

**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 30, 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: 001-14845

TRIMBLE INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

94-2802192
(I.R.S. Employer
Identification No.)

10368 Westmoor Dr, Westminster, CO
(Address of principal executive offices)

80021
(Zip Code)

Registrant's telephone number, including area code: **(720) 887-6100**

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, \$0.001 par value	TRMB	NASDAQ Global Select Market

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act.

Yes No

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer.

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-accelerated Filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
Emerging Growth Company	<input type="checkbox"/>		

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

Indicate by check mark whether the registrant 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.

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

As of July 1, 2022, the aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$14.3 billion based on the closing price as reported on the NASDAQ Global Select Market. Shares of common stock held by each officer and director of the registrant have been excluded in that such person may be deemed to be an affiliate. This determination of affiliate status is not necessarily a conclusive determination for any other purpose.

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

Class	Outstanding at February 14, 2023
Common stock, \$0.001 par value	246,951,697 shares

DOCUMENTS INCORPORATED BY REFERENCE

Certain parts of Trimble Inc. Proxy Statement relating to the annual meeting of stockholders to be held on June 1, 2023 (the “Proxy Statement”) are incorporated by reference into Part III of this report.

SPECIAL NOTE ON FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which are subject to the “safe harbor” created by those sections. These statements include, among other things:

- potential weakness and uncertainties in the US and global macroeconomic outlook, including slowing growth, inflationary pressures, and increases in interest rates, which may affect demand for our products and services and adversely affect our results of operations;
- potential impact of volatility and conflict in the political and economic environment, including the ongoing military conflict between Russia and Ukraine and related sanctions and the direct and indirect impact on our business;
- impact of the COVID-19 pandemic, including upon global or local macroeconomic conditions, our results of operations, and estimates or judgments;
- the pace at which our dealers work through their inventory;
- our belief that inflationary cost pressures will diminish over time as supply chain conditions continue to normalize;
- fluctuations in foreign currency exchange rates;
- our ability to convert backlog to revenue;
- seasonal fluctuations in our hardware revenue, sales to U.S. governmental agencies, longer ordering, lead times and less flexibility to adapt to changes in product mix demand, and expectations that we will experience less seasonality in the future;
- the portion of our revenue expected to come from sales to customers located in countries outside of the U.S.;
- our plans to continue to invest in research and development to actively develop and introduce new products and to deliver targeted solutions to the markets we serve;
- a continued shift in revenue towards a more significant mix of software and recurring revenue, including subscription, maintenance and support, and services revenue;
- our belief that increases in recurring revenue, including from our software and subscription solutions, will provide us with enhanced business visibility over time;
- our growth strategy, including our focus on historically underserved large markets, the relative importance of organic growth versus strategic acquisitions, and the reasons that we acquire businesses;
- any anticipated benefits to us from our acquisitions, including the pending Transporeon acquisition, and our ability to successfully integrate the acquired businesses;
- our ability to complete, on a timely basis or at all, the pending Transporeon acquisition, a leading cloud-based transportation management software platform;
- the impact of indebtedness we have or expect to incur in connection with the pending acquisition of Transporeon on our results of operations and financial condition;
- our belief that our cash and cash equivalents, together with borrowings under the commitments for our credit facilities and senior notes, will be sufficient in the foreseeable future to meet our anticipated operating cash needs, debt service, and planned capital expenditures;
- our belief that our gross unrecognized tax benefits will not materially change in the next twelve months;
- our discretion to conduct, suspend, or discontinue our share repurchase program subject to the discretion of our management; and
- our commitments to environmental, social, and governance matters.

The forward-looking statements regarding future events and the future results of Trimble Inc. (“Trimble” or “the Company” or “we” or “our” or “us”) are based on current expectations, estimates, forecasts, and projections about the industries in which we operate, our current tax structure, including where our assets are deemed to reside for tax purposes, and the beliefs and assumptions of our management. Discussions containing such forward-looking statements may be found in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of this report. In some cases, forward-looking statements can be identified by terminology such as “may,” “will,” “should,” “could,” “predicts,” “potential,” “continue,” “expects,” “anticipates,” “future,” “intends,” “plans,” “believes,” “estimates,” and similar expressions. These forward-looking statements involve certain risks and uncertainties that could cause actual results, levels of activity, performance, achievements, and events to differ materially from those implied by such forward-looking statements, including but not limited to those discussed in this report under the section entitled “Risk Factors” and elsewhere, and in other reports we file with the Securities and Exchange Commission (“SEC”), specifically the most recent reports on Form 8-K and Form 10-Q, each as it may be amended from time to time. These forward-looking statements are made as of the date of this report. We reserve the right to update these statements for any reason, including the occurrence of material events, but assume no duty to

update these statements to reflect subsequent events. The risks and uncertainties under the caption “Risks and Uncertainties” contained herein, among other things, should be considered in evaluating our prospects and future financial performance.

