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

FORM 10-K

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

For the fiscal year ended December 31, 2022

OR

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

For the Transition Period from to

Commission File Number: 001-34723

AMERICOLD REALTY TRUST, INC.

(Exact name of registrant as specified in its charter)

Maryland	**93-0295215**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification Number)
10 Glenlake Parkway, Suite 600, South Tower **Atlanta, Georgia**	**30328**
(Address of principal executive offices)	(Zip Code)

(678) 441-1400

(Registrants telephone number, including area code)

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

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value per share	COLD	New York Stock Exchange (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.
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 ☐ No ☒

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter periods that the registrant was required to submit such files).
Yes ☒ No ☐

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.
Yes ☐ No ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report
Yes ☒ No ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934)
Yes ☐ No ☒

As of June 30, 2022, the aggregate market value of the voting common stock owned by non-affiliates of Americold Realty Trust, Inc. was $5.7 billion, computed by reference to the closing price of the common stock of Americold Realty Trust, Inc. on the New York Stock Exchange on such date. Such value excludes common shares held by executive officers, directors, and 10% or greater stockholders as of June 30, 2022. The identification of 10% or greater stockholders is based on Schedule 13G and amended 13G reports publicly filed before June 30, 2022. This calculation does not reflect a determination that such parties are affiliates for any other purposes. The number of shares of Americold Realty Trust Inc.'s common stock outstanding at February 23, 2023, was approximately 269,925,540.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates by reference portions of Americold Realty Trust, Inc.'s Proxy Statement for its 2023 Annual Meeting of stockholders, which the registrant anticipate will be filed no later than 120 days after the end of its fiscal year pursuant to Regulation 14A.

EXPLANATORY NOTE

As used in this report, unless the context otherwise requires, references to “we,” “us,” “our” and “the Company” refer to Americold Realty Trust, Inc., a Maryland corporation, and its consolidated subsidiaries, including Americold Realty Operating Partnership, L.P., a Delaware limited partnership and the subsidiary through which we conduct our business, which we refer to as “our operating partnership” or “the operating partnership,” and references to “common stock” refer to our common stock, $0.01 par value per share.

In addition, unless otherwise stated herein, when we refer to “cubic feet” in one of our temperature-controlled facilities, we refer to refrigerated cubic feet (as opposed to total cubic feet, refrigerated and otherwise) therein.

TABLE OF CONTENTS

Item		Page
	PART I	
1.	Business	3
1A.	Risk Factors	16
1B.	Unresolved Staff Comments	54
2.	Properties	56
3.	Legal Proceedings	58
4.	Mine Safety Disclosures	58
	PART II	
5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	59
6.	[Reserved]	61
7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	62
7A.	Quantitative and Qualitative Disclosures About Market Risk	93
8.	Financial Statements and Supplementary Data	95
9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	95
9A.	Controls and Procedures	95
9B.	Other Information	99
9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	101
	PART III	
10.	Directors, Executive Officers and Corporate Governance	100
11.	Executive Compensation	100
12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	100
13.	Certain Relationships and Related Transactions, and Director Independence	100
14.	Principal Accounting Fees and Services	100
	PART IV	
15.	Exhibits, Financial Statements and Schedules	101
16.	Form 10-K Summary	105

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains statements about future events and expectations that constitute forward-looking statements. Forward-looking statements are based on our beliefs, assumptions and expectations of our future financial and operating performance and growth plans, taking into account the information currently available to us. These statements are not statements of historical fact. Forward-looking statements involve risks and uncertainties that may cause our actual results to differ materially from the expectations of future results we express or imply in any forward-looking statements, and you should not place undue reliance on such statements. Factors that could contribute to these differences include the following:

- *inflation, increased interest rates and operating costs;*
- *labor and power costs;*
- *labor shortages;*
- *our relationship with our associates, the occurrence of any work stoppages or any disputes under our collective bargaining agreements and employment related litigation;*
- *the impact of supply chain disruptions, including, among others, the impact on labor availability, raw material availability, manufacturing and food production and transportation;*
- *risks related to expansions of existing properties and developments of new properties, including failure to meet budgeted or stabilized returns within expected time frames, or at all, in respect thereof;*
- *uncertainty of revenues, given the nature of our customer contracts;*
- *acquisition risks, including the failure to identify or complete attractive acquisitions or the failure of acquisitions to perform in accordance with projections and to realize anticipated cost savings and revenue improvements;*
- *our failure to realize the intended benefits from our recent acquisitions and including synergies, or disruptions to our plans and operations or unknown or contingent liabilities related to our recent acquisitions;*
- *difficulties in expanding our operations into new markets, including international markets;*
- *uncertainties and risks related to public health crises, such as the recent COVID-19 pandemic;*
- *a failure of our information technology systems, systems conversions and integrations, cybersecurity attacks or a breach of our information security systems, networks or processes could cause business disruptions, loss of confidential information, remediation costs or damages;*
- *disruption caused by implementation of new ERP system, potential cost overruns, timing and control risks and failure to recognize anticipated cost savings and increased productivity from the implementation of the new ERP system;*
- *defaults or non-renewals of significant customer contracts;*
- *risks related to privacy and data security concerns, and data collection and transfer restrictions and related foreign regulations;*
- *changes in applicable governmental regulations and tax legislation, including in the international markets;*
- *risks related to current and potential international operations and properties;*
- *actions by our competitors and their increasing ability to compete with us;*
- *changes in foreign currency exchange rates;*
- *the potential liabilities, costs and regulatory impacts associated with our in-house trucking services and the potential disruptions associated with our use of third-party trucking service providers to provide transportation services to our customers;*
- *liabilities as a result of our participation in multi-employer pension plans;*
- *risks related to the partial ownership of properties, including as a result of our lack of control over such investments, financial condition of JV partners, disputes with JV partners, regulatory risks, brand recognition risks and the failure of such entities to perform in accordance with projections;*

- *adverse economic or real estate developments in our geographic markets or the temperature-controlled warehouse industry;*
- *changes in real estate and zoning laws and increases in real property tax rates;*
- *general economic conditions;*
- *risks associated with the ownership of real estate generally and temperature-controlled warehouses in particular;*
- *possible environmental liabilities, including costs, fines or penalties that may be incurred due to necessary remediation of contamination of properties presently or previously owned by us;*
- *uninsured losses or losses in excess of our insurance coverage;*
- *financial market fluctuations;*
- *our failure to obtain necessary outside financing;*
- *risks related to, or restrictions contained in, our debt financings;*
- *decreased storage rates or increased vacancy rates;*
- *the impact of anti-takeover provisions in our constituent documents and under Maryland law, which could make an acquisition of us more difficult, limit attempts by our stockholders to replace our directors and affect the price of our common stock, $0.01 par value per share;*
- *the potential dilutive effect of our common stock offerings;*
- *the cost and time requirements as a result of our operation as a publicly traded REIT; and*
- *our failure to maintain our status as a REIT.*

The risks included here are not exhaustive, and additional factors could adversely affect our business and financial performance, including factors and risks included in other sections of this Annual Report on Form 10-K, including under Part I, Item 1A, Risk Factors. Words such as "anticipates," "believes," "continues," "estimates," "expects," "goal," "objectives," "intends," "may," "opportunity," "plans," "potential," "near-term," "long-term," "projections," "assumptions," "projects," "guidance," "forecasts," "outlook," "target," "trends," "should," "could," "would," "will" and similar expressions are intended to identify such forward-looking statements. Examples of forward-looking statements included in this Annual Report on Form 10-K include, among others, statements about our expected expansion and development pipeline and our targeted return on invested capital on expansion and development opportunities. We qualify any forward-looking statements entirely by these cautionary factors. Other risks, uncertainties and factors, including those discussed under "Risk Factors," could cause our actual results to differ materially from those projected in any forward-looking statements we make. We assume no obligation to update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

PART I

ITEM 1. Business

The Company

We are the world's largest publicly traded REIT focused on the ownership, operation, acquisition and development of temperature-controlled warehouses. We are organized as a self-administered and self-managed REIT with proven operating, development and acquisition expertise. As of December 31, 2022, we operated a global network of 242 temperature-controlled warehouses encompassing approximately 1.4 billion cubic feet, with 195 warehouses in North America, 27 in Europe, 18 warehouses in Asia-Pacific, and 2 warehouses in South America. In addition, we hold minority interests in three joint ventures, one with SuperFrio, which owns or operates 38 temperature-controlled warehouses in Brazil, one with Comfrio, which owns or operates 28 temperature-controlled warehouses in Brazil, and one with the LATAM JV, which owns one temperature-controlled warehouse in Chile. We view and manage our business through three primary business segments: warehouse, transportation, and third-party managed.

We consider our temperature-controlled warehouses to be "mission-critical" real estate in the markets we serve from "farm to fork" and an integral component of the temperature-controlled food infrastructure supply chain, which we refer to as the "cold chain." The cold chain is vital for maintaining the quality of food producers', distributors', retailers' and e-tailers' temperature-sensitive products, protecting brand reputation and ensuring consumer safety and satisfaction. Our customers depend upon the location, high-quality nature, integration and scale of our portfolio to ensure the integrity and efficient distribution of their products. Many of our warehouses are located in key logistics corridors in the countries in which we operate, including strategic U.S. and international metropolitan statistical areas, or MSAs, while others are connected or immediately adjacent to customers' production facilities. We believe our strategic locations and the extensive geographic presence of our integrated warehouse network are fundamental to our customers' ability to optimize their distribution networks while reducing their capital expenditures, operating costs and supply-chain risks.

We consider ownership of our temperature-controlled warehouses to be fundamental to our business, and critical to our ability to attract and retain customers and our ability to achieve our targeted return on invested capital. We believe that the ownership of our real estate provides us with cost of capital and balance sheet advantages, stemming from the attractive financing options available to real estate owners and the tax advantages of being a REIT. We also believe that consolidation of the ownership and operation of our portfolio significantly enhances the value of our business by allowing us to provide customers with our complementary suite of value-added services across one integrated and reliable cold chain network. Ownership of our integrated cold chain network enhances our ability to efficiently reposition customers and undertake capital improvements or other modifications on their behalf without the need to obtain third-party approvals. While some of our warehouses are leased, we own a significant majority of our warehouses. Our decision to own, rather than lease, a significant majority of our warehouses provides us with better control over the specialized nature of our assets and greater influence over our warehouse locations on a long-term basis, which is crucial to meeting our customers' "mission-critical" cold chain needs.

Recent Acquisitions and Investments in Joint Ventures

Over the last several years we have acquired many businesses to enhance our global portfolio and integrated network offerings to our customers. In 2021, we acquired Liberty Freezers for C$56.8 million, or $44.9 million, KMT Brrr! for $71.4 million, Bowman Stores for £75.0 million, or $106.4 million, the remaining minority shareholders portion of Frigorifico, a joint venture acquired in tandem with the Agro acquisition, for

$11.6 million, the assets of the ColdCo Companies for $20.5 million, Newark Facility Management for $390.8 million, a recently constructed warehouse in Denver for $53.6 million and Lago Cold Stores for Australian $102.2 million, or $75.1 million.

On June 2, 2022, we formed a joint venture, Americold LATAM Holdings Ltd (the "LATAM JV"), with Cold Latam Limited (our "JV partner"), in an effort to help us grow our business and market presence in Latin America, excluding Brazil. Our JV partner committed to invest approximately $209.0 million in exchange for 85% of the total equity interests, and we have contributed our Chilean business upon formation of the joint venture and retained the remaining 15% equity interests in the joint venture. On July 2, 2022, we acquired De Bruyn Cold Storage for Australian $23.5 million, or $16.0 million.

Our Information

Our principal executive office is located at 10 Glenlake Parkway, South Tower, Suite 600, Atlanta, Georgia 30328, and our telephone number is (678) 441-1400. Our website address is www.americold.com. The information found on, or otherwise accessible through, our website is not incorporated into, and does not form a part of, this Annual Report on Form 10-K or any other report or document we file with or furnish to the Securities and Exchange Commission (the "SEC"). Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, Proxy Statement and all amendments to those reports are available free of charge on our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. We make our annual ESG report available on our website as well. We use our website as a means of disclosing additional information, including for complying with our disclosure obligations under the SEC's Regulation FD. In addition, all reports we file with the SEC are available via EDGAR through the SEC website at www.sec.gov. Copies of our annual report will be made available, free of charge, on written request. Our Code of Business Conduct and Ethics is also made available through our website under "Investors - Governance Documents".

BUSINESS STRATEGY AND OPERATING SEGMENTS

We were formed as a Maryland REIT on December 27, 2002 and subsequently converted to a Maryland corporation on May 26, 2022, pursuant to the Articles of Conversion, as approved by the stockholders at our annual stockholder meeting on May 17, 2022. Each issued and outstanding share of beneficial interest in Americold Realty Trust was converted into one share of common stock in Americold Realty Trust, Inc. As a result of this conversion, several references in this Form 10-K have been updated accordingly. Despite this conversion, the Company continues to operate as a REIT for U.S. federal income tax purposes. Our Operating Partnership was formed as a Delaware limited partnership on April 5, 2010 and was not impacted by the conversion to a Maryland corporation. Our operations are conducted through our Operating Partnership and its subsidiaries.

Our primary business objective is to serve our customers and other stakeholders, increase stockholder value, grow our market share, enhance our operating and financial results and increase cash flows from operations. We also believe that our ability to execute on our business and growth strategies will enhance the overall value of our real estate. The strategies we intend to execute to achieve these objectives include the

following:

Enhancing Our Operating and Financial Results Through Proactive Asset Management

We seek to enhance our operating and financial results by supporting our customers' growth initiatives in the cold chain, optimizing both physical and economic occupancy, underwriting and deploying yield management initiatives and executing operational optimization and cost containment strategies. We believe that the combination of our ability to execute these and other initiatives and the significant investments we have made in our business over the last several years and continue to make will further drive our financial results and position us to expand our warehouse portfolio, grow our customer base, enhance our market share and create value for our stockholders.

Continue to Increase Committed Revenue in Our Warehouse Segment

Historically, providers of temperature-controlled warehouse space have offered storage services to customers on an as-utilized, on-demand basis. We actively seek to enter into contracts that implement our commercial business rules which contemplate, among other things, fixed storage commitments in connection with establishing new customer relationships or renewing agreements with existing customers, particularly with our largest customers, and variable rates for the value-added services we provide. Over the last several years, we have transitioned a significant portion of our rent and storage revenues generated on an as-utilized, on-demand basis to a fixed storage commitment basis. We believe the scope and breadth of our network position us favorably to continue to increase our fixed storage commitments as we believe this structure offers commercial advantages to both our customers and us.

Focused and Disciplined Strategy to Expand Our Portfolio of Temperature-Controlled Warehouses

We believe our operating systems and economies of scale provide us with a significant advantage over our competitors with respect to expansion, development and acquisition opportunities. Being a publicly-traded REIT focused on the temperature-controlled warehouse industry provides us access to capital markets and positions us to strategically enter new locations, fill gaps in existing distribution networks and effectively compete for expansion, development and acquisition opportunities. In addition, in certain international markets we operate through joint ventures with financial sponsors and operating platforms; and in the future we may expand the use of these vehicles to pursue acquisition, development and other opportunities.

Capitalize on Increased Outsourcing by Leading Global Food Producers, Distributors, Retailers and E-Tailers

Over the last 35 years, frozen food producers, distributors, retailers and e-tailers have increasingly outsourced their temperature-controlled warehousing needs to increase efficiency, reduce costs and redeploy capital into core businesses. We anticipate that cold chain participants will continue to make certain of their "in-house" temperature-controlled warehouses available for sale in the future and, accordingly, will continue to look to third-party providers to meet their temperature-controlled warehouse storage and service needs in related geographic markets. We believe that our ability to offer an extensive and integrated network of high-quality temperature-controlled warehouses globally with value-added services and our long-standing relationships with leading cold chain participants will enable us to capitalize on this trend.

Well Positioned to Benefit from E-Commerce Growth

Our warehouse portfolio serves as a fundamental bridge between food producers and fulfillment centers - whether for online e-tailers or traditional brick and mortar retailers. We believe our ability to design, build and operate warehouses across the cold chain makes us an attractive storage solution for existing retailers and the

growing e-tailer segment and positions us well to generate new relationships, drive growth and capture market share by increasing our presence in the e-commerce channel.

Expand Our Presence by Increasing Market Share for Other Temperature-Sensitive Product Types

Although we focus on providing temperature-controlled warehouse space to the food industry, we also store other forms of temperature-sensitive products, including pharmaceutical, floral and chemical products. As the rapid growth in e-commerce continues to increase the flow of products through the global distribution network, we believe our ability to provide comprehensive and consistent quality warehousing and value-added services at all points in the cold chain put us in a strong position to develop new relationships, drive growth and enhance market share with producers, distributors, retailers and e-tailers in other temperature-sensitive products. Additionally, we have the flexibility to store non-temperature-sensitive “dry” goods in some of our warehouses to the extent desirable.

Increased Investment in and Transformation of our Technology Systems, Business Processes and Customer Solutions

In February 2023, we announced our transformation program “Project Orion” designed to drive future growth and achieve our long-term strategic objectives, through investment in our technology systems and business processes across our global platform. The project includes the implementation of a new, best-in-class, cloud-based enterprise resource planning (“ERP”) software system. Since going public in 2018, we have acquired over 100 facilities, or approximately 40% of our total warehouse facility network. Project Orion will enable us to better integrate many of these recent acquisitions and position us well for the integration of future acquisitions. The primary goals of this project are to streamline standard processes, reduce manual work and incrementally improve our business analytics capabilities. Highlights of the project include implementing centralized customer billing operations, a global payroll and human capital management platform, next-generation plant maintenance capabilities, global procurement functionality and shared-service operations in certain international regions, among others. We expect the benefits of these initiatives to include revenue and margin improvements through pricing data and analytics and heightened customer contract governance, finance and human resources cost reductions, information technology applications and infrastructure rationalization, reduced employee turnover, working capital efficiency and reduced IT maintenance capital expenditures. The activities associated with Project Orion are expected to be substantially complete within three years. We estimate the aggregate investment in Project Orion to be approximately $100 million, which includes $50 million capital investment into our Company along with another $50 million of one-time implementation and integration expenses. We will continue to evaluate our overall project for additional opportunities and benefits, which could result in the identification and implementation of additional actions associated with Project Orion and incremental costs and benefits.

Investments in Our Warehouses

We employ a strategic investment approach to maintain a high-quality portfolio of temperature-controlled warehouses to ensure that our warehouses meet the “mission-critical” role they serve in the cold chain. We have successfully modernized many of our warehouses to reduce our power costs and increase their competitive position through reliable temperature-control systems that can implement distinct temperature zones within the same warehouse. In addition, we use LED lighting, thermal energy storage, motion-sensor technology, variable frequency drives for our fans and compressors, third-party efficiency reviews and real-time monitoring of energy consumption, high speed doors and alternative-power generation technologies, including solar, to improve the energy efficiency of our warehouses. We also utilize rain-water recapture to reduce our reliance on municipal water supplies and reduce run-off. We believe that our warehouses are well-maintained and in good operating condition.

Our Business Segments

We view and manage our business through three primary business segments—warehouse, transportation and third-party managed.

Our core business is our warehouse segment, where we provide temperature-controlled warehouse storage and related handling and other warehouse services. In our warehouse segment, we collect rent and storage fees from customers to store their frozen and perishable food and other products within our real estate portfolio. We also provide our customers with handling and other warehouse services related to the products stored in our buildings that are designed to optimize their movement through the cold chain, such as the placement of food products for storage and preservation, the retrieval of products from storage upon customer request, case-picking, blast freezing, produce grading and bagging, ripening, kitting, protein boxing, repackaging, e-commerce fulfillment, and other recurring handling services. We refer to these handling and other services as our value-added services. We have substantially grown our warehouse segment recently through strategic acquisitions and multiple expansion and development projects. In late 2020, we entered the European market through the acquisition of Agro Merchants, and have recently expanded our presence in South America.

In our transportation segment, we broker, manage or operate transportation of frozen and perishable food and other products for our customers. Our transportation services include consolidation services (*i.e.*, consolidating a customer's products with those of other customers for more efficient shipment), freight under management services (*i.e.*, arranging for and overseeing transportation of customer inventory) and dedicated transportation services, each designed to improve efficiency and reduce transportation and logistics costs to our customers. We provide these transportation services at cost plus a service fee or, in the case of our consolidation or dedicated services, we may charge a fixed fee. We supplemented our regional, national and truckload consolidation services with the transportation operations from various warehouse acquisitions. We also provide multi-modal global freight forwarding services to support our customers' needs in certain markets.

Under our third-party managed segment, we manage warehouses on behalf of third parties and provide warehouse management services to leading food manufacturers and retailers in their owned facilities. We believe using our third-party management services allows our customers to increase efficiency, lower costs, reduce supply-chain risks and focus on their core businesses. We also believe that providing third-party management services allows us to offer a complete and integrated suite of services across the cold chain.

Customers

Our global footprint enables us to efficiently serve approximately 4,300 customers as of December 31, 2022, consisting primarily of producers, distributors, retailers and e-tailers of frozen and perishable food products, such as fruits, vegetables, meats, seafood, novelties, dairy and packaged foods. We believe the creditworthiness and geographic diversity of our customer base provide us with stable cash flows and a strong platform for growth. The weighted average length of our relationship with our 25 largest customers in our warehouse segment exceeds 35 years. The total warehouse segment revenues generated by our 25 largest customers in our warehouse segment represent 47%, 49% and 55% of our total warehouse segment revenues for the years ended December 31, 2022, 2021 and 2020, respectively. As we have acquired multiple businesses over the past three years, this percentage has declined as our portfolio has expanded. This disclosure is calculated on an annualized basis as if the Company had completed its acquisitions as of the beginning of the year in which they occurred. There has been no material change to the composition of our top 25 customers over the last three years. Each of these 25 largest customers has been in our network for the entirety of these periods.

The following table presents summary information concerning our 25 largest customers in our warehouse segment, based on warehouse segment revenues for the year ended December 31, 2022:

				Network Utilization					
	% of Warehouse Revenue [1]	**# of Sites**	**Credit Rating (Moody's/S&P)[2]**	**Multi Location**	**Dedicated Sites**	**Value Added Services**	**Transportation Consolidation**	**Technology Integration**	**Committed Contract or Lease [3]**
Retailer	4.7%	7	NR | NR	✓	✓	✓	✓	✓	✓
Producer	4.6%	34	BBB- | Baa3	✓	✓	✓		✓	✓
Retailer	3.5%	10	BBB | Baa2	✓	✓	✓		✓	✓
Producer	3.2%	60	BBB+ | Baa2	✓	✓	✓	✓	✓	✓
Producer	2.7%	23	NR | NR	✓	✓	✓	✓	✓	✓
Producer	2.7%	23	BBB- | NR	✓	✓	✓		✓	✓
Retailer	2.6%	19	AA | Aa2	✓	✓	✓	✓	✓	✓
Producer	2.0%	22	BB+ | Ba2	✓	✓	✓		✓	✓
Retailer	1.9%	4	BBB+ | Baa1	✓	✓	✓		✓	
Producer	1.7%	25	A+ | A1	✓	✓	✓	✓	✓	✓
Producer	1.6%	18	NR | NR	✓	✓	✓		✓	✓
Producer	1.5%	13	A+ | A1	✓	✓	✓	✓	✓	✓
Retailer	1.5%	5	BBB+ | Baa1	✓		✓	✓	✓	✓
Producer	1.4%	5	NR | NR	✓	✓			✓	✓
Producer	1.4%	47	A | A2	✓	✓	✓	✓	✓	✓
Producer	1.3%	25	A | A1	✓	✓	✓	✓	✓	✓
Producer	1.3%	12	BBB | Baa2	✓	✓	✓	✓	✓	✓
Producer	1.3%	25	BBB- | Baa3	✓		✓		✓	
Producer	1.2%	27	BBB- | Baa3	✓		✓	✓	✓	✓
Producer	1.0%	21	NR | NR	✓	✓	✓	✓	✓	✓
Producer	1.0%	18	NR | NR	✓		✓	✓	✓	✓
Producer	1.0%	26	NR | NR	✓		✓	✓	✓	✓
Producer	0.8%	21	NR | NR	✓		✓	✓	✓	✓
Producer	0.8%	7	B | NR	✓	✓			✓	✓
Producer	0.8%	13	NR | NR	✓		✓			
Total	**47.5%**								

(1) Based on warehouse revenues for the twelve months ended December 31, 2022. Presented on an annualized basis as if we had completed all 2022 acquisitions as of the beginning of the year.
(2) Represents long-term issuer ratings as published in January 2023.
(3) A check mark indicates that the customer had at least one fixed commitment contract or lease with us as of December 31, 2022.

Seasonality

We are involved in providing services to food producers, distributors, retailers and e-tailers whose businesses, in some cases, are seasonal or cyclical. In order to mitigate the volatility in our revenue and earnings caused by seasonal business, we have implemented fixed commitment contracts with certain of our customers. Our customers with fixed commitment contracts pay for guaranteed warehouse space in order to maintain their required inventory levels, which is especially helpful to them during periods of peak physical occupancy. On a portfolio-wide basis, physical occupancy rates are generally the lowest during May and June. Physical occupancy rates typically exhibit a gradual increase after May and June as a result of annual harvests and our customers building inventories in connection with end-of-year holidays and generally peak between mid-September and early December as a result thereof. Typically, we have higher than average physical occupancy levels in October or November, which also tends to result in higher revenues. In recent years we have seen variability in physical occupancy levels as compared to the typical seasonality trends as a result of the COVID-19 pandemic.

Additionally, the involvement of our customers in a cross-section of the food industry mitigates, in part, the impact of seasonality as peak demand for various products occurs at different times of the year (for example, demand for ice cream is typically highest in the summer while demand for frozen turkeys usually peaks in the late fall). Our southern hemisphere operations in Australia, New Zealand and South America also help balance the impact of seasonality in our global operations, as their growing and harvesting cycles are complementary to North America and Europe. Each of our warehouses sets its own operating hours based on demand, which is heavily driven by growing seasons and seasonal consumer demand for certain products.

Competition

In our industry, the principal competitive factors are warehouse location, warehouse size and available occupancy, breadth and interconnectivity of warehouse networks, customer service and quality, type of service and price. For refrigerated food customers, transportation costs are typically significantly greater than warehousing costs and, accordingly, location and transportation capabilities are major competitive factors. The size of a warehouse is important in part because large customers generally prefer to have all of their products needed to serve a given market in a single location and to have the flexibility to increase storage at that single location during seasonal peaks. In areas with direct local competition, customers generally will select a temperature-controlled warehouse based upon service level, price and the quality of the warehouse. In addition, some food producers and distributors attend to their own warehousing and distribution needs by either building or leasing warehouses, creating a private warehousing market which may compete with the public warehouse industry. Many customers, including those for whom private warehousing is a viable option, will select distribution services based upon service level and price, provided that an appropriate network of related storage facilities is available. The ability to provide a wide breadth of high-quality integrated logistics management services is an increasingly important competitive advantage in the marketplace. In addition, we compete for the business of customers and potential customers who may choose to provide temperature-controlled warehousing in-house.

North America

Outside the five largest owners of temperature-controlled warehouses, the North America temperature-controlled warehouse industry is highly fragmented among numerous owners and operators. We believe our main competitors include Lineage Logistics, LLC, United States Cold Storage, Inc. (an affiliate of John Swire & Sons), Interstate Warehousing, Burris Logistics, NewCold Advanced Cold Logistics and Seafrigo Logistics, in addition to numerous other local, regional and national temperature-controlled warehouse owners, operators and developers.

Europe

Our main competitors in Europe include Constellation Cold Storage, Lineage Logistics, LLC and NewCold Advanced Logistics. Generally, the European temperature-controlled warehouse industry is highly fragmented among numerous owners and operators.

Asia-Pacific

Our main competitors in Australia include Lineage Logistics, LLC and NewCold Advanced Cold Logistics, which operate warehouses and service many of the Australian markets. Generally, our other competitors operate in only one region and do not compete in the retail market that comprises the majority of our revenues.

Our main competitors in New Zealand are Lineage Logistics, LLC and Halls Transport (not affiliated with the Halls acquisition we completed during 2020). Lineage Logistics, is the largest public warehouse operator in New Zealand. Halls Transport is primarily a transporter that also operates a network of five warehouses. Generally, our other competitors also service the commodity market and operate in only one region.

South America

We have several competitors in the Buenos Aires, Argentina market, which in the past tended to be smaller single-site operations or fragmented networks. The greatest sources of competition in Argentina are the disproportionate number of producers (compared to the United States) that continue to in-source their temperature-controlled storage needs. During 2022, we contributed our Chile facility to a joint venture. Through our joint ventures with Superfrio and Comfrio, we now have a relationship with the top two owners and operators of cold storage facilities in Brazil. The largest competitor in Brazil is Friozem Armazens Frigorificos Ltda. Additionally, Lineage Logistics, LLC has entered this market through a joint venture with Emergent Cold, which has locations in Brazil, Panama and Peru.

HUMAN CAPITAL RESOURCES

Americold is committed to creating a work environment that supports the growth and success of our associates. We have employees located throughout the world. As of December 31, 2022, we employed approximately 15,484 people worldwide, 98% of which are full-time associates.

The geographic distribution of our associates as of December 31, 2022 is summarized in the following table:

Region	Number of associates	Percentage of workforce
North America	11,954	77 %
Europe	1,862	12 %
Australia/New Zealand	1,540	10 %
South America	128	1 %
Total	15,484	100 %

As of December 31, 2022, approximately 29% of our associates were represented by various local labor unions and associations. During 2023, we expect to engage in negotiations for 20 agreements, which make up approximately 8% of our associate population. We do not anticipate any workplace disruptions during this renewal process. We consider our labor relations to be positive and productive.

Diversity, Inclusion and Belonging

We believe that how we attract, develop and retain our talent is critical to how we achieve our strategic objectives and create sustained growth and value for our stockholders. We are devoted to fostering a work environment where associates from diverse backgrounds are culturally and socially appreciated as their unique selves and can thrive as valued members of the organization. We are committed to developing and implementing programs and practices that create a supportive learning environment and encompasses communication of diverse perspectives and experiences.

We are an equal opportunity employer, with all qualified applicants receiving consideration for employment without regard to race, color, national origin, ancestry, religion, genetic information, physical or mental disability, marital status, age, sexual orientation or identification, gender, veteran status, political affiliation, physical appearance, or any other characteristic protected by federal, state or local law. It is our policy to recruit talent based on skill, knowledge and experience, without discrimination. We evaluate compensation equity annually and ensure action plans are in place to address pay disparities when applicable.

During 2022, we conducted an enterprise-wide engagement survey, which was available in 16 languages that focused on measuring the engagement and inclusion of our associates. Americold achieved a higher engagement score and a higher associate response rate in 2022 as compared to 2021. Creating a positive employee experience where individuals and teams feel their work is satisfying and impactful is a key focus area of ours. We continually assess and strive to enhance associate satisfaction and engagement.

We continue to emphasize associate development and training. Our associates are offered regular opportunities to participate in formal and informal personal growth and professional development programs. Associates completed over 115,000 hours of training in 2022. One of our unique leadership development programs is the Americold Leadership Academy, which builds the leadership capabilities of our global operations supervisors and managers, who have direct oversight of the frontline workforce managing our customers' products through the supply chain. Other formal offerings include tuition reimbursement, leadership development experiences, and a diverse curriculum of online learning programs. Additionally, we launched an executive coaching program to enhance leadership capabilities across the organization.

In 2022, our focus turned to streamlining processes and tools within our organization, through the kickoff of Project Orion. This multi-year initiative will transform our technology systems through the implementation of a global ERP, human capital management system and other back-office systems. Our associates began the planning phase of this initiative during 2022. We also introduced Leader Standard Work—a set of recurrent management techniques, tools, and skills—to our senior operations leaders which is intended to improve management performance and foster cross-team communication. Leader Standard Work will continue to be rolled out across the organization in 2023.

Philanthropy

Giving back to the communities where we work and live is important to Americold and to our associates. We're particularly proud of our associates and their efforts to give back and help those in need. We partner with and support organizations around the globe that contribute to fighting hunger and supporting the growth and development of children and teens. Our most significant partnership is with Feed the Children in the United States, through which we provide donations, complimentary temperature-controlled transportation of food products, and volunteer opportunities for our associates.

In Europe, we have many associates who have family members that were directly affected by the crisis in Ukraine in 2022. To support those associates, and offer general aid, Americold donated to the Red Cross for relief efforts. We also partnered with Feed the Children which connected with a local relief organization in Ukraine to provide food baskets to refugees and families in need in the area.

Our associates are not only making a difference in their communities, but they also have strong passion and support for each other. We know that some of our own people experience unforeseen disasters or personal hardships that place financial stress on them and their families. Our associates consistently ask how they can help each other. Americold Foundation was introduced to give associates the opportunity to contribute monetary donations to aid members of the Americold family in need. All associates around the world can contribute as well as be recipients of this charitable foundation. Associates in need are encouraged to apply for a grant from the Americold Foundation Fund to ease their financial burden.

Safety and Wellbeing

The safety of our associates is our number one priority. Our associates receive safety training throughout the year to ensure they are equipped with the knowledge and tools that will allow them to conduct their daily tasks safely. Our associates are provided with personal protective equipment which keeps them protected while safely performing their job functions. We use safety scorecards, standardized signage, and visual management throughout our facilities to reinforce safety principles and metrics. Americold's total recordable incidence rate ("TRIR") of 2.70 is 51% better than the industry average of 5.5 for refrigerated warehouses. TRIR is a measure of occupational health and safety based on the number of safety incidents reported against the number of workers present and the number of hours worked based on the U.S. Occupational Safety and Health Administration (OSHA) record-keeping criteria (injuries per 200,000 hours).

All our supervisors complete Americold's Behavioral Based Safety (BBS) Program, which reinforces safe working behaviors by actively addressing observations, as well as providing constructive feedback to address "at risk" behaviors. The program is implemented worldwide and serves to make safety a part of an open and regular dialogue.

To address the continuing dynamic nature of COVID-19 in 2022, we maintained social distancing and other health and safety protocols as recommended and required by global, national, state and local government agencies and organizations, including the U.S. Centers for Disease Control and Prevention and the World Health Organization.

Because our most valuable asset is our people, we are constantly looking to give associates the wellbeing support they need with the goal of having a happier, healthier and more engaged workforce. We look at wellbeing from a holistic perspective inclusive of physical, mental, and financial wellness.

In the U.S., we offer a Health Reimbursement Account program funded solely by Americold. This program encourages annual wellbeing exams and self-health awareness, and rewards associates who participate in

it. Additionally, we offer a comprehensive Employee Assistance Program that assists associates with personal and/or work-related situations that may impact their job performance, health, and general sense of wellbeing. During the year, we launched a comparable program in Australia and New Zealand to provide similar benefits. We continue to evaluate programs that address mental health given the growing need in this area.

For financial wellness, we added a Roth option to our 401(k) program that will be available for our U.S. associates in 2023 which allows for after-tax contributions and provides associates more flexibility towards their retirement options.

Total Rewards

We provide programs and benefits designed to attract, retain and reward high-performing associates. In addition to salaries or hourly wages, our compensation programs, which vary by geography and acquired entity, can include performance incentives for front-line workers, annual bonuses, share-based compensation awards, paid time off, retirement savings programs, healthcare and insurance benefits, health savings accounts, flexible work schedules, employee assistance programs and tuition assistance. To foster a stronger sense of ownership, aid in retention and to align the interests of our associates with our stockholders, we provide restricted stock units to eligible associates through our equity incentive programs. To drive further engagement and individual ownership of the company, we offer an Employee Stock Purchase Program (ESPP) which provides our associates an opportunity to purchase our common stock at a discounted price. In 2022, we established the foundation for a global rewards and recognition program that is anchored in our organizational values of customer service, integrity, giving back, accountability, and teamwork. This program will begin launching in 2023.

Business Conduct and Ethics

We are dedicated to conducting our business consistent with the highest standards of business ethics. Our updated Code of Business Conduct and Ethics sets forth our standards and policies. We have adopted a supplier code of conduct that seeks to ensure that our suppliers operate within our required code of conduct. We provide code of conduct training so that our associates receive regular training and reminders about our standards. We also maintain an anti-discrimination and anti-harassment policy that includes mandatory harassment training for all managers. We do not tolerate any form of racism, sexism or injustice within our facilities or across our organization. If at any time an associate witnesses an action or situation that is contrary to our code of conduct or policies, they are encouraged to report it immediately. We provide an anonymous Ethics Helpline, which our compliance, legal and human resources teams monitor regularly. We take all complaints seriously, and evaluate all claims, conduct internal investigations and implement appropriate remediation plans if necessary. The Company’s Audit Committee is routinely briefed on complaints received and has access to reports made through our Ethics Helpline.

We have also adopted a Human Rights Policy overseen by our Board of Directors, which outlines our commitment to the United Nations Universal Declaration of Human Rights, and a policy against modern slavery, ensuring transparency within our business.

REGULATORY MATTERS

Many laws and governmental regulations are applicable to our properties and changes in these laws and regulations, or interpretation of such laws and regulations by agencies and the courts, occur frequently.

Environmental Matters

Our properties are subject to a wide range of environmental laws and regulations in each of the locations in which we operate, and compliance with these requirements involves significant capital and operating costs. Failure to comply with these environmental requirements can result in civil or criminal fines or sanctions, claims for environmental damages, remediation obligations, revocation of environmental permits or restrictions on our operations. Future changes in environmental laws or in the interpretation of those laws, including stricter requirements affecting our operations, could result in increased capital and operating costs, which could materially and adversely affect our business, financial condition, liquidity, results of operations and, consequently, amounts available for distribution to our stockholders.

Food Safety Regulations

Most of our properties in the United States are subject to compliance with federal regulations regarding food safety. Under the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, the United States Food and Drug Administration, or the FDA, requires us to register all warehouses in which food is stored and further requires us to maintain records of sources and recipients of food for purposes of food recalls.

The Food Safety Modernization Act, or FSMA significantly expanded the FDA's authority over food safety, providing the FDA with new tools to proactively ensure the safety of the entire food system, including new hazard analysis and preventive controls requirements, food safety planning, requirements for sanitary transportation of food, and increased inspections and mandatory food recalls under certain circumstances. The most significant rule under the FSMA which impacts our business is the Current Good Manufacturing Practice and Hazard Analysis and Risk-Based Preventive Controls for Human Food rule. This rule requires a food facility to establish a food safety system that includes an analysis of hazards and the implementation of risk-based preventive controls, among other steps. This is in addition to requirements that we satisfy existing Good Manufacturing Practices with respect to the holding of foods, as set forth in FDA regulations. The USDA also grants to some of our warehouses "ID status," which entitles us to handle products of the USDA. Any products destined for export must also satisfy the applicable export requirements. As a result of the regulatory framework from the FDA, the USDA and other local regulatory requirements, we subject our warehouses to periodic food safety audits which are for the most part carried out by a recognized global, third-party provider of such audits. In addition to meeting any applicable food safety, food facility registration and record-keeping requirements, our customers often require us to perform food safety audits.

To the extent we fail to comply with existing food safety regulations or contractual obligations, or are required to comply with new regulations or obligations in the future, it could adversely affect our business, financial condition, liquidity, results of operations and prospects, as well as the amount of funds available for distribution to our stockholders.

Occupational Safety and Health Act, or OSHA

Our properties in the United States are subject to regulation under OSHA, which requires employers to provide associates with a safe work environment free from hazards, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress and unsanitary conditions. In addition, due to the amount of ammonia stored at some of our facilities, we are also subject to compliance with OSHA's Process Safety Management of Highly Hazardous Chemicals standard and OSHA's ongoing National Emphasis Program related to potential releases of highly hazardous chemicals. The cost of complying with OSHA and similar laws enacted by states and other jurisdictions in which we operate can be substantial, and any failure to comply with

these regulations could expose us to substantial penalties and potentially to liabilities to associates who may be injured at our warehouses.

International Regulations

Our international facilities are subject to many local laws and regulations which govern a wide range of matters, including food safety, building, environmental, health and safety, hazardous substances, waste minimization, as well as specific requirements for the storage of meat, dairy products, fish, poultry, agricultural and other products. Any products destined for export must also satisfy the applicable export requirements. A failure to comply with, or the cost of complying with, these laws and regulations could materially adversely affect our business, financial condition, liquidity, results of operations and prospects and, consequently the amounts available for distribution to our stockholders.

INSURANCE COVERAGE

We carry comprehensive general liability, fire, extended coverage, business interruption, umbrella liability and environmental coverage on all of our properties with limits of liability which we deem adequate. Similarly, we are insured against the risk of direct physical damage in amounts we believe to be adequate to reimburse us on a replacement basis for costs incurred to repair or rebuild each property, including loss of business profits during the reconstruction period. We also carry coverage for customers' products in our warehouses that are damaged due to our negligence. The cost of all such insurance is passed through to customers as part of their regular rates for storage and handling.

We are self-insured for workers' compensation and health insurance under a large-deductible program, meaning that we have accrued liabilities in amounts that we consider appropriate to cover losses in these areas. In addition, we maintain excess loss coverage to insure against losses in excess of the reserves that we have established for these claims in amounts that we consider appropriate.

We will not carry insurance for generally uninsured losses such as loss from riots or war; however, we do include coverage for risks across all programs for acts of terrorism. We carry earthquake insurance on our properties in areas known to be seismically active and flood insurance on our properties in areas known to be flood zones, in an amount and with deductibles which we believe are commercially reasonable. We also carry insurance coverage relating to cybersecurity incidents commensurate with the size and nature of our operations.

ITEM 1A. Risk Factors

Investing in our common stock involves risks and uncertainties. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found below under the heading "Risk Factors" and should be carefully considered, together with other information in this Form 10-K and our other filings with the SEC, before making an investment decision regarding our common stock and other securities. Consistent with the foregoing, risks we face include, but are not limited to, the following:

Risks Related to our Business and Operations

- our investments are concentrated in the temperature-controlled warehouse industry;
- inflation could continue to have a negative impact on our business and results of operation;
- labor shortages, increased turnover and work stoppages may have a material adverse effect on us;
- wage increases driven by competitive pressures and applicable legislation;
- labor shortages, disruptions or inefficiencies may negatively impact our customers' ability to produce and ship products for storage;
- supply chain disruptions may continue to have a material adverse impact on us;
- risks associated with expansion and development, which could result in lower than expected returns and unforeseen costs and liabilities;
- the short-term nature and lack of fixed storage commitments of many of our customer contracts;
- our growth may strain our management and resources;
- a portion of our growth depends upon acquisitions and we may be unable to identify, complete and successfully integrate acquisitions;
- we may be unable to successfully expand our operations into new markets;
- we face various risks and uncertainties related to public health crises, such as the novel coronavirus and its variants (COVID-19);
- a failure or breach of our information technology systems, cybersecurity attacks or a breach of our information security systems, networks or processes could cause business disruptions, loss of confidential information, remediation costs or damages;
- issues with maintaining, upgrading and implementing our information technology systems, potential cost overruns, timing and control risks and failure to recognize anticipated savings and increased productivity;
- privacy and data security concerns and restrictions may adversely affect our business;
- we may not be reimbursed for increases in operating expenses and other real estate costs;
- our temperature-controlled warehouses are concentrated in certain geographic areas, some of which are susceptible to adverse local conditions such as natural disasters, economic slowdown and localized oversupply of warehouse space;
- our current and potential international operations and properties subject us to risks different from those we face domestically and we may not be able to manage our international business effectively;
- competition in our markets may increase over time as our competitors open new or expand existing warehouses;
- our power costs may increase or be subject to volatility;
- we depend on certain customers for a substantial amount of our warehouse segment revenues;
- foreign exchange rates and other hedging activity exposes us to risks, including the risk that a counterparty will not perform and that the hedge will not yield the benefits we anticipate;
- we may incur liabilities or reputational harm from quality-control issues associated with our services;
- we are subject to risks related to corporate governance, social and environmental responsibility and reputation;

- our temperature-controlled warehouse infrastructure may become obsolete or unmarketable;
- we use in-house trucking services to provide transportation services to our customers and any increased severity or frequency of accidents or other claims, changes in regulation or disruptions in service could have a material adverse effect on us;
- we use third-party trucking service providers to provide transportation services to our customers and any delay or disruption in these services or damage to products during transport could have a material adverse effect on us;
- we could face liability from our participation in multiemployer pension plans administered by labor unions;
- we could experience power outages or breakdowns of our refrigeration equipment;
- we hold leasehold interests in 59 of our warehouses, which we may be forced to vacate if we default on our obligations thereunder or are unable to renew such leases upon their expiration;
- charges for impairment of goodwill or other long-lived assets and declining real estate valuations could adversely affect our earnings and financial condition;
- political and economic conditions could negatively impact our investment in our foreign joint ventures;
- geopolitical conflicts, including the conflict between Russia and Ukraine, may adversely affect our business and results of operation.

General Risks Related to the Real Estate Industry

- our performance is subject to economic conditions in the real estate market and the broader economy;
- costs relating to the presence, removal or abatement of asbestos, ammonia and other chemicals and underground storage tanks;
- we could incur significant costs related to environmental conditions and liabilities;
- risks related to climate change or natural disasters could have a material adverse effect on our results of operations;
- our insurance coverage may be insufficient to cover potential environmental liabilities;
- our properties may contain or develop harmful molds or have other air quality issues;
- illiquidity of real estate developments could significantly impede our ability to respond to adverse changes;
- we could experience uninsured or under-insured losses relating to our warehouses or other assets;
- costs of complying with governmental laws and regulations could adversely affect us or our customers;
- ongoing litigation risks which could result in material liabilities and harm our business;
- our current and future joint venture investments face risks stemming from our partial ownership interests, lack of sole decision making authority, reliance upon our partners' financial condition, disputes and other risks.

Risks Related to our Debt Financings

- we have a substantial amount of indebtedness that may limit our financial and operating activities;
- increases in interest rates could increase the amount of our debt service
- we are dependent on external sources of capital, the continuing availability of which is uncertain;
- adverse changes in our credit ratings could negatively impact our financing activity;
- any indebtedness containing covenants restricting our ability to engage in certain activities.

Risks Related to our Organization and Structure

- provisions of Maryland law may limit the ability of a third party to acquire control of our company;
- our board of directors can take many actions even if our stockholders disagree or if they are otherwise not in the stockholders's best interest;

- our articles of incorporation contain provisions that make removal of our directors difficult;
- certain rules and restrictions in our articles of incorporation have an anti-takeover effect;
- our rights and the rights of our stockholders to take action against our directors and officers are limited;
- we have fiduciary duties as the general partner of our Operating Partnership.

Risks Related to our Common Stock

- cash available for distribution to stockholders may not be sufficient to pay distributions at expected levels;
- any future debt could dilute our existing stockholders and may be senior to our common stock;
- any future issuance of additional equity could dilute our existing stockholders;
- common stock eligible for future sale may have adverse effects on the market price of our common stock.

REIT and Tax Related Risks

- our failure to qualify as a REIT for U.S. federal income tax purposes, or our failure to remediate if we failed, could have a material adverse effect on us;
- meeting annual distribution requirements could result in material harm to our company;
- we conduct a portion of our business through TRSs, which are subject to certain tax risks;
- complying with REIT requirements may cause us to forgo otherwise attractive opportunities;
- future changes to the U.S. federal income tax laws could have a material adverse impact on us;
- distributions payable by REITs generally do not qualify for any reduced tax rates;
- we may be subject to U.S. federal, state, local and foreign taxes, reducing funds available for distribution;
- complying with REIT requirements may result in tax liabilities and limit our ability to hedge; and
- if our Operating Partnership fails to qualify as a partnership for U.S. federal income tax purposes.

Risk Factors

Set forth below are certain risk factors that could harm our business, results of operations and financial condition. You should carefully read the following risk factors, together with the financial statements, related notes and other information contained in this Annual Report on Form 10-K. Our business, financial condition and operating results may suffer if any of the following risks are realized. If any of these risks or uncertainties occur, the trading price of our common stock could decline and you might lose all or part of your investment. This Annual Report on Form 10-K contains forward-looking statements that contain risks and uncertainties. Please refer to the discussion of "Cautionary Statement Regarding Forward-Looking Statements."

Risks Related to our Business and Operations

Our investments are concentrated in the temperature-controlled warehouse industry, and our business would be materially and adversely affected by an economic downturn in that industry or the markets for our customers' products.

Our investments in real estate assets are concentrated in the industrial real estate industry, specifically in temperature-controlled warehouses. This concentration exposes us to the risk of economic downturns in this industry to a greater extent than if our business activities included a more significant portion of other sectors of the real estate market. We are also exposed to fluctuations in the markets for, and production of, the commodities and finished products that we store in our warehouses. For example, the demand for poultry and poultry products and the production of such products directly impacts the need for temperature-controlled warehouse space to store poultry and poultry products for our customers. Although our customers store a diverse product mix in our

temperature-controlled warehouses, declines in production of or demand for their products could cause our customers to reduce their inventory levels at our warehouses, which could reduce the storage and other fees payable to us and materially and adversely affect us.

Inflation has and may continue to have a negative impact on our business and results of operation.

Inflation in the United States, Europe, Australia/New Zealand and South America has risen to levels not experienced in recent decades and we are seeing its impact on various aspects of our business. Certain of our expenses, including, but not limited to, utility costs (power in particular), labor costs, interest expense, property taxes, insurance premiums, equipment repair and replacement, and other operating expenses are subject to inflationary pressures that have and may continue to negatively impact our business and results of operation. While we seek to mitigate the impact of inflation by increased operating efficiencies and embedded rate escalation or price increases to our customers to offset increased costs, there can be no assurance that we will be able to offset future inflationary cost increases in whole or in part, which could adversely impact our profit margins.

Labor shortages, increased turnover and work stoppages may disrupt our operations, increase costs and negatively impact our profitability.

Our ability to successfully implement our business strategy depends upon our ability to attract and retain talented people and effectively manage our human capital. The labor markets in the industries in which we operate are competitive. We have recently experienced increased labor shortages at some of our warehouses and other locations, and while we have historically experienced some level of ordinary course turnover of employees, the COVID-19 pandemic and resulting actions, as well as other macro-economic headwinds such as inflation and supply change disruptions have exacerbated labor shortages and increased turnover. A number of factors have had and may continue to have adverse effects on the labor force available to us, including reduced employment pools, and other government regulations, which include laws and regulations related to workers' health and safety, wage and hour practices and immigration. In addition, we seek to optimize our mix of permanent and temporary associates in our facilities, as temporary associates typically result in higher costs and lower efficiency. Labor shortages and increased turnover rates within our associate ranks have led to and could in the future lead to
increased costs, such as increased overtime to meet demand and increased wage rates to attract and retain associates and could negatively affect our ability to efficiently operate our facilities or otherwise operate at full capacity. An overall or prolonged labor shortage, lack of skilled labor, inability to maintain a stable mix of permanent to temporary associates, increased turnover and labor inflation could have a material adverse impact on our operations, results of operations, liquidity or cash flows.

Furthermore, certain portions of our operations are subject to collective bargaining agreements. As of December 31, 2022, worldwide, we employed approximately 15,484 people, approximately 29% of whom were represented by various local labor unions. Unlike owners of industrial warehouses, we hire our own workforce to handle product in and out of storage for our customers. Strikes, slowdowns, lockouts or other industrial disputes could cause us to experience a significant disruption in our operations, as well as increase our operating costs, which could materially and adversely affect us. If a greater percentage of our workforce becomes unionized, or if we fail to re-negotiate our expired or expiring collective bargaining agreements on favorable terms in a timely manner or at all, we could be materially and adversely affected.

Wage increases driven by competitive pressures or applicable legislation on employee wages and benefits could negatively affect our operating margins and our ability to attract qualified personnel.

Our hourly associates in the U.S. and internationally are typically paid wage rates above the applicable minimum wage. However, increases in the minimum wage will increase our labor costs if we are to continue paying our hourly associates above the applicable minimum wage. If we are unable to continue paying our hourly

associates above the applicable minimum wage, we may be unable to hire and retain qualified personnel. The U.S. federal minimum wage has been $7.25 per hour since July 24, 2009. From time to time, various U.S. federal, state and local legislators have proposed or enacted significant changes to the minimum wage requirements. For example, certain local or regional governments in places such as Chicago, Los Angeles, Seattle, San Francisco, Portland and New York have approved phased-in increases that eventually will take their minimum wage to as high as $16.00 per hour. In addition, specific legislative and regulatory proposals regarding an increase in the federal minimum wage have been discussed recently. If such increases were to occur nationally or in specific markets in which we operate, our operating margins would be negatively affected unless we are able to increase our rent, storage fees and handling fees in order to pass increased labor costs on to our customers. Our standard contract forms include rate protection for uncontrollable costs such as labor, or costs associated with regulatory action, however, despite such provisions, we may not be able to fully pass through these increased costs.

Competitive pressures may also require that we enhance our pay and benefits package to compete effectively for such personnel (including costs associated with health insurance coverage or workers' compensation insurance) or offer retention bonuses. If we fail to attract and retain qualified and skilled personnel, we could be materially and adversely affected.

Labor shortages, disruptions or inefficiencies may continue to negatively impact our customers' ability to produce products for storage and ability to ship products to our warehouses.

Our customers' operations are subject to labor shortages and disruptions that could continue to negatively impact their production capability, resulting in reduced volume of product for storage. In addition, labor shortages and disruptions impacting the transportation industry may hamper the timely movement of goods into and out of our warehouses. These labor shortages and disruptions could in turn have a material adverse effect on us.

Supply chain disruptions may continue to negatively impact our business.

Our business has been impacted by ongoing supply chain disruptions, which have impacted, among other things, labor availability, raw material availability, manufacturing and food production, construction materials and transportation. Continued disruptions in the supply chain impacting the availability of materials, causing delays in manufacturing and production, including in our customers' products, shipping delays and other supply chain problems could materially and adversely impact us.

We are exposed to risks associated with expansion and development, which could result in returns below expectations and unforeseen costs and liabilities.

We have engaged, and expect to continue to engage, in expansion and development activities with respect to certain of our legacy or newly acquired properties. Expansion and development activities subject us to certain risks not present in the acquisition of existing properties (the risks of which are described below), including, without limitation, the following:

- our pipeline of expansion and development opportunities is at various stages of discussion and consideration and, based on historical experiences, many of them may not be pursued or completed as contemplated or at all;
- the availability and timing of financing on favorable terms or at all;
- the availability and timely receipt of zoning and regulatory approvals, which could result in increased costs and could require us to abandon our activities entirely with respect to the warehouse for which we are unable to obtain permits or authorizations;
- the cost and timely completion within budget of construction due to increased land, materials, equipment, labor or other costs (including risks beyond our control, such as weather or labor conditions, or material

shortages), which could make completion of the warehouse or the expansion thereof uneconomical, and we may not be able to increase revenues to compensate for the increase in construction costs;

- we may be unable to complete construction of a warehouse or the expansion thereof on schedule due to availability of labor, equipment or materials or other factors outside of our control, resulting in increased debt service expense and construction costs;
- supply chain disruptions or delays in receiving materials or support from vendors or contractors could impact the timing of stabilization of expansion and development projects;
- the potential that we may expend funds on and devote management time and attention to projects which we do not complete;
- a completed expansion project or a newly-developed warehouse may fail to achieve, or take longer than anticipated to achieve, expected occupancy rates and may fail to perform as expected;
- projects to automate our existing or new warehouses may not perform as expected or achieve the anticipated operational efficiencies; and
- we may not be able to achieve targeted returns and budgeted stabilized returns on invested capital on our expansion and development opportunities due to the risks described above, and an expansion or development may not be profitable and could lose money.

These risks could create substantial unanticipated delays and expenses and, in certain circumstances, prevent the initiation or completion of expansion or development as contemplated or at all, any of which could materially and adversely affect us.

The short-term nature and lack of fixed storage commitments of many of our customer contracts exposes us to certain risks that could have a material adverse effect on us.

On an annualized basis assuming all 2022 acquisitions occurred as of the beginning of the year, 41.9% of rent and storage revenue were generated from fixed commitment storage contracts or leases with customers for the year ended December 31, 2022.

Our customer contracts that do not contain fixed storage commitments typically do not require our customers to utilize a minimum number of pallet positions or provide for guaranteed fixed payment obligations from our customers to us. As a result, most of our customers may discontinue or otherwise reduce their use of our warehouses or other services in their discretion at any time which could have a material adverse effect on us. Additionally, we have discrete pricing for our customers based upon their unique profiles. Therefore, a shift in the mix of business types or customers could negatively impact our financial results.

The storage and other fees we generate from customers with month-to-month warehouse rate agreements may be adversely affected by declines in market storage and other fee rates more quickly than with respect to our contracts that contain stated terms. There also can be no assurance that we will be able to retain any customers upon the expiration of their contracts (whether month-to-month warehouse rate agreements or contracts) or leases. If we cannot retain our customers, or if our customers that are not party to contracts with fixed storage commitments elect not to store goods in our warehouses, we may be unable to find replacement customers on favorable terms or at all or on a timely basis and we may incur significant expenses in obtaining replacement customers and repositioning warehouses to meet their needs. Any of the foregoing could materially and adversely affect us.

Our growth may strain our management and resources, which may have a material adverse affect on us.

We have grown rapidly in recent years, including by expanding our internal resources, making acquisitions, and entering new markets. Our growth has, and may continue to, place a strain on our management, operational, financial and information systems, and procedures and controls to expand, train and control our

employee base. Our need for working capital will increase as our operations grow. We can provide no assurance that we will be able to adapt our portfolio management, administrative, accounting, information technology and operational systems to support any growth we may experience. Failure to oversee our current portfolio of properties and manage our growth effectively, or to obtain necessary working capital and funds for capital improvements, could have a material adverse effect on our business, results of operations, cash flow, financial condition and stock price.

A portion of our future growth depends upon acquisitions and we may be unable to identify, complete and successfully integrate acquisitions, which may impede our growth, and our future acquisitions may not achieve their intended benefits or may disrupt our plans and operations.

Our ability to expand through acquisitions requires us to identify and complete acquisitions that are compatible with our growth strategy and to successfully integrate and operate these newly-acquired businesses. We continually evaluate acquisition opportunities, but cannot guarantee that suitable opportunities currently exist or will exist in the future. Our ability to identify and acquire suitable properties on favorable terms and to successfully integrate and operate them may be constrained by the following risks:

- we face competition from other real estate investors with significant capital, including REITs, institutional investment funds and special purpose acquisition companies, which may be able to accept more risk than we can prudently manage, including risks associated with paying higher acquisition prices;
- we face competition from other potential acquirers that may significantly increase the purchase price for a property we acquire, which could reduce our growth prospects or returns;
- we may incur significant costs and divert management's attention in connection with evaluating and negotiating potential acquisitions, including ones that we are subsequently unable to complete;
- we may acquire properties that are not accretive to our operating and financial results upon acquisition, and we may be unsuccessful in integrating and operating such properties in accordance with our expectations;
- our cash flow from an acquired property may be insufficient to meet our required principal and interest payments with respect to any debt used to finance the acquisition of such property;
- we may discover unexpected items, such as unknown liabilities, during our due diligence investigation of a potential acquisition or other customary closing conditions may not be satisfied, causing us to abandon an acquisition opportunity after incurring expenses related thereto;
- we may face opposition from governmental authorities or third parties alleging that potential acquisition transactions are anti-competitive, and as a result, we may have to spend a significant amount of time and expense to respond to related inquiries, or governmental authorities may prohibit the transaction or impose terms or conditions that are unacceptable to us;
- we may fail to obtain financing for an acquisition on favorable terms or at all;
- we may be unable to make, or may spend more than budgeted amounts to make, necessary improvements or renovations to acquired properties;
- we may spend more than budgeted amounts to meet customer specifications on a newly-acquired warehouse;
- market conditions may result in higher than expected vacancy rates and lower than expected storage charges, rent or fees; or
- we may, without any recourse, or with only limited recourse, acquire properties subject to liabilities, such as liabilities for clean-up of undisclosed environmental contamination, claims by customers, vendors or other persons dealing with the former owners of the properties, liabilities incurred in the ordinary course of business and claims for indemnification by general partners, directors, officers and others indemnified by the former owners of the properties.

Our inability to identify and complete suitable property acquisitions on favorable terms or at all, could have a material adverse effect on us. The expected synergies and operating efficiencies of our acquisitions, may not be fully realized, which could result in increased costs and/or lower revenues and have a material adverse effect on us. In addition, the overall integration of the businesses may result in material unanticipated problems, expenses, liabilities, competitive responses, loss of customer relationships and diversion of management's attention, among other potential consequences. Acquired businesses may also be subject to unknown or contingent liabilities for which we may have no or limited recourse against the sellers. The total amount of costs and expenses that we may incur with respect to liabilities associated with our acquisitions may exceed our expectations, which may materially and adversely affect us.

We may be unable to successfully expand our operations into new markets.

If the opportunity arises, we may acquire or develop properties in new markets. In particular, we have determined to strategically grow our warehouse portfolio in attractive international markets. In addition to the risks described above under "—A portion of our future growth depends upon acquisitions and we may be unable to identify and complete acquisitions of suitable properties, which may impede our growth, and our future acquisitions may not yield the returns we expect" and "—We are exposed to risks associated with expansion and development, which could result in returns below expectations and unforeseen costs and liabilities," the acquisition or development of properties in new markets will subject us to the risks associated with a lack of understanding of the related economy and unfamiliarity with government and permitting procedures. We will also not possess the same level of familiarity with the dynamics and market conditions of any new market that we may enter, which could adversely affect our ability to successfully expand and operate in such market. We may be unable to build a significant market share or achieve a desired return on our investments in new markets. If we are unsuccessful in expanding and operating in new, high-growth markets, it could have a material adverse effect on us.

Pandemics or disease outbreaks, such as the COVID-19 pandemic and associated responses, may disrupt our business, including among other things, increasing our costs, impacting our supply chain, and impacting demand for cold storage, which could have a material adverse impact on our business.

