GENESEE & WYOMING INC
Form 10-K
February 26, 2019
UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K
þ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018
or
o 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. 001-31456
GENESEE & WYOMING INC.
(Exact name of registrant as specified in its charter)

Delaware	06-0984624
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
20 West Avenue, Darien, Connecticut	06820
(Address of principal executive offices)	(Zip Code)

(203) 202-8900
(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
Class A Common Stock, $0.01 par value	NYSE

Securities registered pursuant to section 12(g) of the Act:
None.
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. þ Yes ¨ No
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ¨ Yes þ 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. þ Yes ¨ No
Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). þ Yes ¨ No
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulations S-K (§229.405 of this chapter) 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. þ
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

Aggregate market value of Class A Common Stock held by non-affiliates based on the closing price as reported by the New York Stock Exchange on the last business day of the registrant's most recently completed second fiscal quarter: $4,717,491,602. Shares of Class A Common Stock held by each executive officer and director have been excluded in that such persons may be deemed to be affiliates. The determination of affiliate status is not necessarily a conclusive determinant for other purposes.

Shares of common stock outstanding as of the close of business on February 22, 2019:

Class	Number of Shares Outstanding
Class A Common Stock	56,288,247
Class B Common Stock	517,138

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement to be filed pursuant to Regulation 14A not later than 120 days after the end of the fiscal year ended December 31, 2018 in connection with the Annual Meeting to be held on May 22, 2019 are incorporated by reference in Part III hereof and made a part hereof.

Genesee & Wyoming Inc.
FORM 10-K
For The Fiscal Year Ended December 31, 2018
INDEX

		PAGE NO.
PART I		
ITEM 1.	Business	4
ITEM 1A.	Risk Factors	20
ITEM 1B.	Unresolved Staff Comments	37
ITEM 2.	Properties	38
ITEM 3.	Legal Proceedings	43
ITEM 4.	Mine Safety Disclosures	43
PART II		
ITEM 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	44
ITEM 6.	Selected Financial Data	46
ITEM 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	48
ITEM 7A.	Quantitative and Qualitative Disclosures About Market Risk	95
ITEM 8.	Financial Statements and Supplementary Data	98
ITEM 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	98
ITEM 9A.	Controls and Procedures	98
ITEM 9B.	Other Information	99
PART III		
ITEM 10.	Directors, Executive Officers and Corporate Governance	100
ITEM 11.	Executive Compensation	100
ITEM 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	100
ITEM 13.	Certain Relationships and Related Transactions, and Director Independence	100
ITEM 14.	Principal Accounting Fees and Services	100
PART IV		
ITEM 15.	Exhibits, Financial Statement Schedules	101
ITEM 16.	Form 10-K Summary	101
	Index to Exhibits	102
	Signatures	106
	Index to Financial Statements	F-1

Unless the context otherwise requires, when used in this Annual Report on Form 10-K (Annual Report), the terms "Genesee & Wyoming," "G&W," the "Company," "we," "our" and "us" refer to Genesee & Wyoming Inc. and its subsidiaries. All references to currency amounts included in this Annual Report, including the financial statements, are in United States dollars unless specifically noted otherwise.

Cautionary Statement Regarding Forward-Looking Statements

The information contained in this Annual Report, including Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II Item 7, contains "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 (Exchange Act), regarding future events and future performance of G&W. Words such as "anticipates," "intends," "plans," "believes," "could," "should," "seeks," "expects," "may," "estimates," "trends," "outlook," "goal," "will," "budget," variations of these words and similar expressions are intended to identify these forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to forecast. Actual results or developments may differ materially from those expressed or forecast in these forward-looking statements.

The areas in which there is risk and uncertainty are further described in "Part I Item 1A. Risk Factors" in this Annual Report, which contain additional important factors that could cause actual results to differ from current expectations and from the forward-looking statements contained herein.

In light of the risks, uncertainties and assumptions associated with forward-looking statements, you should not place undue reliance on any forward-looking statements. Additional risks that we may currently deem immaterial or that are not presently known to us could also cause the forward-looking events discussed or incorporated by reference in this Annual Report not to occur.

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward-looking statements to encourage companies to provide prospective information about their companies without fear of litigation. We are taking advantage of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 in connection with the forward-looking statements included in this Annual Report.

Our forward-looking statements speak only as of the date of this Annual Report or as of the date they are made, and except as otherwise required by applicable securities laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, changed circumstances or any other reason after the date of this Annual Report.

Information set forth in "Part I Item 1. Business" and in "Part II Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" should be read in conjunction with the risk factors set forth in "Part I Item 1A. Risk Factors" in this Annual Report.

PART I

ITEM 1. Business.

OVERVIEW

We own or lease 120 freight railroads worldwide that are organized in nine operating regions with approximately 8,000 employees and 3,000 customers.

- Our seven North American regions serve 41 U.S. states and four Canadian provinces and include 114 short line and regional freight railroads with more than 13,000 track-miles.
- Our Australian Region serves New South Wales, the Northern Territory and South Australia and operates the 1,400-mile Tarcoola-to-Darwin rail line. The Australia Region is 51.1% owned by G&W and 48.9% owned by a consortium of funds and clients managed by Macquarie Infrastructure and Real Assets (MIRA).
- Our U.K./European Region includes the United Kingdom's (U.K.) largest rail maritime intermodal operator and the second-largest freight rail provider, as well as regional rail services in Continental Europe.

Our subsidiaries and joint ventures also provide rail service at more than 40 major ports, rail-ferry service between the United States Southeast and Mexico, transload services, contract coal loading, and industrial railcar switching and repair.

GROWTH STRATEGY

Since our initial public offering in 1996, our revenues have increased at a compound annual growth rate of 16.8%, from $77.8 million in 1996 to $2.3 billion in 2018. Over the same period, our stock price has increased at a compound growth rate of 14.2%, from $3.75 on June 25, 1996, adjusted for stock splits, to $74.02 on December 31, 2018. We have achieved these results primarily through the disciplined execution of our growth strategy, which has two main drivers: (1) our operating strategy; and (2) our acquisition and investment strategy.

Operating Strategy

Our railroads operate under strong regional management teams, supported by centralized administrative, commercial and operational support and oversight. As of December 31, 2018, our operations were organized in nine geographic regions. In North America, we have seven regions: Central (which includes industrial switching operations), Coastal (which includes industrial switching and port operations), Midwest, Northeast, Southern, Western and Canada. Outside North America, we have two regions: Australia (which is 51.1% owned by us through the Australia partnership with MIRA) and U.K./Europe (which consists of operations in the U.K., Germany, the Netherlands and Poland, as well as the provision of management and technical support through Freightliner Group Limited (Freightliner) to Saudi Railway Company).

In each of our regions, we seek to encourage the entrepreneurial drive, local knowledge, customer service and safety culture that we view as critical to achieving our financial goals. Our regional managers focus on increasing our return on invested capital, earnings and cash flow through the disciplined execution of our operating strategy. At the regional level, our operating strategy consists of the following five principal elements:

- Continuous Safety Improvement. We believe that a safe work environment is essential for our employees, our customers and the communities in which we conduct business and that the attention to detail necessary to eliminate employee injuries translates into efficient, well-run operations. Each year, we establish stringent safety targets as part of our safety program. To monitor our safety performance, we apply the guidelines established by the United States Federal Railroad Administration (FRA) to all of our operations worldwide. In 2018, our operations achieved a consolidated FRA reportable injury frequency rate of 0.84 per 200,000 man-hours worked. Through the implementation of our safety program, we have reduced our injury frequency rate by 57% since 2006, when it was 1.95 injuries per 200,000 man-hours worked. For comparative purposes, from January 2018 through November 2018, the most recent month for which FRA data is publicly available, the United States short line average reportable injury frequency rate was 2.64 injuries per 200,000 man-hours worked, and the United States regional railroad average was 2.93 injuries per 200,000 man-hours worked. Based on these results, in 2018, our operations were more than three times safer than the short line and regional railroad averages. Our safety program also focuses on the safety and security of our train operations, and we monitor our reportable derailments worldwide in accordance with the guidelines established by the FRA. Our operations achieved a consolidated reportable derailment frequency rate, defined as FRA reportable derailments per 200,000 man-hours worked, of 0.68 and 0.58 for the years ended December 31, 2018 and 2017, respectively.
- Outstanding Customer Service. We are committed to providing exceptional service to our customers, and each of our local railroads is focused on exceeding customer expectations. This customer commitment supports not only traffic growth, but also customer loyalty and new business development opportunities. To ensure the needs of our customers are addressed promptly, we employ technology-based service exception tools to monitor service information, communicate issues and track corrective actions. We engage a leading independent customer-satisfaction research firm to conduct a biennial, comprehensive customer satisfaction survey. The survey results are used to measure our performance and develop continuous improvement programs. Over the past ten years, we have outscored the trucking and railroad industries on each of our biennial customer satisfaction surveys.
- Focused Regional Marketing. We generally build and operate each of our regions based on the local customer base within our operating geographies and seek to grow rail traffic through intensive marketing efforts to new and existing customers. As a result of the acquisition of RailAmerica, Inc. (RailAmerica) in 2012, Freightliner in 2015, Glencore Rail (NSW) Pty Limited (GRail) in 2016 and Pentalver Transport Limited (Pentalver) in 2017, we believe that our expanded footprint across North America, Australia, the United Kingdom and Europe provides us with greater visibility of new commercial and industrial development opportunities in these geographies that should continue to enhance the success of our marketing efforts. Further, we believe that our relationship with MIRA, a recognized Australian infrastructure investor, will enable us to leverage our rail platform for future growth opportunities in Australia. We also pursue additional sources of revenue by providing ancillary rail services such as railcar switching, rolling-stock and shipping container repair, storage, cleaning, weighing and blocking and bulk transfer, which enables our customers and Class I carriers to move freight more easily and cost-effectively.
- Low Cost Structure. We focus on running cost effective railroad operations and historically have been able to operate acquired rail lines more efficiently than they were operated prior to our acquisition. We typically achieve efficiencies by lowering administrative overhead by leveraging our regional structure, consolidating equipment and in-sourcing track maintenance, reducing transportation costs, selling surplus assets and reducing expenses associated with accidents and personal injuries through the implementation of our safety culture. In addition, through our Roots Reset program, which is an internal framework focused on improving the operating efficiency of our railroads, we periodically review and benchmark our railroad operations and service plans. The purpose of the program is to identify revenue opportunities, to reduce costs and to optimize asset utilization.

- Efficient Use of Capital. We invest in track and rolling stock to ensure that we operate safe railroads that meet the needs of customers. At the same time, we seek to improve our return on invested capital by focusing on cost effective capital programs. For example, in our short haul and regional operations in North America, we typically rebuild older locomotives rather than purchase new ones and invest in track at levels appropriate for our traffic type and density. Further, in 2015, we formed a new entity, Railroad Engineering Services LLC, with experienced management and dedicated track engineering resources to enhance the productivity of our track and bridge capital programs. In addition, because of the importance of certain of our customers and railroads to their regional economies, we are able, in some instances, to obtain state, provincial and/or federal grants to upgrade track and other infrastructure. Typically, we seek government funds to support investments that otherwise would not be economically viable for us to fund on a stand-alone basis.

To assist our local management teams, we provide administrative, commercial and operational support from corporate staff groups where there are benefits to be gained from scale efficiencies and centralized expertise. Our commercial group assists local management by providing assistance with regional pricing, origin and destination offerings across the Company, managing real estate revenue (including from land leases and crossing and access rights), industrial development project expertise, 24/7 customer service and Class I railroad relationship management. Our operations department assists with implementing our safety culture, conducting training programs, leveraging our scale in purchasing rail and rail-related equipment, ensuring efficient equipment utilization and service design, and providing mechanical, locomotive and bridge engineering expertise. In addition, we maintain other traditional, centralized functions, such as accounting, finance, legal, corporate development, government and industry affairs, human resources and information technology.

Acquisition and Investment Strategy

Our acquisition and investment strategy includes the acquisition or long-term lease of existing railroads, as well as investment in rail equipment and/or track infrastructure to serve new and existing customers. Since 2000, we have added 105 railroads through the execution of our acquisition and investment strategy. Historically, our acquisition, investment and long-term lease opportunities have been from the following five sources:

- Acquisitions of short line and regional railroads in the United States and Canada, such as the Heart of Georgia Railroad, Inc. (HOG) in 2017 and the Providence and Worcester Railroad Company (Providence and Worcester Railroad) in 2016 and our acquisitions of Pinsly Railroad Company's (Pinsly) Arkansas Division (Pinsly Arkansas) in 2015, RailAmerica in 2012, Arizona Eastern Railway Company in 2011, CAGY Industries, Inc. in 2008, the Ohio Central Railroad System in 2008 and Rail Management Corporation in 2005. Based on Association of American Railroads (AAR) data issued in 2018, there were approximately 500 short line and regional railroads in the United States not owned by us;
- Acquisitions of international railroads and transportation service providers, such as our acquisitions of Pentalver in the U.K. in 2017, London-based Freightliner in 2015, FreightLink Pty Ltd (FreightLink) in Australia in 2010 and Rotterdam Rail Feeding B.V. (RRF) in the Netherlands in 2008. We believe that there are additional acquisition and investment prospects in Australia, Europe and other international markets, including significant opportunities to invest in ancillary businesses that expand our service offerings;
- Investments in track and/or rolling stock to support growth in new or existing areas of operations, such as recent purchases of rolling stock in Australia to support the increase in spot coal traffic and our September 2017 joint venture with SEACOR Holdings, Inc. to own and operate the CG Railway, LLC (CGR). CGR provides a freight rail ferry service that extends our reach from Mobile, Alabama to southeastern Mexico;
- Acquisitions or long-term leases of branch lines of Class I railroads, such as our acquisition of the assets comprising the western end of the Dakota, Minnesota & Eastern Railroad Corporation (DM&E) from Canadian Pacific Railway Limited (CP) in 2014; and
- Acquisitions of operations from industrial or mining companies, such as our acquisitions of GRail from Glencore Coal Pty Limited in Australia on December 1, 2016 and the railroads owned by Georgia-Pacific Corporation in 2003.

When we make acquisitions, we seek to increase revenues and reduce costs wherever possible and to implement best practices to increase the value of our investment, which is frequently accomplished through the elimination of duplicative overhead costs, implementation of our safety culture, improvements to operating plans, more efficient equipment utilization and enhanced customer service and marketing initiatives. In some cases, however, the best way to maximize the value of an investment is to increase expenditures at a new acquisition, such as for track upgrades or equipment for new service, which improves customer satisfaction and drives additional revenue growth.

In North America, we believe that our footprint of railroads provides opportunities to make contiguous short line railroad acquisitions due to a higher number of touchpoints with other railroads. On a global basis, we believe that our scale, international experience and financial resources enhance our ability to compete for rail and ancillary business opportunities worldwide. We have made a number of important railroad investments in North America and in various international markets, and we expect to continue to pursue our acquisition and investment strategy while adhering to our disciplined valuation approach.

INDUSTRY

North American Operations

United States

According to the AAR's 2018 Railroad Facts Book, there were 613 freight railroads in the United States operating over approximately 137,000 miles of track. As described in the table below, the AAR classifies railroads operating in the United States into one of three categories based on an individual railroad's operating revenues (adjusted for inflation) and track miles operated.

The following table shows the breakdown of freight railroads in the United States by classification:

Classification of Railroads	Number	Aggregate Miles Operated	Revenues and Miles Operated
Class I[(a)]	7	93,058	$463.86 million or more
Regional or Class II	22	11,035	At least $20 million and 350 or more miles operated; or $37.11 million to $463.86 million
Local or Class III	584	32,758	Less than $37.11 million and less than 350 miles operated
Total	613	136,851	

(a) CSX Corp, BNSF Railway Co., Norfolk Southern Corp., Kansas City Southern Railway Co., Union Pacific Railroad Co., Canadian National Railway Co. and Canadian Pacific Railway Limited.

Source: AAR 2018 Railroad Facts Book

Class I railroads operate across many different states and concentrate largely, though not exclusively, on long haul, high density and intercity traffic lanes. The primary function of the regional and local railroads is to provide local service to rail customers and communities not located on the Class I railroad networks. Regional railroads typically operate 400 to 650 miles of track and provide service to selected areas of the country, mainly connecting neighboring states and/or economic centers. We refer to local railroads as short line railroads. Typically, local, or short line, railroads serve as branch lines connecting customers with Class I railroads. Short line railroads generally have more predictable and straightforward operations as they largely perform point-to-point, light density service over shorter distances, versus the complex networks associated with the Class I railroads or larger regional railroads.

A significant portion of regional and short line railroad traffic is driven by carloads that are interchanged with other carriers. For example, a Class I railroad may transport freight hundreds or thousands of miles from its origination point and then pass the railcar to a short line railroad, which provides the final step of service directly to the terminating customer.

The railroad industry in the United States has undergone significant change since the passage of the Staggers Rail Act of 1980 (Staggers Act), which effectively deregulated certain pricing and types of services provided by railroads. Following the passage of the Staggers Act, Class I railroads in the United States took steps to improve profitability and recapture market share lost to other modes of transportation, primarily trucks. In furtherance of that goal, Class I railroads focused their management and capital resources on their core long-haul systems, and some of them sold or leased branch lines to short line railroads, whose smaller scale and more cost-efficient operations allowed them to commit the resources necessary to meet the needs of customers located on those lines. Divestiture of branch lines spurred the growth in the short line railroad industry and enabled Class I railroads to minimize incremental capital expenditures, concentrate traffic density, improve operating efficiency and avoid traffic losses associated with rail line abandonment.

We operate two regional and 104 local (short line) railroads in the United States over approximately 15,800 miles of track, inclusive of approximately 3,200 miles of track that are owned or leased by others, which we operate through various trackage and operating rights agreements.

Canada

According to Rail Trends 2018, published by The Railway Association of Canada (RAC), there are approximately 26,400 miles (42,500 kilometers (km)) of track operated by railroads in Canada. Similar to the United States railroad industry, freight railroads in Canada are also categorized as Class I railroads, regional railroads and short line railroads. In Canada, there are two Class I railroads that are largely transcontinental carriers in Canada, with significant United States operations as well, several regional operators and approximately 50 short line railroads.

We operate eight local (short line) railroads in Canada over approximately 1,318 miles of track, inclusive of approximately 100 miles of track that are owned or leased by others, which we operate through various trackage and operating rights agreements.

Australian Operations

Australia has approximately 25,000 miles (40,000 km) of both publicly and privately owned track that link major capital cities and key regional centers and also connect key mining regions to ports. The Australian rail network comprises three track gauges: broad, narrow and standard gauge. There are three major interstate rail segments in Australia: the east-west corridor (Sydney, New South Wales to Perth, Western Australia); the east coast corridor (Brisbane, Queensland to Melbourne, Victoria); and the north-south corridor (Darwin, Northern Territory to Adelaide, South Australia). In addition, there are a number of intrastate rail freight networks servicing major agricultural and mining regions in Queensland, New South Wales, Western Australia, South Australia and Victoria.

The Australian rail freight transport industry is largely open access, which means that network owners and managers must provide access to the rail network to all accredited rail service providers, subject to the rules and negotiation framework of each applicable access regime. The access rules generally include pricing principles and standards of use and are established by the applicable state or Commonwealth government. The Australian rail freight transport industry is structured around two components: train operations for freight haulage services (above rail) and rail track access operation and management (below rail). This contrasts with the North American freight rail industry where railroad operators almost always have exclusive use of the track that they own or lease. We are an accredited rolling-stock operator in all mainland Australian states and a Rail infrastructure Manager in the Northern Territory and South Australia.

Since Australian rail customers have access to multiple rail carriers under open access regimes, all rail carriers face possible competition on their above rail business from other rail carriers, as well as from competing modes of transportation, such as trucks. The open access nature of the Australian rail freight transport industry enables rail operators to develop new business and customer relationships in areas outside of their current operations, and there are limited barriers to entry that preclude any rail operator from approaching a customer to seek new business. However, shipments of bulk commodities in Australia are generally handled under long-term agreements with dedicated equipment that may include take-or-pay provisions and/or exclusivity arrangements, which make capturing new business from an existing rail operator difficult.

Through our Australian subsidiaries, we manage approximately 2,300 miles (3,700 km) of track in South Australia and the Northern Territory, which includes approximately 1,400 miles (2,200 km) of track between Darwin and Tarcoola that we manage pursuant to a concession agreement that expires in 2054, as well as approximately 900 miles (1,500 km) of track in South Australia that we manage pursuant to a lease that expires in 2047. Through the concession and lease agreements, we have long-term economic ownership of the tracks that we manage in South Australia and the Northern Territory, and we receive below rail access fees when other rail operators use the track we manage. In South Australia and the Northern Territory, our economic ownership of the tracks we manage, combined with our above rail operations, makes our Australian operations more similar to a typical North American railroad despite the open access environment. In addition, through our acquisitions of Freightliner and GRail, we also have above rail operations in New South Wales.

U.K./European Operations

United Kingdom

According to Network Rail, the authority responsible for Great Britain's railway network, there are approximately 20,000 miles (32,000 km) of track owned and managed by it, and there are seven rail operators licensed for freight transport in Great Britain. Great Britain's rail network is also open access, which means rail lines can be utilized by any licensed rail operator with an appropriate track access agreement in place. In the U.K.'s open access framework, the infrastructure managers must provide access to the rail infrastructure to all accredited rail service providers, subject to the rules and framework of each applicable access regime. As a result, U.K. rail freight customers have access to multiple rail carriers under the open access regime, and our operations face competition from both other rail freight carriers and other modes of transportation, such as road and water. In Great Britain, in 2017, 9% of all freight goods were moved by rail, while over the same period, 78% and 13% of goods were moved via road and water, respectively.

Through the acquisition of Pentalver, we operate off-dock container terminals (most under long-term lease) strategically placed at each of the three major seaports of Felixstowe, Southampton and London Gateway, as well as an inland terminal located at Cannock, in the U.K. Midlands, near many of the nation's largest distribution centers. In addition to providing storage for loaded and empty containers on over 100 acres of land, Pentalver also operates a trucking haulage service with more than 150 trucks, primarily providing daily service between the seaports of Felixstowe and Southampton and its inland terminal at Cannock. Pentalver also provides services related to container maintenance, repair and conversions (including refrigerated containers) and is one of the largest sellers of new and used containers in the U.K.

The maritime container logistics industry in the U.K. is highly competitive, whether by road, rail or short-sea, with a premium placed on timely, efficient and safe service. We provide rail and road transportation solutions, as well as offer storage options at the ports and inland and provide local collection and delivery haulage from Freightliner's inland terminals.

Freightliner is the largest rail participant in the U.K. intermodal market (deep sea maritime containers), and when combined with Freightliner's bulk haulage operations, including coal, aggregates, cement and infrastructure services, Freightliner is the second largest rail freight company in the U.K.

Belgium

According to Infrabel, the Belgian railways infrastructure manager, there are approximately 2,238 miles (3,602 km) of track owned and managed by it on the Belgian rail network, and currently there are 12 rail operators licensed for freight transport in Belgium. As a result of the country's open access regime, this track may be accessed by any operator admitted and licensed to provide freight transport in the country. Our subsidiary, Belgium Rail Feeding, has the ability to operate in Belgium, but is currently not doing business.

Germany

The German rail network is composed of approximately 20,654 miles (33,241 km) of track. There are approximately 385 rail operators certified for freight transport in Germany. In Germany, as well as in other Continental European markets, the leading rail freight operators are often state controlled, such as DB Cargo AG in Germany. As a result of Germany's open access regime, the rail infrastructure may be accessed by any licensed rail operator.

A number of our subsidiaries operate in Germany. Freightliner PL Sp. zo. o. (Freightliner Poland) operates on the open access rail system within Poland with cross-border traffic into Germany. Freightliner DE GmbH (Freightliner Germany) operates on the open access rail system within Germany with cross-border traffic into Poland.

Netherlands

According to ProRail, the entity responsible for the Dutch rail infrastructure, there are approximately 4,363 miles (7,021 km) of track owned and managed by it on the Dutch rail network. As a result of the open access regime in the Netherlands, this track may be accessed by any admitted and licensed rail operator. According to ProRail, there are 21 rail operators that provide rail freight services in the Netherlands.

In the Netherlands, our subsidiary, RRF, operates mainly in the Port of Rotterdam on the main rail freight corridors towards the German and Belgian borders.

Poland

According to the Office of Rail Transport, the railway regulator in Poland, there are approximately 114 rail operators certified for freight transport in Poland operating over approximately 11,939 miles (19,214 km) of track. As a result of Poland’s open access regime, this rail infrastructure may be accessed by any admitted and licensed rail operator.

In Poland, our subsidiary, Freightliner Poland, operates on the open access network within Poland.

OPERATIONS

Through our subsidiaries, we own or lease 120 freight railroads worldwide, including 104 short line railroads and two regional freight railroads in the United States, eight short line railroads in Canada, three railroads in Australia, one in the U.K., one in Poland and Germany and one in the Netherlands. Our subsidiaries provide freight rail service at more than 40 major ports in North America, Australia and Europe and perform contract coal loading and railcar switching for industrial customers.

Our railroads operate over approximately 16,100 miles of track that are owned, jointly owned or leased by us, which includes the Tarcoola-to-Darwin rail line in Australia that we manage under a concession agreement that expires in 2054. Also, through various track access arrangements, we operate over approximately 6,200 additional miles of track that is owned or leased by others.

While our railroads are predominantly focused on freight service, certain of our railroads interact with passenger rail operations. The majority of our railroads in the U.K. and Continental Europe provide freight service that is commingled with passenger operations on third party track. In North America and Australia, it is not uncommon for passenger or excursion operators to provide service over our track. In addition, in the United States, the Providence and Worcester Railroad provides freight service over track that is owned by a passenger operator, and our Portland & Western Railroad operates passenger trains for the Tri-County Metropolitan Transportation District of Oregon.

Freight Revenues

We generate freight revenues from the haulage of freight by rail. Freight revenues represented approximately 70%, 70% and 69% of our total operating revenues for the years ended December 31, 2018, 2017 and 2016, respectively. Our railroads transport a wide variety of commodities. For a comparison of freight revenues, carloads and average freight revenues per carload by commodity group for the years ended December 31, 2018, 2017 and 2016, see the discussion under "Part II Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

We group the commodities we carry as follows:

Commodity Group	Commodity Description
Agricultural Products	Wheat, barley, corn and other grains, as well as soybean meal
Autos & Auto Parts	Finished automobiles and stamped auto parts
Chemicals & Plastics	Sulfuric acid, ethanol, fertilizers and other chemicals and plastics used in manufacturing
Coal & Coke	Shipments of coal to power plants and industrial customers
Food & Kindred Products	Fruits, vegetables and food oils
Intermodal	Various commodities shipped in trailers or containers on flat cars
Lumber & Forest Products	Finished lumber, wood pellets, export logs and wood chips
Metallic Ores	Manganese ore, iron ore, copper concentrate and ore and alumina
Metals	Finished steel products and copper, as well as scrap metal and pig iron
Minerals & Stone	Construction aggregates, clay and bentonite, gypsum, salt used in highway ice control, limestone and frac sand
Petroleum Products	Liquefied petroleum gases, natural gas liquids, crude oil, asphalt, diesel fuel and gasoline
Pulp & Paper	Container board, finished papers, scrap paper and wood pulp
Waste	Municipal solid waste and construction and demolition debris
Other	Freight not included in the commodity groups set forth above

Rail traffic shipped on our rail lines can be categorized either as interline or local traffic. Interline traffic passes over the lines of two or more rail carriers. It can originate or terminate with customers located along a rail line, or it can pass over the line from one connecting rail carrier to another without the traffic originating or terminating on the rail line (referred to as overhead traffic). Local traffic both originates and terminates on the same rail line and does not involve other carriers. Unlike overhead traffic, which has the potential to move from origin to destination without using our rail line, originating, terminating and local traffic in North America provides us with a more stable source of revenues because this traffic represents shipments to and/or from customers located along our rail lines and is less susceptible to competition from other rail routes or other modes of transportation. In 2018, revenues generated from originating, terminating and local traffic in North America constituted approximately 93% of our North American freight revenues. In Australia, the U.K. and Continental Europe, railroads generally serve from origin to destination with few, if any, interline movements.

Freight-Related Revenues

We generate freight-related revenues primarily from port terminal railroad operations and industrial switching services (where we operate trains on a contract basis in facilities we do not own), trucking haulage services and container storage, as well as demurrage, storage, car hire, track access rights, transloading, crewing services, traction service (or hook and pull service that requires us to provide locomotives and drivers to move a customer's train between specified origin and destination points) and other ancillary revenues related to the movement of freight. Freight-related revenues represented approximately 24%, 24% and 27% of our total operating revenues for the years ended December 31, 2018, 2017 and 2016, respectively.

All Other Revenues

We generate all other revenues primarily from revenues from third-party railcar and locomotive repairs, container sales, property rentals and other ancillary revenues not directly related to the movement of freight. All other revenues represented approximately 6%, 6% and 5% of our total operating revenues for the years ended December 31, 2018, 2017 and 2016, respectively.

Seasonality of Operations

Some of the commodities we carry have peak shipping seasons, either as a result of the nature of the commodity or its demand cycle. Seasonality is also reflected in our results of operations due to weather patterns. See Note 19, Quarterly Financial Data (unaudited), to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report. Typically, we experience relatively lower revenues in North America in the first and fourth quarters of each year as the winter season and colder weather in North America tend to reduce shipments of certain products, such as construction materials. Further, due to adverse winter conditions, we may also experience reduced shipments as a result of weather-related network disruptions and also tend to incur higher operating costs. In addition, we experience relatively lower revenues in Australia in the first quarter of each year as a result of the wet season (i.e., monsoonal rains in the Northern Territory). In the U.K./European operations, the intermodal business peaks in the late third and early fourth quarter of the year. We typically initiate capital projects in North America in the second and third quarters when weather conditions are more favorable.

Segment and Geographic Information

For financial information with respect to each of our segments and geographic areas, see Note 18, Segment and Geographic Area Information, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report. For information about the risks related to our foreign operations, see "Part I Item 1A. Risk Factors" and more specifically "Part I Item 1A. Risk Factors—Additional Risks Associated With Our Foreign Operations."

Customers

As of December 31, 2018, our operations served approximately 3,000 customers. Revenues from our ten largest customers accounted for approximately 26%, 24% and 22% of our operating revenues for the years ended December 31, 2018, 2017 and 2016, respectively. Two of our ten largest customers in 2018 were located in Australia. One operates in the agricultural and coal sectors, and the other operates in the iron ore mining sector. Three of our ten largest customers in 2018 were located in the U.K. Two of these customers are maritime shipping companies and the other is the infrastructure manager of most of the rail network in England, Scotland and Wales. The remaining five of our top ten customers are located in North America, and each of such customers represents less than 2% of our total operating revenues.

In North America, we typically handle freight pursuant to transportation contracts between us, our connecting carriers and the customer. These contracts are in accordance with industry norms and vary in duration, with terms generally ranging from less than one year to ten years. These contracts establish a price or, in the case of longer term contracts, a methodology for determining a price, but do not typically obligate the customer to move any particular volume. Generally, our freight rates and volumes are not directly linked to the prices of the commodities being shipped.

In Australia, we generally handle freight pursuant to transportation contracts directly with our customers. These contracts have terms as long as 20 years and generally contain a combination of volume commitments and fixed and variable pricing, with the fixed portion based upon the invested capital associated with the contract and the variable portion based on the actual volumes shipped.

In the U.K. and Continental Europe, we typically handle freight pursuant to transportation contracts between us and the customer. These contracts are in accordance with industry norms and vary in duration from one to twelve years in the U.K. and one to two years in Poland. These contracts establish a price or a methodology to calculate the price. In some cases, the contracts provide for a minimum volume commitment by the customer and certain business is also conducted on a spot basis. Our contracts will typically provide for a price adjustment to reflect any changes to particular elements of our cost base, such as fuel and track access charges. In addition, Freightliner, as part of a British consortium, provides management and technical support for infrastructure and freight operations to Saudi Railway Company. The Saudi Railway Company is a government-owned company that is tasked with developing and operating railway services in Saudi Arabia.

Employees

There are various labor laws governing the countries in which we operate. As of December 31, 2018, we had approximately 8,000 full-time employees. Of this total, approximately 4,200 employees were union members or have employment terms and conditions determined by a labor agreement or negotiated by a labor union or works council. Our operations have 101 collective bargaining agreements with various labor unions in the United States, Australia, Canada and U.K./Europe. We are currently engaged in negotiations with respect to approximately 27 of those agreements and are currently negotiating collective bargaining agreements with four newly represented bargaining units, which will cover approximately 73 additional employees. We are also a party to employee association agreements covering an additional 19 employees who are not represented by a national labor organization. In the United States, we have 70 labor agreements with unions which cover approximately 36% of our employees within the United States. In Canada, we have 11 labor agreements, which cover approximately 53% of our employees within Canada. In Australia, Genesee & Wyoming Australia Pty Ltd (GWA) has collective enterprise bargaining agreements covering the majority of its employees. In the U.K., we have collective bargaining agreements with four recognized unions covering the majority of our employees. In Continental Europe, key locations have local work councils. We continue to build and maintain positive working relationships with our employees and their representatives.

The following table sets forth an approximation of union and non-union employees as of December 31, 2018:

	Union/Represented [(a)]	Non-Union/ Non-Represented
North America	1,700	2,700
Australia	500	200
U.K./Europe	2,000	900
Total	4,200	3,800

(a) Also includes employees that have employment terms and conditions determined by a labor agreement or negotiated by a labor union or works council.

SAFETY

Our safety program involves all employees and focuses on the prevention of train accidents and personal injuries. Operating personnel are trained and certified in train operations, the transportation of hazardous materials, safety and operating rules, and governmental rules and regulations. In order to continuously improve our safety results, we utilize and measure various safety metrics, such as human factor incidents, that are instrumental in reducing our FRA reportable injuries. To monitor our safety performance, we apply the guidelines established by the FRA to all of our operations worldwide. Our operations achieved a consolidated reportable injury frequency rate, as defined by the FRA as reportable injuries per 200,000 man-hours worked, of 0.84 and 0.83 for the years ended December 31, 2018 and 2017, respectively. The average injuries per 200,000 man-hours worked for all United States short line railroads was 2.64 in 2018 (through November) and 2.49 in 2017. Based on these results, in 2018, our operations were more than three times safer than the short line and regional railroad averages.

Our safety program also focuses on the safety and security of our train operations, and we monitor our reportable derailments worldwide in accordance with the guidelines established by the FRA. Our operations achieved a consolidated reportable derailment frequency rate, defined as FRA reportable derailments per 200,000 man-hours worked, of 0.68 and 0.58 for the years ended December 31, 2018 and 2017, respectively. Further, we continue to utilize technology to analyze and maintain our track so as to prevent track-caused derailments.

In addition, our information technology staff routinely assesses the security of our computer networks from cyber attacks. While we have not experienced any material disruptions of our networks or operations due to cyber attacks, to date, we have been subject to attacks in the past and will continue to face such threats in the future.

Our employees also strive to heighten awareness of rail safety in the communities where we operate through participation in governmental and industry sponsored safety programs, such as Operation Lifesaver, a non-profit organization that provides public education programs to prevent collisions, injuries and fatalities on and around railroad tracks and highway-rail grade crossings. During 2018, employees of our railroads made 412 Operation Lifesaver presentations focused on the dangers associated with highway-rail grade crossings and trespassing on railroad property. We also participate in safety committees of the AAR and the American Short Line and Regional Railroad Association.

INSURANCE

We maintain liability and property insurance coverage to mitigate the financial risk of providing rail and rail-related services. Our liability policies cover railroad employee injuries, personal injuries associated with grade crossing accidents and accidents involving passengers and other third-party claims associated with our operations. Damages associated with sudden releases of hazardous materials, including hazardous commodities transported by rail, and expenses related to evacuation as a result of a railroad accident are also covered under our liability policies. Our liability policies currently have self-insured retentions of up to $2.5 million per occurrence. Our property policies cover property and equipment that we own, as well as property in our care, custody and control. Our property policies currently have various self-insured retentions, which vary based on the type and location of the incident, that are currently up to $2.5 million per occurrence. The property policies also provide business interruption insurance arising from covered events. The self-insured retentions under our insurance policies may change with each annual insurance renewal depending on our loss history, the size and make-up of our Company and general insurance market conditions.

We also maintain ancillary insurance coverage for other risks associated with rail and rail-related services, as well as insurance for employment practices, directors' and officers' liability, workers' compensation, pollution, cyber risk, auto claims, crime and road haulage liability, among others.

COMPETITION

Railroads compete directly with other modes of transportation, principally highway competition from trucks and, on some routes and for certain commodities, ships, barges and pipelines. Competition is based primarily upon the rate charged and the transit time required, as well as the quality and reliability of the service provided.

In North America, there normally is only one rail carrier directly serving a customer facility, while most freight is interchanged with other railroads prior to reaching its final destination. To the extent that highway competition is involved, the degree of that competition is affected by government policies with respect to fuel and other taxes, highway tolls and permissible truck sizes and weights.

In Australia, the U.K. and Continental Europe, our customers have access to other rail carriers under open access regimes, so we face competition from other rail carriers in addition to competition from competing modes of transportation. In addition, we also face competition from other companies that provide terminal and rail-related services.

To a lesser degree, there is also competition from similar products made in other areas where we are not located, a kind of competition commonly known as geographic competition. For example, a paper producer may choose to increase or decrease production at a specific plant served by one of our railroads depending on the relative competitiveness of that plant as compared to its paper plants in other locations. In some instances, we face product competition, where commodities we transport are exposed to competition from substitutes (e.g., coal we transport can compete with natural gas as a fuel source for electricity generation). We also face import competition, where commodities we transport face competition from less expensive imported products (e.g., steel). In addition, some of the products we transport are exported and face competition on a global basis (e.g., grain).

In acquiring rail properties and making rail equipment and/or track infrastructure investments, we generally compete with other railroad operators and with various financial institutions, including infrastructure and private equity firms, operating in conjunction with rail operators. Competition for rail properties and investment projects is based primarily upon price and the seller's assessment of the buyer's railroad operating expertise and financing capability. We believe our established reputation as a successful acquirer and long-term operator of rail properties, our managerial and financial resources, as well as our commitment to safety and the communities in which we operate, position us well in a competitive acquisition and investment environment.

REGULATION

North American Operations

United States

In addition to federal, state and local laws and regulations generally applicable to many businesses, our United States railroads are subject to regulation by:

- United States Surface Transportation Board (STB);
- FRA;
- federal agencies, including the United States Department of Transportation (DOT), the Occupational Safety and Health Administration (OSHA), the Pipeline and Hazardous Material Safety Administration (PHMSA), Mine Safety and Health Administration (MSHA) and the Transportation Security Administration (TSA), which operates under the Department of Homeland Security (DHS);
- state departments of transportation; and
- some state and local regulatory agencies.

The STB is the successor to certain regulatory functions previously administered by the Interstate Commerce Commission (ICC). Established by the ICC Termination Act of 1995, the STB has jurisdiction over, among other things, certain freight rates (where there is no effective competition), extension or abandonment of rail lines, the acquisition of rail lines and the consolidation, merger or acquisition of control of rail common carriers. In limited circumstances, the STB may condition its approval of an acquisition upon the acquirer of a railroad agreeing to provide severance benefits to certain subsequently terminated employees. The FRA, DOT, OSHA and PHMSA have jurisdiction over certain aspects of safety, which include the regulation of equipment standards, track maintenance, handling of hazardous shipments, locomotive and railcar inspection, repair requirements, operating practices and crew qualifications. The TSA has broad authority over railroad operating practices that have implications for homeland security. Additionally, various state and local agencies have jurisdiction over disposal of hazardous waste and may regulate movement of hazardous materials in ways not preempted by federal law.

