporated and Goldman, Sachs & Co. is incorporated herein by reference to Exhibit 10.1 of the Registrant's Form 8-K filed February 6, 2017.
- 14.1 Code of Business Conduct and Ethics is incorporated herein by reference to Exhibit 14.1 to the Registrant's Form 8-K filed January 12, 2016.
- 21.1 List of the subsidiaries of the Registrant.

- 23.1 Consent of KPMG LLP.
- 31.1 Certification pursuant to Rule 13(a) 14(a).
- 31.2 Certification pursuant to Rule 13(a) 14(a).
- 32.1 Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.2 Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 101 The following financial information from the Company's Annual Report on Form 10-K for the year ended August 31, 2017, formatted in XBRL (eXtensible Business Reporting Language) and furnished electronically herewith: (i) the Consolidated Balance Sheets; (ii) the Consolidated Statements of Income; (iii) Consolidated Statements of Comprehensive Income (iv) the Consolidated Statements of Equity (v) the Consolidated Statements of Cash Flows; (vi) the Notes to Condensed Consolidated Financial Statements.

* Management contract or compensatory plan or arrangement

Table of Contents

Note: For all exhibits incorporated by reference, unless otherwise noted above, the SEC file number is 001-13146.

Item 16. FORM 10-K SUMMARY

None.

The Greenbrier Companies 2017 Annual Report

97

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities and Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

THE GREENBRIER COMPANIES, INC.

Dated: October 27, 2017

By: /s/ William A. Furman
William A. Furman
President and Chief Executive Officer

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

Signature	Date
/s/ William A. Furman William A. Furman, President, Chief Executive Officer and Chairman of the Board	October 27, 2017
/s/ Duane C. McDougall Duane C. McDougall, Director	October 27, 2017
/s/ Graeme A. Jack Graeme A. Jack, Director	October 27, 2017
/s/ Charles J. Swindells Charles J. Swindells, Director	October 27, 2017
/s/ Donald A. Washburn Donald A. Washburn, Director	October 27, 2017
/s/ Kelly M. Williams Kelly M. Williams, Director	October 27, 2017
/s/ Thomas B. Fargo Thomas B. Fargo, Director	October 27, 2017

/s/ Wanda F. Felton October 27, 2017

Wanda F. Felton, Director

/s/ David L. Starling October 27, 2017

David L. Starling, Director

/s/ Lorie L. Tekorius October 27, 2017

Lorie L. Tekorius, Executive Vice President and Chief

Financial Officer (Principal Financial Officer)

/s/ Adrian J. Downes October 27, 2017

Adrian J. Downes, Senior Vice President and Chief

Accounting Officer (Principal Accounting Officer)

Table of Contents

CERTIFICATIONS

The Company filed the required 303A.12(a) New York Stock Exchange Certification of its Chief Financial Officer with the New York Stock Exchange with no qualifications following the 2017 Annual Meeting of Shareholders and the Company filed as an exhibit to its Annual Report on Form 10-K for the year ended August 31, 2016, as filed with the Securities and Exchange Commission, a Certification of the Chief Executive Officer and a Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.