We face various risks and uncertainties related to public health crises, such as the COVID-19 pandemic, including:

- supply chain disruptions;
- potential work stoppages, including stoppages due to spread of the disease among our associates or our customers' work forces or due to shutdowns that may be requested or mandated by governmental authorities;
- labor unrest due to risks of disease from working with other associates and outside vendors;
- economic impacts, including increased labor costs, from mitigation and other measures undertaken by us and/or third parties to support and protect our associates or the food supply;
- completing developments on time or an inability of our contractors to perform as a result of spread of disease among associates of our contractors and other construction partners, travel restrictions or due to shutdowns that may be requested or mandated by governmental authorities;
- limiting the ability of our customers to comply with the terms of their contracts with us, including making timely payments to us, due to, among other factors, labor shortages impacting our customers' ability to manufacture and transport product;
- limiting the ability of our suppliers and partners to comply with the terms of their contracts with us, including in making timely delivery of supplies, such as ammonia, to us necessary for the operation of our temperature-controlled warehouses;
- long-term volatility in or reduced demand for temperature-controlled warehouse storage and related handling and other warehouse services;

- adverse impact on the value of our real estate; and
- reduced ability to execute our growth strategies, including identifying and completing acquisitions and expanding into new markets.

The extent to which a public health emergency, such the COVID-19 pandemic, impacts our operations will depend on future developments, which are highly uncertain and cannot be predicted with any degree of confidence, including the scope, severity, duration and geographies of the outbreak, the actions taken to contain the outbreak or mitigate its impact requested or mandated by governmental authorities or otherwise voluntarily taken by individuals or businesses, and the direct and indirect economic effects of the illness and containment measures, among others.

A failure of our information technology systems, cybersecurity attacks or a breach of our information security systems, networks or processes could cause business disruptions and the loss of confidential information and may materially adversely affect our business.

We rely extensively on our computer systems to process transactions, operate and manage our business. Despite efforts to avoid or mitigate such risks, external and internal risks, such as malware, ransomware, insecure coding, data leakage and human error pose direct threats to the stability and effectiveness of our information technology systems. The failure of our information technology systems to perform as anticipated, and the failure to integrate disparate systems effectively or to collect data accurately and consolidate it a useable manner efficiently could adversely affect our business through transaction errors, billing and invoicing errors, processing inefficiencies or errors and loss of sales, receivables, collections and customers, in each case, which could result in reputational damage and have an ongoing adverse effect on our business, results of operation and financial condition.

We may also be subject to cybersecurity attacks and other intentional hacking. These attacks could include attempts to gain unauthorized access to our data and computer systems. In particular, as discussed further below, our operations have been, and may in the future be, subject to ransomware or cyber-extortion attacks, which could significantly disrupt our operations. Generally, such attacks involve restricting access to computer systems or vital data. We employ a number of measures to prevent, detect and mitigate these threats, which include password protection, frequent password changes, firewall detection systems, frequent backups, a redundant data system for core applications and annual penetration testing; however, there is no guarantee such efforts will be successful in preventing a cybersecurity attack. A cybersecurity attack or breach could compromise the confidential information of our associates, customers and vendors. A successful attack could result in service interruptions, operational difficulties, loss of revenue or market share, liability to our customers or others, diversion of corporate resources and injury to our reputation and increased costs. Addressing such issues could prove difficult or impossible and be very costly. Responding to claims or liability could similarly involve substantial costs. In addition, our customers rely extensively on computer systems to process transactions and manage their business and thus their businesses are also at risk from, and may be impacted by, cybersecurity attacks. An interruption in the business operations of our customers or a deterioration in their reputation resulting from a cybersecurity attack could indirectly impact our business operations.

Our computer network has been subjected to cyber attacks from time to time. In November 2020, our computer network was affected by a cyber security incident. We incurred costs relating to this event, including to retain third party consultants and forensic experts to assist with the restoration and remediation of systems and, with the assistance of law enforcement, to investigate and respond to the incident, as well as increased expenditures for our information technology (IT) infrastructure, systems and network and instituting in-house cyber security training for our associates. We carry insurance, including cyber insurance commensurate with the size and nature of our operations. While the November 2020 incident did not have a material impact on us, there

can be no assurance that future incidents will not have a material adverse effect on our business, consolidated results of operations, and consolidated financial condition.

We depend on information technology systems to operate our business, and issues with maintaining, upgrading or implementing these systems, could have a material adverse effect on our business.

We rely on the efficient and uninterrupted operation of information technology systems to process, transmit and store electronic information in our day-to-day operations. All information technology systems are vulnerable to damage or interruption from a variety of sources. Our business has grown in size and complexity; this has placed, and will continue to place, significant demands on our information technology systems. To effectively manage this growth, our information systems and applications require an ongoing commitment of significant resources to maintain, protect, enhance and upgrade existing systems and develop and implement new systems to keep pace with changing technology and our business needs. We have began implementation of "Project Orion", new ERP and back-office software systems which will replace certain existing business, operational, and financial processes and systems. This ERP implementation project requires investment of capital and human resources, the re-engineering of business processes, and the attention of many associates who would otherwise be focused on other areas of our business. This system change entails certain risks, including difficulties with changes in business processes that could disrupt our operations, manage our supply chain and aggregate financial and operational data. During the transition, we may continue to rely on legacy information systems, which may be costly or inefficient, while the implementation of new initiatives may not achieve the anticipated benefits and may divert management's attention from other operational activities, negatively affect associate morale, or have other unintended consequences. Delays in integration or disruptions to our business from implementation of new or upgraded systems could have a material adverse impact on our financial condition and operating results. Additionally, if we are not able to accurately forecast expenses and capitalized costs related to system upgrades and changes, this may have an adverse impact on our financial condition and operating results.

If we fail to maintain or are unable to assert that our internal control over financial reporting is effective under the new ERP system, we could adversely affect our ability to accurately report our financial condition, operating results or cash flows. If we have a material weakness in our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock could be adversely affected, and we could become subject to investigations by the stock exchange on which our securities are listed, the SEC, or other regulatory authorities, which could require additional financial and management resources.

If the information we rely upon to run our businesses were to be found to be inaccurate or unreliable, if we fail to maintain or protect our information technology systems and data integrity effectively, if we fail to develop and implement new or upgraded systems to meet our business needs in a timely manner, or if we fail to anticipate, plan for or manage significant disruptions to these systems, our competitive position could be harmed, we could have operational disruptions, we could lose existing customers, have difficulty preventing, detecting, and controlling fraud, have disputes with customers, have regulatory sanctions or penalties imposed or other legal problems, incur increased operating and administrative expenses, lose revenues as a result of a data privacy breach or theft of intellectual property or suffer other adverse consequences, any of which could have a material adverse effect on our business, results of operations, financial condition or cash flows.

Privacy and data security concerns, and data collection and transfer restrictions and related regulations may adversely affect our business.

Many foreign countries and governmental bodies, including the European Union, where we now conduct business, have laws and regulations concerning the collection and use of personal data obtained from their

residents or by businesses operating within their jurisdiction. These laws and regulations often are more restrictive than those in the United States. Laws and regulations in these jurisdictions apply broadly to the collection, use, storage, disclosure and security of data that identifies or may be used to identify or locate an individual, such as names, email addresses and, in some jurisdictions, IP addresses.

Recently, there has been heightened interest and enforcement focus on data protection regulations and standards both in the United States and abroad. For example, in November 2020, California voters approved Proposition 24 (Consumer Personal Information Law and Agency Initiative), which will increase data privacy requirements for our business when its provisions take effect in 2023. We expect that there will continue to be new proposed laws, regulations and industry standards concerning privacy, data protection and information security in the United States, the European Union, and other jurisdictions. For example, the European Commission adopted a General Data Protection Regulation, or the GDPR, that became fully effective on May 25, 2018, superseding prior European Union data protection legislation, imposing more stringent European Union data protection requirements, and providing for greater penalties for noncompliance. The United Kingdom enacted the Data Protection Act that substantially implements the GDPR. More generally, we cannot yet fully determine the impact these or future laws, regulations and standards may have on our business. Privacy, data protection and information security laws and regulations are often subject to differing interpretations, may be inconsistent among jurisdictions, and may be alleged to be inconsistent with our current or future practices. Additionally, we may be bound by contractual requirements applicable to our collection, use, processing, and disclosure of various types of data, including personal data, and may be bound by, or voluntarily comply with, self-regulatory or other industry standards relating to these matters. These and other requirements could increase our costs, impair our ability to grow our business, or restrict our ability to store and process data or, in some cases, impact our ability to operate our business in some locations and may subject us to liability. Any failure or perceived failure to comply with applicable laws, regulations, industry standards, and contractual obligations may adversely affect our business.

Further, in view of new or modified foreign laws and regulations, industry standards, contractual obligations and other legal obligations, or any changes in their interpretation, we may find it necessary or desirable to fundamentally change our business activities and practices or to expend significant resources to adapt to these changes. We may be unable to make such changes and modifications in a commercially reasonable manner or at all.

The costs of compliance with and other burdens imposed by laws, regulations and standards may limit the use and adoption of our service and reduce overall demand for it. Failure to comply with applicable data protection regulations or standards may expose us to litigation, fines, sanctions or other penalties, which could damage our reputation and adversely impact our business, results of operation and financial condition. Privacy, information security, and data protection concerns may inhibit market adoption of our business, particularly in certain industries and foreign countries.

We may not be reimbursed for increases in operating expenses and other real estate costs.

We may be limited in our ability to obtain reimbursement from customers under existing warehouse contracts for any increases in operating expenses such as labor, electricity charges, maintenance costs, taxes, including real estate and income taxes, or other real estate-related costs. Unless we are able to offset any unexpected costs, in a timely manner, or at all, with sufficient revenues through new warehouse contracts or new customers, increases in these costs would lower our operating margins and could materially and adversely affect us.

Our temperature-controlled warehouses are concentrated in certain geographic areas, some of which are particularly susceptible to adverse local conditions.

Although we own or hold leasehold interests in warehouses across the United States and globally, many of these warehouses are concentrated in a few geographic areas. For example, approximately 41.2% of our owned or leased warehouses are located in six states; with approximately 10.2% in Georgia, 7.7% in New Jersey, 7.5% in Pennsylvania, 5.6% in California, 5.2% in Texas, and 5.0% in Arkansas and approximately 8.2% in Europe (in each case, on a refrigerated cubic-foot basis based on information as of December 31, 2022). We could be materially and adversely affected if conditions in any of the markets in which we have a concentration of properties become less favorable. Such conditions may include natural disasters, periods of economic slowdown or recession, localized oversupply in warehousing space or reductions in demand for warehousing space, adverse agricultural events, disruptions in logistics systems, such as transportation and tracking systems for our customers' inventory, and power outages. Adverse agricultural events include, but are not limited to, the cost of commodity inputs, drought and disease. In addition, adverse weather patterns may affect local harvests, which could have an adverse effect on our customers and cause them to reduce their inventory levels at our warehouses, which could in turn materially and adversely affect us.

We are subject to additional risks with respect to our current and potential international operations and properties and our European operations and properties.

As of December 31, 2022, we owned or had a leasehold interest in 46 temperature-controlled warehouses outside the United States, and we managed two warehouses outside the United States on behalf of third parties. We also intend to strategically grow our portfolio globally through acquisitions of temperature-controlled warehouses in attractive international markets to service demonstrable customer demand where we believe the anticipated risk-adjusted returns are consistent with our investment objectives. However, there is no assurance that our existing customer relationships will support our international operations in any meaningful way or at all. Our international operations and properties and in particular our newly acquired European operations and properties, could be affected by factors peculiar to the laws, regulations and business practices of the jurisdictions in which our warehouses are located. These laws, regulations and business practices expose us to risks that are different than or in addition to those commonly found in the United States. Risks relating to our international operations and properties include:

- changing governmental rules and policies, including changes in land use and zoning laws;
- enactment of laws relating to the international ownership and leasing of real property or mortgages and laws restricting the ability to remove profits earned from activities within a particular country to a person's or company's country of origin;
- changes in laws or policies governing foreign trade or investment and use of foreign operations or workers, and any negative sentiments towards multinational companies as a result of any such changes to laws, regulations or policies or due to trends such as political populism and economic nationalism;
- variations in currency exchange rates and the imposition of currency controls;
- adverse market conditions caused by terrorism, civil unrest, natural disasters, infectious disease and changes in international, national or local governmental or economic conditions;
- business disruptions arising from public health crises and outbreaks of communicable diseases, including the recent coronavirus outbreak;
- the willingness of U.S. or international lenders to make mortgage loans in certain countries and changes in the availability, cost and terms of secured and unsecured debt resulting from varying governmental economic policies;
- the imposition of unique tax structures and changes in real estate and other tax rates and other operating expenses in particular countries, including the potential imposition of adverse or confiscatory taxes;
- the potential imposition of restrictions on currency conversions or the transfer of funds;
- general political and economic instability; and

- our limited experience and expertise in foreign countries, particularly European countries, relative to our experience and expertise in the United States.

If any of the foregoing risks were to materialize, they could materially and adversely affect us.

Competition in our markets may increase over time if our competitors open new or expand existing warehouses.

We compete with other owners and operators of temperature-controlled warehouses (including our customers or potential customers who may choose to provide temperature-controlled warehousing in-house), some of which own properties similar to ours in similar geographic locations. In recent years, certain of our competitors have added, through construction, development and acquisition, temperature-controlled warehouses in certain of our markets. In addition, our customers or potential customers may choose to develop new temperature-controlled warehouses, expand their existing temperature-controlled warehouses or upgrade their equipment. Many of our warehouses are older, and as our warehouses and equipment age and newer warehouses and equipment come onto the market, we may lose existing or potential customers, and we may be pressured to reduce our rent and storage and other fees below those we currently charge in order to retain customers. If we lose one or more customers, we cannot assure you that we would be able to replace those customers on attractive terms or at all. We also may be forced to invest in new construction or reposition existing warehouses at significant costs in order to remain competitive. Increased capital expenditures or the loss of warehouse segment revenues resulting from lower occupancy or storage rates could have a material adverse effect on us.

Power costs may increase or be subject to volatility, which could result in increased costs that we may be unable to recover.

Power is a major operating cost for temperature-controlled warehouses, and the price of power varies substantially between the markets in which we operate, depending on the power source and supply and demand factors. For each of the years ended December 31, 2022 and 2021, power costs in our warehouse segment accounted for 9.3% and 8.6% of the segment’s operating expenses, respectively.

We have implemented programs across our warehouses to reduce overall consumption and to reduce consumption at peak demand periods, when power prices are typically highest. However, there can be no assurance that these programs will be effective in reducing our power consumption or cost of power.

We have entered into, or may in the future enter into, fixed price power purchase agreements in certain deregulated markets whereby we contract for the right to purchase an amount of electric capacity at a fixed rate per kilowatt. These contracts do not obligate us to purchase any minimum amounts but would require negotiation if our capacity requirements were to materially differ from historical usage or exceed the thresholds agreed upon. For example, exceeding these thresholds could have an adverse impact on our incremental power purchase costs if we were to be unable to obtain favorable rates on the incremental purchases.

If the cost of electric power to operate our warehouses increases dramatically or fluctuates widely and we are unable to pass such costs through to customers, we could be materially and adversely affected.

We depend on certain customers for a substantial amount of our warehouse segment revenues.

During the year ended December 31, 2022 and 2021, our 25 largest customers in our warehouse segment contributed approximately 47% and 49%, respectively, of our pro-forma warehouse segment revenues assuming all acquisitions occurred at the beginning of the year. As of December 31, 2022, we had eight customers that each

accounted for at least 2% of our warehouse segment revenues, also on a pro-forma basis. In addition, as of December 31, 2022, 45 of our warehouses were predominantly single-customer warehouses. If any of our most significant customers were to discontinue or otherwise reduce their use of our warehouses or other services, which they are generally free to do at any time unless they are party to a contract that includes a fixed storage commitment, we would be materially and adversely affected. While we have contracts with stated terms with certain of our customers, most of our contracts do not obligate our customers to use our warehouses or provide for fixed storage commitments. Moreover, a decrease in demand for certain commodities or products produced by our significant customers and stored in our temperature-controlled warehouses would lower our physical occupancy rates and use of our services, without lowering our fixed costs, which could have a material adverse effect on us. In addition, any of our significant customers could experience a downturn in their businesses which may weaken their financial condition and liquidity and result in their failure to make timely payments to us or otherwise default under their contracts. Cancellation of, or failure of a significant customer to perform under, a contract could require us to seek replacement customers. However, there can be no assurance that we would be able to find suitable replacements on favorable terms in a timely manner or at all or reposition the warehouses without incurring significant costs. Moreover, a bankruptcy filing by or relating to any of our significant customers could prevent or delay us from collecting pre-bankruptcy obligations. The bankruptcy, insolvency or financial deterioration of our significant customers, could materially and adversely affect us.

In addition, while some of our warehouses are located in primary markets, others are located in secondary and tertiary markets that are specifically suited to the particular needs of the customer utilizing these warehouses. For example, our production advantaged warehouses typically serve one or a small number of customers. These warehouses are also generally located adjacent to or otherwise in close proximity to customer processing or production facilities and were often build-to-suit at the time of their construction. If customers who utilize this type of warehouse, which may be located in remote areas, relocate their processing or production plants, default or otherwise cease to use our warehouses, then we may be unable to find replacement customers for these warehouses on favorable terms or at all or, if we find replacement customers, we may have to incur significant costs to reposition these warehouses for the replacement customers' needs, any of which could have a material adverse effect on us.

Foreign exchange rates and other hedging activity exposes us to risks, including the risk that a counterparty will not perform and that the hedge will not yield the benefits we anticipate.

Our warehouse business outside the United States exposes us to losses resulting from currency fluctuations, as the revenues associated with our international operations and properties are typically generated in the local currency of each of the countries in which the properties are located. Fluctuations in exchange rates between these currencies and the U.S. dollar will therefore give rise to non-U.S. currency exposure, which could materially and adversely affect us. We naturally hedge this exposure by incurring operating costs in the same currency as the revenue generated by the related property. We may attempt to mitigate any such effects by entering into currency exchange rate hedging arrangements where it is practical to do so and where such hedging arrangements are available and by structuring debt in local currency. These hedging arrangements may bear substantial costs, however, and may not eliminate all related risks. We cannot assure you that our efforts will successfully mitigate our currency risks. Moreover, if we do engage in currency exchange rate hedging activities, any income recognized with respect to these hedges (as well as any foreign currency gain recognized with respect to changes in exchange rates) may not qualify under the 75% gross income test or the 95% gross income test that we must satisfy annually in order to qualify as a REIT under the Internal Revenue Code of 1986, as amended, or the Code.

As of December 31, 2022, we were a party to cross currency swaps on certain of our intercompany loans, and to interest rate swaps on our variable rate indebtedness. Periodically we enter into foreign currency forward

contracts to manage our exposure to fluctuations in exchange rates. In addition, we have entered into certain forward contracts and other hedging arrangements in order to fix power costs for anticipated electricity requirements. These hedging transactions expose us to certain risks, such as the risk that counterparties may fail to honor their obligations under these arrangements, and that these arrangements may not be effective in reducing our exposure to foreign exchange rate, interest rate, and power cost changes. Moreover, there can be no assurance that our hedging arrangements will qualify for hedge accounting or that our hedging activities will have the desired beneficial impact on our results of operations or cash flows. Should we desire to terminate a hedging agreement, there could be significant costs and cash requirements involved to fulfill our obligation under the hedging agreement. Failure to hedge effectively against foreign exchange rates, interest rates and power cost changes could have a material adverse effect on us.

We may incur liabilities or harm our reputation as a result of quality-control issues associated with our warehouse storage and other services.

We store frozen and perishable food and other products and provide food processing, repackaging and other services. Product contamination, spoilage, other adulteration, product tampering or other quality control issues could occur at any of our facilities or during the transportation of these products, which could cause our customers to lose all or a portion of their inventory. We could be liable for the costs incurred by our customers as a result of the lost inventory, and we also may be subject to liability, which could be material, if any of the frozen and perishable food products we stored, processed, repackaged or transported caused injury, illness or death. The occurrence of any of the foregoing may negatively impact our brand and reputation and otherwise have a material adverse effect on us.

We are subject to risks related to corporate social and environmental responsibility and reputation.

A number of factors influence our reputation and brand value, including how we are perceived by our customers, business partners, investors, associates, other stakeholders and the communities in which we do business. We face increasing scrutiny related to environmental, social and governance (“ESG”) activities and disclosures and risk damage to our reputation if we fail to act appropriately and responsibly in ESG matters, including, among others, environmental stewardship, supply chain management, climate change, human rights, diversity and inclusion, workplace ethics and conduct, philanthropic activity and support for the communities we serve and in which we operate. Any damage to our reputation could impact the willingness of our business partners and customers to do business with us, or could negatively impact our associate hiring, engagement and retention, all of which could have a material adverse effect on our business, results of operations and cash flows.

Our temperature-controlled warehouse infrastructure may become obsolete or unmarketable, and we may not be able to upgrade our equipment cost-effectively or at all.

The infrastructure at our temperature-controlled warehouses may become obsolete or unmarketable due to the development of, or demand for, more advanced equipment or enhanced technologies, including increased automation of our warehouses. Increased automation may entail significant start-up costs and time and may not perform as expected. In addition, our information technology platform pursuant to which we provide inventory management and other services to our customers may become outdated. When customers demand new equipment or technologies, the cost could be significant and we may not be able to upgrade our warehouses on a cost-effective basis in a timely manner, or at all, due to, among other things, increased expenses to us that cannot be passed on to customers or insufficient resources to fund the necessary capital expenditures. The obsolescence of our infrastructure or our inability to upgrade our warehouses would likely reduce warehouse segment revenues, which could have a material adverse effect on us.

We use in-house trucking services to provide transportation services to our customers, and any increased severity or frequency of accidents or other claims, changes in regulations or disruptions in services could have a material adverse effect on us.

We use in-house transportation services to provide refrigerated transportation services to certain customers. The potential liability associated with accidents in the trucking industry is severe and occurrences are unpredictable. A material increase in the frequency or severity of accidents or workers' compensation claims or the unfavorable development of existing claims could materially and adversely affect our results of operations. In the event that accidents occur, we may be unable to obtain desired contractual indemnities, and our insurance my prove inadequate in certain cases. The occurrence of an event not fully insured or indemnified against or the failure or inability of a customer or insurer to meet its indemnification or insurance obligations could result in substantial losses.

In addition, our trucking services are subject to regulation as a motor carrier by the US Department of Transportation, by various state agencies and by similar authorities in our international operations, whose regulations include certain permit requirements of state highway and safety authorities. These regulatory authorities exercise broad powers over our trucking operations. The trucking industry is subject to possible regulatory and legislative changes that may impact our operations and affect the economics of the industry by requiring changes in operating practices or by changing the demand for or the costs of providing trucking services. Some of these possible changes include increasingly stringent fuel emission limits, changes in the regulations that govern the amount of time a driver may drive or work in any specific period, limits on vehicle weight and size and other matters including safety requirements.

We use third-party trucking service providers to provide transportation services to our customers and any delays or disruptions in providing these services or damages caused to products during transportation, could have a material averse effect on us.

We also use third-party trucking service providers to provide refrigerated transportation services to our customers. We do not have an exclusive or long-term contractual relationship with any of these third- party trucking service providers, and we can provide no assurance that our customer will have uninterrupted or unlimited access to their transportation assets or services. Any delays or disruptions in providing these transportation services to our customers could reduce the confidence our customers have in our ability to provide transportation services and could impair our ability to retain existing customers or attract new customers. Moreover, in connection with any such delays or disruptions, or if customers' products are damaged or destroyed during transport, we may incur financial obligations or be subject to lawsuits by our customers. Any of these risks could have a material adverse effect on us.

We participate in multiemployer pension plans administered by labor unions. To the extent we or other employers withdraw from participation in any of these plans, we could face additional liability from our participation therein.

As of December 31, 2022, we participated in a number of multiemployer pension plans under the terms of collective bargaining agreements with labor unions representing the Company's associates. The Company contributes to multi-employer plans that cover approximately 34% of union associates as of December 31, 2022. We make periodic contributions to these plans pursuant to the terms of our collective bargaining agreements to allow the plans to meet their pension benefit obligations. We have also participated in additional multiemployer pension plans in the past.

In the event that a withdrawal from any of the multiemployer pension plans in which we participate or have participated occurs or should any of the pension plans in which we participate or have participated fail, the documents governing the applicable plan and applicable law could require us to make an additional contribution to the applicable plan in the amount of the unfunded vested benefits allocable to our participation in the plan, and we would have to reflect that as an expense on our Consolidated Statement of Operations and as a liability on our Consolidated Balance Sheets. Our liability for any multiemployer pension plan would depend on the extent of the plan's funding of vested benefits as of the year in which the withdrawal or failure occurs, and may vary depending on the funded status of the applicable multiemployer pension plan, whether there is a mass withdrawal of all participating employers and whether any other participating employer in the applicable plan withdraws from the plan and is not able to contribute an amount sufficient to fund the unfunded liabilities associated with its participants in the plan. Based on the latest information available from plan administrators, we estimate our share of the aggregate withdrawal liability for such pension plans could have been as much as $820.1 million as of December 31, 2022, of which we estimate that certain of our customers are contractually obligated to make indemnification payments to us for approximately $791.7 million. Multiemployer pension plans that we have previously participated in are also covered by indemnification provisions in our favor. However, there is no guarantee that, to the extent we incurred any such withdrawal liability, we would be successful in obtaining all or any of the indemnification payments therefor.

In the ordinary course of our renegotiation of collective bargaining agreements with labor unions that maintain these plans, we could agree to discontinue participation in one or more plans, and in that event we could face a withdrawal liability. Additionally, we could be treated as withdrawing from a plan if the number of our associates participating in the plan is reduced to a certain degree over certain periods of time.

Some multiemployer pension plans, including ones in which we participate, are reported to have significant underfunded liabilities. Such underfunding could increase the size of our potential withdrawal liability. Additionally, changes to multiemployer pension plan laws and regulations could increase our potential cost of withdrawing from one or more multiemployer pension plans.

We could experience power outages or breakdowns of our refrigeration equipment.

Our warehouses are subject to electrical power outages and breakdowns of our refrigeration equipment. We attempt to limit exposure to such occasions by conducting regular maintenance and upgrades to our refrigeration equipment, and using backup generators and power supplies, generally at a significantly higher operating cost than we would pay for an equivalent amount of power from a local utility. However, we may not be able to limit our exposure entirely even with these protections in place. Power outages that last beyond our backup and alternative power arrangements and refrigeration equipment breakdowns would harm our customers and our business. During prolonged power outages and refrigeration equipment breakdowns, changes in humidity and temperature could spoil or otherwise contaminate the frozen and perishable food and other products stored by our customers. We could incur financial obligations to, or be subject to lawsuits by, our customers in connection with these occurrences, which may not be covered by insurance. Any loss of services or product damage could reduce the confidence of our customers in our services and could consequently impair our ability to attract and retain customers. Additionally, in the event of the complete failure of our refrigeration equipment, we would incur significant costs in repairing or replacing our refrigeration equipment, which may not be covered by insurance. Any of the foregoing could have a material adverse effect on us. As of December 31, 2021, we have not had a significant power outage or breakdown of our refrigeration equipment.

We hold leasehold interests in 59 of our warehouses, and we may be forced to vacate our warehouses if we default on our obligations thereunder and we will be forced to vacate our warehouses if we are unable to renew such leases upon their expiration.

As of December 31, 2022, we held leasehold interests in 59 of our warehouses. These leases expire (taking into account our extension options) from March 2024 to September 2052, and have a weighted-average remaining term of 26 years. If we default on any of these leases, we may be liable for damages and could lose our leasehold interest in the applicable property, including all improvements. We would incur significant costs if we were forced to vacate any of these leased warehouses due to, among other matters, the high costs of relocating the equipment in our warehouses. If we were forced to vacate any of these leased warehouses, we could lose customers that chose our storage or other services based on our location, which could have a material adverse effect on us. Our landlords could attempt to evict us for reasons beyond our control. Further, we may be unable to maintain good working relationships with our landlords, which could adversely affect our relationship with our customers and could result in the loss of customers. In addition, we cannot assure you that we will be able to renew these leases prior to their expiration dates on favorable terms or at all. If we are unable to renew our lease agreements, we will lose our right to operate these warehouses and be unable to derive revenues from these warehouses and, in the case of ground leases, we forfeit all improvements on the land. We could also lose the customers using these warehouses who are unwilling to relocate to another one of our warehouses, which could have a material adverse effect on us. Furthermore, unless we purchase the underlying fee interests in these properties, as to which no assurance can be given, we will not share in any increase in value of the land or improvements beyond the term of such lease, notwithstanding any capital we have invested in the applicable warehouse, especially warehouses subject to ground leases. Even if we are able to renew these leases, the terms and other costs of renewal may be less favorable than our existing lease arrangements. Failure to sufficiently increase revenues from customers at these warehouses to offset these projected higher costs could have a material adverse effect on us.

Charges for impairment of goodwill or other long-lived assets and declines in real estate valuations could adversely affect our financial condition and results of operations.

We regularly monitor the recoverability of our long-lived assets, such as buildings and improvements and machinery and equipment, and evaluate their carrying value for potential impairment, whenever events or changes in circumstances indicate that the carrying amount of such assets may not be fully recoverable. We review goodwill on an annual basis to determine if impairment has occurred and review the recoverability of fixed assets and intangible assets, generally on a quarterly basis and whenever events or changes in circumstances indicate that impairment may have occurred or the value of such assets may not be fully recoverable. Examples of indicators of potential impairment of our long-lived assets may include a significant decrease in the market price, an adverse change in how a property is being used, an accumulation of costs significantly in excess of the amount originally expected for the acquisition or development, a change in our intended holding period due to our intention to sell an asset, a history of operating losses or a material decline in profitability (of a property or a reporting unit). If such reviews indicate that impairment has occurred, we are required to record a non-cash impairment charge for the difference between the carrying value and fair value of the long-lived assets in the period the determination is made. The testing of long-lived assets and goodwill for impairment requires the use of estimates based on significant assumptions about our future revenue, profitability, cash flows, fair value of assets and liabilities, weighted average cost of capital, as well as other assumptions. Changes in these estimates, or changes in actual performance compared with these estimates, may affect the fair value of long-lived assets, which could result in an impairment charge.

Political and economic conditions could negatively impact our investments in our Brazilian joint ventures.

We have an investment in two joint ventures in Brazil. The Brazilian government from time to time intervenes in the Brazilian economy and makes changes in policy and regulations designed to control inflation and stimulate growth. These measures include, among others, increases in interest rates, changes in tax policy, price controls, currency devaluations, capital controls and import restrictions. Such measures and the economic and political environment in Brazil, may adversely affect the value of our investment in our Brazilian joint ventures and our results from operations.

Geopolitical conflicts, including the conflict between Russia and Ukraine, may adversely affect our business and results of operations.

We have operations or activities in numerous countries and regions outside the United States, including throughout Europe and Asia-Pacific. As a result, our global operations are affected by economic, political and other conditions in the foreign countries in which we do business as well as U.S. laws regulating international trade. Specifically, the current conflict between Russia and Ukraine is creating substantial uncertainty about the future impact on the global economy. Countries across the globe are instituting sanctions and other penalties against Russia. The retaliatory measures that have been taken, and could be taken in the future, by the U.S., NATO, and other countries have created global security concerns that could result in broader European military and political conflicts and otherwise have a substantial impact on regional and global economies, any or all of which could adversely affect our business, particularly our European operations.

While the broader consequences are uncertain at this time, the continuation and/or escalation of the Russian and Ukraine conflict, along with any expansion of the conflict to surrounding areas, create a number of risks that could adversely impact our business and results of operations, including:

- increased inflation and significant volatility in commodity prices;
- disruptions to our global technology infrastructure, including through cyberattacks, ransom attacks or cyber-intrusion;
- adverse changes in international trade policies and relations;
- our ability to maintain or increase our prices, including freight in response to rising fuel costs;
- disruptions in global supply chains, specifically within the food supply chain and construction materials;
- increased exposure to foreign currency fluctuations; and
- constraints, volatility or disruption in the credit and capital markets.

To the extent the current conflict between Russia and Ukraine adversely affects our business, it may also have the effect of heightening many other risks disclosed in this Annual Report under the heading “Risk Factors”, any of which could materially and adversely affect our business and results of operations. We are continuing to monitor the situation in the Ukraine and globally and assess its potential impact on our business.

General Risks Related to the Real Estate Industry

Our performance and value are subject to economic conditions affecting the real estate market generally, and temperature-controlled warehouses in particular, as well as the broader economy.

Our performance and value depend on the amount of revenues earned, as well as the expenses incurred, in connection with operating our warehouses. If our temperature-controlled warehouses do not generate revenues and operating cash flows sufficient to meet our operating expenses, including debt service and capital expenditures, we could be materially and adversely affected. In addition, there are significant expenditures associated with our real estate (such as real estate taxes, maintenance costs and debt service payments) that

generally do not decline when circumstances reduce the revenues from our warehouses. Accordingly, our expenditures may stay constant, or increase, even if our revenues decline. The real estate market is affected by many factors that are beyond our control, and revenues from, and the value of, our properties may be materially and adversely affected by:

- changes in the national, international or local economic climate;
- availability, cost and terms of financing;
- technological changes, such as expansion of e-commerce, reconfiguration of supply chains, automation, robotics or other technologies;
- the attractiveness of our properties to potential customers;
- inability to collect storage charges, rent and other fees from customers;
- the ongoing need for, and significant expense of, capital improvements and addressing obsolescence in a timely manner, particularly in older structures;
- changes in supply of, or demand for, similar or competing properties in an area;
- customer retention and turnover;
- excess supply in the market area;
- availability of labor and transportation to service our sites;
- financial difficulties, defaults or bankruptcies by our customers;
- changes in operating costs and expenses and a general decrease in real estate property rental rates;
- changes in or increased costs of compliance with governmental rules, regulations and fiscal policies, including changes in tax, real estate, environmental and zoning laws, and our potential liability thereunder;
- our ability to provide adequate maintenance and insurance;
- changes in the cost or availability of insurance, including coverage for mold or asbestos;
- unanticipated changes in costs associated with known adverse environmental conditions, newly discovered environmental conditions and retained liabilities for such conditions;
- changes in interest rates or other changes in monetary policy; and
- disruptions in the global supply-chain caused by political, regulatory or other factors such as terrorism, political instability and public health crises.

In addition, periods of economic slowdown or recession, rising interest rates or declining demand for real estate, or the public perception that any of these events may occur, could result in a general decrease in rates or an increased occurrence of defaults under existing contracts, which could materially and adversely affect us.

We could incur significant costs under environmental laws relating to the presence and management of asbestos, ammonia and other chemicals and underground storage tanks.

Environmental laws require that owners or operators of buildings containing asbestos properly manage asbestos, adequately inform or train those who may come into contact with asbestos and undertake special precautions, including removal or other abatement, in the event that asbestos is damaged, is decayed, poses a health risk or is disturbed during building renovation or demolition. These laws impose fines and penalties on building owners or operators who fail to comply with these requirements and may allow third parties to seek recovery from owners or operators for personal injury associated with exposure to asbestos and other toxic or hazardous substances. Some of our properties may contain asbestos or asbestos-containing building materials.

Most of our warehouses utilize ammonia as a refrigerant. Ammonia is classified as a hazardous chemical regulated by the U.S. Environmental Protection Agency, or the EPA and similar international agencies. Releases of ammonia occur at our warehouses from time to time, and any number of unplanned events, including severe storms, fires, earthquakes, vandalism, equipment failure, operational errors, accidents, deliberate acts of associates or third parties, and terrorist acts could result in a significant release of ammonia that could result in injuries, loss of life, property damage and a significant interruption at affected facilities. In 2021, we identified and reported

one ammonia release across refrigeration systems in our facilities. This release resulted in no significant property damage or personal injury. In 2022, we identified and reported 1 ammonia release across refrigeration systems in our facilities. This release resulted in no significant property damage or personal injury. Although our warehouses have risk management programs required by the Occupational Safety and Health Act of 1970, as amended, or OSHA, the EPA and other regulatory agencies in place, we could incur significant liability in the event of an unanticipated release of ammonia from one of our refrigeration systems. Releases could occur at locations or at times when trained personnel may not be available to respond quickly, increasing the risk of injury, loss of life or property damage. Some of our warehouses are not staffed 24 hours a day and, as a result, we may not respond to intentional or accidental events during closed hours as quickly as we could during open hours, which could exacerbate any injuries, loss of life or property damage. We also could incur liability in the event we fail to report such ammonia releases in a timely fashion.

Environmental laws and regulations subject us and our customers to liability in connection with the storage, handling and use of ammonia and other hazardous substances utilized in our operations. Our warehouses also may have under-floor heating systems, some of which utilize ethylene glycol, petroleum compounds, or other hazardous substances; releases from these systems could potentially contaminate soil and groundwater.

In addition, some of our properties have been operated for decades and have known or potential environmental impacts. Other than in connection with financings, we have not historically performed regular environmental assessments on our properties, and we may not do so in the future. Many of our properties contain, or may in the past have contained, features that pose environmental risks including underground tanks for the storage of petroleum products and other hazardous substances as well as floor drains and wastewater collection and discharge systems, hazardous materials storage areas and septic systems. All of these features create a potential for the release of petroleum products or other hazardous substances. Some of our properties are adjacent to or near properties that have known environmental impacts or have in the past stored or handled petroleum products or other hazardous substances that could have resulted in environmental impacts to soils or groundwater that could affect our properties. In addition, former owners, our customers, or third parties outside our control (such as independent transporters) have engaged, or may in the future engage, in activities that have released or may release petroleum products or other hazardous substances on our properties. Any of these activities or circumstances could materially and adversely affect us.

We could incur significant costs related to environmental conditions and liabilities.

Our operations are subject to a wide range of environmental laws and regulations in each of the locations in which we operate, and compliance with these requirements involves significant capital and operating costs. Failure to comply with these environmental requirements can result in civil or criminal fines or sanctions, claims for environmental damages, remediation obligations, the revocation of environmental permits or restrictions on our operations. Future changes in environmental laws, or in the interpretation of those laws, including potential future climate change regulations, such as those affecting electric power providers or regulations related to the control of greenhouse gas emissions, or stricter requirements affecting our operations could result in increased capital and operating costs, which could materially and adversely affect us.

Under various U.S. federal, state and local environmental laws, including the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, commonly known as CERCLA, or the Superfund law, a current or previous owner or operator of real property may be liable for the entire cost of investigating, removing or remediating hazardous or toxic substances on such property. Such laws often impose liability whether or not the owner or operator knew of, or was responsible for, the contamination. Even if more than one person may have been responsible for the contamination, each person covered by the environmental laws

may be held responsible for the entire cleanup cost. We may also be subject to environmental liabilities under the regulatory regimes in place in the other countries in which we operate.

The presence of hazardous or toxic substances on our properties, or the failure to properly remediate contaminated properties, could give rise to liens in favor of the government for failure to address the contamination, or otherwise adversely affect our ability to sell or lease properties or borrow using our properties as collateral. Environmental laws also may impose restrictions on the manner in which property may be used or our businesses may be operated.

Under environmental laws, a property owner or operator is subject to compliance obligations, potential government sanctions for violations or natural resource damages, claims from private parties for cleanup contribution or other environmental damages and investigation and remediation costs. In connection with the acquisition, ownership or operation of our properties, we may be exposed to such costs. The cost of resolving environmental, property damage or personal injury claims, of compliance with environmental regulatory requirements, of paying fines, or meeting new or stricter environmental requirements or of remediating contaminated properties could materially and adversely affect us.

Nearly all of our properties have been the subject of environmental assessments conducted by environmental consultants at some point in the past. Most of these assessments have not included soil sampling or subsurface investigations. Some of our older properties have not had asbestos surveys. In many instances, we have not conducted further investigations of environmental conditions disclosed in these environmental assessments nor can we be assured that these environmental assessments have identified all potential environmental liabilities associated with our properties. Material environmental conditions, liabilities or compliance concerns may have arisen or may arise after the date of the environmental assessments on our properties. Moreover, there can be no assurance that (i) future laws, ordinances or regulations will not impose new material environmental obligations or costs, including the potential effects of climate change or new climate change regulations, (ii) we will not incur material liabilities in connection with both known and undiscovered environmental conditions arising out of past activities on our properties or (iii) our properties will not be materially and adversely affected by the operations of customers, by environmental impacts or operations on neighboring properties (such as releases from underground storage tanks), or by the actions of parties unrelated to us.

Risks related to climate change could have a material adverse effect on our results of operations.

Climate change, including the impact of global warming, creates physical and financial risks. Physical risks from climate change include an increase in sea level and changes in weather conditions, such as an increase in storm intensity and severity of weather (e.g., floods, tornados or hurricanes) and extreme temperatures. The occurrence of sea level rise or one or more natural disasters, such as floods, tornados, hurricanes, tropical storms, wildfires and earthquakes (whether or not caused by climate change), could cause considerable damage to our warehouses, disrupt our operations and negatively affect our financial performance. Additional risks related to our business and operations as a result of climate change include physical and transition risks such as:

- higher energy costs as a result of extreme weather events, extreme temperatures or increased demand for limited resources;
- limited availability of water and higher costs due to limited sources and droughts;
- higher materials cost due limited availability and environmental impacts of extraction and processing of raw materials and production of finished goods;

- lost revenue or increased expense as a result of higher insurance costs, potential uninsured or under insured losses, diminished customer retention stemming from extreme weather events or resource availability constraints;
- utility disruptions or outages due to demand or stress on electrical grids resulting from extreme weather events; and
- reduced storage revenue due to crop damage or failure or to reduced protein production as a result of extreme weather events.

In addition, risks associated with new or more stringent laws or regulations or stricter interpretations of existing laws could directly or indirectly affect our customers and could adversely affect our business, financial condition, results of operations and cash flows. For example, various federal, state and regional laws and regulations have been implemented or are under consideration to mitigate the effects of climate change caused by greenhouse gas emissions. Among other things, "green" building codes may seek to reduce emissions through the imposition of standards for design, construction materials, water and energy usage and efficiency, and waste management. Such codes could require us to make improvements to our warehouses, increase the cost of maintaining, operating or improving our warehouses, or increase taxes and fees assessed on us.

Climate change regulations could also adversely impact companies with which we do business, which in turn may adversely impact our business, financial condition, results or operations or cash flows. In the future, our customers may demand lower indirect emissions associated with the storage and transportation of frozen and perishable food, which could make our facilities less competitive. Further, such demand could require us to implement various processes to reduce emissions from our operations in order to remain competitive, which could materially and adversely affect us.

Our insurance coverage may be insufficient to cover potential environmental liabilities.

We maintain a portfolio environmental insurance policy that provides coverage for sudden and accidental environmental liabilities, subject to the policy's coverage conditions, deductibles and limits, for most of our properties. There is no assurance that future environmental claims will be covered under these policies or that, if covered, the loss will not exceed policy limits. From time to time, we may acquire properties, or interests in properties, with known adverse environmental conditions where we believe that the environmental liabilities associated with these conditions are quantifiable and that the acquisition will yield an attractive risk-adjusted return. In such an instance, we factor the estimated costs of environmental investigation, cleanup and monitoring into the net cost. Further, in connection with property dispositions, we may agree to remain responsible for, and to bear the cost of, remediating or monitoring certain environmental conditions on the properties. A failure to accurately estimate these costs, or uninsured environmental liabilities, could materially and adversely affect us.

Our properties may contain or develop harmful molds or have other air quality issues, which could lead to financial liability for adverse health effects to our associates or third parties, and costs of remediating the problem.

Our properties may contain or develop harmful molds or suffer from other air quality issues, which could lead to liability for adverse health effects and costs of remediating the problem. When excessive moisture accumulates in buildings or on building materials, mold growth may occur, particularly if the moisture problem remains undiscovered or is not addressed over a period of time. Some molds produce airborne toxins or irritants. Indoor air quality issues can also stem from inadequate ventilation, poor equipment maintenance, chemical contamination from indoor or outdoor sources and other biological contaminants, such as pollen, viruses and bacteria. Indoor exposure to airborne toxins or irritants present above certain levels can cause a variety of adverse health effects and symptoms, including allergic or other reactions. As a result, the presence of significant mold or

other airborne contaminants at any of our properties could require us to undertake a costly remediation program to contain or remove the mold or other airborne contaminants from the affected property, to reduce indoor moisture levels, or to upgrade ventilation systems to improve indoor air quality. In addition, the presence of significant mold or other airborne contaminants could expose us to liability from our associates, our customers, associates of our customers and others if property damage or health concerns arise.

Illiquidity of real estate investments, particularly our specialized temperature-controlled warehouses, could significantly impede our ability to respond to adverse changes in the performance of our business and properties.

Real estate investments are relatively illiquid, and given that our properties are highly specialized temperature-controlled warehouses, our properties may be more illiquid than other real estate investments. This illiquidity is driven by a number of factors, including the specialized and often customer-specific design of our warehouses, the relatively small number of potential purchasers of temperature-controlled warehouses, the difficulty and expense of repurposing our warehouses and the location of many of our warehouses in secondary or tertiary markets. As a result, we may be unable to complete an exit strategy or quickly sell properties in our portfolio in response to adverse changes in the performance of our properties or in our business generally. We cannot predict whether we will be able to sell any property for the price or on the terms set by us or whether any price or other terms offered by a prospective buyer would be acceptable to us. We also cannot predict the length of time it would take to complete the sale of any such property. Such sales might also require us to expend funds to mitigate or correct defects to the property or make changes or improvements to the property prior to its sale. The ability to sell assets in our portfolio may also be restricted by certain covenants in our credit agreements. Code requirements relating to our status as a REIT may also limit our ability to vary our portfolio promptly in response to changes in economic or other conditions.

We could experience uninsured or under-insured losses relating to our warehouses and other assets, including our real property.

We carry insurance coverage on all of our properties in an amount that we believe adequately covers any potential casualty losses. However, there are certain losses, including losses from floods, earthquakes, acts of war or riots, that we are not generally insured against or that we are not generally fully insured against because it is not deemed economically feasible or prudent to do so. In addition, changes in the cost or availability of insurance could expose us to uninsured casualty losses. In the event that any of our properties incurs a casualty loss that is not covered by insurance (in part or at all), the value of our assets will be reduced by the amount of any such uninsured loss, and we could experience a significant loss of capital invested and potential revenues in these properties. Any such losses could materially and adversely affect us. In addition, we may have no source of funding to repair or reconstruct the damaged property, and we cannot assure you that any such sources of funding will be available to us for such purposes in the future on favorable terms or at all.

In the event of a fire, flood or other occurrence involving the loss of or damage to stored products held by us but belonging to others, we may be liable for such loss or damage. Although we have an insurance program in effect, there can be no assurance that such potential liability will not exceed the applicable coverage limits under our insurance policies. A number of our properties are located in areas that are known to be subject to earthquake activity, such as California, Washington, Oregon and New Zealand, or in flood zones, such as Appleton, Wisconsin and Fort Smith, Arkansas and our Netherlands facilities, in each case exposing them to increased risk of casualty.

If we or one or more of our customers experiences a loss for which we are liable and that loss is uninsured or exceeds policy limits, we could lose the capital invested in the damaged properties as well as the anticipated

future cash flows from those properties. In addition, if the damaged properties are subject to recourse indebtedness, we would continue to be liable for the indebtedness, even if these properties were irreparably damaged.

We are self-insured for workers' compensation and health insurance under a large deductible program, meaning that we have accrued liabilities in amounts that we consider appropriate to cover losses in these areas. In addition, we maintain excess loss coverage to insure against losses in excess of the reserves that we have established for these claims in amounts that we consider appropriate. However, in the event that our loss experience exceeds our reserves and the limits of our excess loss policies, we could be materially and adversely affected.

Costs of complying with governmental laws and regulations could adversely affect us and our customers.

Our business is highly regulated at the federal, state and local level. The food industry in all jurisdictions in which we operate is subject to numerous government standards and regulations. While we believe that we are currently in compliance with all applicable government standards and regulations, there can be no assurance that all of our warehouses or our customers' operations are currently in compliance with, or will be able to comply in the future with, all applicable standards and regulations or that the costs of compliance will not increase in the future.

All real property and the operations conducted on real property are subject to governmental laws and regulations relating to environmental protection and human health and safety. For example, our warehouses are subject to regulation and inspection by the United States Food and Drug Administration and the United States Department of Agriculture and our domestic trucking operations are subject to regulation by the U.S. Department of Transportation and the Federal Highway Administration. In addition, our international facilities are subject to many local laws and regulations which govern a wide range of matters, including food safety, building, environmental, health and safety, hazardous substances, waste minimization, as well as specific requirements for the storage of meats, dairy products, fish, poultry, agricultural and other products. Any products destined for export must also satisfy applicable export requirements. Our ability to operate and to satisfy our contractual obligations may be affected by permitting and compliance obligations arising under such laws and regulations. Some of these laws and regulations could increase our operating costs, result in fines or impose joint and several liability on customers, owners or operators for the costs to investigate or remediate contamination, regardless of fault or whether the acts causing the contamination were legal.

Some of these laws and regulations have been amended so as to require compliance with new or more stringent standards in the future. Compliance with new or more stringent laws or regulations or stricter interpretation of existing laws may require that we or our customers incur material expenditures. In addition, there are various governmental, environmental, fire, health, safety and similar regulations with which we and our customers may be required to comply and which may subject us and our customers to liability in the form of fines or damages for noncompliance. Any material expenditures, fines or damages imposed on our customers or us could directly or indirectly have a material adverse effect on us. In addition, changes in these governmental laws and regulations, or their interpretation by agencies and courts, could occur.

The Americans with Disabilities Act of 1990, as amended, or the ADA, generally requires that public buildings, including portions of our warehouses, be made accessible to disabled persons. Noncompliance could result in the imposition of fines by the federal government or the award of damages to private litigants. If, under the ADA, we are required to make substantial alterations and capital expenditures in one or more of our warehouses, including the removal of access barriers, it could materially and adversely affect us.

Our properties are subject to regulation under OSHA, which requires employers to protect associates against many workplace hazards, such as exposure to harmful levels of toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress and unsanitary conditions. The cost of complying with OSHA and similar laws enacted by other jurisdictions in which we operate is substantial and any failure to comply with these regulations could expose us to penalties and potentially to liabilities to associates who may be injured at our warehouses, any of which could be material. Furthermore, any fines or violations that we face under OSHA could expose us to reputational risk.

We face ongoing litigation risks which could result in material liabilities and harm to our business regardless of whether we prevail in any particular matter.

We are a large company operating in multiple U.S. and international jurisdictions, with thousands of associates and business counterparts. As such, there is an ongoing risk that we may become involved in legal disputes or litigation with these parties or others. The costs and liabilities with respect to such legal disputes may be material and may exceed our amounts accrued, if any, for such liabilities and costs. In addition, our defense of legal disputes or resulting litigation could result in the diversion of our management's time and attention from the operation of our business, each of which could impede our ability to achieve our business objectives. Some or all of the amounts we may be required to pay to defend or to satisfy a judgment or settlement of any or all of our disputes and litigation may not be covered by insurance.

We are currently invested in three joint ventures and may invest in additional joint ventures in the future and face risks stemming from our partial ownership interests in such properties which could materially and adversely affect the value of any such joint venture investments.

Our current and future joint-venture investments involve risks not present in investments in which a third party is not involved, including the possibility that:

- we and a co-venturer or partner may reach an impasse on a major decision that requires the approval of both parties;
- we may not have exclusive control over the development, financing, management and other aspects of the property or joint venture, which may prevent us from taking actions that are in our best interest but opposed by a co-venturer or partner;
- a co-venturer or partner may at any time have economic or business interests or goals that are or may become inconsistent with ours;
- a co-venturer or partner may encounter liquidity or insolvency issues or may become bankrupt, which may mean that we and any other remaining co-venturers or partners generally would remain liable for the joint venture's liabilities;
- a co-venturer or partner may take action contrary to our instructions, requests, policies or investment objectives, including our current policy with respect to maintaining our qualification as a REIT under the Code;
- a co-venturer or partner may take actions that subject us to liabilities in excess of, or other than, those contemplated;
- in certain circumstances, we may be liable for actions of our co-venturer or partner, and the activities of a co-venturer or partner could adversely affect our ability to qualify as a REIT, even if we do not control the joint venture;
- our joint venture agreements may restrict the transfer of a co-venturer's or partner's interest or otherwise restrict our ability to sell the interest when we desire or on advantageous terms;

- our joint venture agreements may contain buy-sell provisions pursuant to which one co-venturer or partner may initiate procedures requiring the other co-venturer or partner to choose between buying the other co-venturer's or partner's interest or selling its interest to that co-venturer or partner;
- if a joint venture agreement is terminated or dissolved, we may not continue to own or operate the interests or investments underlying the joint venture relationship or may need to purchase such interests or investments at a premium to the market price to continue ownership; or
- disputes between us and a co-venturer or partner may result in litigation or arbitration that could increase our expenses and prevent our management from focusing their time and attention on our business.

Any of the above could materially and adversely affect the value of our current joint venture investment or any future joint venture investments and potentially have a material adverse effect on us. To the extent we expand our use of joint ventures in the future, our business will be more susceptible to these risks.

Risks Related to Our Debt Financings

We have a substantial amount of indebtedness that may limit our financial and operating activities.

As of December 31, 2022, we had approximately $1.3 billion of variable-rate indebtedness outstanding under our Senior Unsecured Credit Facility, and we have entered into interest rate swaps to convert $829.5 million of this indebtedness to fixed-rate. Additionally, we had approximately $1.7 billion of fixed-rate indebtedness outstanding under our Debt Private Placement offerings. Additional information regarding our indebtedness may be found in our consolidated financial statements and in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 in this Annual Report. Our organizational documents contain no limitations regarding the maximum level of indebtedness that we may incur or keep outstanding.

Payments of principal and interest on indebtedness may leave us with insufficient cash resources to operate our properties or to pay distributions to our stockholders at expected levels. Our substantial outstanding indebtedness could have other material and adverse consequences, including, without limitation, the following:

- our cash flows may be insufficient to meet our required principal and interest payments;
- we may use a substantial portion of our cash flows to make principal and interest payments and we may be unable to obtain additional financing as needed or on favorable terms, which could, among other things, have a material adverse effect on our ability to invest in acquisition opportunities, fund capital improvements or meet operational needs;
- we may be unable to refinance our indebtedness at maturity or the refinancing terms may be less favorable than the terms of our original indebtedness;
- we may be forced to dispose of one or more of our properties, possibly on disadvantageous terms or in violation of certain covenants to which we may be subject;
- we may default on our indebtedness by failing to make required payments or violating covenants, which would entitle holders of such indebtedness and other indebtedness with a cross-default provision to accelerate the maturity of their indebtedness and, if such indebtedness is secured, to foreclose on our properties that secure their loans;
- we may be unable to effectively hedge floating rate debt with respect to our Senior Unsecured Credit Facilities or any successor facilities thereto;
- we are required to maintain certain debt and coverage and other financial ratios at specified levels, thereby reducing our operating and financial flexibility;
- our vulnerability to general adverse economic and industry conditions may be increased; and

- we may be subject to greater exposure to increases in interest rates for our variable-rate debt and to higher interest expense upon refinancing of existing debt or the issuance of future fixed rate debt.

If any one of these events were to occur, we could be materially and adversely affected. In addition, any foreclosure on our properties could create taxable income without accompanying cash proceeds, which could materially and adversely affect our ability to meet the REIT distribution requirements imposed by the Code.

Increases in interest rates could increase the amount of our debt payments*.*

As of December 31, 2022, we had approximately $1.3 billion of variable-rate indebtedness outstanding under our Senior Unsecured Credit Facility, and we have entered into interest rate swaps to convert $829.5 million of this indebtedness to fixed-rate. Interest rates are expected to increase in 2023. Increases in interest rates on our variable-rate indebtedness would raise our interest costs, reduce our cash flows and funds from operations, reduce our access to capital markets and reduce our ability to make distributions to our stockholders. Increases in interest rates would also increase our interest expense on future fixed rate borrowings and have the same collateral effects. In addition, if we need to repay existing debt during periods of rising interest rates, we could be required to liquidate one or more of our investments in properties at times which may not permit realization of the maximum return on such investments. Interest rate increases may also increase the risk that the counterparties to our swap contracts will default on their obligations, which could further increase our exposure to interest rate increases. Conversely, if interest rates are lower than our swapped fixed rates, we will be required to pay more to service our debt than if we had not entered into the interest rate swaps.

We are dependent on external sources of capital, the continuing availability of which is uncertain.

In order to qualify as a REIT, we are required each year to distribute to our stockholders at least 90% of our REIT taxable income (determined without regard to the dividends paid deduction and by excluding capital gains). In addition, we will be subject to income tax at regular corporate rates to the extent that we distribute less than 100% of our REIT taxable income, including any net capital gains. Because of these distribution requirements, we may not be able to fund all of our future capital needs, including capital for acquisitions, development activities and recurring and non-recurring capital improvements, from operating cash flows. Consequently, we intend to rely on third-party sources of capital to fund a substantial amount of our future capital needs. We may not be able to obtain additional financing on favorable terms or at all when needed. Any additional debt we incur will increase our leverage, expose us to the risk of default and impose operating and financial restrictions on us. In addition, any equity financing could be materially dilutive to the equity interests held by our stockholders. Our access to third-party sources of capital depends, in part, on general market conditions, the market's perception of our growth potential, our leverage, our current and anticipated results of operations, liquidity, financial condition and cash distributions to stockholders and the market price of our common shares. If we cannot obtain sufficient capital on favorable terms when needed, we may not be able to execute our business and growth strategies, satisfy our debt service obligations, make the cash distributions to our stockholders necessary for us to qualify as a REIT (which would expose us to significant penalties and corporate-level taxation), or fund our other business needs, which could have a material adverse effect on us.

Adverse changes in our credit ratings could negatively impact our financing activity.

Our credit ratings are based on our operating performance, liquidity and leverage ratios, overall financial condition and other factors utilized by rating agencies in their analysis. Our credit ratings can affect the amount of capital that we can access, as well as the terms and pricing of any future debt. We can provide no assurance that we will be able to maintain our current credit ratings, and a downgrade of our credit ratings would likely cause us to incur higher borrowing costs and make additional financing more difficult to obtain. In addition, a downgrade

could trigger higher costs under our existing credit facilities and may have other negative consequences. Adverse changes in our credit ratings could negatively impact our business, particularly our refinancing and other capital market activities, our future growth, development and acquisition activity.

At December 31, 2022, our credit ratings were "BBB" with a Stable Trend outlook from DBRS Morningstar, Inc., "BBB" with a Negative outlook from Fitch Ratings, Inc. and "Baa3" with a Stable outlook from Moody's. A securities rating is not a recommendation to buy, sell or hold securities and is subject to revision or withdrawal at any time by the rating organization.

Our existing indebtedness contains, and any future indebtedness is likely to contain, covenants that restrict our ability to engage in certain activities.

Our outstanding indebtedness requires, and our future indebtedness is likely to require, us to comply with a number of financial covenants and operational covenants. The financial covenants under our Senior Unsecured Credit Facility include a maximum leverage ratio, a minimum fixed charge coverage ratio, a maximum secured leverage ratio, a minimum unsecured debt service coverage ratio, and a maximum unsecured indebtedness to unencumbered assets ratio. In addition, the financial covenants under the Series A, Series B, Series C, Series D and Series E Senior Unsecured Notes include, without limitation, a maximum total leverage ratio, a minimum fixed charge coverage ratio, a maximum total secured indebtedness ratio, a minimum unsecured debt service coverage ratio and a maximum unsecured indebtedness to qualified assets ratio. These covenants may limit our ability to engage in certain transactions that may be in our best interests. In order to be able to make distributions to our stockholders (other than minimum distributions required to maintain our status as a REIT), there may not be an event of default under such indebtedness. Our failure to meet the covenants could result in an event of default under the applicable indebtedness, which could result in the acceleration of the applicable indebtedness and other indebtedness with a cross-default provision as well as foreclosure, in the case of secured indebtedness, upon any of our assets that secure such indebtedness. If we are unable to refinance our indebtedness at maturity or meet our payment obligations, we would be materially and adversely affected.

Risks Related to our Organization and Structure

Provisions of Maryland law may limit the ability of a third party to acquire control of our company.

Under the Maryland General Corporation Law, or the MGCL, as applicable to Maryland corporations, certain "business combinations" (including a merger, consolidation, share exchange or, in certain circumstances specified under the statute, an asset transfer or issuance or reclassification of equity securities) between a Maryland corporation and any person who beneficially owns, directly or indirectly, 10% or more of the voting power of the corporation's then outstanding voting shares or an affiliate or associate of the corporation who, at any time within the two-year period before the date in question, was the beneficial owner, directly or indirectly, of 10% or more of the voting power of the corporation's then outstanding shares, which we refer to as an "interested stockholder," or an affiliate thereof, are prohibited for five years after the most recent date on which the interested stockholder becomes an interested stockholder. Thereafter, any such business combination must be approved by two super-majority stockholder votes unless, among other conditions, the corporation's common stockholders receive a minimum price (as defined in the MGCL) for their shares and the consideration is received in cash or in the same form as previously paid by the interested stockholder for its voting shares. Pursuant to the statute, our board of directors, by resolution, elected to opt out of the business combination provisions of the MGCL. This resolution may not be modified or repealed by our board of directors without the approval of our stockholders by the affirmative vote of a majority of the votes cast on the matter. Accordingly, the five-year prohibition and the super-majority vote requirements described above do not apply to a business combination between us and any other person. As a result, any person may be able to enter into business combinations with us, which may not be

in your best interest as a stockholder, within five years of becoming an interested stockholder and without compliance by us with the super-majority vote requirements and other provisions of the MGCL.

The “control share” provisions of the MGCL provide that “control shares” of a Maryland corporation (defined as shares which, when aggregated with other shares controlled by the stockholder (except solely by virtue of a revocable proxy), entitle the stockholder to exercise one of three increasing ranges of voting power in electing directors) acquired in a “control share acquisition” (defined as the direct or indirect acquisition of ownership or control of “control shares”) have no voting rights except to the extent approved by the corporation’s stockholders by the affirmative vote of at least two-thirds of all the votes entitled to be cast on the matter, excluding votes entitled to be cast by the acquirer of control shares, the corporation’s officers and the corporation’s associates who are also the corporation’s directors. Our amended and restated bylaws, or our bylaws, contain a provision exempting from the control share acquisition provisions of the MGCL any and all acquisitions by any person of our shares. This provision may not be amended by our board of directors without the affirmative vote at a duly called meeting of stockholders of at least a majority of the votes cast on the matter by stockholders entitled to vote generally in the election of directors.