TRIMBLE INC.
2022 FORM 10-K ANNUAL REPORT
TABLE OF CONTENTS

PART I		
Item 1	Business	6
Item 1A	Risk Factors	18
Item 1B	Unresolved Staff Comments	31
Item 2	Properties	31
Item 3	Legal Proceedings	31
Item 4	Mine Safety Disclosures	31
PART II		
Item 5	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	32
Item 6	Reserved	33
Item 7	Management’s Discussion and Analysis of Financial Condition and Results of Operations	34
Item 7A	Quantitative and Qualitative Disclosures about Market Risk	49
Item 8	Financial Statements and Supplementary Data	52
Item 9	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	80
Item 9A	Controls and Procedures	80
Item 9B	Other Information	80
Item 9C	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	80
PART III		
Item 10	Directors, Executive Officers, and Corporate Governance	81
Item 11	Executive Compensation	81
Item 12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	81
Item 13	Certain Relationships, Related Transactions, and Director Independence	81
Item 14	Principal Accountant Fees and Services	81
PART IV		
Item 15	Exhibits and Financial Statement Schedules	82
Item 16	Form 10-K Summary	82
	Signatures	85

PART I

Item 1. Business

Trimble Inc. (“Trimble” or “the Company” or “we” or “our” or “us”) is a leading technology solutions provider that enables office and mobile professionals to connect their workflows and asset lifecycles to drive a more productive, sustainable future. With a focus on the industries that feed, build, and move the world, the comprehensive depth and breadth of our solutions is transforming the way the world works, making it easier for Trimble customers to focus on what matters—getting the job done right.

We innovate at the intersection of the digital and physical worlds with solutions that span the world’s foundational industries including building, civil and infrastructure construction, geospatial, survey and mapping, agriculture, natural resources, utilities, transportation, and government.

We exist to empower our customers: asset owners, general and specialty contractors, engineers and designers, surveyors, agricultural companies and farmers, energy and utility companies, trucking companies and drivers, as well as state, federal, and municipal governments.

Productivity and sustainability are at the heart of who we are—woven into our work internally and through our customers’ application of our technologies. The state of the world today requires us to step up with an accelerated focus on our strategic approach to manage the environmental, social, and governance (“ESG”) aspects of our business. These efforts will make us a better, more resilient company and motivate us to create greater sustainability solutions for the customers and stakeholders we serve.

Our solutions provide customers with the ability to improve their work quality while being safe, efficient, and sustainable. More than that, our products enable reduced environmental impact in our markets, ranging from reduced greenhouse gas (“GHG”) emissions to improved water stewardship.

Today’s work requires solutions for an interconnected world, no matter the industry. Trimble offers a diverse range of coherent capabilities that connect applications, data, workflows, and mobile technologies to more efficiently orchestrate work, often in mixed fleet environments. Our advanced positioning and autonomous guidance capabilities enable increased precision with large equipment, such as tractors and bulldozers. We offer integrated systems that track and manage fleets of vehicles, improve the driver experience, and provide real-time logistical analytics and insights back to the office. Our connected reality capture systems enable the management of large amounts of geo-referenced information, and our software solutions connect all aspects of a fleet, a farm, or a lane, while our collaborative building information modeling (“BIM”) solutions are used throughout the design, build, and operation of the built environment.

We focus on integrating our software application and cloud capabilities to create vertically-focused, system-wide solutions that transform how work is done. The integration of sensors, software, hardware, and data in our portfolio gives us a unique ability to provide detailed insights for our customers to improve their specific workflows.

Our strategy is centered on the concept of open industry clouds and underlying common data environments as the nucleus of our connected solutions, allowing all stakeholders to collaborate and make decisions based on the same information. In construction, we connect teams across the design, build, and operational phases of a project. In agriculture, we continue to develop connected farm solutions to optimize operations for agricultural production and protection. Meanwhile, our connected supply chain solutions provide transportation companies and their drivers with tools to enhance fuel efficiency, safety, transparency, and sustainability throughout their connected fleets.