Over the past five years, there have been various proceedings at the STB seeking to expand rail regulation. The STB continues to evaluate the impact of "access" regulation that would impact railroads' ability to limit the access of other rail service providers to their rail infrastructure and has held hearings to assess the impact of changes to the access regime in the United States. The outcome of these initiatives could impact regulation of railroad operations and prices for our rail services, which could undermine the economic viability of certain of our railroads, as well as threaten the service we are able to provide to our customers.

In 2010, the FRA issued rules governing the implementation of an interoperable positive train control system (PTC), which, following the passage by Congress of an extension in October 2015, generally was to be completed as early as December 31, 2018, unless extensions were granted. PTC is a collision avoidance technology intended to override locomotive controls and stop a train before an accident. The FRA's rule contains certain exceptions to these PTC requirements for Class II and Class III railroads, including but not limited to, excepting from the PTC requirements trains traveling less than 20 miles on PTC-required track and providing Class II and Class III railroads until 2020 to employ PTC-equipped locomotives. Notwithstanding these exceptions, certain of our railroads were required to install PTC-related equipment by the end of 2018. Our procurement and implementation of required PTC equipment is underway, and thus far, we have complied and expect to continue to comply with the statutory installation deadlines. However, non-compliance with these and other applicable laws or regulations could undermine public confidence in us and subject us to fines, penalties and other legal or regulatory sanctions.

Canada

Railroads that operate in more than one province are subject to extensive federal laws, regulations and rules and the jurisdiction of the federal government. St. Lawrence & Atlantic Railroad (Quebec), Ottawa Valley Railway, Southern Ontario Railway, Knob Lake & Timmins Railway and the Goderich-Exeter Railway are federally regulated railroads in Canada that fall under the jurisdiction of the Canadian Transportation Agency (CTA) and Transport Canada (TC) and are subject to the Railway Safety Act. The CTA regulates construction and operation of federally regulated railways, financial transactions of federally regulated railway companies, all aspects of rates, tariffs and services and the transferring and discontinuing of the operation of railway lines. TC administers the Railway Safety Act, which ensures that federally regulated railway companies abide by all regulations with respect to engineering standards governing the construction or alteration of railway works and the operation and maintenance standards of railway works and equipment.

Railways operating exclusively within one province are regulated by that province and must hold a Certificate of Fitness delivered by the appropriate provincial authority. Quebec Gatineau Railway and Cape Breton & Central Nova Scotia Railway are subject to the jurisdiction of the provincial governments of Quebec and Nova Scotia, respectively. In addition, Huron Central Railway is subject to the jurisdiction of the provincial government of Ontario. Generally, construction, operation and discontinuance of operation are regulated by the provincial authorities, as are railway services.

Acquisitions of additional railroad operations in Canada, whether federally or provincially regulated, may be subject to review under the Investment Canada Act (ICA), a federal statute that applies to the acquisition of a Canadian business or establishment of a new Canadian business by a non-Canadian. In the case of an acquisition that is subject to review, a non-Canadian investor must observe a statutory waiting period prior to completion and satisfy the minister responsible for the administration of the ICA that the investment will be of net benefit to Canada, considering certain evaluative factors set out in the legislation.

Any contemplated acquisitions may also be subject to Canada's Competition Act, which contains provisions relating to pre-merger notification as well as substantive merger provisions.

Australian Operations

In Australia, we are subject to multiple regulatory regimes governing workplace health and safety, as well as rail safety, in each of the states and the one territory in which we operate. Regulation of rail safety is predominately governed by national legislation and administered by the Office of the National Rail Safety Regulator.

Regulation of track access to nationally significant rail infrastructure is generally governed by federally legislated guidelines that are implemented by the states. The state access regimes are required to be certified as effective access regimes by the Australian National Competition Council. The regulatory oversight for the provision of rail infrastructure access in South Australia and the Northern Territory is largely provided by the Essential Services Commission of South Australia. In addition, certain new acquisitions in Australia will also be subject to review by the Foreign Investment Review Board based on Australian national interest considerations and the Australian Competition and Consumer Commission on competition considerations.

U.K./European Operations

In the European Union (EU), several directives have been issued concerning the transportation of goods by rail. These directives generally cover the development of railways, the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and the licensing of railway undertakings. The EU legislation also sets a framework for a harmonized approach towards railway safety. Every railway company must obtain a safety certification before it can run trains on the European network, and EU member states must set up national railway safety authorities and independent accident investigation bodies. These directives have been or will be implemented in legislation passed in each of the European countries in which we operate.

Currently, each of the countries in which our U.K./European Operations segment operates is a member of the EU, and each one has adopted a similar regulatory regime consistent with European legislation. EU law requires each member state to establish an overarching regulatory body for rail, independent in its organization, legal structure, funding and decision making that is also independent from any infrastructure manager. The regulatory body ensures fair and non-discriminatory access to the rail infrastructure network and will often be responsible for monitoring competition in the rail services market, the licensing of rail operators and rail safety. In June 2016, the U.K. held a referendum in which voters approved an exit from the EU, commonly referred to as Brexit. The long-term effects of Brexit will depend on any agreements the U.K. makes to retain access to European markets, either during a transitional period or more permanently, and any other bilateral trade agreements the U.K. can reach with other trade partners, as well as any changes to the regulation of rail.
The rail infrastructure is owned and managed by the infrastructure manager who is responsible for maintaining and renewing the infrastructure as well as enhancements to the rail network. Access to the network is granted by the infrastructure manager through track access arrangements with licensed rail operators, with oversight by the regulatory body in certain EU countries. Currently, all of the infrastructure managers in the European countries in which we operate are owned or controlled by the respective governments in each country. The governments of each member state have ministries or departments dedicated to transport who are responsible for the long-term strategy, planning and funding of the transport infrastructure, including rail. These departments are also responsible for implementing European directives into domestic legislation.

Country	Regulatory Body	Infrastructure Manager	Government Ministry	Competition Regulator(s)
Germany	Bundesnetzagentur	DB Netz AG	Federal Ministry of Transport Building and Urban Development	The enforcement of German competition law primarily lies with the Federal Cartel Office (Bundeskartellamt) and in certain circumstances with the respective state competition authorities (Landeskartellbehörden)
The Netherlands	The Human Environment and Transport Inspectorate	ProRail	The Ministry of Infrastructure and Water Management	The Netherlands Authority for Consumers and Markets
Poland	Office of Rail and Transport	PKP PLK S.A.	Ministry of Infrastructure	Office of Rail Transport The President of the Office of Competition and Consumer Protection
United Kingdom	Office of Rail and Road	Network Rail	Department for Transport Transport Scotland	Office of Rail and Road

ENVIRONMENTAL MATTERS
Our operations are subject to various federal, state, provincial and local laws and regulations relating to the protection of the environment. These regulations have the effect of increasing the costs, risks and liabilities associated with rail operations, which frequently involve transporting hazardous materials. We are also indirectly affected by environmental laws that impact the operations of our customers. We believe our railroads operate in compliance with current environmental laws and regulations and agency agreements in all material respects. While we presently estimate that any expenses incurred in maintaining compliance with current environmental laws and regulations will not have a material effect on our earnings or capital expenditures, we cannot predict the effect, if any, that unidentified environmental matters or the adoption of additional or more stringent environmental laws and regulations would have on our results of operations, financial condition or liquidity.

North American Operations

In the United States, these environmental laws and regulations, which are administered and implemented principally by the United States Environmental Protection Agency (EPA) and comparable state agencies, govern the management of hazardous wastes, the discharge of pollutants into the air and into surface and underground waters and the manufacture and disposal of certain substances. The primary laws affecting our operations are: the Resource Conservation and Recovery Act, regulating the management and disposal of solid and hazardous wastes; the Comprehensive Environmental Response, Compensation, and Liability Act, regulating the cleanup of contaminated properties; the Clean Air Act, regulating air emissions; and the Clean Water Act, regulating water discharges.

As a result of our operations, we receive notices from time to time from the EPA and state environmental agencies alleging we may be liable under federal or state environmental laws for remediation costs at various sites throughout the United States. In November 2014, we received a notice from the EPA requesting information under the Clean Water Act related to the discharge of crude oil as a result of a derailment of one of our trains in November 2013 in the vicinity of Aliceville, Alabama. Although the cleanup associated with this derailment is substantially complete, civil payment penalty associated with the contamination is subject to further discussion and potential litigation.

In Canada, environmental laws and regulations are administered at the federal level by Environment Canada and by the Ministry of Transport and comparable agencies at the provincial level.

Australia Operations

In Australia, environmental laws and regulations are administered primarily by the Department of Environment at the federal level and by environmental protection agencies at the state and territories level.

Our railroads in Australia are subject to environmental laws and regulations and agency agreements, of which we have two in Australia, one with the South Australian Environmental Protection Agency under EPA License 2933 and the other with the Northern Territory Environmental Protection Agency under EPL 222. Genesee & Wyoming Australia is not currently required to be licensed in New South Wales but may be required to be licensed in the future. Our South Australia and Northern Territory environmental protection licenses require us to provide annual returns demonstrating compliance with their operational and administrative conditions. They also have embedded in them conditions that require us to make certain notifications in the event of an occurrence that is likely to breach a condition of the licenses or the legislation. These conditions have been managed effectively to date. Genesee & Wyoming Australia is also obligated to report annually under the Commonwealth Government National Greenhouse and Energy Reporting Act.

Non-compliance with applicable laws and regulations may result in the implementation of remedial actions, the imposition of fines, temporary or permanent shutdown of operations or other injunctive relief, criminal prosecution or the termination of our lease.

U.K./European Operations

In the U.K., European, national and local laws regulating the protection of the environment are administered by the Environment Agency, along with local authorities and other related bodies. Regulations relating to the transportation of hazardous goods are administered and enforced by the Health and Safety Executive, the Office of Rail and Road (ORR) and the Department for Transport (DfT).

There is no principal environmental regulator in Germany. State authorities (usually district or county authorities), guided by their respective State Environmental Ministry, carry out day-to-day operational activities. Regulations relating to the transportation of hazardous goods are administered by the Federal Railway Office.

In the Netherlands, European, national and local laws regulating the protection of the environment are administered by the Ministry of Infrastructure and Water Management and authorities at the provincial and municipal level, whereas laws regulating the transportation of hazardous goods are primarily administered by the Ministry of Infrastructure and Water Management.

The principal body responsible for environmental policy and law in Poland is the Ministry of the Environmental Protection, while the principal enforcement authority is the regional inspector for environmental protection. Regulations relating to the transportation of hazardous goods are administered by the President of the Rail Transport Office.

AVAILABLE INFORMATION

We were incorporated in Delaware on September 1, 1977. We completed our initial public offering in June 1996, and since September 27, 2002, our Class A Common Stock has been listed on the New York Stock Exchange (NYSE) under the symbol GWR. Our principal executive offices and corporate headquarters are located at 20 West Avenue, Darien, Connecticut 06820, and our telephone number is (203) 202-8900.

Our Internet website address is www.gwrr.com. We make available free of charge, on or through our Internet website, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after those materials are electronically filed with, or furnished to, the Securities and Exchange Commission (SEC). Also, filings made pursuant to Section 16 of the Exchange Act with the SEC by our executive officers, directors and other reporting persons with respect to our common shares are made available, free of charge, through our Internet website. Our Internet website also contains charters for each of the committees of our Board of Directors, our corporate governance guidelines and our Code of Ethics and Conduct.

The information regarding our Internet website and its content is for your convenience only. From time to time, we may use our website as a channel of distribution of material company information. Financial and other material information regarding the Company is routinely posted on and accessible at www.gwrr.com/investors. In addition, you may automatically receive email alerts and other information about us by enrolling your email address in the "E-mail Alerts" section of www.gwrr.com/investors.

The information contained on or connected to our Internet website is not deemed to be incorporated by reference in this Annual Report or filed with the SEC.

ITEM 1A. Risk Factors.

Our operations and financial condition are subject to certain risks that could cause actual operating and financial results to differ materially from those expressed or forecast in our forward-looking statements, including the risks described below and the risks that may be identified in future documents that are filed with or furnished to the SEC.

GENERAL RISKS ASSOCIATED WITH OUR BUSINESS

Adverse global macroeconomic and business conditions could negatively impact our business, and changes in commodity prices could decrease demand for the transport of commodities.

Slower economic growth, an economic recession, significant changes in global economic conditions or commodity prices or import or export volumes or changes in government regulation could negatively impact our business. For instance, lower prices of commodities, such as iron ore, coal and manganese, could be a factor influencing decisions to delay, cancel or suspend certain mining projects in Australia and elsewhere, which could reduce the demand for our services. Further, if the rate of economic growth in Asia slows, the export coal carried by our railroads, particularly in Australia, could decline. Agricultural commodity prices are also inherently susceptible to fluctuation. For example, in the United States, a decline in the price of wheat that we transport may result in lower revenues for us if farmers decide to store such wheat until the price increases. In addition, our business may be impacted by governmental policies that impact global trade, including tariffs, quotas and non-trade barriers related to agricultural products, coal and steel, among others. If we experience significant decline in demand for our services with respect to one or more commodities or products, we may experience lower revenues, increased operating costs, workforce adjustments and other related activities, which could have a material adverse effect on our results of operations, financial condition and liquidity.

In addition, we are required to assess for potential impairment of non-current assets whenever events or changes in circumstances, including economic circumstances, indicate that an asset's carrying amount may not be recoverable. Given the asset intensive nature of our business, weakness in the general economy increases the risk of significant asset impairment charges. A decline in current macroeconomic and financial conditions or commodity demand from changing patterns of economic activity could have a material adverse effect on our results of operations, financial condition and liquidity.

If we are unable to consummate additional acquisitions or investments or manage our growth effectively, then we may not be able to implement our growth strategy successfully.

Our growth strategy is based in part on the selective acquisition and/or development of, and investment in, rail operations, both in new regions and in regions in which we currently operate. The success of this strategy will depend on, among other things:

- the availability of suitable opportunities;
- the level of competition from other potential buyers, including buyers who may have lower costs of capital;
- our ability to dedicate adequate resources to value acquisition and investment opportunities accurately and negotiate acceptable terms for those acquisitions and investments;
- our ability to identify and enter into mutually beneficial relationships with partners; and
- the receipt of government approvals and financial constraints or other restrictions that may be specific to the particular company or asset to be acquired.

We have experienced significant growth in the past, partially due to the acquisition of additional railroads. Effective management of rapid growth presents challenges, including the availability of management resources to oversee the integration and operation of the new businesses effectively, the need to expand our management team and staff when necessary, the need to enhance internal operating systems and controls and the ability to consistently achieve targeted returns on capital. These challenges are more pronounced when we experience growth in numerous geographies and on a larger scale. As our business grows, we may not be able to maintain similar rates of growth in the future or manage our growth effectively.

Our inability to integrate acquired businesses successfully or to realize the anticipated cost savings and other benefits could have adverse consequences to our business.

We may not be able to integrate acquired businesses successfully. Integrating acquired businesses could also result in significant unexpected costs. Further, the process of integrating businesses may be disruptive to our existing business and may cause an interruption or reduction of our business as a result of the following factors, among others:

- loss of key employees, contracts or customers;
- assumptions related to customer revenues;
- possible inconsistencies in or conflicts between standards, internal controls, procedures and policies among the combined companies and the need to implement company-wide financial, accounting, information technology and other systems;
- changes in the regulatory approval process and inability to obtain necessary regulatory approvals;
- failure to maintain or improve the safety or quality of services that have historically been provided;
- inability to hire or recruit qualified employees;
- failure to effectively integrate employees of rail lines acquired from other entities into our railroad and safety cultures following an acquisition;
- unanticipated environmental or other liabilities;
- failure to coordinate geographically dispersed organizations; and
- the diversion of management's attention from our day-to-day business as a result of the need to manage any disruptions and difficulties and the need to add management resources to do so.

These disruptions and difficulties, if they occur, may cause us to fail to realize the cost savings, synergies, revenue enhancements and other benefits that we expect to result from integrating acquired companies and may cause material adverse short- and long-term effects on our results of operations, financial condition and liquidity.

Even if we are able to integrate the operations of acquired businesses into our operations, we may not realize the full benefits of the cost savings, synergies, revenue enhancements or other benefits that we may have expected at the time of acquisition. Expected savings and benefits are frequently based on due diligence results and on extensive analyses that involve assumptions as to future events, including general business and industry conditions, commodity trends, the longevity of specific customer plants and factories served and the associated revenues, the ability to negotiate acceptable contractual arrangements, including renewals of leases with other railroads or extensions of government subsidies, operating costs, competitive factors and the ongoing cost of maintaining track infrastructure, many of which are beyond our control and difficult to predict. There is no guarantee that the due diligence results will be accurate or that we will not discover unanticipated liabilities. Further, while we believe these analyses and their underlying assumptions are reasonable, they are estimates that are necessarily speculative in nature. In addition, even if we achieve the expected benefits, we may not be able to achieve them within the anticipated time frame. Also, the cost savings and other benefits from these acquisitions may be offset by unexpected costs incurred in integrating the companies, increases in other expenses or problems in the business unrelated to these acquisitions. For example, if key employees of acquired companies depart because of issues relating to the uncertainty and difficulty of integration or a desire not to become our employees, our ability to realize the anticipated benefits of such acquisitions could be reduced or delayed. Accordingly, you should not place undue reliance on our anticipated synergies.

Many of our recent acquisitions have involved the purchase of stock of existing companies. These acquisitions, as well as acquisitions of substantially all of the assets of a company, may expose us to liability for actions taken by an acquired business and its management before our acquisition. The due diligence we conduct in connection with an acquisition and any contractual guarantees or indemnities that we receive from the sellers of acquired companies may not be sufficient to protect us from, or compensate us for, actual liabilities. Generally, the representations made by the sellers, other than certain representations related to fundamental matters, such as ownership of capital stock, expire within several years of the closing. A material liability associated with an acquisition, especially where there is insufficient right to indemnification, could adversely affect our results of operations, financial condition and liquidity.

We may need additional capital to fund our acquisitions and investments. If we are unable to obtain this capital at a reasonable cost, then we may be required to forego potential opportunities, which would impair the execution of our growth strategy.

We intend to continue to review acquisition and investment opportunities and potential purchases of railroad assets and to attempt to acquire companies and assets that meet our investment criteria. As in the past, we expect that we will pay cash for some or all of the purchase price of acquisitions and purchases that we make. In addition, from time to time, we may make investments in equipment and assets to support our customers. Depending on the number of acquisitions and investments and funding requirements, we may need to raise substantial additional capital. Instability or disruptions in the capital markets, including credit markets, or the deterioration of our financial condition due to internal or external factors, could restrict or prohibit access to the capital markets and could also increase our cost of capital. To the extent we raise additional capital through the sale of equity, equity-linked or convertible debt securities, the issuance of such securities could result in dilution to our existing stockholders. If we raise additional funds through the issuance of debt securities, the terms of such debt could impose additional restrictions and costs on our operations. Additional capital, if required, may not be available on acceptable terms or at all. If we are unable to obtain additional capital at a reasonable cost, we may be required to forego potential acquisitions, which could impair the execution of our growth strategy.

Exposure to market risks, particularly changes in interest rates, foreign currency exchange rates, and hedging transactions entered into to mitigate these and other risks could adversely impact our results of operations, financial condition and liquidity.

We are exposed to various market risks, including interest rate and foreign currency exchange rate risks. It is impossible to fully mitigate all such exposure, and higher interest rates and unfavorable fluctuations in foreign currency exchange rates could have an adverse effect on our results of operations, financial condition and liquidity. From time to time, we may use various financial instruments to reduce our exposure to certain market risks. For instance, we have entered into interest rate swaps to mitigate the risk associated with floating interest rate payments under our Third Amended and Restated Senior Secured Syndicated Credit Facility Agreement (the Credit Agreement). While these financial instruments reduce our exposure to market risks, the use of such instruments may ultimately limit our ability to benefit from lower interest rates or favorable foreign currency exchange rate fluctuations due to amounts fixed at the time of entering into the hedge agreement and may have significant costs associated with early termination, which could have a material adverse effect on our results of operations, financial condition and liquidity. In addition, advances under our revolving credit facility and our term loan facility generally bear interest based on (i) the LIBOR Rate (as defined in the Credit Agreement and calculated using the London Interbank Offered Rate (LIBOR)) or (ii) the Base Rate (as defined in the Credit Agreement). On July 27, 2017, the Financial Conduct Authority (the authority that regulates LIBOR) announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021, and it is unclear whether new methods of calculating LIBOR will be established. If LIBOR ceases to exist after 2021, the interest rates under our revolving credit facility and our term loan facility will be based on the Base Rate, which may result in higher interest rates. To the extent that these interest rates increase, our interest expense will increase, which could adversely affect our financial condition, operating results and cash flows.

Because we depend on Class I railroads and other connecting carriers for a significant portion of our operations in North America, our results of operations, financial condition and liquidity may be adversely affected if our relationships with these carriers deteriorate.

The railroad industry in the United States and Canada is dominated by seven Class I carriers that have substantial market control and negotiating leverage. In 2018, approximately 80% of our total carloads in the United States and Canada were interchanged with Class I carriers. In addition, Class I carriers also traditionally have been significant sources of business for us, as well as sources of potential acquisition candidates as they divest branch lines. A decision by any of these Class I carriers to cease or re-route certain freight movements or to alter existing business relationships, including operational or relationship changes related to the implementation of Precision Scheduled Railroading, could have a material adverse effect on our results of operations. The overall impact of any such decision would depend on which Class I carrier is involved, the routes and freight movements affected, as well as the nature of any changes.

22

In addition, our ability to provide rail service to customers in the United States and Canada depends in large part upon our ability to maintain cooperative relationships with connecting carriers with respect to lease arrangements, freight rates, revenue divisions, fuel surcharges, car supply, reciprocal switching, interchange and trackage rights. Deterioration in the operations of, or service provided by, those connecting carriers or in our relationship with those connecting carriers could have a material adverse effect on our results of operations, financial condition and liquidity.

We are dependent on lease agreements with Class I railroads and other third parties for our operations, strategy and growth.

In North America, our rail operations are dependent, in part, on lease agreements with Class I railroads and other third parties that allow us to operate over certain segments of track critical to our operations. We lease many of our railroads from Class I carriers and other third parties under lease arrangements with varied expirations, of which railroads with leases that are subject to expiration within the next 10 years accounted for approximately 9.6% of our 2018 total operating revenues. We also own several railroads that lease portions of the track or right-of-way upon which they operate from Class I railroads and other third parties. Our ability to provide comprehensive rail services to our customers on the leased lines depends in large part upon our ability to maintain and extend these lease agreements. Leases from Class I railroads and other third parties that are subject to expiration in each of the next ten years represent 3.1% or less of our annual revenues in the year of expiration based on our operating revenues for the year ended December 31, 2018. For example, our revenues associated with leases from Class I railroads and other third parties subject to expiration in each of the next five years (2019 - 2023) would represent approximately 1.2%, 0.0%, 0.5%, 1.0% and 1.2% of our operating revenues in each of those years, respectively, based on our operating revenues for the year ended December 31, 2018. A portion of the leases subject to expire in 2019 were scheduled to expire in 2018 and are currently operating on a month-to-month basis (while lease negotiations continue). Expiration or termination of these leases or the failure of our railroads to comply with the terms of these leases could result in the loss of operating rights with respect to those rail properties and could have a material adverse effect on our results of operations, financial condition and liquidity.

The loss of important customers or contracts may adversely affect our results of operations, financial condition and liquidity.

Our operations served approximately 3,000 customers in 2018. Revenues from our ten largest customers accounted for approximately 26% of our operating revenues in 2018. In 2018, our largest customer was a maritime shipping company in the U.K. and accounted for approximately 6% of our operating revenues across all geographies. In North America and in our intermodal business in the U.K. and Australia, we typically handle freight pursuant to transportation contracts between us, our connecting carriers and the customer. Our contracts are generally in accordance with industry norms and vary in duration. These contracts establish price or, in the case of longer term contracts, a methodology for determining the price, but do not typically obligate the customer to move any particular volume. As a consequence, there is rarely a guarantee that past volumes or revenues will continue in the future. Further, under these contracts, freight rates and volumes are not directly linked to changes in the prices of the commodities being shipped, and there is no customary contractual protection in the event of a bankruptcy or insolvency of a customer. Substantial reduction in business with, or loss of, important customers or contracts could have a material adverse effect on our results of operations, financial condition and liquidity.

We are exposed to the credit risk of our customers and counterparties, and their failure to meet their financial obligations could adversely affect our business.

Our business is subject to credit risk. There is a risk that customers or counterparties, which include government entities related to grants and financial institutions related to derivative transactions, will fail to meet their obligations when due. Customers and counterparties that owe us money have defaulted and may continue to default on their obligations to us due to bankruptcy, insolvency, lack of liquidity, shutdowns, operational failures or other reasons. Over the last three years, several of our mining, metals and maritime shipping customers instituted insolvency proceedings. In the United States, for interline traffic, one railroad typically invoices a customer on behalf of all railroads participating in the route. The invoicing railroad then pays the other railroads their portion of the total amount invoiced on a monthly basis. Therefore, when we are the invoicing railroad, we are exposed to customer credit risk for the total amount invoiced and are required to pay the other railroads participating in the route even if we are not paid by the customer. Also, when we are not the invoicing railroad, we are exposed to credit risk at the customer

and invoicing railroad levels.

In addition, we may make substantial investments in equipment and assets to support our customers, in particular for those in the mining and natural resources industry. We usually enter into long-term contracts with these customers that include fixed and variable payment terms. Under these contracts, the customers pay a fixed amount independent of actual volume shipped as well as a variable rate per ton shipped, with the fixed payment often representing the majority of the total contract payments. Under these arrangements, we are exposed to start-up risks for new operations as well as ongoing operational risks, including exposure to mine shutdowns, that may reduce the variable payments, as well as customer insolvency risk that could impact our ability to collect our fixed payments.

We have procedures for reviewing our receivables and evaluating credit exposures to specific customers and counterparties; however, default risk may arise from events or circumstances that are difficult to detect or foresee. Certain of our risk management methods depend upon the evaluation of information regarding markets, customers or other matters. This information may not, in all cases, be accurate, complete, up-to-date or properly evaluated. As a result, unexpected credit exposures could have a material adverse effect on our results of operations, financial condition and liquidity.

We transport hazardous materials, which could result in material losses.

We transport certain hazardous materials and other materials, including toxic/poisonous inhalation hazard (TIH/PIH) materials, such as chlorine, crude oil and other dangerous substances that pose certain risks in the event of a release or combustion. A rail accident or other incident or accident on our railroads, at our facilities or at the facilities of our customers involving the release or combustion of hazardous materials could create catastrophic losses in terms of personal injury, property damage and environmental remediation costs and compromise critical parts of our railroads. In addition, insurance premiums charged for, or the self-insured retention associated with, some or all of the coverage currently maintained by us could increase dramatically or certain coverage may not be available to us in the future if there is a catastrophic event related to rail transportation of these materials. In the United States, laws impose common carrier obligations on railroads that require us to transport certain hazardous materials regardless of risk or potential exposure to loss. Also, the United States federal regulators have previously prescribed regulations governing railroads' transportation of hazardous materials and have the ability to put in place additional regulations, which could significantly increase the costs associated with moving hazardous materials on our railroads. Further, certain local governments have sought to enact ordinances banning hazardous materials moving by rail within their borders. Such ordinances could require the re-routing of hazardous materials shipments, with the potential for significant additional costs. Increases in costs associated with the transportation of hazardous materials could have a material adverse effect on our results of operations, financial condition and liquidity.

Our results of operations and rail infrastructure are susceptible to weather conditions and other natural occurrences.

We are susceptible to adverse weather conditions, including floods, fires, hurricanes (or cyclones), tornadoes, droughts, earthquakes and other natural occurrences. For example, bad weather and natural disasters, such as blizzards in the United States or Canada and hurricanes (or cyclones) in the United States or Australia, and resulting floods, could cause a shutdown, derailment, washout or other substantial disruption of our operations and those of the entire freight rail network, which could have a material adverse effect on our results of operations, financial condition and liquidity. Weather impacts or other conditions that do not directly affect our operations can still impact the operations of our customers or connecting carriers. For example:

- Our minerals and stone freight revenues may be reduced by mild winters in the northeastern United States, which lessen demand for road salt.
- Our coal and coke freight revenues may be reduced by mild winters and other weather events, which lessen demand for electricity, which in turn lessons the demand for coal.
- Our revenues generated from the transportation of agricultural products in North America and Australia are susceptible to the impact of drought conditions, and the South Australian grain harvest is also susceptible to the impact of droughts or heavy rains and flooding in South Australia.

Furthermore, our expenses could be adversely impacted by weather conditions, including, for example, higher track maintenance, overtime and diesel fuel costs in the winter at our railroads in the United States and Canada related to snow removal, mandated work breaks and locomotive idling. Weather conditions could also cause our customers or connecting carriers to reduce or suspend their operations. Adverse weather conditions that disrupt the entire freight rail network can also cause traffic diversions, prolonged delays and equipment shortages that impact our ability to serve our customers, all of which could have a material adverse effect on our results of operations, financial condition and liquidity.

The development of some of our business could be hindered if we fail to maintain satisfactory working relationships with partners in Australia.

Following our acquisition of GRail, our Australian Operations are conducted through the Australia Partnership, in which we own a controlling 51.1% ownership interest and, therefore, include 100% of our Australian Operations within our consolidated financial statements with a 48.9% noncontrolling interest recorded to reflect MIRA's ownership. However, as a consequence of the partnership agreement, we do not have absolute control over the operations of the Australia Partnership. The Australia Partnership is governed by a management committee, which is comprised of representatives appointed by both MIRA and G&W as general partners. Certain matters require approval by both MIRA and us, including: (1) hiring and dismissing select executives of the partnership; (2) commitments relating to significant contracts or other matters; (3) approval of the partnership’s strategic plan, which is a long-term plan outlining the expectations of MIRA and us for the business (including leverage, equity returns and capitalization); (4) mergers or consolidations; (5) incurrence of material indebtedness; (6) capital structure changes; (7) changes to the distribution policy; and (8) related-party transactions. Accordingly, our ability to maintain constructive and cooperative relations with MIRA will be critical to our ability to implement our plans and expand our business. Any failure to maintain satisfactory working relationships with MIRA or the need to dedicate significant management resources and time to align our interests with the interests of MIRA could result in a material adverse effect on our operating results, financial condition and liquidity. Furthermore, should we fail to maintain a controlling interest in the Australia Partnership, we will deconsolidate our Australian Operations and account for them under the equity method of accounting.

Market and regulatory responses to climate change, changes in the dynamics of global energy markets, including the closure of coal-fired power plants we serve, climate change litigation and climate change itself could adversely affect our operating costs, decrease demand for the commodities we transport and adversely affect our results of operations, financial condition and liquidity.

Market and regulatory responses to climate change, as well as its physical impacts, could materially affect us. For example, federal, state and local laws, regulations, restrictions, caps, taxes or other controls on emissions of greenhouse gases, including diesel exhaust, could significantly increase our operating costs to comply with these laws and regulations to the extent they apply to our diesel locomotives, equipment, vehicles and machinery or our rail yards. Further, restrictions on emissions could affect our customers that mine, produce or otherwise trade in or sell carbon based energy sources, use commodities that we carry to produce energy, that use significant amounts of energy in producing or delivering the commodities we carry, or that manufacture or produce goods that consume significant amounts of energy or burn fossil fuels, including, for example, coal mining operations, natural gas producers, coal-fired power plants, chemical producers, farmers and food producers, automakers and other manufacturers. Significant cost increases, government regulation, changes in market dynamics or changes in consumer preferences for goods or services relating to alternative sources of energy or emissions reductions could materially affect the markets for the commodities we carry. For instance, over the past few years, production of natural gas in the United States has increased dramatically, which has resulted in lower natural gas prices. As a result of sustained low natural gas prices, coal-fired power plants have been displaced by natural gas-fired power generation facilities. If natural gas prices were to remain low, additional coal-fired plants in the United States could be displaced. Further, we carry significant coal volumes in Australia that are destined for export to Asia. A decrease in the demand for coal in the United States or Asia could further reduce our coal volumes and revenues, which in turn could have a material adverse effect on our results of operations, financial condition and liquidity. Increasing awareness of the market response to climate change may impact the ability of businesses that derive a significant benefit directly or indirectly from coal-fired power plants to obtain financing. Government incentives encouraging the use of alternative sources of

energy could also affect certain of our customers and the markets for certain of the commodities we carry in an unpredictable manner that could alter our traffic patterns, including, for example, the impacts of ethanol incentives on farming and ethanol producers.

Finally, we could face changes to our operations and decreased revenues associated with climate change. We may also experience increased costs related to defending and resolving legal claims and other litigation related to climate change, including claims alleging that our operations have a negative impact on climate change. Any such market or regulatory responses or litigation, as well as physical impacts attributed to climate change and global warming, such as floods, rising sea levels, increasingly frequent and intense storms and any alteration of trade patterns, individually or in conjunction with one or more of the impacts discussed above or other unforeseen impacts of climate change, could have a material adverse effect on our results of operations, financial condition and liquidity.

Our Credit Agreement and our Australian Credit Agreement contain numerous covenants that impose certain restrictions on the way we operate our business.

Our Credit Agreement contains numerous covenants that impose restrictions on our ability and the ability of our subsidiaries to, among other things:

- incur additional indebtedness;
- pay dividends on capital stock or redeem, repurchase or retire capital stock or indebtedness;
- make investments, loans, advances and acquisitions;
- engage in certain transactions with affiliates;
- create liens;
- sell assets, including capital stock of any of our subsidiaries;
- consolidate or merge;
- enter into sale-leaseback transactions;
- change the business conducted by us and the guarantors;
- change our fiscal year; and
- enter into certain agreements containing negative pledges and upstream limitations.

Our Australian Credit Agreement contains comparable provisions that are applicable solely to our Australian business. In addition, our Credit Agreement and the Australian Credit Agreement also contain financial covenants that require the borrowers under each agreement to meet financial ratios and tests. Failure to comply with the obligations in our Credit Agreement, the Australian Credit Agreement and other debt agreements could result in an increase in our interest expense and could give rise to events of default under the Credit Agreement, the Australian Credit Agreement or other debt agreements, as applicable, which, if not cured or waived, could permit lenders to accelerate the related indebtedness and foreclose on the assets securing such debt, if any.

Our substantial indebtedness could adversely affect our financial condition and prevent us from fulfilling our obligations under such indebtedness.

We have a significant amount of indebtedness. As of December 31, 2018, we had a total indebtedness of $2.5 billion, and we had unused commitments of $458.3 million under our Credit Agreement (after giving effect to $2.6 million of undrawn letters of credit that reduces such availability). In addition, under our Australian Credit Agreement, we had unused commitments of A$46.3 million.

Subject to the limits contained in our Credit Agreement, the Australian Credit Agreement and our other debt instruments, we may be able to incur additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions, or for other purposes. If we do so, the risks related to our high level of debt could intensify. Specifically, our high level of debt could have important consequences, including the following:

- making it more difficult to satisfy our obligations with respect to our outstanding debt;
- limiting our ability to draw down on amounts available under our Credit Agreement or the Australian Credit Agreement or to obtain additional financing for working capital, capital expenditures, investments or acquisitions or other general corporate requirements;
- requiring a substantial portion of our cash flows to be dedicated to debt service payments instead of other purposes, thereby reducing the amount of cash flows available for working capital, capital expenditures, investments or acquisitions and other general corporate purposes;
- increasing our vulnerability to general adverse economic and industry conditions;
- exposing us to the risk of increased interest rates as certain of our borrowings, including borrowings under our Credit Agreement and the Australian Credit Agreement, are at variable rates of interest;
- limiting our flexibility in planning for and reacting to changes in the industry in which we compete;

- placing us at a disadvantage compared to other, less leveraged competitors; and

• increasing our cost of borrowing.

We may be impacted by our inability to obtain government funding for capital projects or to benefit from revenue support grants.

Certain of our existing capital projects are, and certain of our future capital projects may be, partially or completely funded through government grant programs. During 2018, we obtained partial or complete funding by United States and Canadian federal, state, provincial and municipal agencies for 72 new projects. The net spending associated with these grant-funded projects represented approximately 4% of our net capital expenditures during 2018. Government funding for projects is limited, and there is no guarantee that budget pressure at the federal, state, provincial and local level or changing governmental priorities will not eliminate funding availability or require us to accept onerous contractual obligations. In certain jurisdictions, the acceptance of government funds may impose additional legal obligations on our operations. If we are unable to obtain adequate government funding, we may have to defer or forgo certain capital projects, incur additional debt or use additional cash.

Our entities in the U.K. benefit from the U.K. Government administered Mode Shift Revenue Support Scheme (MSRS), which supports the movement of freight away from road, particularly in the container market. While the U.K. Government confirmed its continued funding of MSRS to the end of March 2020, the amount of the funding available may be less than in prior years. The MSRS scheme, which was for a five-year period, expires in March 2020, and at present, there is no certainty as to how any successor scheme, if any, will be structured. Reduced grants may have a material adverse effect on our results of operations, financial condition and liquidity.

The occurrence of losses or other liabilities that are either not covered by insurance or that exceed our insurance limits could materially adversely affect our results of operations, financial condition and liquidity.

We purchase insurance coverage for losses arising from personal injury and for property damage in the event of derailments, grade crossing accidents, collisions and other incidents or occurrences. Unexpected or catastrophic circumstances associated with derailments of valuable lading, grade crossing accidents, collisions or other incidents involving passenger trains or spillage of hazardous materials or other accidents involving our operations could cause our losses to exceed our insurance coverage limits or sub-limits or give rise to losses or penalties that are not covered by our insurance. In addition, on certain of the rail lines over which we operate, freight trains are operated over the same track as passenger trains. For instance, in Oregon, our Portland & Western Railroad operates passenger trains for the Tri-County Metropolitan Transportation District of Oregon, our New England Central Railroad is also used by Amtrak for passenger service in New England, our Connecticut Southern Railroad operates over Amtrak trackage in Connecticut and the Providence and Worcester Railroad operates over MetroNorth Commuter Railroad trackage in New York and Connecticut and also operates over Amtrak trackage in New York, Connecticut, Rhode Island and Massachusetts. In Australia, The Ghan passenger train is operated by a third party over the track of GWA (North) Pty Ltd between Tarcoola and Darwin, and GRail operations also have touchpoints with the passenger network in New South Wales. Further, the public is able to easily access both the rail network that we manage and the rail networks on which we operate. We also operate excursion trains on behalf of third parties on certain of the rail lines over which we operate. In the U.K., Continental Europe and Australia, freight trains are primarily operated over the same track as passenger trains and will also regularly pass through passenger stations. Derailments, collisions or other incidents involving us and passenger or excursion trains could give rise to losses that exceed our insurance coverage. Moreover, certain third-party freight and excursion train operators have contractual rights to operate over certain of our rail lines. These third-party operators generally are required to maintain specified levels of insurance coverage, but insurance coverage may not be sufficient to cover all of the losses arising from an incident involving such operators on our rail lines. Also, insurance is available from only a very limited number of insurers, and we may not be able to obtain insurance protection at current levels or at all or obtain it on terms acceptable to us. Deteriorating insurance market conditions caused by global property or rail liability losses, as well as subsequent adverse events directly and indirectly attributable to us, including such things as derailments, accidents, discharge of toxic or hazardous materials, or other like occurrences in the industry, may result in additional increases in our insurance premiums and/or our self-insured retentions, volatility in our claims' expenses and limitations to the coverage under our existing policies and could have a material adverse effect on our results of operations, financial condition and liquidity. In addition, we are subject to the risk that one or more of our insurers may become insolvent and would be unable to pay a claim that may be made in the future. Even with insurance, if any catastrophic interruption of service occurs, we may not be able

to restore service without a significant interruption to our operations, which could have a material adverse effect on our results of operations, financial condition and liquidity.