Subtitle 8 of Title 3 of the MGCL, or Subtitle 8, would permit our board of directors, without stockholder approval, to implement certain takeover defenses (some of which, such as a classified board, we do not have), if we have a class of equity securities registered under the Exchange Act and at least three independent directors. We have elected not to be subject to Subtitle 8 unless approved by the affirmative vote of at least a majority of the votes cast on the matter by stockholders entitled to vote generally in the election of directors.

Any of the MGCL provisions, if then applicable to us, may have the effect of inhibiting a third party from making an acquisition proposal for us or of delaying, deferring or preventing a transaction or change in control which might involve a premium price for our common stock or otherwise be in the best interests of our stockholders.

Our board of directors can take many actions even if you and other stockholders disagree with such actions or if they are otherwise not in your best interest as a stockholder.

Our board of directors has overall authority to oversee our operations and determine our major policies. This authority includes significant flexibility to take certain actions without stockholder approval. For example, our board of directors can do the following without stockholder approval:

- issue additional shares, which could dilute your ownership;
- amend our articles of incorporation to increase or decrease the aggregate number of shares or the number of shares of any class or series that we have authority to issue;
- classify or reclassify any unissued shares and set the preferences, rights and other terms of such classified or reclassified shares, which preferences, rights and terms could delay, defer or prevent a transaction or change in control which might involve a premium price for our common stock or otherwise be in your best interest as a stockholder;
- remove and replace executive management;
- employ and compensate affiliates;
- change major policies, including policies relating to investments, financing, growth and capitalization;
- enter into new lines of business or new markets; and
- determine that it is no longer in our best interests to attempt to continue to qualify as a REIT.

Any of these actions without stockholder approval could increase our operating expenses, impact our ability to make distributions to our stockholders, reduce the market value of our real estate assets, negatively impact our stock price, or otherwise not be in your best interest as a stockholder.

Our articles of incorporation contain provisions that make removal of our directors difficult, which could make it difficult for our stockholders to effect changes to our management.

Our articles of incorporation provide that, subject to the rights of holders of one or more classes or series of preferred shares to elect or remove one or more directors, a director may be removed only for "cause" (as defined in our articles of incorporation), and then only by the affirmative vote of stockholders entitled to cast two-thirds of the votes entitled to be cast generally in the election of directors. The foregoing provision of our articles of incorporation, when coupled with the power of our board of directors to fill vacant directorships, will preclude stockholders from removing incumbent directors except for cause and by a substantial affirmative vote and filling the vacancies created by such removal with their own nominees. These requirements make it more difficult to change our management by removing and replacing directors and may prevent a change in control that is in the best interests of our stockholders.

The REIT ownership limit rules and the related restrictions on ownership and transfer contained in our articles of incorporation have an anti-takeover effect.

In order for us to maintain our qualification as a REIT under the Code, not more than 50% in value of our outstanding shares of common stock may be owned, directly or indirectly, by five or fewer individuals (as defined in the Code to include certain entities) at any time during the last half of each taxable year (other than the first taxable year for which the election to be treated as a REIT was made). To ensure that we will not fail to qualify as a REIT under this and other tests under the Code, our articles of incorporation, subject to certain exceptions, authorize our board of directors to take such actions as are necessary and desirable to preserve our qualification as a REIT and does not permit individuals (including certain entities treated as individuals), other than excepted holders approved in accordance with our articles of incorporation, to own, directly or indirectly, more than 9.8% (in value) of our outstanding stock. In addition, our articles of incorporation prohibit: (a) any person from beneficially or constructively owning our stock that would result in our company being "closely held" under Section 856(h) of the Code or otherwise cause us to fail to qualify as a REIT; (b) any person from transferring stock of our company if such transfer would result in our stock being beneficially owned by fewer than 100 persons; and (c) any person from beneficially owning our stock to the extent such ownership would result in our failing to qualify as a "domestically controlled qualified investment entity" within the meaning of Section 897(h) of the Code (after taking into account for such purpose the statutory presumptions set forth in Section 897(h)(4)(E) of the Code). Our board of directors is required to exempt a person (prospectively or retrospectively) from the percentage ownership limit described above (but not the other restrictions) if the person seeking a waiver demonstrates that the waiver would not jeopardize our status as a REIT or violate the other conditions described above.

These ownership limitations are intended to provide added assurance of compliance with the tax law requirements and to minimize administrative burdens. Although our articles of incorporation requires our board of directors to grant a waiver of the percentage ownership limit described above if the person seeking a waiver demonstrates that such ownership would not jeopardize our status as a REIT or violate the other conditions described above, these limitations might still delay, defer or prevent a transaction or change in control which might involve a premium price for our common stock or otherwise not be in your best interest as a stockholder or result in the transfer of shares acquired in excess of the ownership limits to a trust for the benefit of a charitable beneficiary and, as a result, the forfeiture by the acquirer of the benefits of owning the additional shares.

Our rights and the rights of our stockholders to take action against our directors and officers are limited.

Our articles of incorporation eliminate our directors' and officers' liability to us and our stockholders for money damages except for liability resulting from actual receipt of an improper benefit or profit in money, property or services or active and deliberate dishonesty established by a final judgment and which is material to the cause of action. Our articles of incorporation and our bylaws require us to indemnify our directors and officers to the maximum extent permitted by Maryland law for liability actually incurred in connection with any proceeding to which they may be made, or threatened to be made, a party, except to the extent that the act or omission of the director or officer was material to the matter giving rise to the proceeding and was either committed in bad faith or the result of active and deliberate dishonesty, the director or officer actually received an improper personal benefit in money, property or services, or, in the case of any criminal proceeding, the director or officer had reasonable cause to believe that the act or omission was unlawful. As a result, we and our stockholders may have more limited rights against our directors and officers than might otherwise exist under common law. In addition, we may be obligated to fund the defense costs incurred by our directors and officers.

We have fiduciary duties as general partner to our Operating Partnership, which may result in conflicts of interests in representing your interests as stockholders of our company.

Conflicts of interest could arise in the future as a result of the relationships between us and our affiliates, and between us and our Operating Partnership or any partner thereof. Our directors and officers have duties to our company under applicable Maryland law in connection with their management of our company. Additionally, we
have fiduciary duties as the general partner to our Operating Partnership and to its limited partners under Delaware law in connection with the management of our Operating Partnership. Our duties as a general partner to our Operating Partnership and any unaffiliated limited partners may come into conflict with the duties of our directors and officers to our company and may be resolved in a manner that is not in your best interest as a stockholder.

Risks Related to our Common Stock

Our cash available for distribution to stockholders may not be sufficient to pay distributions at expected levels, or at all, and we may need to increase our borrowings or otherwise raise capital in order to make such distributions; consequently, we may not be able to make such distributions in full.

Our current annualized distributions to our stockholders are $0.88 per share. If cash available for distribution generated by our assets is less than our estimate, or if such cash available for distribution decreases in future periods, we may be unable to make distributions to our stockholders at expected levels, or at all, or we may need to increase our borrowings or otherwise raise capital in order to do so, and there can be no assurance that such capital will be available on attractive terms in sufficient amounts, or at all. Any of the foregoing could result in a decrease in the market price of our common stock. Any distributions made to our stockholders by us will be authorized and determined by our board of directors in its sole discretion out of funds legally available therefore and will be dependent upon a number of factors, including our actual or anticipated financial condition, results of operations, cash flows and capital requirements, debt service requirements, financing covenants, restrictions under applicable law and other factors.

Any future debt, which would rank senior to our common stock upon liquidation, or equity securities, which could dilute our existing stockholders and may be senior to our common stock for the purposes of distributions, may adversely affect the market price of our common stock.

In the future, we may attempt to increase our capital resources by incurring additional debt, including term loans, borrowings under credit facilities, mortgage loans, commercial paper, senior or subordinated notes and secured notes, and making additional offerings of equity and equity-related securities, including preferred and common stock and convertible or exchangeable securities.

Upon our liquidation, holders of our debt securities and preferred shares and lenders with respect to other borrowings would receive a distribution of our available assets prior to the holders of our common stock. Additional offerings of common stock would dilute the holdings of our existing stockholders or may reduce the market price of our common stock or both. Additionally, any preferred shares or convertible or exchangeable securities that we issue in the future may have rights, preferences and privileges more favorable than those of our common stock and may result in dilution to holders of our common stock. Because our decision to incur debt or issue equity or equity-related securities in the future will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing, nature or success of our future capital raising. Thus, our stockholders bear the risk that our future capital raising will materially and adversely affect the market price of our common stock and dilute the value of their holdings in us.

Common stock eligible for future sale may have adverse effects on the market price of our common stock.

The market price of our common stock could decline as a result of sales or resales of a large number of our common stock in the market, or the perception that such sales or resales could occur. These sales or resales, or the possibility that these sales or resales may occur, also might make it more difficult for us to sell our common stock in the future at a desired time and at an attractive price. On April 16, 2020, the Company filed a registration statement on Form S-3ASR which registered an indeterminate amount of common stock, preferred stock, depositary shares and warrants, as well as debt securities of the Operating Partnership, which will be fully and unconditionally guaranteed by us. As circumstances warrant, we may issue equity securities from time to time on an opportunistic basis, dependent upon market conditions and available pricing. On May 10, 2021, we entered into a distribution agreement with a syndicate of banks through which we may sell from time to time up to an aggregate of $900.0 million of our common stock in an at the market equity program (an “ATM Offering”).

As of December 31, 2022, 269,814,956 shares of common stock are issued and outstanding, and no Series A preferred shares, Series B preferred shares or Series C preferred shares are issued and outstanding.

In addition, we have filed with the SEC a registration statement on Form S-8 covering common stock issuable pursuant to options, restricted stock units, performance units, operating partnership profits units and other stock-based awards issued under our outstanding equity incentive plans and a registration statement on Form S-8 covering shares issuable under our 2020 Employee Stock Purchase Plan.

We cannot predict the effect, if any, of future issuances, sales or resales of our common stock, or the availability of common stock for future issuances, sales or resales, on the market price of our common stock. Issuances, sales or resales of substantial amounts of common shares, or the perception that such issuances, sales or resales could occur, may materially and adversely affect the then prevailing market price for our common stock.

Issuance of additional equity may dilute our existing stockholders.

In the future, we may issue additional equity which may dilute our current stockholders, reducing their proportionate ownership and voting power.

REIT and Tax Related Risks

Failure to qualify as a REIT for U.S. federal income tax purposes would have a material adverse effect on us.

We have elected to be taxed as a REIT under the Code. Our qualification as a REIT requires us to satisfy numerous requirements, some on an annual and quarterly basis, established under highly technical and complex Code provisions for which there are only limited judicial or administrative interpretations, and which involve the determination of various factual matters and circumstances not entirely within our control. We expect that our current organization and methods of operation will enable us to continue to qualify as a REIT, but we may not so qualify or we may not be able to remain so qualified in the future. In addition, U.S. federal income tax laws governing REITs and other corporations and the administrative interpretations of those laws may be amended at any time, potentially with retroactive effect. The Protecting Americans from Tax Hikes Act, or PATH Act, was enacted in December 2015, and included numerous changes in the U.S. federal income tax laws applicable to REITs, and comprehensive tax legislation passed on December 22, 2017, which is commonly known as the Tax Cuts and Jobs Act, or TCJA and, which is fully described in Note 15 to the consolidated financial statements included in this Annual Report on Form 10-K, made fundamental changes to the individual and corporate tax laws that will materially impact us and our stockholders. In addition, future legislation, new regulations, administrative interpretations or court decisions could materially and adversely affect our ability to qualify as a REIT or materially and adversely affect our company and stockholders.

As a result of the Agro Merchants Acquisition, we acquired interests in certain assets and earn certain items of income that are not, or may not be, qualifying assets or income for purposes of the REIT asset and income tests. In addition, although we intend to structure our post-acquisition operation of Agro Merchants in a way that would allow us to continue to qualify as a REIT for U.S. federal income tax purposes, no assurances can be given that we will be successful.

If we fail to qualify as a REIT in any taxable year, we would be subject to U.S. federal income tax on our REIT taxable income at regular corporate rates, and would not be allowed to deduct dividends paid to our stockholders in computing our REIT taxable income. Also, unless the Internal Revenue Service, or the IRS, granted us relief under certain statutory provisions, we could not re-elect REIT status until the fifth calendar year after the year in which we first failed to qualify as a REIT. The additional tax liability from the failure to qualify as a REIT would reduce or eliminate the amount of cash available for investment or distribution to our stockholders. This would materially and adversely affect us. In addition, we would no longer be required to make distributions to our stockholders. Even if we continue to qualify as a REIT, we will continue to be subject to certain U.S. federal, state and local taxes on our income and property.

To qualify as a REIT, we must meet annual distribution requirements, which could result in material harm to our company if they are not met.

To obtain the favorable tax treatment accorded to REITs, among other requirements, we normally will be required each year to distribute to our stockholders at least 90% of our REIT taxable income, determined without regard to the deduction for dividends paid and by excluding net capital gains. We will be subject to U.S. federal income tax on our undistributed REIT taxable income and net capital gains. In addition, if we fail to distribute to our stockholders during each calendar year at least the sum of (a) 85% of our ordinary income for such year; (b) 95% of our capital gain net income for such year; and (c) any undistributed REIT taxable income from prior periods, we will be subject to a 4% excise tax on the excess of the required distribution over the sum of (i) the amounts actually distributed by us and (ii) retained amounts on which we pay U.S. federal income tax at the corporate level. We intend to make distributions to our stockholders to comply with the requirements of the Code for REITs and to minimize or eliminate our U.S. federal income tax obligation. However, differences between the recognition of REIT taxable income and the actual receipt of cash could require us to sell assets or raise capital on a short-term or long-term basis to meet the distribution requirements of the Code. Certain types of

assets generate substantial mismatches between REIT taxable income and available cash. Such assets include rental real estate that has been financed through financing structures which require some or all of available cash flows to be used to service borrowings. Further, under amendments to the Code made by TCJA, income must be accrued for U.S. federal income tax purposes no later than when such income is taken into account as revenue in our financial statements, subject to certain exceptions, which could also create mismatches between REIT taxable income and the receipt of cash attributable to such income. As a result, the requirement to distribute a substantial portion of our REIT taxable income could cause us to: (1) sell assets in adverse market conditions; (2) raise capital on unfavorable terms; or (3) distribute amounts that would otherwise be invested in future acquisitions, expansions or developments, capital expenditures or repayment of debt, in order to comply with REIT requirements. Further, amounts distributed will not be available to fund our operations. Under certain circumstances, covenants and provisions in our existing and future debt instruments may prevent us from making distributions that we deem necessary to comply with REIT requirements. Our inability to make required distributions as a result of such covenants could threaten our status as a REIT and could result in material adverse tax consequences for our company and stockholders.

We conduct a portion of our business through TRSs, which are subject to certain tax risks.

We have established taxable REIT subsidiaries, or TRSs, and may establish others in the future. Despite our qualification as a REIT, our TRSs must pay income tax on their taxable income. As a result of the enactment of the TCJA, effective for taxable years beginning on or after January 1, 2018, our domestic TRSs are subject to U.S. federal income tax on their taxable income at a flat rate of 21% (as well as applicable state and local income tax), but net operating loss, or NOL, carryforwards of TRS losses arising in taxable years beginning after December 31, 2017, may be deducted only to the extent of 80% of TRS taxable income in the carryforward year (computed without regard to the NOL deduction or our dividends paid deduction). In contrast to prior law, which permitted unused NOL carryforwards to be carried back two years and forward 20 years, TCJA provides that losses arising in taxable years ending after December 31, 2017, can no longer be carried back but can be carried forward indefinitely. In addition, we must comply with various tests to continue to qualify as a REIT for U.S. federal income tax purposes, and our income from, and investments in, our TRSs generally do not constitute permissible income and investments for certain of these tests. No more than 20% of the value of a REIT's assets may consist of securities of one or more TRSs. Because TRS securities do not qualify for purposes of the 75% asset test described herein, and because we own other assets that do not, or may not, qualify for the 75% asset test, the 75% asset test may effectively limit the value of our TRS securities to less than 20% of our total assets. Our dealings with our TRSs may materially and adversely affect our REIT qualification. Furthermore, we may be subject to a 100% penalty tax, or our TRSs may be denied deductions, to the extent our dealings with our TRSs are determined not to be arm's length in nature or are otherwise not permitted under the Code.

Complying with REIT requirements may cause us to forgo otherwise attractive opportunities or liquidate certain of our investments.

To qualify as a REIT for U.S. federal income tax purposes, we must continually satisfy tests concerning, among other things, the sources of our income, the nature and diversification of our assets, the amounts we distribute to our stockholders and the ownership of our stock. We may be required to make distributions to our stockholders at disadvantageous times or when we do not have funds readily available for distribution. Thus, compliance with the REIT requirements may, for instance, hinder our ability to make certain otherwise attractive investments or undertake other activities that might otherwise be beneficial to us and our stockholders, or may require us to raise capital or liquidate investments in unfavorable market conditions and, therefore, may hinder our performance.

As a REIT, at the end of each quarter, at least 75% of the value of our assets must consist of cash, cash items, government securities and qualified real estate assets. The remainder of our investments in securities (other than cash, cash items, government securities, securities issued by a TRS and qualified real estate assets) generally cannot include more than 10% of the outstanding voting securities of any one issuer or more than 10% of the total value of the outstanding securities of any one issuer. In addition, in general, no more than 5% of the value of our total assets (other than cash, cash items, government securities, securities issued by a TRS and qualified real estate assets) can consist of the securities of any one issuer, and no more than 20% of the value of our total securities can be represented by securities of one or more TRSs. If we fail to comply with these requirements at the end of any quarter, we must correct the failure within 30 days after the end of the quarter or qualify for certain statutory relief provisions to avoid losing our REIT qualification and suffering material adverse tax consequences. The need to comply with the 75% asset test and 20% TRS securities test on an ongoing basis potentially could require us in the future to limit the future acquisition of, or to dispose of, nonqualifying assets, limit the future expansion of our TRSs' assets and operations or dispose of or curtail TRS assets and operations, which could adversely affect our business and could have the effect of reducing our income and amounts available for distribution to our stockholders.

Future changes to the U.S. federal income tax laws could have an adverse impact on our business and financial results.

Changes to the U.S. federal income tax laws, including changes in applicable tax rates, are proposed regularly. Additionally, the REIT rules are constantly under review by persons involved in the legislative process and by the IRS and the U.S. Department of the Treasury, which may result in revisions to regulations and interpretations in addition to statutory changes. If enacted, such changes could have an adverse impact on our business and financial results.

Other legislative proposals could be enacted in the future that could affect REITs and their stockholders. Prospective investors are urged to consult their tax advisor regarding the effect of any potential tax law changes on an investment in our common stock.

Distributions payable by REITs generally do not qualify for the reduced tax rates that apply to certain other corporate distributions, potentially making an investment in our company less advantageous for certain persons than an investment in an entity with different tax attributes.

The maximum federal income tax rate applicable to "qualified dividend income" payable by non-REIT corporations to certain non-corporate U.S. stockholders is generally 20%, and a 3.8% Medicare tax may also apply. Dividends paid by REITs, however, generally are not eligible for the reduced rates applicable to qualified dividend income. Commencing with taxable years beginning on or after January 1, 2018 and continuing through 2025, TCJA temporarily reduces the effective tax rate on ordinary REIT dividends (i.e., dividends other than capital gain dividends and dividends attributable to certain qualified dividend income received by us) for U.S. holders of our common stock that are individuals, estates or trusts by permitting such holders to claim a deduction in determining their taxable income equal to 20% of any such dividends they receive. Taking into account TCJA's reduction in the maximum individual federal income tax rate from 39.6% to 37%, this results in a maximum effective rate of regular income tax on ordinary REIT dividends of 29.6% through 2025 (as compared to the 20% maximum federal income tax rate applicable to qualified dividend income received from a non-REIT corporation). Under final regulations recently issued by the IRS, in order to qualify for this deduction with respect to a dividend on our common stock, a stockholder must hold such shares for more than 45 days during the 91-day period beginning on the date which is 45 days before the date on which such shares become ex-dividend with respect to such dividend (taking into account certain special holding period rules that may, among other consequences, reduce a stockholder's holding period during any period in which the stockholder has diminished

its risk of loss with respect to the stock). Stockholders are urged to consult their tax advisors as to their ability to claim this deduction. The more favorable rates applicable to regular corporate distributions could cause investors who are individuals to perceive investments in REITs to be relatively less attractive than investments in the stocks of non-REIT corporations that pay distributions. This could materially and adversely affect the value of the stock of REITs, including our common stock.

In certain circumstances, we may be subject to U.S. federal, state, local or foreign taxes, which would reduce our funds available for distribution to our stockholders.

Even if we qualify and maintain our status as a REIT, we may be subject to certain U.S. federal, state, local or foreign taxes. For example, net income from a "prohibited transaction," including sales or other dispositions of property, other than foreclosure property, held primarily for sale in the ordinary course of business, will be subject to a 100% tax. While we do not intend to hold properties that would be characterized as held for sale in the ordinary course of business, unless a sale or disposition qualifies under statutory safe harbors, there can be no assurance that the IRS would agree with our characterization of our properties or that we will be able to make use of available safe harbors. In addition, we may not be able to make sufficient distributions to avoid income and excise taxes. We may also be subject to state, local, or foreign taxes on our income or property, either directly or at the level of our Operating Partnership or the other companies through which we indirectly own our assets. Any taxes we pay will reduce our funds available for distribution to our stockholders.

We may also decide to retain certain gains from the sale or other disposition of our property and pay income tax directly on such gains. In that event, our stockholders would be required to include such gains in income and would receive a corresponding credit for their share of taxes paid by us. Any net taxable income earned directly by a TRS will be subject to U.S. federal and state corporate income tax. Furthermore, even though we qualify for taxation as a REIT, if we acquire any asset from a corporation which is or has been a C-corporation in a transaction in which the basis of the asset in our hands is less than the fair market value of the asset determined at the time we acquired the asset, and we subsequently recognize a gain on the disposition of the asset during the five-year period beginning on the date on which we acquired the asset, then we will be required to pay tax at the highest regular corporate tax rate on this gain to the extent of the excess of (a) the fair market value of the asset over (b) our adjusted basis in the asset, in each case determined as of the date on which we acquired the asset. These requirements could limit, delay or impede future sales of our properties. We currently do not expect to sell any asset if the sale would result in the imposition of a material tax liability. We cannot, however, assure you that we will not change our plans in this regard.

Complying with REIT requirements may limit our ability to hedge effectively and may cause us to incur tax liabilities.

The REIT provisions of the Code limit our ability to hedge our liabilities. Generally, income from a hedging transaction we enter into either to manage risk of interest rate changes with respect to borrowings incurred or to be incurred to acquire or carry real estate assets, or to manage the risk of currency fluctuations with respect to any item of income or gain (or any property which generates such income or gain) that constitutes "qualifying income" for purposes of the 75% or 95% gross income tests applicable to REITs, does not constitute "gross income" for purposes of the 75% or 95% gross income tests, provided that we properly identify the hedging transaction pursuant to the applicable sections of the Code and Treasury Regulations. To the extent that we enter into other types of hedging transactions, the income from those transactions is likely to be treated as non-qualifying income for purposes of both gross income tests. As a result of these rules, we may need to limit our use of otherwise advantageous hedging techniques or implement those hedges through a TRS. The use of a TRS could increase the cost of our hedging activities (because our TRS would be subject to tax on income or gain resulting from hedges entered into by it) or expose us to greater risks than we would otherwise want to bear. In addition,

net losses in any of our TRSs will generally not provide any tax benefit except for being carried forward for use against future taxable income of the TRS.

If our Operating Partnership fails to qualify as a partnership for U.S. federal income tax purposes, we would fail to qualify as a REIT.

As a partnership, our Operating Partnership is not subject to U.S. federal income tax on its income. For all tax periods during which the Operating Partnership is treated as a partnership, each of its partners, including us, will be allocated that partner's share of the Operating Partnership's income. Following the admission of additional limited partners, no assurance can be provided, however, that the IRS will not challenge the status of our Operating Partnership as a partnership for U.S. federal income tax purposes, or that a court would not sustain such a challenge. If the IRS were successful in treating our Operating Partnership as an association taxable as a corporation for U.S. federal income tax purposes, we would fail to meet the gross income tests and certain of the asset tests applicable to REITs and, accordingly, would cease to qualify as a REIT, which would have a material adverse effect on us and our stockholders. Also, our Operating Partnership would then be subject to U.S. federal corporate income tax, which would reduce significantly the amount of its funds available for debt service and for distribution to its partners, including us.

ITEM 1B. Unresolved Staff Comments

None.

ITEM 2. Properties

General

In addition to the information in this Item 2, certain information regarding our portfolio is contained in Schedule III (Financial Statement Schedule) under Part IV, Item 15(b) and which is included in Part II, Item 8.

Our Warehouse Portfolio

As of December 31, 2022, we operated a global network of 242 warehouses that contained approximately 1.4 billion cubic feet and approximately 5 million pallet positions. We believe that the volume of cubic feet in our warehouses and the number of pallets contained therein provide a more meaningful measure of our storage space than warehouse surface area expressed in square feet as customers generally contract for storage on a pallet-by-pallet basis, not on a square footage basis. Our warehouses feature customized racking systems that allow for the storage of products on pallets in horizontal rows across vertically stacked levels. Our racking systems can accommodate a wide array of different customer storage needs.

The following table provides summary information regarding the warehouses in our portfolio that we owned, leased or managed as of December 31, 2022.

Country / Region	# of warehouses	Cubic feet (in millions)	% of total cubic feet	Pallet positions (in thousands)	Average economic occupancy [1]	Average physical occupancy [1]	Revenues [2] (in millions)	Segment contribution (NOI) [2][3] (in millions)	Total customers [4]
Warehouse Segment Portfolio [5]									
United States									
East	50	345.6	24 %	1,149	81 %	72 %	$ 592.6	$ 157.1	1,271
Southeast	49	295.6	21 %	956	79 %	73 %	426.6	88.7	797
Central	41	268.2	19 %	1,107	80 %	74 %	434.1	150.6	818
West	45	273.7	19 %	1,186	73 %	67 %	379.0	126.3	699
Canada	6	33.7	2 %	129	83 %	83 %	45.7	17.9	105
North America Total	**191**	**1,216.8**	**85 %**	**4,527**	**78 %**	**72 %**	**$ 1,878.0**	**$ 540.6**	**2,733**
Netherlands	7	36.7	3 %	121	78 %	78 %	70.0	10.4	442
United Kingdom	6	40.1	3 %	258	85 %	85 %	50.8	13.9	168
Spain	4	15.2	1 %	64	75 %	75 %	20.4	2.6	283
Portugal	4	11.5	1 %	57	86 %	86 %	16.1	3.9	176
Ireland	3	9.5	1 %	35	95 %	95 %	14.3	2.9	131
Austria	1	4.2	— %	44	84 %	84 %	23.9	6.6	161
Poland	2	3.5	— %	14	95 %	95 %	5.1	0.8	69
Europe Total	**27**	**120.7**	**8 %**	**593**	**83 %**	**83 %**	**$ 200.6**	**$ 41.1**	**1,333**
Australia	10	57.9	4 %	195	88 %	76 %	172.7	36.7	127
New Zealand	7	20.4	1 %	87	92 %	84 %	36.4	13.0	69
Asia-Pacific Total	**17**	**78.3**	**5 %**	**282**	**89 %**	**79 %**	**$ 209.1**	**$ 49.7**	**192**
Argentina	2	9.7	1 %	23	77 %	77 %	11.4	3.0	56
Chile[6]	—	—	— %	10	105 %	105 %	3.9	1.8	—
South America Total	**2**	**9.7**	**1 %**	**33**	**85 %**	**85 %**	**$ 15.3**	**$ 4.8**	**56**
Warehouse Segment Total / Average	**237**	**1,425.5**	**100 %**	**5,435**	**85 %**	**82 %**	**$ 2,303.0**	**$ 636.2**	**4,296**
Third-Party Managed Portfolio									
United States	3	14.9	74 %	—	—	—	$ 273.6	$ 7.5	3
Canada	1	5.3	26 %	—	—	—	3.4	1.0	1
North America Total / Average	**4**	**20.2**	**100 %**	**—**	**—**	**—**	**$ 277.0**	**$ 8.5**	**4**
Asia-Pacific	1	—	— %	—	—	—	21.4	3.8	1
Third-Party Managed Total / Average	**5**	**20.2**	**100 %**	**—**	**—**	**—**	**$ 298.4**	**$ 12.3**	**5**
Portfolio Total / Average	**242**	**1,445.7**	**100 %**	**5,435**	**80 %**	**73 %**	**$ 2,601.4**	**$ 648.5**	**4,296**

(1) We define average economic occupancy as the aggregate number of physically occupied pallets and any additional pallets otherwise contractually committed for a given period, without duplication. We estimate the number of contractually committed pallet positions by taking into account actual pallet commitments specified in each customer's contract, and subtracting the physical pallet positions.
We define average physical occupancy as the average number of occupied pallets divided by the estimated number of average physical pallet positions in our warehouses for the year ended December 31, 2022. We estimate the number of physical pallet positions by taking into account actual racked space and by estimating unracked space on an as-if racked basis. We base this estimate on the total cubic feet of each room within the warehouse that is unracked divided by the volume of an assumed rack space that is consistent with the characteristics of the relevant warehouse. On a warehouse by warehouse basis, rack space generally ranges from three to four feet depending upon the type of facility and the nature of the customer goods stored therein. The number of our pallet positions is reviewed and updated quarterly, taking into account changes in racking configurations and room utilization.
(2) Year ended December 31, 2022.
(3) We use the term "segment contribution (NOI)" to mean a segment's revenues less its cost of operations (excluding any depreciation and amortization, impairment charges and corporate-level selling, general and administrative expenses). The applicable segment contribution (NOI) from our owned and leased warehouses and our third-party managed warehouses is included in our warehouse segment contribution (NOI) and third-party managed segment contribution (NOI), respectively.
(4) We serve some of our customers in multiple geographic regions and in multiple facilities within geographic regions. As a result, the total number of customers that we serve is less than the total number of customers reflected in the table above that we serve in each geographic region.
(5) As of December 31, 2022, we owned 154 of our North American warehouses and 39 of our international warehouses, and we leased 37 of our North American warehouses and seven of our international warehouses. As of December 31, 2022, fourteen of our owned facilities were located on land that we lease pursuant to long-term ground leases.
(6) On June 1, 2022, we contributed our Chilean operations to the LATAM JV which we have a 15% ownership stake in. The information reflects the period of time we owned the facility during 2022, prior to contributing it to the LATAM JV.

We own, develop and manage multiple types of temperature-controlled warehouses, which allows us to service our customers' needs across our network. Our warehouse portfolio consists of five distinct property types:

- *Distribution*. As of December 31, 2022, we owned or leased 90 distribution centers with approximately 639.1 million cubic feet of temperature-controlled capacity and 2.1 million pallet positions. Distribution centers typically house a wide variety of customers' finished products until future shipment to end users. Each distribution center is located in a key distribution hub that services a distinct surrounding population center in a major market.
- *Public*. As of December 31, 2022, we owned or leased 85 public warehouses with approximately 419.1 million cubic feet of temperature-controlled capacity and 1.7 million pallet positions. Public warehouses generally store multiple types of inventory and cater to small and medium-sized businesses by primarily serving the needs of local and regional customers.
- *Production Advantaged*. As of December 31, 2022, we owned or leased 58 production advantaged warehouses with approximately 345.1 million cubic feet of temperature-controlled capacity and 1.5 million pallet positions. Production advantaged warehouses are temperature-controlled warehouses that are typically dedicated to one or a small number of customers. Production advantaged warehouses are generally located adjacent to or otherwise in close proximity to customer processing or production facilities and were often build-to-suit at the time of their construction.
- *Facility Leased*. As of December 31, 2022, we had four facility leased warehouses with approximately 22.1 million cubic feet of temperature-controlled capacity. We charge our customers that are party to these leases rent based on the square footage leased in our warehouses. Our facility leased warehouses are facilities that are leased to third parties, such as retailers, e-tailers, distributors, transportation companies and food producers, that desire to manage their own temperature-controlled warehousing or carry on processing operations generally in warehouses adjacent, or in close proximity, to their retail stores or production facilities. The majority of our facility leased warehouses are leased to third parties under "triple net lease" arrangements.
- *Third-Party Managed*. As of December 31, 2022, we managed five warehouses on behalf of third parties with approximately 20.2 million cubic feet of temperature-controlled capacity. We manage warehouses on behalf of third parties and provide warehouse management services to several leading food retailers

and manufacturers in customer-owned facilities, including some of our largest and longest-standing customers. Our third-party managed segment provides a complete outsourcing solution by managing all aspects of the distribution of our customers' products, including order management, reverse logistics, inventory control and, in some instances, dedicated transportation services for temperature-controlled and ambient (*i.e.*, non-refrigerated) customers.

ITEM 3. Legal Proceedings

From time to time, we may be party to a variety of legal proceedings arising in the ordinary course of our business. We are not a party to, nor is any of our property a subject of, any material litigation or legal proceedings or, to the best of our knowledge, any threatened litigation or legal proceedings which, in the opinion of management, individually or in the aggregate, would have a material impact on our business, financial condition, liquidity, results of operations and prospects. Refer to Note 17 of the Consolidated Financial Statements for additional information.

ITEM 4. Mine Safety Disclosures

None.

PART II

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

Americold Realty Trust, Inc.’s common stock is listed on the NYSE under the trading symbol “COLD”. Our common stock has been publicly traded since January 19, 2018. On February 23, 2023, we had approximately 269,925,540 shares of common stock outstanding. The number of holders of record of our common stock on February 23, 2023 was 14. This figure does not represent the actual number of beneficial owners of our common stock because our common stock is frequently held in “street name” by securities dealers and others for the benefit of beneficial owners who may vote the shares. Our future common stock dividends, if and as declared, may vary and will be determined by our board of directors upon the circumstances prevailing at the time, including our financial condition, operating results, estimated taxable income and REIT distribution requirements.

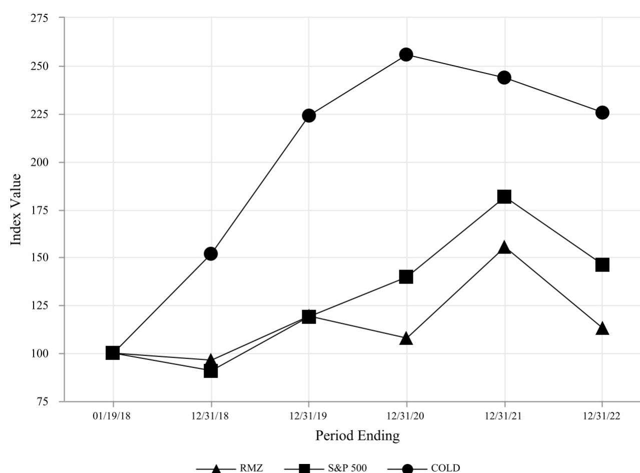
Subject to the distribution requirements applicable to REITs under the Code, we intend, to the extent practicable, to invest substantially all of the proceeds from sales and refinancing of our assets in real estate-related assets and other assets. We may, however, under certain circumstances, make a dividend of capital or of assets. Such dividends, if any, will be made at the discretion of our board of directors.

Stock Performance Graph

The following graph compares the change in the cumulative total stockholder return on Americold Realty Trust, Inc. common stock during the period from January 19, 2018 (the date of our IPO) through December 31, 2022, with the cumulative total returns on the MSCI US REIT Index (RMZ) and the S&P 500 Market Index. The comparison assumes that $100 was invested on January 19, 2018 in Americold Realty Trust, Inc. common stock and in each of these indices and assumes reinvestment of dividends, if any.

Comparison of Cumulative Total Returns
Among Americold Realty Trust, Inc., S&P 500, and RMZ Index

Assumes $100 invested on January 19, 2018
Assumes dividends reinvested
To fiscal year ended December 31, 2022



Pricing Date	COLD ($)	S&P 500($)	RMZ($)
1/19/2018	100.00	100.00	100.00
12/31/2018	151.79	90.82	96.30
12/31/2019	224.06	119.05	119.34
12/31/2020	255.61	139.57	107.88
12/31/2021	243.51	181.51	155.35
12/31/2022	225.57	146.15	112.89

- This graph and the accompanying text are not “soliciting material,” are not deemed filed with the SEC and are not to be incorporated by reference in any filing by us under the Securities Act of 1933, as amended, or the Security Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.
- The stock price performance shown on the graph is not necessarily indicative of future price performance.
- The hypothetical investment in Americold Realty Trust, Inc.’s common stock presented in the stock performance graph above is based on the closing price of the common stock on January 19, 2018.

Sales of Unregistered Securities

None.

Purchases of Equity Securities

None.

Securities Authorized For Issuance Under Equity Compensation Plans

Information relating to compensation plans under which our common stock is authorized for issuance is set forth under Part III, Item 12 of this Annual Report on Form 10-K and such information is incorporated by reference herein.

Other Stockholder Matters

None.

ITEM 6. [Reserved]

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements included in this Annual Report on Form 10-K. In addition, the following discussion contains forward-looking statements, such as statements regarding our expectation for future performance, liquidity and capital resources, that involve risks, uncertainties and assumptions that could cause actual results to differ materially from our expectations. Our actual results may differ materially from those contained in or implied by any forward-looking statements. Factors that could cause such differences include those identified below and those described under Item 1A of this Annual Report on Form 10-K. Refer to our Annual Report on Form 10-K as filed on March 1, 2022, for a discussion of the comparative results of operations for the years ended December 31, 2021 and 2020.

Management's Overview

We are the world's largest publicly traded REIT focused on the ownership, operation, acquisition and development of temperature-controlled warehouses. We are organized as a self-administered and self-managed REIT with proven operating, development and acquisition expertise. As of December 31, 2022, we operated a global network of 242 temperature-controlled warehouses encompassing approximately 1.4 billion cubic feet, with 195 warehouses in North America, 27 in Europe, 18 warehouses in Asia-Pacific, and two warehouses in South America. We view and manage our business through three primary business segments: warehouse, third–party managed and transportation. In addition, we hold three minority interests in joint ventures, one with SuperFrio which owns or operates 38 temperature-controlled warehouses in Brazil, one with Comfrio which owns or operates 28 temperature-controlled warehouses in Brazil, and one with LATAM which owns one temperature-controlled warehouse in Chile.

Components of Our Results of Operations

Warehouse. Our primary source of revenues consists of rent, storage and warehouse services fees. Our rent, storage and warehouse services revenues are the key drivers of our financial performance. Rent and storage revenues consist of recurring, periodic charges related to the storage of frozen and perishable food and other products in our warehouses by our customers. We also provide these customers with a wide array of handling and other warehouse services, such as (1) receipt, handling and placement of products into our warehouses for storage and preservation, (2) retrieval of products from storage upon customer request, (3) blast freezing, which involves the rapid freezing of non-frozen products, including individual quick freezing for agricultural produce and seafood, (4) case-picking, which involves selecting product cases to build customized pallets, (5) kitting and repackaging, which involves assembling custom product packages for delivery to retailers and consumers, and labeling services, (6) order assembly and load consolidation, (7) exporting and importing support services, (8) container handling, (9) cross-docking, which involves transferring inbound products to outbound trucks utilizing our warehouse docks without storing them in our warehouses, (10) government-approved temperature-controlled storage and inspection services, (11) fumigation, (12) pre-cooling and cold treatment services, (13) produce grading and bagging, (14) protein boxing, (15) e-commerce fulfillment, and (16) ripening. We refer to these handling and other warehouse services as our value-added services.

Cost of operations for our warehouse segment consists of power, other facilities costs, labor, and other services costs. Labor, the largest component of the cost of operations from our warehouse segment, consists primarily of employee wages, benefits, and workers' compensation. Trends in our labor expense are influenced by changes in headcount, changes in compensation levels and associated performance incentives, the use of third-party labor to support our operations, changes in terms of collective bargaining agreements, changes in customer requirements and associated work content, workforce productivity, labor availability, governmental policies and

regulations, variability in costs associated with medical insurance and the impact of workplace safety programs, inclusive of the number and severity of workers' compensation claims. Labor expense can also be impacted as a result of discretionary bonuses. In response to the COVID-19 pandemic, we incorporated certain activities such as staggered break schedules, social distancing, and other changes to process that can create inefficiencies. Our second largest cost of operations from our warehouse segment is power utilized in the operation of our temperature-controlled warehouses. As a result, fluctuations in the price for power in the regions where we operate may have a significant effect on our financial results. We may from time to time hedge our exposure to changes in power prices through fixed rate agreements or, to the extent possible and appropriate, through rate escalations or power surcharge provisions within our customer contracts. Additionally, business mix impacts power expense depending on the temperature zone or type of freezing required. Other facilities costs include utilities other than power, property insurance, property taxes, sanitation (which include incremental supplies as a result of COVID-19), repairs and maintenance on real estate, rent under real property operating leases, where applicable, security, and other related facilities costs. Other services costs include equipment costs, warehouse consumables (e.g., shrink-wrap and uniforms), personal protective equipment to maintain the health and safety of our associates, warehouse administration and other related services costs.

Transportation. We charge transportation fees, which may also include fuel and capacity surcharges, to our customers for whom we arrange the transportation of their products. Cost of operations for our transportation segment consists primarily of third-party carrier charges, which are impacted by factors affecting those carriers, including driver and equipment availability in certain markets. Additionally, in certain markets we employ drivers and assets to serve our customers. Costs to operate these assets include, wages, fuel, tolls, insurance and maintenance.

Third-Party Managed. We receive a reimbursement of substantially all expenses for warehouses that we manage on behalf of third-party owners, with all reimbursements recognized as revenues under the relevant accounting guidance. We also earn management fees, incentive fees upon achieving negotiated performance and cost-savings results, or an applicable mark-up on costs. Cost of operations for our third-party managed segment is reimbursed on a pass-through basis. During the fourth quarter of 2022, we strategically transitioned the management of our largest third-party managed customer's warehouses to a new third-party provider, and our operations ceased. As part of this transition, we agreed to continue to process certain costs for the related employee benefits for this customer, and will receive reimbursement for all such costs.

Other Consolidated Operating Expenses. We also incur depreciation and amortization expenses, corporate-level selling, general and administrative expenses and corporate-level acquisition, litigation and other expenses.

Our depreciation and amortization charges result primarily from the capital-intensive nature of our business. The principal components of depreciation relate to our warehouses, including buildings and improvements, refrigeration equipment, racking, leasehold improvements, material handling equipment, furniture and fixtures, and our computer hardware and software. Amortization relates primarily to intangible assets for customer relationships.

Our corporate-level selling, general and administrative expenses consist primarily of wages and benefits for management, administrative, business development, account management, project management, marketing, engineering, supply-chain solutions, human resources and information technology personnel, as well as expenses related to equity incentive plans, communications and data processing, travel, professional fees, bad debt, training, office equipment and supplies. Trends in corporate-level selling, general and administrative expenses are influenced by changes in headcount and compensation levels and achievement of incentive compensation targets. To position ourselves to meet the challenges of the current business environment, we have implemented a shared

services support structure to better manage costs and enhance the efficiency of our operations. We have begun to integrate our recent acquisitions into this shared services structure.

Our corporate-level acquisition, litigation and other expenses consist of costs that we view outside of selling, general and administrative expenses with a high level of variability from period-to-period, and include the following: acquisition and integration related costs, litigation costs incurred in order to defend ourselves from litigation charges outside of the normal course of business and related settlement costs, severance costs, terminated site operations costs, cyber incident related costs and related recoveries, other costs which relate to insurance claim deductibles and related recoveries.

Key Factors Affecting Our Business and Financial Results

Market Conditions

During the years ended December 31, 2022 and 2021, our business and financial results were negatively impacted by macro-economic headwinds and disruptions in (1) the food supply chain; (ii) our customers' production and transportation of goods; (iii) the labor market impacting associate turnover, availability and cost; and (iv) the macroeconomic environment including the impact of inflation on the cost to provide our services. During the year ended December 31, 2022, there have been gradual improvements in food production and the food supply chain has begun to recover storage levels, nearing pre-COVID 19 pandemic levels by the end of the year. There is no assurance that the inventory levels reported as of December 31, 2022 will be maintained or increase due to the previously mentioned risks and uncertainties, among others. Overall, we expect that end-consumer demand for food will remain consistent with historic levels over the long-term.

The unprecedented labor environment continues to impact many companies, including our food manufacturing customers and our own. Labor availability strained food production during 2021 and the early parts of 2022, but began to improve gradually through the duration of 2022. Additionally, the tenure of associates has declined as a result of higher than average turnover, leading to inefficiencies in our operations. We expect that this will improve with our efforts to focus on associate retention.

Our business was also impacted by inflation and rising interest rates during the second half of 2021 and throughout 2022. We believe we are positioned to address continued inflationary pressure as it arises; however, many of our contracts require that we experience sustained cost increases for an extended period of time ranging up to 60 days before we are able to initiate rate increases or seek remedies under our contracts. As a result of the significant impact of inflation on the cost of providing our storage, services and transportation to customers, starting during the second half of 2021 and continuing into 2022 we initiated several out-of-cycle rate increases in our customer contracts (many of which contain provisions for inflationary price escalators), and expect to continue to monitor further inflation and implement pricing increases as required. We can give no assurance that we will be able to offset the entire impact of inflation or future inflationary cost increases through increased storage or service charges or by operational efficiencies.

Additionally, global supply chains have been volatile following the invasion of Ukraine by Russia which has resulted in sanctions against Russia from the U.S. and a number of European countries. While we do not have warehouses or operations in Russia or Ukraine, our global operations and specifically our European operations may be impacted as a result of the ongoing conflict, including increased power costs and disruptions in inventory transportation, logistics systems and supply chain management. To date, our operations have not been materially impacted by the ongoing conflict.

Refer to “Item 1A - Risk Factors” in this Annual Report on Form 10-K for additional information.

Foreign Currency Translation Impact on Our Operations

Our consolidated revenues and expenses are subject to variations caused by the net effect of foreign currency translation on revenues and expenses incurred by our operations outside the United States. Future fluctuations of foreign currency exchange rates and their impact on our Consolidated Statements of Operations are inherently uncertain. As a result of the relative size of our international operations, these fluctuations may be material on our results of operations. Our revenues and expenses from our international operations are typically denominated in the local currency of the country in which they are derived or incurred. Therefore, the impact of foreign currency fluctuations on our results of operations and margins is partially mitigated.

The following table shows a comparison of underlying average exchange rates of the foreign currencies that impacted our U.S. dollar-reported revenues and expenses during the periods discussed herein together with a comparison against the exchange rates of such currencies at the end of the applicable periods presented herein. The rates below represent the U.S. dollar equivalent of one unit of the respective foreign currency. Amounts presented in constant currency within our results of operations are calculated by applying the average foreign exchange rate from the comparable prior year period to actual local currency results in the current period, rather than the actual exchange rates in effect during the respective period. While constant currency metrics are a non-GAAP calculation and do not represent actual results, the comparison allows the reader to understand the impact of the underlying operations in addition to the impact of changing foreign exchange rates.

Foreign Currency	Foreign exchange rates as of December 31 2022	Average foreign exchange rates used to translate actual operating results for the year ended December 31 2022	Foreign exchange rates as of December 31, 2021	Prior period average foreign exchange rate used to adjust actual operating results for the year ended December 31, 2021[(1)]
Argentinian peso	0.006	0.008	0.010	0.011
Australian dollar	0.681	0.695	0.726	0.752
Brazilian real	0.189	0.194	0.180	0.186
British Pound	1.208	1.238	1.353	1.376
Canadian dollar	0.738	0.769	0.791	0.798
Chilean Peso	0.001	0.001	0.001	0.001
Euro	1.071	1.054	1.137	1.183
New Zealand dollar	0.635	0.636	0.683	0.707
Poland Zloty	0.229	0.225	0.248	0.259

(1) Represents the relevant average foreign exchange rates in effect in the comparable prior period applied to the activity for the current period. The average foreign currency exchange rates we apply to our operating results are derived from third party reporting sources for the periods indicated.

Focus on Our Operational Effectiveness and Cost Structure

As previously mentioned, we have initiated Project Orion during 2023 in order to further enhance our operational effectiveness, and to integrate the acquisitions completed over the last several years. We continuously seek to execute on various initiatives aimed at streamlining our business processes and reducing our cost structure, including: realigning and centralizing key business processes and fully integrating acquired assets and businesses; implementing standardized operational processes; integrating and launching new information technology tools and platforms; instituting key health, safety, leadership and training programs; and capitalizing on the purchasing power of our network. Through the realignment of our business processes, we have acquired new talent and strengthened our service offerings. In order to reduce costs in our facilities, we have invested in

energy efficiency projects, including LED lighting, thermal energy storage, motion-sensor technology, variable frequency drives for our fans and compressors, third party efficiency reviews and real-time monitoring of energy consumption, rapid open and close doors, and alternative-power generation technologies to improve the energy efficiency of our warehouses. We have also performed fine-tuning of our refrigeration systems, deployed efficient energy management practices, such as time-of-use and awareness, and have increased our participation in Power Demand Response programs with some of our power suppliers. These initiatives have allowed us to reduce our consumption of kilowatt hours and energy spend.

As part of our initiatives to streamline our business processes and to reduce our cost structure, we have evaluated and exited less strategic and profitable markets or business lines, including the sale of certain warehouse assets, the exit of certain leased facilities, the exit of certain managed warehouse agreements and the sale of our quarry business during 2020. Through our process of active portfolio management, we continue to evaluate our markets and offerings.

Strategic Shift within Our Transportation Segment

Several years ago, we initiated a strategic shift in our transportation segment services and solutions. The intention of this strategic shift was to better focus our business on the operation of our temperature-controlled warehouses. Specifically, we have gradually exited certain commoditized, non-scalable, or low margin services we historically offered to our customers, in favor of more profitable and value-added programs, such as regional, national, truckload and retailer-specific multi-vendor consolidation services. We designed each value-added program to improve efficiency and reduce transportation and logistics costs to our warehouse customers, whose transportation spend typically represents the majority of their supply-chain costs. We believe this efficiency and cost reduction helps to drive increased client retention, as well as maintain high occupancy levels in our temperature-controlled warehouses. Over the last several years, we have made significant progress in implementing our strategic initiative of growing our transportation service offering in a way that complements our temperature-controlled warehouse business, such as adding a dedicated fleet service offering through acquisitions such as Agro and Hall's. We intend to continue executing this strategy in the future.

Historically Significant Customer

For the years ended December 31, 2022, 2021, and 2020 one customer accounted for more than 10% of our total revenues, with revenues received of $264.2 million, $285.6 million and $257.3 million, respectively. The substantial majority of this customer's business relates to our third-party managed segment. The Company and this customer transitioned the management of this customer's warehouses to a new third-party provider during the fourth quarter of 2022, and we will no longer serve this customer in the third-party managed segment going forward. We are reimbursed for substantially all expenses we incur in managing warehouses on behalf of third-party owners. We recognize these reimbursements as revenues under applicable accounting guidance, but they generally do not affect our financial results because they are offset by the corresponding expenses that we recognize in our third-party managed segment cost of operations. Of the revenues received from this customer, $255.2 million, $273.1 million, and $241.8 million represented reimbursements for certain expenses we incurred during the years ended December 31, 2022, 2021 and 2020, respectively, that were offset by matching expenses included in our third-party managed cost of operations.

Economic Occupancy of our Warehouses

We define average economic occupancy as the aggregate number of physically occupied pallets and any additional pallets otherwise contractually committed for a given period, without duplication. We estimate the number of contractually committed pallet positions by taking into account the actual pallet commitment specified

in each customers' contract, and subtracting the physical pallet positions. We regard economic occupancy as an important driver of our financial results. Historically, providers of temperature-controlled warehouse space have offered storage services to customers on an as-utilized, on-demand basis. We actively seek to enter into contracts that implement our commercial business rules which contemplate, among other things, fixed storage commitments in connection with establishing new customer relationships. Additionally, we actively seek opportunities to transition our current customers to contracts that feature a fixed storage commitment when renewing existing agreements or upon the change in the anticipated profile of our customer. This strategy mitigates the impact of changes in physical occupancy throughout the course of the year due to seasonality, as well as other factors that can impact physical occupancy while ensuring our customers have the necessary space they need to support their business.

Throughput at our Warehouses

The level and nature of throughput at our warehouses is an important factor impacting our warehouse services revenues in our warehouse segment. Throughput refers to the volume of pallets that enter and exit our warehouses. Higher levels of throughput drive warehouse services revenues in our warehouse segment as customers are typically billed on a basis that takes into account the level of throughput of the goods they store in our warehouses. The nature of throughput may be driven by the expected turn of the underlying product or commodity. Throughput pallets can be influenced both by the food manufacturers as well as shifts in demand preferences. Food manufacturers' production levels, which respond to market conditions, labor availability, supply chain dynamics and consumer preferences, may impact inbound pallets. Similarly, a change in inventory turnover due to shift in consumer demand may impact outbound pallets.

How We Assess the Performance of Our Business

Segment Contribution (Net Operating Income or "NOI")

We evaluate the performance of our primary business segments based on their contribution (NOI) to our overall results of operations. We use the term "segment contribution (NOI)" to mean a segment's revenues less its cost of operations (excluding any depreciation and amortization, impairment charges, corporate-level selling, general and administrative expenses and corporate-level acquisition, litigation and other expenses). We use segment contribution (NOI) to evaluate our segments for purposes of making operating decisions and assessing performance in accordance with FASB ASC, Topic 280, *Segment Reporting*.

We also analyze the "segment contribution (NOI) margin" for each of our business segments, which we calculate as segment contribution (NOI) divided by segment revenues.

In addition to our segment contribution (NOI) and segment contribution (NOI) margin, we analyze the contribution (NOI) of our warehouse rent and storage operations and our warehouse services operations within our warehouse segment. We calculate the contribution (NOI) of our warehouse rent and storage operations as rent and storage revenues less power and other facilities cost. We calculate the contribution (NOI) of our warehouse services operations as warehouse services revenues less labor and other service costs. We calculate the contribution (NOI) margin for each of these operations as the applicable contribution (NOI) measure divided by the applicable revenue measure. We believe the presentation of these contribution (NOI) and contribution (NOI) margin measures helps investors understand the relative revenues, costs and earnings resulting from each of these separate types of services we provide to our customers in the same manner reviewed by our management in connection with the operation of our business. These contribution (NOI) measures within our warehouse segment are not measurements of financial performance under U.S. GAAP, and these measures should be considered as

supplements, but not as alternatives, to our results calculated in accordance with U.S. GAAP. We provide reconciliations of these measures in the discussions of our comparative results of operations below.

Same Store Analysis

We define our "same store" population once a year at the beginning of the current calendar year. Our same store population includes properties that were owned or leased for the entirety of two comparable periods and that have reported at least twelve months of consecutive normalized operations prior to January 1 of the prior calendar year. We define "normalized operations" as properties that have been open for operation or lease after development or significant modification, including the expansion of a warehouse footprint or a warehouse rehabilitation subsequent to an event, such as a natural disaster or similar event causing disruption to operations. In addition, our definition of "normalized operations" takes into account changes in the ownership structure (e.g., purchase of a previously leased warehouse would result in a change in the nature of expenditures in the compared periods), which would impact comparability in our warehouse segment contribution (NOI).

Acquired properties will be included in the "same store" population if owned by us as of the first business day of each year, of the prior calendar year and still owned by us as of the end of the current reporting period, unless the property is under development. The "same store" pool is also adjusted to remove properties that were sold or entering development subsequent to the beginning of the current calendar year. As such, the "same store" population for the period ended December 31, 2022 includes all properties that we owned at January 2, which had both been owned and had reached "normalized operations" by January 2, 2022.

We calculate "same store contribution (NOI)" as revenues for the same store population less its cost of operations (excluding any depreciation and amortization, impairment charges and corporate-level selling, general and administrative expenses, corporate-level acquisition, litigation and other expenses and gain or loss on sale of real estate). In order to derive an appropriate measure of period-to-period operating performance, we also calculate our same store contribution (NOI) on a constant currency basis to remove the effects of foreign currency exchange rate movements by using the comparable prior period exchange rate to translate from local currency into U.S. dollars for both periods. We evaluate the performance of the warehouses we own or lease using a "same store" analysis, and we believe that same store contribution (NOI) is helpful to investors as a supplemental performance measure because it includes the operating performance from the population of properties that is consistent from period to period and also on a constant currency basis, thereby eliminating the effects of changes in the composition of our warehouse portfolio and currency fluctuations on performance measures.

The following table shows the number of same-store warehouses in our portfolio and the number of warehouses excluded as same-store warehouses for the year ended December 31, 2022. While not included in the non-same store warehouse count in the table below, the results of operations for the non-same store warehouses includes the partial period impact of the sites that were exited during the year ended December 31, 2022, as described in footnote 1 following the table. In addition, we hold three minority interests in joint ventures, one with SuperFrio, which owns or operates 38 temperature-controlled warehouses in Brazil, one with Comfrio, which owns or operates 28 temperature-controlled warehouses in Brazil, and one with LATAM, which owns one temperature-controlled warehouse in Chile; these joint ventures are not included in the table below.

Total Warehouses	242
Same Store Warehouses [1]	208
Non-Same Store Warehouses [1]	29
Third-Party Managed Warehouses	5

[1] The non-same store facility count of 29 includes a facility acquired through the De Bruyn Cold Storage acquisition on July 1, 2022, a facility previously leased that we bought during the third quarter of 2022, one recently leased warehouse in Australia, one recently constructed facility in Denver that we purchased in November 2021, one facility previously leased that we bought during the second quarter of 2022, three warehouses acquired through the Lago Cold Stores acquisition on November 15, 2021 (including one leased facility that was exited upon expiration during the first quarter of 2022 and another leased facility early terminated in the third quarter of 2022), one warehouse acquired through the Newark Facility Management acquisition on September 1, 2021, two facilities acquired through the ColdCo acquisition on August 2, 2021 (including one leased facility from the ColdCo acquisition that was exited upon expiration during the fourth quarter of 2022), one warehouse acquired through the Bowman stores acquisition on May 28, 2021, two warehouses acquired through the KMT Brrr! acquisition on May 5, 2021, four remaining warehouses acquired through the Liberty Freezers acquisition on March 1, 2021 (including one leased facility that was exited during the third quarter of 2021), 13 warehouses in expansion or redevelopment and one warehouse which we ceased operations within as it is being prepared for lease to a third-party.

Same store contribution (NOI) is not a measurement of financial performance under U.S. GAAP. In addition, other companies providing temperature-controlled warehouse storage and handling and other warehouse services may not define same store or calculate same store contribution (NOI) in a manner consistent with our definition or calculation. Same store contribution (NOI) should be considered as a supplement, but not as an alternative, to our results calculated in accordance with U.S. GAAP. We provide reconciliations of these measures in the discussions of our comparative results of operations below.

Constant Currency Metrics

As discussed above under "Key Factors Affecting Our Business and Financial Results—*Foreign Currency Translation Impact on Our Operations*," our consolidated revenues and expenses are subject to variations outside our control that are caused by the net effect of foreign currency translation on revenues generated and expenses incurred by our operations outside the United States. As a result, in order to provide a framework for assessing how our underlying businesses performed excluding the effect of foreign currency fluctuations, we analyze our business performance based on certain constant currency reporting that represents current period results translated into U.S. dollars at the relevant average foreign exchange rates applicable in the comparable prior period. We believe that the presentation of constant currency results provides a measurement of our ongoing operations that is meaningful to investors because it excludes the impact of these foreign currency movements that we cannot control. Constant currency results are not measurements of financial performance under U.S. GAAP, and our constant currency results should be considered as a supplement, but not as an alternative, to our results calculated in accordance with U.S. GAAP. The constant currency performance measures should not be considered a substitute for, or superior to, the measures of financial performance prepared in accordance with U.S. GAAP. We provide reconciliations of these measures in the discussions of our comparative results of operations below. Our discussion of the drivers of our performance below are based upon U.S. GAAP.

Presentation

A detailed discussion of the 2022 year-over-year changes can be found below and a detailed discussion of the 2021 year-over-year changes can be found in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" on Form 10-K filed with the SEC on March 1, 2022.

Results of Operations

Comparison of Results for the Years Ended December 31, 2022 and 2021

Warehouse Segment

The following table presents the operating results of our warehouse segment for the years ended December 31, 2022 and 2021.

	Year ended December 31,			Change	
	2022 actual	2022 constant currency[1]	2021 actual	Actual	Constant currency
		(Dollars in thousands)			
Rent and storage	$ 999,388	$ 1,019,787	$ 876,153	14.1 %	16.4 %
Warehouse services	1,303,583	1,332,867	1,209,234	7.8 %	10.2 %
Total warehouse segment revenue	2,302,971	2,352,654	2,085,387	10.4 %	12.8 %
Power	155,661	161,000	129,535	20.2 %	24.3 %
Other facilities costs [2]	231,944	236,436	208,172	11.4 %	13.6 %
Labor	1,006,862	1,028,375	934,782	7.7 %	10.0 %
Other services costs [3]	272,272	278,958	226,462	20.2 %	23.2 %
Total warehouse segment cost of operations	$ 1,666,739	$ 1,704,769	$ 1,498,951	11.2 %	13.7 %
Warehouse segment contribution (NOI)	$ 636,232	$ 647,885	$ 586,436	8.5 %	10.5 %
Warehouse rent and storage contribution (NOI) [4]	$ 611,783	$ 622,351	$ 538,446	13.6 %	15.6 %
Warehouse services contribution (NOI) [5]	$ 24,449	$ 25,534	$ 47,990	(49.1)%	(46.8)%
Total warehouse segment margin	27.6 %	27.5 %	28.1 %	-49 bps	-58 bps
Rent and storage margin[6]	61.2 %	61.0 %	61.5 %	-24 bps	-43 bps
Warehouse services margin[7]	1.9 %	1.9 %	4.0 %	-209 bps	-205 bps

(1) The adjustments from our U.S. GAAP operating results to calculate our operating results on a constant currency basis are the effect of changes in foreign currency exchange rates relative to the comparable prior period.
(2) Includes real estate rent expense of $42.0 million and $41.8 million for the year ended December 31, 2022 and 2021, respectively.
(3) Includes non-real estate rent expense (equipment lease and rentals) of $12.9 million and $11.7 million for the year ended December 31, 2022 and 2021, respectively.
(4) Calculated as rent and storage revenue less power and other facilities costs.
(5) Calculated as warehouse services revenue less labor and other services costs.
(6) Calculated as warehouse rent and storage contribution (NOI) divided by warehouse rent and storage revenue.
(7) Calculated as warehouse services contribution (NOI) divided by warehouse services revenue.