Connected software applications and cloud platform services are key elements of our solutions and account for a steadily increasing portion of our business. Our software enhances a broad range of other products and systems to allow our customers to optimize their work toward targeted outcomes and improve their decision-making and productivity. Ranging from embedded, real-time firmware to software that integrates data with large-scale enterprise back-office systems, many of our solutions are extensible and can be tailored by users for customized business processes and workflows. Trimble software capabilities include extensive three-dimensional (“3D”) modeling, analysis, planning and design solutions as well as a large suite of domain-specific software applications used across industries including agriculture, construction, geospatial, utilities, and transportation.

Our software is sold as perpetual, term, or subscription and can be provisioned for on-premise, and increasingly, hosted as Software as a Service (“SaaS”). Our tiered subscription offerings can include both hardware and software, providing a complete customer solution with technology assurance as new generations of hardware become available. We are extending our capabilities to run in multi-cloud environments, while delivering our unique value via domain-specific workflows and lifecycle management in our target industries.

Our global operations include major research, development, manufacturing, and logistics operations in the United States, the Netherlands, India, Germany, Finland, Canada, New Zealand, the United Kingdom, and Sweden.

Business Strategy

Our growth strategy is centered on multiple elements:

- *Executing on our Connect and Scale strategy.* We continue to focus on executing our multi-year platform strategy. This strategy contains two elements.
 - The first element, Connect, aims to connect more customer workflows, industry lifecycles, and solution offerings, so that we can continue to transform the way our customers work. This includes integrating more of our customers' data through cloud offerings and making more of our solutions available over time on a subscription basis. Cloud enablement raises the bar with shared, on-demand services that empower network participants to proactively contribute to organic value creation and delivery, directly and with fewer intermediaries. When end users interact on a shared, online platform, the overall value that is created increases as the number of end-user participants increases. This network effect means that the willingness of developers, partners, or end users to engage increases as the number of network participants grows, which further enhances the platform experience and end-user value. For example, our flagship design and construction platform solution, Trimble Connect, enables entire project teams to collaborate in real-time between the office and the field to make efficient decisions around the same data-rich design model. And, our recently released Trimble Construction Cloud includes capabilities such as a connected data environment for online collaboration, the ability to author unique workflows that connect the digital and physical worlds, and the power to dynamically orchestrate design coordination in the cloud from wherever project stakeholders may be. Meanwhile in our Transportation business, the Trimble Transportation Cloud, for example, provides shippers and carriers with the critical information they need to make more informed bid and contract award decisions.
 - The second element, Scale, aims to invest in the people, processes, and technologies that are necessary to streamline and standardize our internal processes, provide a seamless experience for our customers as they engage with our connected solutions, and enable us to continue to grow our business efficiently and effectively for many years into the future.
- *Increasing focus on software and services.* Software and services targeted for the needs of vertical end markets are increasingly important elements of our solutions and are core to our growth strategy. We generally have an open application programming interface philosophy and open vendor environment, which leads to increased adoption of our software and analytics offerings. These software and services solutions integrate and optimize additional workflows for our customers, thereby improving their work productivity, and in the case of subscription, maintenance, and support services, also provide us with enhanced business visibility over time. Professional services constitute an additional customer offering that helps our customers integrate and optimize the use of our offerings in their environment.
- *Focus on attractive markets with significant growth and profitability potential.* We focus on large markets historically underserved by technology that offer significant potential for long-term revenue growth, profitability, and market leadership. Our core industries, such as construction, agriculture, and transportation, are each multi-trillion dollar global industries that operate in demanding environments with technology adoption in the early phases relative to other industries. With the emergence of mobile and cloud computing capabilities, the increasing technological know-how of end users, and compelling return on investment, we believe many of our markets are attractive for substituting Trimble's technology and solutions in place of traditional operating methods.
- *Domain knowledge and technological innovation that benefit a diverse customer base.* We have over time redefined our technological focus from hardware-driven point solutions to integrated work process solutions by developing domain expertise and heavily reinvesting in research and development ("R&D") and acquisitions. We currently have over 1,000 unique patents reflective of our technology portfolio and deep domain knowledge to deliver specific, targeted solutions quickly and cost-effectively to each of the vertical markets we serve. Our patent portfolio is continuously updated with new patent grants that emerge from our investments in research and development. We look for opportunities where the opportunity for technological change is high and that have a requirement for the integration of multiple technologies into complete vertical solutions.
- *Geographic expansion with localization strategy.* We view international expansion as an important element of our strategy, and we continue to position ourselves in geographic markets that will serve as important sources of future growth. Products are sold in more than 150 countries, through dealers, representatives, joint ventures, and other channels throughout the world, as well as direct sales to end users. Sales are supported by our own offices located in approximately 40 countries around the world.
- *Optimized go-to-market strategies to best access our markets.* We utilize vertically focused go-to-market strategies that leverage domain expertise to best serve the needs of individual markets both domestically and abroad. These go-to-market capabilities include independent dealers, joint ventures, original equipment manufacturers ("OEM"), and