We are subject to significant governmental regulation of our railroad operations. The failure to comply with governmental regulations or changes to the legislative and regulatory environment could have a material adverse effect on our results of operations, financial condition and liquidity.

We are subject to governmental regulation with respect to our railroad operations associated with new legislation, executive orders issued by the President of the United States and to a variety of health, safety, security, labor, environmental and other regulations by a significant number of federal, state and local regulatory authorities. New rules or regulations mandated by these agencies could increase our operating costs. Non-compliance with these and other applicable laws or regulations could undermine public confidence in us and subject us to fines, penalties and other legal or regulatory sanctions.

In addition, there are various legislative and regulatory actions that have been considered in the United States in recent years. For instance, proponents of a possible legislative effort to increase federal truck size and weight limits remain vocal. State departments of transportation have also launched initiatives seeking to increase truck size and weight limits at the state level. In addition, several of the proposals under consideration by the STB could have a significant negative impact on our ability to negotiate prices for the value of rail services provided and meet service standards. In addition, statutes imposing price constraints or affecting rail-to-rail competition could adversely affect our profitability. Many of the actions under consideration and pending are directed at Class I railroads; however, various legislative and regulatory initiatives being considered by Congress, the STB or other regulators could expand regulation of our railroad operations and undermine the economic viability of certain of our railroads, as well as threaten the service we are able to provide to our customers. The cost of compliance with the proposed rules and regulations could also be significant. In the other geographies in which we operate, federal, state, provincial and local regulatory authorities could change the regulatory framework (including the access regimes) or take actions without providing us with any recourse for the adverse effects that the changes or actions could have on our business, including, without limitation, regulatory determinations or rules regarding dispute resolution and business relationships with our customers and other railroads. Expanded regulation of our railroad operations will increase the cost of providing rail services, which could reduce capital spending on our rail network, facilities and equipment and have a material adverse effect on our results of operations, financial condition and liquidity.

In November 2018, the Office of Rail and Road (ORR) in the U.K. completed its periodic review to determine Network Rail’s costs and funding for the period from April 2019 to March 2024 - known as Control Period 6 (CP6). The periodic review sets the network access charges which are paid by rail providers to Network Rail, as well as the performance and other compensation regimes that regulate the relationship between Network Rail and all rail operators. The ORR has determined that freight access charges will be held constant in real terms in years one and two of CP6 with charges rising on a straight-line basis from year three. By the end of CP6, the network access charges payable by our U.K. operations are expected to increase by an average of 16% for bulk services and 30% for intermodal services. Changes have also been made to the performance regime which could result in increased performance payments by, and reduced compensation payments to, our operations.

In October 2018, the U.K. Department for Transport (DfT) announced an independently chaired government review into the structure of the railway network in the U.K. (UK Rail Review). The UK Rail Review has been established to recommend the most appropriate organizational and commercial framework for the U.K. railway. The UK Rail Review's final report, expected in autumn 2019, will set out the U.K. government's intended changes to the U.K. railway structure which may affect our operations and increase our operating costs. Our failure to comply with applicable laws and regulations, or further changes to existing regulatory regimes could have a material adverse effect on our results of operations, financial condition and liquidity.

We could incur significant costs for violations of, or liabilities under, environmental laws and regulations.
Our railroad operations and real estate ownership are subject to extensive federal, provincial, state, local and foreign environmental laws and regulations concerning, among other things, emissions to the air, discharges to waters, the generation handling, storage, transportation and disposal of waste and other materials and cleanup of hazardous materials (including lading) or petroleum releases. We generate and transport hazardous and non-hazardous waste in our operations. We may incur environmental liability from conditions or practices at properties previously owned, leased or operated by us, properties owned by third parties (for example, properties at which hazardous substances or wastes for which we are responsible have been treated, stored, spilled or disposed), as well as at properties currently owned, leased or operated by us, including from lading in the event of a derailment. Under some environmental statutes, liability may be found without regard to whether we were at fault and may also be "joint and several," whereby we are responsible for all the liability at issue even though we (or the entity that gives rise to our liability) may be only one of a number of entities whose conduct contributed to the liability.
Environmental liabilities may also arise from claims asserted by owners or occupants of affected properties, other third parties affected by environmental conditions (for example, contractors and current or former employees) seeking to recover in connection with alleged damages to their property or personal injury or death, and/or by governmental authorities seeking to remedy environmental conditions or to enforce environmental obligations.
While we maintain insurance for certain environmental damages and claims, environmental requirements and liabilities could obligate us to incur significant costs and expenses to investigate and remediate environmental contamination that may or may not be fully covered by our insurance. Violations of, and liabilities under, environmental laws and regulations could have a material adverse effect on our results of operations, financial condition and liquidity.
We face competition from numerous sources, including those relating to geography, substitute products, other types of transportation and other rail operators.
In North America, each of our railroads is typically the only rail carrier directly serving our customers. In certain circumstances, including under the open access regimes in Australia and Europe, our customers have direct access to other rail carriers. In addition, our railroads also compete directly with other modes of transportation, principally trucks and, on some routes, ship, barge and pipeline operators. Transportation providers such as trucks and barges utilize public rights-of-way that are built and maintained by governmental entities, while we must build and maintain our own network infrastructure. Competition for our services could increase if other rail operators build new rail lines to access certain of our customers or grant to other rail carriers access rights to our rail lines or if legislation is passed that provides materially greater latitude for trucks with respect to size or weight restrictions or automation.
We are also subject to geographic and product competition. A customer could shift production to a region where we do not have operations. Also, commodities that are not transported by rail could be substituted for another commodity that we transport by rail. For example, natural gas can compete with coal that we transport as a fuel source for electricity generation. In either case, we could lose a source of revenues. In addition, we are subject to import competition, where commodities that we transport face competition from less expensive imported products. Some of the products that we transport are exported and face competition on a global basis.
The extent of competition varies significantly among our railroads. Competition is based primarily upon the rate charged, the relative costs of substitutable products and the transit time required. In addition, competition is based on the quality and reliability of the service provided. Because a significant portion of our carloads in the United States and Canada involve interchange with another carrier, we have only limited control over the total price, transit time or quality of such service. It is difficult to quantify the potential impact of competition on our business, since not only each customer, but also each customer location and each product shipped from such location is subject to different types of competition. However, changes to the competitive landscape could have a material adverse effect on our results of operations, financial condition and liquidity.
For information on the risks related to competition associated with the open access regimes in Australia and Europe, see "Additional Risks Associated with our Foreign Operations."

We may be adversely affected by diesel fuel supply constraints resulting from disruptions in the fuel markets and increases in diesel fuel costs.

We consumed 72.8 million gallons and 71.6 million gallons of diesel fuel in 2018 and 2017, respectively. Fuel availability could be affected by any limitation in the fuel supply or by any imposition of mandatory allocation or rationing regulations. If a severe fuel supply shortage arose from production curtailments, disruption of oil imports or domestic oil production, disruption of domestic refinery production, damage to refinery or pipeline infrastructure, political unrest, war, terrorist attack or otherwise, diesel fuel may not be readily available and may be subject to rationing regulations.

In addition, diesel fuel costs constitute a significant portion of our total operating expenses. Currently, we receive fuel surcharges and other rate adjustments to offset fuel prices, although there may be a significant delay in our recovery of fuel costs based on the terms of the fuel surcharge program. If Class I railroads change their policies regarding fuel surcharges, the compensation we receive for increases in fuel costs may decrease, which could have a negative effect on our profitability. Costs for fuel used in operations were approximately 10% and 8% of our operating expenses for the years ended December 31, 2018 and 2017, respectively.

If diesel fuel prices increase dramatically from production curtailments, a disruption of oil imports or domestic oil production or otherwise, these events could have a material adverse effect on our results of operations, financial condition and liquidity.

We may be subject to various claims and lawsuits that could result in significant expenditures.

The nature of our business exposes us to the potential for various claims and litigation related to labor and employment, personal injury, environmental contamination, freight loss, property damage, contract claims and other matters. For example, United States job-related personal injury claims by our railroad employees are subject to the Federal Employers' Liability Act (FELA) which is applicable only to railroads. FELA's fault-based tort system produces results that are unpredictable and inconsistent as compared with a no-fault worker's compensation system. The variability inherent in this system could result in the actual costs of claims being very different from the liability recorded. From time to time, we also have various contractual disputes with interchange partners and customers. Any material changes to current litigation trends or a catastrophic rail accident or series of accidents involving material freight loss or property damage, personal injury or environmental liability against us or monetary damages associated with a breach of contract or other claims that is not covered by insurance could have a material adverse effect on our results of operations, financial condition and liquidity.

Some of our employees, and our customers' employees, belong to labor unions, and strikes or work stoppages could adversely affect our results of operations, financial condition and liquidity.

As of December 31, 2018, we were a party to 101 collective bargaining agreements with various labor unions in the United States, Australia, Canada and U.K./Europe. We are currently engaged in negotiations with respect to approximately 27 of these agreements and are currently negotiating collective bargaining agreements with four newly represented bargaining units. Approximately 4,200 of our approximately 8,000 full time employees are either union members or have employment terms and conditions determined by labor agreements or negotiated by a labor union or works council. We are in the process of negotiating the initial collective bargaining agreements for the above noted four newly represented bargaining units, which would cover approximately 73 additional employees. We also have entered into employee association agreements with an additional 19 employees who are not represented by a national labor organization. In the United States, we have 70 labor agreements with unions which cover approximately 36% of our employees within the United States. In Canada, we have 11 labor agreements, which cover approximately 53% of our employees within Canada. In Australia, GWA has four collective enterprise bargaining agreements covering the majority of its employees. In the U.K./Europe we have various collective bargaining agreements, as well as agreements with local work councils.

Our inability to negotiate acceptable contracts with these unions could result in, among other things, strikes, work stoppages or other slowdowns by the affected workers. If the unionized 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, we could experience a significant disruption of our operations and/or higher ongoing labor costs. A substantial majority of the employees of the Class I railroads with which we interchange are unionized. If such Class I railroads were to have a work slowdown or strike, the national rail network and our operations would be adversely affected. In the U.K., our operations are reliant on the rail infrastructure provided by Network Rail. A majority of Networks Rail's employees are unionized, and if Network Rail were to have a work stoppage or strike, the U.K. rail network and our operations would be adversely affected. Additional unionization of our workforce could result in higher employee compensation and restrictive working condition demands that could increase our operating costs or constrain our operating flexibility.

Moreover, where our customers have a unionized workforce, they are also susceptible to strikes or work stoppages, which reduces their need for our transportation services and can adversely affect our results of operations and financial condition.

If we are unable to employ a sufficient number of qualified workers, our results of operations, financial condition and liquidity may be materially adversely affected.

We believe that our success and our growth depend upon our ability to attract and retain skilled workers who possess the ability to operate and maintain our equipment and facilities. The operation and maintenance of our equipment and facilities involve complex and specialized processes and often must be performed in harsh and remote conditions, resulting in a high employee turnover rate when compared to many other industries. The challenge of attracting and retaining the necessary workforce is increased by the expected retirement of an aging workforce, training requirements and significant competition for specialized trades. Within the next five years, we estimate that approximately 9% of our current workforce will become eligible for retirement based on the minimum age typically required for retirement eligibility under the applicable nationally funded retirement program in each country, which ranges from ages 60 to 65, with the average retirement eligibility age across our workforce of 63.

Many of these workers hold key operating positions, such as conductors, engineers and mechanics. In addition, the demand for workers with the types of skills we require has increased, especially from Class I railroads, which can usually offer higher wages and more generous benefits. A significant increase in the wages paid by competing employers could result in a reduction of our skilled labor force or an increase in the wage rates that we must pay or both.

The execution of our growth strategy is substantially dependent on our senior management team.

We rely on our senior management team to execute our growth strategy. Our growth strategy is different than the strategy of many other railroads because of our acquisition and investment focus. We may not be able to attract and retain senior leadership necessary to manage and grow our business. Our performance significantly depends upon the continued contributions of our executive officers and key employees, both individually and as a group, and our ability to retain and motivate them. Our officers and key personnel have many years of experience with us and in our industry, and it may be difficult to replace them. Further, the loss of any executive officers or key employees could require the remaining senior leadership to divert immediate and substantial attention to seeking a replacement. The loss of the services of any of our senior leadership, and the inability to find a suitable replacement, could adversely affect our operating, acquisition and investment strategies, as well as our results of operations, financial condition and liquidity.

If we fail to maintain an effective system of internal control over financial reporting as well as disclosure controls and procedures, we could become subject to regulatory scrutiny and current and potential shareholders may lose confidence in our financial reporting and disclosures.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to include in our Annual Report on Form 10-K our management’s report and an independent registered public accounting firm's report on the effectiveness of our internal control over financial reporting. As we execute our acquisition strategy, consistent with the guidance issued by the Securities and Exchange Commission, we may elect to omit an assessment of internal control over financial reporting of a recently acquired business in the year of acquisition from management's report. Recently acquired businesses are required to be included in our assessment of internal control over financial reporting no later than in the year subsequent to the acquisition. As a result, to the extent we delay the assessment of an acquisition, there may be a delay in identifying and reporting control issues.

The failure to implement and maintain proper and effective internal controls over financial reporting, as well as disclosure controls and procedures, could result in our identification of material weaknesses in our financial reporting controls that may cause errors in our financial statements that could have a material effect on our financial results, financial position or liquidity and in the accompanying footnote disclosures. Such errors could also require restatements of previously issued financial statements. We may be unable to identify and report any material weaknesses on a timely basis in the future. Should such events occur, we may become subject to regulatory scrutiny and investors may lose confidence in our reported financial information and disclosure, which could negatively impact our stock price.

Our operations are dependent on our ability to obtain railcars, locomotives and other critical railroad items from suppliers.

Due to the capital intensive nature and industry-specific requirements of the rail industry, there are high barriers to entry for potential new suppliers of core railroad items such as railcars, locomotives and track materials. If the number of available railcars is insufficient or if the cost of obtaining these railcars either through lease or purchase increases, we might not be able to obtain railcars on favorable terms, or at all, and shippers may seek alternate forms of transportation. In some cases, we use third-party locomotives to provide transportation services to our customers and such locomotives may not be available. Without these third-party locomotives, we would need to invest additional capital in locomotives. Even if purchased, there is no guarantee that locomotives would be available for delivery without significant delay. For example, in Australia, the availability of new wagons and locomotives is limited, with long lead times for delivery. Further, the number of domestic rolling-stock manufacturers are decreasing, requiring us to source rolling-stock from manufactures with a lesser degree of certainty regarding quality and performance. Additionally, we compete with other industries for certain track materials, such as rail and ties. Changes in the competitive landscapes of these limited-supplier markets could result in equipment shortages that could have a material adverse effect on our results of operations, financial condition and liquidity in a particular year or quarter and could limit our ability to attract customers to support new projects and achieve our growth strategy.

We may be affected by acts of terrorism or anti-terrorism measures.

Our rail lines, port operations and other facilities and equipment, including railcars carrying hazardous materials that we are required to transport under federal law as a common carrier, could be direct targets or indirect casualties of terrorist attacks. Any terrorist attack or other similar event could cause significant business interruption and may adversely affect our results of operations, financial condition and liquidity. In addition, regulatory measures designed to control terrorism could impose substantial costs upon us and could result in impairment to our service, which could also have a material adverse effect on our results of operations, financial condition and liquidity.

We rely on the stability and availability of our technology systems to operate our business.

We rely on information technology in all aspects of our business. The performance and reliability of our technology systems, as well as those provided by critical vendors, is critical to our ability to operate, compete safely and effectively improve our efficiency. A cyber security attack, which is a deliberate theft of data or impairment of information technology systems, or other significant disruption or failure, could result in a service interruption, train accident, misappropriation of confidential or sensitive information, process failure, security breach or other operational difficulties, thereby impacting our efficiency and damaging our corporate reputation. There has been an increasing trend of cyber attacks on critical infrastructure, as it remains an attractive target. Such an event could result in increased capital, insurance or operating costs, including security costs to protect our infrastructure. To date, we have been affected by several ransomware attacks but have not experienced any material disruptions of our networks or operations due to cyber security attacks; however, a disruption or compromise of our information technology systems, even for short periods of time, could have a material adverse effect on our business and results of operations.

ADDITIONAL RISKS ASSOCIATED WITH OUR FOREIGN OPERATIONS

We are subject to the risks of doing business in foreign countries.

Some of our subsidiaries provide service and transact business in foreign countries, namely in Australia, Canada, the U.K., Germany, the Netherlands, Poland, Saudi Arabia, Mexico, the Marshall Islands and China. In addition, we may consider acquisitions or other investments in other foreign countries in the future. The risks of doing business in foreign countries include:

- adverse changes or greater volatility in the economies of those countries;
- foreign currency fluctuations;
- adverse effects due to changes in the European Union (EU) or eurozone membership, including risks associated with the U.K.'s exit from the EU;
- adverse effects due to the migration of people into the EU;
- limitations in our ability to enforce contractual provisions, including those related to indemnities and jurisdiction, in varied legal systems;
- adverse changes to the regulatory environment or access regimes of those countries;
- adverse changes to the tax laws and regulations of those countries;
- restrictions on the withdrawal of foreign investment, or a decrease in the value of repatriated cash flows;
- a decrease in the value of foreign sourced income as a result of exchange rate changes;
- the actual or perceived failure by us to fulfill commitments under concession agreements;
- the ability to identify and retain qualified local managers; and
- the challenge of managing a culturally and geographically diverse operation.

Any of the risks above could have a material adverse effect on our results of operations, financial condition and liquidity.

Because some of our subsidiaries and affiliates transact business in foreign currencies and because a significant portion of our net income comes from the operations of our foreign subsidiaries, exchange rate fluctuations may adversely affect us and may affect the comparability of our results between financial periods.

We have operations in Australia, Canada, the U.K. and Europe. The results of operations of our foreign entities are maintained in the local currency (including, the Australian dollar, the British pound, the Canadian dollar, the Euro and the Polish zloty) and then translated into United States dollars based on the exchange rate at the end of the period for balance sheet items and, for the statement of operations, at the average exchange rate for the statement period. In addition, Freightliner, as part of a British consortium, provides management and technical support for infrastructure and freight operations to Saudi Railway Company. The Saudi Railway Company is a government-owned company established in 2006 that is tasked with developing and operating railway services in Saudi Arabia. Payments under the contract are made in Saudi riyal and are converted into British pounds and included in our consolidated operating income in our U.K./European Operations. As a result, any appreciation or depreciation of these currencies against the United States dollar can impact our consolidated results of operations. The exchange rates between these currencies and the United States dollar have fluctuated significantly in recent years and may continue to do so in the future.

33

Moreover, foreign governments may restrict transfers of cash out of the country and control exchange rates. We may not be able to repatriate our earnings, and at exchange rates that are beneficial to us, which could have a material adverse effect on our business, results of operations, financial condition and liquidity.

We may not be able to manage our exchange rate risks effectively, and the volatility in currency exchange rates may have a material adverse effect on our results of operations, financial condition and liquidity. In addition, because our financial statements are stated in U.S. dollars, such fluctuations may affect our consolidated results of operations and financial condition and may affect the comparability of our results between financial periods.

Political and economic uncertainty arising from a majority of voters approving a referendum for the United Kingdom to exit the European Union could adversely impact our operations and financial results.

In June 2016, the U.K. held a referendum in which voters approved an exit from the European Union (EU), commonly referred to as Brexit. As a result of the referendum, the U.K. Government negotiated a withdrawal agreement with the EU Commission on the precise terms of the U.K.'s withdrawal. The Withdrawal Agreement was rejected by the U.K. Parliament and as a result, the U.K. Government is seeking to renegotiate the terms of the Withdrawal Agreement with the EU. The precise details of the U.K.'s withdrawal remain uncertain. A withdrawal could, among other outcomes, disrupt the free movement of goods, services and people between the U.K. and the EU, undermine bilateral cooperation in key policy areas and significantly disrupt trade between the U.K. and the EU. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the U.K. determines which EU laws to replace or replicate. Given the lack of comparable precedent, it is unclear what financial, trade and legal implications the withdrawal of the U.K. from the EU would have and how such withdrawal would affect us. Our U.K./European Operations represented approximately 27% of our consolidated revenues in 2018. The announcement of Brexit caused significant volatility in global stock markets and currency exchange rate fluctuations that resulted in the weakening of the British pound against the United States dollar. During periods of a weakening British pound, our reported international revenues are reduced because the British pound translates into fewer United States dollars. Brexit could cause weakening of the U.K. economy, slower long-term economic growth and less government revenue for infrastructure projects, all of which could lower demand for our services. The long-term effects of Brexit will depend on any agreements the U.K. makes to retain access to European markets, either during a transitional period or more permanently, and any other bilateral trade agreements the U.K. can reach with other trade partners. Any of the potential effects of Brexit could have unpredictable consequences for credit markets and adversely affect our business, results of operations and financial condition and liquidity.

Our concession and/or lease agreements in Australia could be canceled, and these agreements may not be extended beyond their terms.

Through our subsidiaries in Australia, we have entered into long-term concession and/or lease agreements with governmental authorities in the Northern Territory and South Australia. Our concession agreement for the Tarcoola-to-Darwin rail line expires in 2054, and our lease agreement for our other South Australia rail lines expires in 2047. If our concession or lease agreements expire, we will no longer act as the below rail access provider but will still be permitted to participate in the above rail market. These concession and lease agreements are subject to a number of conditions, including those relating to the maintenance of certain standards with respect to service, price and the environment. These concession and lease agreements also typically carry with them a commitment to maintain the condition of the railroad and to make a certain level of capital expenditures, which may require capital expenditures that are in excess of our projections. Our failure to meet these commitments under the long-term concession and lease agreements could result in the termination of those concession or lease agreements. The termination of any concession or lease agreement could result in the loss of our investment relating to that concession or lease agreement and could have a material adverse effect on our results of operations, financial condition and liquidity.

Open access regimes in Australia and Europe could lead to additional competition for rail services, disruption to service and decreased revenues and profit margins.

The legislative and regulatory framework in Australia allows third-party rail operators to gain access to our Australian railway infrastructure and also governs our access to track owned by others. Where our operations are on track owned by third parties, we may require facilities for storage and provisioning in areas where we are competing with other rail operators for such facilities and/or are reliant on these parties to provide access to those facilities. European countries in which our subsidiaries operate also have open access regimes that permit third-party rail operators to compete for the business of our subsidiaries that operate in such countries. There are limited barriers to entry to preclude a current or prospective rail operator from approaching our customers and seeking to capture their business. As new operators enter the market, existing operators have increased equipment available and are able to offer aggressive pricing in order to ensure market share and an efficient use of their resources. Further, the open access nature of the rail network could lead to disruptions to services as infrastructure maintenance, capital expenditure or maintaining or expanding such infrastructure, and scheduling operations and delays or stoppages caused by other rail operators are outside our control. The loss of our customers to competitors or unexpected disruptions in service could result in decreased revenues and profit margins, which could have a material adverse effect on our results of operations, financial condition and liquidity.

Changes to the open access regimes in Australia and Europe could have a significant impact on our operations.

Access fees paid for our access onto the track of other companies and access fees we charge under state and federal regimes are subject to change. Where we pay access fees to others, if those fees were increased, our operating margins could be negatively affected. In Australia, if the federal government or respective state regulators were to alter the regulatory regime or determine that access fees charged to current or prospective third-party rail freight operators by our Australian railroads did not meet competitive standards, our income from those fees could decline. In the U.K., if the ORR, the independent safety and economic regulator for Britain's railways, were to change the access regime, even if we were able to pass any increased fees onto customers, we may be less competitive and our revenues could decline. In addition, when we operate over track networks owned by others, the owners of the networks are responsible for scheduling the use of the tracks as well as for determining the amount and timing of the expenditures necessary to maintain the tracks in satisfactory condition. Therefore, in areas where we operate over tracks owned by others, our operations are subject to train scheduling set by the owners as well as the risk that the network will not be adequately maintained. Changes to the open access regimes could have a material adverse effect on our business, results of operations, financial condition and liquidity.

Revocation of our safety accreditations could result in a loss of revenue and termination of our concession deeds and customer contracts.

Our operating subsidiaries in Australia and U.K./Europe hold safety accreditations that are required in order for them to provide freight rail services. These safety accreditations are essential for us to conduct our business and are subject to removal. In addition, these safety accreditations are required under our concession deeds and many customer contracts. Following significant derailments, the government entities responsible for oversight of rail safety frequently perform investigations to supplement their annual and spot audit inquiries. Any loss of, failure to maintain or inability to renew, rail safety accreditations necessary to carry on rail operations in any jurisdiction, or any changes in government policy and legal or regulatory oversight, including changes to the rail safety regulatory regime, could have a material adverse effect on our business, results of operations, financial condition and liquidity.

We have significant pension funding obligations under our U.K. Pension Program

We provide a defined benefit pension program for our U.K. employees through a standalone shared cost arrangement within the Railways Pension Scheme (Pension Program). The Pension Program has more than 300,000 active and retired employees, and participation by more than 150 rail companies with assets under management of approximately £25 billion. There are six discrete sections within the Pension Program, and participating employers may set up more than one arrangement in the program. There is no cross-subsidy or funding obligation between the discrete sections of the Pension Program or between the discrete arrangements of any participating employers. The Pension Program is managed and administered by a professional pension administration company and is overseen by trustees with professional advice from independent actuaries and other advisers. Our section of the Pension Program is a shared cost arrangement with required contributions shared between us and our employees with our contribution being 60% and the remaining 40% contributed by active employees.

The Pension Program's assets are subject to market fluctuation, and its assets and liabilities are formally valued on an independent actuarial basis every three years. A key element of the valuation process is an assessment of the creditworthiness of the participating employer. Less creditworthy employers are encouraged to invest in lower risk assets, with on average lower returns, which impacts the assessment of the pension liabilities and any underlying deficit. In the event that our section of the Pension Program is underfunded on an actuarial basis at any valuation point, the shared cost nature of the program means that we are responsible for paying 60% of any deficit contributions, with active employees contributing the remaining 40%, in each case over a recovery period agreed with the trustees. If our section of the Pension Program is terminated and wound up, any deficit would fall entirely on us and would not be shared with active employees. Equally, if all active employees were to leave our section, we would have full responsibility for funding any deficits. As of December 31, 2018, there were approximately 1,500 active employees in our section of the Pension Program. Our pension expense and funding of our section of the Pension Program may increase in the future and, as a result, could have a material adverse effect on our results of operations, financial condition and liquidity.

RISKS RELATED TO TAXATION

The United States Short Line Tax Credit was renewed in February 2018 for the calendar year ended December 31, 2017. If this credit is not extended, our effective tax rate in future periods will be higher.

Since 2005, we have benefited from the effects of the United States Short Line Tax Credit, which is an income tax credit for Class II and Class III railroads to reduce their federal income tax based on qualified railroad track maintenance expenditures (the Short Line Tax Credit). Qualified expenditures include amounts incurred for maintaining track, including roadbed, bridges and related track structures, owned or leased by a Class II or Class III railroad. The credit is equal to 50% of the qualified expenditures, subject to an annual limitation of $3,500 multiplied by the number of miles of railroad track owned or leased by the Class II or Class III railroad as of the end of its tax year. The Short Line Tax Credit was initially enacted for a three-year period, 2005 through 2007, and was subsequently extended a series of times with the last extension enacted in February 2018. The February 2018 extension provided a retroactive credit, solely for fiscal year 2017. Legislation is currently pending that seeks to extend the Short Line Tax Credit retroactively for fiscal year 2018 and beyond. There is no guarantee that the Short Line Tax Credit will be extended again. If the Short Line Tax Credit is not extended for additional tax years, or is modified prospectively, or the benefit derived from the credit is not replaced otherwise, the loss or a reduction of the credit will increase our tax rate and reduce our earnings per share.

If the earnings of our foreign subsidiaries were to be distributed, our effective tax rate could be higher.
We file a consolidated United States federal income tax return that includes all of our United States subsidiaries. Each of our foreign subsidiaries files income tax returns in each of their respective countries. The amount of accumulated foreign earnings that have not been distributed was $216.2 million as of December 31, 2018. These earnings have been subject to United States federal income tax via the estimated toll tax required by the Tax Cuts and Jobs Act of 2017 (the TCJA). If the earnings were to be distributed in the future, those distributions may result in foreign exchange gains or losses and be subject to other taxes and credits, including U.S. state income taxes and withholding taxes payable to various foreign countries, which could result in a higher effective tax rate for us, thereby reducing our earnings. No provision is made for the impact of those future foreign exchange gains or losses or such other potential taxes and credits that could be applicable to the undistributed earnings of our foreign subsidiaries in the event of distribution. See "Part II Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Cash Repatriation" for additional information.
Non-U.S. holders who own or owned more than a certain ownership threshold may be subject to United States federal income tax on gains realized on the disposition of the shares of our Class A Common Stock.
It is possible that we are a United States real property holding corporation currently or will become one in the future for United States federal income tax purposes. If we are or become a United States real property holding corporation, so long as our Class A Common Stock continues to be regularly traded on an established securities market, only a non-U.S. holder (i.e., a holder that is not a United States citizen or resident, a corporation or partnership organized under the laws of the United States or any state thereof and certain trusts and estates) who holds or held (at any time during the shorter of the five-year period preceding the date of disposition or the holder's holding period) more than 5% of our Class A Common Stock will be subject to United States federal income tax on the disposition of our Class A Common Stock, by reason of our status as a United States real property holding corporation. Non-U.S. holders should consult their own tax advisors concerning the consequences of disposing of shares of our Class A Common Stock.
ITEM 1B. Unresolved Staff Comments.
None.

ITEM 2. Properties.

Genesee & Wyoming, through our subsidiaries, currently has interests in 120 freight railroads, including 104 short line railroads and two regional freight railroads in the United States, eight short line railroads in Canada, three railroads in Australia, one in the U.K., one in Poland and Germany and one in the Netherlands.

The rail properties that we own and operate in North America typically consist of the track and the underlying land. Real estate adjacent to the railroad rights-of-way is generally owned by others, and our holdings of such real estate are not material. Further, unless we own the rail properties outright, we do not normally control mineral rights or the ability to grant fiber optic and other easements in the properties. In North America and elsewhere, several of our railroads are operated under leases or operating licenses, and in these instances do not own the track or the underlying land. Further, under open access regimes, as more fully described under "Part I Item 1. Business," the track may be accessed by any operator admitted and licensed to provide freight transport in the jurisdiction.

Our railroads operate over approximately 16,100 miles of track that is owned, jointly owned or leased by us, which includes the Tarcoola-to-Darwin rail line that we manage under a concession agreement that expires in 2054. Several of our railroads are operated pursuant to lease agreements that will expire in the next few years and may not be extended. Leases from Class I railroads and other third parties that could expire in each of the next ten years would represent 3.1% or less of our annual revenues in the year of expiration, based on our operating revenues for the year ended December 31, 2018. For additional information on these lease expirations, see "Part I Item 1A. Risk Factors" of this Annual Report. We also operate, through various trackage and operating rights agreements, over approximately 6,200 additional miles of track that are owned or leased by others under contractual track access arrangements. The track miles listed below exclude approximately 2,110 miles of sidings and yards (1,880 miles in the United States, 150 miles in Canada and 80 miles in Australia). Track miles owned by others, but available to us, under open access regimes in Australia, the Netherlands, Poland and the U.K. are also excluded. We have recorded mortgages on many of the owned properties located in the United States and described in the table below as additional security for our outstanding obligations under our Credit Agreement. For additional information regarding our Credit Agreement, see Note 8, Long-Term Debt, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

The following table sets forth certain information with respect to our railroads as of December 31, 2018:

RAILROAD AND LOCATION	YEAR ACQUIRED	TRACK MILES	STRUCTURE
NORTH AMERICAN OPERATIONS			
UNITED STATES:			
Genesee and Wyoming Railroad Company (GNWR) New York[a]	1899	27	Owned
The Dansville and Mount Morris Railroad Company (DMM) New York[a]	1985	8	Owned
Rochester & Southern Railroad, Inc. (RSR) New York[a]	1986	58	Owned
Louisiana & Delta Railroad, Inc. (LDRR) Louisiana	1987	83	Owned/Leased
Buffalo & Pittsburgh Railroad, Inc. (BPRR) New York, Pennsylvania[b][c][d]	1988	368	Owned/Leased
Allegheny & Eastern Railroad, LLC (ALY) Pennsylvania[b]	1992	128	Owned
Bradford Industrial Rail, Inc. (BR) Pennsylvania[c]	1993	4	Owned
Willamette & Pacific Railroad, Inc. (WPRR) Oregon	1993	178	Leased
Portland & Western Railroad, Inc. (PNWR) Oregon	1995	288	Owned/Leased
Pittsburg & Shawmut Railroad, LLC	1996	108	Owned

(PS) Pennsylvania[d]			
Illinois & Midland Railroad, Inc. (IMRR) Illinois	1996	98	Owned
Commonwealth Railway, Incorporated (CWRY) Virginia	1996	24	Owned/Leased
Corpus Christi Terminal Railroad, Inc. (CCPN) Texas	1997	42	Leased

RAILROAD AND LOCATION	YEAR ACQUIRED	TRACK MILES	STRUCTURE
Golden Isles Terminal Railroad, Inc. (GITM) Georgia	1998	13	Owned/Leased
Savannah Port Terminal Railroad, Inc. (SAPT) Georgia	1998	18	Leased
South Buffalo Railway Company (SB) New York	2001	54	Owned/Leased
St. Lawrence & Atlantic Railroad Company (SLR) Maine, New Hampshire, Vermont	2002	143	Owned
York Railway Company (YRC) Pennsylvania	2002	42	Owned
Utah Railway Company (UTAH) Utah	2002	41	Owned
Salt Lake City Southern Railroad Company, Inc. (SLCS) Utah	2002	2	Owned
Chattahoochee Industrial Railroad (CIRR) Georgia	2003	15	Owned
Arkansas Louisiana & Mississippi Railroad Company (ALM) Arkansas, Louisiana	2003	62	Owned
Fordyce and Princeton R.R. Co. (FP) Arkansas	2003	57	Owned
Tazewell & Peoria Railroad, Inc. (TZPR) Illinois	2004	25	Leased
Golden Isles Terminal Wharf (GITW) Georgia	2004	6	Owned
First Coast Railroad Inc. (FCRD) Florida, Georgia	2005	32	Leased
AN Railway, L.L.C. (AN) Florida	2005	96	Leased
Atlantic & Western Railway, Limited Partnership (ATW) North Carolina	2005	16	Owned
The Bay Line Railroad, L.L.C. (BAYL) Alabama, Florida	2005	108	Owned
East Tennessee Railway, L.P. (ETRY) Tennessee	2005	4	Owned/Leased
Galveston Railroad, L.P. (GVSR) Texas	2005	39	Leased
Georgia Central Railway, L.P. (GC) Georgia	2005	171	Owned/Leased
KWT Railway, Inc. (KWT) Kentucky, Tennessee	2005	68	Owned
Little Rock & Western Railway, L.P. (LRWN) Arkansas	2005	79	Owned
Meridian & Bigbee Railroad, L.L.C. (MNBR) Alabama, Mississippi	2005	147	Owned/Leased
Riceboro Southern Railway, LLC (RSOR) Georgia	2005	18	Leased
Tomahawk Railway, Limited Partnership (TR) Wisconsin	2005	6	Owned

Valdosta Railway, L.P. (VR) Georgia	2005	10	Owned
Western Kentucky Railway, L.L.C. (WKRL) Kentucky	2005	—	Owned
Wilmington Terminal Railroad, Limited Partnership (WTRY) North Carolina	2005	17	Leased
Chattahoochee Bay Railroad, Inc. (CHAT) Alabama, Georgia	2006	26	Owned
Maryland Midland Railway, Inc. (MMID) Maryland	2007	70	Owned
Chattooga & Chickamauga Railway Co. (CCKY) Georgia	2008	49	Leased
Luxapalila Valley Railroad, Inc. (LXVR) Alabama, Mississippi	2008	29	Owned

RAILROAD AND LOCATION	YEAR ACQUIRED	TRACK MILES	STRUCTURE
Columbus and Greenville Railway Company (CAGY) Mississippi	2008	151	Owned
The Aliquippa & Ohio River Railroad Co. (AOR) Pennsylvania	2008	6	Owned
The Columbus & Ohio River Rail Road Company (CUOH) Ohio	2008	247	Owned/Leased
The Mahoning Valley Railway Company (MVRY) Ohio	2008	6	Owned
Ohio Central Railroad, Inc. (OHCR) Ohio	2008	70	Owned/Leased
Ohio and Pennsylvania Railroad Company (OHPA) Ohio	2008	3	Owned
Ohio Southern Railroad, Inc. (OSRR) Ohio	2008	18	Owned
The Pittsburgh & Ohio Central Railroad Company (POHC) Pennsylvania	2008	35	Owned
The Warren & Trumbull Railroad Company (WTRM) Ohio	2008	4	Leased
Youngstown & Austintown Railroad Inc. (YARR) Ohio	2008	5	Leased
The Youngstown Belt Railroad Company (YB) Ohio	2008	14	Owned
Georgia Southwestern Railroad, Inc. (GSWR) Alabama, Georgia	2008	181	Owned/Leased
Arizona Eastern Railway Company (AZER) Arizona, New Mexico	2011	200	Owned
Hilton & Albany Railroad, Inc. (HAL) Georgia	2011	56	Leased
Columbus & Chattahoochee Railroad, Inc. (CCH) Alabama, Georgia	2012	26	Leased
Alabama & Gulf Coast Railway LLC (AGR) Alabama, Mississippi, Florida	2012	283	Owned/Leased
Arizona & California Railroad Company (ARZC) Arizona, California	2012	190	Owned
Bauxite & Northern Railway Company (BXN) Arkansas	2012	5	Owned
California Northern Railroad Company (CFNR) California	2012	209	Leased
Carolina Piedmont Railroad (CPDR) South Carolina	2012	30	Owned
Cascade and Columbia River Railroad Company (CSCD) Washington	2012	131	Owned
Central Oregon & Pacific Railroad, Inc. (CORP) Oregon, California	2012	305	Owned/Leased
The Central Railroad Company of Indiana (CIND) Indiana, Ohio	2012	82	Owned
Central Railroad Company of Indianapolis (CERA) Indiana	2012	43	Owned/Leased

Chesapeake and Albemarle Railroad (CA) North Carolina, Virginia	2012	68	Leased
Chicago, Fort Wayne & Eastern Railroad (CFE) Indiana, Ohio	2012	281	Owned/Leased
Conecuh Valley Railway, L.L.C. (COEH) Alabama	2012	13	Owned
Connecticut Southern Railroad, Inc. (CSO) Connecticut	2012	23	Owned/Leased
Dallas, Garland & Northeastern Railroad, Inc. (DGNO) Texas	2012	168	Owned/Leased
Eastern Alabama Railway, LLC (EARY) Alabama	2012	26	Owned
Grand Rapids Eastern Railroad (GR) Michigan	2012	24	Owned

RAILROAD AND LOCATION	YEAR ACQUIRED	TRACK MILES	STRUCTURE
Huron and Eastern Railway Company, Inc. (HESR) Michigan	2012	330	Owned/Leased
Indiana & Ohio Railway Company (IORY) Indiana, Ohio, Michigan	2012	450	Owned/Leased
Indiana Southern Railroad, LLC (ISRR) Indiana	2012	226	Owned
Kiamichi Railroad Company L.L.C. (KRR) Oklahoma, Arizona, Texas	2012	231	Owned
Kyle Railroad Company (KYLE) Colorado, Kansas	2012	505	Owned/Leased
Marquette Rail LLC (MQT) Michigan	2012	128	Leased
The Massena Terminal Railroad Company (MSTR) New York	2012	3	Owned
Michigan Shore Railroad (MS) Michigan	2012	50	Owned
Mid-Michigan Railroad, Inc. (MMRR) Michigan	2012	30	Owned/Leased
Missouri & Northern Arkansas Railroad Company, Inc. (MNA) Arizona, Missouri, Kansas	2012	483	Owned/Leased
New England Central Railroad, Inc. (NECR) Vermont, New Hampshire, Massachusetts, Connecticut	2012	325	Owned
North Carolina & Virginia Railroad Company L.L.C. (NCVA) North Carolina, Virginia	2012	53	Owned
Otter Tail Valley Railroad Company, Inc. (OTVR) Minnesota	2012	54	Owned
Point Comfort & Northern Railway Company (PCN) Texas	2012	14	Owned
Puget Sound & Pacific Railroad (PSAP) Washington	2012	135	Owned/Leased
San Diego & Imperial Valley Railroad Company, Inc. (SDIY) California	2012	1	Leased
San Joaquin Valley Railroad Co. (SJVR) California	2012	297	Owned/Leased
South Carolina Central Railroad Company, LLC (SCRF) South Carolina	2012	47	Owned
Texas Northeastern Railroad (TNER) Texas	2012	67	Leased
Three Notch Railway, L.L.C. (TNHR) Alabama	2012	34	Owned
Toledo, Peoria & Western Railway Corp. (TPW) Illinois, Indiana	2012	180	Owned/Leased
Ventura County Railroad Company (VCRR) California	2012	9	Leased
Wellsboro & Corning Railroad, LLC (WCOR) Pennsylvania, New York	2012	35	Leased
Wiregrass Central Railway, L.L.C. (WGCR) Alabama	2012	20	Owned

Rapid City, Pierre & Eastern Railroad, Inc. (RCPE) Minnesota, South Dakota, Nebraska, Wyoming	2014	651	Owned
Arkansas Midland Railroad, Inc. (AKMD) Arkansas	2015	114	Owned/Leased
The Prescott & Northwestern Railroad Company (PNW) Arkansas	2015	6	Owned
Warren & Saline River Railroad Company (WSR) Arkansas	2015	1	Owned
Olympia & Belmore Railroad, Inc. (OYLO) Washington	2016	5	Leased
Providence and Worcester Railroad Company (PW) Rhode Island, Massachusetts, Connecticut and New York[e]	2016	229	Owned

RAILROAD AND LOCATION	YEAR ACQUIRED	TRACK MILES	STRUCTURE
Heart of Georgia Railroad (HOG) Georgia and Alabama	2017	221	Leased
CANADA:			
Huron Central Railway Inc. (HCRY) Ontario	1997	173	Owned/Leased
Quebec Gatineau Railway Inc. (QGRY) Québec	1997	301	Owned/Leased
St. Lawrence & Atlantic Railroad (Québec) Inc. (SLQ) Québec	2002	95	Owned
Cape Breton & Central Nova Scotia Railway Limited (CBNS) Nova Scotia	2012	242	Owned
Goderich-Exeter Railway Company Limited (GEXR) Ontario	2012	71	Owned
Ottawa Valley Railway (OVR) Ontario, Québec	2012	157	Leased
Southern Ontario Railway (SOR) Ontario	2012	5	Leased
Kérail Inc. (KERY) Québec	2014	10	Owned
U.K./EUROPEAN OPERATIONS:			
Rail Feeding (Rotterdam)	2008	—	Open Access
Freightliner U.K.	2015	—	Open Access
Freightliner Poland and Freightliner Germany	2015	—	Open Access
AUSTRALIAN OPERATIONS (51.1% owned by us as of December 1, 2016):			
Genesee & Wyoming Australia Pty Ltd (GWA)[f]	1997; 2006	822	Leased/Open Access
GWA (North) Pty Ltd (GWA North)	2010	1,395	Leased/Open Access
Freightliner Australia Pty Ltd (FLA)[g]	2015; 2016	—	Open Access

(a) The original GNWR consisted of 14 miles and acquired an additional 13 miles in 1982. The GNWR and DMM are now operated by RSR.