Warehouse segment revenue was $2.30 billion for the year ended December 31, 2022, an increase of $217.6 million, or 10.4%, compared to $2.09 billion for the year ended December 31, 2021. On a constant currency basis, our warehouse segment revenue was $2.35 billion for the year ended December 31, 2022, an increase of $267.3 million, or 12.8%, compared to the prior year. This growth was driven by $161.7 million of growth in our same store pool on a constant currency basis primarily due to our pricing initiative and rate escalations and an improvement in economic occupancy, partially offset by COVID-19 and the related labor challenges which continued to negatively impact food production during the first half of 2022 and slightly lower throughput. Approximately $79.5 million of the increase, on a constant currency basis, was driven by acquisitions completed during 2021 and 2022, including the growth experienced period-over-period during overlapping periods of ownership. Refer to the Same Store Analysis above for details of our acquisitions during 2022 and 2021. Revenue growth was also due to our recently completed expansion and developments in our non-same store pool, which increased approximately $26.1 million, on a constant currency basis. The foreign currency

translation of revenues earned by our foreign operations had a $49.7 million unfavorable impact during the year ended December 31, 2022, which was mainly driven by the strengthening of the U.S. dollar against our foreign subsidiaries' currencies.

Warehouse segment cost of operations was $1.67 billion for the year ended December 31, 2022, an increase of $167.8 million, or 11.2%, compared to $1.50 billion for the year ended December 31, 2021. On a constant currency basis, our warehouse segment cost of operations was $1.70 billion for the year ended December 31, 2022, an increase of $205.8 million, or 13.7%, compared to the prior year. The cost of operations for our same store pool increased $123.2 million on a constant currency basis, across most of our cost categories, reflective of the inflationary pressure and operational inefficiencies. Labor was also impacted by employee absenteeism and associated disruption throughout the first quarter of 2022 due to the COVID-19 Omicron variant. Approximately $59.7 million of the increase, on a constant currency basis, was driven by the additional facilities in the warehouse segment we acquired in connection with the aforementioned acquisitions. We also incurred higher costs of $22.9 million related to our recently completed and in progress expansion and development projects, inclusive of incremental start-up costs of $13.7 million during the year ended 2022, which have not yet stabilized. These increases are offset by the foreign currency translation of expenses incurred by our foreign operations, which had a $38.0 million favorable impact during the year ended December 31, 2022.

Warehouse segment contribution (NOI) was $636.2 million for the year ended December 31, 2022, an increase of $49.8 million, or 8.5%, compared to $586.4 million for the year ended December 31, 2021. On a constant currency basis, warehouse segment contribution was $647.9 million for the year ended December 31, 2022, an increase of $61.4 million, or 10.5%, compared to the prior year. Approximately $19.9 million of the increase, on a constant currency basis, was driven by the additional facilities in the warehouse segment as a result of the aforementioned acquisitions, including the growth and synergies experienced period-over-period during overlapping periods of ownership. The NOI for our same store pool increased $38.5 million on a constant currency basis, attributable to revenue and cost of operations factors previously described. Additionally, warehouse segment NOI was negatively impacted by the start-up costs incurred in connection with our expansion and development projects in the non-same store pool as they continue to ramp up prior to stabilization. The foreign currency translation of our results of operations had a $11.7 million unfavorable impact to the warehouse segment contribution period-over-period.

Same Store and Non-Same Store Results

We had 208 same stores for the years ended December 31, 2022 and 2021. The following table presents revenues, cost of operations, contribution (NOI) and margins for our same stores and non-same stores with a reconciliation to the total financial metrics of our warehouse segment for the years ended December 31, 2022 and December 31, 2021. Amounts related to the acquisitions of Bowman Stores, ColdCo, De Bruyn Cold Storage, KMT Brrr!, Lago Cold Stores, Liberty, Newark, one recently leased warehouse in Australia, a recently constructed facility in Denver purchased in November 2021, a leased facility which we purchased during the second quarter of 2022, as well as certain expansion and development projects not yet stabilized are reflected within non-same store results.

The following table presents revenues, cost of operations, contribution (NOI) and margins for our same stores and non-same stores with a reconciliation to the total financial metrics of our warehouse segment for the years ended December 31, 2022 and 2021.

	Year ended December 31,			Change	
	2022 actual	2022 constant currency[(1)]	2021 actual	Actual	Constant currency
Number of same store sites	208		208	n/a	n/a
Same store revenue:		(Dollars in thousands)			
Rent and storage	$ 862,268	$ 877,817	$ 783,256	10.1 %	12.1 %
Warehouse services	1,151,824	1,177,011	1,109,896	3.8 %	6.0 %
Total same store revenue	2,014,092	2,054,828	1,893,152	6.4 %	8.5 %
Same store cost of operations:					
Power	128,408	131,993	113,073	13.6 %	16.7 %
Other facilities costs	193,831	197,053	178,077	8.8 %	10.7 %
Labor	865,949	884,576	837,137	3.4 %	5.7 %
Other services costs	226,159	231,882	194,034	16.6 %	19.5 %
Total same store cost of operations	$ 1,414,347	$ 1,445,504	$ 1,322,321	7.0 %	9.3 %
Same store contribution (NOI)	$ 599,745	$ 609,324	$ 570,831	5.1 %	6.7 %
Same store rent and storage contribution (NOI)[(2)]	$ 540,029	$ 548,771	$ 492,106	9.7 %	11.5 %
Same store services contribution (NOI)[(3)]	$ 59,716	$ 60,553	$ 78,725	(24.1)%	(23.1)%
Total same store margin	29.8 %	29.7 %	30.2 %	-37 bps	-50 bps
Same store rent and storage margin[(4)]	62.6 %	62.5 %	62.8 %	-20 bps	-31 bps
Same store services margin[(5)]	5.2 %	5.1 %	7.1 %	-191 bps	-195 bps

	Year ended December 31,			Change	
	2022 actual	2022 constant currency[(1)]	2021 actual	Actual	Constant currency
Number of non-same store sites[(6)]	29		33	n/a	n/a
Non-same store revenue:		(Dollars in thousands)			
Rent and storage	$ 137,119	$ 141,970	$ 92,897	n/r	n/r
Warehouse services	151,760	155,855	99,338	n/r	n/r
Total non-same store revenue	288,879	297,825	192,235	n/r	n/r
Non-same store cost of operations:					
Power	27,253	29,006	16,462	n/r	n/r
Other facilities costs	38,113	39,384	30,095	n/r	n/r
Labor	140,913	143,800	97,645	n/r	n/r
Other services costs	46,113	47,076	32,428	n/r	n/r
Total non-same store cost of operations	$ 252,392	$ 259,266	$ 176,630	n/r	n/r
Non-same store contribution (NOI)	$ 36,487	$ 38,559	$ 15,605	n/r	n/r
Non-same store rent and storage contribution (NOI)[(2)]	$ 71,753	$ 73,580	$ 46,340	n/r	n/r
Non-same store services contribution (NOI)[(3)]	$ (35,266)	$ (35,021)	$ (30,735)	n/r	n/r
Total non-same store margin	12.6 %	12.9 %	8.1 %	n/r	n/r
Non-same store rent and storage margin[(4)]	52.3 %	51.8 %	49.9 %	n/r	n/r
Non-same store services margin[(5)]	(23.2)%	(22.5)%	(30.9)%	n/r	n/r
Total warehouse segment revenue	$ 2,302,971	$ 2,352,654	$ 2,085,387	10.4 %	12.8 %
Total warehouse cost of operations	$ 1,666,739	$ 1,704,769	$ 1,498,951	11.2 %	13.7 %
Total warehouse segment contribution	$ 636,232	$ 647,885	$ 586,436	8.5 %	10.5 %

(1) The adjustments from our U.S. GAAP operating results to calculate our operating results on a constant currency basis is the effect of changes in foreign currency exchange rates relative to the comparable prior period.
(2) Calculated as rent and storage revenues less power and other facilities costs.

(3) Calculated as warehouse services revenues less labor and other services costs.
(4) Calculated as rent and storage contribution (NOI) divided by rent and storage revenue.
(5) Calculated as warehouse services contribution (NOI) divided by warehouse services revenue.
(6) Refer to our Same Store Analysis previously disclosed that includes the composition of our Non-same store warehouse pool.
n/a - not applicable, the change in actual and constant currency metrics does not apply to site count.

The following table provides certain operating metrics to explain the drivers of our same store performance.

Units in thousands except per pallet and site number data - unaudited	Year ended December 31, 2022	2021	Change
Number of same store sites	208	208	n/a
Same store rent and storage:			
Economic occupancy[1]			
Average occupied economic pallets	3,879	3,714	4.4 %
Economic occupancy percentage	80.5 %	77.0 %	345 bps
Same store rent and storage revenue per economic occupied pallet	$ 222.27	$ 210.88	5.4 %
Constant currency same store rent and storage revenue per economic occupied pallet	$ 226.28	$ 210.88	7.3 %
Physical occupancy[2]			
Average physical occupied pallets	3,592	3,394	5.8 %
Average physical pallet positions	4,821	4,823	0.0 %
Physical occupancy percentage	74.5 %	70.4 %	413 bps
Same store rent and storage revenue per physical occupied pallet	$ 240.07	$ 230.81	4.0 %
Constant currency same store rent and storage revenue per physical occupied pallet	$ 244.40	$ 230.81	5.9 %
Same store warehouse services:			
Throughput pallets (in thousands)	35,733	36,281	(1.5)%
Same store warehouse services revenue per throughput pallet	$ 32.23	$ 30.59	5.4 %
Constant currency same store warehouse services revenue per throughput pallet	$ 32.94	$ 30.59	7.7 %
Number of non-same store sites[3]	29	33	n/a
Non-same store rent and storage:			
Economic occupancy[1]			
Average occupied economic pallets	439	333	n/r
Economic occupancy percentage	71.9 %	71.3 %	n/r
Physical occupancy[2]			
Average physical occupied pallets	399	308	n/r
Average physical pallet positions	610	467	n/r
Physical occupancy percentage	65.5 %	65.8 %	
Non-same store warehouse services:			
Throughput pallets (in thousands)	4,360	3,658	n/r

(1) We define average economic occupancy as the aggregate number of physically occupied pallets and any additional pallets otherwise contractually committed for a given period, without duplication. We estimate the number of contractually committed pallet positions by taking into account actual pallet commitment specified in each customers' contract, and subtracting the physical pallet positions.

(2) We define average physical occupancy as the average number of occupied pallets divided by the estimated number of average physical pallet positions in our warehouses for the applicable period. We estimate the number of physical pallet positions by taking into account actual racked space and by estimating unracked space on an as-if racked basis. We base this estimate on a formula utilizing the total cubic feet of each room within the warehouse that is unracked divided by the volume of an assumed rack space that is consistent with the characteristics of the relevant warehouse. On a warehouse by warehouse basis, rack space generally ranges from three to four feet depending upon the type of facility and the nature of the customer goods stored therein. The number of our pallet positions is reviewed and updated quarterly, taking into account changes in racking configurations and room utilization.

(3) Refer to our Same Store Analysis previously disclosed that includes the composition of our Non-same store warehouse pool.

Economic occupancy at our same stores was 80.5% for the year ended December 31, 2022, a increase of 345 basis points compared to 77.0% for the year ended December 31, 2021. Economic occupancy was higher than the prior year due to gradual improvements in food production levels particularly during the second half 2022. Same store rent and storage revenues per economic occupied pallet increased 5.4% period-over-period, primarily driven by our pricing initiative and contractual rate escalations, partially offset by unfavorable foreign currency translation. On a constant currency basis, our same store rent and storage revenues per occupied pallet increased 7.3% period-over-period. Our economic occupancy at our same stores was 597 basis points higher than our corresponding average physical occupancy of 74.5%.

Throughput pallets at our same stores were 35.7 million pallets for the year ended December 31, 2022, a decrease of 1.5% from 36.3 million pallets for the year ended December 31, 2021. This decrease was the result of a slight decline in end-consumer demand as basket sizes decreased due to the broader economic slowdown and a slight change in business mix. Same store warehouse services revenue per throughput pallet increased 5.4% compared to the prior year primarily as a result of by our our pricing initiative and contractual rate escalations, partially offset by unfavorable foreign currency translation as previously discussed. On a constant currency basis, our same store services revenue per throughput pallet increased 7.7% compared to the prior year.

Transportation Segment

The following table presents the operating results of our transportation segment for the years ended December 31, 2022 and 2021.

	Year ended December 31,			Change	
	2022 actual	2022 constant currency(1)	2021 actual	Actual	Constant currency
	(Dollars in thousands)				
Transportation revenue	$ 313,358	$ 331,556	$ 312,092	0.4 %	6.2 %
Transportation cost of operations	265,956	283,182	282,716	(5.9)%	0.2 %
Transportation segment contribution (NOI)	$ 47,402	$ 48,374	$ 29,376	61.4 %	64.7 %
Transportation margin	15.1 %	14.6 %	9.4 %	571 bps	518 bps

(1) The adjustments from our U.S. GAAP operating results to calculate our operating results on a constant currency basis are the effect of changes in foreign currency exchange rates relative to the comparable prior period.

Transportation revenue was $313.4 million for the year ended December 31, 2022, an increase of $1.3 million, or 0.4%, compared to $312.1 million for the year ended December 31, 2021. On a constant currency basis, transportation revenue was $331.6 million for the year ended December 31, 2022, an increase of $19.5 million, or 6.2%, compared to the prior year. The increase was primarily due to higher rates in our consolidation business, the associated transportation revenue from recently completed acquisitions, and the higher revenue associated with brokered transportation cost. This is partially offset by the net decrease in revenue from the rationalization of certain domestic market operations and the unfavorable impact of foreign currency translation.

Transportation cost of operations was $266.0 million for the year ended December 31, 2022, a decrease of $16.8 million, or 5.9%, compared to $282.7 million for the year ended December 31, 2021. On a constant currency basis, transportation cost of operations was $283.2 million for the year ended December 31, 2022, an increase of $0.5 million, or 0.2%, compared to the prior year. The decrease was primarily due to the decrease of costs from the exit of certain domestic market operations, improved transportation procurement and the favorable impact of foreign currency translation.

Transportation segment contribution (NOI) was $47.4 million for the year ended December 31, 2022, an increase of $18.0 million, or 61.4%, compared to $29.4 million for the year ended December 31, 2021. Transportation segment margin increased 571 basis points from the prior year, to 15.1% from 9.4%. On a constant currency basis, transportation segment contribution was $48.4 million for the year ended December 31, 2022, an increase of $19.0 million, or 64.7%, compared to the prior year. The increase in margin was primarily due to the rate increases implemented and improved transportation procurement during 2022.

Third-Party Managed Segment

The following table presents the operating results of our third-party managed segment for the years ended December 31, 2022 and 2021.

	Year ended December 31,			Change	
	2022 actual	2022 constant currency[1]	2021 actual	Actual	Constant currency
Number of managed sites	5		9		
		(Dollars in thousands)			
Third-party managed revenue	$ 298,406	$ 300,308	$ 317,311	(6.0)%	(5.4)%
Third-party managed cost of operations	286,077	287,638	303,347	(5.7)%	(5.2)%
Third-party managed segment contribution	$ 12,329	$ 12,670	$ 13,964	(11.7)%	(9.3)%
Third-party managed margin	4.1 %	4.2 %	4.4 %	-27 bps	-18 bps

(1) The adjustments from our U.S. GAAP operating results to calculate our operating results on a constant currency basis are the effect of changes in foreign currency exchange rates relative to the comparable prior period.

Third-party managed revenue was $298.4 million for the year ended December 31, 2022, a decrease of $18.9 million, or 6.0%, compared to $317.3 million for the year ended December 31, 2021. On a constant currency basis, third-party managed revenue was $300.3 million for the year ended December 31, 2022, a decrease of $17.0 million, or 5.4%, compared to the prior year. This decrease was due to the wind down of operations for our largest domestic third-party managed customer, lower volumes and a reduction in certain costs that are a direct pass-through to the customer, discussed below.

Third-party managed cost of operations was $286.1 million for the year ended December 31, 2022, a decrease of $17.3 million, or 5.7%, compared to $303.3 million for the year ended December 31, 2021. On a constant currency basis, third-party managed cost of operations was $287.6 million for the year ended December 31, 2022, a decrease of $15.7 million, or 5.2%, compared to the prior year. Third-party managed cost of operations decreased as a result of the wind down of operations for our largest domestic third-party managed customer, lower volumes and lower costs including health care and travel expenses.

Third-party managed segment contribution (NOI) was $12.3 million for the year ended December 31, 2022, a decrease of $1.6 million, or 11.7%, compared to $14.0 million for the year ended December 31, 2021. The decline was driven by the reasons previously described. On a constant currency basis, third-party managed segment contribution (NOI) was $12.7 million for the year ended December 31, 2022, a decrease of $1.3 million, or 9.3%, compared to the prior year.

Other Consolidated Operating Expenses

Depreciation and amortization. Depreciation and amortization expense was $331.4 million for the year ended December 31, 2022, an increase of $11.6 million, or 3.6%, compared to $319.8 million for the year ended December 31, 2021. This increase was primarily due to the 2021 acquisitions, expansions and developments, partially offset by the favorable impact of foreign currency translation.

Selling, general and administrative. Corporate-level selling, general and administrative expenses were $231.1 million for the year ended December 31, 2022, an increase of $49.0 million, or 26.9%, compared to $182.1 million for the year ended December 31, 2021. Included in these amounts are business development expenses attributable to new business pursuits, supply chain solutions and underwriting, facility development, customer onboarding, and engineering and consulting services to support our customers in the cold chain. We believe these costs are comparable to leasing costs for other publicly-traded REITs. Business development expenses represented approximately 17% and 17% of corporate-level selling, general and administrative expenses for the year ended December 31, 2022 and 2021, respectively. The increase in selling, general and administrative expenses was due to the resumption of performance-based compensation expense in connection with the short-term incentive plan, higher third-party professional and consulting fees and higher share-based compensation expense from the November 2021 retention grant. For the years ended December 31, 2022 and 2021, corporate-level selling, general and administrative expenses were 7.9% and 6.7% of total revenues, respectively.

Acquisition, litigation and other. Corporate-level acquisition, litigation and other expenses were $32.5 million for the year ended December 31, 2022, a decrease of $19.1 million compared to $51.6 million for the year ended December 31, 2021. During the year ended December 31, 2022, we incurred $24.0 million of acquisition and integration related expenses, an aggregate $6.5 million of severance related expenses due to the realignment of certain international operations and senior leadership changes, $4.2 million of terminated site operating costs, partially offset by $2.2 million of insurance recoveries related to cyber incidents. During the year ended December 31, 2021, we incurred $39.3 million of acquisition related expenses primarily composed of professional fees and integration related costs, including severance and employee retention expenses, in connection with completed and potential acquisitions, primarily related to the Agro acquisition. We also incurred aggregate severance of $8.9 million, of which $4.6 million related to severance of our former CEO and $4.3 million related to the realignment of our international operations.

Impairment of indefinite and long-lived assets. For the years ended December 31, 2022 and 2021, we recorded impairment charges of $7.4 million and $3.3 million, respectively. The charges incurred during the year ended December 31, 2022 include $3.2 million of goodwill impairment as we are strategically shifting our focus to our core warehouse portfolio and are no longer serving one of our largest historical customers in the third-party managed segment, an impairment charge of “Assets under construction” of $2.2 million associated with a development project which management determined it would no longer pursue, and aggregate charges of $1.7 million of “Buildings, property and equipment” associated with the anticipated exit of certain leased facilities. The charges incurred during the year ended December 31, 2021 include $1.7 million related to costs associated with development projects which management determined it would no longer pursue, and $1.6 million for certain software costs that were supplanted with upgrades or replacements.

Loss from sale of real estate. For the year ended December 31, 2022, we recorded a $5.7 million loss from the sale of real estate related to a facility where a customer exercised its option to purchase the facility and we recorded a loss for the excess book value.

Other Expense

The following table presents other items of income and expense for the years ended December 31, 2022 and 2021.

	Year ended December 31,		Change
	2022	2021	%
	(Dollars in thousands)		
Other (expense) income:			
Interest expense	$ (116,127)	$ (99,177)	17.1 %
Interest income	$ 1,633	$ 841	94.2 %
Loss on debt extinguishment, modifications and termination of derivative instruments	$ (3,217)	$ (5,689)	(43.5)%
Foreign currency exchange loss	$ (975)	$ (610)	59.8 %
Other income - net	$ 1,806	$ 1,791	0.8 %
Loss from partially owned entities	$ (9,300)	$ (2,004)	n/r

n/r= not relevant

Interest expense. Interest expense was $116.1 million for the year ended December 31, 2022, an increase of $17.0 million, or 17.1%, compared to $99.2 million for the year ended December 31, 2021. The average effective interest rate of our outstanding debt increased from 3.14% for the year ended December 31, 2021 to 3.65% for the year ended December 31, 2022 due to higher average borrowings paired with rising interest rates associated with our Senior Unsecured Credit Facility. In August 2022, we completed a refinancing of our Senior Unsecured Credit Facility and entered into interest rate swaps to fix the interest rate on a substantial portion of this facility. In December 2022, we entered into additional interest rate swaps to fix the interest rate on the remainder of our term loan. Our revolving credit facility borrowings continue to incur interest under the applicable variable, floating rate. Refer to Notes 9 and Note 10 of the Consolidated Financial Statements for additional information regarding these transactions.

Interest income. Interest income of $1.6 million for the year ended December 31, 2022 increased $0.8 million when compared to $0.8 million for the year ended December 31, 2021. The increase was driven by higher interest billings to customers with past due amounts as compared to the prior year.

Loss on debt extinguishment, modifications and termination of derivative instruments. Loss on debt extinguishment, modifications, and termination of derivative instruments of $3.2 million for the year ended December 31, 2022 decreased as compared to the year ended December 31, 2021 primarily due to the early repayment of $200 million of principal on the Senior Unsecured Term Loan A Facility during the first quarter of 2021, which resulted in a charge of $2.9 million, partially offset by a charge of $0.6 million due to the refinancing that occurred during 2022. Additionally, during the years ended 2022 and 2021, we recorded $2.5 million and $2.7 million, respectively, for the amortization of fees paid for the interest rate swaps terminated during 2020.

Foreign currency exchange loss, net. We reported a foreign currency exchange loss of $1.0 million for the year ended December 31, 2022 compared to a $0.6 million loss for the year ended December 31, 2021. The increase in foreign currency exchange loss due to unfavorable foreign currency exchange rates because of the relative strength of the US dollar against foreign currencies that we transact in.

Other income (expense) - net. Other income, net was $1.8 million for each of the years ended December 31, 2022 and 2021. For the year ended December 31, 2022, this includes a $3.4 million gain related to the dissolution of the New Market Tax Credit entities during 2022, $2.2 million credit in non-service pension costs and $3.2 million of income from various tax credits. These gains were partially offset by $3.5 million in aggregate net loss from asset disposals, as well as a $4.1 million loss in connection with the deconsolidation of

our Chilean operations upon contribution to the LATAM JV. For the year ended December 31, 2021, Other income, net of $1.8 million consisted of income of $1.3 million from various tax credits, a $0.7 million credit in non-service pension costs, partially offset by $0.3 million in aggregate net loss from asset disposals.

Loss from partially owned entities. We reported a loss of $9.3 million for the year ended December 31, 2022 compared to a loss of $2.0 million for the year ended December 31, 2021. The increase is primarily driven by higher interest expense incurred by our joint ventures given rising interest rates.

Income Tax Benefit

Income tax benefit for the year ended December 31, 2022 was $18.8 million, which represented an increase of $17.2 million, from an income tax benefit of $1.6 million for the year ended December 31, 2021. The tax benefit was principally created by $17.2 million in foreign losses generated in 2022, compared to a benefit of $7.4 million for foreign losses in 2021. We also recognized a $1.3 million tax benefit in 2022 for the release of valuation allowance as compared to a $7.1 million benefit for the release of valuation allowance in 2021. Certain non-recurring adjustments included a $6.5 million tax benefit in 2022 for the deconsolidation of our Chilean subsidiary and an $11.8 million deferred tax expense in 2021 to remeasure our net deferred tax liability in the United Kingdom due to the tax rate increase from 19% to 25%. Other adjustments consisted of $6.2 million tax expense in 2022 compared to $1.1 million tax expense in 2021; other adjustments primarily consisted of shared based compensation and non-deductible items.

Non-GAAP Financial Measures

We use the following non-GAAP financial measures as supplemental performance measures of our business: FFO, Core FFO, Adjusted FFO, EBITDAre, Core EBITDA and net debt to pro-forma Core EBITDA.

We calculate funds from operations, or FFO, in accordance with the standards established by the Board of Governors of the National Association of Real Estate Investment Trusts, or NAREIT. NAREIT defines FFO as net income or loss determined in accordance with U.S. GAAP, excluding extraordinary items as defined under U.S. GAAP and gains or losses from sales of previously depreciated operating real estate assets, plus specified non-cash items, such as real estate asset depreciation and amortization, real estate asset impairment and our share of reconciling items for partially owned entities. We believe that FFO is helpful to investors as a supplemental performance measure because it excludes the effect of depreciation, amortization and gains or losses from sales of real estate, all of which are based on historical costs, which implicitly assumes that the value of real estate diminishes predictably over time. Since real estate values instead have historically risen or fallen with market conditions, FFO can facilitate comparisons of operating performance between periods and among other equity REITs.

We calculate core funds from operations, or Core FFO, as FFO adjusted for the effects of gain or loss on the sale of non-real estate assets, acquisition, litigation and other, net, goodwill and other non-core impairment, share-based compensation expense for the IPO retention grants, loss on debt extinguishment, modifications and termination of derivative instruments, bridge loan commitment fees and foreign currency exchange loss. We also adjust for the impact of Core FFO attributable to gain on extinguishment of New Market Tax Structure, loss on deconsolidation of subsidiary contributed to the LATAM joint venture and our share of reconciling items related to partially owned entities. We believe that Core FFO is helpful to investors as a supplemental performance measure because it excludes the effects of certain items which can create significant earnings volatility, but which do not directly relate to our core business operations. We believe Core FFO can facilitate comparisons of operating performance between periods, while also providing a more meaningful predictor of future earnings potential.

However, because FFO and Core FFO add back real estate depreciation and amortization and do not capture the level of maintenance capital expenditures necessary to maintain the operating performance of our properties, both of which have material economic impacts on our results from operations, we believe the utility of FFO and Core FFO as a measure of our performance may be limited.

We calculate adjusted funds from operations, or Adjusted FFO, as Core FFO adjusted for the effects of amortization of deferred financing costs and pension withdrawal liability, non-real estate asset impairment, amortization of above or below market leases, straight-line net rent, provision or benefit from deferred income taxes, share-based compensation expense from grants under our equity incentive plans, excluding IPO grants, non-real estate depreciation and amortization, non-real estate depreciation and amortization from foreign joint ventures and maintenance capital expenditures. We also adjust for AFFO attributable to our share of reconciling items of partially owned entities. We believe that Adjusted FFO is helpful to investors as a meaningful supplemental comparative performance measure of our ability to make incremental capital investments in our business and to assess our ability to fund distribution requirements from our operating activities.

FFO, Core FFO and Adjusted FFO are used by management, investors and industry analysts as supplemental measures of operating performance of equity REITs. FFO, Core FFO and Adjusted FFO should be evaluated along with U.S. GAAP net income and net income per diluted share (the most directly comparable U.S. GAAP measures) in evaluating our operating performance. FFO, Core FFO and Adjusted FFO do not represent net income or cash flows from operating activities in accordance with U.S. GAAP and are not indicative of our results of operations or cash flows from operating activities as disclosed in our consolidated statements of operations included elsewhere in this Annual Report on Form 10-K. FFO, Core FFO and Adjusted FFO should be considered as supplements, but not alternatives, to our net income or cash flows from operating activities as indicators of our operating performance. Moreover, other REITs may not calculate FFO in accordance with the NAREIT definition or may interpret the NAREIT definition differently than we do. Accordingly, our FFO may not be comparable to FFO as calculated by other REITs. In addition, there is no industry definition of Core FFO or Adjusted FFO and, as a result, other REITs may also calculate Core FFO or Adjusted FFO, or other similarly-captioned metrics, in a manner different than we do. The table below reconciles FFO, Core FFO and Adjusted FFO to net (loss) income, which is the most directly comparable financial measure calculated in accordance with U.S. GAAP.

Reconciliation of Net Income to NAREIT FFO, Core FFO, and Adjusted FFO

(in thousands)

	Year Ended December 31,		
	2022	2021	2020
Net (loss) income	$ (19,474)	$ (30,309)	$ 24,555
Adjustments:			
Real estate related depreciation	210,171	200,184	146,417
Net loss (gain) on sale of real estate (a)	5,689	—	(21,759)
Net loss on asset disposals	1,135	12	2,045
Impairment charges on certain real estate assets	3,407	1,752	5,630
Our share of reconciling items related to partially owned entities	4,410	2,412	449
NAREIT FFO	$ 205,338	$ 174,051	$ 157,337
Adjustments:			
Net loss on sale of non-real assets	2,421	267	595
Acquisition, litigation, and other	32,511	51,578	36,306
Goodwill and other non-core impairment	3,209	—	2,606
Share-based compensation expense, IPO grants	—	163	972
Loss on debt extinguishment, modifications, and termination of derivative instruments	3,217	5,689	9,975
Bridge loan commitment fee	—	—	2,438
Foreign currency exchange loss	975	610	45,278
Gain on extinguishment of New Market Tax Credit Structure	(3,410)	—	—
Loss on deconsolidation of Chile Joint Venture	4,148	—	—
Our share of reconciling items related to partially owned entities	574	439	194
Core FFO	248,983	232,797	255,701
Adjustments:			
Amortization of deferred financing costs and pension withdrawal liability	4,833	4,425	5,147
Non-real estate asset impairment	764	1,560	—
Amortization of below/above market leases	2,131	2,261	152
Straight-line net rent	747	(216)	(628)
Deferred income taxes benefit	(22,561)	(9,147)	(13,732)
Share-based compensation, excluding IPO grants	27,137	23,737	16,939
Non-real estate depreciation and amortization	121,275	119,656	69,474
Maintenance capital expenditures (b)	(85,511)	(75,965)	(65,547)
Our share of reconciling items related to partially owned entities	2,482	387	371
Adjusted FFO	$ 300,280	$ 299,495	$ 267,877

(a) Net loss (gain) on sale of real estate, net of withholding tax include withholding tax on the sale of Sydney land which is included in income tax expense on the Consolidated Statement of Operations during 2020.

(b) Maintenance capital expenditures include capital expenditures made to extend the life of, and provide future economic benefit from, our existing temperature-controlled warehouse network and its existing supporting personal property and information technology.

We calculate EBITDA for Real Estate, or EBITDAre, in accordance with the standards established by the Board of Governors of NAREIT, defined as, earnings before interest expense, taxes, depreciation and amortization, net gain on sale of real estate, net of withholding taxes, and adjustment to reflect share of EBITDAre of partially owned entities. EBITDAre is a measure commonly used in our industry, and we present EBITDAre to enhance investor understanding of our operating performance. We believe that EBITDAre provides investors and analysts with a measure of operating results unaffected by differences in capital structures, capital investment cycles and useful life of related assets among otherwise comparable companies.

We also calculate our Core EBITDA as EBITDAre further adjusted for acquisition, litigation and other, net, loss on partially owned entities, impairment of indefinite and long-lived assets, foreign currency exchange gain or loss, share-based compensation expense, loss on debt extinguishment, modifications and termination of derivative instruments, gain on extinguishment of New Market Tax Credit structure, loss on deconsolidation of subsidiary contributed to joint venture, net loss on other asset disposals, and reduction in EBITDAre from partially owned entities. We believe that the presentation of Core EBITDA provides a measurement of our operations that is meaningful to investors because it excludes the effects of certain items that are otherwise included in EBITDAre but which we do not believe are indicative of our core business operations. EBITDAre and Core EBITDA are not measurements of financial performance under U.S. GAAP, and our EBITDAre and Core EBITDA may not be comparable to similarly titled measures of other companies. You should not consider our EBITDAre and Core EBITDA as alternatives to net income or cash flows from operating activities determined in accordance with U.S. GAAP. Our calculations of EBITDAre and Core EBITDA have limitations as analytical tools, including:

- these measures do not reflect our historical or future cash requirements for maintenance capital expenditures or growth and expansion capital expenditures;
- these measures do not reflect changes in, or cash requirements for, our working capital needs;
- these measures do not reflect the interest expense, or the cash requirements necessary to service interest or principal payments, on our indebtedness;
- these measures do not reflect our tax expense or the cash requirements to pay our taxes; and
- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized will often have to be replaced in the future and these measures do not reflect any cash requirements for such replacements.

We use EBITDAre and Core EBITDA as measures of our operating performance and not as measures of liquidity. The table below reconciles EBITDAre and Core EBITDA to net (loss) income, which is the most directly comparable financial measure calculated in accordance with U.S. GAAP.

Net debt to proforma Core EBITDA is calculated using total debt, plus capital lease obligations, less cash and cash equivalents, divided by pro-forma Core EBITDA. We calculate pro-forma Core EBITDA as Core EBITDA further adjusted for acquisitions, dispositions and for rent expense associated with lease buy-outs and lease exits. The pro-forma adjustment for acquisitions reflects the Core EBITDA for the period of time prior to acquisition. The pro-forma adjustment for leased facilities exited or purchased reflects the add-back for the related lease expense from the last year. The pro-forma adjustment for dispositions reduces Core EBITDA for the earnings of facilities disposed of or exited during the year, including the strategic exit of certain third-party managed business.

Reconciliation of Net Income to NAREIT EBITDAre and Core EBITDA
(In thousands)

	Year Ended December 31,		
	2022	**2021**	**2020**
Net loss (income)	$ (19,474)	$ (30,309)	$ 24,555
Adjustments:			
Depreciation and amortization	331,446	319,840	215,891
Interest expense	116,127	99,177	91,481
Income taxes benefit	(18,836)	(1,569)	(7,292)
EBITDA	409,263	387,139	324,635
Adjustments:			
Loss (gain) on sale of real estate	5,689	—	(21,759)
Adjustment to reflect share of EBITDAre of partially owned entities	17,815	8,966	1,022
NAREIT EBITDAre	$ 432,767	$ 396,105	$ 303,898
Adjustments:			
Acquisition, litigation and other, net	32,511	51,578	36,306
Loss on partially owned entities	9,300	2,004	250
Impairment of indefinite and long-lived assets	7,380	3,312	8,236
Foreign currency exchange loss	975	610	45,278
Share-based compensation expense	27,137	23,900	17,911
Loss on debt extinguishment, modifications, and terminations of derivatives instruments	3,217	5,689	9,975
Bridge loan commitment fees	—	—	2,438
Loss on other asset disposals	3,556	279	2,640
Gain on extinguishment of New Market Tax Credit Structure	(3,410)	—	—
Loss on deconsolidation of Chile Joint Venture	4,148	—	—
Reduction in EBITDAre from partially owned entities	(17,815)	(8,966)	(1,022)
Core EBITDA	$ 499,766	$ 474,511	$ 425,910

	As of December 31,	
	2022	2021
	(In thousands)	
Borrowings under revolving line of credit	$ 500,052	$ 399,314
Mortgage notes, senior unsecured notes and term loan – net of deferred financing costs of $13,044 and $11,050 in the aggregate, at December 31, 2022 and 2021, respectively	2,569,281	2,443,806
Sale-leaseback financing obligations	171,089	178,817
Financing lease obligations	77,561	97,633
Total debt	3,317,983	3,119,570
Deferred financing costs	13,044	11,050
Gross debt	3,331,027	3,130,620
Adjustments:		
Less: cash, cash equivalents and restricted cash	53,063	82,958
Net debt	$ 3,277,964	$ 3,047,662
Core EBITDA	$ 499,766	$ 474,511
Adjustments	(3,588)	25,190
Pro-forma Core EBITDA	$ 496,178	$ 499,701
Net debt to pro-forma Core EBITDA[(1)]	6.6 x	6.1 x

(1) Net debt to Core EBITDA represents (i) our gross debt (defined as total debt plus discount and deferred financing costs) less cash and cash equivalents divided by (ii) Core EBITDA. Pro-forma Core EBITDA for 2022, 2021, and 2020 for purposes of this calculation assumes ownership of our acquisitions for the full twelve months of the year, includes an add-back for rent expense on leased facilities exited or purchased, and is reduced by Core EBITDA of dispositions. Our management believes that this ratio is useful because it provides investors with information regarding gross debt less cash and cash equivalents, which could be used to repay debt, compared to our performance as measured using Core EBITDA.

Liquidity and Capital Resources

We currently expect that our principal sources of funding for working capital, facility acquisitions, business combinations, expansions, maintenance and renovation of our properties, developments projects, debt service and distributions to our stockholders will include:

- current cash balances;
- cash flows from operations;
- our Senior Unsecured Revolving Credit Facility;
- our ATM Equity Program; and
- other forms of debt financings and equity offerings, including capital raises through joint ventures.

We expect that our funding sources as noted above are adequate and will continue to be adequate to meet our short-term liquidity requirements and capital commitments. These liquidity requirements and capital commitments include:

- operating activities and overall working capital;
- capital expenditures;
- capital contributions and investments in joint ventures;
- debt service obligations; and
- quarterly stockholder distributions.

We expect to utilize the same sources of capital we will rely on to meet our short-term liquidity requirements to also meet our long-term liquidity requirements, which include funding our operating activities, our debt service obligations and stockholder distributions, and our future development and acquisition activities.

We are a well-known seasoned issuer with an effective shelf registration statement filed on April 16, 2020, which registered an indeterminate amount of common shares, preferred shares, depositary shares and warrants, as well as debt securities of the Operating Partnership, which will be fully and unconditionally guaranteed by us. As circumstances warrant, we may issue equity securities from time to time on an opportunistic basis, dependent upon market conditions and available pricing. We may use the proceeds for general corporate purposes, which may include the repayment of outstanding indebtedness, the funding of development, expansion and acquisition opportunities and to increase working capital.

On May 10, 2021, we entered into an equity distribution agreement pursuant to which we may sell, from time to time, up to an aggregate sales price of $900.0 million of our common shares through an ATM Equity Program (the “2021 ATM Equity Program”). Sales of our common stock made pursuant to the 2021 ATM Equity Program may be made in negotiated transactions or transactions that are deemed to be “at the market” offerings as defined in Rule 415 under the Securities Act, including sales made directly on the NYSE, or sales made to or through a market maker other than on an exchange, or as otherwise agreed between the applicable Agent and us. Sales may also be made on a forward basis pursuant to separate forward sale agreements. The net proceeds from sales of our common stock pursuant to the 2021 ATM Equity Program were used for funding acquisitions and development projects. During the year ended December 31, 2021, there were 2,332,846 common shares sold under the 2021 ATM Equity Program under forward sale agreements for gross proceeds of $90.6 million. All of these shares were settled during the year ended December 31, 2021.

Security Interests in Customers' Products

By operation of law and in accordance with our customer contracts (other than leases), we typically receive warehouseman's liens on products held in our warehouses to secure customer payments. Such liens permit us to take control of the products and sell them to third parties in order to recover any monies receivable on a delinquent account, but such products may be perishable or otherwise not available to us for re-sale. Historically, in instances where we have warehouseman's liens and our customer sought bankruptcy protection, we have been successful in receiving "critical vendor" status, which has allowed us to fully collect on our accounts receivable during the pendency of the bankruptcy proceeding.

Our bad debt expense was $5.9 million and $3.1 million for the years ended December 31, 2022 and 2021, respectively. As of December 31, 2022, we maintained bad debt allowances of approximately $16.0 million, which we believed to be adequate. The increase in bad debt expense is driven primarily by the increase in revenue as well as a slight increase in the aged accounts receivable.

Dividends and Distributions

We are required to distribute 90% of our taxable income (excluding capital gains) on an annual basis in order to continue to qualify as a REIT for federal income tax purposes. Accordingly, we intend to make, but are not contractually bound to make, regular quarterly distributions to stockholders from cash flows from our operating activities. While historically we have satisfied this distribution requirement by making cash distributions to our stockholders, we may choose to satisfy this requirement by making distributions of cash or other property. All such distributions are at the discretion of our Board of Directors. We consider market factors and our performance in addition to REIT requirements in determining distribution levels. We have distributed at least 100% of our taxable income annually since inception to minimize corporate-level federal income taxes. Amounts accumulated for distribution to stockholders are invested primarily in interest-bearing accounts, which are consistent with our intention to maintain our status as a REIT.

As a result of this distribution requirement, we cannot rely on retained earnings to fund our ongoing operations to the same extent that other companies which are not REITs can. We may need to continue to raise capital in the debt and equity markets to fund our working capital needs, as well as potential developments in new or existing properties, acquisitions or investments in existing or newly created joint ventures. In addition, we may be required to use borrowings under our revolving credit facility, if necessary, to meet REIT distribution requirements and maintain our REIT status.

Outstanding Indebtedness

The following table summarizes our outstanding indebtedness as of December 31, 2022 (in thousands):

Debt Summary:		
Fixed rate	$	2,582,325
Variable rate - unhedged		500,052
Total mortgage notes, senior unsecured notes, term loans and borrowings under revolving line of credit		3,082,377
Sale-leaseback financing obligations		171,089
Financing lease obligations		77,561
Total debt and debt-like obligations	$	3,331,027
Percent of total debt and debt-like obligations:		
Fixed rate		85 %
Variable rate		15 %
Effective interest rate as of December 31, 2022		3.95 %

The variable rate debt shown above bears interest at interest rates based on various one-month SOFR, CDOR, SONIA, BBSW, EURIBOR, and BKBM rates, depending on the respective agreement governing the debt, including our global revolving credit facilities. As of December 31, 2022, our debt had a weighted average term to maturity of approximately 5.7 years , assuming exercise of extension options.

For further information regarding outstanding indebtedness, please see Note 9 and Note 10 to our consolidated financial statements included in this 2022 Annual Report on Form 10-K as filed with the SEC.

Credit Ratings

Our capital structure and financial practices have earned us investment grade credit ratings from three nationally recognized credit rating agencies. We have investment grade ratings of BBB with a negative outlook from Fitch, BBB with a Stable Trends outlook from DBRS Morningstar, and an investment grade rating of Baa3 with a stable outlook from Moody's. These credit ratings are important to our ability to issue debt at favorable rates of interest, among other terms. Refer to our risk factor "*Adverse changes in our credit ratings could negatively impact our financing activity"* for further details regarding the potential impacts from changes to our credit ratings.

Maintenance Capital Expenditures and Repair and Maintenance Expenses

We utilize a strategic approach to recurring maintenance capital expenditures and repair and maintenance expenses to maintain the high quality and operational efficiency of our warehouses and ensure that our warehouses meet the "mission-critical" role they serve in the cold chain.

Maintenance Capital Expenditures

Maintenance capital expenditures are capitalized investments made to extend the life of, and provide future economic benefit from, our existing temperature-controlled warehouse network and its existing supporting personal property and information technology systems. Examples of maintenance capital expenditures related to our existing temperature-controlled warehouse network include replacing roofs and refrigeration equipment, and upgrading our racking systems. Examples of maintenance capital expenditures related to personal property include expenditures on material handling equipment (*e.g.*, fork lifts and pallet jacks) and related batteries. Examples of maintenance capital expenditures related to information technology include expenditures on existing servers, networking equipment and current software. Maintenance capital expenditures do not include acquisition costs contemplated when underwriting the purchase of a building or costs which are incurred to bring a building up to Americold's operating standards. The following table sets forth our recurring maintenance capital expenditures for the years ended December 31, 2022 and 2021.

	Year ended December 31,	
	2022	2021
	(In thousands, except per cubic foot amounts)	
Real estate	$ 74,852	$ 62,677
Personal property	4,232	5,828
Information technology	6,427	7,460
Maintenance capital expenditures[(1)]	$ 85,511	$ 75,965
Maintenance capital expenditures per cubic foot	$ 0.059	$ 0.052

(1) Excludes $18.4 million and $15.8 million of deferred acquisition maintenance capital expenditures incurred for the years ended December 31, 2022 and 2021, respectively.

Repair and Maintenance Expenses

We incur repair and maintenance expenses that include costs of normal maintenance and repairs and minor replacements that do not materially extend the life of the property or provide future economic benefits. Repair and maintenance expenses consist of expenses related to our existing temperature-controlled warehouse network and its existing supporting personal property and are reflected as operating expenses on our income statement. Examples of repair and maintenance expenses related to our warehouse portfolio include ordinary repair and maintenance on roofs, racking, walls, doors, parking lots and refrigeration equipment. Examples of repair and maintenance expenses related to personal property include ordinary repair and maintenance expenses on material handling equipment (*e.g.*, fork lifts and pallet jacks) and related batteries. The following table sets forth our repair and maintenance expenses for the years ended December 31, 2022 and 2021.

	Year ended December 31,	
	2022	2021
	(In thousands, except per cubic foot amounts)	
Real estate	$ 41,086	$ 31,612
Personal property	61,822	53,006
Repair and maintenance expenses	$ 102,908	$ 84,618
Repair and maintenance expenses per cubic foot	$ 0.071	$ 0.058

External Growth, Expansion and Development Capital Expenditures

External growth expenditures represent asset acquisitions or business combinations. Expansion and development capital expenditures are investments made to support both our customers and our warehouse

expansion and development initiatives. It also includes investments in enhancing our information technology platform. Examples of capital expenditures associated with expansion and development initiatives include funding of construction costs, increases to warehouse capacity and pallet positions, acquisitions of reusable incremental material handling equipment, and implementing energy efficiency projects, such as thermal energy storage, LED lighting, motion-sensor technology, variable frequency drives for our fans and compressors, rapid-close doors and alternative-power generation technologies. Examples of capital expenditures to enhance our information technology platform include the delivery of new systems and software and customer interface functionality.

Acquisitions

During the year ended December 31, 2022 we completed the acquisition of De Bruyn Cold Storage. During the year ended December 31, 2021, we completed the acquisitions of Bowman Stores, ColdCo, KMT Brrr!, Lago Cold Stores, Liberty Freezers, Newark Facility Management and a recently constructed facility in Denver. Refer to Note 3 of the Consolidated Financial Statements for details of the purchase price allocation for each acquisition.

Expansion and development

The expansion and development expenditures for the year ended December 31, 2022 are primarily driven by $37.5 million related to our two fully-automated, build-to-suit, development sites in Connecticut and Pennsylvania, $26.0 million for the Spearwood, Australia expansion, $13.5 million related to the Dunkirk, NY development, $18.8 million in our Dublin expansion, $8.8 million for the Barcelona expansion, $24.0 million related to our Russellville expansion, $12.4 million related to Atlanta Major Market Strategy Phase 2, and $8.4 million related to the Rochelle facility. During the year ended December 31, 2022, we also incurred capitalized interest of $11.8 million and capitalized insurance, property taxes, and compensation and travel expense aggregating to $5.5 million related to our ongoing expansion and development projects.

The expansion and development expenditures for the year ended December 31, 2021 are primarily driven by $111.2 million related to two fully-automated, build-to-suit, development sites in Connecticut and Pennsylvania, $23.9 million for the Atlanta major markets strategy project (Phase 1) and $21.0 million related to Phase 2, $37.5 million for the Russellville expansion, $9.5 million for the Calgary, Canada expansion, $20.4 million related to the Auckland, New Zealand expansion project, $24.0 million for the Dunkirk, NY development, $13.5 million for the Dublin expansion, $4.4 million for the Spearwood, Australia expansion and $4 million for the Lurgan expansion. During the year ended December 31, 2021, we also incurred capitalized interest of $11.6 million and capitalized insurance, property taxes, and compensation and travel expense aggregating to $3.5 million related to our ongoing expansion and development projects.

Expansion and development initiatives also include $22.5 million and $26.8 million of corporate initiatives and smaller customer driven growth projects incurred during 2022 and 2021, respectively, which are projects designed to reduce future spending over the course of time. This category reflects return on investment projects, conversion of leases to owned assets, and other cost-saving initiatives.

Finally, we incurred approximately $1.5 million and $13.2 million during 2022 and 2021, respectively, for contemplated future expansion or development projects.

The following table sets forth our acquisitions, expansion and development capital expenditures for the years ended December 31, 2022 and 2021 (in thousands).

	Year ended December 31,	
	2022	2021
Acquisitions, net of cash acquired and adjustments	$ 15,829	$ 741,353
Asset acquisitions	14,581	53,641
Expansion and development initiatives	190,718	324,499
Information technology	6,910	7,630
Growth and expansion capital expenditures	$ 228,038	$ 1,127,123

Historical Cash Flows

The following summary discussion of our cash flows is based on the Consolidated Statements of Cash Flows and is not meant to be an all-inclusive discussion of the changes in our cash flows for the periods presented below.

	Year ended December 31,	
	2022	2021
	(In thousands)	
Net cash provided by operating activities	$ 299,996	$ 273,060
Net cash used in investing activities	$ (348,489)	$ (1,239,199)
Net cash provided by financing activities	$ 23,325	$ 431,489

Operating Activities

For the year ended December 31, 2022, our net cash provided by operating activities was $300.0 million, an increase of $26.9 million, or 9.9%, compared to $273.1 million for the year ended December 31, 2021. The increase is primarily due to higher segment contribution and lower acquisition and integration related costs. This was partially offset by higher selling, general and administrative expense.

Investing Activities

For the year ended December 31, 2022 cash used for additions to property, buildings and equipment was $308.4 million reflecting investments in our various expansion and development projects and maintenance capital expenditures. Additionally, we invested $15.8 million for the acquisition of De Bruyn Cold Storage and $14.6 million in acquisitions of property, buildings, and equipment for the buyout of two previously leased facilities. Finally, we invested $14.4 million primarily for the formation of the LATAM joint venture and immaterial capital contributions to the SuperFrio joint venture. This was partially offset by $4.7 million in proceeds from the sale of various assets.

For the year ended December 31, 2021 cash used for the acquisitions of Bowman, ColdCo, KMT Brrr!, Lago Cold Stores, Liberty and Newark Facility Management and accounted for as business combinations totaled $$741.4 million. Additions to property, buildings and equipment were $438.2 million reflecting investments in our various expansion and development projects and maintenance capital expenditures.

Financing Activities

Our net cash provided by financing activities was $23.3 million for the year ended December 31, 2022. Cash provided by financing activities during 2022 consisted of $529.4 million in proceeds from our revolving line of credit and $470.0 million received in connection with the increase of our Senior Unsecured Term Loan Tranche A-1 and Deferred Draw A-3. These cash inflows were partially offset by $413.9 million of repayments on our revolving line of credit, $238.7 million of distributions paid, $269.7 million of repayments on our mortgage notes and $41.7 million of payments related to lease obligations.

Our net cash provided by financing activities was $431.5 million for the year ended December 31, 2021 and primarily consisted of $474.5 million net proceeds from equity forward contracts settled upon the issuance of common shares, $811.0 million in proceeds from our revolving line of credit and $50.0 million received in connection with the increase of our Senior Unsecured Term Loan Tranche A-1. These cash inflows were partially offset by $405.0 million of repayments on our revolving line of credit, $227.5 million of distributions paid, $208.0 million of repayments on our term loan and mortgage notes, $39.2 million of payments related to lease obligations and $16.9 million in payment of withholding taxes related to share-based payment arrangements.

Critical Accounting Policies and Estimates

Our discussion and analysis of our historical financial condition and results of operations for the periods described is based on our audited consolidated financial statements and our unaudited interim condensed consolidated financial statements, each of which has been prepared in accordance with U.S. GAAP. The preparation of these historical financial statements in conformity with U.S. GAAP requires management to make estimates, assumptions and judgments in certain circumstances that affect the reported amounts of assets, liabilities and contingencies as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. We evaluate our assumptions and estimates on an ongoing basis. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. For more information on our significant accounting policies, see Note 2 to our Consolidated Financial Statements included in this Annual Report on Form 10-K. The following critical accounting discussion pertains to accounting policies management believes are most critical to the portrayal of our historical financial condition and results of operations and that require significant, difficult, subjective or complex judgments. Other companies in similar businesses may use different estimation policies and methodologies, which may impact the comparability of our financial condition, results of operations and cash flows to those of other companies.

Goodwill Impairment Evaluation

We perform impairment testing of goodwill as of October 1 of each year, and between annual evaluations if events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Such events or changes in circumstances may include a significant deterioration in overall economic conditions, changes in the business climate of our industry, a decline in our market capitalization, operating performance indicators and competition. As of October 1, 2022, our reporting units included the following: North American warehouse, North America transportation, North America third-party managed, Europe warehouse, Europe transportation, Asia-Pacific warehouse, Asia-Pacific transportation, Asia-Pacific third-party managed, and South America warehouse.

We may use both qualitative and quantitative approaches when testing goodwill for impairment. For selected reporting units where we use the qualitative approach, we perform a qualitative evaluation of events and circumstances impacting the reporting unit to determine the likelihood of goodwill impairment. Based on that qualitative evaluation, if we determine it is more likely than not that the fair value of a reporting unit exceeds its carrying amount, no further evaluation is necessary. Otherwise, we perform a quantitative impairment test. We may also perform a quantitative evaluation periodically, even if there is no change of events or circumstances.

To perform the quantitative impairment test, we compare the fair value of a reporting unit to its carrying value, including goodwill. If the fair value of a reporting unit exceeds its carrying value, goodwill of the reporting unit is not impaired. If the carrying value of the reporting unit, including goodwill, exceeds its fair value, a goodwill impairment loss is recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. We generally estimate the fair value of each reporting unit using a methodology or combination of methodologies, including a discounted cash flow analysis and market-based valuation such as comparable public company trading values and values observed in recent business acquisitions. The assumptions used in the quantitative impairment test are estimates and use Level 3 inputs. The estimation of the net present value of future cash flows is based upon varying economic assumptions, including assumptions such as revenue growth rates, operating costs and margins, capital expenditures, tax rates, long-term growth rates and discount rates. Of these assumptions, the operating costs and margins and the discount rates are the most subjective and/or complex. These assumptions are based on risk-adjusted growth rates and discount factors accommodating viewpoints that consider the full range of variability contemplated in the current and potential future economic situations. The discount rates utilized in the discounted cash flow analysis are based on the respective reporting units weighted average cost of capital, which takes into account the relative weights of each component of capital structure (equity and debt) and represents the expected cost of new capital, adjusted as appropriate to consider the risk inherent in future cash flows of the respective reporting unit. The carrying value of each reporting unit includes the assets and liabilities employed in its operations, goodwill and allocations of amounts held at the business segment and corporate levels. We also assess market-based multiples of other market-participant companies, further corroborating that our discounted cash flow models reflect fair value assumptions that are appropriately aligned with market-participant valuation multiples.

During the third quarter of 2022, the Company strategically shifted its focus to the core warehouse portfolio, terminating and winding down business with one of the largest customers in the North America third-party managed reporting unit resulting in a goodwill impairment charge of $3.2 million. There is no remaining goodwill related to the North America third-party managed reporting unit following this impairment, as the remaining business is immaterial. Historically, our reporting units have generated sufficient returns to recover the value of goodwill. The results of our 2022 impairment test indicated that the estimated fair value of each of our reporting units was in excess of the corresponding carrying amount as of October 1, and no impairment of goodwill existed.

Business Combinations

From time to time, we may enter into business combinations. In accordance with ASC 805, "*Business Combinations*", we generally recognize the identifiable assets acquired and the liabilities assumed at their fair values as of the date of acquisition. We measure goodwill as the excess of consideration transferred over the net of the acquisition date fair values of the identifiable assets acquired and liabilities assumed. Goodwill is assigned to each reporting unit based upon the relative fair value of tangible assets acquired. The acquisition method of accounting requires us to make significant estimates and assumptions regarding the fair values of the elements of a business combination as of the date of acquisition, including the fair values of identifiable intangible assets, land and buildings. Significant estimates and assumptions impacting the fair value of the acquired intangible assets include subjective and/or complex judgments regarding items such as operating costs and margins, and discount

rates, including estimating future cash flows that we expect to generate from the acquired assets. Certain other estimates and assumptions impacting the fair value of the acquired intangible assets involving less subjective and/or less complex judgments include: short-term and long-term revenue growth rates, capital expenditures, tax rates, customer attrition rates, economic lives and other factors impacting the discounted cash flows. The significant assumptions impacting the fair value of the acquired buildings include estimates of indirect costs and entrepreneurial profit on the transaction, which were added to the replacement cost of the acquired assets in order to estimate their fair value in the market. The significant assumptions impacting the fair value of the acquired land include estimates of the price per acre in comparable transactions in the market.

The acquisition method of accounting also requires us to refine these estimates over a measurement period not to exceed one year to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the measurement of the amounts recognized as of that date. If we are required to adjust provisional amounts that we have recorded for the fair values of assets and liabilities in connection with acquisitions, these adjustments could have a material impact on our financial condition and results of operations. If the subsequent actual results and updated projections of the underlying business activity change compared with the assumptions and projections used to develop these values, we could record future impairment charges. In addition, we have estimated the economic lives of certain acquired assets and these lives are used to calculate depreciation and amortization expense.

We describe our accounting policy for business combinations in Note 2 to the Consolidated Financial Statements. Additionally, we have disclosed all business combinations completed during 2020 and 2021, including material measurement period adjustments for these acquisitions, in Note 3 to the Consolidated Financial Statements. For those business combinations which the acquisition accounting is preliminary as of December 31, 2022, we have disclosed the estimates, assumptions used and areas for which the acquisition accounting is not finalized.

Revenue Recognition

Our primary revenue source consists of rent, storage and warehouse services revenues. Additionally, we charge transportation fees to those customers who use our transportation services, where we act as the principal in the arrangement of the services. We also receive a reimbursement of substantially all expenses for warehouses that we manage on behalf of third-party owners, with all reimbursements recognized as revenues under the relevant accounting guidance. We also earn management fees, incentive fees upon achieving negotiated performance and cost-savings results, or an applicable mark-up on costs. Revenues from storage and handling are recognized over the period consistent with the transfer of the service to the customer. Multiple contracts with a single counterparty are accounted for as separate arrangements. We recognize transportation fees and expenses on a gross basis upon delivery of products on behalf of our customers. We also recognize management fees and related expense reimbursements as revenues as we perform management services and incur the expense.

New Accounting Pronouncements

See Note 2 to our consolidated financial statements included in this Annual Report on Form 10-K.

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

Our future income and cash flows relevant to financial instruments are dependent upon prevalent market interest rates. Market risk refers to the risk of loss from adverse changes in market prices and interest rates.

As of December 31, 2022, we had $645.0 million of outstanding USD-denominated variable-rate debt and $250 million of outstanding CAD-denominated variable-rate debt under our Senior Unsecured Term Loan A Facility bearing interest at one-month SOFR for the USD tranche and one-month CDOR for the CAD tranche, plus a margin of up to 0.95%. We have entered into interest rate swaps to effectively lock in the floating rates on all of our USD-denominated term loan at a weighted average rate of 4.40% and all of our outstanding CAD-denominated term loan at a weighted average rate of 4.54%. As a result, the only borrowings that we have exposure to changes in interest rates as of December 31, 2022 consist of our borrowings under our Revolving Credit Facility including: $225.0 million, C$50.0 million, €35.5 million, £76.5 million, AUD146.0 million and NZD$13.0 million. At December 31, 2022, one-month term and daily SOFR was approximately 4.30%, one-month CDOR was approximately 4.67%, one-month SONIA was at 3.43%, and one-month AUD BBSW was approximately 3.07%, one-month EURIBOR was approximately 1.90% and one-month BKBM was approximately 4.37%, therefore a 100 basis point increase in market interest rates would result in an increase in interest expense to service our variable-rate debt of approximately $5.0 million. A 100 basis point decrease in market interest rates would result in a decrease in interest of approximately $5.0 million.

Foreign Currency Risk

Our international revenues and expenses are generated in the currencies of the countries in which we operate, including Australia, New Zealand, Argentina, Canada and several European countries. We are exposed to foreign currency exchange variability related to investments in and earnings from our foreign investments. Foreign currency market risk is the possibility that our results of operations or financial position could be better or worse than planned because of changes in foreign currency exchange rates. When the local currencies in these countries decline relative to our reporting currency, the U.S. dollar, our consolidated revenues, contribution (NOI) margins and net investment in properties and operations outside the United States decrease. The impact of currency fluctuations on our earnings is partially mitigated by the fact that most operating and other expenses are also incurred and paid in the local currency. The impact of devaluation or depreciating currency on an entity depends on the residual effect on the local economy and the ability of an entity to raise prices and/or reduce expenses. Due to our constantly changing currency exposure and the potential substantial volatility of currency exchange rates, we cannot predict the effect of exchange rate fluctuations on our business. As a result, changes in the relation of the currency of our international operations to U.S. dollars may also affect the book value of our assets and the amount of total equity. A 10% depreciation in the year-end functional currencies of our international operations, relative to the U.S. dollar, would have resulted in a reduction in our total equity of approximately $136.2 million as of December 31, 2022.

Our operations in Argentina are reported using highly inflationary accounting. The Argentina subsidiary's functional currency is the Australian dollar, which is the reporting and functional currency of their immediate parent company. The entity's statements of operations and balance sheets have been measured in Australian dollars using both current and historical exchange rates prior to translation into U.S. dollars in consolidation. As of December 31, 2022, the net monetary assets of the Argentina subsidiary were immaterial and, therefore, a 10% unfavorable change in the exchange rate would not be material. Additionally, the operating income of the Argentina subsidiary was less than 1.0% of our consolidated operating income for the years ended December 31, 2022 and 2021.