(b) ALY merged with BPRR in January 2004.

(c) BR merged with BPRR in January 2004.

(d) PS merged with BPRR in January 2004.

(e) PW operates over approximately 300 additional miles of track through contractual track access arrangements.

(f) We initially invested in South Australia in 1997; we contributed our holdings to our Australian Railroad Group Pty. Ltd. (ARG) joint venture in 2000; upon sale of our interest in ARG in 2006, we re-acquired our contributed holdings, which were renamed GWA.

(g) We acquired Glencore Rail (NSW) Pty Limited (GRail) in 2016. FLA has been the rail operator of GRail since its inception in 2010.

EQUIPMENT

As of December 31, 2018, our rolling stock consisted of 1,338 locomotives, of which 1,147 were owned and 191 were leased, and 30,103 railcars, of which 8,783 were owned and 21,320 were leased. A breakdown of the types of railcars owned and leased by us as of December 31, 2018 is set forth in the table below:

	Owned	Leased	Total
Railcars by Car Type:			
Box	1,186	9,078	10,264
Covered hoppers	2,710	4,324	7,034
Flats	1,863	2,705	4,568
Gondolas	608	3,404	4,012
Open top hoppers	2,182	1,365	3,547
Tank cars	14	29	43
Vehicle flats	44	406	450
Maintenance of way	163	9	172
Crew cars	13	—	13
	8,783	21,320	30,103

ITEM 3. Legal Proceedings.

From time to time, we are a defendant in certain lawsuits resulting from our operations in the ordinary course, as the nature of our business exposes us to the potential for various claims and litigation, including those related to property damage, personal injury, freight loss, labor and employment, environmental and other matters. We maintain insurance policies to mitigate the financial risk associated with such claims. However, any material changes to pending litigation or a catastrophic rail accident or series of accidents involving material freight loss or property damage, personal injuries or environmental liability or other claims or disputes that are not covered by insurance could have a material adverse effect on our results of operations, financial condition and liquidity. As described in Note 2, Significant Accounting Policies, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report, we maintain insurance policies to mitigate the financial risk associated with many of these claims.

In November 2014, we received a notice from the United States Environmental Protection Agency (EPA) requesting information under the Clean Water Act related to the discharge of crude oil as a result of a derailment of an Alabama & Gulf Coast Railway LLC (AGR) freight train in November 2013 in the vicinity of Aliceville, Alabama. In May 2018, the EPA notified the AGR of a maximum civil payment penalty of $14.1 million, based on the amount of oil allegedly discharged and other relevant factors considered under the applicable regulation. Although the cleanup associated with this derailments is substantially complete, the civil penalty associated with the contamination is subject to further discussion and potential litigation.

Management believes there are adequate provisions in the financial statements for any probable liabilities that may result from disposition of the pending lawsuits and the aforementioned EPA matter. Based upon currently available information, we do not believe it is reasonably possible that any such lawsuit or matter would be material to our results of operations or have a material adverse effect on our financial position or liquidity.

ITEM 4. Mine Safety Disclosures.

Not applicable.

PART II

ITEM 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information

Our Class A Common Stock publicly trades on the NYSE under the trading symbol "GWR."

Number of Holders

On February 22, 2019, there were 120 Class A Common Stock record holders and 11 Class B Common Stock record holders.

Dividends

We did not pay cash dividends to our Class A or Class B common stockholders for the years ended December 31, 2018 and 2017. We do not intend to pay cash dividends to our common stockholders for the foreseeable future and intend to retain earnings, if any, for future operation and expansion of our business. Any determination to pay dividends to our common stockholders in the future will be at the discretion of our Board of Directors and subject to applicable law and any restrictions contained in our Credit Agreement. In October 2018, our Board of Directors authorized a new $500 million repurchase plan of Class A Common Stock, subject to certain limitations under our Credit Agreement. As of December 31, 2018, the remaining amount authorized for repurchase under the share repurchase plan was $339.8 million.

For more information on contractual restrictions on our ability to pay dividends, see our Class A Common Stock in Note 8, Long-Term Debt, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Securities Authorized for Issuance Under Equity Compensation Plans

See "Part III Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" for information about securities authorized for issuance under our equity compensation plans.

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

2018	(a) Total Number of Shares (or Units) Purchased (1)	(b) Average Price Paid per Share (or Unit) (2)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number of Shares (or Units) (or Approximate Dollar Value) that May Yet Be Purchased Under the Plans or Programs (3)
October 1 to October 31	350,010	$ 84.00	350,010	$111,706
November 1 to November 30	717,373	$ 79.90	717,343	$426,879,283
December 1 to December 31	1,362,469	$ 75.52	1,362,469	$339,795,994
Total	2,429,852	$ 78.03	2,429,822	

(1) Of the 2,429,852 shares acquired in the three months ended December 31, 2018, 30 represent Class A Common Stock acquired by us from our employees who surrendered shares in lieu of cash to either fund their exercise of stock options or to pay taxes on stock-based awards made under our Third Amended and Restated 2004 Omnibus Incentive Plan.

(2) Average price paid per share included costs associated with the repurchases.

(3) In September 2015, in conjunction with Amendment No. 1 to the Credit Agreement, the Board of Directors (the Board) authorized the repurchase of up to $300 million of our Class A Common Stock and appointed a special committee of the Board to review and approve repurchases proposed by management, which authorization was reaffirmed by the Board on March 4, 2018. We began purchasing shares under this plan during 2018 and completed the $300 million share repurchase program in October 2018. In November 2018, the Board authorized the repurchase of an additional $500 million of our Class A Common Stock. During the three months ended December 31, 2018, we repurchased 2,429,822 shares of our Class A Common Stock under the repurchase programs.

ITEM 6. Selected Financial Data.

The following selected financial data was derived from the consolidated statements of operations and consolidated balance sheets of Genesee & Wyoming as of and for the years ended December 31, 2018, 2017, 2016, 2015 and 2014. All of the information should be read in conjunction with the Consolidated Financial Statements and related notes included in "Part IV Item 15. Exhibits, Financial Statement Schedules" and "Part II Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report.

Because of variations in the structure, timing and size of acquisitions and dispositions, our results of operations in any reporting period may not be directly comparable to our results of operations in other reporting periods. For financial information with respect to our principles of consolidation and basis of presentation, see Note 2, Significant Accounting Policies, to our Consolidated Financial Statements, and for a complete description of our most recent acquisitions and dispositions, see Note 3, Changes in Operations, to our Consolidated Financial Statements, in each case, included within "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

	For the Year Ended December 31,				
	2018 (a)	2017 (b)	2016 (c)	2015 (d)	2014 (e)
	(In thousands, except per share amounts)				
STATEMENT OF OPERATIONS DATA:					
Operating revenues	$2,348,550	$2,208,044	$2,001,527	$2,000,401	$1,639,012
Operating expenses	1,925,038	1,816,063	1,715,165	1,616,140	1,217,441
Operating income	423,512	391,981	286,362	384,261	421,571
Interest income	3,256	2,082	1,107	481	1,445
Interest expense	(107,719)	(107,291)	(75,641)	(67,073)	(56,162)
Loss on forward contracts	—	—	—	(18,686)	—
Other (expense)/income, net	(188)	8,747	3,663	1,948	1,259
Income before income taxes	318,861	295,519	215,491	300,931	368,113
(Provision for)/benefit from income taxes	(64,535)	261,259	(74,395)	(75,894)	(107,107)
Net income	254,326	556,778	141,096	225,037	261,006
Less: Net income/(loss) attributable to noncontrolling interest	9,908	7,727	(41)	—	251
Net income attributable to Genesee & Wyoming Inc.	$244,418	$549,051	$141,137	$225,037	$260,755
Basic earnings per common share attributable to Genesee & Wyoming Inc. common stockholders:					
Basic earnings per common share	$4.09	$8.92	$2.46	$3.97	$4.71
Weighted average shares—Basic	59,745	61,579	57,324	56,734	55,305
Diluted earnings per common share attributable to Genesee & Wyoming Inc. common stockholders:					
Diluted earnings per common share	$4.03	$8.79	$2.42	$3.89	$4.58
Weighted average shares—Diluted	60,628	62,464	58,256	57,848	56,972
BALANCE SHEET DATA AT YEAR-END:					
Total assets	$7,868,461	$8,034,897	$7,634,958	$6,703,082	$5,595,753
Long-term debt and capital leases (excluding portion due within one year)	$2,425,235	$2,303,442	$2,306,915	$2,205,785	$1,548,051
Total equity	$3,630,052	$3,896,092	$3,187,121	$2,519,461	$2,357,980

(a) On June 5, 2018, we finalized the sale of our Continental Europe intermodal business, ERS Railways B.V. (ERS), for gross cash proceeds of €11.2 million (or $13.1 million at the exchange rate on June 5, 2018), or €6.8 million (or $7.9 million at the exchange rate on June 5, 2018) net of €4.4 million (or $5.2 million at the exchange rate on June 5, 2018) of cash on hand that transferred to the buyer. The sale resulted in a net loss of $1.4 million recognized in our consolidated statement of operations for the year ended December 31, 2018 within other (expense)/income, net. In addition, we recorded a $31.6 million income tax benefit associated with the U.S. Short Line Tax Credit for fiscal year 2017 that was enacted in February 2018. We also incurred $15.1 million of restructuring and related costs

primarily associated with our U.K. Operations Optimization program, recorded a gain on settlement of $7.3 million from the recovery of pre-petition claims associated with Arrium Limited's voluntary administration (bankruptcy) and recognized $5.1 million of income tax expense associated with prior periods.

(b) On May 3, 2017, our subsidiary, GWI UK Acquisition Company Limited, purchased for cash all of the issued share capital of Pentalver for £97.8 million (or $126.2 million at the exchange rate on May 3, 2017) or £77.5 million (or $100.1 million) net of cash received of £20.2 million (or $26.1 million). On May 31, 2017, we completed the acquisition of all the outstanding shares of Atlantic Western Transportation, Inc., the parent company of Heart of Georgia Railroad, Inc. (HOG), for $5.6 million in cash and contingent consideration valued at $5.7 million. In addition, we recorded a $371.9 million estimated tax benefit associated with the Tax Cuts and Jobs Act of 2017. We also bought out the Freightliner deferred consideration in November 2017 and recorded an $8.9 million gain on the buyout, which was included within other expenses in our consolidated statement of operations. In addition, during 2017 we incurred $11.9 million of corporate development and related costs and $10.2 million of restructuring costs, as well as $4.9 million of impairment and related charges primarily associated with the write down of track assets on idle branch lines in South Australia.

(c) On November 1, 2016, we completed the acquisition of Providence and Worcester Railroad for $126.2 million. On December 1, 2016, one of our Australian subsidiaries completed the acquisition of GRail for A$1.14 billion (or approximately $844.9 million at an exchange rate of $0.74 for one Australian dollar) and concurrently issued a 48.9% equity stake in GWAHLP, which is the holding entity for all of the Company’s Australian businesses, including GRail, to MIRA. On December 13, 2016, we completed a public offering of 4,000,000 shares of Class A Common Stock at $75.00 per share and received net proceeds of $285.8 million after deducting underwriting discounts and commissions and offering expenses. In addition, we incurred impairment and related charges of $57.3 million, including $21.5 million related to our ERS business in Continental Europe, $21.1 million related to the impairment of our rolling stock maintenance facility and associated write-off of accounts receivable resulting from an iron ore customer in Australia entering voluntary administration and $14.7 million charges related to leases of idle excess U.K. coal railcars, as well as $26.6 million of corporate development and related costs.

(d) On January 5, 2015, we completed the acquisition of Pinsly Arkansas for $41.3 million in cash. On March 25, 2015, we acquired all of the outstanding share capital of RailInvest Holding Company Limited, the parent company of London-based Freightliner, for total consideration of £516.3 million (or $769.1 million at the exchange rate on March 25, 2015). In addition, we incurred $15.3 million of acquisition/integration costs primarily associated with Freightliner and recorded a loss of $18.9 million on the settlement of foreign currency forward purchase contracts during 2015, which were entered into in contemplation of the Freightliner acquisition.

(e) On May 30, 2014, our new subsidiary, Rapid City, Pierre & Eastern Railroad, Inc. (RCP&E), purchased the assets of the western end of CP's DM&E rail line for a cash purchase price of $218.6 million, including the purchase of materials and supplies, railcars, equipment and vehicles.

ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion should be read in conjunction with the Consolidated Financial Statements and related notes set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report. Our consolidated financial statements were prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP).

When comparing our results of operations from one reporting period to another, it is important to consider that we have historically experienced fluctuations in revenues and expenses due to acquisitions, changing economic conditions, commodity prices, competitive forces, changes in foreign currency exchange rates, rail network issues and congestion, the ability to attract and retain skilled workers, one-time freight moves, fuel price fluctuations, customer plant expansions and shutdowns, sales of property and equipment, derailments and weather-related conditions, such as hurricanes, cyclones, tornadoes, high winds, droughts, heavy snowfall, unseasonably hot or cold weather, freezing and flooding, among other factors. In periods when these events occur, our results of operations are not easily comparable from one period to another. Finally, certain of our railroads have commodity shipments that are sensitive to general economic conditions, global commodity prices and foreign exchange rates, such as steel products, iron ore, paper products, lumber and forest products and agricultural products, as well as product specific market conditions, such as the availability of lower priced alternative sources of power generation (coal) and energy commodity price differentials (crude oil and natural gas liquids) or congestion at ports (intermodal). Other shipments are relatively less affected by economic conditions and are more closely affected by other factors, such as winter weather (salt) and seasonal rainfall (agricultural products). As a result of these and other factors, our results of operations in any reporting period may not be directly comparable to our results of operations in other reporting periods.

When we discuss foreign exchange impact, we are referring to the change in our results due to the change in foreign currency exchange rates. We calculate foreign exchange impact by comparing the prior period results translated from local currency to United States dollars using current period exchange rates to the prior period results in United States dollars as reported. Constant currency, which is a non-GAAP measure, reflects the prior period results translated at the current period exchange rates. When we discuss results from existing operations or same railroad operations, we are referring to the change in our results, period-over-period, associated with operations that we managed in both periods (i.e., excluding the impact of acquisitions and divestitures).

Outlook for 2019

Financial Expectations

We expect consolidated operating revenues to decrease approximately 1% in 2019, primarily due to the June 2018 sale of our Continental European intermodal business, ERS Railways B.V. (ERS), the return of two leased railroads in Canada in Q4 2018, as well as a stronger United States dollar, which impacts the translation of revenues and expenses from our foreign operations. On a same railroad basis and adjusting for foreign currency, we expect our consolidated operating revenues to increase approximately 4%. Consolidated operating income is also expected to grow, primarily due to same railroad growth.

In North America, we expect operating revenues to increase approximately 2%, or 4% on a same railroad basis, excluding the impact of foreign currency, with carload growth across most industrial and consumer commodity categories and positive freight pricing. We expect our North American operating income to grow due to incremental margins on higher revenues as well as various efficiency initiatives.

In Australia, we expect operating revenues to decrease 2% in United States dollars but increase 4% in Australian dollars primarily due to higher freight revenues. Australian volumes are expected to increase approximately 10%, primarily due to higher coal traffic, partially offset by lower agricultural products volumes. We expect our Australia operating income to be flat in United States dollars, but to increase in Australian dollars.

Finally, in our U.K./European segment, we expect operating revenues to decrease 4% in United States dollars, primarily due to our divested ERS operations. On a same railroad basis, excluding the impact of foreign currency, U.K./European operating revenues are expected to increase 6%, primarily due to higher intermodal revenues, new aggregate contracts and higher U.K. infrastructure services revenue, partially offset by a decline in U.K. coal traffic. U.K./European operating income is expected to increase. On a same railroad basis, excluding the impact of foreign currency, U.K./European operating income is expected to increase approximately 20%. In addition to the revenue growth, our U.K./European operating income is expected to benefit from the ongoing restructuring activities.

We expect our consolidated annual effective income tax rate to be approximately 27%.

Capital Plan

We expect to make capital investments totaling $280 million in 2019. Of this total, $215 million is planned for ongoing railroad track and equipment capital and $30 million is planned for matching capital spending associated with government grant funded projects in the United States. We expect to spend an additional $35 million on new business investments, which include track projects, equipment purchases and investments in new facilities. Our capital plan excludes acquisitions and new business development projects that are identified during the year. Our new business investments of $35 million include $27 million for our Australian Operations, in which we own a 51.1% controlling interest.

Corporate and Business Development

We continue to evaluate a number of potential projects located in all of the geographic markets in which we currently operate and elsewhere around the world.

Overview

We own or lease 120 freight railroads worldwide that are organized in nine operating regions with approximately 8,000 employees and 3,000 customers. The financial results of our nine operating regions are reported in the following three distinct segments:

- Our North American Operations segment includes seven regions that serve 41 U.S. states and four Canadian provinces and includes 114 short line and regional freight railroads with more than 13,000 track-miles.
- Our Australian Operations segment serves New South Wales, the Northern Territory and South Australia and operates the 1,400-mile Tarcoola-to-Darwin rail line. Since December 1, 2016, the Australia Region is 51.1% owned by G&W and 48.9% owned by a consortium of funds and clients managed by Macquarie Infrastructure and Real Assets (MIRA).
- Our U.K./European Operations segment is led by Freightliner Group Limited (Freightliner), the United Kingdom's (U.K.) largest rail maritime intermodal operator and second-largest freight rail provider, as well as regional rail services in Continental Europe.

Our subsidiaries and joint ventures also provide rail service at more than 40 major ports, rail-ferry service between the United States Southeast and Mexico, transload services, contract coal loading, and industrial railcar switching and repair. As more fully described in Note 18, Segment and Geographic Area Information, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report, the results of operations of the foreign entities are maintained in the respective local currency and then translated into United States dollars at the applicable exchange rates for inclusion in the consolidated financial statements. As a result, any appreciation or depreciation of these currencies against the United States dollar will impact our results of operations.

Consolidated Annual Results

Our operating revenues increased $140.5 million, or 6.4%, to $2,348.6 million for the year ended December 31, 2018, compared with $2,208.0 million for the year ended December 31, 2017. Operating income for the year ended December 31, 2018 was $423.5 million, compared with $392.0 million for the year ended December 31, 2017. Our operating ratio, defined as operating expenses divided by operating revenues, was 82.0% for the year ended December 31, 2018, compared with 82.2% for the year ended December 31, 2017.

Our net income attributable to G&W for the year ended December 31, 2018 was $244.4 million, compared with net income of $549.1 million for the year ended December 31, 2017. Our diluted earnings per share (EPS) for the year ended December 31, 2018 were $4.03 with 60.6 million weighted average shares outstanding, compared with diluted EPS of $8.79 with 62.5 million weighted average shares outstanding for the year ended December 31, 2017. Our provision for income taxes for the year ended December 31, 2018 was $64.5 million, while our benefit from income taxes for the year ended December 31, 2017 was $261.3 million. Our provision for income taxes for the year ended December 31, 2018 included a $31.6 million benefit from the retroactive extension of the United States Short Line Tax Credit for fiscal year 2017, which was enacted in February 2018. The benefit from income taxes for the year ended December 31, 2017 included an income tax benefit of approximately $394 million resulting from reducing the value of our net deferred tax liabilities from a 35% United States federal income tax rate to the newly enacted rate of 21%, partially offset by an estimated transitional (toll) tax of approximately $22 million, both associated with the TCJA signed into law in December 2017. For additional information regarding our provision for/benefit from income taxes, see Note 13, Income Taxes, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits,

Financial Statement Schedules" of this Annual Report.

Our results for the year ended December 31, 2018 and 2017 included certain items affecting comparability between the periods that are set forth below (dollars in millions, except per share amounts):

	Income/(Loss) Before Taxes Impact	Net Income/(Loss) Attributable to G&W Impact	Diluted Earnings/(Loss) Per Common Share Impact
Year Ended December 31, 2018			
Corporate development and related costs	$ (0.8)	$ (0.6)	$ (0.01)
Restructuring and related costs	$ (15.1)	$ (12.2)	$ (0.20)
Credit facility refinancing-related costs	$ (2.7)	$ (2.0)	$ (0.03)
Gain on settlement	$ 7.3	$ 2.6	$ 0.04
Loss on sale of business	$ (1.4)	$ (1.4)	$ (0.02)
Canadian railroad lease return costs	$ (2.1)	$ (1.5)	$ (0.02)
Gain on sale of investment	$ 1.4	$ 1.0	$ 0.02
2017 Short Line Tax Credit	$ —	$ 31.6	$ 0.52
Prior period tax adjustment	$ —	$ (5.1)	$ (0.08)
Impact of the Tax Cuts and Jobs Act of 2017	$ —	$ (1.6)	$ (0.03)
Year Ended December 31, 2017			
Corporate development and related costs	$ (11.9)	$ (8.1)	$ (0.13)
Restructuring costs	$ (10.2)	$ (9.0)	$ (0.14)
Australia impairment and related costs	$ (4.9)	$ (1.8)	$ (0.03)
Buyout of Freightliner deferred consideration agreements	$ 8.9	$ 8.9	$ 0.14
Gain on sale of investment	$ 1.6	$ 1.0	$ 0.02
U.K. coal restructuring and related charges	$ 1.1	$ 0.9	$ 0.01
Impact of TCJA enactment	$ —	$ 371.9	$ 5.96
Recognition of unrecognized tax benefits	$ —	$ 3.3	$ 0.05

During the year ended December 31, 2018, we generated $553.1 million in cash flows from operating activities. During the same period, we purchased $284.1 million of property and equipment, including $44.0 million for new business investments, partially offset by $20.5 million in cash received from government grants and other outside parties for capital spending, $9.5 million in cash proceeds from the sale of property and equipment, $7.9 million in proceeds from the sale of a business and $3.0 million in insurance proceeds received for the replacement of assets. Our unused borrowing capacity as of December 31, 2018 was $458.3 million.

Annual Results by Segment

North American Operations

Operating revenues from our North American Operations increased $84.6 million, or 6.6%, to $1,358.9 million for the year ended December 31, 2018, compared with $1,274.3 million for the year ended December 31, 2017. Excluding $1.8 million of revenues from new operations and a $0.1 million increase from the impact of foreign currency appreciation, our North American Operations same railroad revenues increased $82.7 million, or 6.5%.

Total traffic from our North American Operations increased 97,791 carloads, or 6.1%, to 1,700,973 carloads for the year ended December 31, 2018, compared with the year ended December 31, 2017. The increase consisted of 94,978 carloads, or 5.9%, from existing operations and 2,813 carloads from new operations. The increase in traffic from existing operations was principally due to increases of 31,073 carloads of coal and coke traffic, 21,229 carloads of metals traffic, 10,752 carloads of other commodity traffic, 8,536 carloads of pulp and paper traffic, 7,523 carloads of petroleum products traffic, 7,028 carloads of minerals and stone traffic, 6,302 carloads of intermodal traffic and 5,542 carloads of waste traffic, partially offset by a decrease of 3,096 carloads of autos and auto parts traffic. All remaining traffic increased by a net 89 carloads.

Operating income from our North American Operations was $343.1 million for the year ended December 31, 2018, compared with $304.3 million for the year ended December 31, 2017. Operating income for the year ended December 31, 2018 included $2.1 million of lease return costs associated with two railroad leases in the Canadian region that expired in the fourth quarter of 2018, $0.7 million of corporate development and related costs and $0.4 million of credit facility refinancing-related costs. Operating income for the year ended December 31, 2017 included corporate development and related costs of $8.2 million associated with the integration of Providence and Worcester Railroad and other corporate development projects. The operating ratio for our North American Operations was 74.8% for the year ended December 31, 2018, compared with 76.1% for the year ended December 31, 2017.

Australian Operations

Operating revenues from our Australian Operations decreased $5.8 million, or 1.9%, to $301.7 million for the year ended December 31, 2018, compared with $307.5 million for the year ended December 31, 2017. Excluding a $7.7 million decrease from the impact of foreign currency depreciation, our Australian Operations operating revenues increased by $1.9 million, or 0.6%.

Total traffic from our Australian Operations increased 24,770 carloads, or 4.5%, to 576,925 carloads for the year ended December 31, 2018, compared with the year ended December 31, 2017. The traffic increase was principally due to increases of 33,873 carloads of coal and coke traffic and 14,304 carloads of minerals and stone traffic, partially offset by decreases of 14,561 carloads of agricultural products traffic, 5,721 carloads of metallic ores traffic and 3,132 carloads of intermodal traffic. All remaining traffic increased by seven carloads.

Operating income from our Australian Operations was $80.3 million for the year ended December 31, 2018, compared with $77.3 million for the year ended December 31, 2017. Operating income for the year ended December 31, 2018 included a $7.3 million gain on settlement related to Arrium Limited's (Arrium) voluntary administration. For the year ended December 31, 2017, our Australian Operations recorded charges of $4.9 million related to the impairment of track assets on idle branch lines in Southern Australia. The operating ratio for our Australian Operations was 73.4% for the year ended December 31, 2018, compared with 74.9% for the year ended December 31, 2017.

U.K./European Operations

Operating revenues from our U.K./European Operations increased $61.8 million, or 9.9%, to $688.0 million for the year ended December 31, 2018, compared with $626.2 million for the year ended December 31, 2017. Excluding $46.7 million of revenues from our new operations and a $19.3 million increase from the impact of foreign currency appreciation, partially offset by a $36.0 million decrease from the divested ERS operations, our U.K./European Operations same railroad revenues increased $31.7 million, or 5.4%.

Total traffic from our U.K./European Operations decreased 96,926 carloads, or 8.9%, to 995,623 carloads for the year ended December 31, 2018, compared with the year ended December 31, 2017. Excluding traffic from our divested ERS operations, existing operations traffic decreased 24,807 carloads, or 2.6%, to 944,674 carloads. The decrease in traffic from existing operations was principally due to a decrease of 37,419 carloads of intermodal traffic, partially offset by an increase of 13,867 carloads of minerals and stone traffic. All remaining traffic decreased by a net 1,255 carloads.

Operating income from our U.K./European Operations was $0.1 million for the year ended December 31, 2018, compared with operating income of $10.5 million for the year ended December 31, 2017. Operating income for the year ended December 31, 2018 included $15.0 million of restructuring and related costs. Operating income for the year ended December 31, 2017 included $9.4 million of restructuring costs and $4.0 million of corporate development and related costs, partially offset by a gain on the buyout of the Freightliner deferred consideration of $8.9 million and a $1.1 million reduction to expense associated with a prior year accrual established for the restructuring of the U.K. coal business.

Changes in Operations

North American Operations

Heart of Georgia Railroad, Inc.: On May 31, 2017, we completed the acquisition of all the outstanding shares of Atlantic Western Transportation, Inc., parent company of Heart of Georgia Railroad, Inc. (HOG), for $5.6 million in cash and contingent consideration valued at $5.7 million. The contingent consideration is payable to the sellers upon satisfaction of certain conditions, which we expect to be paid in 2021. The results of operations from HOG have been included in our consolidated statement of operations within our North American Operations since the acquisition date.

For additional information regarding the acquisition of HOG, see Note 3, Changes in Operations, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Providence and Worcester Railroad Company: On November 1, 2016, we completed the acquisition of 100% of the outstanding common stock of Providence and Worcester Railroad for $25.00 per share, or $126.2 million. We funded the acquisition with borrowings under our Second Amended and Restated Senior Secured Syndicated Credit Facility Agreement (the Prior Credit Agreement). The results of operations from Providence and Worcester Railroad have been included in our consolidated statements of operations within our North American Operations since the acquisition date. We incurred $3.1 million of integration costs associated with Providence and Worcester Railroad during the year ended December 31, 2017, of which $2.7 million was included within labor and benefits expense primarily for severance costs and $0.4 million was included within other expenses in our consolidated statement of operations.

Australian Operations

Glencore Rail (NSW) Pty Limited: On December 1, 2016, our subsidiary completed the acquisition of GRail for A$1.14 billion (or approximately $844.9 million at an exchange rate of $0.74 for one Australian dollar) and concurrently issued a 48.9% equity stake in GWAHLP (collectively, the Australia Partnership), which is the holding entity for all of our Australian businesses, including GRail, to MIRA, a large infrastructure investment firm. Through wholly-owned subsidiaries, we retained a 51.1% ownership in GWAHLP. As we maintain control of our Australian Operations, we continue to consolidate 100% of our Australian Operations in our financial statements and report a noncontrolling interest for MIRA’s 48.9% equity ownership.

We and MIRA contributed a combined A$1.3 billion in the form of cash, partner loans and contributed equity, and our subsidiary, GWI Acquisitions Pty Ltd (GWIA), entered into a five-year A$690.0 million senior secured term loan facility that is non-recourse to us and to MIRA. The proceeds were used to acquire GRail for A$1.14 billion, repay Genesee & Wyoming Australia’s (GWA) existing A$250.0 million term loan (under our Prior Credit Agreement) and pay A$19.8 million in debt issuance costs and A$13.2 million of acquisition-related costs (collectively, the GRail Transactions).

The results from operations from GRail have been included in our consolidated statements of operations within our Australian Operations segment since the acquisition date. For additional information regarding the acquisition of GRail, see Note 3, Changes in Operations, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Arrium Limited: On April 7, 2016, GWA's customer, Arrium, announced it had entered into voluntary administration. As a result, during the first quarter of 2016, we recorded a $13.0 million non-cash charge related to the impairment of GWA's idle rolling-stock maintenance facility and an allowance for doubtful accounts charge of $8.1 million. Also as a result of the voluntary administration, all payments to GWA associated with the rail haulage agreement for Arrium's Southern Iron mine ceased.

On August 31, 2017, Arrium was sold to GFG Alliance. The steel making business was rebranded as Liberty OneSteel and the mining business was rebranded as SIMEC Mining (SIMEC). Although the Southern Iron mine is still mothballed, GWA continues to provide services and receive payments under the rail haulage agreement for SIMEC's Middleback Range operations. Pursuant to that rail haulage agreement, GWA serves several iron ore mines in the Middleback Range and the Whyalla steelworks operations.

In December 2017, GWA recovered $0.9 million of cash in relation to our previous agreements with Arrium. During the year ended December 31, 2018, GWA recorded $7.3 million of gains on settlement from additional cash recoveries of pre-petition claims associated with Arrium, which were recognized as offsets to other expenses, net in our consolidated statement of operations.

U.K./European Operations

U.K. Operations Optimization: In 2018, we reorganized our U.K. business into three service platforms: Rail (Intermodal and Heavy Haul), Road (former Freightliner and Pentalver road operations) and Terminals (former Freightliner and Pentalver terminals), with a single combined commercial organization responsible for selling all three services. We also announced a program to restructure and further optimize our operations in the U.K. that began in May 2018 and is intended to be completed by 2020. The program includes the rationalization of the locomotive and railcar fleet, management restructuring (following the U.K. consultative process), and technology investments to upgrade systems to enhance productivity and service quality. Of the $52 million estimated total restructuring and related charges previously disclosed, approximately $20 million is now expected to be unnecessary due to contracted new business. Restructuring and related costs associated with the optimization are expected to be approximately $32 million. During the year ended December 31, 2018, we incurred $15.0 million of restructuring and related costs associated with the optimization. For additional information regarding the optimization of our U.K. operations, see Note 3, Changes in Operations, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Pentalver Transport Limited: On May 3, 2017, our subsidiary, GWI UK Acquisition Company Limited, purchased for cash all of the issued share capital of Pentalver from a subsidiary of APM Terminals (a subsidiary of A P Møller-Maersk A/S (Maersk)) for £97.8 million (or $126.2 million at the exchange rate on May 3, 2017) or £77.5 million (or $100.1 million at the exchange rate on May 3, 2017) net of cash received of £20.2 million (or $26.1 million at the exchange rate on May 3, 2017). We funded the acquisition with borrowings under our Prior Credit Agreement.

The results of operations from Pentalver have been included in our consolidated statement of operations within our U.K./European Operations segment since the acquisition date. We incurred $3.9 million of acquisition and integration costs related to Pentalver during the year ended December 31, 2017, of which $3.8 million was included within other expenses and $0.1 million was included in labor and benefits expense in our consolidated statement of operations. For additional information regarding the acquisition of Pentalver, see Note 3, Changes in Operations, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Continental Europe Intermodal Business: The performance of ERS, our Continental Europe intermodal business, reached unsustainable levels during 2016 and a restructuring plan was initiated. As a result of the ERS restructuring plan, we recorded impairment and related charges of $21.5 million in December 2016. These charges primarily included $14.5 million for an impairment of goodwill and $4.1 million for an impairment of a customer-related intangible asset, which were both recorded to net (gain)/loss on sale and impairment of assets within operating expenses, which represented the entire carrying value of these assets.

In 2017, we ceased all "open" train services from the port of Rotterdam and closed the ERS offices in Rotterdam and Frankfurt as well as the ERS customer services function in Warsaw. For the year ended December 31, 2017, we recorded $5.7 million of restructuring costs related to ERS, primarily for severance costs and costs associated with surplus locomotive and railcar leases.

On June 5, 2018, we finalized the sale of ERS for gross cash proceeds of €11.2 million (or $13.1 million at the exchange rate on June 5, 2018) or €6.8 million (or $7.9 million at the exchange rate on June 5, 2018) net of €4.4 million (or $5.2 million at the exchange rate on June 5, 2018) of cash on hand that transferred to the buyer. The sale resulted in a net loss of $1.4 million recognized in our consolidated statement of operations within other (loss)/income, net during the year ended December 31, 2018.

Restructuring of U.K. Coal Business: During 2016, due to a drastic decline in coal shipments, we implemented a restructuring of our U.K. coal business. The U.K. coal business, which we acquired as part of the Freightliner acquisition in 2015, was a relatively low-margin business, and we originally expected to cease coal shipments by 2022. We incurred charges related to the U.K. coal restructuring program of $14.7 million during the year ended December 31, 2016. These charges included $10.5 million associated with leased railcars that exceed our expected ongoing needs and were permanently taken out of service, which was recorded to equipment rents within operating expenses, as well as $4.2 million of severance and related costs associated with restructuring our workforce. During the year ended December 31, 2017, we recorded a reduction to equipment rents within operating expenses of $1.1

million associated with an adjustment to the liability recorded in 2016 for the leased railcars.