For the years ended December 31, 2022 and 2021, revenues from our international operations were $654.3 million and $666.7 million, respectively, which represented 22.4% and 24.6% of our consolidated revenues, respectively.

Net assets in international operations were approximately $1.3 billion as of December 31, 2022 and 2021.

The effect of a change in foreign exchange rates on our net investment in foreign subsidiaries is reflected in the Accumulated other comprehensive (loss) income component of equity of our Consolidated Financial Statements included in this Annual Report on Form 10-K.

We attempt to mitigate a portion of the risk of currency fluctuation by financing certain of our foreign investments in local currency denominations, effectively providing a natural hedge. However, given the volatility of currency exchange rates, there can be no assurance that this strategy will be effective. The Company has entered into cross-currency swaps on its foreign denominated intercompany loans to hedge the cash flow variability from the impact of changes in foreign currency on the interest payments on the intercompany loan as well as the final principal payment. Since the critical terms of the derivatives match the critical terms of the intercompany loans, the hedge is considered perfectly effective. All changes in fair value will be recorded to Accumulated other comprehensive (loss) income.

On December 30, 2020, we closed on the Agro acquisition, which conducts a significant amount of its operations in Europe. In tandem with this acquisition, we closed on the Series D and E Senior Unsecured Notes in aggregate of €750 million. The debt was designated as a net investment hedge for the Agro operations, as the equity in the European entities is greater than the principal of the debt. Quarterly, effectiveness will be measured according to the amount of principal compared to the equity of the European entities. A portion of the Series D and E Senior Unsecured Notes may be undesignated if the equity is insufficient to hedge the principal from the Series D and E Senior Unsecured Notes issuance. The remeasurement on the Series D and E Senior Unsecured Notes will be recorded to Accumulated other comprehensive (loss) income.

Additionally, we entered into a foreign currency forward to exchange the €750 million proceeds for $877.4 million USD. On the date of issuance, the €750 million issuance was equivalent to $922.4 million USD, based on the spot rate. The difference between the proceeds from the foreign currency forward and the market equivalent on the date of debt issuance of $45 million was recorded to Foreign currency exchange loss, net, a component of other (expense) income of our Consolidated Statements of Operations during the year ended December 31, 2020, and included in this Annual Report on Form 10-K.

As a result of the Agro acquisition, multiple intercompany loans were generated, denominated in various foreign currencies. These intercompany loans have been designated as long-term, permanent investments, whereby the periodic remeasurement will be recorded through Accumulated other comprehensive (loss) income on the Consolidated Balance Sheet.

On May 28, 2021, we closed on the Bowman acquisition. In order to fund the acquisition, we drew £68.5 million from our Senior Unsecured Revolving Credit Facility. The debt was designated as a net investment hedge for the Bowman operations, as the equity residing in this entity is greater than the debt. A portion of this Revolver liability may be undesignated if the equity is insufficient to hedge the outstanding debt. The remeasurement on the GBP Revolver draws will be recorded to Accumulated other comprehensive (loss) income.

On November 15, 2021, we closed on the Lago acquisition. In order to fund the acquisition, we drew $80 million AUD from our Senior Unsecured Revolving Credit Facility. The debt was designated as a net investment hedge for the Lago operations, as the equity residing in this entity is greater than the debt. A portion of

this Revolver liability may be undesignated if the equity is insufficient to hedge the outstanding debt. The remeasurement on the AUD Revolver draws will be recorded to Accumulated other comprehensive (loss) income.

During 2022, we have funded various international capital requirements including the De Bruyn acquisition, the settlement of the Bowman acquisition deferred consideration and expansion and development projects with borrowings from our Senior Unsecured Revolving Credit Facility. The foreign-denominated borrowings under our Senior Unsecured Revolving Credit Facility was designated as a net investment hedge. A portion of this Revolver liability may be undesignated if the equity is insufficient to hedge the outstanding debt. The remeasurement on these borrowings will be recorded to Accumulated other comprehensive (loss) income.

ITEM 8. Financial Statements and Supplementary Data

The independent registered public accounting firm's reports, consolidated financial statements and schedule listed in the "Index to Financial Statements" on page F-1 of this Annual Report are filed as part of this report and incorporated herein by reference.

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

None.

ITEM 9A. Controls and Procedures

Disclosure Controls and Procedures

The term "disclosure controls and procedures" is defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. These rules refer to the controls and other procedures of a company that are designed to ensure that information is recorded, processed, accumulated, summarized, communicated and reported to management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding what is required to be disclosed by a company in the reports that it files under the Exchange Act. As of December 31, 2022 (the "Evaluation Date"), we carried out an evaluation, under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, of the effectiveness of our disclosure controls and procedures. Based upon that evaluation, our chief executive officer and chief financial officer concluded that, as of the Evaluation Date, our disclosure controls and procedures are effective.

Management's Report on Internal Control over Financial Reporting

Management is responsible for the preparation and fair presentation of the consolidated financial statements included in this annual report. The consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles and reflect management's judgments and estimates concerning events and transactions that are accounted for or disclosed.

Management is also responsible for establishing and maintaining effective internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Management recognizes that there are inherent limitations in the effectiveness of any internal control and effective internal control over financial reporting and can provide only reasonable assurance with respect to financial statement preparation. Additionally, because of changes in conditions, the effectiveness of internal control over financial reporting may vary over time.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework* (2013 framework). The scope of our efforts to comply with Section 404 of the Sarbanes-Oxley Act with respect to 2022 included all of our operations other than the business we acquired during 2022 as described in Note 3 to the consolidated financial statements. In accordance with the SEC's published guidance, because we acquired this business during the year, we excluded it from our efforts to comply with Section 404 with respect to 2022. The business acquired during 2022 constituted less than 1% of total assets as of December 31, 2022 and less than 1% of revenue for the year then ended. The SEC's published guidance specifies that the period in which management may omit an assessment of an acquired business's internal control over financial reporting from its assessment of the Company's internal control may not extend beyond one year from the date of acquisition. Based on our assessment, which as discussed herein excluded the operations of the businesses acquired, management concludes that the Company maintained effective internal control over financial reporting as of December 31, 2022.

The effectiveness of our internal control over financial reporting has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included in this Annual Report.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rule 13a - 15(f) of the Exchange Act) identified in connection with the evaluation required by Rule 13a-15(d) under the Exchange Act during the year ended December 31, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Americold Realty Trust, Inc. and Subsidiaries

Opinion on Internal Control over Financial Reporting

We have audited Americold Realty Trust, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Americold Realty Trust, Inc. and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of businesses acquired during the year ended December 31, 2022, which are included in Note 3 of the 2022 consolidated financial statements of the Company and constituted less than 1% of total assets as of December 31, 2022 and less than 1% of revenue for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of the businesses acquired during the year ended December 31, 2022.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive (loss) income, equity, and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and the financial statement schedule listed in the index at Item 15(b) and our report dated February 27, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

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

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail,

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 27, 2023

ITEM 9B. Other Information

None.

ITEM 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

None.

PART III

ITEM 10. Directors, Executive Officers and Corporate Governance

The information required by Item 10 will be included in the definitive proxy statement relating to the 2023 Annual Meeting of Stockholders of Americold Realty Trust, Inc. and is incorporated herein by reference.

ITEM 11. Executive Compensation

The information required by Item 11 will be included in the definitive proxy statement relating to the 2023 Annual Meeting of Stockholders of Americold Realty Trust, Inc. and is incorporated herein by reference.

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

The information required by Item 12 will be included in the definitive proxy statement relating to the 2023 Annual Meeting of Stockholders of Americold Realty Trust, Inc. and is incorporated herein by reference.

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

The information required by Item 13 will be included in the definitive proxy statement relating to the 2023 Annual Meeting of Stockholders of Americold Realty Trust, Inc. and is incorporated herein by reference.

ITEM 14. Principal Accounting Fees and Services

The information required by Item 14 will be included in the definitive proxy statement relating to the 2023 Annual Meeting of Stockholders of Americold Realty Trust, Inc. and is incorporated herein by reference.

PART IV
ITEM 15. Exhibits, Financial Statements and Schedules

Americold Realty Trust, Inc. and Subsidiaries

The following documents are filed as a part of this Annual Report on Form 10-K:

a. Financial Statements and Schedules

Financial Statements:	**Page**
Americold Realty Trust, Inc. and Subsidiaries	
Report of Independent Registered Public Accounting Firm (Auditor Firm ID: 42)	F-1
Consolidated Balance Sheets	F-3
Consolidated Statements of Operations	F-4
Consolidated Statements of Comprehensive Income	F-5
Consolidated Statements of Equity	F-6
Consolidated Statements of Cash Flows	F-9
Notes to the Consolidated Financial Statements of Americold Realty Trust, Inc. and Subsidiaries	F-11
b. Schedule III – Real Estate and Accumulated Depreciation	F-66

c. Exhibits

EXHIBIT INDEX

Exhibit No.	Description
2.1	Articles of Conversion (incorporated by reference to Exhibit 2.1 to Americold Realty Trust, Inc.'s Current Report on Form 8-K filed on May 25, 2022 (File No. 001-34723))
3.1	Articles of Incorporation of Americold Realty Trust, Inc. (incorporated by reference to Exhibit 3.1 to Americold Realty Trust, Inc.'s Current Report on Form 8-K filed on May 25, 2022 (File No. 001-34723))
3.2	Amended and Restated Bylaws of Americold Realty Trust, Inc. (incorporated by reference to Exhibit 3.1 to Americold Realty Trust, Inc.'s Current Report on Form 8-K filed on December 7, 2022 (File No. 001-34723))
3.3	Certificate of Limited Partnership of Americold Realty Operating Partnership, L.P. (incorporated by reference to Exhibit 3.3 to Americold Realty Trust's Annual Report on Form 10-K filed on February 26, 2019 (File No. 001-34723))
3.4	Amended and Restated Limited Partnership Agreement of Americold Realty Operating Partnership, L.P. (incorporated by reference to Exhibit 3.1 to Americold Realty Trust's Current Report on Form 8-K filed on July 2, 2019 (File No. 001-34723))
4.1	Description of Capital Stock
4.2	Registration Rights Agreement, dated as of December 30, 2020 by and among Americold Realty Trust and the Holders named therein (incorporated by reference to Exhibit 4.2 to Americold Realty Trust's Annual Report on Form 10-K filed on March 1, 2021 (File No. 001-34723))
10.1	Credit Agreement, dated as of December 4, 2018, by and among the Operating Partnership, the Company, the Several Lenders and Letter of Credit Issuers from Time to Time Parties Thereto and Bank of America, National Association, as Administrative Agent (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Report on Form 8-K filed on December 5, 2018 (File No. 001-34723))
10.2	Consent and First Amendment to Credit Agreement, dated as of December 23, 2019, by and among the Company, the Operating Partnership and the guarantors, lenders and letter of credit issues named therein (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Form on Form 8-K filed on January 9, 2020 (File No. 001-34723))

10.3	Credit Agreement, dated as of March 26, 2020, by and among the Company, the Operating Partnership, certain of their subsidiaries, Several Lenders and Letter of Credit Issuers named therein and Bank of America, National Association, as Administrative Agent (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Report on Form 8-K filed on March 30, 2020 (File No. 001-34723))
10.4	Note and Guaranty Agreement, dated as of December 4, 2018, by and among the Operating Partnership, the Company and the purchasers named therein (incorporated by reference to Exhibit 10.2 to Americold Realty Trust's Current Report on Form 8-K filed on December 5, 2018 (File No. 001-34723))
10.5	Note and Guaranty Agreement, dated as of May 7, 2019, by and among the Operating Partnership, the Company and the purchasers named therein (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Report on Form 8-K filed on May 8, 2019 (File No. 001-34723))
10.6	Amendment No. 1 to the Note and Guaranty Agreement, dated as of May 7, 2019, dated as of December 30, 2020, by and among the Operating Partnership, the Company and the purchasers named therein (incorporated by reference to Exhibit 10.2 to Americold Realty Trust's Current Report on Form 8-K filed on January 6, 2021 (File No. 001-34723))
10.7	Amendment No. 2 to the Note and Guaranty Agreement, dated as of December 4, 2018, dated as of December 30, 2020, by and among the Operating Partnership, the Company and the purchasers named therein (incorporated by reference to Exhibit 10.3 to Americold Realty Trust's Current Report on Form 8-K filed on January 6, 2021 (File No. 001-34723))
10.8	Note and Guaranty Agreement, dated as of December 30, 2020, by and among the Operating Partnership, the Company and the Purchasers (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Report on Form 8-K filed on January 6, 2021 (File No. 001-34723))
10.9	Credit Agreement, dated as of August 23, 2022, by and among the Operating Partnership, the Company, the Several Lenders and Letter of Credit Issuers from Time to Time Parties Thereto and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.1 to Americold Realty Trust Inc. 's Current Report on Form 8-K filed on August 24, 2022 (File No. 001-34723))
10.10#	Employment Agreement, dated November 2, 2021, by and between AmeriCold Logistics, LLC and George F. Chappelle Jr. (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Report on Form 8-K filed on November 3, 2021 (File No. 001-34723))
10.11#	Form of Employment Agreement (Executive Vice President) (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Quarterly Report on Form 10-Q filed on November 5, 2021 (File No. 001-34723))
10.12	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.16 to Americold Realty Trust's Registration Statement on Form S-11/A, filed on December 19, 2017 (Registration No. 333-221560))
10.13#	Americold Realty Trust 2008 Equity Incentive Plan (incorporated by reference to Exhibit 10.21 to Americold Realty Trust's Registration Statement on Form S-11/A, filed on January 12, 2018 (Registration No. 333-221560))
10.14#	Americold Realty Trust 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.14 to Americold Realty Trust's Registration Statement on Form S-11/A, filed on December 20, 2017 (Registration No. 333-221560))
10.15#	Americold Realty Trust 2017 Equity Incentive Plan, effective as of January 23, 2018 (incorporated by reference to Exhibit 10.8 to Americold Realty Trust's Current Report on Form 8-K filed on January 23, 2018 (Registration No. 333-221560))
10.16#	Form of Annual Director Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.2 to Americold Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed on May 15, 2018 (File No. 001-34723))
10.17#	Form of Retention Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.3 to Americold Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed on May 15, 2018 (File No. 001-34723))
10.18#	Form of Performance Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.4 to Americold Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed on May 15, 2018 (File No. 001-34723))
10.19#	Form of Annual Director OP Unit Award Agreement (incorporated by referenced to Exhibit 10.1 to Americold Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed on August 9, 2019 (File No. 001-34723))
10.20#	Form of Retention OP Unit Award Agreement (incorporated by referenced to Exhibit 10.2 to Americold Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed on August 9, 2019 (File No. 001-34723))
10.21#	Form of Performance OP Unit Award Agreement (incorporated by referenced to Exhibit 10.3 to Americold Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed on August 9, 2019 (File No. 001-34723))
10.22#	Form of Performance Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.26 to Americold Realty Trust's Annual Report on Form 10-K filed on March 2, 2020 (File No. 001-34723))

10.23	Third Amendment to Credit Agreement, dated as of March 26, 2020, dated as of January 29, 2021, by and among the Company, the Operating Partnership, certain of their subsidiaries, Several Lenders and Letter of Credit Issuers named therein and Bank of America, National Association, as Administrative Agent (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Report on Form 8-K filed on February 4, 2021 (File No. 001-34723))
10.24	Amendment No. 1 to the Note and Guaranty Agreement, dated as of December 30, 2020, dated as of June 18, 2021, by and among the Operating Partnership, the Company and the purchasers named therein (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Quarterly Report on Form 10-Q filed on August 6, 2021 (File No. 001-34723))
10.25	Amendment No. 2 to the Note and Guaranty Agreement, dated as of May 7, 2019, dated as of June 18, 2021, by and among the Operating Partnership, the Company and the purchasers named therein (incorporated by reference to Exhibit 10.2 to Americold Realty Trust's Quarterly Report on Form 10-Q filed on August 6, 2021 (File No. 001-34723))
10.26	Amendment No. 3 to the Note and Guaranty Agreement, dated as of December 4, 2018, dated as of June 18, 2021, by and among the Operating Partnership, the Company and the purchasers named therein (incorporated by reference to Exhibit 10.3 to Americold Realty Trust's Quarterly Report on Form 10-Q filed on August 6, 2021 (File No. 001-34723))
10.27	Confirmation of Incremental Facilities Participation and Joinder Agreement, dated as of December 10, 2021, by and among the Company, the Operating Partnership, the guarantors, lenders and letter of credit issues named therein and Bank of America, National Association, as Administrative Agent (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Report on Form 8-K filed on December 16, 2021 (File No. 001-34723))
10.28#	Form of Performance Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.2 to Americold Realty Trust's Quarterly Report on Form 10-Q filed on May 7, 2021 (File No. 001-34723))
10.29#	Form of Time-Based Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.3 to Americold Realty Trust's Quarterly Report on Form 10-Q filed on May 7, 2021 (File No. 001-34723))
10.30#	Form of Performance OP Unit Award Agreement (incorporated by reference to Exhibit 10.4 to Americold Realty Trust's Quarterly Report on Form 10-Q filed on May 7, 2021 (File No. 001-34723))
10.31#	Form of Time-Based OP Unit Award Agreement (incorporated by reference to Exhibit 10.5 to Americold Realty Trust's Quarterly Report on Form 10-Q filed on May 7, 2021 (File No. 001-34723))
10.32#	Form of Time-Based OP Unit Award Agreement (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Report on Form 8-K filed on March 14, 2022 (File No. 001-34723))
10.33#	Form of Performance-Based OP Unit Award Agreement (incorporated by reference to Exhibit 10.2 to Americold Realty Trust's Current Report on Form 8-K filed on March 14, 2022 (File No. 001-34723))
10.34#	Offer Letter, dated February 24, 2022, by and between AmeriCold Logistics, LLC and George F. Chappelle Jr. (incorporated by reference to Exhibit 10.1 to Americold Realty Trust's Current Report on Form 8-K filed on February 24, 2022 (File No. 001-34723))
10.35#	Executive Severance Benefits Plan (incorporated by reference to Exhibit 10.2 to Americold Realty Trust's Current Report on Form 8-K filed on February 24, 2022 (File No. 001-34723))
21.1	List of Subsidiaries
23.1	Consent of Ernst & Young LLP
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 - Americold Realty Trust, Inc.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 - Americold Realty Trust, Inc.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 - Americold Realty Trust, Inc.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 - Americold Realty Trust, Inc.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

This document has been identified as a management contract or compensatory plan or arrangement.

Certain agreements and other documents filed as exhibits to this Annual Report on Form 10-K contain representations and warranties that the parties thereto made to each other. These representations and warranties have been made solely for the benefit of the other parties to such agreements and may have been qualified by certain information that has been disclosed to the other parties to such agreements and other documents and that may not be reflected in such agreements and other documents. In addition, these representations and warranties may be intended as a way of allocating risks among parties if the statements contained therein prove to be incorrect, rather than as actual statements of fact. Accordingly, there can be no reliance on any such representations and warranties as characterizations of the actual state of

facts. Moreover, information concerning the subject matter of any such representations and warranties may have changed since the date of such agreements and other documents.

ITEM 16. Form 10-K Summary

Not Applicable.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Americold Realty Trust, Inc. and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Americold Realty Trust, Inc. and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive (loss) income, equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and financial statement schedule listed in the index at Item 15(b) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 27, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

Test of Goodwill for Impairment

Description of the Matter	As more fully described in Note 2 to the consolidated financial statements, the Company evaluates the carrying value of goodwill each year as of October 1 and between annual evaluations if events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit to which goodwill has been allocated below its carrying amount. The carrying value of the Company's goodwill balance totaled $1.034 billion as of December 31, 2022. Auditing management's annual goodwill impairment test involved especially subjective judgments due to the significant estimation required in determining the fair value of the reporting units to which goodwill has been allocated and for which a quantitative impairment test was completed by the Company. In particular, the estimates of fair value are sensitive to changes in assumptions impacting the net present value of future cash flows attributable to the reporting units, including operating costs and margins, and discount rate, which are affected by expectations about future market and economic conditions.
How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's goodwill impairment review process. For example, we tested controls over the estimation of the fair value of the reporting unit to which goodwill has been allocated and for which a quantitative impairment test was completed by the Company, including the Company's controls over the valuation model, the mathematical accuracy of the valuation model and development of underlying assumptions used to determine the fair value of the reporting unit. We also tested controls over management's review of the reconciliation of the aggregate estimated fair value of the reporting units to the market capitalization of the Company. To test the estimated fair value of the Company's reporting unit for which the Company completed a quantitative impairment test, our audit procedures included, among others, assessing the valuation methodology and the underlying data used by the Company in its analysis, including testing the significant assumptions discussed above. We compared the significant assumptions used by management to current economic trends, historical results, and other relevant factors. We assessed the historical accuracy of management's assumptions of future expected net cash flows and performed sensitivity analyses of significant assumptions to evaluate the changes in the fair value of the reporting unit that would result from changes in the assumptions. We involved valuation specialists to assist in our evaluation of the valuation methodology and the significant assumptions, including the discount rate used in determining the fair value of the reporting unit.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2010.

Atlanta, Georgia
February 27, 2023

Americold Realty Trust, Inc. and Subsidiaries
Consolidated Balance Sheets
(In thousands, except shares and per share amounts)

	December 31,			
		2022		2021
Assets				
Property, buildings and equipment:				
Land	$	786,975	$	807,495
Buildings and improvements		4,245,607		4,152,763
Machinery and equipment		1,407,874		1,352,399
Assets under construction		526,811		450,153
		6,967,267		6,762,810
Accumulated depreciation		(1,901,450)		(1,634,909)
Property, buildings and equipment – net		5,065,817		5,127,901
Operating lease right-of-use assets		352,553		377,536
Accumulated depreciation – operating leases		(76,334)		(57,483)
Operating leases – net		276,219		320,053
Financing leases:				
Buildings and improvements		13,546		13,552
Machinery and equipment		127,009		146,341
		140,555		159,893
Accumulated depreciation – financing leases		(57,626)		(58,165)
Financing leases – net		82,929		101,728
Cash, cash equivalents and restricted cash		53,063		82,958
Accounts receivable – net of allowance of $15,951 and $18,755 at December 31, 2022 and 2021, respectively		430,042		380,014
Identifiable intangible assets – net		925,223		980,966
Goodwill		1,033,637		1,072,980
Investments in partially owned entities and other		78,926		37,458
Other assets		158,705		112,139
Total assets	$	8,104,561	$	8,216,197
Liabilities and equity				
Liabilities:				
Borrowings under revolving line of credit	$	500,052	$	399,314
Accounts payable and accrued expenses		557,540		559,412
Mortgage notes, senior unsecured notes and term loan – net of deferred financing costs of $13,044 and $11,050 at December 31, 2022 and 2021, respectively		2,569,281		2,443,806
Sale-leaseback financing obligations		171,089		178,817
Financing lease obligations		77,561		97,633
Operating lease obligations		264,634		301,765
Unearned revenue		32,046		26,143
Pension and postretirement benefits		1,531		2,843
Deferred tax liability – net		135,098		169,209
Multiemployer pension plan withdrawal liability		7,851		8,179
Total liabilities		4,316,683		4,187,121
Commitments and contingencies (see Commitments and Contingencies Note 17)				
Equity				
Stockholders' equity:				
Common stock, $0.01 par value per share – 500,000,000 authorized shares; 269,814,956 and 268,282,592 issued and outstanding at December 31, 2022 and 2021, respectively		2,698		2,683
Paid-in capital		5,191,969		5,171,690
Accumulated deficit and distributions in excess of net earnings		(1,415,198)		(1,157,888)
Accumulated other comprehensive (loss) income		(6,050)		4,522
Total stockholders' equity		3,773,419		4,021,007
Noncontrolling interests:				
Noncontrolling interests in Operating Partnership		14,459		8,069
Total equity		3,787,878		4,029,076
Total liabilities and equity	$	8,104,561	$	8,216,197

See accompanying notes to consolidated financial statements.

Americold Realty Trust, Inc. and Subsidiaries
Consolidated Statements of Operations
(In thousands, except per share amounts)

	Years Ended December 31,		
	2022	2021	2020
Revenues:			
Rent, storage and warehouse services	$ 2,302,971	$ 2,085,387	$ 1,549,314
Transportation services	313,358	312,092	142,203
Third-party managed services	298,406	317,311	291,751
Other	—	—	4,459
Total revenues	2,914,735	2,714,790	1,987,727
Operating expenses:			
Rent, storage and warehouse services cost of operations	1,666,739	1,498,951	1,028,981
Transportation services cost of operations	265,956	282,716	123,396
Third-party managed services cost of operations	286,077	303,347	279,523
Cost of operations related to other revenues	—	—	4,329
Depreciation and amortization	331,446	319,840	215,891
Selling, general and administrative	231,067	182,076	144,738
Acquisition, litigation and other, net	32,511	51,578	36,306
Impairment of indefinite and long-lived assets	7,380	3,312	8,236
Loss (gain) from sale of real estate	5,689	—	(22,124)
Total operating expenses	2,826,865	2,641,820	1,819,276
Operating income	87,870	72,970	168,451
Other (expense) income:			
Interest expense	(116,127)	(99,177)	(91,481)
Interest income	1,633	841	1,162
Bridge loan commitment fees	—	—	(2,438)
Loss on debt extinguishment, modifications and termination of derivative instruments	(3,217)	(5,689)	(9,975)
Foreign currency exchange loss, net	(975)	(610)	(45,278)
Other income (expense), net	1,806	1,791	(2,563)
Loss from partially owned entities	(9,300)	(2,004)	(250)
(Loss) income before income tax benefit	(38,310)	(31,878)	17,628
Income tax benefit:			
Current	(3,725)	(7,578)	(6,805)
Deferred	22,561	9,147	13,732
Total income tax benefit	18,836	1,569	6,927
Net (loss) income	$ (19,474)	$ (30,309)	$ 24,555
Net (loss) income attributable to noncontrolling interests	(34)	146	15
Net (loss) income attributable to Americold Realty Trust, Inc.	$ (19,440)	$ (30,455)	$ 24,540
Weighted average common stock outstanding – basic	269,565	259,056	203,255
Weighted average common stock outstanding – diluted	269,565	259,056	206,940
Net (loss) income per common share - basic	$ (0.07)	$ (0.12)	$ 0.11
Net (loss) income per common share - diluted	$ (0.07)	$ (0.12)	$ 0.11

See accompanying notes to consolidated financial statements.

Americold Realty Trust, Inc. and Subsidiaries
Consolidated Statements of Comprehensive (Loss) Income
(In thousands)

	Years Ended December 31,		
	2022	**2021**	**2020**
Net (loss) income	$ (19,474)	$ (30,309)	$ 24,555
Other comprehensive (loss) income - net of tax:			
Adjustment to accrued pension liability	(2,376)	8,329	1,433
Change in unrealized net (loss) gain on foreign currency	(23,514)	(6,315)	9,944
Unrealized gain (loss) on cash flow hedges	15,318	6,887	(1,630)
Other comprehensive (loss) income - net of tax attributable to Americold Realty Trust, Inc.	(10,572)	8,901	9,747
Other comprehensive (loss) income attributable to noncontrolling interests	(51)	28	4
Total comprehensive (loss) income	$ (30,097)	$ (21,380)	$ 34,306

See accompanying notes to consolidated financial statements.

Americold Realty Trust, Inc. and Subsidiaries
Consolidated Statements of Equity
(In thousands, except shares)

	Common Stock						
	Number of Shares	**Par Value**	**Paid-in Capital**	**Accumulated Deficit and Distributions in Excess of Net Earnings**	**Accumulated Other Comprehensive Income (Loss)**	**Noncontrolling Interests in Operating Partnership**	**Total**
Balance - December 31, 2019	191,799,909	$ 1,918	$ 2,582,087	$ (736,861)	$ (14,126)	$ —	$ 1,833,018
Net income	—	—	—	24,540	—	15	24,555
Other comprehensive income	—	—	—	—	9,747	4	9,751
Distributions on common stock, restricted stock and OP units	—	—	—	(182,700)	—	(241)	(182,941)
Stock-based compensation expense	—	—	15,259	—	—	2,603	17,862
Common stock issuance related to stock-based payment plans, net of shares withheld for employee taxes	574,599	6	286	—	—	—	292
Issuance of common stock	45,161,428	451	1,578,208	—	—	—	1,578,659
Issuance of common stock as consideration in the Agro acquisition	14,166,667	142	511,983		—	—	512,125
Cumulative effect of accounting change	—	—	—	(500)	—	—	(500)
Balance - December 31, 2020	251,702,603	$ 2,517	$ 4,687,823	$ (895,521)	$ (4,379)	$ 2,381	$ 3,792,821

See accompanying notes to consolidated financial statements.

Americold Realty Trust, Inc. and Subsidiaries
Consolidated Statements of Equity (Continued)
(In thousands, except shares)

	Common Stock						
	Number of Shares	**Par Value**	**Paid-in Capital**	**Accumulated Deficit and Distributions in Excess of Net Earnings**	**Accumulated Other Comprehensive Income (Loss)**	**Noncontrolling Interests in Operating Partnership**	**Total**
Balance - December 31, 2020	251,702,603	$ 2,517	$ 4,687,823	$ (895,521)	$ (4,379)	$ 2,381	$ 3,792,821
Net (loss) income	—	—	—	(30,455)	—	146	(30,309)
Other comprehensive income	—	—	—	—	8,901	28	8,929
Measurement period adjustment to record fair value of non-controlling interests in consolidated joint venture from Agro acquisition	—	—	—	—	—	11,600	11,600
Purchase of noncontrolling interest holders share in consolidated joint venture	—	—	—	—	—	(11,600)	(11,600)
Distributions on common stock, restricted stock and OP units	—	—	—	(231,912)	—	(480)	(232,392)
Stock-based compensation expense	—	—	17,916	—	—	5,994	23,910
Common stock issuance related to stock-based payment plans, net of shares withheld for employee taxes	969,779	10	(10,294)	—	—	—	(10,284)
Common stock issuance related to employee stock purchase plan	63,260	1	1,919	—	—	—	1,920
Issuance of common stock	15,546,950	155	474,326	—	—	—	474,481
Balance - December 31, 2021	268,282,592	$ 2,683	$ 5,171,690	$ (1,157,888)	$ 4,522	$ 8,069	$ 4,029,076

See accompanying notes to consolidated financial statements.

Americold Realty Trust, Inc. and Subsidiaries
Consolidated Statements of Equity (Continued)
(In thousands, except shares)

	Common Stock						
	Number of Shares	Par Value	Paid-in Capital	Accumulated Deficit and Distributions in Excess of Net Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests in Operating Partnership	Total
Balance - December 31, 2021	268,282,592	$ 2,683	$ 5,171,690	$ (1,157,888)	$ 4,522	$ 8,069	$ 4,029,076
Net loss	—	—	—	(19,440)	—	(34)	(19,474)
Other comprehensive loss	—	—	—	—	(15,542)	(51)	(15,593)
Distributions on common stock, restricted stock and OP units	—	—	—	(237,770)	—	(724)	(238,494)
Stock-based compensation expense	—	—	19,734	—	—	7,403	27,137
Common stock issuance related to share-based payment plans, net of shares withheld for employee taxes	1,387,078	14	(3,333)	—	—	—	(3,319)
Common stock issuance related to employee stock purchase plan	145,286	1	3,878	—	—	—	3,879
Deconsolidation of subsidiary contributed to LATAM joint venture	—	—	—	—	4,970	(204)	4,766
Other	—	—	—	(100)	—	—	(100)
Balance - December 31, 2022	269,814,956	$ 2,698	$ 5,191,969	$ (1,415,198)	$ (6,050)	$ 14,459	$ 3,787,878

See accompanying notes to consolidated financial statements.

Americold Realty Trust, Inc. and Subsidiaries
Consolidated Statements of Cash Flows
(In thousands)

	Years Ended December 31,		
	2022	**2021**	**2020**
Operating activities:			
Net (loss) income	$ (19,474)	$ (30,309)	$ 24,555
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization	331,446	319,840	215,891
Amortization of deferred financing costs and pension withdrawal liability	4,833	4,425	5,147
Amortization of above/below market leases	2,131	2,261	152
Loss on debt extinguishment, modification and termination of derivative instruments	3,217	5,565	1,995
Loss from foreign exchange	975	610	45,278
Loss from investments in partially owned entities	9,300	2,004	250
Gain on extinguishment of new market tax credit structure	(3,410)	—	—
Loss on deconsolidation of subsidiary contributed to LATAM joint venture	4,148	—	—
Stock-based compensation expense	27,137	23,931	17,897
Change in deferred taxes	(22,561)	(9,147)	(13,732)
Loss (gain) from sale of real estate	5,689	—	(22,124)
Loss on other asset disposals	3,556	279	2,494
Impairment of indefinite and long-lived assets	7,380	3,312	8,236
Provision for doubtful accounts receivable, net	7,394	6,466	5,356
Changes in operating assets and liabilities:			
Accounts receivable	(68,629)	(60,476)	(12,897)
Accounts payable and accrued expenses	(8,462)	17,831	19,471
Other	15,326	(13,532)	(4,289)
Net cash provided by operating activities	299,996	273,060	293,680
Investing activities:			
Business combinations and deferred consideration paid, net of cash acquired	(15,829)	(741,353)	(1,858,937)
Acquisitions of property, buildings and equipment, net of cash acquired	(14,581)	(53,641)	(25,538)
Additions to property, buildings and equipment	(308,365)	(438,190)	(376,817)
Investment in partially owned entities and other	(14,427)	(7,570)	(26,229)
Proceeds from the settlement of net investment hedges, net	—	—	3,034
Proceeds from the settlement of foreign currency forward contract	—	—	877,365
Payment in settlement of foreign currency forward contract	—	—	(922,350)
Proceeds from sale of investments in partially owned entities	—	596	154
Proceeds from sale of property, buildings and equipment	4,713	959	80,193
Net cash used in investing activities	(348,489)	(1,239,199)	(2,249,125)
Financing activities:			
Distributions paid on common stock, restricted stock units and noncontrolling interests in Operating Partnership	(238,709)	(227,522)	(167,086)
Purchase of noncontrolling interest holders share in consolidated joint venture	—	(11,600)	—
Proceeds from revolving line of credit	529,354	810,985	636,753
Repayment of revolving line of credit	(413,860)	(405,000)	(627,075)
Proceeds from stock options exercised	3,974	6,105	6,748
Proceeds from employee stock purchase plan	3,879	1,920	—
Remittance of withholding taxes related to employee share-based transactions	(8,308)	(16,886)	(6,953)
Repayment of sale-leaseback financing obligations	(7,835)	(6,782)	(3,774)
Repayment of financing lease obligations	(33,860)	(32,441)	(19,970)
Payment of debt issuance costs	(11,651)	(3,760)	(10,076)
Repayment of term loans, mortgage notes, and notes payable	(269,659)	(208,011)	(156,750)
Proceeds from senior unsecured notes	—	—	922,350
Proceeds from term loans	470,000	50,000	177,075
Net proceeds from issuance of common stock	—	474,481	1,578,659
Net cash provided by financing activities	23,325	431,489	2,329,901
Net (decrease) increase in cash, cash equivalents, and restricted cash	(25,168)	(534,650)	374,456
Effect of foreign currency translation on cash, cash equivalents and restricted cash	(4,727)	(3,443)	5,982
Cash, cash equivalents and restricted cash:			
Beginning of period	82,958	621,051	240,613
End of period	$ 53,063	$ 82,958	$ 621,051

Americold Realty Trust, Inc. and Subsidiaries
Consolidated Statements of Cash Flows (Continued)
(In thousands)

	Years Ended December 31,		
	2022	**2021**	**2020**
Supplemental disclosures of non-cash investing and financing activities:			
Common stock issued as consideration for Agro acquisition	$ —	$ —	$ 512,125
Deferred cash consideration for acquisitions	$ —	$ 11,820	$ 49,710
Addition of property, buildings and equipment on accrual	$ 49,378	$ 52,818	$ 51,115
Addition of fixed assets under financing lease obligations	$ 18,694	$ 24,567	$ 38,858
Addition of fixed assets under operating lease obligations	$ 7,889	$ 50,886	$ 44,919
Supplemental disclosures of cash flows information:			
Interest paid – net of amounts capitalized	$ 118,161	$ 87,720	$ 82,775
Income taxes paid – net of refunds	$ 7,885	$ 10,786	$ 1,485

Allocation of purchase price of property, buildings and equipment to:	**As of December 31, 2022**	**As of December 31, 2021**	**As of December 31, 2020**
Land	$ 3,628	$ 3,933	$ 3,233
Building and improvements	8,289	33,824	15,940
Machinery and equipment	2,664	15,884	6,022
Identifiable intangible assets	—	—	140
Other assets and liabilities, net	—	—	303
Cash paid for acquisition of property, buildings and equipment	$ 14,581	$ 53,641	$ 25,638

	As of December 31, 2022	**As of December 31, 2021**	**As of December 31, 2020**
Allocation of purchase price to business combinations:			
Land	$ 514	$ 68,874	$ 167,989
Buildings and improvements	8,218	188,792	1,176,924
Machinery and equipment	3,676	72,492	322,652
Assets under construction	—	373	308
Operating lease right-of-use assets	—	22,842	268,633
Financing leases	—	417	—
Cash and cash equivalents	—	6,878	57,456
Accounts receivable	—	6,436	96,992
Goodwill	3,107	81,949	470,987
Customer relationships	—	301,460	528,517
Investments in partially owned entities	—	—	21,638
Other assets	25	3,998	20,405
Accounts payable and accrued expenses	289	(12,620)	(97,964)
Sale-leaseback financing obligations	—	—	(73,075)
Financing lease obligations	—	(371)	(46,845)
Operating lease obligations	—	(14,450)	(221,655)
Unearned revenue	—	(2,807)	(1,068)
Deferred tax liability	—	(14,961)	(213,666)
Total consideration, including common stock issued and deferred consideration	$ 15,829	$ 709,302	$ 2,478,228

Americold Realty Trust, Inc. and Subsidiaries
Consolidated Statements of Cash Flows (Continued)
(In thousands)

	As of December 31, 2022	As of December 31, 2021	As of December 31, 2020
Deconsolidation of Chile upon contribution to LATAM JV			
Land	$ (19,574)	$ —	$ —
Buildings and improvements	(10,118)	—	—
Machinery and equipment	(8,395)	—	—
Assets under construction	(20)	—	—
Accumulated depreciation	1,959	—	—
Cash, cash equivalents and restricted cash	(2,483)	—	—
Accounts receivable	(1,422)	—	—
Goodwill	(6,653)	—	—
Other assets	(309)	—	—
Accounts payable and accrued expenses	1,105	—	—
Mortgage notes, senior unsecured notes and term loans – net of unamortized deferred financing costs	9,633	—	—
Accumulated other comprehensive loss	(4,766)	—	—
Net carrying value of Chile assets and liabilities deconsolidated	**$ (41,043)**	**$ —**	**$ —**
Recognition of investment in unconsolidated LATAM joint venture	**$ 36,896**	**$ —**	**$ —**

1. Description of the Business

The Company

Americold Realty Trust, Inc. together with its subsidiaries (ART, the Company, or we) is a Maryland corporation that operates as a real estate investment trust (REIT) for U.S. federal income tax purposes. The Company is the world's largest publicly traded REIT focused on the ownership, operation and development of temperature-controlled warehouses. The Company is organized as a self-administered and self-managed REIT with proven operating, acquisition and development experience. As of December 31, 2022, we operated a global network of 242 temperature-controlled warehouses encompassing approximately 1.4 billion cubic feet, with 195 warehouses in North America, 27 in Europe, 18 warehouses in Asia-Pacific, and 2 warehouses in South America.

During 2010, the Company formed a Delaware limited partnership, Americold Realty Operating Partnership, L.P. (the Operating Partnership), and transferred substantially all of its interests in entities and associated assets and liabilities to the Operating Partnership. This structure is commonly referred to as an umbrella partnership REIT or an UPREIT structure. The REIT is the sole general partner of the Operating Partnership, owning 99% of the common general partnership interests as of December 31, 2022. Americold Realty Operations, Inc., a Delaware corporation and wholly-owned subsidiary of the REIT, is a limited partner of the Operating Partnership, owning less than 1% of the common general partnership interests as of December 31, 2022. Additionally, the aggregate partnership interests of all other limited partners was less than 0.1% as of December 31, 2022. As the sole general partner of the Operating Partnership, the REIT has full, exclusive and complete responsibility and discretion in the day-to-day management and control of the Operating Partnership. The limited partners of the Operating Partnership do not have rights to replace Americold Realty Trust, Inc. as the general partner nor do they have participating rights, although they do have certain protective rights. The terms "Americold," the "Company," "we," "our" and "us" refer to Americold Realty Trust, Inc. and all of its consolidated subsidiaries, including the Operating Partnership.

No limited partner shall be liable for any debts, liabilities, contracts or obligations of the Operating Partnership. A limited partner shall be liable to the Operating Partnership only to make payments of capital contribution, if any, as and when due. After a capital contribution is fully paid, no limited partner shall, except as otherwise may be legally required under Delaware law, be required to make any further contribution or other payments or lend any funds to the Operating Partnership. The limited partners of the Operating Partnership do not have rights to replace Americold Realty Trust, Inc. as the general partner nor do they have participating rights, although they do have certain protective rights.

The Company grants Operating Partnership Profit Units (OP Units) to certain members of the Board of Directors and certain members of management of the Company, which are described further in Note 14. These units represent noncontrolling interests in the Operating Partnership that are not owned by Americold Realty Trust, Inc.

On March 22, 2021, the Company filed Articles of Amendment to the Company's Amended and Restated Declaration of Trust with the State Department of Assessments and Taxation of Maryland to increase the number of authorized common shares of beneficial interest, $0.01 par value per share, from 325,000,000 to 500,000,000. The Articles of Amendment were effective upon filing. The Company also has 25,000,000 authorized preferred shares, $0.01 par value per share; however, none were issued or outstanding as of December 31, 2022 or December 31, 2021.

On May 25, 2022, the Company completed its conversion from a Maryland real estate investment trust to a Maryland corporation, pursuant to the Articles of Conversion, as approved by the stockholders at its annual

stockholder meeting on May 17, 2022. Each issued and outstanding share of beneficial interest in Americold Realty Trust was converted into one share of common stock in Americold Realty Trust, Inc. As a result of this conversion, several references in this Form 10-K have been updated accordingly. Despite this conversion, the Company continues to operate as a REIT for U.S. federal income tax purposes.

The Operating Partnership includes numerous disregarded entities ("DRE"). Additionally, the Operating Partnership conducts various business activities in North America, Europe, Asia-Pacific, and South America through several wholly-owned taxable REIT subsidiaries (TRSs).

Recent Capital Markets Activity

At the Market (ATM) Equity Program

On May 10, 2021, the Company entered into an equity distribution agreement pursuant to which we may sell, from time to time, up to an aggregate sales price of $900.0 million of our common stock through an ATM Equity Program (the "2021 ATM Equity Program"). Sales of the Company's common stock made pursuant to the 2021 ATM Equity Program may be made in negotiated transactions or transactions that are deemed to be "at the market" offerings as defined in Rule 415 under the Securities Act, including sales made directly on the NYSE, or sales made to or through a market maker other than on an exchange, or as otherwise agreed between the applicable Agent and us. Sales may also be made on a forward basis pursuant to separate forward sale agreements. The net proceeds from sales of the Company's common stock pursuant to the 2021 ATM Equity Program were used for funding acquisitions and development projects. During the year ended December 31, 2021, there were 2,332,846 shares sold under the 2021 ATM Equity Program under forward sale agreements for gross proceeds of $90.6 million. All of these shares were settled during the year ended December 31, 2021. There was no activity during 2022 under the 2021 ATM Equity Program.

Universal Shelf Registration Statement

In connection with filing our ATM Equity Offering Sales Agreement on April 16, 2020, the Company and the Operating Partnership filed with the SEC an automatic shelf registration statement on Form S-3 (Registration Nos. 333-237704 and 333-237704-01) (the "Registration Statement"), registering an indeterminate amount of (i) the Company's common stock, $0.01 par value per share, (ii) the Company's preferred stock, $0.01 par value per share, (iii) depositary shares representing entitlement to all rights and preferences of fractions of the Company's preferred shares of a specified series and represented by depositary receipts, (iv) warrants to purchase the Company's common stock or preferred stock or depositary shares and (v) debt securities of the Operating Partnership, which will be fully and unconditionally guaranteed by the Company.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the U.S. (U.S. GAAP). The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries where the Company exerts control. Investments in which the Company does not have control, and is not the primary beneficiary of a Variable Interest Entity (VIE), but where the Company exercises significant influence over the operating and financial policies of the investee, are accounted for using the equity method of accounting. Intercompany balances and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of (1) assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the financial statements, and (2) revenues and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications

Certain immaterial, prior period amounts have been reclassified to conform to the current period presentation within the Notes to the Consolidated Financial Statements.

Significant Risks and Uncertainties

While the Company did not incur significant disruptions during 2020 from the COVID-19 pandemic, the years ended December 31, 2022 and 2021 were negatively impacted by COVID-19 related disruptions in (i) the food supply chain; (ii) our customers' production of goods; (iii) the labor market impacting associate turnover, availability and cost; and (iv) the impact of inflation on the cost to provide our services. During the year ended December 31, 2022, there have been gradual improvements in food production and the food supply chain has begun to recover storage levels, nearing pre-COVID-19 pandemic levels by the end of the year.

Our business was also impacted by inflation during the second half of 2021 and throughout 2022. We believe we are positioned to address continued inflationary pressure as it arises through our ability to increase pricing with our customers.

Property, Buildings and Equipment

Property, buildings and equipment is stated at cost, less accumulated depreciation. Depreciation is computed on a straight-line basis over the estimated useful lives of the respective assets or, if less, the term of the underlying lease. Depreciation begins in the month an asset is placed into service. Useful lives range from 40 to 43 years for buildings, 5 to 20 years for building and land improvements, and 3 to 15 years for machinery and equipment. For the years ended December 31, 2022, 2021 and 2020, the Company recorded depreciation expense of $295.7 million, $284.6 million and $198.8 million, respectively. The Company periodically reviews the appropriateness of the estimated useful lives of its long-lived assets.

Costs of normal maintenance and repairs and minor replacements are charged to expense as incurred. When non-real estate assets are sold or otherwise disposed of, the cost and related accumulated depreciation are removed, and any resulting gain or loss is included in “Other income (expense), net” on the accompanying Consolidated Statements of Operations. Gains or losses from the sale of real estate assets are reported in the accompanying Consolidated Statement of Operations as a component of operating expenses.

Impairment of Long-Lived Assets

The Company reviews its long-lived assets for impairment when events or changes in circumstances (such as decreases in operating income and declines in occupancy) indicate that the carrying amounts may not be recoverable. A comparison is made of the expected future operating cash flows of the long-lived assets on an undiscounted basis to their carrying amounts.

If the carrying amounts of the long-lived assets exceed the sum of the expected future undiscounted cash flows, an impairment charge is recognized in an amount equal to the excess of the carrying amount over the estimated fair value of the long-lived assets, which the Company calculates based on projections of future cash flows and appraisals with significant unobservable inputs classified as Level 3 of the fair value hierarchy. The Company determined that individual warehouse properties constitute the lowest level of independent cash flows for purposes of considering possible impairment.

For the years ended December 31, 2022, 2021 and 2020, the Company recorded long-lived asset impairment charges of $7.4 million, $3.3 million and $8.2 million, respectively, within "Impairment of indefinite and long-lived assets" on the accompanying Consolidated Statements of Operations.

Capitalization of Costs

Project costs that are clearly associated with the development of properties are capitalized as incurred. Project costs include all costs directly associated with the development of a property, including construction costs, insurance, property taxes, interest, and costs of personnel working on the project. Costs that do not clearly relate to the projects under development are not capitalized and are charged to expense as incurred.

Capitalization of costs begins when the activities necessary to get the development project ready for its intended use commence, which include costs incurred before the beginning of construction. Capitalization of costs ceases when the development project is substantially complete and ready for its intended use. We generally consider a development project to be substantially complete and ready for its intended use upon receipt of a certificate of occupancy. If and when development of a property is suspended pursuant to a formal change in the planned use of the property, we will evaluate whether the accumulated costs exceed the estimated value of the project and write off the amount of any such excess accumulated costs. For a development project that is suspended for reasons other than a formal change in the planned use of such property, the accumulated project costs are written off. Capitalized costs are allocated to the specific components of a project that are benefited.

Lease Accounting

Arrangements wherein we are the lessee:

At the inception of a contract, we determine if the contract is or contains a lease. Leases are classified as either financing or operating based upon criteria within ASC 842, *Leases*, and a right-of-use (ROU) asset and liability are established for leases with an initial term greater than 12 months. Leases with an initial term of 12 months or less, and not expected to renew beyond 12 months, are not recorded on the balance sheet.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at commencement date based on the present value of the lease payments over the lease term, as adjusted for prepayments, incentives and initial direct costs. ROU assets are subsequently measured at the value of the remeasured lease liability, adjusted for the remaining balance of the following, as applicable: lease incentives, cumulative prepaid or accrued rent and unamortized initial direct costs. When available, we use the rate implicit in the lease to discount lease payments to present value; however, most of our leases do not provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate to discount the lease payments based on information available at lease commencement. We generally use our incremental borrowing rate based on the estimated rate of interest for collateralized borrowing over a similar term of the lease payments at commencement date. Our lease terms may include options to extend or terminate the lease when it is

reasonably certain that we will exercise that option. The depreciable lives of assets are limited by the expected lease term, unless there is a transfer of title or purchase option reasonably certain of exercise. Depreciation expense on assets acquired under financing leases is included in "Depreciation and amortization" on the accompanying Consolidated Statements of Operations. Amortization of leased assets classified as ROU assets are included within cost of operations for the respective segment the asset pertains to, or within "Selling, general and administrative" for corporate assets on the accompanying Consolidated Statements of Operations. As with other long-lived assets, ROU assets are reviewed for impairment when events or change in circumstances indicate the carrying value may not be recoverable.

In reference to certain temperature-controlled warehouses where the Company is the lessee in an acquired business, below-market and above-market leases are amortized on a straight-line basis over the remaining lease terms in a manner that adjusts lease expense to the market rate in effect as of the acquisition date.

Operating leases are included in "Operating lease right-of-use assets", "Accounts payable and accrued expenses" and "Operating lease obligations" on our Consolidated Balance Sheets. Financing lease assets are included in "Financing leases-net", "Accounts payable and accrued expenses" and "Financing lease obligations" on our Consolidated Balance Sheets.

Arrangements wherein we are the lessor:

Each new lease contract is evaluated for classification as a sales-type lease, direct financing or operating lease. A lease is a sales-type lease if any one of five criteria are met, as outlined in ASC 842 each of which indicate the lease, in effect, transfers control of the underlying asset to the lessee. If none of those five criteria are met, but two additional criteria are both met, indicating we have transferred substantially all the risks and benefits of the underlying asset to the lessee and a third party, the lease is a direct financing lease. All leases that are not sales-type or direct financing leases are operating leases. We do not currently have any sales-type or direct financing leases.

For operating leases wherein we are the lessor, we assess the probability of payments at commencement of the lease contract and subsequently recognize lease income, including variable payments based on an index or rate, over the lease term on a straight-line basis, as a component of "Rent, storage and warehouse services". We continue to measure and disclose the underlying assets subject to operating leases based on our policies for application of ASC 360, *Property, Plant and Equipment*.

For all asset classes we have elected to not separate the lease and non-lease components which generally relate to taxes and common area maintenance. Additionally, we elected a practical expedient to present all funds collected from lessees for sales and other similar taxes net of the related sales tax expense. Our lease contracts are structured in a manner to reduce risks associated with the residual value of leased assets.

Business Combinations

For business combinations, the excess of purchase price over the net fair value of assets acquired and liabilities assumed is recorded as goodwill. In an asset acquisition where we have determined that the cost incurred differs from the fair value of the net assets acquired, we assess whether we have appropriately determined the fair value of the assets and liabilities acquired and we also confirm that all identifiable assets have been appropriately identified and recognized. After completing this assessment, we allocate the difference on a relative fair value basis to all assets acquired except for financial assets (as defined in ASC 860, *Transfers and Servicing*), deferred taxes, and assets defined as "current" (as defined in ASC 210, *Balance Sheet*).

Whether the acquired business is being accounted for as a business combination or an asset acquisition, the determination of fair values of identifiable assets and liabilities requires estimates and the use of valuation techniques. Significant judgment is involved specifically in determining the estimated fair value of the acquired land and buildings and intangible assets. For intangible assets, we typically use the excess earnings method. Significant estimates that are more subjective and complex include the discount rate and operating margin. Significant estimates, although not necessarily highly subjective or complex, used in valuing intangible assets acquired in a business combination include, but are not limited to, revenue growth rates, customer attrition rates, operating costs, capital expenditures, tax rates and long-term growth rates. For buildings, we used a combination of methods including the cost approach to value buildings and the sales comparison approach to value the underlying land. Significant estimates used in valuing buildings and improvements acquired in a business combination include, but are not limited to estimates of indirect costs and entrepreneurial profit, which were added to the replacement cost of the acquired assets in order to estimate their fair value in the market. Significant estimates use in valuing the land include but are not limited to estimating the price per acre of comparable market transactions.

Identifiable Intangible Assets

Identifiable intangible assets consist of a trade name and customer relationships.

The Company’s trade name asset is indefinite-lived, thus, it is not amortized. The Company evaluates the carrying value of its trade name each year as of October 1, and between annual evaluations if events occur or circumstances change that would more likely than not reduce the fair value of the trade name below its carrying amount. There were no impairments to the Company’s trade name for the years ended December 31, 2022, 2021 and 2020.

Customer relationship assets are the Company’s largest finite-lived assets and are amortized over 18 to 40 years using the straight-line method, which reflects the pattern in which economic benefits of intangible assets are expected to be realized by the Company. Customer relationship amortization expense for the years ended December 31, 2022, 2021 and 2020 was $35.7 million, $34.2 million and $15.3 million, respectively. The Company reviews these intangible assets for impairment when circumstances indicate the carrying amount may not be recoverable. There were no impairments to customer relationship assets for the years ended December 31, 2022, 2021 and 2020.

Goodwill

The Company evaluates the carrying value of goodwill each year as of October 1 and between annual evaluations if events occur or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. The Company may use both qualitative and quantitative approaches when testing goodwill for impairment. For selected reporting units where we use the qualitative approach, we perform a qualitative evaluation of events and circumstances impacting the reporting unit to determine the likelihood of goodwill impairment. Based on that qualitative evaluation, if we determine it is more likely than not that the fair value of a reporting unit exceeds its carrying amount, no further evaluation is necessary. Otherwise, we perform a quantitative impairment test. When quantitatively evaluating whether goodwill of a reporting unit is impaired, the Company compares the fair value of its reporting units to its carrying amounts, including goodwill. The assumptions used in the quantitative impairment test are estimates and use Level 3 inputs. The Company estimates the fair value of its reporting units using a methodology, or combination of methodologies, including a discounted cash flow analysis and a market-based valuation. Future cash flows are estimated based upon certain economic assumptions. The estimates of future cash flows are subject, but not limited to the following

assumptions: revenue growth rates, operating costs and margins, capital expenditures, tax rates, long-term growth rates and discount rates, which are affected by expectations about future market and economic conditions. The assumptions are based on risk-adjusted growth rates and discount factors accommodating multiple viewpoints that consider the full range of variability contemplated in the current and potential future economic situations. The market-based multiples approach assesses the financial performance and market values of other market-participant companies. If the estimated fair value of each of the reporting units exceeds the corresponding carrying value, no impairment of goodwill exists. If the reporting unit carrying value exceeds the reporting unit fair value an impairment charge is recorded for the difference between fair value and carrying value, limited to the amount of goodwill in the reporting unit. As of October 1, 2022, our reporting units which had a goodwill balance included the following: North America warehouse, North America transportation, Europe warehouse and Asia-Pacific warehouse. During the third quarter of 2022, the Company strategically shifted its focus to the core warehouse portfolio, terminating and winding down business with one of the largest customers in the North America third-party managed reporting unit resulting in a goodwill impairment charge of $3.2 million. There is no remaining goodwill related to the North America third-party managed reporting unit following this impairment, as the remaining business is immaterial. Historically, our reporting units have generated sufficient returns to recover the value of goodwill. The results of our 2022 impairment test for our remaining report units indicated that the estimated fair value of each of our reporting units was in excess of the corresponding carrying amount as of October 1, and no impairment of goodwill existed.

Cash, Cash Equivalents and Restricted Cash

Cash and cash equivalents consist of cash on hand, demand deposits, and short-term liquid investments purchased with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value. Restricted cash relates to cash on deposit and cash restricted for the payment of certain cash on deposit for certain workers' compensation programs and cash collateralization of certain rental and performance bonds.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount. The Company periodically evaluates the collectability of amounts due from customers and maintains an allowance for doubtful accounts for estimated amounts uncollectable from customers. Management exercises judgment in establishing these allowances and considers the balance outstanding, payment history, and current credit status in developing these estimates. Specific accounts are written off against the allowance when management determines the account is uncollectable.

The following table provides a summary of activity of the allowance for doubtful accounts (in thousands):

	Balance at beginning of year	Charged to expense/against revenue/interest income	Amounts written off, net of recoveries	Balance at end of year
Year ended December 31, 2022	$ 18,755	11,908	(14,712)	$ 15,951
Year ended December 31, 2021	$ 12,286	7,186	(717)	$ 18,755

The Company records interest on delinquent billings within "Interest income" in the accompanying Consolidated Statements of Operations when collected.

Deferred Financing Costs

Direct financing costs are deferred and amortized over the terms of the related agreements as a component of

"Interest expense" in the accompanying Consolidated Statements of Operations. The Company amortizes such costs based on the effective interest rate or on a straight-line basis. The Company uses the latter approach when the periodic amortization approximates the amounts calculated under the effective-interest rate method. Deferred financing costs related to revolving line of credits are classified as other assets, whereas deferred financing costs related to debt are offset against the related principal balance, as applicable in the accompanying Consolidated Balance Sheets.

Variable Interest Entities (VIEs)

We are party to VIEs that are immaterial to our consolidated financial statements. During 2022, we recognized a gain of $3.4 million within "Other income (expense), net" on the Consolidated Statement of Operations upon extinguishment of New Market Tax Credit ("NMTC") agreements which were dissolved immediately following the conclusion of the seven-year compliance period during which the tax credits were recognized.

Revenue Recognition

Revenues for the Company include rent, storage and warehouse services (collectively, Warehouse Revenue), transportation services (Transportation Revenue), third-party managed services for locations or logistics services managed on behalf of customers (Third-Party Managed Revenue), and revenue from the sale of quarry products (Other Revenue). Other revenue consisted of our previously owned quarry business that was sold during 2020. The Company made an accounting policy election to exclude from the measurement of the transaction price all taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction and collected by the entity from a customer (e.g., sales, use, value added, some excise taxes).

Warehouse Revenue

The Company's customer arrangements generally include rent, storage and service elements that are priced separately. Revenues from storage and handling are recognized over the period consistent with the transfer of the service to the customer. Multiple contracts with a single counterparty are accounted for as separate arrangements.

Transportation Revenue

The Company records transportation revenue and expenses upon delivery of the product. Since the Company is the principal in the arrangement of transportation services for its customers, revenues and expenses are presented on a gross basis.

Third-Party Managed Revenue

The Company provides management services for which the contract compensation arrangement includes: reimbursement of operating costs, management fees, and contingent performance-based fees (Managed Services). Managed Services fixed fees are recognized as revenue as the management services are performed ratably over the service period. Managed Services performance-based fees are recognized ratably over the service period based on the likelihood of achieving performance targets.

Cost reimbursements related to Managed Services arrangements are recognized as revenue as the services are performed and costs are incurred. Managed Services fees and related cost reimbursements are presented on a

gross basis as the Company is the principal in the arrangement. Multiple contracts with a single counterparty are accounted for as separate arrangements.

Contracts with Multiple Service Lines

When considering contracts containing more than one service to a customer, a contract's transaction price is pre-defined or allocated to each distinct performance obligation and recognized as revenue when, or as the performance obligation is satisfied, either over time as work progresses, or at a point in time. For contracts with multiple service lines or distinct performance obligations, the Company evaluates and allocates the contract's transaction price to each performance obligation using our best estimate of the standalone selling price of each distinct good or service in the contract. The primary method used to estimate standalone selling price is the expected cost plus a margin approach, under which the Company forecasts expected costs of satisfying a performance obligation and then adds an appropriate margin for that distinct good or service.

Income Taxes

The Company operates in a manner intended to enable it to continue to qualify as a REIT under Sections 856-860 of the Code. Under those sections, a REIT that distributes at least 100% of its REIT taxable income, as defined in the Code, as a dividend to its stockholders each year and that meets certain other conditions will not be taxed on that portion of its taxable income that is distributed to its stockholders for U.S. federal income tax purposes. Through cash dividends, the Company, for tax purposes, has distributed an amount equal to or greater than its REIT taxable income for the years ended December 31, 2022, 2021 and 2020. For all periods presented, the Company has met all the requirements to qualify as a REIT. Thus, no provision for federal income taxes was made for the years ended December 31, 2022, 2021 and 2020, except as needed for the Company's U.S. Taxable REIT Subsidiaries (TRSs), and for the Company's foreign entities. To qualify as a REIT, an entity cannot have at the end of any taxable year any undistributed earnings and profits that are attributable to a non-REIT taxable year (undistributed E&P). The Company believes that it had no undistributed E&P as of December 31, 2021. However, to the extent there is a determination (within the meaning of Section 852(e)(1)) of the Code that the Company has undistributed earnings and profits (as determined for U.S. federal income tax purposes) accumulated (or acquired from another entity) from any taxable year in which the Company (or any other entity that converts to a Qualified REIT Subsidiary (QRS) that was acquired during the year) was not a REIT or a QRS, the Company will take all necessary steps to permit the Company to avoid the loss of its REIT status, including, but not limited to: 1) within the 90-day period beginning on the date of the determination, making one or more qualified designated distributions (within the meaning of the Section 852(e)(2)) of the Code in an amount not less than such undistributed earnings and profits over the interest payable under section 852(e)(3) of the Code; and 2) timely paying to the IRS the interest payable under Section 852(e)(3) of the Code resulting from such a determination.