Year Ended December 31, 2018 Compared with Year Ended December 31, 2017

Consolidated Operating Results

Operating Revenues

The following table reflects the calculation of our total ongoing operations by subtracting the revenues and carloads from the divested ERS operations from our total operations for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018			2017			Increase in Total Operations		Currency Impact on 2017 Total Operations*
	Total Operations	Divested Operations	Total Ongoing Operations	Total Operations	Divested Operations	Total Ongoing Operations	Amount	%	
Freight revenues	$1,642,465	$17,086	$1,625,379	$1,553,875	$41,588	$1,512,287	$88,590	5.7 %	$6,179
Freight-related revenues	571,595	7,006	564,589	533,651	15,073	518,578	37,944	7.1 %	5,038
All other revenues	134,490	21	134,469	120,518	29	120,489	13,972	11.6%	435
Total operating revenues	$2,348,550	$24,113	$2,324,437	$2,208,044	$56,690	$2,151,354	$140,506	6.4 %	$11,652
Carloads	3,273,521	50,949	3,222,572	3,247,886	123,068	3,124,818	25,635	0.8 %	

* Currency impact was calculated by comparing the 2017 results translated from local currency to United States dollars using 2018 exchange rates to the 2017 results in United States dollars as reported.

The following table sets forth our total ongoing operating revenues and carloads by new operations and existing operations for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018			2017	Increase/(Decrease) in Existing/Ongoing Operations		Currency Impact on 2017 Total Ongoing Operations
	Total Ongoing Operations	New Operations	Existing Operations	Total Ongoing Operations	Amount	%	
Freight revenues	$1,625,379	$1,580	$1,623,799	$1,512,287	$111,512	7.4 %	$3,822
Freight-related revenues	564,589	32,532	532,057	518,578	13,479	2.6 %	4,001
All other revenues	134,469	14,440	120,029	120,489	(460)	(0.4)%	433
Total operating revenues	$2,324,437	$48,552	$2,275,885	$2,151,354	$124,531	5.8 %	$8,256
Carloads	3,222,572	2,813	3,219,759	3,124,818	94,941	3.0 %	

* Currency impact was calculated by comparing the 2017 results translated from local currency to United States dollars using 2018 exchange rates to the 2017 results in United States dollars as reported.

Operating Expenses

Total operating expenses for the year ended December 31, 2018 increased $109.0 million, or 6.0%, to $1,925.0 million, compared with $1,816.1 million for the year ended December 31, 2017. The increase consisted of $99.4 million from existing operations and $46.6 million from new operations, partially offset by a $37.0 million decrease from our divested ERS operations. The increase from existing operations included an $11.3 million increase from the net appreciation of foreign currencies relative to the United States dollar, as well as increases of $35.8 million in diesel fuel used in train operations, $33.8 million in labor and benefits expense, $11.3 million in depreciation and amortization expense, $7.9 million in materials expense, $4.9 million in restructuring and related costs, $3.5 million in equipment rents expense and $2.1 million in electricity used in train operations. These increases were partially offset by decreases of $7.0 million in net gain on sale and impairment of assets and $4.2 million in purchased services expense. For additional explanations regarding the changes in our total operating expenses, see "Operating Results by Segment."

The following table sets forth our total operating expenses for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018		2017					
	Amount	% of Operating Revenues	Amount	% of Operating Revenues	Increase/(Decrease)	Currency Impact	2017 Constant Currency*	Increase/ (Decrease) Constant Currency*
Labor and benefits	$709,735	30.2 %	$666,765	30.1 %	$ 42,970	$4,584	$671,349	$ 38,386
Equipment rents	138,207	5.9 %	132,903	6.0 %	5,304	2,978	135,881	2,326
Purchased services	234,903	10.0 %	244,119	11.1 %	(9,216)	3,903	248,022	(13,119)
Depreciation and amortization	263,216	11.2 %	250,457	11.3 %	12,759	(453)	250,004	13,212
Diesel fuel used in train operations	184,437	7.9 %	147,427	6.7 %	37,010	1,121	148,548	35,889
Electricity used in train operations	9,603	0.4 %	7,521	0.3 %	2,082	534	8,055	1,548
Casualties and insurance	45,534	2.0 %	46,993	2.1 %	(1,459)	28	47,021	(1,487)
Materials	129,081	5.5 %	107,519	4.9 %	21,562	280	107,799	21,282
Trackage rights	87,743	3.7 %	87,490	4.0 %	253	1,258	88,748	(1,005)
Net (gain)/loss on sale and impairment of assets	(3,246)	(0.1)%	4,254	0.2 %	(7,500)	(369)	3,885	(7,131)
Restructuring and related costs	15,088	0.6 %	10,160	0.5 %	4,928	576	10,736	4,352
Other expenses	110,737	4.7 %	110,455	5.0 %	282	1,286	111,741	(1,004)
Total operating expenses	$1,925,038	82.0 %	$1,816,063	82.2 %	$ 108,975	$15,726	$1,831,789	$ 93,249

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

Operating Income/Operating Ratio

Operating income was $423.5 million for the year ended December 31, 2018, compared with $392.0 million for the year ended December 31, 2017. Operating income for the year ended December 31, 2018 included restructuring and related costs of $15.1 million, primarily driven by our optimization activities in the U.K., lease return costs of $2.1 million associated with two railroad leases in Canada that expired in the fourth quarter of 2018, and corporate development and related costs of $0.8 million, partially offset by a $7.3 million gain on settlement related to Arrium's voluntary administration. Operating income for the year ended December 31, 2017 included corporate development and related costs of $11.9 million, restructuring costs of $10.2 million and impairment and related charges of $4.9 million associated with our Australian Operations, partially offset by an $8.9 million reduction to expense as a result of the buyout of the Freightliner deferred consideration and a $1.1 million reduction to expense associated with a prior year accrual established for the restructuring of our U.K. coal business. Our operating ratio was 82.0% for the year ended December 31, 2018, compared with 82.2% for the year ended December 31, 2017.

Interest Expense

Interest expense was $107.7 million for the year ended December 31, 2018, compared with $107.3 million for the year ended December 31, 2017.

Provision For/Benefit From Income Taxes

Our provision for income taxes for the year ended December 31, 2018 was $64.5 million, while our benefit from income taxes for the year ended December 31, 2017 was $261.3 million. Our provision for income taxes for the year ended December 31, 2018 included a $31.6 million benefit from the retroactive extension of the United States Short Line Tax Credit for fiscal year 2017, which was enacted in February 2018. The benefit from income taxes for the year

ended December 31, 2017 included an income tax benefit of approximately $394 million resulting from reducing the value of our net deferred tax liabilities from a 35% United States federal income tax rate to the newly enacted rate of 21%, partially offset by an estimated transitional (toll) tax of approximately $22 million, both associated with the TCJA signed into law in December 2017. For additional information regarding our benefit from/provision for income taxes, see Note 13, Income Taxes, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

The United States Short Line Tax Credit was an income tax track maintenance credit for Class II and Class III railroads to reduce their federal income tax based on qualified railroad track maintenance expenditures (the Short Line Tax Credit). Qualified expenditures included amounts incurred for maintaining track, including roadbed, bridges and related track structures owned or leased by a Class II or Class III railroad. The credit was equal to 50% of the qualified expenditures, subject to an annual limitation of $3,500 multiplied by the number of miles of railroad track owned or leased by the Class II or Class III railroad as of the end of its tax year. The Short Line Tax Credit was initially enacted for a three-year period, 2005 through 2007, and was subsequently extended a series of times with the last extension enacted in February 2018. The February 2018 extension provided a retroactive credit, solely for fiscal year 2017. Legislation is currently pending that seeks to extend the Short Line Tax Credit retroactively for fiscal year 2018 and beyond. For additional information regarding the Short Line Tax Credit, see Note 13, Income Taxes, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Net Income and Earnings Per Common Share Attributable to G&W Common Stockholders

Net income attributable to G&W for the year ended December 31, 2018 was $244.4 million, compared with $549.1 million for the year ended December 31, 2017. Our basic EPS were $4.09 with 59.7 million weighted average shares outstanding for the year ended December 31, 2018, compared with basic EPS of $8.92 with 61.6 million weighted average shares outstanding for the year ended December 31, 2017. Our diluted EPS for the year ended December 31, 2018 were $4.03 with 60.6 million weighted average shares outstanding, compared with diluted EPS of $8.79 with 62.5 million weighted average shares outstanding for the year ended December 31, 2017. Our results for the years ended December 31, 2018 and 2017 included certain items affecting comparability between the periods as previously presented in the "Overview."

Operating Results by Segment

Our various rail operations are organized into nine operating regions. We present our financial information as three reportable segments: North American Operations, Australian Operations and U.K./European Operations. Our seven North American regions are aggregated into one segment as a result of having similar economic and operating characteristics. Each of our segments generates the following three categories of revenues from external customers: freight revenues, freight-related revenues and all other revenues.

Our Australian business underwent a transformational change on December 1, 2016, with the acquisition of Glencore Rail (NSW) Pty Limited (GRail) and the formation of the Australia Partnership, which we control through our 51.1% interest. The GRail acquisition significantly expanded our operations in New South Wales. In conjunction with the GRail acquisition, we issued a 48.9% equity stake in our Australian subsidiary, G&W Australia Holdings LP (GWAHLP), to MIRA. We retained a 51.1% controlling interest in GWAHLP and continue to consolidate 100% of our Australian Operations in our financial statements and report a noncontrolling interest for MIRA’s 48.9% equity ownership. As a result, (1) 100% of the assets and liabilities of our Australian Operations, after the elimination of intercompany balances, were included in our consolidated balance sheets as of December 31, 2018, 2017 and 2016, with MIRA's 48.9% noncontrolling interest reflected in the equity section, (2) our operating revenues and operating income for the year ended December 31, 2018, 2017 and 2016 included 100% of our Australian Operations, while net income attributable to G&W reflected our 51.1% ownership position in our Australian Operations since the formation of the partnership on December 1, 2016 and (3) 100% of the cash flows of our Australian Operations, after the elimination of intercompany items, were included in our consolidated statements of cash flows for the years ended December 31, 2018, 2017 and 2016. Accordingly, any payments between our Australian Operations and our other businesses are eliminated in consolidation, while our cash flows reflect 100% of any cash flows between our Australian Operations and MIRA.

The results of operations of our foreign entities are maintained in the respective local currency (the Australian dollar, the British pound, the Canadian dollar and the Euro) and then translated into United States dollars at the applicable exchange rates for inclusion in our consolidated financial statements. As a result, any appreciation or depreciation of these currencies against the United States dollar can impact our results of operations.

The following tables set forth our North American Operations, Australian Operations and U.K./European Operations for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018 North American Operations	Australian Operations	U.K./European Operations	Total Operations
Operating revenues:				
Freight revenues	$1,037,549	$255,022	$ 349,894	$1,642,465
Freight-related revenues	257,162	41,252	273,181	571,595
All other revenues	64,159	5,404	64,927	134,490
Total operating revenues	$1,358,870	$301,678	$ 688,002	$2,348,550
Operating expenses:				
Labor and benefits	432,777	72,032	204,926	709,735
Equipment rents	54,573	5,205	78,429	138,207
Purchased services	60,126	24,622	150,155	234,903
Depreciation and amortization	165,625	60,766	36,825	263,216
Diesel fuel used in train operations	96,978	31,505	55,954	184,437
Electricity used in train operations	—	—	9,603	9,603
Casualties and insurance	33,078	6,557	5,899	45,534
Materials	52,698	11,274	65,109	129,081
Trackage rights	40,598	8,131	39,014	87,743
Net gain on sale and impairment of assets	(2,772)	(269)	(205)	(3,246)
Restructuring and related costs	53	—	15,035	15,088
Other expenses	82,024	1,578	27,135	110,737
Total operating expenses	1,015,758	221,401	687,879	1,925,038
Operating income	$343,112	$80,277	$ 123	$423,512
Operating ratio	74.8%	73.4%	100.0%	82.0%
Interest expense, net	$40,827	$51,358	$ 12,278	$104,463
Provision for income taxes	$43,531	$8,694	$ 12,310	$64,535
Expenditures for additions to property & equipment, net of grants from outside parties	$182,645	$42,722	$ 38,208	$263,575
Carloads	1,700,973	576,925	995,623	3,273,521

	2017 North American Operations	Australian Operations	U.K./European Operations	Total Operations
Operating revenues:				
Freight revenues	$961,356	$254,653	$ 337,866	$1,553,875
Freight-related revenues	249,623	46,696	237,332	533,651
All other revenues	63,306	6,161	51,051	120,518
Total operating revenues	$1,274,285	$307,510	$ 626,249	$2,208,044
Operating expenses:				
Labor and benefits	416,098	68,935	181,732	666,765
Equipment rents	53,139	5,577	74,187	132,903
Purchased services	59,815	26,269	158,035	244,119
Depreciation and amortization	158,006	61,142	31,309	250,457
Diesel fuel used in train operations	76,852	25,236	45,339	147,427
Electricity used in train operations	—	—	7,521	7,521
Casualties and insurance	37,262	5,502	4,229	46,993
Materials	49,757	10,706	47,056	107,519
Trackage rights	38,637	12,633	36,220	87,490
Net (gain)/loss on sale and impairment of assets	(1,456)	5,797	(87)	4,254
Restructuring costs	467	338	9,355	10,160
Other expenses	81,456	8,124	20,875	110,455
Total operating expenses	970,033	230,259	615,771	1,816,063
Operating income	$304,252	$77,251	$ 10,478	$391,981
Operating ratio	76.1 %	74.9 %	98.3 %	82.2 %
Interest expense, net	$38,547	$54,718	$ 11,944	$105,209
(Benefit from)/provision for income taxes	$(266,063)	$6,110	$ (1,306)	$(261,259)
Expenditures for additions to property & equipment, net of grants from outside parties	$166,685	$16,076	$ 25,462	$208,223
Carloads	1,603,182	552,155	1,092,549	3,247,886

North American Operations

Operating Revenues and Carloads

The following table sets forth our North American Operations operating revenues and carloads by new operations and existing operations for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018			2017	Increase in Total Operations		Increase in Existing Operations		Currency Impact on 2017 Total Operations*
	Total Operations	New Operations	Existing Operations	Total Operations	Amount	%	Amount	%	
Freight revenues	$1,037,549	$ 1,580	$1,035,969	$961,356	$76,193	7.9%	$ 74,613	7.8 %	$ 90
Freight-related revenues	257,162	240	256,922	249,623	7,539	3.0%	7,299	2.9 %	(39)
All other revenues	64,159	10	64,149	63,306	853	1.3%	843	1.3 %	18
Total operating revenues	$1,358,870	$ 1,830	$1,357,040	$1,274,285	$84,585	6.6%	$ 82,755	6.5 %	$ 69
Carloads	1,700,973	2,813	1,698,160	1,603,182	97,791	6.1%	94,978	5.9 %	

* Currency impact was calculated by comparing the 2017 results translated from local currency to United States dollars using 2018 exchange rates to the 2017 results in United States dollars as reported.

58

Freight Revenues

The following table sets forth the changes in our North American Operations freight revenues by commodity group segregated into new operations and existing operations for the year ended December 31, 2018, compared with the year ended December 31, 2017 (dollars in thousands):

Commodity Group	2018	2017	Increase/(Decrease) in Total Operations	New Operations	Currency Impact	2017 Constant Currency*	Increase/(Decrease) in Existing Operations Constant Currency*
Agricultural Products	$122,832	$124,285	$ (1,453)	$ 113	$ 40	$124,325	$ (1,606)
Autos & Auto Parts	21,568	22,901	(1,333)	—	—	22,901	(1,333)
Chemicals & Plastics	151,759	148,252	3,507	362	47	148,299	3,098
Coal & Coke	83,162	75,935	7,227	—	(11)	75,924	7,238
Food & Kindred Products	34,361	33,424	937	—	3	33,427	934
Intermodal	1,665	980	685	—	(1)	979	686
Lumber & Forest Products	91,928	87,200	4,728	1,050	16	87,216	3,662
Metallic Ores	13,940	13,391	549	—	3	13,394	546
Metals	126,579	103,863	22,716	—	28	103,891	22,688
Minerals & Stone	140,310	130,511	9,799	7	(4)	130,507	9,796
Petroleum Products	74,177	68,388	5,789	2	(12)	68,376	5,799
Pulp & Paper	121,600	107,453	14,147	—	(9)	107,444	14,156
Waste	29,049	25,063	3,986	—	(2)	25,061	3,988
Other	24,619	19,710	4,909	46	(8)	19,702	4,871
Total freight revenues	$1,037,549	$961,356	$ 76,193	$ 1,580	$ 90	$961,446	$ 74,523

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following table sets forth our North American Operations freight revenues, carloads and average freight revenues per carload for the years ended December 31, 2018 and 2017 (dollars in thousands, except average freight revenues per carload):

	Freight Revenues				Carloads		Average Freight Revenues Per Carload		
	2018		2017 Constant Currency*						
Commodity Group	Amount	% of Total	Amount	% of Total	2018	2017	2018	2017	2017 Constant Currency*
Agricultural Products	$122,832	11.9 %	$124,325	12.9 %	208,283	209,471	$590	$593	$ 594
Autos & Auto Parts	21,568	2.1 %	22,901	2.4 %	34,150	37,246	632	615	615
Chemicals & Plastics	151,759	14.6 %	148,299	15.4 %	175,911	177,602	863	835	835
Coal & Coke	83,162	8.0 %	75,924	7.9 %	255,351	224,278	326	339	339
Food & Kindred Products	34,361	3.3 %	33,427	3.5 %	60,531	59,307	568	564	564
Intermodal	1,665	0.2 %	979	0.1 %	16,140	9,838	103	100	100
Lumber & Forest Products	91,928	8.9 %	87,216	9.1 %	145,354	140,856	632	619	619
Metallic Ores	13,940	1.3 %	13,394	1.4 %	17,490	17,925	797	747	747
Metals	126,579	12.2 %	103,891	10.8 %	158,117	136,888	801	759	759
Minerals & Stone	140,310	13.5 %	130,507	13.6 %	221,527	214,469	633	609	609
Petroleum Products	74,177	7.1 %	68,376	7.1 %	105,940	98,414	700	695	695
Pulp & Paper	121,600	11.7 %	107,444	11.2 %	170,408	161,872	714	664	664
Waste	29,049	2.8 %	25,061	2.6 %	57,623	52,081	504	481	481
Other	24,619	2.4 %	19,702	2.0 %	74,148	62,935	332	313	313
Total	$1,037,549	100.0%	$961,446	100.0%	1,700,973	1,603,182	$610	$600	$ 600

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

Total traffic from our North American Operations increased 97,791 carloads, or 6.1%, for the year ended December 31, 2018, compared with the year ended December 31, 2017. The increase consisted of 94,978 carloads, or 5.9%, from existing operations and 2,813 carloads from new operations. The increase in traffic from existing operations was principally due to increases of 31,073 carloads of coal and coke traffic, 21,229 carloads of metals traffic, 10,752 carloads of other commodity traffic, 8,536 carloads of pulp and paper traffic, 7,523 carloads of petroleum products traffic, 7,028 carloads of minerals and stone traffic, 6,302 carloads of intermodal traffic and 5,542 carloads of waste traffic, partially offset by a decrease of 3,096 carloads of autos and auto parts traffic. All remaining traffic increased by a net 89 carloads.

Changes in average freight revenues per carload in a commodity group may be impacted by changes in customer rates and fuel surcharges, as well as changes in the mix of customer traffic within a commodity group. Average freight revenues per carload from our North American Operations increased 1.7% to $610 for the year ended December 31, 2018, compared with the year ended December 31, 2017. Average freight revenues per carload from existing operations also increased 1.7% to $610 for the year ended December 31, 2018, compared with the year ended December 31, 2017. The increase in average freight revenues per carload was impacted by higher fuel surcharges, which increased average freight revenues per carload by 2.1%, partially offset by the impact of a change in commodity mix, which decreased average freight revenues per carload 1.1%. Excluding these factors, average freight revenues per carload increased 0.7%.

The following information discusses the significant changes in our North American Operations freight revenues from existing operations by commodity group, excluding the impact of foreign currency.

Autos and auto parts revenues decreased $1.3 million, or 5.8%. Autos and auto parts traffic decreased 3,096 carloads, or 8.3%, which decreased revenues by $2.0 million, while average freight revenues per carload increased 2.8%, which increased revenues by $0.6 million. The decrease in carloads was primarily due to decreased shipments of auto parts in the northeastern and southern United States.

Chemicals and plastics revenues increased $3.1 million, or 2.1%. Chemicals and plastics average freight revenues per carload increased 3.4%, which increased revenues by $4.9 million, while traffic decreased 2,126 carloads, or 1.2%, which decreased revenues by $1.8 million. The decrease in carloads was primarily due to lower sulphuric acid traffic in the western United States and lower ethanol traffic resulting from barge competition in the midwestern United States, partially offset by increased industrial chemical demand in the southern United States.

Coal and coke revenues increased $7.2 million, or 9.5%. Coal and coke traffic increased 31,073 carloads, or 13.9%, which increased revenues by $10.1 million, while average freight revenues per carload decreased 3.8%, which decreased revenues by $2.9 million. The increase in carloads was primarily due to increased demand and new business in the northeastern and midwestern United States, as well as a maintenance outage at a customer facility in 2017. The decrease in average freight revenues per carload was primarily due to a change in the mix of business.

Lumber and forest products revenues increased $3.7 million, or 4.2%. Lumber and forest products average freight revenues per carload increased 2.3%, which increased revenues by $1.9 million, and traffic increased 2,789 carloads, or 2.0%, which increased revenues by $1.8 million. The increase in carloads was primarily due to increased shipments of lumber in the western United States.

Metals revenues increased $22.7 million, or 21.8%. Metals traffic increased 21,229 carloads, or 15.5%, which increased revenues by $17.0 million, and average freight revenues per carload increased 5.5%, which increased revenues by $5.7 million. The increase in carloads was primarily due to increased coil and pig iron shipments in the southern United States, increased scrap steel shipments in the midwestern United States and increased finished steel shipments across North America.

Minerals and stone revenues increased $9.8 million, or 7.5%. Minerals and stone average freight revenues per carload increased 3.9%, which increased revenues by $5.3 million, and traffic increased 7,028 carloads, or 3.3%, which increased revenues by $4.5 million. The increase in carloads was primarily due to increased cement shipments across North America and increased rock salt and frac sand shipments in the northeastern United States.

Petroleum products increased $5.8 million, or 8.5%. Petroleum products traffic increased 7,523 carloads, or 7.6%, which increased revenues by $5.3 million, and average freight revenues per carload increased 0.7%, which increased revenues by $0.5 million. The increase in carloads was primarily due to increased shipments of fuel oil, jet fuel,

natural gas and liquid petroleum in Canada.

Pulp and paper revenues increased $14.2 million, or 13.2%. Pulp and paper average freight revenues per carload increased 7.5%, which increased revenues by $8.1 million, and traffic increased 8,536 carloads, or 5.3%, which increased revenues by $6.1 million. The increase in carloads was primarily due to increased containerboard shipments across North America.

Waste revenues increased $4.0 million, or 15.9%. Waste traffic increased 5,542 carloads, or 10.6%, which increased revenues by $2.8 million, and average freight revenues per carload increased 4.8%, which increased revenues by $1.2 million. The increase in carloads was primarily due to increased shipments to waste disposal sites in the northeastern United States.

Other commodity revenues increased $4.9 million, or 24.7%. Other commodity traffic increased 10,752 carloads, or 17.1%, which increased revenues by $3.6 million, and average freight revenues per carload increased 6.4%, which increased revenues by $1.3 million. The increase in carloads was primarily due to increased empty car traffic in the southern and central United States. The increase in average freight revenues per carload was primarily due to shipments of wind towers in the midwestern United States and Canada.

Freight revenues from all remaining commodities combined increased by a net $0.4 million.

Freight-Related Revenues

Excluding the impact from foreign currency, freight-related revenues from our North American Operations, which includes revenues from railcar switching, track access rights, crewing services, storage and other ancillary revenues related to the movement of freight, increased $7.6 million, or 3.0%, to $257.2 million for the year ended December 31, 2018, compared with $249.6 million for the year ended December 31, 2017. The increase in freight-related revenues was primarily due to increased switching revenues from existing operations primarily related to a new iron ore customer in Canada, stronger intermodal and petroleum products in the southeastern United States.

All Other Revenues

Excluding the impact from foreign currency, all other revenues from our North American Operations, which includes revenues from third-party car and locomotive repairs, property rentals, railroad construction and other ancillary revenues not directly related to the movement of freight, increased $0.8 million, or 1.3%, to $64.2 million for the year ended December 31, 2018, compared with $63.3 million for the year ended December 31, 2017. The increase was primarily from existing operations.

Operating Expenses

Total operating expenses from our North American Operations increased $45.7 million, or 4.7%, to $1,015.8 million for the year ended December 31, 2018, compared with $970.0 million for the year ended December 31, 2017. The increase consisted of $44.2 million from existing operations and $1.5 million from new operations. The increase from existing operations was primarily due to a $20.0 million increase in the cost of diesel fuel used in train operations, a $16.2 million increase in labor and benefits expense, a $7.4 million increase in depreciation and amortization expense, a $2.8 million increase in materials expense and a $1.9 million increase in trackage rights expense, partially offset by a $4.3 million decrease in casualties and insurance expense. In addition, the change from existing operations included a $0.3 million increase due to the impact of foreign currency appreciation.

The following table sets forth operating expenses from our North American Operations for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018		2017					
	Amount	% of Operating Revenues	Amount	% of Operating Revenues	Increase/(Decrease)	Currency Impact	2017 Constant Currency*	Increase/(Decrease) Constant Currency*
Labor and benefits	$432,777	31.9 %	$416,098	32.7 %	$ 16,679	$ 83	$416,181	$ 16,596
Equipment rents	54,573	4.0 %	53,139	4.2 %	1,434	7	53,146	1,427
Purchased services	60,126	4.4 %	59,815	4.7 %	311	1	59,816	310
Depreciation and amortization	165,625	12.2 %	158,006	12.4 %	7,619	35	158,041	7,584
Diesel fuel used in train operations	96,978	7.1 %	76,852	6.0 %	20,126	39	76,891	20,087
Casualties and insurance	33,078	2.4 %	37,262	2.9 %	(4,184)	39	37,301	(4,223)
Materials	52,698	3.9 %	49,757	3.9 %	2,941	21	49,778	2,920
Trackage rights	40,598	3.0 %	38,637	3.0 %	1,961	1	38,638	1,960
Net gain on sale and impairment of assets	(2,772)	(0.2)%	(1,456)	(0.1)%	(1,316)	13	(1,443)	(1,329)
Restructuring and related costs	53	— %	467	— %	(414)	—	467	(414)
Other expenses, net	82,024	6.1 %	81,456	6.4 %	568	11	81,467	557
Total operating expenses	$1,015,758	74.8 %	$970,033	76.1 %	$ 45,725	$ 250	$970,283	$ 45,475

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following information discusses the significant changes in operating expenses from our North American Operations, excluding an increase of $0.3 million due to the impact from foreign currency appreciation.

Labor and benefits expense was $432.8 million for the year ended December 31, 2018, compared with $416.2 million for the year ended December 31, 2017, an increase of $16.6 million, or 4.0%. The increase consisted of $16.2 million from existing operations and $0.4 million from new operations. The increase from existing operations was primarily due to annual wage increases, as well as additional overtime.

Depreciation and amortization expense was $165.6 million for the year ended December 31, 2018, compared with $158.0 million for the year ended December 31, 2017, an increase of $7.6 million, or 4.8%. The increase was primarily attributable to a larger depreciable asset base in 2018 compared with 2017, reflecting capital spending in 2018 and 2017.

The cost of diesel fuel used in train operations was $97.0 million for the year ended December 31, 2018, compared with $76.9 million for the year ended December 31, 2017, an increase of $20.1 million, or 26.1%. The increase was primarily associated with existing operations, which consisted of a $17.1 million increase due to a 22.4% increase in average fuel cost per gallon and a $2.9 million increase due to a 3.1% increase in diesel fuel consumption from existing operations.

Casualties and insurance expense was $33.1 million for the year ended December 31, 2018, compared with $37.3 million for the year ended December 31, 2017, a decrease of $4.2 million, or 11.3%. The decrease was primarily attributable to a $3.0 million gain from insurance recoveries recognized in 2018 as an offset to expense related to a prior year trestle fire.

Materials expense was $52.7 million for the year ended December 31, 2018, compared with $49.8 million for the year ended December 31, 2017, an increase of $2.9 million, or 5.9%. The increase included approximately $1 million of costs associated with the return of two railroad leases in Canada that expired in the fourth quarter of 2018.

Trackage rights expense was $40.6 million for the year ended December 31, 2018, compared with $38.6 million for the year ended December 31, 2017, an increase of $2.0 million, or 5.1%. The increase was primarily attributable to

increased rail traffic and increased traffic at port switching locations.

Operating Income/Operating Ratio

Operating income from our North American Operations was $343.1 million for the year ended December 31, 2018, compared with $304.3 million for the year ended December 31, 2017. Operating income for the year ended December 31, 2018 included $2.1 million of lease return costs associated with two railroad leases in the Canadian region that expired in the fourth quarter of 2018 and $0.7 million of corporate development and related costs. Operating income for the year ended December 31, 2017 included corporate development and related costs of $8.2 million associated with the integration of Providence and Worcester Railroad and other corporate development projects. The operating ratio was 74.8% for the year ended December 31, 2018, compared with 76.1% for the year ended December 31, 2017.

Australian Operations

Operating Revenues and Carloads

As previously disclosed, we own a controlling 51.1% ownership interest in our Australian Operations and, therefore, include 100% of our Australian Operations within our consolidated financial statements with a 48.9% noncontrolling interest recorded to reflect MIRA's ownership. The following table sets forth our Australian Operations operating revenues and carloads for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018	2017	Increase/(Decrease) in Total Operations Amount	%	Currency Impact on 2017 Total Operations*
Freight revenues	$255,022	$254,653	$369	0.1 %	$ (6,369)
Freight-related revenues	41,252	46,696	(5,444)	(11.7)%	(1,146)
All other revenues	5,404	6,161	(757)	(12.3)%	(178)
Total operating revenues	$301,678	$307,510	$(5,832)	(1.9)%	$ (7,693)
Carloads	576,925	552,155	24,770	4.5 %	

* Currency impact was calculated by comparing the 2017 results translated from local currency to United States dollars using 2018 exchange rates to the 2017 results in United States dollars as reported.

Freight Revenues

The following table sets forth the changes in our Australian Operations freight revenues by commodity group for the year ended December 31, 2018, compared with the year ended December 31, 2017 (dollars in thousands):

Commodity Group	2018	2017	Increase/(Decrease) in Total Operations	Currency Impact on Total Operations	2017 Constant Currency*	Increase/(Decrease) in Total Operations Constant Currency*
Agricultural Products	$18,635	$22,562	$ (3,927)	$ (506)	$22,056	$ (3,421)
Coal & Coke	125,599	117,678	7,921	(2,879)	114,799	10,800
Intermodal	68,010	69,433	(1,423)	(1,849)	67,584	426
Metallic Ores	33,808	37,415	(3,607)	(1,015)	36,400	(2,592)
Minerals & Stone	8,273	6,878	1,395	(96)	6,782	1,491
Petroleum Products	697	687	10	(24)	663	34
Total freight revenues	$255,022	$254,653	$ 369	$ (6,369)	$248,284	$ 6,738

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following table sets forth our Australian Operations freight revenues, carloads and average freight revenues per carload for the years ended December 31, 2018 and 2017 (dollars in thousands, except average freight revenues per carload):

	Freight Revenues				Carloads		Average Freight Revenues Per Carload		
	2018		2017 Constant Currency*						
Commodity Group	Amount	% of Total	Amount	% of Total	2018	2017	2018	2017	2017 Constant Currency*
Agricultural Products	$18,635	7.3 %	$22,056	8.9 %	37,348	51,909	$499	$435	$ 425
Coal & Coke	125,599	49.2 %	114,799	46.2 %	393,664	359,791	319	327	319
Intermodal	68,010	26.7 %	67,584	27.2 %	55,716	58,848	1,221	1,180	1,148
Metallic Ores	33,808	13.3 %	36,400	14.7 %	23,737	29,458	1,424	1,270	1,236
Minerals & Stone	8,273	3.2 %	6,782	2.7 %	66,176	51,872	125	133	131
Petroleum Products	697	0.3 %	663	0.3 %	284	277	2,454	2,480	2,394
Total	$255,022	100.0%	$248,284	100.0%	576,925	552,155	$442	$461	$ 450

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

Total traffic from our Australian Operations increased 24,770 carloads, or 4.5%, to 576,925 carloads for the year ended December 31, 2018, compared with the year ended December 31, 2017. The traffic increase was principally due to increases of 33,873 carloads of coal and coke traffic and 14,304 carloads of minerals and stone traffic, partially offset by decreases of 14,561 carloads of agricultural products traffic, 5,721 carloads of metallic ores traffic and 3,132 carloads of intermodal traffic. All remaining traffic increased by seven carloads.

Changes in average freight revenues per carload in a commodity group may be impacted by changes in customer rates and fuel surcharges, as well as changes in the mix of customer traffic within a commodity group. Excluding a 2.3% impact of foreign currency, average freight revenues per carload from our Australian Operations decreased 1.8% to $442 for the year ended December 31, 2018, compared with the year ended December 31, 2017. A change in the mix of commodities decreased average freight revenues per carload by 7.1%, primarily due to decreases in metallic ores traffic and intermodal traffic, while higher fuel surcharges increased average freight revenues per carload by 1.1%. Excluding these factors, average freight revenues per carload increased 4.2%.

The following information discusses the significant changes in our Australian Operations freight revenues by commodity group, excluding the impact of foreign currency.

Agricultural products revenues decreased $3.4 million, or 15.5%. Agricultural products traffic decreased 14,561 carloads, or 28.1%, which decreased revenues by $7.3 million, while average freight revenues per carload increased 17.4%, which increased revenues by $3.8 million. The decrease in carloads was primarily due to a smaller grain harvest in 2018. Because rates for Australian grain traffic have both a fixed and variable component, the decrease in grain traffic resulted in higher average freight revenues per carload. The increase in average freight revenues per carload was also due to longer haul movements in 2018.

Coal and coke revenues increased $10.8 million, or 9.4%, due to a traffic increase of 33,873 carloads. The increase in carloads was primarily due to industrial action at Hunter Valley coal mines in 2017 and increased spot shipments in 2018.

Metallic ores revenues decreased $2.6 million, or 7.1%. Metallic ores traffic decreased 5,721 carloads, or 19.4%, which decreased revenues by $8.1 million, while average freight revenues per carload increased 15.2%, which increased revenues by $5.6 million. The decrease in carloads was primarily due to the shutdown of an iron ore customer's mine in October 2017. The increase in average freight revenues per carload was primarily due to a change in business mix.

Minerals and stone revenues increased $1.5 million, or 22.0%, primarily due to a traffic increase of 14,304 carloads, or 27.6%. The increase in carloads was primarily due to a temporary maintenance outage at a customer port facility in 2017.

Freight revenues from all remaining commodities combined increased by $0.4 million.

Freight-Related Revenues

Excluding a $1.1 million decrease due to the impact of foreign currency depreciation, freight-related revenues from our Australian Operations, which includes revenues from railcar switching, track access rights, crewing services, storage and other ancillary revenues related to the movement of freight, decreased $4.3 million, or 9.4%, to $41.3 million for the year ended December 31, 2018, compared with $45.6 million for the year ended December 31, 2017. The decrease in freight-related revenues was primarily due to decreased agricultural products switching revenues as a result of a smaller harvest in 2018, partially offset by an increase in infrastructure services.

All Other Revenues

Excluding a $0.2 million decrease due to the impact of foreign currency depreciation, all other revenues from our Australian Operations, which includes revenues from third-party railcar and locomotive repairs, property rentals and other ancillary revenues not directly related to the movement of freight, decreased $0.6 million, or 9.7%, to $5.4 million for the year ended December 31, 2018, compared with $6.0 million for the year ended December 31, 2017.

Operating Expenses

Total operating expenses from our Australian Operations for the year ended December 31, 2018 decreased $8.9 million, or 3.8%, to $221.4 million, compared with $230.3 million for the year ended December 31, 2017. The change in total operating expenses included a $5.7 million decrease due to the impact of foreign currency depreciation. Total operating expenses for the year ended December 31, 2018 included a $7.3 million gain on a settlement related to Arrium's voluntary administration that was recognized as an offset to other expenses, net. Total operating expenses for the year ended December 31, 2017 included $4.9 million of impairment and related charges primarily associated with track assets on idle branch lines in South Australia.

The following table sets forth operating expenses from our Australian Operations for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018		2017				2017	Increase/(Decrease)
	Amount	% of Operating Revenues	Amount	% of Operating Revenues	Increase/(Decrease)	Currency Impact	Constant Currency*	Constant Currency*
Labor and benefits	$72,032	23.9 %	$68,935	22.4 %	$ 3,097	$(1,620)	$67,315	$ 4,717
Equipment rents	5,205	1.7 %	5,577	1.8 %	(372)	(141)	5,436	(231)
Purchased services	24,622	8.2 %	26,269	8.6 %	(1,647)	(720)	25,549	(927)
Depreciation and amortization	60,766	20.1 %	61,142	19.9 %	(376)	(1,513)	59,629	1,137
Diesel fuel used in train operations	31,505	10.5 %	25,236	8.2 %	6,269	(558)	24,678	6,827
Casualties and insurance	6,557	2.2 %	5,502	1.8 %	1,055	(121)	5,381	1,176
Materials	11,274	3.7 %	10,706	3.5 %	568	(289)	10,417	857
Trackage rights	8,131	2.7 %	12,633	4.1 %	(4,502)	(249)	12,384	(4,253)
Net (gain)/loss on sale and impairment of assets	(269)	(0.1)%	5,797	1.9 %	(6,066)	(372)	5,425	(5,694)
Restructuring costs	—	— %	338	0.1 %	(338)	9	347	(347)
Other expenses, net	1,578	0.5 %	8,124	2.6 %	(6,546)	(160)	7,964	(6,386)
Total operating expenses	$221,401	73.4 %	$230,259	74.9 %	$ (8,858)	$(5,734)	$224,525	$ (3,124)

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following information discusses the significant changes in operating expenses from our Australian Operations excluding a $5.7 million decrease due to the net impact from foreign currency depreciation.

Labor and benefits expense was $72.0 million for the year ended December 31, 2018, compared with $67.3 million for the year ended December 31, 2017, an increase of $4.7 million, or 7.0%. The increase was primarily attributable to an increase in headcount to support growth initiatives.

Depreciation and amortization expense was $60.8 million for the year ended December 31, 2018, compared with $59.6 million for the year ended December 31, 2017, an increase of $1.1 million, or 1.9%. The increase was primarily

attributable to a larger depreciable asset base in 2018 compared with 2017, reflecting capital spending in 2018 and 2017.

The cost of diesel fuel used in train operations was $31.5 million for the year ended December 31, 2018, compared with $24.7 million for the year ended December 31, 2017, an increase of $6.8 million, or 27.7%. The increase consisted of $7.4 million due to a 29.8% increase in average fuel cost per gallon, partially offset by $0.6 million due to a 1.6% decrease in diesel fuel consumption.
Casualties and insurance expense was $6.6 million for the year ended December 31, 2018, compared with $5.4 million for the year ended December 31, 2017, an increase of $1.2 million, or 21.9%. The increase was primarily attributable due to increased derailment and track damage expense in 2018.
Trackage rights expense was $8.1 million for the year ended December 31, 2018, compared with $12.4 million for the year ended December 31, 2017, a decrease of $4.3 million, or 34.3%. The decrease was primarily due to the shutdown of an iron ore mine in October 2017.
Net gain on the sale and impairment of assets was $0.3 million for the year ended December 31, 2018, compared with a net loss on the sale and impairment of assets of $5.4 million for the year ended December 31, 2017, which included the impairment of track assets on idle branch lines in Southern Australia in 2017.
Other expenses, net were $1.6 million for the year ended December 31, 2018, compared with $8.0 million for the year ended December 31, 2017, a decrease of $6.4 million. Other expenses, net for the year ended December 31, 2018 included a $7.3 million gain on a settlement related to Arrium's voluntary administration.
Operating Income/Operating Ratio
Operating income from our Australian Operations was $80.3 million for the year ended December 31, 2018, compared with $77.3 million for the year ended December 31, 2017. Operating income for the year ended December 31, 2018 included a $7.3 million gain on a settlement related to Arrium's voluntary administration. For the year ended December 31, 2017, our Australian Operations recorded charges of $4.9 million related to the impairment of track assets on idle branch lines in Southern Australia. The operating ratio was 73.4% for the year ended December 31, 2018, compared with 74.9% for the year ended December 31, 2017.
U.K./European Operations
Operating Revenues and Carloads
The following table sets forth our U.K./European total operating revenues for the years ended December 31, 2018 and 2017. The table also reflects the calculation of our total ongoing operations by subtracting the revenues from the divested ERS operations from our total operations for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018			2017			Increase/(Decrease) in Total Operations		Currency Impact on 2017 Total Operations*
	Total Operations	Divested Operations	Total Ongoing Operations	Total Operations	Divested Operations	Total Ongoing Operations	Amount	%	
Freight revenues	$349,894	$ 17,086	$ 332,808	$337,866	$ 41,588	$ 296,278	$ 12,028	3.6 %	$ 12,458
Freight-related revenues	273,181	7,006	266,175	237,332	15,073	222,259	35,849	15.1 %	6,223
All other revenues	64,927	21	64,906	51,051	29	51,022	13,876	27.2 %	595
Total operating revenues	$688,002	$ 24,113	$ 663,889	$626,249	$ 56,690	$ 569,559	$ 61,753	9.9 %	$ 19,276
Carloads	995,623	50,949	944,674	1,092,549	123,068	969,481	(96,926)	(8.9)%	

* Currency impact was calculated by comparing the 2017 results translated from local currency to United States dollars using 2018 exchange rates to the 2017 results in United States dollars as reported.

The following table sets forth our ongoing U.K./European Operations total operating revenues and carloads by new operations and existing operations for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018			2017	Increase/(Decrease) in Existing/Ongoing Operations		Currency Impact on Total Ongoing Operations
	Total Ongoing Operations	New Operations	Existing Operations	Total Ongoing Operations	Amount	%	
Freight revenues	$332,808	$ —	$ 332,808	$ 296,278	$36,530	12.3 %	$ 10,101
Freight-related revenues	266,175	32,292	233,883	222,259	11,624	5.2 %	5,186
All other revenues	64,906	14,430	50,476	51,022	(546)	(1.1)%	593
Total operating revenues	$663,889	$ 46,722	$ 617,167	$ 569,559	$47,608	8.4 %	$ 15,880
Carloads	944,674	—	944,674	969,481	(24,807)	(2.6)%	

Freight Revenues

The following table sets forth our U.K./European Operations ongoing operations freight revenues by commodity group by subtracting the revenues from the divested ERS operations from our U.K./European total operations for the year ended December 31, 2018, compared with the year ended December 31, 2017 (dollars in thousands):

	2018			2017						
Commodity Group	Total Operations	Divested Operations	Total Ongoing/Existing Operations	Total Operations	Divested Operations	Total Ongoing Operations	Increase/(Decrease) in Existing Operations	Currency Impact on Existing Operations	2017 Constant Currency Existing Operations*	Increase/(Decrease) in Existing Operations Constant Currency*
Agricultural Products	$4,567	$—	$4,567	$5,280	$—	$5,280	$(713)	$305	$5,585	$(1,018)
Coal & Coke	11,706	—	11,706	9,972	—	9,972	1,734	498	10,470	1,236
Intermodal	249,317	17,086	232,231	253,854	41,588	212,266	19,965	7,358	219,624	12,607
Minerals & Stone	83,582	—	83,582	68,760	—	68,760	14,822	1,940	70,700	12,882
Petroleum Products	722	—	722	—	—	—	722	—	—	722
Total	$349,894	$17,086	$332,808	$337,866	$41,588	$296,278	$36,530	$10,101	$306,379	$26,429

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following table sets forth our U.K./European Operations freight revenues, carloads and average freight revenues per carload for the years ended December 31, 2018 and 2017 (dollars in thousands, except average freight revenues per carload):

	Freight Revenues				Carloads		Average Freight Revenues Per Carload		
	2018		2017 Constant Currency*						
Commodity Group	Amount	% of Total	Amount	% of Total	2018	2017	2018	2017	2017 Constant Currency*
Agricultural Products	$4,567	1.3 %	$5,585	1.6 %	3,454	4,359	$1,322	$1,211	$ 1,281
Coal & Coke	11,706	3.3 %	10,470	3.0 %	19,523	22,403	600	445	467
Intermodal	249,317	71.3 %	263,569	75.2 %	781,306	890,844	319	285	296
Minerals & Stone	83,582	23.9 %	70,700	20.2 %	188,810	174,943	443	393	404

Petroleum Products	722	0.2 %	—	— %	2,530	—	285	—	—
Total	$349,894	100.0%	$350,324	100.0%	995,623	1,092,549	$351	$309	$ 321

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

Total traffic from our U.K./European Operations decreased 96,926 carloads, or 8.9%, to 995,623 carloads for the year ended December 31, 2018, compared with the year ended December 31, 2017. Excluding traffic from our divested ERS operations, existing operations traffic decreased 24,807 carloads, or 2.6%, to 944,674 carloads. The decrease in traffic from existing operations was principally due to decreases of 37,419 carloads of intermodal traffic and 2,880 carloads of coal and coke traffic, partially offset by increases of 13,867 carloads of minerals and stone traffic and 2,530 carloads of petroleum products traffic. All remaining traffic decreased by 905 carloads.

Changes in average freight revenues per carload in a commodity group may be impacted by changes in customer rates and fuel surcharges, as well as changes in the mix of customer traffic within a commodity group. Excluding a 4.3% impact of foreign currency, average freight revenues per carload from our U.K./European Operations increased 9.3% to $351 for the year ended December 31, 2018, compared with the year ended December 31, 2017. Average freight revenues per carload from existing operations, excluding the impact of foreign currency, increased 11.4% to $352 for the year ended December 31, 2018, compared with the year ended December 31, 2017. A change in the mix of commodities increased average freight revenues per carload by 0.3%, and higher fuel surcharges increased average freight revenues per carload by 0.3%. Excluding these factors, average freight revenues per carload increased 10.9%.
The following information discusses the significant changes in our U.K./European Operations freight revenues by commodity group, excluding the impact of foreign currency and the divested ERS operations.
Intermodal revenues increased $12.6 million, or 5.7%. Intermodal average freight revenues per carload increased 11.2%, which increased revenues by $24.5 million, while traffic decreased 37,419 carloads, or 4.9%, which decreased revenues by $11.9 million. The increase in average freight revenues per carload was primarily due to port and route mix resulting from changes in shipping alliances. The decrease in carloads was primarily due to weather-related service cancellations and congestion at the port of Felixstowe related to the port's information technology system conversion as well as locomotive driver shortages in the second half of 2018.
Minerals and stone revenues increased $12.9 million, or 18.2%. Minerals and stone average freight revenues per carload increased 9.7%, which increased revenues by $6.7 million, and traffic increased 13,867 carloads, or 7.9%, which increased revenues by $6.1 million. The increase was primarily due to higher construction aggregates shipments in the U.K and Poland.
Freight revenues from all remaining commodities increased $0.9 million.

Freight-Related Revenues

Freight-related revenues from our U.K./European Operations include trucking haulage services, container storage and switching services, as well as infrastructure services, where we operate work trains for the track infrastructure owner. Freight-related revenues in the U.K./Europe also include traction services (or hook and pull), which requires us to provide locomotives and drivers to move a customer's train between specified origin and destination points and other ancillary revenues related to the movement of freight.
Freight-related revenues from our U.K./European Operations were $273.2 million for the year ended December 31, 2018, compared with $237.3 million for the year ended December 31, 2017, an increase of $35.8 million, or 15.1%. Excluding $32.3 million from new operations, a decrease of $9.1 million from the divested ERS operations and a $6.2 million increase due to the impact of foreign currency appreciation, freight-related revenues from our existing operations increased $6.4 million, or 2.8%, to $233.9 million for the year ended December 31, 2018, compared with $227.4 million for the year ended December 31, 2017. The increase was primarily due to increased switching revenues related to steel traffic, stronger trucking haulage volumes in the U.K. and increased crewing revenue in Poland, partially offset by a decrease in infrastructure services in the U.K.

All Other Revenues

All other revenues from our U.K./European Operations includes revenues from container sales, third-party car and locomotive repairs, property rentals and other ancillary revenues not directly related to the movement of freight. All other revenues from our U.K./European Operations were $64.9 million for the year ended December 31, 2018, compared with $51.1 million for the year ended December 31, 2017, an increase of $13.9 million, or 27.2%. Excluding $14.4 million from new operations and a $0.6 million increase due to the impact of foreign currency appreciation, all other revenues from our existing operations decreased $1.1 million, or 2.2%. The decrease from existing operations was primarily due to reduced management and technical support revenues in Saudi Arabia, partially offset by increased passenger crewing revenues in the U.K.

Operating Expenses

Total operating expenses from our U.K./European Operations increased $72.1 million, or 11.7%, to $687.9 million for the year ended December 31, 2018, compared with $615.8 million for the year ended December 31, 2017. The increase included $47.3 million from existing operations, $45.0 million from new operations and a $21.2 million increase due to the net impact of foreign currency appreciation, partially offset by a $41.4 million decrease from our divested ERS operations. The increase from existing operations included increases of $12.9 million in labor and benefits expense, $9.0 million in the cost of diesel fuel used in train operations, $6.6 million in other expenses, $5.7 million in restructuring and related costs, $4.2 million in materials expense, $3.4 million in trackage rights expense, $2.8 million in depreciation and amortization expense and $2.7 million in equipment rents expense, partially offset by a $3.3 million decrease in purchased services expense.

The following table sets forth operating expenses from our U.K./European Operations for the years ended December 31, 2018 and 2017 (dollars in thousands):

	2018		2017					
	Amount	% of Operating Revenues	Amount	% of Operating Revenues	Increase/(Decrease)	Currency Impact	2017 Constant Currency*	Increase/(Decrease) Constant Currency*
Labor and benefits	$204,926	29.8 %	$181,732	29.0 %	$ 23,194	$6,121	$187,853	$ 17,073
Equipment rents	78,429	11.4 %	74,187	11.9 %	4,242	3,112	77,299	1,130
Purchased services	150,155	21.8 %	158,035	25.2 %	(7,880)	4,622	162,657	(12,502)
Depreciation and amortization	36,825	5.3 %	31,309	5.0 %	5,516	1,025	32,334	4,491
Diesel fuel used in train operations	55,954	8.1 %	45,339	7.2 %	10,615	1,640	46,979	8,975
Electricity used in train operations	9,603	1.4 %	7,521	1.2 %	2,082	534	8,055	1,548
Casualties and insurance	5,899	0.9 %	4,229	0.7 %	1,670	110	4,339	1,560
Materials	65,109	9.5 %	47,056	7.5 %	18,053	548	47,604	17,505
Trackage rights	39,014	5.7 %	36,220	5.8 %	2,794	1,506	37,726	1,288
Net gain on sale and impairment of assets	(205)	— %	(87)	— %	(118)	(10)	(97)	(108)
Restructuring and related costs	15,035	2.2 %	9,355	1.5 %	5,680	567	9,922	5,113
Other expenses, net	27,135	3.9 %	20,875	3.3 %	6,260	1,435	22,310	4,825
Total operating expenses	$687,879	100.0 %	$615,771	98.3 %	$ 72,108	$21,210	$636,981	$ 50,898

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following information discusses the significant changes in operating expenses from our U.K./European Operations, excluding an increase of $21.2 million due to the net impact of foreign currency appreciation.

Labor and benefits expense was $204.9 million for the year ended December 31, 2018, compared with $187.9 million for the year ended December 31, 2017, an increase of $17.1 million, or 9.1%. The increase consisted of $12.9 million from existing operations and $9.3 million from new operations, partially offset by a decrease of $5.1 million from divested operations. The increase from existing operations was primarily due to annual wage increases and an increase in overtime.

Equipment rents expense was $78.4 million for the year ended December 31, 2018, compared with $77.3 million for the year ended December 31, 2017, an increase of $1.1 million, or 1.5%. The increase consisted of $4.4 million from new operations and $2.7 million from existing operations, partially offset by a decrease of $6.0 million from divested operations. The increase from existing operations was primarily due a lease accounting adjustment in 2018 and additional equipment rental expense associated with higher traffic in Poland.

Purchased services expense was $150.2 million for the year ended December 31, 2018, compared with $162.7 million for the year ended December 31, 2017, a decrease of $12.5 million, or 7.7%. The decrease consisted of $23.0 million from divested operations and $3.3 million from existing operations, partially offset by an increase of $13.9 million from new operations. The decrease from existing operations was primarily attributable to a change in classification of maintenance expense associated with certain leased equipment from purchased services in 2017 to materials expense in 2018 as well as lower rail network service costs due to adverse weather and service cancellations, partially offset by an increase in temporary contractors.

Depreciation and amortization expense was $36.8 million for the year ended December 31, 2018, compared with $32.3 million for the year ended December 31, 2017, an increase of $4.5 million, or 13.9%. The increase consisted of $2.8 million from existing operations and $1.7 million from new operations. The increase from existing operations was primarily attributable to a larger depreciable asset base in 2018 compared with 2017, reflecting capital spending in 2018 and 2017.

The cost of diesel fuel used in train operations was $56.0 million for the year ended December 31, 2018, compared with $47.0 million for the year ended December 31, 2017, an increase of $9.0 million, or 19.1%. The increase consisted of $8.0 million due to a 17.7% increase in average fuel cost per gallon and $1.0 million due to a 1.0% increase in diesel fuel consumption.

The cost of electricity used in train operations was $9.6 million for the year ended December 31, 2018, compared with $8.1 million for the year ended December 31, 2017, an increase of $1.5 million, or 19.2%. The increase consisted of $2.1 million from existing operations, partially offset by a decrease of $0.5 million from divested operations. The increase was primarily due to increased activity in Poland.

Casualties and insurance expense was $5.9 million for the year ended December 31, 2018, compared with $4.3 million for the year ended December 31, 2017, an increase of $1.6 million, or 36.0%. The increase consisted of $1.3 million from existing operations and $0.5 million from new operations, partially offset by a decrease of $0.2 million from divested operations. The increase from existing operations was primarily due to higher claims expense.

Materials expense was $65.1 million for the year ended December 31, 2018, compared with $47.6 million for the year ended December 31, 2017, an increase of $17.5 million, or 36.8%. The increase primarily consisted of $13.4 million from new operations and $4.2 million from existing operations. The increase from existing operations was primarily attributable to a change in classification of maintenance expense associated with certain leased equipment from purchased services in 2017 to materials expense in 2018 as well as an increase in the cost of fuel used in trucking operations and new container sales.

Trackage rights expense was $39.0 million for the year ended December 31, 2018, compared with $37.7 million for the year ended December 31, 2017, an increase of $1.3 million, or 3.4%. The increase consisted of $3.4 million from existing operations, partially offset by a decrease of $2.1 million from divested operations. The increase from existing operations was primarily due to an increase in freight and switching activity.

Restructuring and related costs for the year ended December 31, 2018, of $15.0 million, were primarily driven by our optimization activities in the U.K. Restructuring and related costs for the year ended December 31, 2017, of $9.4 million, were primarily related to the restructuring of ERS.

Other expenses, net were $27.1 million for the year ended December 31, 2018, compared with $22.3 million for the year ended December 31, 2017, an increase of $4.8 million, or 21.6%. The increase consisted of $6.6 million from existing operations and $1.9 million from new operations, partially offset by a decrease of $3.7 million from divested operations. The year ended December 31, 2017 included the buyout of the Freightliner deferred consideration, which resulted in a net gain of $8.9 million, as well as corporate development and related costs associated with the acquisition and integration of Pentalver. For additional information regarding deferred consideration, see Note 10, Fair Value of Financial Instruments, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Operating Income/Operating Ratio

Operating income from our U.K./European Operations was $0.1 million for the year ended December 31, 2018, compared with operating income of $10.5 million for the year ended December 31, 2017. Operating income for the year ended December 31, 2018 included $15.0 million of restructuring and related costs. Operating income for the year ended December 31, 2017 included $9.4 million of restructuring costs and $4.0 million of corporate development and related costs, partially offset by a gain on the buyout of the Freightliner deferred consideration of $8.9 million and a $1.1 million reduction to expense associated with a prior year accrual established for the restructuring of the U.K. coal business.

Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

Consolidated Operating Results

Operating Revenues

The following table sets forth our operating revenues and total carloads into new operations and existing operations for the years ended December 31, 2017 and 2016 (dollars in thousands):

	2017					Increase/(Decrease) in Total Operations		Increase/(Decrease) in Existing Operations		Currency Impact
	Total Operations	New Operations	Eliminations (a)	Existing Operations	2016	Amount	%	Amount	%	
Freight revenues	$1,553,875	$133,509	$—	$1,420,366	$1,371,566	$182,309	13.3 %	$48,800	3.6 %	$(2,403)
Freight-related revenues	533,651	74,208	(42,759)	502,202	536,359	(2,708)	(0.5)%	(34,157)	(6.4)%	(1,594)
All other revenues	120,518	30,416	—	90,102	93,602	26,916	28.8 %	(3,500)	(3.7)%	(577)
Total operating revenues	$2,208,044	$238,133	$(42,759)	$2,012,670	$2,001,527	$206,517	10.3 %	$11,143	0.6 %	$(4,574)
Carloads	3,247,886	365,854	—	2,882,032	2,894,664	353,222	12.2 %	(12,632)	(0.4)%	

(a) Represents revenues for services provided by Freightliner Australia to GRail for the 11 months ended November 2017 (the new operations period), which were eliminated in our consolidated revenues.

Operating revenues were $2,208.0 million for the year ended December 31, 2017, compared with $2,001.5 million for the year ended December 31, 2016, an increase of $206.5 million, or 10.3%. The $206.5 million increase in operating revenues consisted of $195.4 million in net revenues from new operations and an $11.1 million increase in existing operations, primarily due to an increase in freight revenues, partially offset by a decrease in freight-related and all other revenues. For additional explanations regarding the changes in our operating revenues, see "Operating Results by Segment."

Operating Expenses

Total operating expenses for the year ended December 31, 2017 increased $100.9 million, or 5.9%, to $1,816.1 million, compared with $1,715.2 million for the year ended December 31, 2016. The increase consisted of $158.5 million from new operations, partially offset by a decrease of $57.6 million from existing operations. Excluding a $1.5 million decrease from the depreciation of foreign currencies relative to the United States dollar, operating expenses from existing operations decreased $56.0 million. For additional explanations regarding the changes in our total operating expenses, see "Operating Results by Segment."

The following table sets forth our total operating expenses for the years ended December 31, 2017 and 2016 (dollars in thousands):

	2017		2016					
	Amount	% of Operating Revenues	Amount	% of Operating Revenues	Increase/(Decrease)	Currency Impact	2016 Constant Currency*	Increase/(Decrease) Constant Currency*
Labor and benefits	$666,765	30.1 %	$636,364	31.7 %	$ 30,401	$(4,339)	$632,025	$ 34,740
Equipment rents	132,903	6.0 %	159,372	8.0 %	(26,469)	(513)	158,859	(25,956)
Purchased services	244,119	11.1 %	198,046	9.9 %	46,073	28	198,074	46,045
Depreciation and amortization	250,457	11.3 %	205,188	10.3 %	45,269	675	205,863	44,594
Diesel fuel used in train operations	147,427	6.7 %	118,203	5.9 %	29,224	121	118,324	29,103
Electricity used in train operations	7,521	0.3 %	13,346	0.7 %	(5,825)	45	13,391	(5,870)
Casualties and insurance	46,993	2.1 %	38,884	1.9 %	8,109	89	38,973	8,020
Materials	107,519	4.9 %	82,522	4.1 %	24,997	(421)	82,101	25,418
Trackage rights	87,490	4.0 %	87,194	4.4 %	296	(77)	87,117	373
Net loss on sale and impairment of assets	4,254	0.2 %	32,484	1.6 %	(28,230)	2,568	35,052	(30,798)
Restructuring costs	10,160	0.5 %	8,182	0.4 %	1,978	(330)	7,852	2,308
Other expenses	110,455	5.0 %	135,380	6.8 %	(24,925)	640	136,020	(25,565)
Total operating expenses	$1,816,063	82.2 %	$1,715,165	85.7 %	$ 100,898	$(1,514)	$1,713,651	$ 102,412

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

Operating Income/Operating Ratio

Operating income was $392.0 million for the year ended December 31, 2017, compared with $286.4 million for the year ended December 31, 2016. Operating income for the year ended December 31, 2017 included corporate development and related costs of $11.9 million, restructuring costs of $10.2 million and impairment and related charges of $4.9 million related to our Australian Operations, partially offset by an $8.9 million reduction to expense as a result of the buyout of the Freightliner deferred consideration. Operating income for the year ended December 31, 2016 included corporate development and related costs of $23.3 million, ERS impairment and related costs of $21.5 million and Australia impairment and related costs of $21.1 million. Our operating ratio was 82.2% for the year ended December 31, 2017, compared with 85.7% for the year ended December 31, 2016.

Interest Expense

Interest expense was $107.3 million for the year ended December 31, 2017, compared with $75.6 million for the year ended December 31, 2016. The increase in interest expense was primarily due to a higher debt balance resulting from the GRail Transactions in December 2016, as well as higher interest rates in 2017 compared with 2016.

Benefit From/Provision For Income Taxes

Our benefit from income taxes for the year ended December 31, 2017 was $261.3 million, while our provision for income taxes for the year ended December 31, 2016 was $74.4 million. The benefit from income taxes for the year ended December 31, 2017 was primarily driven by the impact of the TCJA, which resulted in a net benefit of $371.9 million. For additional information regarding our benefit from/provision for income taxes, see Note 13, Income Taxes, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Our provision for income taxes for the year ended December 31, 2016 included a $28.8 million tax benefit associated with the United States Short Line Tax Credit and a $4.3 million tax benefit associated with a prospective reduction in the U.K. income tax rate enacted during the fourth quarter of 2015.

Net Income and Earnings Per Common Share Attributable to G&W Common Stockholders

Net income attributable to G&W for the year ended December 31, 2017 was $549.1 million, compared with $141.1 million for the year ended December 31, 2016. Our basic EPS were $8.92 with 61.6 million weighted average shares outstanding for the year ended December 31, 2017, compared with basic EPS of $2.46 with 57.3 million weighted average shares outstanding for the year ended December 31, 2016. Our diluted EPS for the year ended December 31, 2017 were $8.79 with 62.5 million weighted average shares outstanding, compared with diluted EPS of $2.42 with 58.3 million weighted average shares outstanding for the year ended December 31, 2016. Our results for the years ended December 31, 2017 and 2016 included certain items affecting comparability between the periods as previously presented in the "Overview."

Operating Results by Segment

The following tables set forth our North American Operations, Australian Operations and U.K./European Operations for the years ended December 31, 2017 and 2016 (dollars in thousands):

	2017 North American Operations	Australian Operations	U.K./European Operations	Total Operations
Operating revenues:				
Freight revenues	$961,356	$254,653	$ 337,866	$1,553,875
Freight-related revenues	249,623	46,696	237,332	533,651
All other revenues	63,306	6,161	51,051	120,518
Total operating revenues	$1,274,285	$307,510	$ 626,249	$2,208,044
Operating expenses:				
Labor and benefits	416,098	68,935	181,732	666,765
Equipment rents	53,139	5,577	74,187	132,903
Purchased services	59,815	26,269	158,035	244,119
Depreciation and amortization	158,006	61,142	31,309	250,457
Diesel fuel used in train operations	76,852	25,236	45,339	147,427
Electricity used in train operations	—	—	7,521	7,521
Casualties and insurance	37,262	5,502	4,229	46,993
Materials	49,757	10,706	47,056	107,519
Trackage rights	38,637	12,633	36,220	87,490
Net (gain)/loss on sale and impairment of assets	(1,456)	5,797	(87)	4,254
Restructuring costs	467	338	9,355	10,160
Other expenses	81,456	8,124	20,875	110,455
Total operating expenses	970,033	230,259	615,771	1,816,063
Operating income	$304,252	$77,251	$ 10,478	$391,981
Operating ratio	76.1 %	74.9 %	98.3 %	82.2 %
Interest expense, net	$38,547	$54,718	$ 11,944	$105,209
(Benefit from)/provision for income taxes	$(266,063)	$6,110	$ (1,306)	$(261,259)
Expenditures for additions to property & equipment, net of grants from outside parties	$166,685	$16,076	$ 25,462	$208,223
Carloads	1,603,182	552,155	1,092,549	3,247,886

	2016 North American Operations	Australian Operations	U.K./European Operations	Total Operations
Operating revenues:				
Freight revenues	$913,619	$120,622	$ 337,325	$1,371,566
Freight-related revenues	258,922	95,776	181,661	536,359
All other revenues	64,223	6,188	23,191	93,602
Total operating revenues	$1,236,764	$222,586	$ 542,177	$2,001,527
Operating expenses:				
Labor and benefits	397,019	66,547	172,798	636,364
Equipment rents	57,680	6,514	95,178	159,372
Purchased services	62,369	23,429	112,248	198,046
Depreciation and amortization	147,527	30,863	26,798	205,188
Diesel fuel used in train operations	59,023	19,743	39,437	118,203
Electricity used in train operations	—	—	13,346	13,346
Casualties and insurance	29,103	5,373	4,408	38,884
Materials	50,095	10,559	21,868	82,522
Trackage rights	36,645	10,047	40,502	87,194
Net (gain)/loss on sale and impairment of assets	(209)	13,341	19,352	32,484
Restructuring costs	884	789	6,509	8,182
Other expenses	76,967	30,571	27,842	135,380
Total operating expenses	917,103	217,776	580,286	1,715,165
Operating income/(loss)	$319,661	$4,810	$ (38,109)	$286,362
Operating ratio	74.2 %	97.8 %	107.0 %	85.7 %
Interest expense, net	$40,985	$13,958	$ 19,591	$74,534
Provision for/(benefit from) income taxes	$80,701	$988	$ (7,294)	$74,395
Expenditures for additions to property & equipment, net of grants from outside parties	$137,334	$11,285	$ 34,831	$183,450
Carloads	1,574,253	216,395	1,104,016	2,894,664

North American Operations

Operating Revenues and Carloads

The following table sets forth our North American Operations operating revenues and carloads by new operations and existing operations for the years ended December 31, 2017 and 2016 (dollars in thousands):

	2017				Increase/(Decrease) in Total Operations		Increase/(Decrease) in Existing Operations		Currency Impact
	Total Operations	New Operations	Existing Operations	2016	Amount	%	Amount	%	
Freight revenues	$961,356	$ 27,794	$933,562	$913,619	$47,737	5.2 %	$ 19,943	2.2 %	$ 1,235
Freight-related revenues	249,623	1,154	248,469	258,922	(9,299)	(3.6)%	(10,453)	(4.0)%	465
All other revenues	63,306	914	62,392	64,223	(917)	(1.4)%	(1,831)	(2.9)%	251
Total operating revenues	$1,274,285	$ 29,862	$1,244,423	$1,236,764	$37,521	3.0 %	$ 7,659	0.6 %	$ 1,951
Carloads	1,603,182	38,003	1,565,179	1,574,253	28,929	1.8 %	(9,074)	(0.6)%	

Freight Revenues

The following table sets forth the changes in our North American Operations freight revenues by commodity group segregated into new operations and existing operations for the year ended December 31, 2017, compared with the year ended December 31, 2016 (dollars in thousands):

Commodity Group	2017	2016	Increase/(Decrease) in Total Operations	New Operations	Currency Impact	2016 Constant Currency*	Increase/(Decrease) in Existing Operations Constant Currency*
Agricultural Products	$124,285	$115,627	$ 8,658	$ 1,601	$ 123	$115,750	$ 6,934
Autos & Auto Parts	22,901	18,259	4,642	2,371	35	18,294	2,236
Chemicals & Plastics	148,252	137,712	10,540	7,227	242	137,954	3,071
Coal & Coke	75,935	74,664	1,271	—	61	74,725	1,210
Food & Kindred Products	33,424	33,549	(125)	577	26	33,575	(728)
Intermodal	980	99	881	815	—	99	66
Lumber & Forest Products	87,200	83,509	3,691	2,379	77	83,586	1,235
Metallic Ores	13,391	16,819	(3,428)	1	58	16,877	(3,487)
Metals	103,863	103,799	64	1,991	164	103,963	(2,091)
Minerals & Stone	130,511	114,185	16,326	6,666	76	114,261	9,584
Petroleum Products	68,388	70,519	(2,131)	1,445	108	70,627	(3,684)
Pulp & Paper	107,453	104,523	2,930	1,201	241	104,764	1,488
Waste	25,063	20,835	4,228	914	6	20,841	3,308
Other	19,710	19,520	190	606	18	19,538	(434)
Total freight revenues	$961,356	$913,619	$ 47,737	$ 27,794	$ 1,235	$914,854	$ 18,708

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following table sets forth our North American Operations freight revenues, carloads and average freight revenues per carload for the years ended December 31, 2017 and 2016 (dollars in thousands, except average freight revenues per carload):

	Freight Revenues				Carloads		Average Freight Revenues Per Carload		
	2017		2016 Constant Currency*						
Commodity Group	Amount	% of Total	Amount	% of Total	2017	2016	2017	2016	2016 Constant Currency*
Agricultural Products	$124,285	12.9 %	$115,750	12.7 %	209,471	217,038	$593	$533	$ 533
Autos & Auto Parts	22,901	2.4 %	18,294	2.0 %	37,246	30,308	615	602	604
Chemicals & Plastics	148,252	15.4 %	137,954	15.1 %	177,602	175,316	835	786	787
Coal & Coke	75,935	7.9 %	74,725	8.2 %	224,278	221,001	339	338	338
Food & Kindred Products	33,424	3.5 %	33,575	3.7 %	59,307	60,874	564	551	552
Intermodal	980	0.1 %	99	— %	9,838	1,382	100	72	72
Lumber & Forest Products	87,200	9.1 %	83,586	9.1 %	140,856	138,096	619	605	605
Metallic Ores	13,391	1.4 %	16,877	1.8 %	17,925	21,697	747	775	778
Metals	103,863	10.8 %	103,963	11.4 %	136,888	137,898	759	753	754
Minerals & Stone	130,511	13.6 %	114,261	12.5 %	214,469	197,849	609	577	578
Petroleum Products	68,388	7.1 %	70,627	7.7 %	98,414	102,718	695	687	688
Pulp & Paper	107,453	11.2 %	104,764	11.5 %	161,872	163,595	664	639	640
Waste	25,063	2.6 %	20,841	2.2 %	52,081	44,922	481	464	464
Other	19,710	2.0 %	19,538	2.1 %	62,935	61,559	313	317	317
Total	$961,356	100.0%	$914,854	100.0%	1,603,182	1,574,253	$600	$580	$ 581

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

Total traffic from our North American Operations increased 28,929 carloads, or 1.8%, for the year ended December 31, 2017, compared with the year ended December 31, 2016. The increase consisted of 38,003 carloads from new operations, partially offset by a decrease of 9,074 carloads, or 0.6%, from existing operations. The decrease in traffic from existing operations was principally due to decreases of 8,979 carloads of agricultural products traffic, 5,572 carloads of petroleum products traffic, 3,772 carloads of metallic ores traffic, 2,669 carloads of chemicals and plastics traffic, 2,608 carloads of metals traffic, 2,498 carloads of pulp and paper traffic and 2,402 carloads of food and kindred products traffic, partially offset by increases of 6,631 carloads of minerals and stone traffic, 5,959 carloads of waste traffic, 3,701 carloads of autos and auto parts traffic and 3,277 carloads of coal and coke traffic. All remaining traffic decreased by a net 142 carloads.

Changes in average freight revenues per carload in a commodity group may be impacted by changes in customer rates and fuel surcharges, as well as changes in the mix of customer traffic within a commodity group. Excluding the impact of foreign currency, average freight revenues per carload from existing operations increased 2.6% to $596 for the year ended December 31, 2017, compared with the year ended December 31, 2016. The increase in average freight revenues per carload was impacted by higher fuel surcharges, which increased average freight revenues per carload by 0.6%, partially offset by the impact of a change in commodity mix, which decreased average freight revenues per carload 0.4%. Excluding these factors, average freight revenues per carload increased 2.4%.

The following information discusses the significant changes in our North American Operations freight revenues from existing operations by commodity group, excluding the impact of foreign currency.

Agricultural products revenues increased $6.9 million, or 6.0%. Agricultural products average freight revenues per carload increased 10.7%, which increased revenues by $12.2 million, while traffic decreased 8,979 carloads, or 4.1%, which decreased revenues by $5.3 million. The increase in average freight revenues per carload was primarily driven by a change in the mix of business. The carload decrease was primarily due to reduced shipments as a result of modal competition, drought conditions in South Dakota, reduced export demand in the midwestern United States and plant closures in the southern United States.

Autos and auto parts revenues increased $2.2 million, or 12.2%, primarily due to a traffic increase of 3,701 carloads, or 12.2%, as a result of import spot shipments in the western United States and increased shipments in the midwestern United States related to a model conversion.

Chemicals and plastics revenues increased $3.1 million, or 2.2%. Chemicals and plastics average freight revenues per carload increased 3.8%, which increased revenues by $5.3 million, while traffic decreased 2,669 carloads, or 1.5%, which decreased revenues by $2.2 million. The decrease in carloads was primarily due to decreased shipments of industrial chemicals due to a plant closure in the northeastern United States, reduced demand from a mining customer in the western United States and decreased shipments of ethanol in the midwestern United States.

Metallic ores revenues decreased $3.5 million, or 20.7%. Metallic ores traffic decreased 3,772 carloads, or 17.4%, which decreased revenues by $2.8 million, and average freight revenues per carload decreased 4.0%, which decreased revenues by $0.7 million. These decreases were primarily due to the planned idling of an alumina customer facility in the southern United States and lower production from a copper mining customer in the western United States.

Metals revenues decreased $2.1 million, or 2.0%, primarily due to a traffic decrease of 2,608 carloads, or 1.9%. The carload decrease was primarily due to reduced shipments of scrap steel and pig iron as a result of modal competition in the southeastern United States.

Minerals and stone revenues increased $9.6 million, or 8.4%. Minerals and stone average freight revenues per carload increased 4.8%, which increased revenues by $5.6 million, and traffic increased 6,631 carloads, or 3.4%, which increased revenues by $4.0 million. The increase in average freight revenues per carload was primarily due to the change in the mix of business. The increase in carloads was primarily due to increased shipments of cement, frac sand, rock salt and clay, partially offset by decreased shipments of construction aggregates.

Petroleum products decreased $3.7 million, or 5.2%, primarily due to a traffic decrease of 5,572 carloads, or 5.4%. The carload decrease was primarily due to decreased shipments of liquid petroleum gases resulting from barge competition in the western United States and production declines and a loss of a customer contract in the northeastern United States.

Pulp and paper revenues increased $1.5 million, or 1.4%. Pulp and paper average freight revenues per carload increased 3.1%, which increased revenues by $3.1 million, while traffic decreased 2,498 carloads, or 1.5%, which decreased revenues by $1.6 million. The decrease in carloads was primarily due to decreased shipments resulting from truck competition and multiple maintenance shutdowns of mills in the southern United States.

Waste revenues increased $3.3 million, or 15.9%. Waste traffic increased by 5,959 carloads, or 13.3%, which increased revenues by $2.8 million, and average freight revenues per carload increased 2.4%, which increased revenues by $0.5 million. These increases were primarily due to new and expanded contracts in the midwestern United States.

Freight revenues from all remaining commodities combined increased by a net $1.3 million.

Freight-Related Revenues

Excluding a $0.5 million increase due to the impact from foreign currency appreciation, freight-related revenues from our North American Operations, which includes revenues from railcar switching, track access rights, crewing services, storage and other ancillary revenues related to the movement of freight, decreased $9.8 million, or 3.8%, to $249.6 million for the year ended December 31, 2017, compared with $259.4 million for the year ended December 31, 2016. The decrease in freight-related revenues was primarily due to the recognition of $10.0 million of revenue from a multi-year take-or-pay volume shortfall under a crude-by-rail contract in the year ended December 31, 2016, compared with $3.1 million of revenue recognized for that contract in the year ended December 31, 2017 and lower demurrage revenues in the southern United States.

All Other Revenues

Excluding a $0.3 million increase due to the impact of foreign currency appreciation, all other revenues from our North American Operations, which includes revenues from third-party car and locomotive repairs, property rentals, railroad construction and other ancillary revenues not directly related to the movement of freight, decreased $1.2 million, or 1.8%, to $63.3 million for the year ended December 31, 2017, compared with $64.5 million for the year ended December 31, 2016. The decrease in all other revenues consisted of $2.1 million from existing operations, partially offset by $0.9 million from new operations.

Operating Expenses

Total operating expenses from our North American Operations increased $52.9 million, or 5.8%, to $970.0 million for the year ended December 31, 2017, compared with $917.1 million for the year ended December 31, 2016. The increase consisted of $28.9 million from new operations and $24.0 million from existing operations. The increase from existing operations was primarily due to a $15.7 million increase in the cost and usage of diesel fuel in train operations, an $8.1 million increase in depreciation and amortization, a $7.1 million increase in casualties and insurance, a $4.4 million increase in labor and benefits and a $2.8 million increase in other expenses, partially offset by a $7.2 million decrease in equipment rents, a $5.6 million decrease in purchased services, and a $1.9 million decrease in materials. In addition, the change from existing operations included a $1.8 million increase due to impact of foreign currency appreciation.

The following table sets forth operating expenses from our North American Operations for the years ended December 31, 2017 and 2016 (dollars in thousands):

	2017 Amount	% of Operating Revenues	2016 Amount	% of Operating Revenues	Increase/(Decrease)	Currency Impact	2016 Constant Currency*	Increase/(Decrease) Constant Currency*
Labor and benefits	$416,098	32.7 %	$397,019	32.1 %	$ 19,079	$675	$397,694	$ 18,404
Equipment rents	53,139	4.2 %	57,680	4.7 %	(4,541)	103	57,783	(4,644)
Purchased services	59,815	4.7 %	62,369	5.0 %	(2,554)	124	62,493	(2,678)
Depreciation and amortization	158,006	12.4 %	147,527	11.9 %	10,479	435	147,962	10,044
Diesel fuel used in train operations	76,852	6.0 %	59,023	4.8 %	17,829	176	59,199	17,653
Casualties and insurance	37,262	2.9 %	29,103	2.4 %	8,159	42	29,145	8,117
Materials	49,757	3.9 %	50,095	4.0 %	(338)	107	50,202	(445)
Trackage rights	38,637	3.0 %	36,645	3.0 %	1,992	19	36,664	1,973
Net gain on sale and impairment of assets	(1,456)	(0.1)%	(209)	— %	(1,247)	(4)	(213)	(1,243)
Restructuring costs	467	— %	884	0.1 %	(417)	—	884	(417)
Other expenses	81,456	6.4 %	76,967	6.2 %	4,489	144	77,111	4,345
Total operating expenses	$970,033	76.1 %	$917,103	74.2 %	$ 52,930	$1,821	$918,924	$ 51,109

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following information discusses the significant changes in operating expenses from our North American Operations excluding an increase of $1.8 million due to the impact from foreign currency appreciation.