If the Company fails to qualify as a REIT in any taxable year, it will be subject to U.S. federal income taxes at regular corporate rates and may not be able to qualify as a REIT for the four subsequent taxable years. Even as a REIT, it may be subject to certain state and local income and franchise taxes, and to U.S. federal income and excise taxes on undistributed taxable income and on certain built-in gains.

The Company has elected TRS status for certain wholly-owned subsidiaries. This allows the Company to provide services at those consolidated subsidiaries that would otherwise be considered impermissible for REITs. Many of the foreign countries in which we have operations do not recognize REITs or do not grant REIT status under their respective tax laws to our entities that operate in their jurisdiction. Accordingly, the Company recognizes income tax expense for the U.S. federal and state income taxes incurred by the TRSs, taxes incurred in certain U.S. states

and foreign jurisdictions, and interest and penalties associated with unrecognized tax benefit liabilities, as applicable.

Common share dividends are characterized for U.S. federal income tax purposes as ordinary income, qualified dividend, capital gains, non-taxable income return of capital, or a combination of the four. Common share dividends that exceed current and accumulated earnings and profits (calculated for tax purposes) constitute a return of capital rather than a dividend and generally reduce the stockholder's basis in the common share. At the beginning of each year, we notify our stockholders of the taxability of the common share dividends paid during the preceding year. The payment of common share dividends is dependent upon our financial condition, operating results, and REIT distribution requirements and may be adjusted at the discretion of the Company's Board of Directors. The composition of the Company's distributions per common share for each year presented is as follows:

Common Shares	**2022**	**2021**	**2020**
Ordinary income	41 %	41 %	35 %
Capital gains	0 %	0 %	0 %
Return of capital	59 %	59 %	65 %
	100 %	100 %	100 %

Taxable REIT Subsidiary

The Company has elected to treat certain of its wholly owned subsidiaries as TRSs. A TRS is subject to U.S. federal and state income taxes at regular corporate tax rates. Thus, income taxes for the Company's TRSs are accounted for using the asset and liability method, under which deferred income taxes are recognized for (i) temporary differences between the financial reporting and tax bases of assets and liabilities and (ii) operating loss and tax credit carryforwards based on enacted tax rates expected to be in effect when such amounts are realized or settled.

The Company records a valuation allowance for deferred tax assets when it estimates that it is more likely than not that future taxable income will be insufficient to fully use a deduction or credit in a specific jurisdiction. In assessing the need for the recognition of a valuation allowance for deferred tax assets, we consider whether it is more likely than not that some portion, or all, of the deferred tax assets will not be realized and adjust the valuation allowance accordingly. We evaluate all significant available positive and negative evidence as part of our analysis. Negative evidence includes the existence of losses in recent years. Positive evidence includes the forecast of future taxable income by jurisdiction, tax-planning strategies that would result in the realization of deferred tax assets, reversal of existing deferred tax liabilities, and the presence of taxable income in prior carryback years. The underlying assumptions we use in forecasting future taxable income require significant judgment and take into account our recent performance. The ultimate realization of deferred tax assets depends on the generation of future taxable income during the periods in which temporary differences are deductible or creditable.

The Company accrues liabilities when it believes that it is more likely than not that it will not realize the benefits of tax positions that it has taken in its tax returns or for the amount of any tax benefit that exceeds the cumulative probability threshold in accordance with ASC 740-10, *Uncertain Tax Positions*. The Company recognizes interest and penalties related to unrecognized tax benefits within "Income tax (expense) benefit" in the accompanying Consolidated Statements of Operations.

Pension and Post-Retirement Benefits

The Company has defined benefit pension plans that cover certain union and nonunion associates. The Company also participates in multi-employer union defined benefit pension plans under collective bargaining agreements for certain union associates. The Company also has a post-retirement benefit plan to provide life insurance coverage to eligible retired associates. The Company also offers defined contribution plans to all of its eligible associates. Contributions to multi-employer union defined benefit pension plans are expensed as incurred, as are the Company's contributions to the defined contribution plans. For the defined benefit pension plans and the post-retirement benefit plan, an asset or a liability is recorded in the consolidated balance sheet equal to the funded status of the plan, which represents the difference between the fair value of the plan assets and the projected benefit obligation at the consolidated balance sheet date. The Company utilizes the services of a third-party actuary to assist in the assessment of the fair value of the plan assets and the projected benefit obligation at each measurement date. Certain changes in the value of plan assets and the projected benefit obligation are not recognized immediately in earnings but instead are deferred as a component of accumulated other comprehensive income (loss) and amortized to earnings in future periods.

Foreign Currency Gains and Losses

The local currency is the functional currency for the Company's operations in Australia, Canada, Chile, Europe and New Zealand. For these operations, assets and liabilities are translated at the rates of exchange on the consolidated balance sheet date, while income and expense items are translated at average rates of exchange during the period. The resulting gains or losses arising from the translation of accounts from the functional currency into U.S. dollars are included as a separate component of equity in accumulated other comprehensive income (loss) until a partial or complete liquidation of the Company's net investment in the foreign operation.

From time to time, the Company's foreign operations may enter into transactions that are denominated in a currency other than their functional currency. These transactions are initially recorded in the functional currency of the subsidiary based on the applicable exchange rate in effect on the date of the transaction. On a monthly basis, these transactions are remeasured to an equivalent amount of the functional currency based on the applicable exchange rate in effect on the remeasurement date. Any adjustment required to remeasure a transaction to the equivalent amount of functional currency is recorded in "Foreign currency exchange loss, net" in the accompanying Consolidated Statements of Operations.

Foreign currency transaction gains and losses on the remeasurement of short-term intercompany loans denominated in currencies other than a subsidiary's functional currency are recognized as a component of foreign currency gain or loss, except to the extent that the transaction is effectively hedged. For loans that are effectively hedged, the transaction gains and losses on remeasurement are recorded to "Accumulated other comprehensive income (loss)". Refer to Note 10 for further details. Foreign currency transaction gains and losses resulting from the remeasurement of long-term intercompany loans denominated in currencies other than a subsidiary's functional currency are is recorded in "Change in unrealized net (loss) gain on foreign currency" on the accompanying Consolidated Statements of Comprehensive (Loss) Income if a repayment of these loans is not anticipated.

Certain foreign denominated debt instruments have been designated as a hedge of our net investment in the international subsidiaries which were funded. The remeasurement of these instruments is recorded in "Change in unrealized net (loss) gain on foreign currency" on the accompanying Consolidated Statements of Comprehensive (Loss) Income. Refer to Note 10 for further details.

3. Business Combinations

Acquisition Completed During 2022

On July 1, 2022, the Company completed the acquisition of De Bruyn Cold Storage which operates a single facility located in Tasmania, Australia for total consideration of A$23.5 million, or $16.0 million, based on the exchange rate between the AUS and USD on the closing date of the transaction. The acquisition accounting related to the consideration transferred primarily included assigning the preliminary fair values of the assets acquired and liabilities assumed including $1.0 million of land, $8.2 million of buildings and improvements, $3.7 million of machinery and equipment, and $3.1 million of goodwill, all of which are allocated to the Warehouse segment. The estimated fair values of the assets acquired and liabilities assumed and the related preliminary acquisition accounting are based on management's estimates and assumptions, as well as other information compiled by management. The estimates and assumptions are subject to change during the measurement period, not to exceed one year from the acquisition date, as defined by ASC 805.

Acquisitions Completed During 2021

The acquisitions of Bowman Stores, ColdCo, KMT Brrr!, Lago Cold Stores, Liberty Freezers and Newark Facility Management (Newark) were completed during the year ended December 31, 2021. The acquisition accounting was finalized for all of these acquisitions within twelve months from the date of the respective acquisition. No material adjustments were made to the acquisition accounting during the year ended December 31, 2022. The total consideration paid and the changes to the balance sheet accounts, in aggregate, resulting from these acquisitions is displayed in the supplemental disclosures within the Consolidated Statements of Cash Flows and Supplemental Disclosures as of and for the year ended December 2022. Additionally, the following table summarizes the final amounts allocated to the assets acquired and liabilities assumed for each of these acquisitions (in thousands):

	Bowman Stores	ColdCo	KMT Brrr!	Lago Cold Stores	Liberty Freezers	Newark
Assets						
Land	$ 5,917	$ 2,430	$ 7,930	$ 19,575	$ 3,250	$ 30,390
Buildings and improvements	32,815	9,695	46,707	28,920	13,892	58,983
Machinery and equipment	17,831	3,027	11,520	13,593	3,710	19,100
Assets under construction	322	—	51	—	—	—
Identifiable intangible assets	25,340	2,480	1,090	—	3,550	269,000
Goodwill	32,554	2,297	3,159	9,789	17,525	17,606
Operating leases - right of use assets	31	—	—	1,808	21,078	3,276
Financing leases	392	24	—	—	—	—
Cash, cash equivalents and restricted cash	3,444	305	512	—	1,654	962
Accounts receivable	1,876	862	1,435	—	1,337	742
Other assets	77	75	149	2,216	268	1,063
Total assets	120,599	21,195	72,553	75,901	66,264	401,122
Liabilities						
Accounts payable	2,968	575	935	494	2,470	5,064
Operating lease obligations	30	—	—	1,808	12,760	3,276
Finance lease obligations	347	24	—	—	—	—
Unearned revenue	83	96	212	—	448	1,967
Deferred tax liability - net	10,808	—	—	(1,496)	5,712	—
Total liabilities	14,236	695	1,147	806	21,390	10,307
Total consideration	**$ 106,363**	**$ 20,500**	**$ 71,406**	**$ 75,095**	**$ 44,874**	**$ 390,815**

4. Investments in Partially Owned Entities

As of December 31, 2022, our investments in partially owned entities accounted for under the equity method of accounting presented in our Consolidated Balance Sheets consists of the following (in thousands):

Joint Venture	Location	% Ownership	December 31, 2022	December 31, 2021
Superfrio	Brazil	14.99%	$30,445	$26,832
Comfrio	Brazil	22.12%	1,435	10,626
LATAM	Chile	15.00%	36,943	—
			$68,823	$37,458

The debt of each of these unconsolidated joint ventures is non-recourse to the Company, except for customary exceptions pertaining to such matters as intentional misuse of funds, environmental conditions and material misrepresentations.

Superfrio Joint Venture

SuperFrio is a Brazilian-based company that provides temperature-controlled storage and logistics services including storage, warehouse services, and transportation.

During 2020, the Company purchased a 14.99% equity interest in a joint venture with Superfrio Armazéns Gerais S.A. (“SuperFrio”) for Brazil reals of R$117.8 million. Including certain transaction costs, the Company recorded an initial investment of USD $25.7 million in the joint venture.

During 2021, the Company contributed an aggregate R$40.7 million (or $7.6 million USD) in capital to the SuperFrio joint venture. The capital calls from SuperFrio were issued to each owner based on their ownership percentage, therefore, the Company’s ownership percentage remains unchanged. There were no material amounts contributed to the SuperFrio JV during 2022, and no further contributions are expected at this time.

Comfrio Joint Venture

As a result of the Agro acquisition which closed on December 30, 2020, the Company acquired Agro’s 22.12% share of ownership in Agrofundo Brazil II Fundode Investimento em Participações (“FIP”) or the “Comfrio” joint venture. The FIP owned all the issued and outstanding shares of common stock of Agro Improvement Participações S.A. (“Agro Improvement”), a sociedade anônima, duly organized and existing under the laws of Brazil. The FIP has a put right that requires the Company, when exercised, to purchase from it all the issued and outstanding shares of Agro Improvement starting on July 1, 2019 through January 7, 2023. On September 29, 2021, the FIP exercised its put right. The parties reached a preliminary settlement agreement on the value of the put right during late 2022 with an expected closing date during the first quarter of 2023, pending regulatory approval. If regulatory approval is obtained, the Company will be required to complete the purchase of the FIP ownership interest for $58 million.

During the fourth quarter of 2022, the Company entered into a loan agreement with Comfrio, in which Comfrio is allowed to borrow up to $25 million from Americold at a 10% annual fixed interest rate. This arrangement was conducted at arm’s length. As of December 31, 2022, the loan receivable and related accrued interest due from Comfrio of $10.1 million is reflected under “Investments in partially owned entities and other” on the Consolidated Balance Sheets.

Latin America Joint Venture

On May 31, 2022, we formed a joint venture, Americold LATAM Holdings Ltd (the "LATAM JV"), with Cold LATAM Limited (our "JV partner"), in an effort to help us grow our business and market presence in the Latin America region, excluding Brazil. Our JV partner committed to invest approximately $209.0 million in exchange for 85% of the total equity interests, and we contributed our Chilean business upon formation of the joint venture and retained the remaining 15% equity interests in the joint venture. Our JV partner's contribution commitment includes an initial contribution of $8 million at closing and the remainder as a contribution receivable to the LATAM JV. The JV partner must complete its remaining contribution payments over the next four-year period through December 31, 2025 and in doing so, it retains its 85% equity ownership during this period. As a result of this transaction, we recognized a loss of approximately $4.1 million within "Other income (expense), net" on the Consolidated Statements of Operations (net of accumulated foreign currency translation loss related to the Chilean business) upon the deconsolidation of this entity and subsequent recognition of our subsidiary's 15% equity investment in the LATAM JV at its estimated fair value of $37.0 million within "Investments in partially owned entities and other" on the Consolidated Balance Sheets. The fair value of the Company's retained equity investment is based on Level 3 measurements within the fair value hierarchy based on the cash paid and contribution receivable committed to by our JV partner for their 85% interest, as well as fair value measurement performed in December 2020 when the Chilean business was acquired. Under the terms of the JV agreement, the Company has a call right that enables it to purchase all remaining issued and outstanding shares of the LATAM JV starting in 2026 through 2028, as calculated in accordance with the JV agreement. Upon expiration of the Company's call option, if unexercised, the JV partner has a call right that requires the Company to sell all of its interest in the LATAM JV by December 31, 2028, with the exercise price based upon the same calculation as the Company's call option in accordance with the LATAM JV agreement.

5. Goodwill and Intangible Assets

The changes in the carrying amount of the Company's goodwill by reportable segment for the years ended December 31, 2022, 2021 and 2020 are as follows (in thousands):

	Warehouse	Transportation	Third-party managed	Unallocated Acquisitions	Total
December 31, 2020	$ 421,727	$ 22,674	$ 3,261	$ 346,673	$ 794,335
Goodwill acquired	92,849	700	—	—	93,549
Purchase price allocation adjustments	541,872	6,746	—	(346,673)	201,945
Impact of foreign currency translation	(16,333)	(466)	(50)	—	(16,849)
December 31, 2021	1,040,115	29,654	3,211	—	1,072,980
Goodwill acquired	3,076	—	—	—	3,076
Purchase price allocation adjustments	981	—	—	—	981
Impairment and other	(27,632)	14,697	(3,211)	—	(16,146)
Impact of foreign currency translation	(27,254)	—	—	—	(27,254)
December 31, 2022	$ 989,286	$ 44,351	$ —	$ —	$ 1,033,637

The goodwill resulting from the Hall's and Agro acquisitions in 2020 was allocated between the Warehouse and Transportation segments during 2021 as the acquired assets had not yet been assigned to the respective segments as of December 31, 2020 given the short period of time between the acquisition dates and year-end. Refer to Note 2 for additional information regarding the goodwill impairment charge recorded during 2022.

Intangible assets subject to amortization as of December 31, 2022 and 2021 are as follows (in thousands):

	As of					
	December 31, 2022			December 31, 2021		
Intangible asset	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationship	$ 1,013,258	$ (103,615)	$ 909,643	$ 1,034,382	$ (69,763)	$ 964,619
In-place lease and assembled workforce	$ 4,825	$ (4,322)	$ 503	$ 4,825	$ (3,521)	$ 1,304

The change in gross carrying amount for customer relationship assets from December 31, 2021 to 2022 is due to a decrease in foreign exchange rate movement of $21.1 million. The change in accumulated amortization for customer relationship assets from December 31, 2021 to 2022 is due to amortization expense of $35.7 million, partially offset by the decrease due to foreign exchange rate movement of $1.1 million. The estimated amortization for each of the next five years is approximately $36.0 million, and approximately $730.1 million thereafter. The weighted average remaining useful life as of December 31, 2022 for our customer relationships is 27 years. Additionally, we have an indefinite-lived Trade name asset with a carrying value of $15.1 million as of December 31, 2022 and 2021, respectively.

6. Other Assets

Other assets as of December 31, 2022 and 2021 are as follows (in thousands):

	2022	2021
Inventory and supplies	$ 29,297	$ 27,040
Prepaid accounts	26,490	26,991
Fair value of derivatives	23,520	2,015
Other	79,398	56,093
	$ 158,705	**$ 112,139**

7. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses as of December 31, 2022 and 2021 are as follows (in thousands):

	2022	2021
Trade payables	$ 215,255	$ 223,932
Accrued payroll and employee benefits	107,238	84,825
Other accrued expenses	70,218	80,400
Dividends payable	60,419	60,612
Accrued utilities, property taxes, and warehouse costs	44,107	40,368
Accrued workers' compensation expenses	31,943	33,514
Accrued interest	28,360	35,761
	$ 557,540	**$ 559,412**

8. Acquisition, Litigation and Other, net

The components of the charges included in “Acquisition, litigation and other, net” in our Consolidated Statements of Operations are as follows (in thousands):

	Years Ended December 31,		
Acquisition, litigation and other, net	**2022**	**2021**	**2020**
Acquisition and integration related costs	$ 24,018	$ 39,265	$ 26,466
Litigation	179	2,217	310
Severance costs	6,530	8,908	1,089
Terminated site operations costs	4,154	884	124
Cyber incident related costs, net of insurance recoveries	(2,210)	(447)	7,908
Other, net	(160)	751	409
Total acquisition, litigation and other, net	**$ 32,511**	**$ 51,578**	**$ 36,306**

Acquisition related costs include costs associated with business transactions, whether consummated or not, such as advisory, legal, accounting, valuation and other professional or consulting fees. We also include integration costs pre- and post-acquisition that reflect work being performed to facilitate merger and acquisition integration, such as work associated with information systems and other projects including spending to support future acquisitions, and primarily consist of professional services. We consider acquisition related costs to be corporate costs regardless of the segment or segments involved in the transaction. Refer to Note 3 for further information regarding recent acquisitions.

Litigation costs consist of expenses incurred in order to defend the Company from litigation charges outside of the normal course of business as well as related settlements not in the normal course of business. In the event that an estimated loss contingency is subsequently settled in a favorable manner, the related benefit is also recorded herein. Litigation costs incurred in connection with matters arising from the ordinary course of business are expensed as a component of “Selling, general and administrative” on the Consolidated Statements of Operations.

Severance costs represent certain contractual and negotiated severance and separation costs from exited former executives, reduction in headcount due to synergies achieved through acquisitions or operational efficiencies and reduction in workforce costs associated with exiting or selling non-strategic warehouses or businesses.

Terminated site operations costs relates to repair expenses incurred to return leased sites to their original physical state at lease inception in connection with the termination of the applicable underlying lease. Additionally, terminated site operations costs include those incurred to wind down operations at recently sold facilities. These terminations were part of our strategic efforts to exit or sell non-strategic warehouses as opposed to ordinary course lease expirations. Repair and maintenance expenses associated with our ordinary course operations are reflected within “Rent, storage and warehouse services cost of operations” on the Consolidated Statement of Operations.

Cyber incident related costs include third-party fees incurred in connection with cyber incidents, as well as any incremental costs, internal and external, incurred to restore operations at our facilities and damage claims. Any subsequent reimbursements from insurance coverage for expenses incurred in connection with the event are also reflected within this category and recorded upon receipt of agreement from the insurer.

Other costs relate to additional superannuation pension costs related to prior years upon review by the Australian Tax Office and expenses incurred which are subject to an insurance claim, including deductibles, which are recorded at the time the claim is submitted to the insurer. Subsequent reimbursement of expenses in excess of the

deductible are also reflected within this category upon receipt from the insurer. Occasionally, we may subsequently decide to withdraw an insurance claim if costs are less than initially estimated and below the deductible, among other reasons, resulting in the reversal of the unused portion of a deductible previously recorded to this category.

9. Debt

The following table reflects a summary of our outstanding indebtedness (in thousands):

	December 31, 2022		December 31, 2021	
	Weighted Average Effective Interest Rate	Carrying Amount	Weighted Average Effective Interest Rate	Carrying Amount
Senior Unsecured Notes	3.27%	$ 1,752,875	3.22%	$ 1,802,750
Senior Unsecured Term Loans	4.67%	829,450	1.45%	372,800
Senior Unsecured Revolving Credit Facility	5.12%	500,052	1.54%	399,314
2013 Mortgage Loans	N/A	—	5.93%	269,545
Chile Mortgages	N/A	—	4.01%	9,761
Total principal amount of indebtedness		$ 3,082,377		$ 2,854,170
Less: unamortized deferred financing costs		(13,044)		(11,050)
Total indebtedness, net of deferred financing costs		$ 3,069,333		$ 2,843,120

The weighted-average interest rates shown represent interest rates at the end of the periods for the debt outstanding and include the impact of designated interest rate swaps, which effectively lock-in the interest rates on certain variable rate debt under our Senior Unsecured Term Loans.

The following tables provides the details of our Senior Unsecured Notes (balances in thousands):

			December 31, 2022		December 31, 2021	
	Stated Maturity Date	Contractual Interest Rate	Borrowing Currency	Carrying Amount (USD)	Borrowing Currency	Carrying Amount (USD)
Series A Notes	01/2026	4.68%	$ 200,000	$ 200,000	$ 200,000	$ 200,000
Series B Notes	01/2029	4.86%	$ 400,000	$ 400,000	$ 400,000	$ 400,000
Series C Notes	01/2030	4.10%	$ 350,000	$ 350,000	$ 350,000	$ 350,000
Series D Notes	01/2031	1.62%	€ 400,000	$ 428,200	€ 400,000	$ 454,800
Series E Notes	01/2033	1.65%	€ 350,000	$ 374,675	€ 350,000	$ 397,950
Total Senior Unsecured Notes				$ 1,752,875		$ 1,802,750

The following tables provides the details of our Senior Unsecured Term Loans (balances in thousands):

	December 31, 2022			December 31, 2021		
	Contractual Interest Rate[(1)]	Borrowing Currency	Carrying Amount (USD)	Contractual Interest Rate[(1)]	Borrowing Currency	Carrying Amount (USD)
Tranche A-1	SOFR + 0.95%	$ 375,000	$ 375,000	LIBOR+0.95%	$ 175,000	$ 175,000
Tranche A-2	CDOR+0.95%	C$ 250,000	184,450	CDOR+0.95%	C$ 250,000	$ 197,800
Delayed Draw Tranche A-3	SOFR + 0.95%	$ 270,000	270,000	—	—	—
Total Senior Unsecured Term Loan Facility			$ 829,450			$ 372,800

(1) S = one-month Adjusted Term SOFR; C = one-month CDOR; L = one-month LIBOR. Tranche A-1 and Tranche A-3 SOFR includes an adjustment of 0.10%, in addition to the margin. While the above reflects the contractual rate, refer to the description below of the Senior Unsecured Credit Facility for

details of the portion of these Term Loans that are hedged, therefore, at a fixed interest rate for the duration of the respective swap agreement. Refer to Note 10 for details of the related interest rate swaps.

The following table provides the details of our Senior Unsecured Revolving Credit Facility (balances in thousands):

	December 31, 2022				December 31, 2021			
Denomination of Draw	**Contractual Interest Rate [1]**	**Borrowing Currency**		**Carrying Amount (USD)**	**Contractual Interest Rate[1]**	**Borrowing Currency**		**Carrying Amount (USD)**
U.S. dollar	SOFR + 0.85%	$	225,000	$ 225,000	LIBOR+0.85%	$	205,000	$ 205,000
Australian dollar	BBSW+0.85%	A$	146,000	$ 99,470	BBSW+0.85%	A$	80,000	$ 58,104
British pound sterling	SONIA+0.85%	£	76,500	$ 92,435	SONIA+0.85%	£	68,500	$ 92,694
Canadian dollar	CDOR+0.85%	C$	50,000	$ 36,890	CDOR+0.85%	C$	55,000	$ 43,516
Euro	EURIBOR+0.85%	€	35,500	$ 38,003	—		—	—
New Zealand dollar	BKBM+0.85%	NZD	12,998	$ 8,254	—		—	—
Total Senior Unsecured Revolving Credit Facility				$ 500,052				$ 399,314

[1] S = one-month Adjusted SOFR; C = one-month CDOR; L = one-month LIBOR, E = Euro Interbank Offered Rate (EURIBOR), SONIA = Adjusted Sterling Overnight Interbank Average Rate, BBSW = Bank Bill Swap Rate, BKBM = Bank Bill Reference Rate. We have elected Daily SOFR for the entirety of our U.S. dollar denominated borrowings shown above, which includes an adjustment of 0.10%, in addition to the margin. Our British pound sterling borrowings bear interest tied to adjusted SONIA which includes an adjustment of 0.03% in addition to our margin.

Senior Unsecured Credit Facility

On August 23, 2022, the Company entered into an agreement to extend and upsize its Senior Unsecured Credit Facility from $1.5 billion to approximately $2.0 billion. Additionally, the Company used a portion of the unsecured credit facilities to repay its 2013 Mortgage Notes which were scheduled to mature on May 1, 2023, but became prepayable at par beginning November 1, 2022. In connection with the refinancing, the base interest rate for the USD denominated borrowings was updated to SOFR from LIBOR and all borrowings now incorporate a sustainability-linked pricing component which is subject to adjustment based on improvement in the Company's annual GRESB rating, as part of it's ESG initiatives.

The Senior Unsecured Revolving Credit Facility is comprised of a $575 million U.S. dollar component and a $575 million U.S. dollar equivalent, multicurrency component. The revolving credit facility matures in August 2026; however, the Company has the option to extend maturity up to two times, each for a six-month period. The Company must meet certain criteria in order to extend the maturity, and an additional extension fee must be paid. Unamortized deferred financing costs related to the revolving credit facility are included in "Other assets" in the accompanying Consolidated Balance Sheets totaling $8.8 million and $4.8 million as of December 31, 2022 and December 31, 2021, respectively, which is amortized as interest expense under the straight-line method through the maturity date.

The Senior Unsecured Term Loan A consists of three tranches. Tranche A-1 consists of a $375 million USD term loan, an increase from the previous amount of $175 million USD, with a maturity date of August 2025; however, the Company has the option to extend maturity up to two times, each for a twelve months period. Tranche A-2 consists of a C$250 million term loan with a maturity date of January 2028, and does not have any extension options. Tranche A-3 consists of a $270 million USD term loan delayed draw facility, which matures in January 2028, and does not have any extension options. As previously mentioned, the Company drew the Tranche A-3 on November 1, 2022, to repay its 2013 Mortgage Notes. The remaining proceeds of the delayed draw facility were used for general corporate purposes. Unamortized deferred financing costs related to the Senior Unsecured Term Loan A are included in "Mortgage notes, senior unsecured notes, and term loan" on the accompanying Consolidated Balance Sheets totaling $4.2 million and $2.3 million as of December 31, 2022, and December 31, 2021, respectively. These amounts are amortized as interest expense under the effective interest method through

the maturity date.

Our Senior Unsecured Credit Facility contains representations, covenants and other terms customary for a publicly traded REIT. In addition, it contains certain financial covenants, as defined in the credit agreement, including:

- a maximum leverage ratio of less than or equal to 60% of our total asset value. Following a Material Acquisition, leverage ratio shall not exceed 65%;
- a maximum unencumbered leverage ratio of less than or equal to 60% to unencumbered asset value. Following a Material Acquisition, unencumbered leverage ratio shall not exceed 65%;
- a maximum secured leverage ratio of less than or equal to 40% to total asset value. Following a Material Acquisition, secured leverage ratio shall not exceed 45%;
- a minimum fixed charge coverage ratio of greater than or equal to 1.50x; and
- a minimum unsecured interest coverage ratio of greater than or equal to 1.75x.

Material Acquisition in our Senior Unsecured Credit Facility is defined as one in which assets acquired exceeds an amount equal to 5% of total asset value as of the last day of the most recently ended fiscal quarter publicly available. Obligations under our Senior Unsecured Credit Facility are general unsecured obligations of our Operating Partnership and are guaranteed by the Company and certain subsidiaries of the Company. As of December 31, 2022, the Company was in compliance with all debt covenants.

There were $21.4 million letters of credit issued on the Company's Senior Unsecured Revolving Credit Facility as of December 31, 2022.

2013 Mortgage Loans

On May 1, 2013, we entered into a mortgage financing in an aggregate principal amount of $322.0 million, which we referred to as the 2013 Mortgage Loans. The debt consisted of a senior debt note and two mezzanine notes. The components were cross-collateralized and cross-defaulted. The senior debt note required monthly principal payments. The mezzanine notes required no principal payments until the stated maturity date in May 2023. The 2013 Mortgage Loans became prepayable at par and the Company repaid at that time using proceeds from the Senior Unsecured Tranche A-3 term loan on November 1, 2022.

Debt Covenants

Our Senior Unsecured Credit Facilities and the Senior Unsecured Notes require financial statement reporting, periodic reporting of compliance with financial covenants, other established thresholds and performance measurements, and compliance with affirmative and negative covenants that govern our allowable business practices. The affirmative and negative covenants include, among others, continuation of insurance, the maintenance of REIT status, and restrictions on our ability to enter into certain types of transactions or take on certain exposures. As of December 31, 2022, we were in compliance with all debt covenants.

Loss on debt extinguishment, modifications and termination of derivative instruments

In connection with the refinancings that occurred during the years ended December 31, 2022, 2021 and 2020, the Company recorded $0.6 million, $2.9 million and $2.3 million, respectively, to "Loss on debt extinguishment, modifications and termination of derivative instruments" in the accompanying Consolidated Statements of Operations. In 2020, the Company terminated the two interest rate swaps related to the 2020 Senior Unsecured Credit Facility for a fee of $16.4 million, of which $8.7 million was recorded in "Accumulated Other

Comprehensive Income" and is being amortized to "Loss on debt extinguishment, modifications and termination of derivative instruments" through 2024, and $7.7 million was immediately recorded as interest and included within "Loss on debt extinguishment, modifications and termination of derivative instruments" in the accompanying Consolidated Statements of Operations during the year ended December 31, 2020. The amortization of the previously deferred costs from terminating these swaps was $2.5 million and $2.7 million during the years ended December 31, 2022 and 2021, respectively.

Aggregate future repayments of indebtedness

The aggregate maturities of indebtedness as of December 31, 2022 for each of the next five years and thereafter, are as follows:

Years Ending December 31:	**(In thousands)**
2023	$ —
2024	—
2025	—
2026	1,075,052
2027	—
Thereafter	2,007,325
Aggregate principal amount of debt	3,082,377
Less unamortized deferred financing costs	(13,044)
Total debt net of deferred financing costs	$ 3,069,333

10. Derivative Financial Instruments

Designated Non-derivative Financial Instruments

As of December 31, 2022, the Company designated £76.5 million, A$146.0 million and €785.5 million debt and accrued interest as a hedge of our net investment in the respective international subsidiaries. As of December 31, 2021, the Company designated £68.5 million and A$80.0 million debt and accrued interest as a hedge of our net investment in the respective international subsidiaries. The remeasurement of these instruments is recorded in "Change in unrealized net (loss) gain on foreign currency" on the accompanying Consolidated Statements of Comprehensive (Loss) Income.

Derivative Financial Instruments

The Company is subject to volatility in interest rates due to variable-rate debt. To manage this risk, the Company periodically enters into interest rate swap agreements. During 2022, the Company completed a refinancing of its Senior Unsecured Credit Facility. As a result of this refinancing, the Company's variable interest rate exposure increased. To manage this risk, the Company entered into several interest rate swap agreements. These agreements involved the receipt of variable-rate amounts in exchange for fixed-rate interest payments over the life of the respective swap agreement without an exchange of the underlying notional amount. The Company's objective for utilizing these derivative instruments was to reduce its exposure to fluctuations in cash flows due to changes in interest rates. The following table includes the key provisions of the interest rate swaps outstanding as of December 31, 2022 (fair value in thousands):

Notional	Fixed Base Interest Rate Swap	Effective Date	Expiration Date	Fair Value as of December 31, 2022
$200 million USD	3.65%	9/23/2022	12/29/2023	$ 2,240
$200 million USD	3.05%	12/29/2023	7/30/2027	2,328
$175 million USD	3.47%	11/30/2022	7/30/2027	2,020
$270 million USD	3.05%	11/01/2022	12/31/2027	8,034
$250 million CAD	3.59%	9/23/2022	12/31/2027	950
			Total	$ 15,572

The Company had no interest rate swaps outstanding as of December 31, 2021. During 2020 we terminated interest rate swaps with notional amounts of $100 million and $225 million, and as a result accelerated the reclassification in other comprehensive income to earnings as a result of the hedged forecasted transactions becoming not probable to occur resulting in a charge to "Loss on debt extinguishment, modifications, and termination of derivative instruments" of $7.7 million on the accompanying Consolidated Statement of Operations for the year ended December 31, 2020, with the remainder being amortized to "Loss on debt extinguishment, modifications, and termination of derivative instruments" through 2024. The Company classifies cash inflow and outflows from derivatives that hedge interest rate risk within operating activities on the Consolidated Statements of Cash Flows.

The Company is subject to volatility in foreign exchange rates due to foreign-currency denominated intercompany loans. The Company implemented cross-currency swaps to manage the foreign currency exchange rate risk on certain intercompany loans. These agreements effectively mitigate the Company's exposure to fluctuations in cash flows due to foreign exchange rate risk. These agreements involve the receipt of fixed USD amounts in exchange for payment of fixed AUD and NZD amounts over the life of the respective intercompany loan. The entirety of the Company's outstanding intercompany loans receivable balances, $153.5 million AUD and $37.5 million NZD, were hedged under the cross-currency swap agreements at December 31, 2022 and 2021.

For derivatives designated and that qualify as cash flow hedges of foreign exchange risk, the gain or loss on the derivative is recorded in Accumulated Other Comprehensive Income and subsequently reclassified in the period(s) during which the hedged transaction affects earnings within the same income statement line item as the earnings effect of the hedged transaction. During the next twelve months, the Company estimates that an additional $0.3 million will be reclassified as an increase to gain/loss on foreign exchange (a component of "Other income (expense), net") and an additional $11.4 million will be reclassified as a decrease to "Interest expense". Additionally, during the next twelve months, the Company estimates that an additional $2.5 million will be reclassified as an increase to "Loss on debt extinguishment, modification, and termination of derivative instruments".

The Company is subject to volatility in foreign currencies against its functional currency, the US dollar. Periodically, the Company uses foreign currency derivatives including currency forward contracts to manage its exposure to fluctuations in exchange rates. While these derivatives are hedging the fluctuations in foreign currencies, they do not meet the requirements to be accounted for as hedging instruments. As a result, the changes in the fair value of derivatives not designated in hedging relationships are recorded directly in earnings. As of December 31, 2022 and 2021, the Company did not have any foreign currency forwards outstanding. During the fourth quarter of 2020, the Company entered into an undesignated foreign currency forward contract to lock in the expected proceeds from the issuance of the Series D & E Senior Unsecured Notes, which would convert the Euro denominated debt issuance to USD. The notional amount was €750 million which settled on December 30, 2020. The realized loss on the foreign currency forward contract was $45 million and was reflected in "Foreign currency

exchange loss, net" on the accompanying Consolidated Statements of Operations during the year ended December 31, 2020.

The Company determines the fair value of its derivative instruments using a present value calculation with significant observable inputs classified as Level 2 of the fair value hierarchy. Derivative asset balances are recorded on the accompanying Consolidated Balance Sheets within "Other assets" and derivative liability balances are recorded on the accompanying Consolidated Balance Sheets within "Accounts payable and accrued expenses". The following table presents the fair value of the derivative financial instruments within "Other assets" and "Accounts payable and accrued expenses" as of December 31, 2022 and 2021 (in thousands):

	Derivative Assets		Derivative Liabilities	
	As of December 31,		As of December 31,	
	2022	2021	2022	2021
Designated derivatives				
Foreign exchange contracts	$ 7,948	$ 2,015	$ —	$ —
Interest rate contracts	15,572	—	—	—
Total fair value of derivatives	$ 23,520	$ 2,015	$ —	$ —

The following tables present the effect of the Company's designated derivative financial instruments on the accompanying Consolidated Statements of Operations for the years ended December 31, 2022, 2021 and 2020, including the impacts to Accumulated Other Comprehensive Income (AOCI) (in thousands):

	Amount of Gain or (Loss) Recognized in Other Comprehensive Income on Derivative			Location of Gain or (Loss) Reclassified from AOCI into Income	Amount of Gain or (Loss) Reclassified from Accumulated Other Comprehensive Income into Income		
	As of December 31,				As of December 31,		
	2022	2021	2020		2022	2021	2020
Interest rate contracts	$ 15,572	$ —	$ (11,465)	Interest expense	$ 721	$ —	$ (3,368)
Interest rate contracts	—	—	(7,688)	Loss on debt extinguishment, modifications and termination of derivative instruments[(1)]	(2,507)	(2,681)	(7,688)
Foreign exchange contracts	5,933	11,626	(11,015)	Foreign currency exchange (loss) gain, net	7,602	7,595	(12,158)
Foreign exchange contracts	—	—	—	Interest expense	371	(175)	(74)
Foreign exchange forwards	—	—	5,250			—	—
Total designated cash flow hedges	$ 21,505	$ 11,626	$ (24,918)		$ 6,187	$ 4,739	$ (23,288)

[(1)] The Company accelerated the reclassification in other comprehensive income to earnings as a result of the hedged forecasted transactions becoming not probable to occur resulting in a charge to "Loss on debt extinguishment, modification, and termination of derivative instruments" on the accompanying Consolidated Statement of Operations for the year ended December 31, 2020.

As of December 31, 2022 and 2021, there was no impact from netting arrangements and the Company did not have any outstanding derivatives in a net liability position. As of December 31, 2022, the Company has not posted any collateral related to these agreements. The Company has agreements with each of its derivative counterparties that contain a provision where the Company could be declared in default on its derivative obligations if repayment of the underlying indebtedness is accelerated by the lender due to the Company's default on the indebtedness. Refer to Note 18 for additional details regarding the impact of the Company's derivatives on AOCI for the years ended December 31, 2022, 2021 and 2020.

11. Sale-Leasebacks of Real Estate

The Company's outstanding sale-leaseback financing obligations of real estate-related long-lived assets as of December 31, 2022 and 2021 are as follows:

	Maturity	Interest Rate as of December 31, 2022	2022	2021
			(In thousands)	
1 warehouse – 2010	7/2030	10.34%	$ 17,607	$ 18,177
11 warehouses – 2007	9/2027	7.00%-19.59%	84,406	89,269
3 facilities - 2007 (Agro)	7/2031	10%	63,550	65,661
1 facility - 2013 (Agro)	12/2033	10%	5,526	5,710
Total sale-leaseback financing obligations			$ 171,089	$ 178,817

In connection with the Agro acquisition, the Company assumed four sale-leaseback facilities. Agro completed a sale-leaseback transaction for three of its warehouse facilities in 2007 that was accounted for as financing. The initial term of the agreement was 20 years and was amended in 2011 to extend the term to 2031. The rent payments increase every five years by the lesser of 125% of the cumulative increase in the Consumer Price Index (CPI) over the related five-year period or 9%. Agro also completed a sale-leaseback transaction for one of its warehouse facilities in 2013 that was accounted for as financing. The initial term of the agreement is 20 years and includes six extension options, each for five-years. The rent payments increase every five years by the lesser of the cumulative increase in CPI over the related five-year period or 12%.

In September 2010, the Company entered into a transaction by which it assigned to an unrelated third party its fixed price "in the money" purchase option of $18.3 million on a warehouse it was leasing in Ontario, California. The purchase option was exercised in September 2010, and the Company simultaneously entered into a new 20-year lease agreement with the new owner and received $1.0 million of consideration to use towards warehouse improvements. Under the terms of the new lease agreement, the Company will exercise control over the asset for more than 90% of the asset's remaining useful life, and it has a purchase option within the last six months of the initial lease term at 95% of the fair market value as of the date such option is exercised. The transaction was accounted for as a financing.

In connection with an acquisition completed in 2010, the Company assumed sale leaseback agreements for 11 warehouses originally entered into in 2007, and received gross proceeds of $170.7 million. The agreements for the leases of these properties had various initial terms of 10 to 20 years and annual rent increases of 1.75%. The leases contained four extension options at the discretion of the Company, each for a five-year period. In July 2013, the lease agreements for six of the 11 warehouses were amended to extend the expiration date on four of the warehouse leases to September 2027 and reduce the annual rent increases from 1.75% to 0.50% on five of the warehouse leases. All of the 11 warehouses subject to the sale-leaseback transaction continue to be accounted for as a financing.

As of December 31, 2022, future minimum lease payments, inclusive of certain obligations to be settled with the residual value of related long-lived assets upon expiration of the lease agreement, of the sale-leaseback financing obligations are as follows:

Years Ending December 31:		**(In thousands)**
2023	$	27,460
2024		27,787
2025		28,075
2026		28,363
2027		25,123
Thereafter		129,034
Total minimum payments		265,842
Interest portion		(94,753)
Present value of net minimum payments	$	171,089

12. Lease Accounting

Arrangements wherein we are the lessee:

We have operating and finance leases for land, warehouses, offices, vehicles, and equipment with remaining lease terms ranging from 1 to 30 years. Many of our leases include one or more options to extend the lease term from 1 to 10 years that may be exercised at our sole discretion. Additionally, many of our leases for vehicles and equipment include options to purchase the underlying asset at or before expiration of the lease agreement. Rental payments are generally fixed over the term of the lease agreement with the exception of certain equipment leases for which the rental payment may vary based on usage of the asset. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

As of December 31, 2022, the rights and obligations with respect to leases which have been signed but have not yet commenced are not material to our financial position or results of operations.

The components of lease expense were as follows (in thousands):

	Years Ended December 31,		
	2022	**2021**	**2020**
Components of lease expense:			
Operating lease cost (a)	$ 52,331	$ 59,405	$ 23,931
Financing lease cost:			
Depreciation	25,687	29,743	16,504
Interest on lease liabilities	3,063	7,135	2,969
Sublease income	(7,991)	(3,785)	(551)
Net lease expense	$ 73,090	$ 92,498	$ 42,853

[a] Includes short-term lease and variable lease costs, which are immaterial.

Other information related to leases is as follows:

	Years Ended December 31, 2022	2021	2020
Supplemental Cash Flow Information (in thousands)			
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash flows from operating leases	$ (42,949)	$ (52,226)	$ (20,070)
Operating cash flows from finance leases	$ (11,533)	$ (10,342)	$ (2,969)
Financing cash flows from finance leases	$ (33,860)	$ (32,441)	$ (19,970)
Right-of-use assets obtained in exchange for lease obligations			
Operating leases	$ 7,889	$ 50,886	$ 44,919
Finance leases	$ 18,694	$ 24,567	$ 38,858
Weighted-average remaining lease term (years)			
Operating leases	11.1	11.7	10.5
Finance leases	3.3	3.6	4.8
Weighted-average discount rate			
Operating leases	2.8 %	2.7 %	2.9 %
Finance leases	3.2 %	3.4 %	3.6 %

Future minimum lease payments under non-cancellable leases as of December 31, 2022 were as follows (in thousands):

Years ending December 31,	**Operating Lease Payments**	**Finance Lease Payments**	**Total Lease Payments**
2023	$ 34,981	$ 33,362	$ 68,343
2024	33,774	23,072	56,846
2025	31,097	11,529	42,626
2026	26,970	6,828	33,798
2027	24,684	3,187	27,871
Thereafter	158,241	4,080	162,321
Total future minimum lease payments	309,747	82,058	391,805
Less: Interest	(45,113)	(4,497)	(49,610)
Total future minimum lease payments less interest	$ 264,634	$ 77,561	$ 342,195

Arrangements wherein we are the lessor:

We receive lease income as the lessor for certain buildings and warehouses or space within a warehouse. The remaining term on existing leases ranges from 1 to 15 years. Lease income is generally fixed over the duration of the contract and each lease contract contains clauses permitting extension or termination. Lease incentives and options for purchase of the leased asset by the lessee are generally not included.

The Company is party to operating leases only and currently does not have sales-type or direct financing leases. Lease income is included within “Rent, storage and warehouse services” in the accompanying Consolidated Statements of Operations as denoted in Note 22 “Revenues from Contracts with Customers”.

Property, buildings and equipment underlying operating leases is included in “Land” and “Buildings and improvements” on the accompanying Consolidated Balance Sheets. The portion of these assets that are applicable to the operating leases where we are the lessor totaled $118.5 million and $91.1 million, for Land and Buildings and improvements, on a gross and net basis, respectively, as of December 31, 2022. The portion of these assets

that are applicable to the operating leases where we are the lessor totaled $124.7 million and $99.4 million, for Land and Buildings and improvements, on a gross and net basis, respectively, as of December 31, 2021. The portion of these assets that are applicable to the operating leases where we are the lessor totaled $73.7 million and $53.1 million, for Land and Buildings and improvements, on a gross and net basis, respectively, as of December 31, 2020. These amounts for 2020 exclude values attributable to Land and Buildings and improvements acquired from Agro as the relevant acquisition accounting was preliminary and was not finalized until 2021, during the measurement period. Depreciation expense for such assets was $4.2 million, $4.2 million and $2.5 million for the years ended December 31, 2022, 2021 and 2020.

Future minimum lease payments due from our customers on leases as of December 31, 2022 were as follows (in thousands):

Year ending December 31,		**Operating Leases**
2023	$	39,727
2024		32,629
2025		22,446
2026		18,612
2027		13,965
Thereafter		43,706
Total	$	171,085

13. Fair Value Measurements

The Company categorizes assets and liabilities that are recorded at fair values into one of three tiers based upon fair value hierarchy. These tiers include: Level 1, defined as quoted market prices in active markets for identical assets or liabilities; Level 2, defined as inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, model-based valuation techniques for which all significant assumptions are observable in the market, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and Level 3, defined as unobservable inputs that are not corroborated by market data. The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued expenses and revolving line of credit approximate their fair values due to the short-term maturities of the instruments.

The Company’s mortgage notes, senior unsecured notes, and term loans are reported at their aggregate principal amount less unamortized deferred financing costs on the accompanying Consolidated Balance Sheets. The fair value of these financial instruments is estimated based on the present value of the expected coupon and principal payments using a discount rate that reflects the projected performance as of each valuation date. The inputs used to estimate the fair value of the Company’s mortgage notes, senior unsecured notes, and term loans are comprised of Level 2 inputs, including senior industrial commercial real estate loan spreads, trading data on comparable unsecured industrial REIT debt, corporate industrial loan indexes, risk-free interest rates, and Level 3 inputs, such as future coupon and principal payments, and projected future cash flows.

The Company’s financial assets and liabilities recorded at fair value on a recurring basis include derivative instruments. The fair value of interest rate swap and cross currency swap agreements, which are designated as cash flow hedges, and foreign currency forward contracts designated as net investment hedges, is based on inputs other than quoted market prices that are observable (Level 2). The fair value of foreign currency forward contracts is based on adjusting the spot rate utilized at the balance sheet date for translation purposes by an estimate of the forward points observed in active markets (Level 2). Additionally, the fair value of derivatives includes a credit valuation adjustment to appropriately incorporate nonperformance risk for the Company and the respective

counterparty. Although the credit valuation adjustments associated with derivatives utilize Level 3 inputs, such as estimates of current credit spreads to evaluate the likelihood of default by us and our counterparties, the significance of the impact on the overall valuation of our derivative positions is insignificant. The fair value hierarchy discussed above is also applicable to the Company's pension and other post-retirement plans. There were no transfers between levels within the hierarchy for the years ended December 31, 2022 and 2021, respectively.

The Company's assets and liabilities recorded at fair value on a non-recurring basis include long-lived assets when events or changes in circumstances indicate that the carrying amounts may not be recoverable. The Company estimates the fair values using unobservable inputs classified as Level 3 of the fair value hierarchy.

The Company's assets and liabilities measured or disclosed at fair value are as follows:

		Fair Value	
		December 31,	
	Fair Value Hierarchy	2022	2021
		(In thousands)	
Measured at fair value on a recurring basis:			
Interest rate swap asset	Level 2	$ 15,572	$ —
Cross-currency swap asset	Level 2	$ 7,948	$ 2,015
Assets held by various pension plans:			
	Level 1	$ 46,155	$ 40,536
	Level 2	$ 17,344	$ 42,599
	Level 3	$ 1,143	$ 1,148
Disclosed at fair value:			
Mortgage notes, senior unsecured notes and term loans[1]	Level 3	$ 2,829,574	$ 2,939,237

[1]The carrying value of mortgage notes, senior unsecured notes and term loans is disclosed in Note 9.

14. Stock-Based Compensation

All share-based compensation cost is measured at the grant date, based on the estimated fair value of the award. The Company issues time-based and market performance-based equity awards. Time-based and cliff vesting market performance-based awards are recognized on a straight-line basis over the associates' requisite service period, as adjusted for estimate of forfeitures.

The Company implemented an Employee Stock Purchase Plan (ESPP) which became effective on December 8, 2020. Under the ESPP, eligible employees are granted options to purchase common stock at the lower of 85% of the fair market value of the stock at the time of grant or 85% of the fair market value at the time of exercise. Options to purchase shares are granted twice yearly on or about January 1 and July 1, and exercisable on or about the succeeding July 1, and January 1, respectively, of each year. No participant may purchase more than $25,000 worth of shares in a six-month offering period, or a maximum of 2,400 shares. There are 5,000,000 shares available for issuance under the ESPP. The stock-based compensation cost of the ESPP options are measured based on grant date at fair value and are recognized on a straight-line basis over the offering period. The ESPP did not have a material impact on stock-based compensation expense during the year ended December 31, 2022.

Aggregate stock-based compensation charges were $27.1 million, $23.9 million and $17.9 million during the years ended December 31, 2022, 2021 and 2020, respectively. Routine stock-based compensation expense is included as a component of "Selling, general and administrative" expense on the accompanying Consolidated Statements of Operations. As of December 31, 2022, there was $22.3 million of unrecognized stock-based

compensation expense related to stock options and restricted stock units, which will be recognized over a weighted-average period of 1.7 years.

Americold Realty Trust 2010 Equity Incentive Plans

During December 2010, the Company and the common stockholders approved the Americold Realty Trust 2010 Equity Incentive Plan (2010 Plan), whereby the Company could issue stock options, stock appreciation rights, restricted stock, restricted stock units, stock bonus awards, and/or dividend equivalents with respect to the Company's common stock, cash bonus awards, and/or performance compensation awards to certain eligible participants, as defined, based upon a reserved pool of 3,849,976 of the Company's common shares. No additional awards may be granted under the 2010 Plan.

Americold Realty Trust 2017 Equity Incentive Plan

On January 4, 2018, the Company's Board of Directors adopted the Americold Realty Trust 2017 Equity Incentive Plan (2017 Plan), which permits the grant of various forms of equity- and cash-based awards from a reserved pool of 9,000,000 shares of common stock of the Company. On January 17, 2018, the Company's stockholders approved the 2017 Plan. Equity-based awards issued under the 2017 Plan have the rights to receive dividend equivalents on an accrual basis. Dividend equivalents for market performance-based awards are forfeitable in the event of termination for cause or when voluntary departure occurs during the vesting period and otherwise, paid upon the vesting of the awards. Time-based awards have the right to receive nonforfeitable dividend equivalent distributions on unvested units throughout the vesting period.

All awards granted under the 2017 Plan dated on March 8, 2020 and thereafter include a retirement provision. The retirement provision allows that if a participant has either attained the age of 65, or has attained the age of 55 and has ten full years of service with the Company, and there are no facts, circumstances or events exist which would give the Company a basis to effect a termination of service for cause, then the award recipient is entitled to continued vesting of any outstanding equity-based awards which include the retirement provision. Should the participant choose to retire from the Company, the awards with the retirement provision would continue to vest. Accordingly, grants of time-based awards to an associate who has met the retirement criteria on or before the date of grant will be expensed at the date of grant. In addition, grants of time-based awards to associates who will meet the retirement criteria during the awards normal vesting period will be expensed between the date of grant and the date upon which the award recipient meets the retirement criteria. Time-based awards granted to recipients who meet the retirement criteria, and decide to retire, will continue vesting on the original vesting schedule as determined at grant date. A pro-rated portion of market-performance based awards granted to recipients who meet the retirement criteria will remain outstanding and eligible to vest based on actual performance through the last day of the performance period based on the number of days during the performance period that the recipient was employed.

Restricted Stock Units

Restricted stock units are nontransferable until vested. Prior to the issuance of a share of common stock, the grantees of restricted stock units are not entitled to vote the shares. Time-based restricted stock unit awards vest in equal annual increments over the vesting period. The grant date fair values for time-based restricted unit stock awards is equal to the closing market price of Americold Realty Trust, Inc. common stock on the grant date. Market performance-based restricted stock unit awards cliff vest upon the achievement of the performance target, as well as completion of performance period.

The following table summarizes restricted stock unit grants by grantee type during the years ended December 31, 2022, 2021 and 2020:

Year Ended December 31	Grantee Type	Number of Restricted Stock Units Granted	Vesting Period		Grant Date Fair Value (in thousands)
2022	Directors	4,810	1 year	$	125
2022	Associates	555,719	1-3 years	$	15,067
2021	Directors	6,616	1 year	$	250
2021	Associates	1,004,650	1-3 years	$	31,159
2020	Directors	8,517	1 year	$	300
2020	Associates	295,274	1-3 years	$	9,137

Restricted stock units granted for the year ended December 31, 2022 consisted of: (i) 4,810 time-based restricted stock units with a one-year vesting period issued to non-employee directors as part of their annual compensation (ii) 424,543 time-based graded vesting restricted stock units with various vesting periods ranging from one to three years issued to certain associates in connection with the annual grant provided in March (iii) 131,176 market performance-based cliff vesting restricted stock units with a three-year vesting period issued to certain associates.

Restricted stock units granted for the year ended December 31, 2021 consisted of: (i) 6,616 time-based restricted stock units with a one-year vesting period issued to non-employee directors as part of their annual compensation (ii) 216,269 time-based graded vesting restricted stock units with various vesting periods ranging from one to three years issued to certain associates in connection with the annual grant provided in March (iii) 108,781 market performance-based cliff vesting restricted stock units with a three-year vesting period issued to certain associates n connection with the annual grant provided in March and (iv) 679,600 time-based graded vesting restricted stock units with various vesting periods ranging from one to two years issued to certain associates as a retention grant in November of 2021.

Restricted stock units granted for the year ended December 31, 2020 consisted of: (i) 8,517 time-based restricted stock units with a one-year vesting period issued to non-employee directors as part of their annual compensation, (ii) 186,464 time-based graded vesting restricted stock units with various vesting periods ranging from one to three years years issued to certain associates and (iv) 108,810 market performance-based cliff vesting restricted stock units with a three-year vesting period issued to certain associates.

In January 2021, following the completion of the applicable market-performance period, the Compensation Committee determined that the high level had been achieved for the 2018 awards and, accordingly, 799,591 units vested immediately, representing a vesting percentage of 150%.

In January 2022, following the completion of the applicable market-performance period, the Compensation Committee determined that the 51st percentile had been achieved for the 2019 awards and, accordingly, 194,111 units vested immediately, representing a vesting percentage of 91.4%.

The following table provides a summary of restricted stock unit activity under the 2010 and 2017 Plans for the year ended December 31, 2022:

	Year Ended December 31, 2022			
Restricted Stock	**Number of Time-Based Restricted Stock Units**	**Aggregate Intrinsic Value (in millions)**	**Number of Market Performance-Based Restricted Stock Units[2]**	**Aggregate Intrinsic Value (in millions)**
Non-vested as of December 31, 2021	1,071,959	$ 35.1	374,048	$ 12.3
Granted	429,353		131,176	
Market-performance adjustment[3]	N/A		(18,253)	
Vested	(623,882)		(194,111)	
Forfeited	(189,763)		(43,413)	
Non-vested as of December 31, 2022	687,667	$ 19.5	249,447	$ 7.1
Shares vested, but not released[1]	46,890	1.3	—	—
Total outstanding restricted stock units	734,557	$ 20.8	249,447	$ 7.1

(1) For certain vested restricted stock units, common stock issuance is contingent upon the first to occur of: (1) termination of service; (2) change in control; (3) death; or (4) disability, as defined in the 2010 Plan. Of these vested time-based restricted stock units 46,890 belong to an active member of the Board of Directors and the date of issuance is therefore unknown at this time. The weighted average grant date fair value of these units is $8.42 per unit. Holders of these certain vested restricted stock units are entitled to receive dividends, but are not entitled to vote until such stock is issued.
(2) The number of market performance-based restricted stock units granted are reflected within this table based upon the number of shares of common stock issuable upon achievement of the performance metric at target.
(3) Represents the decrease in the number of original market-performance units awarded based on the final performance criteria achievement at the end of the defined performance period.

The weighted average grant date fair value of restricted stock units granted during years 2022, 2021, and 2020 was $27.10, $31.06 and $31.06 per unit, respectively. During the year ended December 31, 2022 the weighted average grant date fair value of vested and converted restricted stock units was $31.47 and forfeited restricted stock units was $29.51. The weighted average grant date fair value of non-vested restricted stock units was $28.15 and $31.40 per unit as of December 31, 2022 and 2021, respectively.

Market Performance-Based Restricted Stock Units

During each of the years ended December 31, 2022, 2020 and 2019, the Compensation Committee of the Board of Directors approved the annual grant of market performance-based restricted stock units under the 2017 Plan to associates of the Company. The awards utilize relative total stockholder return (TSR) over a three-year measurement period as the market performance metric. Awards will vest based on the Company’s TSR relative to the MSCI US REIT Index (RMZ) over a three-year market performance period, or the Market Performance Period, commencing on January 1st of the grant year and ending on December 31st of the third year, as applicable (or, if earlier, ending on the date on which a change in control of the Company occurs), subject to continued services. Vesting with respect to the market condition is measured based on the difference between the Company’s TSR percentage and the TSR percentage of the RMZ, or the RMZ Relative Market Performance. In the event that the RMZ Relative Market Performance during the Market Performance Period is achieved at the “threshold,” “target” or “high” level as set forth below, the awards will become vested as to the market condition with respect to the percentage of RSUs, as applicable, set forth below:

Performance Level Thresholds	RMZ Relative Market Performance	Market Performance Vesting Percentage
High Level	above 75th percentile	200%
Target Level	55th percentile	100%
Threshold Level	25th percentile	50%
Below Threshold Level	below 25th percentile	0%

If the RMZ Relative Market Performance falls between the levels specified above, the percentage of the award that will vest with respect to the market condition will be determined using straight-line linear interpolation between such levels.

The fair values of the awards were measured using a Monte Carlo simulation to estimate the probability of the market vesting condition being satisfied. The Company's achievement of the market vesting condition is contingent on its TSR over a three-year market performance period, relative to the total stock price. Monte Carlo simulation is well-accepted for pricing market based awards, where the number of shares that will vest depends on the future stock price movements. For each simulated path, the TSR is calculated at the end of the performance period and determines the vesting percentage based on achievement of the performance target. The fair value of the RSUs is the average discounted payout across all simulation paths. Assumptions used in the valuations are summarized as follows:

Award Date	Expected Stock Price Volatility [2]	Risk-Free Interest Rate	Dividend Yield [1]
2020	23%	0.52%	N/A
2021	33%	0.31%	N/A
2022	33%	1.75%	N/A

(1) Dividends are assumed to be reinvested and therefore not applicable.
(2) Volatility is based on historical stock price

OP Units Activity

The Company's Board of Directors and certain members of management have the option to elect their annual grant in the form of either restricted stock units or OP units. The terms of the OP units mirror the terms of the restricted stock units granted in the respective period.

The following table summarizes OP unit grants under the 2017 Plan during the years ended December 31, 2022, 2021 and 2020:

Year Ended December 31,	Grantee Type	Number of OP Units Granted	Vesting Period		Grant Date Fair Value (in thousands)
2022	Directors	35,593	1 year	$	925
2022	Associates	342,980	1-3 years	$	9,087
2021	Directors	22,427	1 year	$	811
2021	Associates	308,862	1-3 years	$	9,938
2020	Directors	16,325	1 year	$	575

OP units granted for the year ended December 31, 2022 consisted of: (i) 35,593 time-based OP units with a one year vesting period issued to non-employee directors as part of their annual compensation, (ii) 98,994 time-based graded vesting OP units with various vesting periods ranging from one to three years issued to certain associates in connection with the annual grant provided in March and (iii) 243,986 market performance-based cliff vesting OP units with a three-year vesting period issued to certain associates in connection with the annual grant provided in March.

OP units granted for the year ended December 31, 2021 consisted of: (i) 22,427 time-based OP units with a one-year vesting period issued to non-employee directors as part of their annual compensation (ii) 102,655 time-based graded vesting OP units with various vesting periods ranging from one to three years issued to certain associates in connection with the annual grant provided in March (iii) 198,007 market performance-based cliff vesting OP units with a three-year vesting period issued to certain associates in connection with the annual grant provided in March and (iv) 8,200 time-based graded vesting OP units with a two-year vesting period issued to certain associates as a retention grant in November of 2021.

OP units granted for the year ended December 31, 2020 consisted of: (i) 16,325 time-based OP units with a one-year vesting period issued to non-employee directors as part of their annual compensation (ii) 76,855 time-based graded vesting OP units with various vesting periods ranging from one to three years issued to certain associates and (iii) 178,865 market performance-based cliff vesting OP units with a three-year vesting period issued to certain associates.