Labor and benefits expense was $416.1 million for the year ended December 31, 2017, compared with $397.7 million for the year ended December 31, 2016, an increase of $18.4 million, or 4.6%. The increase consisted of $14.0 million from new operations, of which $2.7 million related to the Providence and Worcester Railroad integration-related severance costs, and $4.4 million from existing operations. The increase from existing operations was due primarily to annual wage increases.

Equipment rents expense was $53.1 million for the year ended December 31, 2017, compared with $57.8 million for the year ended December 31, 2016, a decrease of $4.6 million, or 8.0%. The decrease consisted of $7.2 million from existing operations, partially offset by $2.6 million from new operations. The decrease from existing operations was primarily due to reduced leased freight car expense due to certain leased cars being returned to lessors or converted to per diem leases, reduced leased locomotive expense due to buyouts of certain of our locomotive leases and reduced car hire expense.

Purchased services expense was $59.8 million for the year ended December 31, 2017, compared with $62.5 million for the year ended December 31, 2016, a decrease of $2.7 million, or 4.3%. The decrease consisted of $5.6 million from existing operations, partially offset by $2.9 million from new operations. The decrease from existing operations was primarily due to a reduction in the use of third party contractors for maintenance and repair of track property.

Depreciation and amortization expense was $158.0 million for the year ended December 31, 2017, compared with $148.0 million for the year ended December 31, 2016, an increase of $10.0 million, or 6.8%. The increase consisted of $8.1 million from existing operations and $1.9 million from new operations. The increase from existing operations was primarily attributable to a larger depreciable asset base in 2017 compared with 2016, reflecting capital spending in 2017 and 2016.

The cost of diesel fuel used in train operations was $76.9 million for the year ended December 31, 2017, compared with $59.2 million for the year ended December 31, 2016, an increase of $17.7 million, or 29.8%. The increase consisted of $15.7 million from existing operations, partially offset by $2.0 million from new operations. The increase from existing operations consisted of $12.9 million due to a 21.5% increase in average fuel cost per gallon and $2.7

million due to a 4.0% increase in diesel fuel consumption.

Casualties and insurance expense was $37.3 million for the year ended December 31, 2017, compared with $29.1 million for the year ended December 31, 2016, an increase of $8.1 million, or 27.9%. The increase consisted of $7.1 million from existing operations and $1.0 million from new operations. The increase from existing operations was primarily attributable to an increase in derailments expense in 2017.

Trackage rights expense was $38.6 million for the year ended December 31, 2017, compared with $36.7 million for the year ended December 31, 2016, an increase of $2.0 million, or 5.4%. The increase consisted of $1.5 million from new operations and $0.5 million from existing operations.
Net gain on sale and impairment of assets was $1.5 million for the year ended December 31, 2017, primarily due to scrap sales during 2017.
Other expenses were $81.5 million for the year ended December 31, 2017, compared with $77.1 million for the year ended December 31, 2016, an increase of $4.3 million, or 5.6%. The increase consisted of $2.8 million from existing operations and $1.6 million from new operations. The increase from existing operations was primarily attributable to corporate development and related costs.

Operating Income/Operating Ratio

Operating income from our North American Operations was $304.3 million for the year ended December 31, 2017, compared with $319.7 million for the year ended December 31, 2016. Operating income for the year ended December 31, 2017 included $8.2 million of corporate development and related costs associated with the integration of Providence and Worcester Railroad and other corporate development projects. Operating income for the year ended December 31, 2016 included corporate development and related costs of $7.2 million. The operating ratio was 76.1% for the year ended December 31, 2017, compared with 74.2% for the year ended December 31, 2016.

Australian Operations

Operating Revenues and Carloads

As previously disclosed, we own a controlling 51.1% ownership interest in our Australian Operations and, therefore, include 100% of our Australian Operations within our consolidated financial statements with a 48.9% noncontrolling interest recorded to reflect MIRA's ownership. The following table sets forth our Australian Operations operating revenues and carloads by new operations and existing operations for the years ended December 31, 2017 and 2016 (dollars in thousands):

	2017					Increase/(Decrease) in Total Operations		Increase/(Decrease) in Existing Operations		Currency Impact
	Total Operations	New Operations	Eliminations(a)	Existing Operations	2016	Amount	%	Amount	%	
Freight revenues	$254,653	$105,715	$—	$148,938	$120,622	$134,031	111.1 %	$28,316	23.5 %	$3,848
Freight-related revenues	46,696	—	(42,759)	89,455	95,776	(49,080)	(51.2)%	(6,321)	(6.6)%	2,860
All other revenues	6,161	6	—	6,155	6,188	(27)	(0.4)%	(33)	(0.5)%	174
Total operating revenues	$307,510	$105,721	$(42,759)	$244,548	$222,586	$84,924	38.2 %	$21,962	9.9 %	$6,882
Carloads	552,155	327,851	—	224,304	216,395	335,760	155.2 %	7,909	3.7 %	

(a) Represents revenues for services provided by Freightliner Australia to GRail for the 11 months ended November 2017 (the new operations period), which were eliminated in our consolidated revenues.

Operating revenues were $307.5 million for the year ended December 31, 2017, compared with $222.6 million for the year ended December 31, 2016, an increase of $84.9 million, or 38.2%. Excluding $63.0 million of net revenues from new operations and a $6.9 million increase from the impact of foreign currency appreciation, our Australian Operations same railroad operating revenues increased by $15.1 million, or 6.6%.

Freight Revenues

The following table sets forth the changes in our Australian Operations freight revenues by commodity group segregated into new operations and existing operations for the year ended December 31, 2017, compared with the year ended December 31, 2016 (dollars in thousands):

Commodity Group	2017	2016	Increase/(Decrease) in Total Operations	New Operations	Currency Impact	2016 Constant Currency*	Increase/(Decrease) in Existing Operations Constant Currency*
Agricultural Products	$22,562	$17,511	$ 5,051	$ —	$ 547	$ 18,058	$ 4,504
Coal & Coke	117,678	11,112	106,566	105,715	473	11,585	378
Intermodal	69,433	66,761	2,672	—	2,027	68,788	645
Metallic Ores	37,415	16,874	20,541	—	541	17,415	20,000
Minerals & Stone	6,878	7,634	(756)	—	236	7,870	(992)
Petroleum Products	687	730	(43)	—	24	754	(67)
Total freight revenues	$254,653	$120,622	$ 134,031	$ 105,715	$ 3,848	$ 124,470	$ 24,468

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following table sets forth our Australian Operations freight revenues, carloads and average freight revenues per carload for the years ended December 31, 2017 and 2016 (dollars in thousands, except average freight revenues per carload):

	Freight Revenues				Carloads		Average Freight Revenues Per Carload		
	2017		2016 Constant Currency*						
Commodity Group	Amount	% of Total	Amount	% of Total	2017	2016	2017	2016	2016 Constant Currency*
Agricultural Products	$22,562	8.8 %	$18,058	14.5 %	51,909	43,362	$435	404	$ 416
Coal & Coke	117,678	46.2 %	11,585	9.3 %	359,791	35,203	327	316	329
Intermodal	69,433	27.3 %	68,788	55.3 %	58,848	59,688	1,180	1,118	1,152
Metallic Ores	37,415	14.7 %	17,415	14.0 %	29,458	13,807	1,270	1,222	1,261
Minerals & Stone	6,878	2.7 %	7,870	6.3 %	51,872	64,060	133	119	123
Petroleum Products	687	0.3 %	754	0.6 %	277	275	2,480	2,655	2,742
Total	$254,653	100.0%	$124,470	100.0%	552,155	216,395	$461	557	$ 575

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

Total traffic from our Australian Operations increased 335,760 carloads to 552,155 carloads for the year ended December 31, 2017, compared with the year ended December 31, 2016. The increase consisted of 327,851 carloads from new operations and an increase of 7,909 carloads, or 3.7%, from existing operations. The increase in traffic from existing operations was principally due to increases of 15,651 carloads of metallic ores traffic and 8,547 carloads of agricultural products traffic, partially offset by decreases of 12,188 carloads of minerals and stone traffic and 3,263 carloads of coal and coke traffic. All remaining traffic decreased by a net 838 carloads.

Changes in average freight revenues per carload in a commodity group may be impacted by changes in customer rates and fuel surcharges, as well as changes in the mix of customer traffic within a commodity group. Excluding the impact of foreign currency, average freight revenues per carload from our Australian Operations decreased 19.8% to $461 for the year ended December 31, 2017, compared with the year ended December 31, 2016. Excluding the impact of foreign currency, average freight revenues per carload from existing operations increased 15.5% to $664 for the year ended December 31, 2017. The increase in average freight revenues per carload from existing operations was primarily due to increased metallic ores shipments as a result of the recommencement of operations at two previously closed iron ore and manganese mines.

The following information discusses the significant changes in our Australian Operations freight revenues from existing operations by commodity group, excluding the impact of foreign currency.

Agricultural products revenues increased $4.5 million, or 24.9%. Agricultural products traffic increased 8,547 carloads, or 19.7%, which increased revenues by $3.7 million, and average freight revenues per carload increased 4.6%, which increased revenues by $0.8 million. The increase in carloads was primarily due to stronger mainland grain shipments.

Metallic ores revenues increased $20.0 million, primarily due to a traffic increase of 15,651 carloads, which increased revenues by $19.9 million. The increase in carloads was primarily due to the recommencement of operations at two previously closed iron ore and manganese mines.

Freight-Related Revenues

Excluding a $2.9 million increase due to the net impact of foreign currency appreciation, freight-related revenues from our Australian Operations, which includes revenues from railcar switching, track access rights, crewing services, storage and other ancillary revenues related to the movement of freight, decreased $51.9 million, or 52.7%, to $46.7 million for the year ended December 31, 2017, compared with $98.6 million for the year ended December 31, 2016. Excluding $42.8 million of net freight-related revenues for services provided by Freightliner Australia to GRail for the 11 months ended November 30, 2017 (the new operations period), which were eliminated in our consolidated freight-related revenues, our freight-related revenues from existing operations decreased $9.2 million. The decrease from existing operations was primarily due to the loss of the fixed payments from Arrium that we received in the first quarter of 2016 associated with our rail haulage agreement to serve their Southern Iron mine and shipments of stockpiled manganese in 2016 at a previously closed customer mine facility. The decrease was partially offset by an increase in agricultural products-related switching revenues in 2017.

All Other Revenues

Excluding a $0.2 million increase due to the net impact of foreign currency appreciation, all other revenues from our Australian Operations, which includes revenues from third-party railcar and locomotive repairs, property rentals and other ancillary revenues not directly related to the movement of freight, decreased $0.2 million, or 3.2%, to $6.2 million for the year ended December 31, 2017, compared with $6.4 million for the year ended December 31, 2016.

Operating Expenses

Total operating expenses from our Australian Operations for the year ended December 31, 2017 increased $12.5 million, or 5.7%, to $230.3 million, compared with $217.8 million for the year ended December 31, 2016. The increase consisted of $31.8 million from new operations, partially offset by a decrease of $19.3 million from existing operations. Operating expenses for the year ended December 31, 2017 included $4.9 million of impairment and related charges primarily associated with track assets on idle branch lines in South Australia. Operating expenses for the year ended December 31, 2016 included a $13.0 million impairment of a rolling-stock maintenance facility and an accounts receivable reserve of $8.1 million, both of which were associated with Arrium's voluntary administration. In addition, the change from existing operations in 2017 included a $6.3 million increase from the net appreciation of the Australian dollar relative to the United States dollar.

The following table sets forth operating expenses from our Australian Operations for the years ended December 31, 2017 and 2016 (dollars in thousands):

	2017		2016					
	Amount	% of Operating Revenues	Amount	% of Operating Revenues	Increase/(Decrease)	Currency Impact	2016 Constant Currency*	Increase/(Decrease) Constant Currency*
Labor and benefits	$68,935	22.4 %	$66,547	29.9 %	$ 2,388	$2,069	$68,616	$ 319
Equipment rents	5,577	1.8 %	6,514	2.9 %	(937)	203	6,717	(1,140)
Purchased services	26,269	8.6 %	23,429	10.5 %	2,840	712	24,141	2,128
Depreciation and amortization	61,142	19.9 %	30,863	13.9 %	30,279	994	31,857	29,285
Diesel fuel used in train operations	25,236	8.2 %	19,743	8.9 %	5,493	608	20,351	4,885
Casualties and insurance	5,502	1.8 %	5,373	2.4 %	129	204	5,577	(75)
Materials	10,706	3.5 %	10,559	4.7 %	147	333	10,892	(186)
Trackage rights	12,633	4.1 %	10,047	4.5 %	2,586	320	10,367	2,266
Net loss on sale and impairment of assets	5,797	1.9 %	13,341	6.0 %	(7,544)	197	13,538	(7,741)
Restructuring costs	338	0.1 %	789	0.4 %	(451)	13	802	(464)
Other expenses	8,124	2.6 %	30,571	13.7 %	(22,447)	620	31,191	(23,067)
Total operating expenses	$230,259	74.9 %	$217,776	97.8 %	$ 12,483	$6,273	$224,049	$ 6,210

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following information discusses the significant changes in operating expenses from our Australian Operations excluding a $6.3 million increase due to the net impact from foreign currency appreciation.

Equipment rents expense was $5.6 million for the year ended December 31, 2017, compared with $6.7 million for the year ended December 31, 2016, a decrease of $1.1 million, or 17.0%. The decrease was primarily attributable to the purchase of equipment that was previously rented.

Purchased services expense was $26.3 million for the year ended December 31, 2017, compared with $24.1 million for the year ended December 31, 2016, an increase of $2.1 million, or 8.8%. The increase was primarily attributable to new operations.

Depreciation and amortization expense was $61.1 million for the year ended December 31, 2017, compared with $31.9 million for the year ended December 31, 2016, an increase of $29.3 million, or 91.9%. The increase was primarily attributable to new operations.

The cost of diesel fuel used in train operations was $25.2 million for the year ended December 31, 2017, compared with $20.4 million for the year ended December 31, 2016, an increase of $4.9 million, or 24.0%. The increase consisted of $3.6 million due to a 17.4% increase in average fuel cost per gallon and $1.3 million due to a 5.7% increase in diesel fuel consumption.

Trackage rights expense was $12.6 million for the year ended December 31, 2017, compared with $10.4 million for the year ended December 31, 2016, an increase of $2.3 million, or 21.9%. The increase was primarily attributable to services for an iron ore customer that recommenced operations in July 2016, as well as increased grain shipments.

Net loss on the sale and impairment of assets for the year ended December 31, 2017, of $5.8 million was primarily related to the impairment of track assets on idle branch lines in Southern Australia. Net loss on the sale and impairment of assets for year ended December 31, 2016 of $13.3 million was primarily related to the impairment of a rolling-stock maintenance facility resulting from Arrium entering into voluntary administration.

Other expenses were $8.1 million for the year ended December 31, 2017, compared with $31.2 million for the year ended December 31, 2016, a decrease of $23.1 million. Other expenses for the year ended December 31, 2016 included $14.7 million of corporate development and related costs associated with the GRail Transactions and an accounts receivable reserve of $8.1 million associated with Arrium entering into voluntary administration.

82

Operating Income/Operating Ratio

Operating income from our Australian Operations was $77.3 million for the year ended December 31, 2017, compared with $4.8 million for the year ended December 31, 2016. For the year ended December 31, 2017, our Australian Operations recorded charges of $5.9 million related to the impairment of track assets on idle branch lines in Southern Australia. For the year ended December 31, 2016, our Australian Operations recorded charges of $21.1 million, including a $13.0 million non-cash charge related to the impairment of a rolling-stock maintenance facility and associated write-off of accounts receivable of $8.1 million, resulting from Arrium entering into voluntary administration. Operating income for the year ended December 31, 2016 also included $14.7 million of corporate development and related costs, primarily associated with the GRail Transactions. The operating ratio was 74.9% for the year ended December 31, 2017, compared with 97.8% for the year ended December 31, 2016.

U.K./European Operations

Operating Revenues and Carloads

The following table sets forth our U.K./European Operations operating revenues and carloads by new operations and existing operations for the years ended December 31, 2017 and 2016 (dollars in thousands):

	2017			2016	Increase/(Decrease) in Total Operations		Increase/(Decrease) in Existing Operations		Currency Impact
	Total Operations	New Operations	Existing Operations		Amount	%	Amount	%	
Freight revenues	$337,866	$—	$337,866	$337,325	$541	0.2 %	$541	0.2 %	$(7,486)
Freight-related revenues	237,332	73,054	164,278	181,661	55,671	30.6 %	(17,383)	(9.6)%	(4,919)
All other revenues	51,051	29,496	21,555	23,191	27,860	120.1 %	(1,636)	(7.1)%	(1,002)
Total operating revenues	$626,249	$102,550	$523,699	$542,177	$84,072	15.5 %	$(18,478)	(3.4)%	$(13,407)
Carloads	1,092,549	—	1,092,549	1,104,016	(11,467)	(1.0)%	(11,467)	(1.0)%	

Freight Revenues

The following table sets forth the changes in our U.K./European Operations freight revenues by commodity group for the year ended December 31, 2017, compared with the year ended December 31, 2016 (dollars in thousands):

Commodity Group	2017	2016	Increase/(Decrease) in Total Operations	Currency Impact	2016 Constant Currency*	Increase/(Decrease) in Total Operations Constant Currency*
Agricultural Products	$5,280	$2,465	$ 2,815	$188	$2,653	$ 2,627
Coal & Coke	9,972	14,982	(5,010)	(375)	14,607	(4,635)
Intermodal	253,854	262,977	(9,123)	(8,511)	254,466	(612)
Lumber & Forest Products	—	170	(170)	2	172	(172)
Metallic Ores	—	100	(100)	5	105	(105)
Minerals & Stone	68,760	56,631	12,129	1,205	57,836	10,924
Total freight revenues	$337,866	$337,325	$ 541	$(7,486)	$329,839	$ 8,027

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

83

The following table sets forth our U.K./European Operations freight revenues, carloads and average freight revenues per carload for the years ended December 31, 2017 and 2016 (dollars in thousands, except average freight revenues per carload):

	Freight Revenues				Carloads		Average Freight Revenues Per Carload		
	2017		2016 Constant Currency*						
Commodity Group	Amount	% of Total	Amount	% of Total	2017	2016	2017	2016	2016 Constant Currency*
Agricultural Products	$5,280	1.6 %	$2,653	0.8 %	4,359	2,552	$1,211	$966	$ 1,040
Coal & Coke	9,972	2.9 %	14,607	4.4 %	22,403	40,117	445	373	364
Intermodal	253,854	75.1 %	254,466	77.2 %	890,844	904,783	285	291	281
Lumber & Forest Products	—	— %	172	0.1 %	—	473	—	359	364
Metallic Ores	—	— %	105	— %	—	201	—	498	522
Minerals & Stone	68,760	20.4 %	57,836	17.5 %	174,943	155,890	393	363	371
Total	$337,866	100.0%	$329,839	100.0%	1,092,549	1,104,016	$309	$306	$ 299

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

Total traffic from our U.K./European Operations decreased 11,467 carloads, or 1.0%, to 1,092,549 carloads for the year ended December 31, 2017, compared with the year ended December 31, 2016. The decrease in traffic was principally due to decreases of 17,714 carloads of coal and coke traffic and 13,939 carloads of intermodal traffic, partially offset by increases of 19,053 carloads of minerals and stone traffic and 1,807 carloads of agricultural products traffic. All remaining traffic decreased by a net 674 carloads.

Changes in average freight revenues per carload in a commodity group may be impacted by changes in customer rates and fuel surcharges, as well as changes in the mix of customer traffic within a commodity group. Excluding the impact of foreign currency, average freight revenues per carload from our U.K./European Operations increased 3.3% to $309 for the year ended December 31, 2017, compared with the year ended December 31, 2016.

The following information discusses the significant changes in our U.K./European Operations freight revenues by commodity group, excluding the impact of foreign currency.

Agricultural products revenues increased $2.6 million, or 99.0%. Agricultural products traffic increased 1,807 carloads, or 70.8%, which increased revenues by $2.2 million, and average freight revenues per carload increased 16.4%, which increased revenues by $0.4 million. The increase in carloads was primarily due to the development of new business in Poland.

Coal and coke revenues decreased $4.6 million, or 31.7%. Coal and coke traffic decreased 17,714 carloads, or 44.2%, which decreased revenues by $7.9 million, while average freight revenues per carload increased 22.3%, which increased revenues by $3.3 million. The decrease in carloads was primarily due to lower demand for steam coal in the U.K., largely as a result of competition from natural gas power generation and an increase in the carbon tax. The increase in average freight revenues per carload was primarily due to a change in the mix of business.

Minerals and stone revenues increased $10.9 million, or 18.9%. Minerals and stone traffic increased 19,053 carloads, or 12.2%, which increased revenues by $7.5 million, and average freight revenues per carload increased 5.9%, which increased revenues by $3.4 million. The increase in carloads was primarily due to higher construction aggregates shipments in the U.K. and Poland. The increase in average freight revenues per carload was primarily due to a change in the mix of business in the U.K.

Freight revenues from all remaining commodities combined decreased by $0.9 million.

Freight-Related Revenues

Freight-related revenues from our U.K./European Operations include trucking haulage services, container storage and switching services, as well as infrastructure services, where we operate work trains for the track infrastructure owner. Freight-related revenues in the U.K./Europe also include traction services (or hook and pull), which requires us to provide locomotives and drivers to move a customer's train between specified origin and destination points and other ancillary revenues related to the movement of freight.

Excluding a $4.9 million decrease due to the impact of foreign currency depreciation, freight-related revenues from our U.K./European Operations increased $60.6 million, or 34.3%, to $237.3 million for the year ended December 31, 2017, compared with $176.7 million for the year ended December 31, 2016. The increase consisted of $73.1 million from new operations, partially offset by a decrease of $12.5 million, or 7.1%, from existing operations. The decrease from existing operations was primarily due to the discontinuation of certain routes in Continental Europe following the completion of the restructuring of ERS in the first half of 2017 and decreased U.K. infrastructure revenues.

All Other Revenues

Excluding a $1.0 million decrease due to the impact of foreign currency depreciation, all other revenues from our U.K./European Operations, which includes revenues from container sales, third-party railcar and locomotive repairs, property rentals and other ancillary revenues not directly related to the movement of freight, increased $28.9 million to $51.1 million for the year ended December 31, 2017, compared with $22.2 million for the year ended December 31, 2016. The increase consisted of $29.5 million from new operations, primarily from container sales and container repairs at Pentalver, partially offset by a decrease of $0.6 million, or 2.9%, from existing operations. The decrease from existing operations was primarily due to reduced management and technical support revenues in Saudi Arabia resulting primarily from the timing of project deliverables, partially offset by increased passenger crewing revenues.

Operating Expenses

Total operating expenses from our U.K./European Operations increased $35.5 million, or 6.1%, to $615.8 million for the year ended December 31, 2017, compared with $580.3 million for the year ended December 31, 2016. The increase consisted of $97.7 million from new operations, partially offset by a decrease of $62.2 million from existing operations. The decrease from existing operations included an $8.9 million gain on the buyout of the Freightliner deferred consideration and $9.6 million due to the net impact of foreign currency depreciation. Operating expenses for the year ended December 31, 2016 included $21.5 million of impairment charges related to ERS and $14.7 million of charges related to the U.K. coal restructuring. The decrease in operating expenses from existing operations was also due to a $2.5 million decrease in labor and benefits expense primarily resulting from reduced headcount related to the restructuring of the U.K. coal business and the discontinuation of certain routes in Continental Europe as part of our restructuring of ERS.

The following table sets forth operating expenses from our U.K./European Operations for the years ended December 31, 2017 and 2016 (dollars in thousands):

	2017		2016					
	Amount	% of Operating Revenues	Amount	% of Operating Revenues	Increase/(Decrease)	Currency Impact	2016 Constant Currency*	Increase/(Decrease) Constant Currency*
Labor and benefits	$181,732	29.0 %	$172,798	31.9 %	$ 8,934	$(7,083)	$165,715	$ 16,017
Equipment rents	74,187	11.9 %	95,178	17.5 %	(20,991)	(819)	94,359	(20,172)
Purchased services	158,035	25.2 %	112,248	20.7 %	45,787	(808)	111,440	46,595
Depreciation and amortization	31,309	5.0 %	26,798	4.9 %	4,511	(754)	26,044	5,265
Diesel fuel used in train operations	45,339	7.2 %	39,437	7.3 %	5,902	(663)	38,774	6,565
Electricity used in train operations	7,521	1.2 %	13,346	2.5 %	(5,825)	45	13,391	(5,870)
Casualties and insurance	4,229	0.7 %	4,408	0.8 %	(179)	(157)	4,251	(22)
Materials	47,056	7.5 %	21,868	4.0 %	25,188	(861)	21,007	26,049
Trackage rights	36,220	5.8 %	40,502	7.5 %	(4,282)	(416)	40,086	(3,866)
Net (gain)/loss on sale and impairment of assets	(87)	— %	19,352	3.6 %	(19,439)	2,375	21,727	(21,814)
Restructuring costs	9,355	1.5 %	6,509	1.2 %	2,846	(343)	6,166	3,189
Other expenses	20,875	3.3 %	27,842	5.1 %	(6,967)	(124)	27,718	(6,843)
Total operating expenses	$615,771	98.3 %	$580,286	107.0 %	$ 35,485	$(9,608)	$570,678	$ 45,093

* Constant currency amounts reflect the prior period results translated at the current period exchange rates.

The following information discusses the significant changes in operating expenses from our U.K./European Operations, excluding a decrease of $9.6 million due to the net impact from foreign currency depreciation.

Labor and benefits expense was $181.7 million for the year ended December 31, 2017, compared with $165.7 million for the year ended December 31, 2016, an increase of $16.0 million, or 9.7%. The increase consisted of $18.5 million from new operations, partially offset by a decrease of $2.5 million from existing operations. The decrease from existing operations was primarily due to reduced headcount related to the restructuring of the U.K. coal business and the discontinuation of certain routes in Continental Europe as part of our restructuring of ERS.

Equipment rents expense was $74.2 million for the year ended December 31, 2017, compared with $94.4 million for the year ended December 31, 2016, a decrease of $20.2 million, or 21.4%. The decrease consisted of $28.6 million from existing operations, partially offset by $8.4 million from new operations. The year ended December 31, 2016 included surplus lease costs in Continental Europe and higher locomotive lease costs in the U.K. that have since been renegotiated with more favorable terms. These resulted in lower equipment costs for the year ended December 31, 2017 that were partially offset by additional locomotive lease expense in Poland to support increased aggregates and grain business.

Purchased services expense was $158.0 million for the year ended December 31, 2017, compared with $111.4 million for the year ended December 31, 2016, an increase of $46.6 million, or 41.8%. The increase consisted of $35.5 million from new operations and $11.1 million from existing operations. The increase in existing operations was primarily due to cost reimbursements in 2016 as a result of disruptions caused by a temporary flood-related bridge outage in the U.K. In addition, the year ended December 31, 2017 included increased third-party costs for services performed at the ports and for contracted administrative services, partially offset by a decrease due to the discontinuation of certain routes in Continental Europe as part of our restructuring plan.

Depreciation and amortization expense was $31.3 million for the year ended December 31, 2017, compared with $26.0 million for the year ended December 31, 2016, an increase of $5.3 million, or 20.2%. The increase consisted of $3.3 million from new operations and $2.0 million from existing operations. The increase from existing operations was primarily attributable to a larger depreciable asset base in 2017 compared with 2016, reflecting capital spending

in 2017 and 2016.

The cost of diesel fuel used in train operations was $45.3 million for the year ended December 31, 2017, compared with $38.8 million for the year ended December 31, 2016, an increase of $6.6 million, or 16.9%. The increase consisted of $5.4 million due to a 14.8% increase in average fuel cost per gallon and $1.2 million due to a 1.8% increase in diesel fuel consumption.

The cost of electricity used in train operations was $7.5 million for the year ended December 31, 2017, compared with $13.4 million for the year ended December 31, 2016, a decrease of $5.9 million, or 43.8%. The decrease was primarily due to the discontinuation of certain routes in Continental Europe as part of our restructuring plan as well as reimbursement of prior year energy taxes as a result of an initiative by the German government.

Materials expense was $47.1 million for the year ended December 31, 2017, compared with $21.0 million for the year ended December 31, 2016, an increase of $26.0 million primarily from new operations.

Trackage rights expense was $36.2 million for the year ended December 31, 2017, compared with $40.1 million for the year ended December 31, 2016, a decrease of $3.9 million, or 9.6%. The decrease was primarily due to the discontinuation of certain routes in Continental Europe as part of our restructuring plan, partially offset by increased construction aggregates shipments in Poland.

Net loss on the sale and impairment of assets for the year ended December 31, 2016 included impairment charges of $21.5 million related to the impairment of assets associated with our ERS business in Continental Europe.

Restructuring costs for the year ended December 31, 2017, of $9.4 million, were primarily related to our previously announced restructuring of ERS. Restructuring costs for the year ended December 31, 2016, of $6.5 million, were primarily associated with severance costs related to the restructuring of the U.K. coal business.

Other expenses were $20.9 million for the year ended December 31, 2017, compared with $27.7 million for the year ended December 31, 2016, a decrease of $6.8 million, or 24.7%. The decrease consisted of $11.7 million from existing operations, partially offset by $4.8 million from new operations. The decrease from existing operations was primarily due to the buyout of the Freightliner deferred consideration, which resulted in a net gain of $8.9 million in 2017. The year ended December 31, 2016 included a write-off of accounts receivable associated with ERS of $2.6 million. For additional information regarding deferred consideration, see Note 10, Fair Value of Financial Instruments, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Operating Income/(Loss)

Operating income from our U.K./European Operations was $10.5 million for the year ended December 31, 2017, compared with an operating loss of $38.1 million for the year ended December 31, 2016. Operating income for the year ended December 31, 2017 included $9.4 million of restructuring costs and $4.0 million of corporate development and related costs, partially offset by a gain on the buyout of the Freightliner deferred consideration of $8.9 million. Operating loss for the year ended December 31, 2016 included impairment charges of $21.5 million associated with our ERS business and $6.5 million of restructuring costs.

Liquidity and Capital Resources

We had cash and cash equivalents of $90.4 million and $80.5 million at December 31, 2018 and 2017, respectively, of which, $26.9 million and $52.4 million as of December 31, 2018 and 2017, respectively, was from our Australian Operations, which we control through a 51.1% ownership interest. In accordance with our Australia Partnership agreement, the cash and cash equivalents of our Australian Operations can be used to make payments in the usual and regular course of business, pay down debt of the partnership and make distributions to the partners in proportion to their investments. During the year ended December 31, 2018, the Australian Partnership made A$65.0 million of such distributions, of which A$33.2 million (or $24.6 million at the applicable exchange rates at the time the payments were made) and A$31.8 million (or $23.6 million at the applicable exchange rates at the time the payments were made) was distributed to G&W and MIRA, respectively.

Based on current expectations, we believe our cash, together with our other liquid assets, anticipated future cash flows from operations, availability under our credit agreement, and access to debt and equity capital markets and other sources of available financing will be sufficient to fund expected operating, capital and debt service requirements and other financial commitments for the foreseeable future.

At December 31, 2018, we had long-term debt, including current portion, of $2.5 billion, which comprised 40.3% of our total capitalization, and $458.3 million of unused borrowing capacity. At December 31, 2017, we had long-term debt, including current portion, totaling $2.3 billion, which comprised 37.4% of our total capitalization. At December 31, 2018 and 2017, our long-term debt, including current portion, included $458.2 million and $525.1 million, respectively, outstanding under the Australian Credit Agreement, which is non-recourse to us and to MIRA.

87

During 2018, 2017 and 2016, we generated $553.1 million, $479.2 million and $407.1 million, respectively, of cash from operating activities. Changes in working capital decreased net cash flows from operating activities by $2.2 million, $30.6 million and $23.1 million in 2018, 2017 and 2016, respectively.

During 2018, 2017 and 2016, our cash used in investing activities was $255.4 million, $306.9 million and $1,135.0 million, respectively. For 2018, the primary drivers of cash used in investing activities were $284.1 million of cash used for capital expenditures, including $44.0 million for new business investments, partially offset by $20.5 million in cash received from grants from outside parties for capital spending and $9.5 million of proceeds from dispositions of property and equipment. In addition, cash used in investing activities included $13.7 million of contributions to our joint venture in CG Railway, LLC for our portion of an initial installment on two new rail ferries, partially offset by $7.9 million of net proceeds from the sale of ERS. For 2017, the primary drivers of cash used in investing activities were $107.6 million of net cash paid for acquisitions, including the acquisitions of Pentalver, HOG and a 50% joint venture in CG Railway, LLC, partially offset by proceeds received from a working capital adjustment related to the GRail acquisition and $228.5 million of cash used for capital expenditures, including $8.6 million for new business investments, partially offset by $20.2 million in cash received from grants from outside parties for capital spending and $5.2 million of proceeds from dispositions of property and equipment. For 2016, the primary drivers of cash used in investing activities were $969.5 million of cash paid for acquisitions, including the acquisitions of Providence and Worcester and GRail, $219.5 million of cash used for capital expenditures, including $26.1 million for new business investments, partially offset by $36.1 million in cash received from grants from outside parties for capital spending and $15.2 million of insurance proceeds for the replacement of assets.

During 2018 and 2017, our cash used in financing activities was $284.2 million and $130.9 million, respectively. For 2018, the primary drivers of cash used in financing activities were $460.1 million for common share repurchases, $23.6 million of distributions made by the Australia Partnership to its noncontrolling interest holder, $6.3 million for installment payments on deferred consideration related to the Freightliner acquisition and $5.8 million in debt amendment and issuance costs, partially offset by net proceeds of $205.9 million from an increase in outstanding debt. For 2017, the primary driver of cash used in financing activities was a net decrease in our outstanding debt of $137.9 million. During 2016, our cash provided by financing activities was $719.9 million. The primary drivers of cash provided by financing activities were proceeds of $476.8 million, which included $300.3 million for the issuance of a 48.9% equity stake in GWAHLP to MIRA and $176.5 million of proceeds from MIRA under the Partner Loan Agreement, and net proceeds of $285.8 million from the sale of our Class A Common Stock.

Cash Repatriation

At December 31, 2018, we had cash and cash equivalents totaling $90.4 million, of which $62.8 million were held by our foreign subsidiaries. The amount of undistributed earnings of our foreign subsidiaries as of December 31, 2018 was $216.2 million. We file a consolidated United States federal income tax return that includes all of our United States subsidiaries. In accordance with the TCJA that was signed into law on December 22, 2017, we recorded a provisional liability of $22 million in 2017 and an adjustment of $1.6 million in 2018, totaling $23.7 million of United States income tax associated with unrepatriated foreign earnings, which will be payable over eight years. Each of our foreign subsidiaries files income tax returns in each of its respective countries. If the earnings were to be distributed in the future, those distributions may result in foreign exchange gains and losses and be subject to other taxes and credits, including U.S. state income taxes and withholding taxes payable to various foreign countries. No provision is made for the impact of those future foreign exchange gains or losses or such other potential taxes and credits that could be applicable to the undistributed earnings of our foreign subsidiaries in the event of distribution. The amount of estimated taxes which would be due if these earnings were distributed is approximately $8 million.

Shelf Registration

We have an effective shelf registration statement on file with the SEC for an indeterminate number of securities that is effective for three years (expires August 29, 2021), around which time we expect to file a replacement shelf registration statement. Under this universal shelf registration statement, we have the capacity to offer and sell from time to time securities, including common stock, debt securities, preferred stock, warrants and units.

Credit Agreement

On June 5, 2018, we entered into the Third Amended and Restated Senior Secured Syndicated Credit Facility Agreement (the Credit Agreement). At closing, the credit facilities under the Credit Agreement were comprised of a $1,423.0 million United States term loan, a £272.9 million (or $365.2 million at the exchange rate on June 5, 2018) U.K. term loan and a $625.0 million revolving credit facility. The revolving credit facility includes borrowing capacity for letters of credit and swingline loans. The amendment also extended the maturity date of our credit facilities to June 5, 2023.

During the year ended December 31, 2018, we made prepayments of $120.0 million on the United States term loan and £25.0 million (or $32.8 million at the exchange rate at the time the payments were made) on the U.K. term loan, which were applied towards their future quarterly installments.

For additional information regarding our Credit Agreement, see Note 8, Long-Term Debt, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Australian Credit Agreement

For the benefit of our Australian business, GWI Acquisitions Pty Ltd (GWIA) entered into a syndicated facility agreement on November 28, 2016 (the Australian Credit Agreement) for A$690.0 million (or $511.4 million at the exchange rate on November 28, 2016) in senior secured term loan facilities and A$50.0 million (or $37.1 million at the exchange rate on November 28, 2016) in the form of a revolving credit facility. The Australian Credit Agreement is non-recourse to us and to MIRA and has a maturity date of December 1, 2021. For additional information regarding our Australian Credit Agreement, see Note 8, Long-Term Debt, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Partner Loan Agreement

On December 1, 2016, GWAHLP and MIRA entered into a Partner Loan Agreement with an A$238.0 million non-recourse subordinated partner loan from MIRA used to fund a portion of its contribution to the Australia Partnership to fund the acquisition of GRail (note our subsidiary, GWI Holding B.V., has a matching partner loan for a portion of our contribution that is eliminated in consolidation). The Partner Loan Agreement is subordinated to the Australian Credit Agreement. The maturity date of the partner loan is November 1, 2026. For additional information regarding our Partner Loan Agreement, see Note 8, Long-Term Debt, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Non-Interest Bearing Loan

In 2010, as part of the acquisition of FreightLink Pty Ltd, Asia Pacific Transport Pty Ltd and related corporate entities (the FreightLink Acquisition), we assumed debt with a carrying value of A$1.8 million (or $1.7 million at the exchange rate on December 1, 2010), which represented the fair value of an A$50.0 million (or $48.2 million at the exchange rate on December 1, 2010) non-interest bearing loan due in 2054. As of December 31, 2018, the carrying value of the loan was A$3.3 million (or $2.4 million at the exchange rate on December 31, 2018) with a non-cash imputed interest rate of 8.0%.