The following table provides a summary of the OP unit activity under the 2017 Plan for the year ended December 31, 2022:

	Year Ended December 31, 2022			
OP Units	Number of Time-Based OP Units	Aggregate Intrinsic Value (in millions)	Number of Market Performance-Based OP Units	Aggregate Intrinsic Value (in millions)
Non-vested as of December 31, 2021	140,222	$ 4.6	288,165	$ 9.4
Granted	134,587		243,986	
Vested	(102,234)		—	
Forfeited	(12,393)		(69,336)	
Non-vested as of December 31, 2022	160,182	$ 4.5	462,815	$ 13.1
Shares vested, but not released	174,958	5.8	—	—
Total outstanding OP units	335,140	$ 10.3	462,815	$ 13.1

The OP units granted for the years ended December 31, 2022, 2021 and 2020 had an aggregate grant date fair value of $10.0 million, $10.7 million and $8.3 million, respectively. During the year ended December 31, 2022 the weighted average grant date fair value of vested OP units was $30.90 and forfeited OP units was $29.30. The weighted average grant date fair value of non-vested OP units was $29.39 and $31.30 per unit as of December 31, 2022 and 2021, respectively.

Stock Options Activity

The following table provides a summary of option activity for the year ended December 31, 2022:

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Terms (Years)
Outstanding as of December 31, 2021	206,298	$ 9.81	2.9
Granted	—	—	
Exercised	(100,800)	9.81	
Forfeited or expired	—	—	
Outstanding as of December 31, 2022	105,498	$ 9.81	3.6
Exercisable as of December 31, 2022	105,498	$ 9.81	3.6

All outstanding stock options were vested as of December 31, 2021. The total intrinsic value of options exercised for the years ended December 31, 2022, 2021 and 2020 was $1.9 million, $4.8 million and $8.2 million, respectively.

15. Income Taxes

As discussed in Note 2, the Company operates in compliance with REIT requirements for federal income tax purposes. It is management's intention to adhere to these requirements and maintain the Company's REIT status. Most states where we operate conform to the federal rules recognizing REITs. The Operating Partnership is a regarded partnership under federal tax law, and the Operating Partnership's accompanying consolidated financial statements include the related provision balances for federal income taxes. A provision for taxes of the TRSs and of foreign branches of the REIT is included in our consolidated financial statements.

The unremitted earnings and basis of certain foreign subsidiaries are indefinitely reinvested, except principally in Canada. The Company changed its assertion for its Canadian subsidiaries in 2018 to begin repatriating its unremitted earnings to the U.S. starting in 2018. If our plans change in the future or if we elect to repatriate the unremitted earnings of our foreign subsidiaries, we would be subject to additional income taxes which could result in a higher effective tax rate. With respect to the foreign subsidiaries owned directly or indirectly by the REIT or Operating Partnership, any unremitted earnings would not be subject to additional U.S. income tax because the REIT would distribute 100% of such earnings or would receive a participation exemption.

The GILTI provisions of the TCJA impose a tax on the income of certain foreign subsidiaries in excess of a specified return on tangible assets used by the foreign companies. The Company continues to account for the GILTI inclusion as a period cost and thus has not recorded any deferred tax liability associated with GILTI. There was no taxable deemed dividend estimated or recorded for the Company for 2022 and 2021. The taxable deemed dividend recorded for the Company for the 2020 tax year is $6.8 million. Also, as a result of IRS guidance issued during the third quarter of 2018, the Company now includes any GILTI as REIT qualified income.

Following is a summary of the income before income taxes in the U.S. and foreign operations:

	2022	2021	2020
		(In thousands)	
U.S.	$ 37,040	$ (8,046)	$ 5,673
Foreign	(75,350)	(23,832)	11,955
Pre-tax (loss) income	$ (38,310)	$ (31,878)	$ 17,628

The benefit (expense) for income taxes for the years ended December 31, 2022, 2021 and 2020 is as follows:

	2022	2021	2020
		(In thousands)	
Current			
U.S. federal	$ 290	$ 38	$ 1,085
State	(620)	(236)	(447)
Foreign	(3,395)	(7,380)	(7,443)
Total current portion	(3,725)	(7,578)	(6,805)
Deferred			
U.S. federal	(3,895)	5,884	8,588
State	360	1,220	2,929
Foreign	26,096	2,043	2,215
Total deferred portion	22,561	9,147	13,732
Total income tax benefit	$ 18,836	$ 1,569	$ 6,927

Income tax benefit attributable to income before income taxes differs from the amounts computed by applying the U.S. statutory federal income tax rate of 21% to income before income taxes. The reconciliation between the statutory rate and reported amount is as follows:

	2022	2021	2020
		(In thousands)	
Income tax benefit (expense) at statutory rates	$ 8,045	$ 6,692	$ (3,702)
Earnings from REIT - not subject to tax	7,742	(3,599)	2,681
State income taxes, net of federal income tax benefit	(524)	(836)	(446)
Foreign income taxed at different rates	1,296	(983)	(2,366)
Change in valuation allowance	1,307	6,198	9,506
Non-deductible expenses	(4,379)	4,398	387
Change in status of investment	6,503	—	—
Change in enacted tax rate	—	(11,802)	—
Other	(1,154)	1,501	867
Total	$ 18,836	$ 1,569	$ 6,927

The tax effects of temporary differences that give rise to deferred tax assets and deferred tax liabilities as of December 31, 2022 and 2021 are as follows:

	2022	2021
	(In thousands)	
Deferred tax assets:		
Net operating loss and credits carryforwards	$ 54,372	$ 43,483
Accrued expenses	33,404	28,511
Share-based compensation	3,192	6,872
Lease obligations	21,552	19,388
Other assets	1,680	2,892
Total gross deferred tax assets	114,200	101,146
Less: valuation allowance	(84)	(1,034)
Total net deferred tax assets	114,116	100,112
Deferred tax liabilities:		
Intangible assets and goodwill	(74,541)	(79,480)
Property, buildings and equipment	(145,936)	(165,905)
Lease right-of-use assets	(21,811)	(18,507)
Other liabilities	(5,889)	(4,875)
Total gross deferred tax liabilities	(248,177)	(268,767)
Net deferred tax liability	$ (134,061)	$ (168,655)

As of December 31, 2022, the U.S. TRS has gross U.S. federal net operating loss carryforwards of approximately $46.3 million, of which $13.8 million was generated prior to 2018 and will expire between 2032 and 2036. The remaining $32.5 million in losses have no expiration, but can only be used to offset up to 80% of future taxable income annually. These losses are subject to an annual limitation under IRC section 382 as a result of our IPO and a subsequent ownership change that occurred in March of 2019; however, the limitation should not impair the Company's ability to utilize the losses. The Company has $80.3 million in REIT U.S. federal net operating loss carryforwards which were obtained through acquisitions. These losses are also subject to an annual limitation under IRC section 382; no deferred tax value has been recorded as they can only be used to reduce required distributions to stockholders, of which none has been used for this purpose.

The Company has gross state net operating loss carryforwards of approximately $46.1 million from its TRSs, of which $35.8 million will expire at various times between 2024 and 2042. The remaining $10.3 million was generated after 2017 and have no expiration.

The Company has gross foreign net operating loss carryforwards of approximately $100.0 million, of which $36.0 million will expire at various times between 2023 and 2041. The remaining $64.0 million can be carried forward indefinitely.

Annually we consider whether it is more-likely-than-not that the deferred tax assets will be realized. In making this assessment, we consider recent operating results, the expected scheduled reversal of deferred tax liabilities, projected future taxable benefits and tax planning strategies.

The Company's policy is to accrue for interest and penalties related to unrecognized tax benefits as a component of income tax expense.

As of December 31, 2022, the Company is generally no longer subject to U.S. federal, state, local, or foreign examinations by tax authorities for years before 2018. However, for U.S. income tax purposes, the 2012, 2013, and 2016 remain open, to the extent that net operating losses were generated in those years and continue to be subject to adjustments from taxing authorities in the tax year they are utilized.

16. Employee Benefit Plans

Defined Benefit Pension and Post-Retirement Plans

The Company has defined benefit pension plans that cover certain union and nonunion associates in the U.S. Benefits under these plans are based either on years of credited service and compensation during the years preceding retirement or on years of credited service and established monthly benefit levels. The Company also has a post-retirement plan that provides life insurance coverage to eligible retired associates (collectively, with the defined benefit plans, the U.S. Plans). The Company froze benefit accruals for the U.S. Plans for nonunion associates effective April 1, 2005, and these associates no longer earn additional pension benefits. The Company also has a defined benefit plan that covers certain associates in Australia and is referenced as the 'Superannuation Plan' and two defined benefit plans that cover certain associates in Austria resulting from the Agro acquisition which are referenced as the 'Austria Plans'. The Company uses a December 31 measurement date for each plan.

Actuarial information regarding these plans is as follows:

	2022					
	Retirement Income Plan	National Service-Related Pension Plan (NSRPP)	Other Post-Retirement Benefits (OPRB)	Superannuation	Austria Plans	Total
			(In thousands)			
Change in benefit obligation:						
Benefit obligation – January 1, 2022	$ (43,693)	$ (36,421)	$ (629)	$ (1,347)	$ (2,602)	$ (84,692)
Service cost	—	—	—	(47)	(97)	(144)
Interest cost	(1,025)	(990)	(11)	(31)	(22)	(2,079)
Actuarial gain (loss)	6,830	9,597	55	76	(37)	16,521
Benefits paid	1,257	1,210	—	15	120	2,602
Plan participants' contributions	—	—	—	(18)	—	(18)
Foreign currency translation gain	—	—	—	84	217	301
Effect of settlement	2,820	—	92	—	—	2,912
Benefit obligation – end of year	(33,811)	(26,604)	(493)	(1,268)	(2,421)	(64,597)
Change in plan assets:						
Fair value of plan assets – January 1, 2022	46,878	34,603	—	1,654	1,148	84,283
Actual return on plan assets	(7,809)	(6,394)	—	(124)	(19)	(14,346)
Employer contributions	—	—	92	—	62	154
Benefits paid	(1,257)	(1,210)	—	(33)	—	(2,500)
Effect of settlement	(2,820)	—	(92)	—	—	(2,912)
Plan participants' contributions	—	—	—	38	—	38
Foreign currency translation gain	—	—	—	(27)	(48)	(75)
Fair value of plan assets – end of year	34,992	26,999	—	1,508	1,143	64,642
Funded status	$ 1,181	$ 395	$ (493)	$ 240	$ (1,278)	$ 45
Amounts recognized on the consolidated balance sheet as of December 31, 2022:						
Pension and post-retirement asset (liability)	$ 1,181	$ 395	$ (493)	$ 240	$ (1,278)	$ 45
Accumulated other comprehensive loss (income)	3,826	(474)	(59)	(32)	47	3,308
Amounts in accumulated other comprehensive loss consist of:						
Net loss	$ 3,826	$ (474)	$ (59)	$ (32)	$ 47	$ 3,308
Prior service cost	$ —	$ —	$ —	$ —	$ —	$ —
Other changes in plan assets and benefit obligations recognized in other comprehensive loss (income):						
Net loss (gain)	$ 3,680	$ (1,070)	$ (147)	$ 58	$ 47	$ 2,568
Amortization of net (gain) loss	(101)	(117)	—	—	13	(205)
Amortization of prior service cost	—	—	—	(21)	—	(21)
Amount recognized due to settlement	(319)		11	—	—	(308)
Foreign currency translation gain	—	—	—	(5)	—	(5)
Effect of tax	150	197	—	—	—	347
Total recognized in other comprehensive loss (income)	$ 3,410	$ (990)	$ (136)	$ 32	$ 60	$ 2,376
Information for plans with accumulated benefit obligation in excess of plan assets:						
Projected benefit obligation	N/A	N/A	$ 493	$ 1,268	$ 2,421	$ 4,182
Accumulated benefit obligation	N/A	N/A	$ 493	$ 1,208	$ 2,107	$ 3,808
Fair value of plan assets	N/A	N/A	$ —	$ 1,508	$ 1,143	$ 2,651

	2021					
	Retirement Income Plan	National Service-Related Pension Plan	Other Post-Retirement Benefits	Superannuation	Austria Plans	Total
Change in benefit obligation:			(In thousands)			
Benefit obligation – January 1, 2021	(47,509)	(38,227)	(647)	(1,423)	—	(87,806)
Purchase price allocation adjustment	—	—	—	—	(2,498)	(2,498)
Service cost	—	—	—	(59)	(107)	(166)
Interest cost	(947)	(936)	(8)	(19)	(18)	(1,928)
Actuarial gain (loss)	1,571	1,592	21	78	(2)	3,260
Benefits paid	1,342	1,150	5	14	61	2,572
Plan participants' contributions	—	—	—	(18)	—	(18)
Foreign currency translation loss	—	—	—	80	(38)	42
Effect of settlement	1,850	—	—	—	—	1,850
Benefit obligation – end of year	(43,693)	(36,421)	(629)	(1,347)	(2,602)	(84,692)
Change in plan assets:						
Fair value of plan assets – January 1, 2021	45,030	32,061	—	1,570	—	78,661
Purchase price allocation adjustment	—	—	—	—	1,112	1,112
Actual return on plan assets	4,371	3,187	—	320	26	7,904
Employer contributions	669	505	5	—	61	1,240
Benefits paid	(1,342)	(1,150)	(5)	(27)	(51)	(2,575)
Effect of settlement	(1,850)	—	—	—	—	(1,850)
Plan participants' contributions	—	—	—	34	—	34
Foreign currency translation gain	—	—	—	(243)	—	(243)
Fair value of plan assets – end of year	46,878	34,603	—	1,654	1,148	84,283
Funded status	$ 3,185	$ (1,818)	$ (629)	$ 307	$ (1,454)	$ (409)
Amounts recognized on the consolidated balance sheet as of December 31, 2021:						
Pension and post-retirement asset (liability)	$ 3,185	$ (1,818)	$ (629)	$ 307	$ (1,454)	$ (409)
Accumulated other comprehensive loss (income)	566	752	(15)	(72)	15	1,246
Amounts in accumulated other comprehensive loss consist of:						
Net loss	$ 566	$ 752	$ (15)	$ (94)	$ 15	$ 1,224
Prior service cost	$ —	$ —	$ —	$ 22	$ —	$ 22
Other changes in plan assets and benefit obligations recognized in other comprehensive income (loss):						
Net (gain) loss	$ (3,558)	$ (3,069)	$ (28)	$ (181)	$ 15	$ (6,821)
Amortization of net gain	(873)	(651)	—	—	—	(1,524)
Amortization of prior service cost	—	—	—	(30)	—	(30)
Amount recognized due to settlement	(24)	—	—	—	—	(24)
Foreign currency translation loss	—	—	—	70	—	70
Total recognized in other comprehensive (income) loss	$ (4,455)	$ (3,720)	$ (28)	$ (141)	$ 15	$ (8,329)
Information for plans with accumulated benefit obligation in excess of plan assets:						
Projected benefit obligation	N/A	$ 36,421	$ 629	$ 1,347	$ 2,602	$ 40,999
Accumulated benefit obligation	N/A	$ 36,421	$ 629	$ 1,272	$ 2,197	$ 40,519
Fair value of plan assets	N/A	$ 34,603	$ —	$ 1,654	$ 1,148	$ 37,405

The components of net period benefit cost for the years ended December 31, 2022, 2021 and 2020 are as follows:

	December 31, 2022					
	Retirement Income Plan	NSRPP	OPRB	Superannuation	Austria Plans	Total
	(In thousands)					
Components of net periodic benefit cost:						
Service cost	$ —	$ —	$ —	$ 47	$ 97	$ 144
Interest cost	1,025	990	11	31	22	2,079
Expected return on plan assets	(2,702)	(2,094)	—	(77)	—	(4,873)
Amortization of net loss	101	117	—	—	(13)	205
Amortization of prior service cost	—	—	—	21	—	21
Effect of settlement	319	—	(11)	—	—	308
Net pension benefit (income) cost	$ (1,257)	$ (987)	$ —	$ 22	$ 106	$ (2,116)

	December 31, 2021					
	Retirement Income Plan	NSRPP	OPRB	Superannuation	Austria Plans	Total
	(In thousands)					
Components of net periodic benefit cost:						
Service cost	$ —	$ —	$ —	$ 59	$ 107	$ 166
Interest cost	947	936	8	19	18	1,928
Expected return on plan assets	(2,384)	(1,710)	—	(74)	—	(4,168)
Amortization of net loss	873	651	—	—	—	1,524
Amortization of prior service cost	—	—	—	30	—	30
Effect of settlement	24	—	—	—	—	24
Net pension benefit (income) cost	$ (540)	$ (123)	$ 8	$ 34	$ 125	$ (496)

	December 31, 2020				
	Retirement Income Plan	NSRPP	OPRB	Superannuation	Total
	(In thousands)				
Components of net periodic benefit cost:					
Service cost	$ —	$ —	$ —	$ 59	$ 59
Interest cost	1,261	1,117	14	25	2,417
Expected return on plan assets	(2,002)	(1,465)	—	(66)	(3,533)
Amortization of net loss	1,017	607	—	—	1,624
Amortization of prior service cost	—	—	—	27	27
Effect of settlement	134	—	—	—	134
Net pension benefit cost	$ 410	$ 259	$ 14	$ 45	$ 728

The service cost component of defined benefit pension cost and postretirement benefit cost are presented in “Selling, general and administrative” and all other components of net period benefit cost are presented in “Other income (expense), net” on the Consolidated Statements of Operations.

The Company recognizes all changes in the fair value of plan assets and net actuarial gains or losses at December 31 each year. Prior service costs and gains/losses are amortized based on a straight-line method over the average future service of members that are expected to receive benefits.

All actuarial gains/losses are exposed to amortization over an average future service period of 5.8 years for the Retirement Income Plan, 6.2 years for the National Service-Related Pension Plan, 4.1 years for Other Post-Retirement Benefits, 4.1 years for Superannuation, and 6.3 years for Austria Plans as of December 31, 2022.

The weighted average assumptions used to determine benefit obligations and net period benefit costs for the years ended December 31, 2022, 2021 and 2020 are as follows:

	December 31, 2022				
	Retirement Income Plan	**NSRPP**	**OPRB**	**Superannuation**	**Austria Plans**
Weighted-average assumptions used to determine obligations (balance sheet):					
Discount rate	5.02%	5.11%	4.81%	5.40%	3.78%
Rate of compensation increase	N/A	N/A	N/A	2.50%	3.00%
Weighted-average assumptions used to determine net periodic benefit cost (statement of operations):					
Discount rate	2.49%	2.77%	1.95%	2.55%	0.94%
Expected return on plan assets	6.50%	6.50%	N/A	5.00%	N/A
Rate of compensation increase	N/A	N/A	N/A	2.50%	N/A

	December 31, 2021				
	Retirement Income Plan	**NSRPP**	**OPRB**	**Superannuation**	**Austria Plans**
Weighted-average assumptions used to determine obligations (balance sheet):					
Discount rate	2.49%	2.77%	1.95%	2.55%	0.94%
Rate of compensation increase	N/A	N/A	N/A	2.50%	2.50%
Weighted-average assumptions used to determine net periodic benefit cost (statement of operations):					
Discount rate	2.10%	2.49%	1.41%	1.50%	0.75%
Expected return on plan assets	6.00%	6.00%	N/A	5.00%	N/A
Rate of compensation increase	N/A	N/A	N/A	3.25%	N/A

	December 31, 2020			
	Retirement Income Plan	**NSRPP**	**OPRB**	**Superannuation**
Weighted-average assumptions used to determine obligations (balance sheet):				
Discount rate	2.10%	2.49%	1.41%	1.50%
Rate of compensation increase	N/A	N/A	N/A	3.25%
Weighted-average assumptions used to determine net periodic benefit cost (statement of operations):				
Discount rate	3.00%	3.25%	2.55%	2.30%
Expected return on plan assets	6.50%	6.50%	N/A	5.00%
Rate of compensation increase	N/A	N/A	N/A	3.25%

The estimated net loss for the defined benefit plans in the U.S. that will be amortized from accumulated other comprehensive loss into net periodic benefit cost during 2023 is $0.6 million. There is no estimated prior service cost associated with this plan to be amortized from accumulated other comprehensive income during 2023.

There is no estimated net gain for the Superannuation Plan that will be amortized from accumulated other comprehensive income into net periodic benefit cost during 2023. The estimated prior service cost associated with this plan to be amortized from accumulated other comprehensive income during 2023 is nominal.

Plan Assets

The Company's overall investment strategy is to achieve a mix of investments for long-term growth and near-term benefit payments. The Company invests in both U.S. and non-U.S. equity securities, fixed-income securities, and real estate. The Austria Plans' assets are held in an insurance annuity contract, which is determined based on the cash surrender value of the insurance contract, with an independent insurance company. The contract is classified within level 3 of the valuation hierarchy. As of December 31, 2022, approximately 96% of total plan assets are allocated to fixed-income securities. To develop the assumption for the long-term rate of return on assets, the Company considered the historical returns and the future expectations for returns for each asset class, as well as the target asset allocation of the U.S. Plans' and Superannuation Plan's assets, adjusted for expected contributions, distributions, administrative expenses and the effect of periodic rebalancing, consistent with the Company's investment strategies. For 2023, the Company expects to receive a long-term rate of return of 4.8% for the ARIP, 5.5% for the NSRPP, and 5.0% for the Superannuation Plan. All plans are invested to maximize the return on assets while minimizing risk by diversifying across a broad range of asset classes.

The fair values of the Company's pension plan assets by category, are as follow:

	As of December 31, 2022			
	Level 1	Level 2	Level 3	Total
Assets	(In thousands)			
U.S. equities:				
Large cap	$ —	$ 2,467	$ —	$ 2,467
Fixed-income securities:				
Money markets	—	78	—	78
U.S. bonds[1]	46,155	9,273	—	55,428
Real estate[2]	—	4,018	—	4,018
Common/collective trusts	—	1,508	—	1,508
Other	—	—	1,143	1,143
Total assets	$ 46,155	$ 17,344	$ 1,143	$ 64,642

	As of December 31, 2021			
	Level 1	Level 2	Level 3	Total
Assets	(In thousands)			
U.S. equities:				
Large cap	$ —	$ 25,148	$ —	$ 25,148
Medium cap	—	4,757	—	4,757
Small cap	1,735	1,840	—	3,575
Non-U.S. equities:				
Large cap	15,611	—	—	15,611
Emerging markets	4,283	—	—	4,283
Fixed-income securities:				
Money markets	—	807	—	807
U.S. bonds[(1)]	11,524	3,932	—	15,456
Non-U.S. bonds[(1)]	7,385	—	—	7,385
Real estate[(2)]	—	4,459	—	4,459
Common/collective trusts	—	1,654	—	1,654
Other	—	—	1,148	1,148
Total assets	$ 40,538	$ 42,597	$ 1,148	$ 84,283

(1) Includes funds either publicly traded (Level 1) or within a separate account (Level 2) held by a regulated investment company. These funds hold primarily debt and fixed-income securities.
(2) Includes funds in a separate account held by a regulated investment company that invest primarily in commercial real estate and includes mortgage loans which are backed by the associated properties. The Company can call the investment in these assets with no restrictions.

The U.S. Plans' assets are in commingled funds that are valued using net asset values. The net asset values are based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The pension assets are classified as Level 1 when the net asset values are based on a quoted price in an active market. The pension assets are classified as Level 2 when the net asset value is based on a quoted price on a private market that is not active and the underlying investments are traded on an active market.

The Company expects to contribute an immaterial amount to certain plans during 2023 based on the expected funded status of the plans.

Estimated Future Benefit Payments

The following benefit payments, which reflect expected future services, as appropriate, are expected to be paid for all plans as of December 31, 2022:

Years Ending December 31:	(In thousands)
2023	$ 6,217
2024	5,328
2025	5,074
2026	5,142
2027	5,059
Thereafter	25,658
	$ 52,478

Multi-Employer Plans

The Company contributes to a number of multi-employer benefit plans under the terms of collective bargaining agreements that cover union-represented associates. These plans generally provide for retirement, death, and/or

termination benefits for eligible associates within the applicable collective bargaining units, based on specific eligibility/participation requirements, vesting periods, and benefit formulas. The risks of participating in these multi-employer plans are different from single-employer plans in the following aspects:

- Assets contributed to the multi-employer plan by one employer may be used to provide benefits to associates of other current or former participating employers.
- If a participating employer stops contributing to the multi-employer plan without paying its unfunded liability, the unfunded obligations of the plan may be borne by the remaining participating employers.
- If the Company chooses to cease participation in a multi-employer plan, such full withdrawal is subject to the payment of any unfunded liability applicable to the Company, referred to as a withdrawal liability. Additionally, such withdrawal is subject to collective bargaining.

The table below outlines the Company's participation in multi-employer pension plans for the periods ended December 31, 2022, 2021 and 2020, and sets forth the contributions into each plan (in thousands). The Company currently participates in certain of these plans in its warehouse segment, and previously on behalf of a customer within its Third-party managed segment. The participation in certain plans related to the Third-party managed agreements were transitioned to a new third-party provider during 2022. Under the terms of the operating agreements, the contributions made to these funds were reimbursed to the Company by the customer as a pass-through cost within Third-party managed revenue. The approximate proportion of contributions to these plans on behalf of the customer is denoted below the table. The "EIN" column provides the Employer Identification Number (EIN). The most recent Pension Protection Act Zone Status available in 2022 relates to the plans' most recent fiscal year-end. The zone status is based on information that we received from the plans' administrators and is certified by each plan's actuary. Among other factors, plans certified in the red zone are generally less than 65% funded, plans certified in the orange zone are (i) less than 80% funded and (ii) have an accumulated funding deficiency or are expected to have a deficiency in any of the next six plan years, plans certified in the yellow zone are less than 80% funded, and plans certified in the green zone are at least 80% funded. As of December 31, 2022, for the plans included in the table below with a Zone Status of Yellow, the fund has implemented a financial improvement plan (FIP), and for the plans with a Zone Status of Red, the fund has implemented a rehabilitation plan (RP).

The Company's collective-bargained contributions satisfy the requirements of all implemented FIPs and RPs and do not currently require the payment of any surcharges. In addition, minimum contributions outside the agreed-upon contractual rate are not required. For the plans detailed in the following table, the expiration dates of the associated collective bargaining agreements range from 2023 through 2027. For all the plans detailed in the following table, the Company has not contributed more than 5% of the total plan contribution for 2022, 2021 and 2020.

The Company contributes to multi-employer plans that cover approximately 34% of union associates as of December 31, 2022. The amounts charged to expense within the Consolidated Statements of Operations for the years ended December 31, 2022, 2021 and 2020 were $20.9 million, $19.1 million and $18.1 million, respectively. Projected minimum contributions required for the upcoming fiscal year are approximately $6.0 million.

Pension Fund	EIN	Zone Status	Americold Contributions 2022	2021	2020
Central Pension Fund of the International Union of Operating Engineers and Participating Employers[2]	36-6052390	Green	$ 8	$ 6	$ 11
Central States SE & SW Areas Health and Welfare Pension Plans[1][7]	36-6044243	Red	9,546	9,060	9,132
New England Teamsters & Trucking Industry Pension Plan[3]	04-6372430	Red	655	529	456
Alternative New England Teamsters & Trucking Industry Pension Plan	04-6372430	Red	326	338	404
I.U.O.E Stationary Engineers Local 39 Pension Fund[1]	94-6118939	Green	181	186	119
United Food & Commercial Workers International Union Industry Pension Fund[4][8]	51-6055922	Green	109	108	126
Western Conference of Teamsters Pension Fund[1][8]	91-6145047	Green	7,586	7,784	7,727
Minneapolis Food Distributing Industry Pension Plan[1]	41-6047047	Green	136	127	146
WWEC Local 863 Pension Fund[5]	26-3541447	Yellow	2,389	967	—
Total Contributions[6]			**$ 20,936**	**$ 19,105**	**$ 18,121**

(1) The status information is for the plans' year end at December 31, 2022 and 2021.
(2) The status information is for the plans' year end at January 31, 2022 and 2021.
(3) The status information is for the plans' year end at September 30, 2022 and 2021. The Company withdrew from the multi-employer plan on October, 31, 2017. The related liability of $7.9 million as of December 31, 2022 is reflected in "Multiemployer pension plan withdrawal liability" on the accompanying Consolidated Balance Sheets and will be repaid over the next 25 years.
(4) The status information is for the plans' year end at June 30, 2022 and 2021.
(5) The Company reflects no contributions in 2020 as this fund was inherited in connection with the Newark Facility Management acquisition in 2021.
(6) Approximately 70% of total contributions made during each of the years ended December 31, 2022, 2021 and 2020 related to Third-party managed sites that the Company has ceased operating agreements for as of December 31, 2022, and for which it received reimbursement of these costs. As a result of ceasing the operating agreements, the Company will no longer be required to contribute to these Funds related to the former Third-party managed operations.
(7) A portion of the Company's participation in this plan related to Third-party managed sites that the Company no longer manages as of December 31, 2022.
(8) As of December 31, 2022, the Company no longer participates in these funds as the Company no longer manages the related Third-party managed sites.

Government-Sponsored Plans

The Company contributes to certain government-sponsored plans in Australia and Argentina. The amounts charged to expense within the Consolidated Statements of Operations and for the years ended December 31, 2022, 2021 and 2020 were $7.7 million, $7.3 million and $6.1 million, respectively.

Defined Contribution Plan

The Company has defined contribution employee benefit plans, which cover all eligible associates. The plans also allow contributions by plan participants in accordance with Section 401(k) of the IRC. The Company matches a percentage of each employee's contributions consistent with the provisions of the plans. The aggregate cost of our contributions to the 401(k) Plan charged to expense within the Consolidated Statements of Operations for each of the years ended December 31, 2022, 2021 and 2020 was $11.4 million, $9.0 million and $5.7 million, respectively.

Deferred Compensation

The Company has deferred compensation and supplemental retirement plan agreements with certain of its executives. The agreements provide for certain benefits at retirement or disability and also provide for survivor benefits in the event of death of the employee. The Company contribution amounts charged to expense relative to this plan were nominal for the years ended December 31, 2022, 2021 and 2020.

17. Commitments and Contingencies

Collective Bargaining Agreements

As of December 31, 2022, worldwide we employed approximately 15,484 people. As of December 31, 2022, approximately 29% of our associates were represented by various local labor unions and associations. During 2023, the Company will be renegotiating 20 collective bargaining agreements, which make up approximately 8% of our employee population. The Company does not anticipate any workplace disruptions during this renegotiation process.

Legal Proceedings

In assessing loss contingencies related to legal proceedings that are pending against the Company or unasserted claims that may result in such proceedings, the Company and its legal counsel evaluate the merits of any legal proceedings or unasserted claims, as well as the perceived merits of the amount of relief sought or expected to be sought. If the assessment of a contingency suggests that a loss is probable, and the amount can be reasonably estimated, then a loss is recorded.

In addition to the matters discussed below, the Company may be subject to litigation and claims arising from the ordinary course of business. In the opinion of management, after consultation with legal counsel, the outcome of such matters is not expected to have a material impact on the Company's financial condition, results of operations, or cash flows.

Kansas Breach of Settlement Agreement Litigation

This case was served against the Company in Wyandotte County, Kansas, on January 17, 2013, alleging breach of a 1994 Settlement Agreement reached with customers of our predecessor company, Americold Corporation. The plaintiffs originally brought claims in 1992 arising from a fire the previous year in an underground warehouse facility.

As a part of the 1994 settlement Americold Corporation agreed to the entry of a $58.7 million judgment against it and assigned its rights to proceed against its insurer to satisfy the judgment. The settlement agreement contained a standard "cooperation provision" in which Americold Corporation agreed to execute any additional documents necessary to fulfill the intent of the settlement agreement. The plaintiffs then sued Americold Corporation's insurer to recover on the consent judgment. The case was ultimately dismissed in 2012, and the Kansas Supreme Court ruled that the 1994 consent judgment had expired and was not revivable as a matter of law.

On September 24, 2012, the plaintiffs filed a separate claim in the district court of Wyandotte County, Kansas, alleging that the Company and one of its subsidiaries, Americold Logistics, LLC, as successors to Americold Corporation, are liable for the full amount of the judgment, based upon the allegation that the Company failed to execute a document or take action to keep the judgment alive and viable.

The Company has settled this case with all parties involved, and the resolution did not result in a loss to the Company.

Preferred Freezer Services, LLC Litigation

On February 11, 2019, Preferred Freezer Services, LLC ("PFS") moved by Order to Show Cause in the Supreme Court of the State of New York, New York County, asserting breach of contract and other claims against the Company and seeking to preliminarily enjoin the Company from acting to acquire certain properties leased by PFS. In its complaint and request for preliminary injunctive relief, PFS alleged that the Company breached a confidentiality agreement entered into in connection with the Company's participation in a bidding process for the sale of PFS by contacting PFS's landlords and by using confidential PFS information in bidding for the properties leased by PFS (the "PFS Action").

PFS's request for a preliminary injunction was denied after oral argument on February 26, 2019. On March 1, 2019, PFS filed an application for interim injunctive relief from the Appellate Division of the Supreme Court, First Judicial Department ("the First Department").

On April 2, 2019, while its application to the First Department was pending, PFS voluntarily dismissed its state court action, and First Department application, and re-filed substantially the same claims against the Company in the U.S. District Court for the Southern District of New York. In addition to an order enjoining Americold from making offers to purchase the properties leased by PFS, PFS sought compensatory, consequential and/or punitive damages. The Company filed a motion to require PFS to reimburse the Company for its legal fees it incurred for the state court action before PFS is allowed to proceed in the federal court action. On February 18, 2020, the Court granted Americold's request for an award of legal fees from PFS but declined to stay the case pending payment of that award. As to the amount of the award, the Company and PFS have entered into a stipulation that PFS will pay Americold $0.6 million to reimburse the Company for its legal fees upon conclusion of the case. PFS has since amended its complaint, and Americold has filed a motion to dismiss that amended complaint.

The Company denies the allegations and believes PFS's claims are without merit and intends to vigorously defend itself against the allegations. Given the status of the proceedings to date, a liability cannot be reasonably estimated. The Company believes the ultimate outcome of this matter will not have a material adverse impact on its consolidated financial statements.

Environmental Matters

The Company is subject to a wide range of environmental laws and regulations in each of the locations in which the Company operates. Compliance with these requirements can involve significant capital and operating costs. Failure to comply with these requirements can result in civil or criminal fines or sanctions, claims for environmental damages, remediation obligations, the revocation of environmental permits, or restrictions on the Company's operations.

The Company records accruals for environmental matters when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated based on current law and existing technologies. The Company adjusts these accruals periodically as assessment and remediation efforts progress or as additional technical or legal information become available. The Company recorded nominal environmental liabilities in accounts payable and accrued expenses as of December 31, 2022 and 2021. The Company believes it is in compliance with applicable environmental regulations in all material respects. Under various U.S. federal, state, and local environmental laws, a current or previous owner or operator of real estate may be liable for the entire cost of investigating, removing, and/or remediating hazardous or toxic substances on such property. Such laws often impose liability whether or not the owner or operator knew of, or was responsible for, the contamination. Even if more than one person may have been responsible for the contamination, each person covered by the

environmental laws may be held responsible for the entire clean-up cost. There are no material unrecorded liabilities as of December 31, 2022, and any liabilities associated with these considerations are considered remote and not estimable. Most of the Company's warehouses utilize ammonia as a refrigerant. Ammonia is classified as a hazardous chemical regulated by the Environmental Protection Agency, and an accident or significant release of ammonia from a warehouse could result in injuries, loss of life, and property damage.

Occupational Safety and Health Act (OSHA)

The Company's warehouses located in the U.S. are subject to regulation under OSHA, which requires employers to provide associates with an environment free from hazards, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, and unsanitary conditions. The cost of complying with OSHA and similar laws enacted by states and other jurisdictions in which we operate can be substantial, and any failure to comply with these regulations could expose us to substantial penalties and potentially to liabilities to associates who may be injured at our warehouses. The Company records accruals for OSHA matters when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated. The Company believes that it is in substantial compliance with all OSHA regulations and that no material unrecorded liabilities exist as of December 31, 2022 and 2021. Future changes in applicable environmental laws or regulations, or in the interpretation of such laws and regulations, could negatively impact us.

18. Accumulated Other Comprehensive Income (Loss)

The Company reports activity in AOCI for foreign currency translation adjustments, including the translation adjustment for investments in partially owned entities, unrealized gains and losses on designated derivatives, and minimum pension liability adjustments (net of tax). The activity in AOCI for the years ended December 31, 2022, 2021 and 2020 is as follows:

	2022	2021	2020
		(In thousands)	
Pension and other postretirement benefits:			
(Loss) gain arising during the period	$ (2,397)	$ 6,821	$ (342)
Amortization of prior service cost [1]	21	1,508	1,775
Total pension and other postretirement benefits, net of tax	(2,376)	8,329	1,433
Foreign currency translation adjustments:			
Cumulative translation adjustment	$ (90,482)	$ (6,315)	$ 9,944
Derecognition of cumulative foreign currency translation upon deconsolidation of entity contributed to a joint venture	4,970	—	—
Derivative net investment hedges	61,998	—	—
Total foreign currency translation loss	(23,514)	(6,315)	9,944
Designated derivatives:			
Cash flow hedge derivatives	21,505	$ 11,626	$ (24,918)
Net amount reclassified from AOCI to net loss	(6,187)	(4,739)	23,288
Total unrealized gains on derivative contracts	15,318	6,887	(1,630)
Total change in other comprehensive loss	$ (10,572)	$ 8,901	$ 9,747

[1] Amounts reclassified from AOCI for pension liabilities are recognized in "Selling, general and administrative" in the accompanying condensed consolidated statements of operations.

19. Geographic Concentrations

The following table provides geographic information for the Company's total revenues for the years ended December 31, 2022, 2021 and 2020, and total assets as of December 31, 2022 and 2021:

	Total Revenues			Total Assets	
	2022	2021	2020	2022	2021
	(In thousands)				
North America	$ 2,309,496	$ 2,092,046	$ 1,729,657	$ 6,366,012	$ 6,419,745
Europe	325,714	321,705	—	1,157,723	1,228,442
Asia-Pacific	262,126	281,164	248,494	493,518	473,764
South America	17,399	19,875	9,576	87,308	94,246
	$ 2,914,735	$ 2,714,790	$ 1,987,727	$ 8,104,561	$ 8,216,197

The following table provides long-lived assets by geography for the years ended December 31, 2022 and 2021:

	Long-Lived Assets	
	2022	2021
	(In thousands)	
North America	$ 4,463,000	$ 4,499,718
Europe	644,085	680,338
Asia-Pacific	357,169	340,078
South America	82,798	79,377
	$ 5,547,052	$ 5,599,511

20. Segment Information

Our principal operations are organized into four reportable segments: Warehouse, Transportation, Third-party managed and Other.

- ***Warehouse.*** Our primary source of revenues consists of rent and storage and warehouse services fees. Our rent and storage and warehouse services revenues are the key drivers of our financial performance. Rent and storage revenues consist of recurring, periodic charges related to the storage of frozen and perishable food and other products in our warehouses. We also provide these customers with a wide array of handling and other warehouse services, such as (1) receipt, handling and placement of products into our warehouses for storage and preservation, (2) retrieval of products from storage upon customer request, (3) blast freezing, which involves the rapid freezing of non-frozen products, including individual quick freezing for agricultural produce and seafood, (4) case-picking, which involves selecting product cases to build customized pallets, (5) kitting and repackaging, which involves assembling custom product packages for delivery to retailers and consumers, and labeling services, (6) order assembly and load consolidation, (7) exporting and importing support services, (8) container handling, (9) cross-docking, which involves transferring inbound products to outbound trucks utilizing our warehouse docks without storing them in our warehouses, (10) government-approved temperature-controlled storage and inspection services, (11) fumigation, (12) pre-cooling and cold treatment services, (13) produce grading and bagging, (14) protein boxing, (15) e-commerce fulfillment, and (16) ripening. We may charge our customers in advance for storage and outbound handling fees. Cost of operations for our warehouse segment consists of power, other facilities costs, labor and other services costs.

- ***Transportation.*** We charge transportation fees, including fuel surcharges, to our customers for whom we arrange the transportation of their products. Cost of operations for our transportation segment consist primarily of third-party carrier charges, which are impacted by factors affecting those carriers.

- ***Third-party managed.*** We receive management and incentive fees, as well as reimbursement of substantially all expenses, for warehouses and logistics services that we manage on behalf of third-party owners/customers. Cost of operations for our third-party managed segment are reimbursed on a pass-through basis (typically within two weeks), with all reimbursements, plus an applicable mark-up, recognized as revenues under the relevant accounting guidance. During the fourth quarter of 2022, we strategically transitioned the management of our largest Third-party managed customer's warehouses to a new third-party provider, and our operations ceased. As part of this transition, we agreed to continue to process certain costs for this customer for a period of time, and will continue to receive reimbursement for all such costs.

- ***Other***. In addition to our primary business segments, we owned a limestone quarry in Carthage, Missouri. Revenues were generated from the sale of limestone mined at our quarry. Cost of operations for our quarry consisted primarily of labor, equipment, fuel and explosives. We do not view the operation of the quarry as an integral part of our business, and as a result this business segment was subsequently sold on July 1, 2020.

Our reportable segments are strategic business units separated by service offerings. Each reportable segment is managed separately and requires different operational and marketing strategies. The accounting polices used in the preparation of our reportable segments financial information are the same as those used in the preparation of its consolidated financial statements.

Our chief operating decision maker uses revenues and segment contribution to evaluate segment performance. We calculate segment contribution as earnings before interest expense, taxes, depreciation and amortization, and excluding corporate selling, general and administrative expense, acquisition, litigation and other expense, impairment of long-lived assets, gain or loss on sale of real estate and all components of non-operating other income and expense. Selling, general and administrative functions support all the business segments. Therefore, the related expense is not allocated to segments as the chief operating decision maker does not use it to evaluate segment performance.

Segment contribution is not a measurement of financial performance under U.S. GAAP, and may not be comparable to similarly titled measures of other companies. You should not consider our segment contribution as an alternative to operating income determined in accordance with U.S. GAAP.

The following table presents segment revenues and contributions with a reconciliation to (Loss) income before income tax benefit for the years ended December 31, 2022, 2021 and 2020:

	Years Ended December 31,		
	2022	2021	2020
	(In thousands)		
Segment revenues:			
Warehouse	$ 2,302,971	$ 2,085,387	$ 1,549,314
Transportation	313,358	312,092	142,203
Third-party managed	298,406	317,311	291,751
Other	—	—	4,459
Total revenues	2,914,735	2,714,790	1,987,727
Segment contribution:			
Warehouse	636,232	586,436	520,333
Transportation	47,402	29,376	18,807
Third-party managed	12,329	13,964	12,228
Other	—	—	130
Total segment contribution	695,963	629,776	551,498
Reconciling items:			
Depreciation and amortization	(331,446)	(319,840)	(215,891)
Selling, general and administrative	(231,067)	(182,076)	(144,738)
Acquisition, litigation and other, net	(32,511)	(51,578)	(36,306)
Impairment of indefinite and long-lived assets	(7,380)	(3,312)	(8,236)
(Loss) gain from sale of real estate	(5,689)	—	22,124
Interest expense	(116,127)	(99,177)	(91,481)
Interest income	1,633	841	1,162
Bridge loan commitment fees	—	—	(2,438)
Loss on debt extinguishment, modifications and termination of derivative instruments	(3,217)	(5,689)	(9,975)
Foreign currency exchange loss, net	(975)	(610)	(45,278)
Other income (expense), net	1,806	1,791	(2,563)
Loss from partially owned entities	(9,300)	(2,004)	(250)
(Loss) income before income tax benefit	**$ (38,310)**	**$ (31,878)**	**$ 17,628**

The following table details our assets by reportable segments, with a reconciliation to total assets reported for each of the periods presented in the accompanying Consolidated Balance Sheets.

	Years Ended December 31,	
	2022	2021
	(In thousands)	
Assets:		
Warehouse	$ 7,736,704	$ 7,821,426
Transportation	205,653	218,252
Third-party managed	25,997	48,497
Total segments assets	7,968,354	8,088,175
Reconciling items:		
Investments in partially owned entities	78,926	37,458
Corporate assets	57,281	90,564
Total reconciling items	136,207	128,022
Total assets	**$ 8,104,561**	**$ 8,216,197**

21. Earnings per Common Share

Basic and diluted earnings per common share are calculated by dividing the net income or loss attributable to common stockholders by the basic and diluted weighted-average number of common shares outstanding in the period, respectively, using the allocation method prescribed by the two-class method. The Company applies this method to compute earnings per share because it distributes non-forfeitable dividend equivalents on restricted stock units and OP units granted to certain associates and non-employee directors who have the right to participate in the distribution of common dividends while the restricted stock units and OP units are unvested.

The shares issuable upon settlement of forward sale agreements are reflected in the diluted earnings per share calculations using the treasury stock method. Under this method, the number of the Company's common shares used in calculating diluted earnings per share is deemed to be increased by the excess, if any, of the number of common shares that would be issued upon full physical settlement of the forward sale agreements over the number of common shares that could be purchased by the Company in the market (based on the average market price during the period) using the proceeds receivable upon full physical settlement (based on the adjusted forward sale price at the end of the reporting period). If and when the Company physically or net share settles the forward sale agreements, the delivery of common shares would result in an increase in the number of shares outstanding and dilution to earnings per share.

A reconciliation of the basic and diluted weighted-average number of common shares outstanding for the years ended December 31, 2022, 2021 and 2020 is as follows:

	Year ended December 31,		
	2022	2021	2020
	(In thousands)		
Weighted average common shares outstanding – basic	269,565	259,056	203,255
Dilutive effect of share-based awards	—	—	1,532
Equity forward contracts	—	—	2,153
Weighted average common shares outstanding – diluted	269,565	259,056	206,940

For the year ended December 31, 2022, potential common shares under the treasury stock method and the if-converted method were antidilutive because the Company reported a net loss. Consequently, the Company did not have any adjustments in this period between basic and diluted loss per share related to share-based awards and equity forward contracts.

The table below presents the number of antidilutive potential common shares that are not considered in the calculation of diluted income (loss) per share:

	Year ended December 31,		
	2022	2021	2020
	(In thousands)		
Employee stock options	163	301	—
Restricted stock units	1,549	1,009	170
OP units	769	453	—
Equity forward contracts	—	3,285	2,231
	2,481	5,048	2,401

22. Revenue from Contracts with Customers

Disaggregated Revenue

The following tables represent a disaggregation of revenue from contracts with customers for the years ended December 31, 2022, 2021 and 2020 by segment and geographic region:

	December 31, 2022				
	North America	Europe	Asia-Pacific	South America	Total
	(In thousands)				
Warehouse rent and storage	$ 800,763	$ 77,017	$ 67,622	$ 9,587	$ 954,989
Warehouse services[(1)]	1,038,145	118,152	141,557	5,729	1,303,583
Transportation	154,669	125,055	31,551	2,083	313,358
Third-party managed	277,010	—	21,396	—	298,406
Total revenues [(2)]	2,270,587	320,224	262,126	17,399	2,870,336
Lease revenue [(3)]	38,909	5,490	—	—	44,399
Total revenue	$ 2,309,496	$ 325,714	$ 262,126	$ 17,399	$ 2,914,735

	December 31, 2021				
	North America	Europe	Asia-Pacific	South America	Total
	(In thousands)				
Warehouse rent and storage	$ 691,174	$ 69,997	$ 64,469	$ 11,911	$ 837,551
Warehouse services[(1)]	919,692	110,517	172,701	6,324	1,209,234
Transportation	152,826	135,065	22,561	1,640	312,092
Third-party managed	295,878	—	21,433	—	317,311
Total revenues [(2)]	2,059,570	315,579	281,164	19,875	2,676,188
Lease revenue [(3)]	32,476	6,126	—	—	38,602
Total revenue	$ 2,092,046	$ 321,705	$ 281,164	$ 19,875	$ 2,714,790

	December 31, 2020				
	North America	Europe	Asia-Pacific	South America	Total
	(In thousands)				
Warehouse rent and storage	$ 581,421	$ —	$ 53,860	$ 5,120	$ 640,401
Warehouse services[1]	727,994	—	152,561	2,610	883,165
Transportation	116,570	—	23,787	1,846	142,203
Third-party managed	273,465	—	18,286	—	291,751
Other	4,448	—	—	—	4,448
Total revenues [2]	1,703,898	—	248,494	9,576	1,961,968
Lease revenue [3]	25,759	—	—	—	25,759
Total revenue	$ 1,729,657	$ —	$ 248,494	$ 9,576	$ 1,987,727

[1] Warehouse services revenue includes sales of product that Americold purchases on the spot market, repackages, and sells to customers. Such revenues totaled $13.1 million and $13.5 million for the year ended December 31, 2022 and December 31, 2021, respectively. This revenue is generated by a facility acquired on December 30, 2020, therefore there was no related revenue during the year ended December 31, 2020.
[2] Revenues are within the scope of ASC 606: *Revenue From Contracts With Customers*. Elements of contracts or arrangements that are in the scope of other standards (e.g., leases) are separated and accounted for under those standards.
[3] Revenues are within the scope of Topic 842, *Leases*.

Performance Obligations

Substantially all our revenue for warehouse storage and handling services, and management and incentive fees earned under third-party managed and other contracts is recognized over time as the customer benefits equally throughout the period until the contractual term expires. Typically, revenue is recognized over time using an output measure (e.g. passage of time). Revenue is recognized at a point in time upon delivery when the customer typically obtains control, for most accessorial services, transportation services and reimbursed costs.

For arrangements containing non-cancellable contract terms, any variable consideration related to storage renewals or incremental handling charges above stated minimums are 100% constrained and not included in aggregate amount of the transaction price allocated to the unsatisfied performance obligations disclosed below, given the degree in difficulty in estimation. Payment terms are generally 0 - 30 days upon billing, which is typically monthly, either in advance or subsequent to the performance of services. The same payment terms typically apply for arrangements containing variable consideration.

The Company has no material warranties or obligations for allowances, refunds or other similar obligations.

At December 31, 2022, the Company had $666.2 million of remaining unsatisfied performance obligations from contracts with customers subject to a non-cancellable term and within contracts that have an original expected duration exceeding one year. These obligations also do not include variable consideration beyond the non-cancellable term, which due to the inability to quantify by estimate, is fully constrained. The Company expects to recognize approximately 31% of these remaining performance obligations as revenue in 2023, and the remaining 69% to be recognized over a weighted average period of 10.9 years through 2038.

Contract Balances

The timing of revenue recognition, billings and cash collections results in accounts receivable (contract assets), and unearned revenue (contract liabilities) on the accompanying Consolidated Balance Sheets. Generally, billing occurs monthly, subsequent to revenue recognition, resulting in contract assets. However, the Company may bill

and receive advances or deposits from customers, particularly on storage and handling services, before revenue is recognized, resulting in contract liabilities. These assets and liabilities are reported on the accompanying Consolidated Balance Sheets on a contract-by-contract basis at the end of each reporting period. Changes in the contract asset and liability balances during the year ended December 31, 2022, were not materially impacted by any other factors.

Receivables balances related to contracts with customers accounted for under ASC 606 were $421.1 million and $375.1 million at December 31, 2022 and 2021, respectively. All other trade receivable balances relate to contracts accounted for under ASC 842.

Balances in unearned revenue related to contracts with customers were $32.0 million and $26.1 million at December 31, 2022 and 2021, respectively. Substantially all revenue that was included in the contract liability balances at the beginning of 2020 and 2019 has been recognized as of December 31, 2022 and 2021, respectively, and represents revenue from the satisfaction of monthly storage and handling services with average inventory turns of approximately 30 days.

Americold Realty Trust, Inc. and Subsidiaries
Schedule III – Real Estate and Accumulated Depreciation
December 31, 2022
(In thousands of U.S. dollars, as applicable and unless noted)

Property	Buildings	Encumbrances	Initial Costs		Costs Capitalized Subsequent to Acquisition (3)	Gross amount at which carried as of December 31, 2022			Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
			Land	Buildings and Improvements		Land	Buildings and Improvements (2)	Total (4)			
US											
401 Kentile, NJ	1	$ —	$ 6,251	$ 21,640	138	$ 6,256	$ 21,773	$ 28,029	$ (1,350)	2014	2020
501 Kentile, NJ	1	—	6,440	46,094	349	6,441	46,442	52,883	(3,278)	1989	2020
601 Kentile, NJ	1	—	8,160	47,277	1,167	8,160	48,444	56,604	(3,063)	1999	2020
Albertville, AL	1	—	1,251	12,385	1,505	1,381	13,760	15,141	(6,983)	1993	2008
Allentown, PA	2	—	5,780	47,807	9,182	6,901	55,868	62,769	(28,989)	1976	2008
Amarillo, TX	1	—	871	4,473	1,699	942	6,101	7,043	(3,174)	1973	2008
Anaheim, CA	1	—	9,509	16,810	4,605	9,534	21,390	30,924	(10,986)	1965	2009
Appleton, WI	1	—	200	5,022	12,036	916	16,343	17,258	(6,197)	1989	2009
Atlanta - East Point, GA	1	—	1,884	3,621	3,970	2,020	7,455	9,475	(4,039)	1959	2016
Atlanta - Empire, GA	1	—	1,610	11,866	613	1,610	12,479	14,089	(1,170)	1959	2020
Atlanta - Gateway, GA	2	—	3,271	32,537	48,569	5,045	79,332	84,377	(11,954)	1972, 2022	2008
Atlanta - Lakewood, GA	1	—	4,297	3,369	(1,083)	639	5,945	6,583	(2,862)	1963	2008
Atlanta - Pleasantdale, GA	1	—	11,960	70,814	1,174	12,029	71,918	83,948	(5,821)	1963	2020
Atlanta - Skygate, GA	1	—	1,851	12,731	2,728	2,417	14,893	17,310	(5,739)	2001	2008
Atlanta - Southgate, GA	1	—	1,623	17,652	4,852	2,646	21,481	24,127	(8,719)	1996	2008
Atlanta - Tradewater, GA	1	—	4,605	36,966	6,216	8,422	39,365	47,787	(12,094)	2004	2008
Atlanta - Westgate, GA	1	—	2,270	24,659	1,310	3,243	24,996	28,239	(12,660)	1990	2008
Atlanta, GA - Corporate	—	—	—	365	28,883	—	29,248	29,248	(9,122)	1999/2014	2008
Augusta, GA	1	—	2,678	1,943	1,543	2,843	3,321	6,164	(2,067)	1971	2008
Babcock, WI	1	—	852	8,916	226	903	9,091	9,994	(3,642)	1999	2008
Belvidere-Imron, IL	1	—	2,000	11,989	4,643	2,413	16,219	18,632	(7,939)	1991	2009
Belvidere-Landmark, IL (Cross Dock)	1	—	1	2,117	2,124	3	4,238	4,242	(4,052)	1991	2009
Benson, NC	1	—	3,660	35,825	95	3,660	35,920	39,580	(4,725)	1997	2019
Benson Hodges, NC	1	—	—	1,198	1,136	10	2,324	2,334	(234)	1985	2020
Birmingham, AL	1	—	1,002	957	2,617	1,282	3,293	4,576	(1,386)	1963	2008
Brea, CA	1	—	4,645	5,891	1,169	4,776	6,929	11,705	(3,463)	1975	2009
Bridgewater, NJ	1	—	6,350	13,472	166	6,475	13,513	19,988	(1,062)	1979	2020
Brighton (Denver 2), CO	1	—	3,933	33,913	20	3,933	33,934	37,866	(1,198)	2021	2021
Brooklyn Park, MN	1	—	1,600	8,951	1,803	1,600	10,754	12,354	(5,542)	1986	2009
Burley, ID	2	—	—	16,136	5,121	219	21,038	21,257	(16,221)	1959	2008

Property	Buildings	Encumbrances	Initial Costs		Costs Capitalized Subsequent to Acquisition (3)	Gross amount at which carried as of December 31, 2022			Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
			Land	Buildings and Improvements		Land	Buildings and Improvements (2)	Total (4)			
Burlington, WA	3	—	694	6,108	2,766	777	8,790	9,568	(4,906)	1965	2008
Carson, CA	1	—	9,100	13,731	2,198	9,152	15,877	25,029	(6,337)	2002	2009
Cartersville, GA	1	—	1,500	8,505	1,522	1,611	9,916	11,527	(4,782)	1996	2009
Carthage Warehouse Dist, MO	1	—	61,445	33,880	9,271	62,987	41,609	104,596	(24,664)	1972	2008
Chambersburg, PA	1	—	1,368	15,868	461	1,389	16,308	17,697	(2,242)	1994	2019
Charlotte, NC	1	—	—	1,160	301	—	1,461	1,461	(181)	1988	2020
Chesapeake, VA	1	—	2,740	13,452	20,024	2,993	33,223	36,216	(3,772)	1991	2019
Chillicothe, MO	1	—	670	44,905	286	670	45,191	45,861	(5,393)	1999	2019
City of Industry, CA	2	—	—	1,455	2,807	257	4,005	4,262	(3,322)	1962	2009
Clearfield, UT	1	—	2,881	14,945	7,548	2,661	22,713	25,374	(10,810)	1973	2008
Clearfield 2, UT	1	—	806	21,569	1,376	1,148	22,603	23,751	(4,479)	2017	2017
Columbia, SC	1	—	768	1,429	1,520	904	2,813	3,717	(1,480)	1971	2008
Columbus, OH	1	—	2,440	38,939	6,565	2,844	45,099	47,944	(4,752)	1996	2019
Connell, WA	1	—	497	8,728	1,411	570	10,066	10,636	(5,036)	1969	2008
Dallas (Catron), TX	1	—	1,468	14,385	13,782	3,010	26,625	29,635	(10,366)	1994	2009
Delhi, LA	1	—	539	12,228	604	587	12,784	13,371	(8,767)	2010	2010
Dominguez Hills, CA	1	—	11,149	10,894	1,928	11,162	12,809	23,971	(6,261)	1989	2009
Douglas, GA	1	—	400	2,080	3,384	401	5,463	5,864	(1,998)	1969	2009
Dunkirk, NY	1	—	1,465	27,379	461	1,465	27,841	29,305	(612)	2022	2022
Eagan, MN	1	—	6,050	49,441	188	6,050	49,629	55,679	(5,973)	1964	2019
East Dubuque, IL	1	—	722	13,764	701	768	14,418	15,187	(5,891)	1993	2008
Edison, NJ	1	—	—	1,390	22	—	1,412	1,412	(253)	2000	2020
Fairfield, OH	1	—	1,880	20,849	422	1,880	21,271	23,151	(2,850)	1993	2019
Fairmont, MN	1	—	1,650	13,738	135	1,682	13,840	15,523	(1,722)	1968	2019
Fairmont City, IL	1	—	2,430	9,087	476	2,451	9,542	11,993	(529)	1971	2021
Forest, MS	1	—	—	733	1,571	10	2,294	2,304	(225)	1990	2020
Fort Dodge, IA	1	—	1,022	7,162	1,401	1,226	8,359	9,585	(4,154)	1979	2008
Fort Smith, AR	2	—	308	2,231	2,732	342	4,930	5,271	(1,927)	1958	2008
Fort Smith (Hwy 45), AR CL	1	—	2,245	51,998	308	2,383	52,169	54,551	(6,410)	1987	2019

			Initial Costs			Gross amount at which carried as of December 31, 2022					
Property	Buildings	Encumbrances	Land	Buildings and Improvements	Costs Capitalized Subsequent to Acquisition (3)	Land	Buildings and Improvements (2)	Total (4)	Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
Fremont, NE	1	—	629	3,109	6,519	691	9,566	10,257	(5,541)	1968	2008
Fort Worth-Blue Mound, TX	1	—	1,700	5,055	1,873	1,717	6,912	8,628	(2,656)	1995	2009
Ft. Worth, TX (Meacham)	1	—	5,610	24,686	5,365	6,174	29,487	35,661	(13,295)	2005	2008
Ft. Worth, TX (Railhead)	1	—	1,857	8,536	2,088	2,129	10,351	12,481	(4,644)	1998	2008
Fort Worth-Samuels, TX	2	—	1,985	13,447	5,422	2,723	18,131	20,854	(8,655)	1977	2009
Gadsden, AL	1	—	100	9,820	(207)	388	9,325	9,713	(4,313)	1991	2013
Gaffney, SC	1	—	1,000	3,263	236	1,005	3,494	4,499	(1,710)	1995	2008
Gainesville, GA	1	—	400	5,704	1,567	434	7,237	7,671	(3,385)	1989	2009
Gainesville Candler, GA	1	—	716	3,258	1,335	770	4,539	5,309	(900)	1995	2019
Garden City, KS	1	—	446	4,721	2,199	446	6,920	7,366	(3,033)	1980	2008
Geneva Lakes, WI	1	—	1,579	36,020	3,951	2,513	39,037	41,550	(15,933)	1991	2009
Gloucester - Rogers, MA	1	—	1,683	3,675	7,025	1,835	10,547	12,383	(3,150)	1967	2008
Gloucester - Rowe, MA	1	—	1,146	2,833	13,193	1,281	15,891	17,172	(5,256)	1955	2008
Gouldsboro, PA	1	—	4,224	29,473	3,925	5,400	32,222	37,622	(12,443)	2006	2009
Goldsboro Commerce, PA	1	—	—	594	1,040	9	1,625	1,634	(160)	1995	2020
Grand Island, NE	1	—	430	6,542	(1,766)	530	4,676	5,206	(2,400)	1995	2008
Grand Prairie, TX	1	—	—	22	35	—	57	57	(26)	1981	2020
Green Bay, WI	2	—	—	2,028	4,681	263	6,446	6,709	(3,800)	1935	2009
Greenville, SC	1	—	200	1,108	429	203	1,535	1,737	(1,290)	1962	2009
Hatfield, PA	2	—	5,002	28,286	10,350	5,827	37,811	43,638	(17,891)	1983	2009
Hattiesburg, MS	1	—	—	486	390	13	863	876	(87)	1995	2020
Henderson, NV	2	—	9,043	14,415	1,939	9,056	16,341	25,397	(6,625)	1988	2009
Hermiston, OR	1	—	1,322	7,107	555	1,419	7,566	8,984	(3,654)	1975	2008
Houston, TX	1	—	1,454	10,084	1,961	1,531	11,967	13,499	(4,751)	1990	2009
Indianapolis, IN	4	—	1,897	18,991	23,216	4,372	39,733	44,104	(17,149)	1975	2008
Jefferson, WI	2	—	1,553	19,805	2,600	1,887	22,071	23,958	(10,794)	1975	2009
Johnson, AR	1	—	6,159	24,802	181	6,236	24,906	31,142	(4,426)	1955	2019
Lakeville, MN	1	—	4,000	47,790	284	4,013	48,061	52,074	(5,982)	1970	2019
Lancaster, PA	1	—	2,203	15,670	1,751	2,371	17,253	19,624	(6,794)	1993	2009

Property	Buildings	Encumbrances	Initial Costs		Costs Capitalized Subsequent to Acquisition (3)	Gross amount at which carried as of December 31, 2022			Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
			Land	Buildings and Improvements		Land	Buildings and Improvements (2)	Total (4)			
LaPorte, TX	1	—	2,945	19,263	3,927	3,502	22,633	26,135	(9,889)	1990	2009
Le Mars, IA	1	—	1,000	12,596	236	1,100	12,732	13,832	(1,917)	1991	2019
Lebanon, TN	1	—	—	883	110	—	993	993	(106)	1991	2020
Leesport, PA	1	—	1,206	14,112	12,887	1,796	26,409	28,205	(9,877)	1993	2008
Logan Township, NJ	1	—	5,040	26,749	3,090	5,078	29,801	34,879	(2,055)	2009, 2015	2021
Lowell, AR	1	—	2,610	31,984	442	2,913	32,123	35,036	(4,626)	1992	2019
Lula, GA	1	—	3,864	35,382	902	4,074	36,074	40,148	(5,332)	1996	2019
Lumberton, NC	1	—	—	981	886	10	1,857	1,867	(181)	1982	2020
Lynden, WA	5	—	1,420	8,590	2,247	1,524	10,734	12,257	(4,907)	1946	2009
Manchester, PA	1	—	3,838	36,621	3,946	5,060	39,345	44,405	(17,622)	1994	2008
Mansfield, TX	1	—	5,670	33,222	10	5,670	33,232	38,902	(2,795)	2018	2020
Marshall, MO	1	—	741	10,304	1,151	967	11,229	12,196	(5,084)	1985	2008
Massillon 17th, OH	1	—	175	15,322	1,031	530	15,998	16,528	(7,007)	2000	2008
Massillon Erie, OH	1	—	—	1,988	656	—	2,644	2,644	(2,564)	1984	2008
Middleboro, MA	1	—	404	15,031	192	441	15,186	15,627	(1,676)	2018	2018
Milwaukie, OR	2	—	2,473	8,112	2,019	2,523	10,081	12,604	(6,609)	1958	2008
Mobile, AL	1	—	10	3,203	1,635	24	4,824	4,848	(2,003)	1976	2009
Modesto, CA	6	—	2,428	19,594	6,677	3,039	25,660	28,699	(13,139)	1945	2009
Monmouth, IL	1	—	2,660	48,348	569	2,683	48,894	51,577	(5,052)	2014	2019
Montgomery, AL	1	—	850	7,746	433	1,157	7,871	9,029	(3,724)	1989	2013
Moses Lake, WA	1	—	575	11,046	3,317	1,198	13,739	14,938	(6,562)	1967	2008
Mullica Hill, NJ	1	—	6,030	27,266	143	6,081	27,358	33,439	(2,471)	1974	2020
Murfreesboro, TN	1	—	1,094	10,936	3,884	1,332	14,581	15,914	(8,011)	1982	2008
Nampa, ID	4	—	1,588	11,864	2,505	1,834	14,123	15,957	(8,884)	1946	2008
Napoleon, OH	1	—	2,340	57,677	436	2,350	58,103	60,453	(7,092)	1974	2019
New Ulm, MN	7	—	725	10,405	3,097	822	13,404	14,227	(5,497)	1984	2009
Newark, NJ	1	—	30,390	53,163	8,294	30,390	61,457	91,847	(3,024)	2012, 2015	2021
Newport, MN	1	—	3,383	19,877	1,414	3,744	20,930	24,674	(3,157)	1964	2020
North Little Rock, AR	1	—	1,680	12,841	14,832	2,236	27,117	29,353	(3,369)	1996	2019

			Initial Costs			Gross amount at which carried as of December 31, 2022					
Property	Buildings	Encumbrances	Land	Buildings and Improvements	Costs Capitalized Subsequent to Acquisition (3)	Land	Buildings and Improvements (2)	Total (4)	Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
Oklahoma City, OK	1	—	742	2,411	2,038	888	4,303	5,191	(2,168)	1968	2008
Ontario, CA	3	—	14,673	3,632	28,573	14,747	32,131	46,878	(16,204)	1987/1984/1983	2008
Ontario, OR	4	—	—	13,791	10,044	1,281	22,554	23,835	(16,280)	1962	2008
Oxford	1	—	1,820	10,083	661	1,828	10,735	12,564	(859)	1990	2020
Pasco, WA	1	—	557	15,809	673	638	16,400	17,039	(6,670)	1984	2008
Pedricktown, NJ	1	—	4,670	35,584	100	4,688	35,667	40,354	(3,407)	2008	2020
Pendergrass, GA	1	—	500	12,810	3,781	580	16,511	17,091	(8,298)	1993	2009
Perryville, MD	1	—	1,626	19,083	5,540	5,820	20,429	26,249	(2,318)	2007	2019
Phoenix2, AZ	1	—	3,182	11,312	268	3,182	11,581	14,762	(3,400)	2014	2014
Piedmont, SC	1	—	500	9,883	1,648	508	11,523	12,031	(6,040)	1981	2009
Piscataway 120, NJ	1	—	—	106	144	—	250	250	(48)	1968	2020
Piscataway 5 Access, NJ	1	—	—	3,952	—	—	3,952	3,952	(684)	2018	2020
Plover, WI	1	—	1,390	18,298	7,022	2,654	24,056	26,710	(12,325)	1981	2008
Portland, ME	1	—	305	2,402	1,393	385	3,715	4,100	(1,478)	1952	2008
Rochelle, IL (Americold Drive)	1	—	1,860	18,178	48,285	4,430	63,893	68,323	(15,320)	1995	2008
Rochelle, IL (Caron)	1	—	2,071	36,658	1,339	2,356	37,712	40,068	(17,368)	2004	2008
Rockmart	1	—	3,520	33,336	3,581	4,677	35,760	40,437	(2,821)	1991	2020
Russellville, AR - Valley	1	—	708	15,832	4,050	759	19,831	20,590	(7,884)	1995	2008
Russellville, AR - Cloverleaf (Rt. 324)	1	—	2,467	29,179	85	2,499	29,232	31,731	(4,025)	1993	2019
Russellville, AR - Elmira	1	—	1,366	36,751	3,513	1,550	40,081	41,630	(8,351)	1986, 2022	2008
Salem, OR	4	—	3,055	21,096	6,199	3,305	27,045	30,350	(13,827)	1963	2008
Salinas, CA	5	—	7,244	7,181	14,142	8,142	20,425	28,567	(8,866)	1958	2009
Salt Lake City, UT	1	—	—	22,481	10,824	485	32,820	33,305	(19,967)	1998	2010
San Antonio - HEB, TX	1	—	2,014	22,902	28	2,014	22,929	24,944	(6,885)	1982	2017
San Antonio, TX	3	—	1,894	11,101	3,980	2,264	14,711	16,975	(9,788)	1913	2009
Sanford, NC	1	—	3,110	34,104	597	3,275	34,537	37,811	(4,424)	1996	2019
Savannah, GA	1	—	20,715	10,456	5,024	22,743	13,451	36,195	(2,254)	2015	2019
Savannah 2, GA	1	—	3,002	37,571	279	3,024	37,828	40,852	(3,925)	2020	2020

Americold Realty Trust, Inc. and Subsidiaries
Schedule III – Real Estate and Accumulated Depreciation
December 31, 2022
(In thousands of U.S. dollars, as applicable and unless noted)

Property	Buildings	Encumbrances	Initial Costs		Costs Capitalized Subsequent to Acquisition (3)	Gross amount at which carried as of December 31, 2022			Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
			Land	Buildings and Improvements		Land	Buildings and Improvements (2)	Total (4)			
Savannah Pooler, GA	1	—	—	1,382	1,951	1,139	2,194	3,333	(371)	2013, 2015	2020
Seabrook, NJ	1	—	3,370	19,958	1,044	3,015	21,357	24,372	(1,608)	2002, 2004, 2018	2021
Sebree, KY	1	—	638	7,895	1,954	802	9,685	10,487	(3,595)	1998	2008
Sikeston, MO	1	—	258	11,936	3,306	2,350	13,151	15,500	(6,044)	1998	2009
Sioux City, IA-2640 Murray St	1	—	5,950	28,391	(596)	4,529	29,216	33,745	(4,445)	1990	2019
Sioux City, IA-2900 Murray St	1	—	3,070	56,336	1,693	4,508	56,590	61,099	(7,961)	1995	2019
Sioux Falls, SD	1	—	856	4,780	5,110	1,088	9,658	10,746	(5,303)	1972	2008
South Plainfield, NJ	1	—	5,360	20,874	1,634	6,578	21,290	27,868	(1,675)	1970 -1974	2020
Springdale, AR	1	—	844	10,754	2,042	931	12,709	13,640	(6,328)	1982	2008
St. Louis, MO	2	—	2,082	7,566	2,216	2,198	9,667	11,864	(4,084)	1956	2009
St. Paul, MN	2	—	1,800	12,129	962	1,800	13,091	14,891	(6,461)	1970	2009
Strasburg, VA	1	—	1,551	15,038	2,214	1,731	17,072	18,803	(7,008)	1999	2008
Summerville	1	—	—	5,024	165	7	5,181	5,189	(535)	1999	2020
Sumter, SC	1	—	530	8,738	51	560	8,759	9,319	(1,690)	1979	2019
Syracuse, NY	2	—	2,177	20,056	6,266	2,420	26,079	28,499	(11,911)	1960	2008
Tacoma, WA	1	—	—	21,216	2,629	31	23,814	23,845	(9,608)	2010	2010
Tampa - Bartow, FL	1	—	—	2,451	859	89	3,221	3,310	(2,690)	1962	2008
Tampa Maple, FL	1	—	3,233	15,940	83	3,242	16,014	19,256	(1,371)	2017	2020
Tampa Plant City, FL	2	—	1,333	11,836	1,701	1,380	13,489	14,870	(5,648)	1987	2009
Tarboro, NC	1	—	1,078	9,586	1,391	1,225	10,829	12,055	(4,684)	1988	2008
Taunton, MA	1	—	1,477	14,159	1,485	1,703	15,418	17,121	(6,278)	1999	2009
Texarkana, AR	1	—	842	11,169	1,750	921	12,840	13,761	(5,355)	1992	2008
Tomah, WI	1	—	886	10,715	695	1,034	11,262	12,296	(5,450)	1989	2008
Turlock, CA (#1)	2	—	944	4,056	877	967	4,911	5,877	(2,395)	1995	2008
Turlock, CA (#2)	1	—	3,091	7,004	3,833	3,124	10,804	13,928	(4,433)	1985	2008
Vernon 2, CA	1	—	8,100	13,490	3,752	8,112	17,229	25,342	(9,761)	1965	2009
Victorville, CA	1	—	2,810	22,811	1,348	2,826	24,143	26,969	(10,232)	2004	2008
Vineland, NJ	1	—	9,580	68,734	2,078	9,580	70,812	80,392	(5,035)	1998, 2000, 2015, 2016, 2017	2020

			Initial Costs			Gross amount at which carried as of December 31, 2022					
Property	Buildings	Encumbrances	Land	Buildings and Improvements	Costs Capitalized Subsequent to Acquisition (3)	Land	Buildings and Improvements (2)	Total (4)	Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
Walla Walla, WA	2	—	215	4,693	722	159	5,471	5,630	(3,509)	1960	2008
Wallula, WA	1	—	690	2,645	975	788	3,521	4,310	(1,545)	1982	2008
Watsonville, CA	1	—	—	8,138	2,336	21	10,452	10,474	(8,445)	1984	2008
West Memphis, AR	1	—	1,460	12,300	3,435	2,802	14,392	17,195	(7,400)	1985	2008
Wichita, KS	1	—	1,297	4,717	2,309	1,432	6,891	8,323	(3,462)	1972	2008
Woodburn, OR	1	—	1,552	9,860	4,788	1,627	14,574	16,200	(5,855)	1952	2008
York-Willow Springs, PA	1	—	1,300	7,351	823	1,416	8,058	9,474	(3,973)	1987	2009
Zumbrota, MN	3	—	800	10,360	1,951	934	12,176	13,111	(5,135)	1996	2009
Canada											
Taber	—	—	—	12	(2)	—	10	10	(10)	1999	2009
Brampton	1	—	27,522	53,367	(1,482)	26,819	52,589	79,407	(5,888)	2004	2020
Calgary	1	—	5,240	36,392	6,958	6,020	42,570	48,590	(3,828)	2009	2020
Halifax Dartmouth	1	—	2,052	14,904	(434)	1,999	14,522	16,522	(1,331)	2013	2020
Halifax Thornhill	1	—	—	1,044	(27)	—	1,017	1,017	(971)	1971	2020
London	1	—	1,431	11,340	(1,111)	1,335	10,325	11,660	(968)	1982	2021
Mississauga Surveyor	1	—	—	245	141	—	386	386	(27)	1972, 1992	2021
Montreal	1	—	1,819	2,307	(277)	1,697	2,153	3,849	(112)	1999	2021
Australia											
Arndell Park	2	—	13,489	29,428	2,091	11,419	33,588	45,008	(12,986)	1989/1994	2009
Brisbane - Hemmant	1	—	9,738	10,072	(1,743)	7,854	10,214	18,067	(1,250)	1996	2020
Brisbane - Lytton	1	—	19,575	28,920	(3,175)	18,152	27,168	45,320	(677)	1966	2021
Laverton	2	—	13,689	28,252	7,539	11,589	37,892	49,480	(14,152)	1997/1998	2009
Murarrie	3	—	10,891	18,975	(2,549)	9,220	18,097	27,317	(7,686)	1972/2003	2009
Prospect/ASC Corporate	2	—	—	1,187	19,656	7,244	13,599	20,843	(6,165)	1985	2009
Spearwood	1	—	7,194	10,990	(381)	6,090	11,713	17,803	(5,492)	1978	2009
Wivenhoe - Tasmania	1	—	994	8,218	(2)	870	8,340	9,210	(218)	1998/2013	2022
New Zealand											
Dalgety	1	—	6,047	5,531	31,440	5,934	37,085	43,018	(5,196)	1988	2009
Diversey	1	—	2,357	5,966	1,298	2,313	7,308	9,621	(2,535)	1988	2009
Halwyn Dr	1	—	5,227	3,399	1,117	5,129	4,614	9,743	(1,942)	1992	2009

Americold Realty Trust, Inc. and Subsidiaries
Schedule III – Real Estate and Accumulated Depreciation
December 31, 2022
(In thousands of U.S. dollars, as applicable and unless noted)

Property	Buildings	Encumbrances	Initial Costs		Costs Capitalized Subsequent to Acquisition (3)	Gross amount at which carried as of December 31, 2022			Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
			Land	Buildings and Improvements		Land	Buildings and Improvements (2)	Total (4)			
Mako Mako	1	—	1,332	3,810	541	1,307	4,375	5,683	(1,536)	2000	2009
Manutapu/Barber Akld	1	—	—	343	279	—	622	622	(594)	2004	2009
Paisley	2	—	—	185	8,314	5,396	3,103	8,499	(623)	1984	2009
Smarts Rd	1	—	2,442	5,750	837	2,487	6,543	9,029	(860)	1984	2022
Argentina											
Mercado Central - Buenos Aires, ARG	1	—	—	4,984	(2,364)	—	2,620	2,620	(3,629)	1996/1999	2009
Pilar - Buenos Aires, ARG	1	—	706	2,586	(2,438)	648	206	854	(53)	2000	2009
Netherlands											
Barneveld	2	—	15,410	27,472	(4,506)	13,526	24,851	38,376	(1,436)	1986, 1995	2020
Urk	2	—	7,100	31,014	(4,103)	6,222	27,789	34,011	(1,699)	1994, 2001	2020
Maasvlakte - Rotterdam	1	—	540	15,746	(2,013)	473	13,800	14,273	(936)	2016	2020
Westland - Rotterdam	1	—	20,910	26,637	(6,185)	18,065	23,297	41,362	(1,578)	1976, 1974, 2007, 2016	2020
Austria											
Vienna	1	—	280	26,515	(3,313)	245	23,237	23,482	(1,466)	1979	2020
Ireland											
Castleblayney	2	—	6,170	22,244	(2,865)	5,407	20,142	25,549	(1,362)	1976, 1994	2020
Dublin	1	—	6,163	29,179	(257)	5,325	29,760	35,085	(708)	2018, 2022	2020
Portugal											
Lisbon	1	—	7,385	29,538	(3,334)	6,472	27,117	33,589	(1,611)	1993	2020
Porto	1	—	6,409	17,340	(2,750)	5,616	15,383	20,999	(878)	2006	2020
Sines	1	—	130	2,311	(300)	114	2,027	2,141	(112)	2016	2020
Spain											
Algeciras	1	—	101	11,948	(1,371)	88	10,591	10,678	(633)	1978	2020
Barcelona	2	—	16,340	35,247	(4,284)	14,556	32,747	47,303	(1,816)	1989, 2008, 2022	2020
Valencia	1	—	170	10,932	(633)	149	10,320	10,469	(628)	2005	2020
Poland											
Gdynia	2	—	1,129	4,167	142	1,144	4,294	5,438	(34)	2015	2020, 2022
Great Britain											
Spalding - Bowman	1	—	5,916	32,815	(7,146)	3,936	27,649	31,585	(1,495)	2011, 2017	2020
Whitchurch	1	—	7,750	74,185	(3,108)	7,981	70,846	78,827	(5,120)	2014	2020

			Initial Costs			Gross amount at which carried as of December 31, 2022					
Property	Buildings	Encumbrances	Land	Buildings and Improvements	Costs Capitalized Subsequent to Acquisition (3)	Land	Buildings and Improvements (2)	Total (4)	Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
Northern Ireland											
Lurgan	2	—	3,390	7,992	1,542	2,930	9,994	12,924	(1,050)	1985, 1986	2020
Total		—	745,471	3,629,424	671,234	786,975	4,259,154	5,046,129	(1,143,258)		
Land, buildings, and improvements in the assets under construction balance as of December 31, 2022.											
US											
401 Kentile, NJ		—	—	—	—	—	5	5			
501 Kentile, NJ		—	—	—	—	—	603	603			
601 Kentile, NJ		—	—	—	—	—	68	68			
Albertville, AL		—	—	—	—	—	137	137			
Allentown, PA		—	—	—	—	—	627	627			
Amarillo, TX		—	—	—	—	—	80	80			
Anaheim, CA		—	—	—	—	—	11	11			
Atlanta - East Point, GA		—	—	—	—	—	220	220			
Atlanta - Empire, GA		—	—	—	—	—	209	209			
Atlanta - Gateway, GA		—	—	—	—	—	22,350	22,350			
Atlanta - Lakewood, GA		—	—	—	—	—	27	27			
Atlanta - Pleasantdale, GA		—	—	—	—	—	5,608	5,608			
Atlanta - Skygate, GA		—	—	—	—	—	262	262			
Atlanta - Southgate, GA		—	—	—	—	—	226	226			
Atlanta - Tradewater, GA		—	—	—	—	—	6,338	6,338			
Atlanta - Westgate, GA		—	—	—	—	—	94	94			
Atlanta, GA - Corporate		—	—	—	—	—	916	916			
Babcock, WI		—	—	—	—	—	72	72			
Belvidere-Imron, IL		—	—	—	—	—	12	12			
Benson, NC		—	—	—	—	—	15	15			
Benson Hodges, NC		—	—	—	—	—	205	205			
Brighton (Denver 2), CO		—	—	—	—	—	3,414	3,414			
Burley, ID		—	—	—	—	—	24	24			
Burlington, WA		—	—	—	—	—	347	347			
Cartersville, GA		—	—	—	—	—	6	6			
Carthage Warehouse Dist, MO		—	—	—	—	—	(9)	(9)			
Chambersburg, PA		—	—	—	—	—	99	99			

Americold Realty Trust, Inc. and Subsidiaries
Schedule III – Real Estate and Accumulated Depreciation
December 31, 2022
(In thousands of U.S. dollars, as applicable and unless noted)

Property	Buildings	Encumbrances	Initial Costs		Costs Capitalized Subsequent to Acquisition (3)	Gross amount at which carried as of December 31, 2022			Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
			Land	Buildings and Improvements		Land	Buildings and Improvements (2)	Total (4)			
Charlotte, NC		—	—	—	—	—	9	9			
Chesapeake, VA		—	—	—	—	—	(9)	(9)			
Chillicothe, MO		—	—	—	—	—	70	70			
Clearfield, UT		—	—	—	—	—	1,042	1,042			
Clearfield 2, UT		—	—	—	—	—	681	681			
Columbia, SC		—	—	—	—	—	221	221			
Dallas (Catron), TX		—	—	—	—	—	370	370			
Dominguez Hills, CA		—	—	—	—	—	1452	1,452			
Douglas, GA		—	—	—	—	—	221	221			
Dunkirk, NY		—	—	—	—	—	1,535	1,535			
East Dubuque, IL		—	—	—	—	—	388	388			
Edison, NJ		—	—	—	—	—	450	450			
Fairfield, OH		—	—	—	—	—	120	120			
Forest, MS		—	—	—	—	—	149	149			
Ft. Worth, TX (Railhead)		—	—	—	—	—	(9)	(9)			
Fort Worth-Samuels, TX		—	—	—	—	—	265	265			
Gadsden, AL		—	—	—	—	—	7	7			
Gaffney, SC		—	—	—	—	—	1	1			
Gainesville, GA		—	—	—	—	—	55	55			
Gainesville Candler, GA		—	—	—	—	—	23	23			
Geneva Lakes, WI		—	—	—	—	—	370	370			
Gloucester - Rogers, MA		—	—	—	—	—	(29)	(29)			
Goldsboro Commerce, PA		—	—	—	—	—	30	30			
Grand Island, NE		—	—	—	—	—	2,763	2,763			
Grand Prairie, TX		—	—	—	—	—	1,074	1,074			
Green Bay, WI		—	—	—	—	—	37	37			
Hatfield, PA		—	—	—	—	—	215	215			
Henderson, NV		—	—	—	—	—	20	20			
Indianapolis, IN		—	—	—	—	—	5,892	5,892			
Jefferson, WI		—	—	—	—	—	28	28			
Johnson, AR		—	—	—	—	—	369	369			
LaPorte, TX		—	—	—	—	—	(13)	(13)			
Le Mars, IA		—	—	—	—	—	671	671			

Property	Buildings	Encumbrances	Initial Costs		Costs Capitalized Subsequent to Acquisition (3)	Gross amount at which carried as of December 31, 2022			Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
			Land	Buildings and Improvements		Land	Buildings and Improvements (2)	Total (4)			
Lebanon, TN		—	—	—	—	—	183	183			
Logan Township, NJ		—	—	—	—	—	68	68			
Lumberton, NC		—	—	—	—	—	26	26			
Lynden, WA		—	—	—	—	—	465	465			
Manchester, PA		—	—	—	—	—	19	19			
Mansfield, TX		—	—	—	—	—	156	156			
Massillon 17th, OH		—	—	—	—	—	153	153			
Milwaukie, OR		—	—	—	—	—	(9)	(9)			
Mobile, AL		—	—	—	—	—	7	7			
Modesto, CA		—	—	—	—	—	(181)	(181)			
Montgomery, AL		—	—	—	—	—	643	643			
Moses Lake, WA		—	—	—	—	—	(37)	(37)			
Mountville, PA		—	—	—	—	—	143,871	143,871			
Murfreesboro, TN		—	—	—	—	—	274	274			
Nampa, ID		—	—	—	—	—	91	91			
Napoleon, OH		—	—	—	—	—	16	16			
New Ulm, MN		—	—	—	—	—	106	106			
Newark, NJ		—	—	—	—	—	210	210			
Newport, MN		—	—	—	—	—	(44)	(44)			
Ontario, CA		—	—	—	—	—	1,082	1,082			
Pasco, WA		—	—	—	—	—	(6)	(6)			
Pedricktown, NJ		—	—	—	—	—	661	661			
Perryville, MD		—	—	—	—	—	80	80			
Piscataway 120, NJ		—	—	—	—	—	46	46			
Plainville, CT		—	—	—	—	—	155,050	155,050			
Plover, WI		—	—	—	—	—	150	150			
Rochelle, IL (Americold Drive)		—	—	—	—	—	1,954	1,954			
Rochelle, IL (Caron)		—	—	—	—	—	9,121	9,121			
Rockmart		—	—	—	—	—	448	448			
Russellville, AR - Elmira		—	—	—	—	—	40,372	40,372			
Russellville, AR - Cloverleaf (Rt. 324)		—	—	—	—	—	122	122			
Salem, OR		—	—	—	—	—	6	6			

Property	Buildings	Encumbrances	Initial Costs		Costs Capitalized Subsequent to Acquisition (3)	Gross amount at which carried as of December 31, 2022			Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
			Land	Buildings and Improvements		Land	Buildings and Improvements (2)	Total (4)			
Salinas, CA		—	—	—	—	—	120	120			
Salt Lake City, UT		—	—	—	—	—	425	425			
San Antonio - HEB, TX		—	—	—	—	—	709	709			
Sanford, NC		—	—	—	—	—	368	368			
Savannah, GA		—	—	—	—	—	8	8			
Savannah 2, GA		—	—	—	—	—	(11)	(11)			
Savannah Pooler, GA		—	—	—	—	—	55	55			
Sebree, KY		—	—	—	—	—	10	10			
Sioux City, IA-2640 Murray St		—	—	—	—	—	1,158	1,158			
Sioux Falls, SD		—	—	—	—	—	33	33			
South Plainfield, NJ		—	—	—	—	—	105	105			
Strasburg, VA		—	—	—	—	—	227	227			
Tacoma, WA		—	—	—	—	—	177	177			
Tampa - Bartow, FL		—	—	—	—	—	13	13			
Tampa Maple, FL		—	—	—	—	—	42	42			
Tampa Plant City, FL		—	—	—	—	—	(30)	(30)			
Tarboro, NC		—	—	—	—	—	24	24			
Taunton, MA		—	—	—	—	—	112	112			
Texarkana, AR		—	—	—	—	—	10	10			
Tomah, WI		—	—	—	—	—	4	4			
Turlock, CA (#1)		—	—	—	—	—	614	614			
Turlock, CA (#2)		—	—	—	—	—	22	22			
Vernon 2, CA		—	—	—	—	—	953	953			
Victorville, CA		—	—	—	—	—	1,166	1,166			
Vineland, NJ		—	—	—	—	—	6,163	6,163			
Walla Walla, WA		—	—	—	—	—	(5)	(5)			
Watsonville, CA		—	—	—	—	—	5	5			
York-Willow Springs, PA		—	—	—	—	—	239	239			
Zumbrota, MN		—	—	—	—	—	114	114			
Canada											
Calgary		—	—	—	—	—	81	81			
Brampton		—	—	—	—	—	59	59			
Halifax - Dartmouth		—	—	—	—	—	2	2			

Property	Buildings	Encumbrances	Initial Costs		Costs Capitalized Subsequent to Acquisition (3)	Gross amount at which carried as of December 31, 2022			Accumulated Depreciation (1) (6) (5)	Date of Construction	Date of Acquisition
			Land	Buildings and Improvements		Land	Buildings and Improvements (2)	Total (4)			
London		—	—	—	—	—	163	163			
Mississauga Surveyor		—	—	—	—	—	66	66			
Australia											
Arndell Park		—	—	—	—	—	816	816			
Brisbane - Hemmant		—	—	—	—	—	513	513			
Brisbane - Lytton		—	—	—	—	—	513	513			
Laverton		—	—	—	—	—	697	697			
Murarrie		—	—	—	—	—	621	621			
Prospect/ASC Corporate		—	—	—	—	—	1,611	1,611			
Spearwood		—	—	—	—	—	23,551	23,551			
Wivenhoe - Tasmania		—	—	—	—	—	38	38			
New Zealand											
Dalgety		—	—	—	—	—	900	900			
Diversey		—	—	—	—	—	164	164			
Halwyn Dr		—	—	—	—	—	147	147			
Mako Mako		—	—	—	—	—	186	186			
Manutapu		—	—	—	—	—	46	46			
Paisley		—	—	—	—	—	216	216			
Smarts Rd		—	—	—	—	—	142	142			
Europe											
Barcelona, Spain		—	—	—	—	—	5,828	5,828			
Dublin, Ireland		—	—	—	—	—	5,862	5,862			
Bowman, UK		—	—	—	—	—	224	224			
Total in assets under construction		—	—	—	—	—	470,813	470,813	—		
Total assets		$ —	$ 745,471	$ 3,629,424	$ 671,234	$ 786,975	$ 4,729,968	$ 5,516,942	$ (1,143,258)		

Schedule III – Footnotes

(1) Reconciliation of total accumulated depreciation to consolidated balance sheet caption as of December 31, 2022:

Total per Schedule III	$	(1,143,258)
Accumulated depreciation on investments in non-real estate assets		(815,818)
Total accumulated depreciation per consolidated balance sheet (property, buildings and equipment and financing leases)	$	(1,959,076)

(2) Reconciliation of total Buildings and improvements to consolidated balance sheet as of December 31, 2022:

Building and improvements per consolidated balance sheet	$	4,245,607
Building and improvements financing leases per consolidated balance sheet		13,546
Assets under construction per consolidated balance sheet		526,811
Less: personal property assets under construction		(55,996)
Total per Schedule III	$	4,729,968

(3) Amount includes the cumulative impact of foreign currency translation and the effect of any asset disposals.

(4) The aggregate cost for Federal tax purposes at December 31, 2022 of our real estate assets was approximately $4.4 billion.

(5) The life on which depreciation is computed ranges from 5 to 43 years.

(6) The following table summarizes the Company's real estate activity and accumulated depreciation for the years ended December 31:

	2022	2021	2020
Real Estate Facilities, at Cost:			
Beginning Balance	$ 6,134,702	$ 5,706,760	$ 3,729,589
Capital expenditures	195,696	304,886	346,027
Acquisitions	12,615	383,600	1,662,650
Purchase price allocation adjustments	(331)	(198,541)	—
Disposition	(14,694)	(3,691)	(62,225)
Impairment	(3,407)	(1,700)	(2,153)
Conversion of leased assets to owned	13,182	—	7,956
Impact of foreign exchange rate changes	(76,100)	(56,612)	24,916
Ending Balance	6,261,663	6,134,702	5,706,760
Accumulated Depreciation:			
Beginning Balance	(1,277,174)	(1,080,922)	(936,422)
Depreciation expense	(204,896)	(201,497)	(146,237)
Dispositions	5,304	1,259	8,731
Impact of foreign exchange rate changes	6,587	3,986	(6,994)
Ending Balance	(1,470,179)	(1,277,174)	(1,080,922)
Total Real Estate Facilities, Net at December 31	$ 4,791,484	$ 4,857,528	$ 4,625,838

The total real estate facilities amounts in the table above include $152.0 million, and $157.4 million, and $165.2 million of assets under sale-leaseback agreements accounted for as a financing as of December 31, 2022, 2021 and 2020, respectively. The Company does not hold title in these assets under sale-leaseback agreements. As of December 31, 2022 and 2021, the Company has no facilities classified as held for sale.

(7) Reconciliation of the Company’s real estate activity and accumulated depreciation for the years ended December 31, 2022 to Schedule III:		
Total real estate facilities gross amount per Schedule III	$	5,516,942
Plus: Refrigeration equipment		744,722
Real estate facilities, at cost - ending balance	$	6,261,664
Accumulated depreciation per Schedule III	$	(1,143,258)
Plus: Refrigeration equipment		(326,921)
Accumulated depreciation - ending balance	$	(1,470,179)

SIGNATURES

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

AMERICOLD REALTY TRUST, INC.

By:	/s/ George F. Chappelle Jr.
	George F. Chappelle Jr. Chief Executive Officer and Director (Principal executive officer)

Date: February 27, 2023

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

Signature	Title	Date
/s/ George F. Chappelle Jr. George F. Chappelle Jr.	Chief Executive Officer and Director	February 27, 2023
/s/ Marc J. Smernoff Marc J. Smernoff	Chief Financial Officer and Executive Vice President	February 27, 2023
/s/ Thomas C. Novosel Thomas C. Novosel	Chief Accounting Officer and Senior Vice President	February 27, 2023
/s/ Mark R. Patterson Mark R. Patterson	Chairman of the Board of Directors	February 27, 2023
/s/ George J. Alburger, Jr. George J. Alburger, Jr.	Director	February 27, 2023
/s/ Kelly H. Barrett Kelly H. Barrett	Director	February 27, 2023
/s/ Robert L. Bass Robert L. Bass	Director	February 27, 2023
/s/ Antonio F. Fernandez Antonio F. Fernandez	Director	February 27, 2023
/s/ Pamela K. Kohn Pamela K. Kohn	Director	February 27, 2023
/s/ David J. Neithercut David J. Neithercut	Director	February 27, 2023
/s/ Andrew P. Power Andrew P. Power	Director	February 27, 2023

Description of Common Stock

The following description of the Company's common stock is based upon the Company's articles of incorporation, or our articles of incorporation, the Company's bylaws, or our bylaws, and applicable provisions of law. The following summary is not complete and is subject to, and is qualified in its entirety by express references to, our articles of incorporation and bylaws.

General. The authorized shares of stock of the Company under our articles of incorporation consist of 500,000,000 shares of common stock, par value $0.01 per share and 25,000,000 shares of preferred stock, par value $0.01 per share.

Under our articles of incorporation, our board of directors is authorized to classify and reclassify any unissued shares of stock into other classes or series of stock, and to cause the issuance of such shares, without obtaining stockholder approval or ratification unless such approval or ratification is required by applicable law, the terms of any other class or series of Company stock or the rules of any stock exchange or automated quotation system on which any shares of Company stock are listed or traded. In addition, our articles of incorporation authorize our board of directors, without stockholder approval, to amend the articles of incorporation from time to time to increase or decrease the aggregate number of authorized shares of stock or the number of authorized shares of any class or series of stock.

Description of Common Stock. The Company is authorized under our articles of incorporation to issue up to 500,000,000 shares of common stock.

Subject to the preferential rights of any other class or series of shares of stock and to the provisions of our articles of incorporation regarding the restrictions on the ownership and transfer of shares of common stock, holders of common stock are entitled to receive dividends on such shares of common stock if, as and when authorized by our board of directors and declared by us out of assets legally available therefor and to share ratably in the assets of the Company legally available for distribution to our stockholders in the event of our liquidation, dissolution or winding up after payment of or adequate provision for all known debts and liabilities of the Company.

Subject to the provisions of our articles of incorporation regarding the restrictions on the ownership and transfer of shares of common stock, each outstanding share of common stock entitles the holder to one vote on all matters submitted to a vote of stockholders, including the election of directors, and, except as provided with respect to any other class or series of stock, the holders of such common stock will possess the exclusive voting power. Each of our directors are elected by a majority of the votes cast with respect to such director at any meeting of stockholders duly called and at which a quorum is present and directors are to be elected, provided that in any contested election the directors shall be elected by a plurality of the votes cast at any meeting of stockholders duly called and at which a quorum is present and directors are to be elected. There is no cumulative voting in the election of directors, which means that the holders of a majority of the shares of outstanding common stock elect all of the directors then

standing for election and the holders of the remaining shares of common stock are not able to elect any directors.

Holders of shares of common stock have no preference, conversion, exchange, sinking fund, redemption or appraisal rights and have no preemptive rights to subscribe for any of the securities. Subject to the provisions of our articles of incorporation regarding the restrictions on the ownership and transfer of shares of common stock, all shares of common stock have equal dividend, liquidation and other rights.

Our articles of incorporation authorize our board of directors to reclassify any unissued shares of common stock into other classes or series of shares of stock and to establish the number of shares in each class or series and to set the preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends or other distributions, qualifications or terms or conditions of redemption for each such class or series.

Description of Preferred Stock. Our articles of incorporation authorize our board of directors to classify any unissued shares of preferred stock and to reclassify any previously classified but unissued shares of preferred stock of any series from time to time, into one or more series, as authorized by our board of directors. Prior to issuance of shares of preferred stock of any series, our board of directors is required by Maryland law and our articles of incorporation to set, subject to the provisions of our articles of incorporation regarding the restrictions on transfer of shares of stock, the terms, preferences, conversion or other rights, voting powers, restrictions, limitations as to dividends or other distributions, qualifications and terms or conditions of redemption for such series. Thus, our board of directors could authorize the issuance of shares of preferred stock with terms and conditions which could have the effect of delaying, deferring or preventing a transaction or a change in control of the Company that might involve a premium price for holders of common stock or otherwise be in their best interest.

Power to Issue Additional Common Stock and Preferred Stock. Our articles of incorporation allow our board of directors to issue additional authorized but unissued shares of common or preferred stock and to classify or reclassify unissued shares of common or preferred stock and thereafter to cause the Company to issue such classified or reclassified stock in order to provide the Company with increased flexibility in structuring possible future financings and acquisitions and in meeting other needs which might arise. The additional classes or series, as well as our common stock, are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange on which the securities may be listed or traded. Although our board of directors has no intention at the present time of doing so, it could authorize the Company to issue a class or series of stock that could, depending upon the terms of such class or series, delay, defer or prevent a transaction or a change in control of the Company that might involve a premium price for holders of common stock or otherwise be in their best interest.

Restrictions on Transfer. To qualify as a REIT under the Code, our shares of common stock must be beneficially owned by 100 or more persons during at least 335 days of a taxable year of

twelve months or during a proportionate part of a shorter taxable year (other than the first year for which an election to be a REIT was made). Also, not more than 50% of the value of our outstanding shares of common stock may be owned, directly or indirectly, by five or fewer individuals (as defined in the Code to include certain entities) during the last half of a taxable year (other than the first year for which an election to be a REIT was made).

Our articles of incorporation, subject to certain exceptions, contain certain restrictions on the number of our shares of stock that a person may own. Our articles of incorporation provide that no individual (including certain entities treated as individuals) may own, or be deemed to own by virtue of the relevant applicable attribution rules of the Code, more than 9.8% (in value) of our outstanding stock, or the Ownership Limit. Our articles of incorporation further prohibit (a) any person from beneficially or constructively owning shares of our stock that would result in the Company being "closely held" under Section 856(h) of the Code or otherwise cause us to fail to qualify as a REIT, (b) any person from transferring shares of stock of the Company if such transfer would result in shares of our stock being beneficially owned by fewer than 100 persons and (c) any person from beneficially owning shares of our stock to the extent such ownership would result in our failing to qualify as a "domestically controlled qualified investment entity" within the meaning of Section 897(h) of the Code (after taking into account for such purpose the statutory presumptions set forth in Section 897(h)(4)(E) of the Code).

Our board of directors is required to exempt a proposed transferee (prospectively or retrospectively) from the Ownership Limit (but not any of the other restrictions on the transfer or ownership of shares of our stock) and may establish or increase an excepted holder limit for such individual, or an Excepted Holder, if the proposed transferee provides our board of directors with information, satisfactory in the sole and absolute discretion of our board of directors, demonstrating: (a) that such exemption would not result in the Company being "closely held" within the meaning of Section 856(h) of the Code or failing to qualify as a "domestically controlled qualified investment entity" within the meaning of Section 897(h) of the Code; (b) that such holder does not own, actually or constructively, an interest in a tenant of the Company (or a tenant of any entity owned or controlled by the Company) that would cause the Company to own, directly or indirectly, more than a 9.8% interest in such a tenant other than a tenant from whom the Company (or an entity owned or controlled by the Company) derives and is expected to continue to derive a sufficiently small amount of revenue that the rent from such tenant would not, in the opinion of our board of directors, adversely affect our ability to qualify as a REIT; and (c) that such exemption would not otherwise result in our failure to qualify as a REIT. The individual seeking an exemption must represent to the satisfaction of our board of directors that it will not violate the aforementioned restrictions while such person beneficially or constructively owns our shares of common stock in excess of the Ownership Limit. The individual also must agree that any violation or attempted violation of any of the foregoing restrictions will result in the automatic transfer of the shares causing such violation to the Trust (as defined below). In connection with granting a waiver of the Ownership Limit or creating or modifying an Excepted Holder limit, or at any other time, our board of directors may increase or decrease the Ownership

Limit unless, after giving effect to any increased or decreased Ownership Limit, five or fewer persons could beneficially own, in the aggregate, more than 49.9% in value of our outstanding stock. A decreased Ownership Limit will not apply to any individual whose percentage of ownership of our stock is in excess of the decreased Ownership Limit until the individual's ownership of our stock equals or falls below the decreased Ownership Limit, but any further acquisition of our stock will be subject to the decreased Ownership Limit. Our board of directors may require a ruling from the IRS or an opinion of counsel, in either case in form and substance satisfactory to our board of directors, in its sole discretion, in order to determine or ensure our status as a REIT prior to granting an exemption.

Any person who acquires or attempts or intends to acquire beneficial or constructive ownership of shares of our stock that will or may violate any of the foregoing restrictions on transferability and ownership, or any person who would have owned shares of stock of the Company that resulted in a transfer of shares to the Trust, is required to give written notice immediately (or, in the case of a proposed or attempted transaction, at least 15 days prior written notice) to the Company and provide the Company with such other information as the Company may request in order to determine the effect of such transfer on our status as a REIT. The foregoing restrictions on transferability and ownership will not apply if our board of directors determines that it is no longer in our best interests to attempt to qualify, or to continue to qualify, as a REIT or that compliance is no longer required in order for us to qualify as a REIT.

Pursuant to our articles of incorporation, if any transfer of shares of our stock would result in shares of our stock being beneficially owned by fewer than 100 persons, such transfer will be null and void and the intended transferee will acquire no rights in such shares. In addition, if any transfer of shares of our stock occurs which, if effective, would result in any person beneficially or constructively owning shares of our stock in excess or in violation of the other transfer or ownership limitations described above, or a Prohibited Owner, then that number of shares of our stock, the beneficial or constructive ownership of which otherwise would cause such person to violate such limitations (rounded up to the nearest whole share), will be automatically transferred to a trust, or the Trust, for the exclusive benefit of one or more charitable beneficiaries designated by us, or the Charitable Beneficiary, and the Prohibited Owner may not acquire any rights in such shares. The automatic transfer will be deemed to be effective as of the close of business on the Business Day (as defined in our articles of incorporation) prior to the date of the violative transfer. Shares of stock held in the Trust will constitute issued and outstanding shares of stock. The Prohibited Owner may not benefit economically from ownership of any shares of stock held in the Trust, and will have no rights to dividends or possess any rights to vote or other rights attributable to the shares of stock held in the Trust. The trustee of the Trust, or the Trustee, will have all voting rights and rights to dividends or other distributions with respect to shares of stock held in the Trust, which rights are to be exercised for the exclusive benefit of the Charitable Beneficiary. Any dividend or other distribution paid prior to us discovering that shares of stock have been transferred to the Trustee will be paid by the recipient of such dividend or distribution to the Trustee upon demand, and any dividend or other distribution authorized but

unpaid must be paid when due to the Trustee. Any dividend or distribution so paid to the Trustee will be held in trust for the Charitable Beneficiary. The Prohibited Owner will have no voting rights with respect to shares of held in the Trust and, subject to Maryland law, effective as of the date that the shares of stock have been transferred to the Trust, the Trustee will have the authority (at the Trustee's sole discretion) (i) to rescind as void any vote cast by a Prohibited Owner prior to our discovery that such shares have been transferred to the Trust and (ii) to recast such vote in accordance with the desires of the Trustee acting for the benefit of the Charitable Beneficiary. However, if the Company has already taken irreversible trust action, then the Trustee shall not have the authority to rescind and recast such vote.

Within 20 days of receiving notice from us that shares of stock have been transferred to the Trust, the Trustee must sell the shares of stock held in the Trust to a person, designated by the Trustee, whose ownership of the shares will not violate the ownership limitations set forth in our articles of incorporation. Upon such sale, the interest of the Charitable Beneficiary in the shares sold will terminate and the Trustee must distribute the net proceeds of the sale to the Prohibited Owner and to the Charitable Beneficiary as follows. The Prohibited Owner will receive the lesser of (i) the price paid by the Prohibited Owner for the shares or, if the Prohibited Owner did not give value for the shares in connection with the event causing the shares to be held in the Trust (e.g., a gift, devise or other such transaction), the Market Price (as defined in our articles of incorporation) of such shares on the day of the event causing the shares to be held in the Trust and (ii) the price per share received by the Trustee from the sale or other disposition of the shares held in the Trust. The Trustee may reduce the amount payable to the Prohibited Owner by the amount of dividends and other distributions which have been paid to the Prohibited Owner and are owed by the Prohibited Owner to the Trustee. Any net sale proceeds in excess of the amount payable to the Prohibited Owner shall be paid immediately to the Charitable Beneficiary. If, prior to our discovery that shares of stock have been transferred to the Trust, the shares are sold by a Prohibited Owner, then (i) the shares will be deemed to have been sold on behalf of the Trust and (ii) to the extent that the Prohibited Owner received an amount for the shares that exceeds the amount that such Prohibited Owner was entitled to receive pursuant to the aforementioned requirement, such excess will be paid to the Trustee upon demand.

In addition, shares of our stock held in the Trust will be deemed to have been offered for sale to us, or our designee, at a price per share equal to the lesser of (i) the price per share in the transaction that resulted in the transfer to the Trust (or, in the case of a devise or gift, the Market Price at the time of the devise or gift) and (ii) the Market Price on the date we, or our designee, accept such offer. We may reduce the amount payable to the Prohibited Owner by the amount of dividends and other distributions which have been paid to the Prohibited Owner and are owed by the Prohibited Owner to the Trustee. We may pay the amount of such reduction to the Trustee for the benefit of the Charitable Beneficiary. We have the right to accept any offer until the Trustee has sold the shares of stock held in the Trust. Upon such a sale to the Company, the interest of the Charitable Beneficiary in the shares sold shall terminate and the Trustee shall distribute the net proceeds of the sale to the Prohibited Owner.

To the extent shares of stock of the Company are certificated, all certificates representing common stock and preferred stock will bear a legend referring to the restrictions described above.

Every owner of 5% or more (or such lower percentage as required by the Code or the regulations promulgated thereunder) of all classes or series of our stock, including our common stock, within 30 days after the end of each taxable year, is required to give written notice to us stating the name and address of the owner, the number of shares of each class and series of our stock which the owner beneficially owns and a description of the manner in which the shares are held and whether the beneficial owner of the shares is a "foreign person" within the meaning of Section 897(h) of the Code. Each such owner must provide any additional information as we may reasonably request in order to determine the effect, if any, of the beneficial ownership on our status as a REIT or as a "domestically controlled qualified investment entity" and to ensure compliance with the Ownership Limit. In addition, each stockholder is, upon reasonable demand, required to provide to us any relevant information we reasonably request in order to determine our status as a REIT or as a "domestically controlled qualified investment entity" and to comply with the requirements of any taxing authority or governmental authority or to determine such compliance.

These ownership limitations could delay, defer or prevent a transaction or a change in control that might involve a premium price for our common stock or otherwise be in the best interest of our stockholders. To reduce the ability of our board of directors to use these ownership limitations to delay, defer or prevent a transaction or a change in control of the Company, our articles of incorporation require our board of directors to grant a waiver of the 9.8% ownership limitation if an individual seeking a waiver demonstrates that such ownership would not jeopardize our status as a REIT.

Transfer Agent and Registrar. The transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, New York 11219.

EXHIBIT 21.1

List of Subsidiaries

List of Subsidiaries

Subsidiary	Jurisdiction of Incorporation
2 Joseph Street, LLC	New Jersey
3333493 Nova Scotia Company	Quebec
Agro Charleston, LLC	Delaware
Agro Improvement Participacoes S.A.	Brazil
Agro Merchants Brasil Paricipacoes LTDA	Brazil
Agro Merchants Carson, LLC	Delaware
Agro Merchants Chile Holdings SpA	Chile
Dublin RE Limited	Republic of Ireland
Agro Merchants European Holdings II S.a r.l	Luxembourg
Agro Merchants European Holdings S. a r.l.	Luxembourg
Agro Merchants European Intermediate Holdings S. a r.l	Luxembourg
Agro Merchants LATAM Holdings S.a r.l	Luxembourg
Agro Merchants NAI Holdings, LLC	Delaware
Agro Merchants North America Holdings LLC	Delaware
Agro Merchants Oakland, LLC	Delaware
Agro Merchants Rotterdam Packaging B.V.	The Netherlands
Agro Merchants Rotterdam Warehousing B.V.	The Netherlands
Agro Merchants Texas, LLC	Delaware
Agro Merchants Westland Holding B.V.	The Netherlands
Agrofundo Brasil II Fundode Investimento em Participacoes	Brazil
Albert and Cornelia, LLC	New Jersey
AM AUS HoldCo PTY Limited	Australia
AM NL RE Holdco 2 B.V.	The Netherlands
AMC 1031 LLC	Delaware
AmeriCold Acquisition, LLC	Delaware
Americold Algeciras, S.L.U.	Spain
Americold Australia PTY LTD	Australia
Americold Australia Realty Trust	Australia
Americold Australian Holdings PTY Ltd.	Australia
Americold Australian Logistics PTY LTD	Australia
Americold Barcelona Palau S.A.	Spain
Americold Barcelona Santa Perpetua S.A.	Spain
Americold Barneveld Warehousing B.V.	The Netherlands
Americold Brazil Paricipacoes LTDA	Brazil
Americold Brazil, LLC	Delaware
Americold Brisbane Realty Trust	Australia
Americold Castleblayney Limited	Republic of Ireland
Amricold Chambersburg Holdings, LLC	Delaware
Americold Chile S.A.	Chile
Americold Dublin Holdings Limited	Republic of Ireland
Americold Dublin Limited	Republic of Ireland
Americold Food Logistics PTY LTD	Australia
Americold Forwarding Agency B.V.	The Netherlands
Americold Gdansk SP. Z O.O.	Poland
Americold Holdings UK Limited	Northern Ireland
Americold Investments PTY LTD	Australia
Americold IR RE Holdco Limited	Republic of Ireland

Americold Ireland Limited	Republic of Ireland
Americold Ireland Properties Limited	Republic of Ireland
Americold LATAM Holdings Ltd.	United Kingdom
Americold Leixoes Unipessoal LDA	Portugal
Americold Lisboa Transport Unipessoal TDA.	Portugal
Americold Lisboa Warehousing S.A.	Portugal
Americold Logistics Argentina S.A.	Argentina
Americold Logistics Limited	Australia
Americold Logistics Services NZ LTD.	New Zealand
Americold Logistics, LLC	Delaware
Americold Lough Egish Limited	Republic of Ireland
Americold Lurgan Transport Ltd.	Northern Ireland
Americold Lurgan Warehousing Ltd.	Northern Ireland
Americold Maasvlakte B.V.	The Netherlands
Americold Melbourne Realty Trust	Australia
Americold Wien Holding GmbH	Austria
Americold NB PTY LTD	Australia
Americold Nebraska Leasing, LLC	Nebraska
Americold Netherlands B.V.	The Netherlands
Americold Netherlands Finco B.V.	The Netherlands
Americold Netherlands Holdco B.V.	The Netherlands
Americold Netherlands II B.V.	The Netherlands
AmeriCold Nova Cold Holdings II, LLC	Delaware
AMERICOLD NOVA COLD HOLDINGS, LP	Delaware
Americold NZ Limited	New Zealand
Americold Poland Holdings Sp. z o.o.	Poland
Americold Porto Warehousing S.A.	Portugal
Americold Portugal SGPS S.A.	Portugal
Americold Property PTY LTD	Australia
Americold Real Estate, L.P.	Delaware
Americold Realty Australia Management PTY LTD	Australia
Americold Realty Hong Kong Limited, Inc.	Hong Kong
Americold Realty LLC	Delaware
Americold Realty Operating Partnership, LP	Delaware
Americold Realty Operations, Inc.	Delaware
Americold Realty State Management PTY LTD	Australia
Americold Rotterdam Stevedoring B.V.	The Netherlands
Americold Russellville, LLC	Arkansas
Americold Sines Unipessoal LDA.	Portugal
Americold Spain S.A.	Spain
Americold Sydney Realty Trust	Australia
Americold Transportation, LLC	Delaware
Americold Transportation Services LLC	Delaware
AmeriCold TRS Parent, LLC	Delaware
Americold UK RE Holdco Ltd	Northern Ireland
Americold Urk B.V.	The Netherlands
Americold Valencia S.L.U.	Spain
Americold Westland Warehousing B.V.	The Netherlands
Americold Whitchurch Ltd.	United Kingdom
Americold Wien GmbH	Austria
Americold Zarantepec Sociedad Limitada	Spain
Amlog Canada, Inc.	Alberta
ART AL Holding LLC	Delaware
ART FIRST MEZZANINE BORROWER PROPCO 2006-2 LP	Delaware

ART FIRST MEZZANINE BORROWER PROPCO 2006-3 L.P.	Delaware
ART FIRST MEZZANINE BORROWER PROPCO GP 2006-2 LLC	Delaware
ART FIRST MEZZANINE BORROWER PROPCO GP 2006-3 LLC	Delaware
ART Icecap Holdings LLC	Delaware
ART LEASING LLC	Delaware
ART Manager, LLC	Delaware
Art Mezzanine Borrower OPCO 2013 LLC	Delaware
Art Mezzanine Borrower Propco 2013 LLC	Delaware
ART MORTGAGE BORROWER OPCO 2006-3 LP	Delaware
ART Mortgage Borrower Opco 2010 - 4 LLC	Delaware
ART Mortgage Borrower OPCO 2010 - 6 LLC	Delaware
Art Mortgage Borrower OPCO 2010-5 LLC	Delaware
Art Mortgage Borrower OPCO 2013 LLC	Delaware
ART MORTGAGE BORROWER PROPCO 2006-1A LLC	Delaware
ART MORTGAGE BORROWER PROPCO 2006-1B LLC	Delaware
ART MORTGAGE BORROWER PROPCO 2006-1C LLC	Delaware
Art Mortgage Borrower Propco 2006-2 LP	Delaware
Art Mortgage Borrower PROPCO 2006-3 L.P.	Delaware
ART Mortgage Borrower PROPCO 2010 - 4 LLC	Delaware
ART Mortgage Borrower Propco 2010 - 5 LLC	Delaware
ART MORTGAGE BORROWER PROPCO 2010-5 LLC	Delaware
ART MORTGAGE BORROWER PROPCO 2013 LLC	Delaware
Art Mortgage Borrower Propco GP 2006-1A LLC	Delaware
Art Mortgage Borrower Propco GP 2006-2 LLC	Delaware
ART MORTGAGE BORROWER, LLC	Delaware
Art Quarry TRS LLC	Delaware
ART SECOND MEZZANINE BORROWER OPCO 2013 LLC	Delaware
ART SECOND MEZZANINE BORROWER PROPCO 2013 LLC	Delaware
ART Third Mezzanine Borrower Propco 2013 LLC	Delaware
Atlas Cold Storage Logistics LLC	Minnesota
Atlas Logistics Group Retail Services (Denver) LL	Minnesota
Atlas Logistics Group Retail Services (Phoenix) LLC	Delaware
Ballykeel Freight Limited	Northern Ireland
Best way Agro Logistica LTDA	Brazil
Bowman Stores Limited	United Kingdom
Castlebleyney RE Limited	Republic of Ireland
CCS Realty Property Owner LLC	Delaware
CCS Realty, LLC	Iowa
Chambersburg Cold Storage Limited Partnership	Maryland
Chambersburg Cold Storage, Inc.	Maryland
Cloverleaf Cold Storage Co., LLC	Ohio
Cloverleaf Cold Storage, LLC	Delaware
Comfrio Transportes EIRELI	Brazil
Comfrio Solucoes Logisticas S.A.	Brazil
De Bruyn Cold Storage PTY LTD	Australia
Frigoriferi Industriali Gestione Integrata S.r.l.	Italy
G.F. Storage, LLC	Minnesota
Garden State Freezers, LLC	Delaware
Grower Services Acquisition LLC	New Jersey
Hall's Fast Motor Freight, Inc.	New Jersey
Hall's Logistics Group, Inc.	New Jersey
Icecap Australia MIT Holding, LLC	Delaware
ICECAP Properties AU LLC	Delaware
ICECAP Properties NZ Holdings LLC	Delaware

ICECAP Properties NZ Limited	New Zealand
Icicle Australia Property PTY Limited	Australia
Icicle NZ Property Limited	New Zealand
Inland Quarries, L.L.C.	Delaware
JF Comerico e Distribuicao de Alimentos LTDA	Brazil
JFLOG Participacoes S.A.	Brazil
KM Brrr LLC	New Jersey
KMT Brokeage, LLC	New Jersey
KMT Logistics LLC	New Jersey
KMT Properties Bridgeton, LLC	New Jersey
KMT Properties Logan, LLC	New Jersey
KM Transporation, LLC	New Jersey
Lanier Cold Storage, LLC	Georgia
Lanier Freezer, LLC	Georgia
Lough Egish RE Limited	Republic of Ireland
Lucca Freezer & Cold Storage, LLC	New Jersey
Lucca Newco, LLC	Delaware
Lucca Trucking, L.L.C.	New Jersey
Lurgan RE 1 Ltd.	Northern Ireland
Lurgan RE 2 Ltd.	Northern Ireland
MHG Gateway Properties, LLC	New Jersey
MHW Group at Perryville, LLC	Maryland
Monmouth Property Development, LLC	Illinois
Mullica Hill Cold Storage, LLC	Delaware
New Hall's Warehouse LLC	New Jersey
Newark Energy Group, LLC	New Jersey
Newark Facility Management, LLC	New Jersey
Newark Farmers Market Urban Renewal, LLC	New Jersey
Newlook Products, LLC	Georgia
Newport-St. Paul Cold Storage Company, LLC	Minnesota
Nordic Logistics and Warehousing, LLC	Delaware
Nordic Nashville, LLC	Delaware
Nordic Savannah, LLC	Delaware
Nordic Warehouse Services, LLC	Delaware
Nova Cold Logistics ULC	Ontario
Novacom Limited	Republic of Ireland
Oak Tree Truck Rental Corp.	New Jersey
PCL Repacking, LLC	New Jersey
PortFresh Development LLC	Delaware
Project London Buyer 1, LLC	Delaware
Project London Buyer 2, LLC	Delaware
Savannah Cold Storage, LLC	Delaware
Sawyer Distribution (MOY) Limited	Northern Ireland
Sawyers Transport Ireland Limited	Republic of Ireland
Second Street, LLC	Iowa
Stock Tech S.A. Armazens Gerais	Brazil
Superfrio Armazens Gerias S.A.	Brazil
T F Bowman & Son Limited	United Kingdom
The Mullica Hill Group Companies LLC	Delaware
TI-HI LLC	New Jersey
URS Realty, LLC	Delaware
VersaCold Atlas Logistics Services USA LLC	Delaware
Versacold Cascade Inc.	Washington
Versacold Logistics, LLC	Delaware

Versacold Northeast Logistics, LLC	Massachusetts
Versacold Northeast, Inc.	Massachusetts
VersaCold Texas, L.P.	Texas
VersaCold USA LLC	Delaware
Whitchurch RE Ltd.	United Kingdom
Woolsey Freight Limited	Northern Ireland
Zero Logistics, LLC	Arkansas
ZM NLR Property Owner LLC	Delaware
ZM Property Owner LLC	Delaware
ZM Waco Property Owner, LLC	Delaware
ZM Leasing, LLC	Oklahoma

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

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

(1) Registration Statement (Form S-3 No. 333-229819) of Americold Realty Trust,

(2) Registration Statement (Form S-3 No. 333-237704) of Americold Realty Trust,

(3) Registration Statement (Form S-3 No. 333-237704-01) of Americold Realty Operating Partnership, L.P.,

(4) Registration Statement (Form S-8 No. 333-222637) pertaining to the Americold Realty Trust 2017 Equity Incentive Plan, Americold Realty Trust 2010 Equity Incentive Plan, and Americold Realty Trust 2008 Equity Incentive Plan of Americold Realty Trust, and

(5) Registration Statement (Form S-8 No. 333-251200) pertaining to the Americold Realty Trust 2020 Employee Stock Purchase Plan;

of our reports dated February 27, 2023, with respect to the consolidated financial statements and schedule of Americold Realty Trust, Inc. and the effectiveness of internal control over financial reporting of Americold Realty Trust, Inc. included in this Annual Report (Form 10-K) of Americold Realty Trust, Inc. for the year ended December 31, 2022.

/s/ Ernst & Young LLP

Atlanta, Georgia
February 27, 2023

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) OF THE EXCHANGE ACT, AS AMENDED,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, George Chappelle Jr., certify that:

1. I have reviewed this Annual Report on Form 10-K of Americold Realty Trust, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2023

/s/ George F. Chappelle Jr.

George F. Chappelle Jr.
Chief Executive Officer and Director

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a) OF THE EXCHANGE ACT, AS AMENDED,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Marc Smernoff, certify that:

1. I have reviewed this Annual Report on Form 10-K of Americold Realty Trust, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2023

/s/ Marc J. Smernoff

Marc J. Smernoff
Chief Financial Officer and Executive Vice President

Exhibit 32.1

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

In connection with this Annual Report on Form 10-K of Americold Realty Trust, Inc. (the "Company") for the fiscal period ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, George Chappelle Jr., Chief Executive Officer and Trustee of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

Dated: February 27, 2023

/s/ George F. Chappelle Jr.

George F. Chappelle Jr.
Chief Executive Officer and Director

Exhibit 32.2

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

In connection with this Annual Report on Form 10-K of Americold Realty Trust, Inc. (the “Company”) for the fiscal period ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Marc Smernoff, Chief Financial Officer and Executive Vice President of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

Dated: February 27, 2023

/s/ Marc J. Smernoff

Marc J. Smernoff
Chief Financial Officer and Executive Vice President