Equipment and Property Leases

We enter into operating leases for railcars, locomotives and other equipment as well as real property. We also enter into agreements with other railroads and other third parties to operate over certain sections of their track, whereby we pay a per car fee to use the track or make an annual lease payment. Through December 31, 2018, the costs associated with operating leases are expensed as incurred. Effective January 1, 2019, we will adopt Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) 2016-02, Leases (Topic 842), which will require lessees to recognize leases on their balance sheets as a right-of-use asset with a corresponding liability. For additional information regarding our equipment and property leases, see Note 6, Property and Equipment and Leases, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report. For additional information regarding our adoption of ASU 2016-02, see Note 20, Recently Issued Accounting Standards, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Grants from Outside Parties

Our railroads have received a number of project grants from federal, provincial, state and local agencies and other outside parties for upgrades and construction of rail lines and upgrades of locomotives. We use the grant funds as a supplement to our normal capital programs. In return for the grants, the railroads pledge to maintain various levels of service and improvements on the rail lines or equipment that had been upgraded or constructed. We believe the levels of service and improvements required under the grants are reasonable. However, we can offer no assurance that grants from outside parties will continue to be available or that, even if available, our railroads will be able to obtain them.

Insurance and Third-Party Claims

Accounts receivable from insurance and other third-party claims was $19.7 million and $10.8 million as of December 31, 2018 and 2017, respectively. Accounts receivable from insurance and other third-party claims at December 31, 2018 included $8.7 million from our U.K./European Operations, $7.2 million from our North American Operations and $3.8 million from our Australian Operations. The balance from the Company's U.K./European Operations resulted primarily from the Company's anticipated insurance recoveries associated with a personal injury that occurred in the U.K. in 2016 and a motor vehicle accident that occurred in the U.K. in 2018. The balance from the Company's North American Operations resulted predominately from the Company's anticipated insurance recoveries associated with a bridge washout in Canada in January 2018 and property damage caused by Hurricane Michael in the southern United States in October 2018. The balance from the Company's Australian Operations resulted primarily from the Company's anticipated insurance recoveries associated with a fire in 2011 that occurred on a railway line operated by GWA. We received proceeds from insurance totaling $3.0 million, $1.6 million and $15.2 million for the years ended December 31, 2018, 2017 and 2016, respectively.

2019 Estimated Capital Expenditures

The following table sets forth our estimated capital expenditures by segment for the year ending December 31, 2019 (dollars in thousands):

	Year Ending December 31, 2019			
Budgeted Capital Expenditures:	North American Operations	Australian Operations	U.K./European Operations	Total
Track and equipment, self-funded	$165,000	$ 20,000	$ 30,000	$215,000
Track and equipment, subject to third-party funding	105,000	—	—	105,000
New business development	8,000	27,000	—	35,000
Grants from outside parties	(75,000)	$ —	—	(75,000)
Net budgeted capital expenditures	$203,000	$ 47,000	$ 30,000	$280,000

We have historically relied primarily on cash generated from operations to fund working capital and capital expenditures relating to ongoing operations, while relying on borrowed funds and stock issuances to finance acquisitions and new investments. We believe our cash flow from operations will enable us to meet our liquidity and capital expenditure requirements relating to ongoing operations for at least the duration of our Credit Agreement.

Contractual Obligations and Commercial Commitments

Based on our assessment of the underlying provisions and circumstances of our material contractual obligations and commercial commitments as of December 31, 2018, there is no known trend, demand, commitment, event or uncertainty that is reasonably likely to occur that would have a material adverse effect on our consolidated results of operations, financial condition or liquidity.

The following table represents our obligations and commitments for future cash payments under various agreements as of December 31, 2018 (dollars in thousands):

	Payments Due By Period				
Contractual Obligations:	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term debt obligations[(a)]	$2,444,577	$ 25,326	$206,328	$2,011,212	$ 201,711
Interest on long-term debt[(b)]	450,604	99,992	191,138	126,680	32,794
Derivative instruments[(c)]	14,395	1,954	2,927	9,514	—
Capital lease obligations	71,727	11,405	25,929	20,405	13,988
Operating lease obligations	663,955	82,191	117,367	80,658	383,739
Purchase obligations[(d)]	55,646	44,196	11,450	—	—
Other contractual obligations[(e)]	56,711	14,736	10,821	273	30,881
Total	$3,757,615	$ 279,800	$565,960	$2,248,742	$ 663,113

(a) Includes an A$50.0 million (or $35.2 million at the exchange rate on December 31, 2018) non-interest bearing loan due in 2054 assumed in the FreightLink Acquisition in 2010 with a carrying value of A$3.3 million (or $2.4 million at the exchange rate on December 31, 2018).
(b) Assumes no change in variable interest rates from December 31, 2018.
(c) Includes the fair value of our interest rate swaps of $14.4 million.
(d) Includes purchase commitments for future capital expenditures among our existing operations.
(e) Includes future payment obligations associated with deferred compensation of $13.7 million, the acquisitions of Freightliner and HOG of $11.3 million, estimated casualty obligations of $3.6 million and certain other long-term liabilities of $11.4 million. In addition, the table includes our 2019 estimated contributions of $9.6 million to our pension plans and estimated post-retirement medical and life insurance benefits of $7.1 million.

For additional information regarding the transition tax, see Note 13, Income Taxes, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Off-Balance Sheet Arrangements

An off-balance sheet arrangement includes any contractual obligation, agreement or transaction involving an unconsolidated entity under which we (1) have made guarantees, (2) have a retained or contingent interest in transferred assets, or a similar arrangement, that serves as credit, liquidity or market risk support to that entity for such assets, (3) have an obligation under certain derivative instruments, or (4) have any obligation arising out of a material variable interest in such an entity that provides financing, liquidity, market risk or credit risk support to us, or that engages in leasing or hedging services with us.

Our off-balance sheet arrangements as of December 31, 2018 consisted of operating lease obligations, which are included in the contractual obligations table above. Effective January 1, 2019, we will adopt ASU 2016-02, Leases (Topic 842), which will require lessees to recognize leases on their balance sheets as a right-of-use asset with a corresponding liability. See Note 20, Recently Issued Accounting Standards, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report for additional information regarding this standard.

Impact of Foreign Currencies on Consolidated Results

The results of operations of our foreign entities are maintained in the local currency (including, the Australian dollar, the British pound, the Canadian dollar, the Euro and the Polish zloty) and then translated into United States dollars based on the exchange rate at the end of the period for balance sheet items and, for the statement of operations, at the average exchange rate for the statement period. When comparing the effects of average foreign currency exchange rates on operating revenues and operating expenses during the year ended December 31, 2018 versus the year ended December 31, 2017, foreign currency translation had a net negative impact on our consolidated operating revenues and a net positive impact on our consolidated operating expenses primarily due to the strengthening of the British pound and the Euro relative to the United States dollar, partially offset by the weakening of the Australian and Canadian dollars relative to the United States dollar for the year ended December 31, 2018. Currency effects related to

operating revenues and expenses are presented within the discussion of these respective items included within this "Management's Discussion and Analysis of Financial Condition and Results of Operations."

The following table reflects the balance sheet exchange rates used to translate each foreign entity's respective local currency balance sheet into United States dollars as of December 31, 2018 and 2017:

	December 31,	
	2018	2017
United States dollar per Australian dollar	$0.70	$0.78
United States dollar per British pound	$1.28	$1.35
United States dollar per Canadian dollar	$0.73	$0.80
United States dollar per Euro	$1.15	$1.20

The following table reflects the average exchange rates used to translate each foreign entity's respective local currency results of operations into United States dollars for the years ended December 31, 2018, 2017 and 2016:

	Year Ended December 31,		
	2018	2017	2016
United States dollar per Australian dollar	$0.75	$0.77	$0.74
United States dollar per British pound	$1.34	$1.29	$1.36
United States dollar per Canadian dollar	$0.77	$0.77	$0.76
United States dollar per Euro	$1.18	$1.13	$1.11

Critical Accounting Policies and Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to use judgment and to make estimates and assumptions that affect business combinations, reported assets, liabilities, revenues and expenses during the reporting period. Management uses its judgment in making significant estimates in the areas of recoverability and useful life of assets, as well as liabilities for casualty claims and income taxes. Actual results could materially differ from those estimates. The following critical accounting policies and use of estimates should be read in conjunction with Note 2, Significant Accounting Policies, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Property and Equipment

We record property and equipment at cost. We capitalize major renewals or improvements, but routine maintenance and repairs are expensed when incurred. We incur maintenance and repair expenses to keep our operations safe and fit for existing purpose. Major renewals or improvements to property and equipment, however, are undertaken to extend the useful life or increase the functionality of the asset, or both.

When assessing spending for classification among capital or expense, we evaluate the substance of the respective spending. For example, costs incurred to modify a railroad bridge, either through individual projects or pre-established multi-year programs, which substantially upgrade the bridge's capacity to carry increased loads and/or to allow for a carrying speed beyond the original or existing capacity of the bridge, are capitalized. However, costs for replacement of routinely wearable bridge components, such as plates or bolts, are expensed as incurred. Other than a de minimis threshold under which costs are expensed as incurred, we do not apply pre-defined capitalization thresholds when assessing spending for classification among capital or expense.

Unlike the Class I railroads that operate over extensive contiguous rail networks, our short line and regional railroads are generally geographically dispersed businesses that transport freight over relatively short distances. Our largest category of capital expenditures is for track line upgrades, expansion and replacement, where we will utilize both our employees and professional contractors in completing these capital projects. Costs that are directly attributable to self-constructed assets (including overhead costs) are capitalized. Direct costs that are capitalized as part of self-constructed assets include materials, labor and equipment. Indirect costs are capitalized if they clearly relate to the construction of the asset. We also generally do not incur significant rail grinding or ballast cleaning expenses. However, if and when such costs are incurred, they are expensed.

The following table sets forth our total net capitalized major renewals and improvements versus our total maintenance and repair expense for the years ended December 31, 2018, 2017 and 2016 (dollars in thousands):

	2018	2017	2016
Gross capitalized major renewals and improvements	$248,396	$220,246	$190,406
Grants from outside parties	(20,527)	(20,249)	(36,094)
Net capitalized major renewals and improvements	$227,869	$199,997	$154,312
Total repairs and maintenance expense	$492,419	$468,306	$467,054

We depreciate our property and equipment using the straight-line method over the useful lives of the property and equipment. The following table sets forth the estimated useful lives of our major classes of property and equipment:

	Estimated Useful Life (in Years)	
	Minimum	Maximum
Property:		
Buildings and leasehold improvements (subject to term of lease)	2	40
Bridges/tunnels/culverts	20	50
Track property	3	50
Equipment:		
Computer equipment	3	10
Locomotives and railcars	2	30
Vehicles and mobile equipment	2	15
Signals and crossing equipment	5	20
Track equipment	2	20
Other equipment	2	20

We continually evaluate whether events and circumstances have occurred that indicate that the carrying amounts of our long-lived tangible assets may not be recoverable. When factors indicate that an asset or asset group may not be recoverable, we use an estimate of the related undiscounted future cash flows over the remaining life of such asset or asset group in measuring whether or not impairment has occurred. If we identify impairment of an asset, we would report a loss to the extent that the carrying value of the related asset exceeds the fair value less the cost to sell such asset, as determined by valuation techniques applicable in the circumstances. Losses from impairment of assets are charged to net loss/(gain) on sale and impairment of assets within operating expenses.

Gains or losses on sales, including sales of assets removed during track and equipment upgrade projects, or losses incurred through other dispositions, such as unanticipated retirement or destruction, are credited or charged to net loss/(gain) on sale and impairment of assets within operating expenses. Gains are recorded when realized if the sale value exceeds the remaining carrying value of the respective property and equipment. If the estimated salvage value is less than the remaining carrying value, we record the loss incurred equal to the respective asset's carrying value less salvage value.

During the year ended December 31, 2017, we recorded a $5.9 million non-cash charge related to the impairment of track assets on idle branch lines in South Australia. During the year ended December 31, 2016, we recorded a $13.0 million non-cash charge related to the impairment of an idle rolling-stock maintenance facility resulting from Arrium, an iron ore customer in Australia, entering voluntary administration. For additional information regarding Arrium, see Note 3, Changes in Operations, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report. There were no material losses incurred through other dispositions from unanticipated or unusual events for the year ended December 31, 2018.

Grants from Outside Parties

Grants from outside parties are recorded within deferred items - grants from outside parties, and are amortized as a reduction to depreciation expense over the same period during which the associated assets are depreciated.

93

Valuation of Assets

We account for businesses we acquire using the acquisition method of accounting. Under this method, all acquisition-related costs are expensed as incurred. We record the underlying net assets at their respective acquisition-date fair values. As part of this process, we identify and attribute values and estimated lives to property and equipment and intangible assets acquired. The results of operations of acquired businesses are included in the consolidated statements of operations beginning on the respective business's acquisition date.

We review the carrying value of goodwill at least annually to assess impairment since these assets are not amortized. We perform our annual impairment assessment as of November 30 of each year. Additionally, we review the carrying value of a reporting unit's goodwill whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

In 2018, we assessed qualitative risk factors for all reporting units to which goodwill is allocated to determine whether it was more likely than not that the fair value of each reporting unit was less than its carrying amount. Qualitative factors considered include relevant events and circumstances that affect the fair value of reporting units. We assessed these qualitative factors to determine whether it was necessary to perform the quantitative impairment test. This quantitative test is required only if we conclude that it is more likely than not that a reporting unit's fair value is less than its carrying amount.

In addition, we perform an impairment test on amortizable intangible assets when specific impairment indicators are present. We have amortizable intangible assets valued primarily as operational network rights, customer contracts and relationships and track access agreements. These intangible assets are generally amortized on a straight-line basis over the expected economic longevity of the facility served, the customer relationship or the length of the contract or agreement, including expected renewals.

The determination of fair value involves significant management judgment including assumptions about operating results, business plans, income projections, anticipated future cash flows and market data. These determinations affect the amount of depreciation and amortization expense recognized in future periods. Any impairment losses are expensed when incurred and are charged to net loss/(gain) on sale and impairment of assets within operating expenses.

Derailment and Property Damages, Personal Injuries and Third-Party Claims

We maintain global liability and property insurance coverage to mitigate the financial risk of providing rail and rail-related services. Our liability policies cover railroad employee injuries, personal injuries associated with grade crossing accidents and accidents involving passengers and other third-party claims associated with our operations. Damages associated with sudden releases of hazardous materials, including hazardous commodities transported by rail, and expenses related to evacuation as a result of a railroad accident are also covered under our liability policies. Our liability policies currently have self-insured retentions of up to $2.5 million per occurrence. Our property policies cover property and equipment that we own, as well as property in our care, custody and control. Our property policies currently have various self-insured retentions, which vary based on the type and location of the incident, that are currently up to $2.5 million per occurrence. The property policies also provide business interruption insurance arising from covered events. The self-insured retentions under our policies may change with each annual insurance renewal depending on our loss history, the size and make-up of our company and general insurance market conditions.

We also maintain ancillary insurance coverage for other risks associated with rail and rail-related services, including insurance for employment practices, directors' and officers' liability, workers' compensation, pollution, auto claims, crime and road haulage liability, among others.

Accruals for claims are recorded in the period when a loss from such claims is determined to be probable and estimable. These estimates are updated in future periods as information develops.

Defined Benefit Plans

We sponsor certain defined benefit plans covering eligible employees. We engage independent actuaries to compute amounts of liabilities and expenses related to these plans subject to the assumptions that we determine are appropriate based on historical trends, current market rates and future projections. These assumptions include, but are not limited to the selection of a discount rate, expected long-term rate of return on plan assets, rate of future compensation increases, inflation volatility and mortality. For additional information regarding these plans, see Note 11, U.K.

Pension Plan, and Note 12, Other Employee Benefit Programs, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Income Taxes

We file a consolidated United States federal income tax return, which includes all of our United States subsidiaries. Each of our foreign subsidiaries files appropriate income tax returns in each of its respective countries. The provision for, or benefit from, income taxes includes deferred taxes resulting from temporary differences using a balance sheet approach. Such temporary differences result primarily from differences in the carrying value of assets and liabilities for financial reporting and tax purposes. Future realization of deferred income tax assets is dependent upon our ability to generate sufficient taxable income. We evaluate on a quarterly basis whether, based on all available evidence, the deferred income tax assets will be realizable. Valuation allowances are established when it is estimated that it is more likely than not that the tax benefit of a deferred tax asset will not be realized.

No provision is made for certain taxes applicable to the undistributed earnings of our foreign subsidiaries as it is the intention of management to fully utilize those earnings in the operations of foreign subsidiaries. The amount of undistributed earnings of our foreign subsidiaries as of December 31, 2018 was $216.2 million. If the earnings were to be distributed in the future, those distributions would not be subject to United States federal corporate income tax but may result in foreign exchange gains and losses and be subject to other taxes and credits, including U.S. state taxes and withholding taxes payable to various foreign countries.

For additional information regarding our income taxes, see Note 13, Income Taxes, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Recently Issued Accounting Standards

See Note 20, Recently Issued Accounting Standards, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk.

We actively monitor our exposure to interest rate and foreign currency exchange rate risks and use derivative financial instruments to manage the impact of these risks. We use derivatives only for purposes of managing risk associated with underlying exposures. We do not trade or use such instruments with the objective of earning financial gains from interest rate or exchange rate fluctuations, nor do we use derivative instruments where there are no underlying exposures. Complex instruments involving leverage or multipliers are not used. We manage our hedging positions and monitor the credit ratings of counterparties and do not anticipate losses due to counterparty nonperformance. Management believes that our use of derivative instruments to manage risk is in our best interest. However, our use of derivative financial instruments may result in short-term gains or losses and increased earnings volatility. For additional information regarding our Derivative Financial Instruments, see Note 9, Derivative Financial Instruments, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Interest Rate Risk

The following tables set forth the primary drivers of our interest expense, net, for our North American Operations, Australia Operations and U.K./European Operations for the years ended December 31, 2018, 2017 and 2016 (dollars in thousands):

	December 31, 2018				
	North American Operations	Australian Operations	U.K./European Operations	Eliminations[a]	Total
Interest expense on variable rate debt	$ 45,960	$ 33,780	$ 7,517	$ —	$ 87,257
Interest expense on intercompany loans	—	12,802	12,630	(25,432)	—
Interest expense on fixed rate debt	469	185	—	—	654
Interest expense on other instruments[b]	1,484	1,023	3,780	—	6,287
Amortization of debt issuance costs	5,129	2,998	1,198	—	9,325
Derivative financial instruments	2,540	1,663	(7)	—	4,196
Interest expense	$ 55,582	$ 52,451	$ 25,118	$ (25,432)	$ 107,719
Interest income from intercompany loans	$ (12,630)	$ —	$ (12,802)	$ 25,432	$ —
All other interest income	(2,125)	(1,093)	(38)	—	(3,256)

Interest income	(14,755)	(1,093)	(12,840)	25,432	(3,256)
Interest expense, net	$ 40,827	$ 51,358	$ 12,278	$ —	$ 104,463

	December 31, 2017				
	North American Operations	Australian Operations	U.K./European Operations	Eliminations[a]	Total
Interest expense on variable rate debt	$ 38,416	$ 35,815	$ 6,050	$ —	$ 80,281
Interest expense on intercompany loans	—	12,933	11,058	(23,991)	—
Interest expense on fixed rate debt	—	176	—	—	176
Interest expense on other instruments[b]	1,619	781	3,736	—	6,136
Amortization of debt issuance costs	5,206	3,143	916	—	9,265
Derivative financial instruments	5,228	2,699	3,506	—	11,433
Interest expense	$ 50,469	$ 55,547	$ 25,266	$ (23,991)	$ 107,291
Interest income from intercompany loans	$ (11,058)	$ —	$ (12,933)	$ 23,991	$ —
All other interest income	(864)	(829)	(389)	—	(2,082)
	$ (11,922)	$ (829)	$ (13,322)	$ 23,991	$ (2,082)

Interest income					
Interest expense, net	$38,547	$ 54,718	$ 11,944	$ —	$105,209

	December 31, 2016				
	North American Operations	Australian Operations	U.K./European Operations	Eliminations[(a)]	Total
Interest expense on variable rate debt	$42,858	$ 10,226	$ 4,553	$ —	$57,637
Interest expense on intercompany loans	—	1,049	14,566	(15,615)	—
Interest expense on fixed rate debt	—	158	—	—	158
Interest expense on other instruments[(b)]	1,691	526	4,735	—	6,952
Amortization of debt issuance costs	5,196	2,268	230	—	7,694
Derivative financial instruments	3,200	—	—	—	3,200
Interest expense	$52,945	$ 14,227	$ 24,084	$ (15,615)	$75,641
Interest income from intercompany loans	$(11,046)	$ —	$ (4,569)	$ 15,615	$—
All other interest income	(914)	(269)	76	—	(1,107)
	$(11,960)	$ (269)	$ (4,493)	$ 15,615	$(1,107)

Interest income					
Interest expense, net	$40,985	$ 13,958	$ 19,591	$ —	$74,534

(a) Intercompany borrowing and lending activity is eliminated in consolidation.

(b) Interest expense on other instruments reflects interest on capital leases and certain fees related to our credit facilities.

96

Our interest rate risk results from variable interest rate debt obligations, where an increase in interest rates would result in lower earnings and increased cash outflows. The following table presents principal payments on our variable rate debt obligations, related weighted average annual interest rates by expected maturity dates and estimated fair values as of December 31, 2018 (dollars in thousands):

	2019	2020	2021	2022	2023	Thereafter	Total	Fair Value
Credit Agreement:								
Revolving credit facility:								
United Kingdom	$—	$—	$—	$—	$19,136	$—	$19,136	$19,357
United States	$10,000	$—	$—	$—	$135,000	$—	$145,000	$144,306
Term loans:								
United Kingdom	$—	$11,630	$17,409	$17,409	$269,839	$—	$316,287	$319,556
United States	$—	$57,875	$71,150	$71,150	$1,102,825	$—	$1,303,000	$1,296,079
Average annual interest rate - Credit Agreement	3.9%	3.8%	3.8%	3.9%	3.9%	0.0%	3.9%	
Australia:								
Australian Credit Agreement	$15,325	$24,133	$24,133	$394,576	$—	$—	$458,167	$457,978
Partner Loan Agreement	$—	$—	$—	$—	$—	$167,796	$167,796	$166,974
Average annual interest rate - Australia	4.9%	4.9%	5.1%	5.5%	7.2%	7.6%	6.0%	

The variable interest rates presented in the table above are based on the implied forward rates in the yield curve for borrowings denominated using Australia BBSY and BBR, and United States LIBOR (as of December 31, 2018). BBSY is the Bank Bill Swap Bid Rate, which we believe is generally considered the Australian equivalent to LIBOR. BBR is the Bankers Buyers Rate, which we believe is generally considered analogous with BBSY. The borrowing margin is composed of a weighted average of 1.50% for United States and United Kingdom borrowings under our Credit Agreement. The borrowing margin is composed of a weighted average of 2.44% for our Australian term loan under our Australian Credit Agreement and 4.50% for our Partner Loan Agreement. To the extent not mitigated by interest rate swap agreements, based on the table above, assuming a one percentage point increase in market interest rates, annual interest expense on our variable rate debt would increase by approximately $12.8 million under our Credit Agreement and $2.6 million under our Australian Credit Agreement and Partner Loan Agreement.

Foreign Currency Exchange Rate Risk

As of December 31, 2018, our foreign subsidiaries had the United States dollar equivalent of $1.0 billion of third-party debt denominated in the local currencies in which our foreign subsidiaries operate, including the Australian dollar, the British pound, the Canadian dollar and the Euro. This includes an A$50.0 million (or $35.2 million at the exchange rate on December 31, 2018) non-interest bearing loan due in 2054 assumed in the FreightLink Acquisition that has a carrying value of A$3.3 million (or $2.4 million at the exchange rate on December 31, 2018). The debt service obligations associated with this foreign currency debt are generally funded directly from those foreign operations. As a result, foreign currency risk related to this portion of our debt service payments is limited. However, in the event the foreign currency debt service is not paid by our foreign subsidiaries and is paid by United States subsidiaries, we may face exchange rate risk if the Australian dollar, the British pound, the Canadian dollar or the Euro were to appreciate relative to the United States dollar and require higher United States dollar equivalent cash.

We are also exposed to foreign currency exchange rate risk related to our foreign subsidiaries, including non-functional currency intercompany debt, associated with acquisitions and any timing difference between announcement and closing of an acquisition of a foreign business. To mitigate currency exposures of non-United States dollar-denominated acquisitions, we may enter into foreign currency forward purchase contracts. To mitigate currency exposures related to non-functional currency denominated intercompany debt, cross-currency swaps or foreign currency forward contracts may be entered into for periods consistent with the underlying debt. To mitigate currency exposures related to significant asset purchases in non-functional denominated currencies, foreign currency forward contracts may be entered into for periods consistent with the anticipated future outflow of cash. For additional information regarding our Derivative Financial Instruments, see Note 9, Derivative Financial Instruments, to our Consolidated Financial Statements set forth in "Part IV Item 15. Exhibits, Financial Statement Schedules" of this Annual Report.

Sensitivity to Diesel Fuel Prices

We are exposed to fluctuations in diesel fuel prices since an increase in the price of diesel fuel would result in lower earnings and cash outflows. For the year ended December 31, 2018, fuel costs for fuel used in operations represented 9.6% of our total operating expenses. As of December 31, 2018, we had not entered into any hedging transactions to manage this diesel fuel risk. We receive fuel surcharges and other rate adjustments that offset the majority of the impact of higher fuel prices, with a lag of up to four months. As of December 31, 2018, each one percentage point change in the price of diesel fuel would result in a $1.8 million change in our annual operating income to the extent not offset by higher fuel surcharges and/or rates.

ITEM 8. Financial Statements and Supplementary Data.

The financial statements and supplementary financial data required by this item are listed under "Part IV Item 15. Exhibits, Financial Statement Schedules," following the signature page hereto and are incorporated by reference herein.

ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

ITEM 9A. Controls and Procedures.

Disclosure Controls and Procedures — We maintain disclosure controls and procedures (as that term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (Exchange Act)) that are designed to ensure that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2018. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2018, the disclosure controls and procedures were effective to accomplish their objectives at the reasonable assurance level.

Internal Control Over Financial Reporting — There were no changes in our internal control over financial reporting (as the term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF MANAGEMENT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of Genesee & Wyoming Inc. is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) or 15d-15(f) under the Securities Exchange Act of 1934, as amended. Our 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 accounting principles generally accepted in the United States of America. Internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of Genesee & Wyoming Inc.;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America;
- provide reasonable assurance that our receipts and expenditures are being made only in accordance with the authorization of management and directors of Genesee & Wyoming Inc.; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the consolidated 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.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2018. Management based this assessment on criteria for effective internal control over financial reporting described in the Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's internal control over financial reporting, established and maintained by management, is under the general oversight of the Company's Audit Committee. Management's assessment included an evaluation of the design of our internal control over financial reporting and testing of the operating effectiveness of our internal control over financial reporting.

Based on this assessment, management determined that, as of December 31, 2018, we maintained effective internal control over financial reporting.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, which has audited and reported on the consolidated financial statements contained in this Annual Report on Form 10-K, has audited the effectiveness of the Company's internal control over financial reporting as stated in their report, which is included herein under "Part IV. Item 15. Exhibits, Financial Statement Schedules."

ITEM 9B. Other Information.

None.

PART III

ITEM 10. Directors, Executive Officers and Corporate Governance.

The information required by this Item is incorporated herein by reference to our proxy statement to be filed within 120 days after the end of our fiscal year in connection with the Annual Meeting of the Stockholders of G&W to be held on May 22, 2019, under "Proposal One: Election of Directors," "Executive Officers" and "Corporate Governance."

We have adopted a Code of Ethics and Conduct that applies to all directors, officers and employees, including our Chief Executive Officer, our Chief Financial Officer, and our Chief Accounting Officer and Global Controller. The Code of Ethics and Conduct is available on the Governance page of the Company's Internet website at www.gwrr.com. We intend to post any amendments to the Code of Ethics and Conduct and any waivers that are required to be disclosed by the rules of either the SEC or the NYSE on our Internet website within the required time period.

ITEM 11. Executive Compensation.

The information required by this Item is incorporated herein by reference to our proxy statement to be filed within 120 days after the end of our fiscal year in connection with the Annual Meeting of the Stockholders of G&W to be held on May 22, 2019, under "Executive Compensation," including the "Compensation Discussion and Analysis," "Compensation Committee Report" and "Summary Compensation Table" sections, and "Director Compensation."

ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The following table sets forth all of our securities authorized for issuance under our equity compensation plans as of December 31, 2018:

Equity Compensation Plan Information

Plan Category	(a) Number of Securities to be Issued upon Exercise of Outstanding Options	(b) Weighted Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders	1,547,630	$ 75.15	2,192,988
Equity compensation plans not approved by security holders	—	—	—
Total	1,547,630	$ 75.15	2,192,988

The remaining information required by this Item is incorporated herein by reference to our proxy statement to be filed within 120 days after the end of our fiscal year in connection with the Annual Meeting of the Stockholders of G&W to be held on May 22, 2019, under "Security Ownership of Certain Beneficial Owners and Management."

ITEM 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item is incorporated herein by reference to our proxy statement to be filed within 120 days after the end of our fiscal year in connection with the Annual Meeting of the Stockholders of G&W to be held on May 22, 2019, under "Corporate Governance" and "Related Person Transactions."

ITEM 14. Principal Accounting Fees and Services.

The information required by this Item is incorporated herein by reference to our proxy statement to be filed within 120 days after the end of our fiscal year in connection with the Annual Meeting of the Stockholders of G&W to be held on May 22, 2019.

PART IV

ITEM 15. Exhibits, Financial Statement Schedules.

DOCUMENTS FILED AS PART OF THIS ANNUAL REPORT ON FORM 10-K

(a) FINANCIAL STATEMENTS

Genesee & Wyoming Inc. and Subsidiaries Financial Statements:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2018 and 2017

Consolidated Statements of Operations for the Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Changes in Equity for the Years Ended December 31, 2018, 2017 and 2016

Consolidated Statements of Cash Flows for the Years Ended December 31, 2018, 2017 and 2016

Notes to Consolidated Financial Statements

(b) EXHIBITS—See INDEX TO EXHIBITS filed herewith immediately preceding the signature page hereto, and which is incorporated herein by reference

(c) FINANCIAL STATEMENT SCHEDULES—Schedules have been omitted because they are not applicable or not required or the information required to be set forth therein is included in the Financial Statements and Supplementary Data, or notes thereto.

ITEM 16. Form 10-K Summary.

None.

INDEX TO EXHIBITS

Number	Description
(3)	(i) Articles of Incorporation
	The Exhibits referenced under 4.1 and 4.4 hereof are incorporated herein by reference.
	(ii) By-laws
3.1	Amended and Restated By-Laws, effective as of November 2, 2018, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 6, 2018 (File No. 001-31456).
(4)	Instruments defining the rights of security holders, including indentures
4.1	Restated Certificate of Incorporation is incorporated herein by reference to Annex II to the Registrant's Definitive Proxy Statement on Schedule 14A filed on April 15, 2011 (File No. 001-31456).
4.2	Specimen stock certificate representing shares of Class A Common Stock is incorporated herein by reference to Exhibit 4.1 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-03972) filed on June 12, 1996.
4.3	Form of Class B Stockholders' Agreement dated as of May 20, 1996, among the Registrant, its executive officers and its Class B Stockholders is incorporated herein by reference to Exhibit 4.2 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Registration No. 333-03972) filed on June 7, 1996.
4.4	Certificate of Elimination of Mandatorily Convertible Perpetual Preferred Stock, Series A-1 of Genesee & Wyoming Inc., dated as of May 27, 2014, is incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 30, 2014 (File No. 001-31456).
(10)	Material Contracts
	The Exhibit referenced under 4.3 hereof is incorporated herein by reference.
10.1	Memorandum of Lease between Minister for Transport and Urban Planning a Body Corporate Under the Administrative Arrangements Act 1994, the Lessor and Australia Southern Railroad Pty Ltd., the Lessee, dated November 7, 1997, is incorporated herein by reference to Exhibit 10.2 to the Registrant's Annual Report on Form 10-K filed on March 31, 1998 (File No. 000-20847).
10.2	Share Sale Agreement dated February 14, 2006 by and among Genesee & Wyoming Inc., GWI Holdings Pty Ltd, Wesfarmers Limited, Wesfarmers Railroad Holdings Pty Ltd, Babcock & Brown WA Rail Pty Ltd, QRNational West Pty Ltd, Australia Southern Railroad Pty Ltd, Australia Western Railroad Pty Ltd and Australian Railroad Group Pty Ltd is incorporated herein by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K filed on February 17, 2006 (File No. 001-31456).
10.3	Restated Genesee & Wyoming Inc. Employee Stock Purchase Plan, as Amended through September 27, 2006, is incorporated herein by reference to Exhibit 4.1(a) to the Registrant's Registration Statement on Form S-8 (Registration No. 333-09165) filed on November 3, 2006.**
10.4	

	Form of Senior Executive Continuity Agreement by and between Genesee & Wyoming Inc. and the Company Senior Executives is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 8, 2007 (File No. 001-31456).**
10.5	Form of Executive Continuity Agreement by and between Genesee & Wyoming Inc. and the Company Executives is incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on November 8, 2007 (File No. 001-31456).**
10.6	Genesee & Wyoming Inc. Amended and Restated 2004 Deferred Compensation Plan for highly compensated employees and directors dated as of December 31, 2008 is incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 7, 2009 (File No. 001-31456).**

10.7	Sale Consent Deed by and among GWA (North) Pty Ltd., The Northern Territory of Australia, The Crown in right of the State of South Australia, The AustralAsia Railway Corporation, Asia Pacific Transport Pty Limited (Receivers and Managers Appointed) dated November 19, 2010, is incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on November 24, 2010 (File No. 001-31456).
10.8	Guarantee and Indemnity (GWA) by and between Genesee & Wyoming Australia Pty Ltd and The AustralAsia Railway Corporation dated November 19, 2010, is incorporated herein by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on November 24, 2010 (File No. 001-31456).
10.9	Form of Restricted Stock Award Notice for Directors under the Second Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on August 6, 2014 (File No. 001-31456).**
10.10	Form of Restricted Stock Unit Award Notice for Directors under the Second Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed on August 6, 2014 (File No. 001-31456).**
10.11	Form of Restricted Stock Award Notice under the Second Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed on August 6, 2014 (File No. 001-31456).**
10.12	Form of Option Award Notice under the Second Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed on August 6, 2014 (File No. 001-31456).**
10.13	Form of Performance-Based Restricted Stock Unit Award Notice under the Second Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed on August 6, 2014 (File No. 001-31456).**
10.14	Form of Restricted Stock Award Notice for CEO under the Second Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed on August 6, 2014 (File No. 001-31456).**
10.15	Form of Option Award Notice for CEO under the Second Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-Q filed on August 6, 2014 (File No. 001-31456).**
10.16	Form of Performance-Based Restricted Stock Unit Award Notice for CEO under the Second Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.9 to the Registrant's Quarterly Report on Form 10-Q filed on August 6, 2014 (File No. 001-31456).**
10.17	Assignment Letter to Matthew O. Walsh, dated June 18, 2015, is incorporated herein by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K filed on June 22, 2015 (File No. 001-31456).**
10.18	Form of Performance-Based Restricted Stock Unit Award Notice Under the Third Amended and Restated Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.1 to the Registrant’s Quarterly Report on Form 10-Q filed on May 5, 2016 (File No. 001-31456).**

10.19	Form of Performance-Based Restricted Stock Unit Award Notice for the CEO Under the Third Amended and Restated Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on May 5, 2016 (File No. 001-31456).**
10.20	Share Sale Agreement, dated October 20, 2016, relating to Glencore Rail (NSW) Pty Limited by and among Genesee & Wyoming Inc., GWI Acquisitions Pty Ltd, Glencore Coal Pty Limited and Glencore Operations Australia Pty Limited, is incorporated herein by reference to Exhibit 10.1 to the Registrants Current Report on Form 8-K filed on October 20, 2016 (File No. 001-31456).***
10.21	Amendment and Restatement Deed, dated November 30, 2016, by and among Genesee & Wyoming Inc. and the members of a Macquarie Infrastructure and Real Assets consortium, is incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on December 1, 2016 (File No. 001-31456).***

103

10.22	Syndicated Facility Agreement, dated November 28, 2016, among GWI Acquisitions Pty Ltd, the obligors party thereto, National Australia Bank Limited, as agent and lender, and Australia and New Zealand Banking Group Limited, Bank of America, N.A. Australian Branch, BNP Paribas, Citibank, N.A. Sydney Branch, Commonwealth Bank of Australia, JPMorgan Chase Bank, N.A., Sumitomo Mitsui Banking Corporation and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as lenders, is incorporated herein by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on December 1, 2016 (File No. 001-31456).
10.23	Form of Performance-Based Restricted Stock Unit Award Notice under the Third Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on May 9, 2017 (File No. 001-31456).**
10.24	Form of Performance-Based Restricted Stock Unit Award Notice for the CEO under the Third Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on May 9, 2017 (File No. 001-31456).**
10.25	Fourth Amended and Restated 2004 Omnibus Incentive Plan is incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 25, 2018 (File No. 001-31456).**
10.26	Amendment No. 3, dated as of June 5, 2018, to the Second Amended and Restated Senior Secured Syndicated Facility Agreement, dated as of March 20, 2015, among Genesee & Wyoming Inc., RP Acquisition Company Two, Quebec Gatineau Railway Inc., GWI Holding B.V., Rotterdam Rail Feeding B.V., Bank of America, N.A., as administrative agent, and the agents, lenders and guarantors party thereto from time to time, is incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on June 11, 2018 (File No. 001-31456).
*10.27	Form of Performance-Based Restricted Stock Unit Award Notice under the Fourth Amended and Restated Omnibus Incentive Plan**
*10.28	Form of Performance-Based Restricted Stock Unit Award Notice for the CEO under the Fourth Amended and Restated Omnibus Incentive Plan**
*(21.1)	Subsidiaries of the Registrant
*(23.1)	Consent of PricewaterhouseCoopers LLP
*(31.1)	Rule 13a-14(a)/15d-14(a) Certification of Principal Executive Officer
*(31.2)	Rule 13a-14(a)/15d-14(a) Certification of Principal Financial Officer
*(32.1)	Section 1350 Certifications
*101	The following financial information from Genesee & Wyoming Inc.'s Annual Report on Form 10-K for the year ended December 31, 2018, formatted in XBRL includes: (i) Consolidated Balance Sheets as of December 31, 2018 and 2017, (ii) Consolidated Statements of Operations for the Years Ended December 31,

2018, 2017 and 2016, (iii) Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2018, 2017 and 2016, (iv) Consolidated Statements of Changes in Equity for the Years Ended December 31, 2018, 2017 and 2016, (v) Consolidated Statements of Cash Flows for the Years Ended December 31, 2018, 2017 and 2016, and (vi) the Notes to Consolidated Financial Statements.

*	Exhibit filed or furnished with this Annual Report on Form 10-K.
**	Management contract or compensatory plan in which directors and/or executive officers are eligible to participate.
***	Certain schedules to this agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company agrees to furnish supplementally a copy of such schedule, or any section thereof, to the Securities and Exchange Commission upon request.

The agreements and other documents filed as exhibits to this report are not intended to provide factual information or other disclosure other than with respect to the terms of the agreements or other documents themselves, and you should not rely on them for that purpose. In particular, any representations and warranties made by us in these agreements or other documents were made solely within the specific context of the relevant agreement or document and may not describe the actual state of affairs as of the date they were made or at any other time.

SIGNATURES

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

Date: February 26, 2019 GENESEE & WYOMING INC.

By: /S/ JOHN C. HELLMANN
John C. Hellmann
Chairman and Chief Executive Officer

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

Date Title Signature