distribution alliances with key partners, including Caterpillar and Nikon, as well as direct sales to end users, which provide us with broad market reach and localization capabilities to effectively serve our markets.

- *Strategic acquisitions and venture fund investments.* Organic growth continues to be our primary focus, while acquisitions serve to enhance our market position. We acquire businesses that bring domain expertise, geographic presence, technology, products, and distribution capabilities that augment our portfolio and allow us to penetrate existing markets more effectively, or to establish a market beachhead. Our success in targeting and effectively integrating acquisitions is an important aspect of our growth strategy. In December 2022, we signed a definitive agreement to acquire Transporeon valued at approximately €1.88 billion or \$2.0 billion, which is expected to close in the first half of 2023, subject to regulatory approvals. Transporeon, a Germany-based company, is a leading cloud-based transportation management software platform that connects key stakeholders across the industry lifecycle to positively impact the optimization of global supply chains, in alignment with our Connect and Scale strategy. We believe the acquisition will advance our sustainability strategy by reducing under-utilized carrier capacity and “empty miles” and increase our international footprint and long-term Transportation opportunities.

We also formed a strategic venture fund in 2021 (“Trimble Ventures”). With this fund, we expect to invest up to \$200 million in early- to growth-stage companies that can accelerate innovation and effectively bring new solutions to our customers and the industries that we serve and would give us an early, inside look and stake in emerging business and technology solutions. To date, we have invested a total of \$20.5 million in early stage companies.

- *Sustainability.* The global economy is experiencing a fundamental shift toward sustainability driven through broad stakeholder engagement, with a focus on decarbonization. Historically, through delivering productivity and efficiency gains, Trimble products have delivered sustainability for our customers, and we envision more opportunities to deliver expanded carbon reductions and other sustainability benefits, such as water management in agriculture and utilities.

Our focus on these growth drivers has led over time to growth in revenue and profitability and an increasingly diversified business model. As our solutions have expanded, our go-to-market model has also evolved, with a balanced mix between direct, distribution, and OEM customers, as well as an increasing number of enterprise-level customer relationships.

Business Segments and Markets

Our segments are distinguished by the markets they serve. Each segment consists of businesses that are responsible for product development, marketing, sales, strategy, and financial performance. We report our financial performance, including revenue and operating income, based on four reportable segments: Buildings and Infrastructure, Geospatial, Resources and Utilities, and Transportation. For further financial information about our segments, see [Note 6 “Reporting Segment and Geographic Information”](#) of this report.

Buildings and Infrastructure

The Buildings and Infrastructure segment primarily serves customers working in architecture, engineering, construction, design, asset management, operations, and maintenance. Within this segment, our most substantial product portfolios are focused on building and civil engineering construction, design, capital planning, and asset management.

Building Construction. Our building construction portfolio of solutions for the residential, commercial, and industrial building industry spans the entire lifecycle of a building and is used by construction owners, architects, designers, general contractors, sub-contractors, and engineers. These solutions serve to improve productivity and to enhance data sharing and collaboration across different teams and stakeholders to help keep projects within cost, time, and quality targets. The suite of technologies and solutions we provide to the building industry includes program management solutions for construction owners including software for 3D conceptual design and modeling; BIM software that is used in design, engineering, and construction; enterprise resource planning, project management, and project collaboration for general contractors; and advanced integrated site layout and measurement systems, cost estimating, scheduling, and project controls solutions for contractors. The suite also includes applications for sub-contractors and construction trades such as steel, concrete, and mechanical, electrical and plumbing; project coordination; and capital program planning and management. In addition, our Trimble Connect collaboration platform streamlines customer workflows and enables interoperability between Trimble’s and other providers’ solutions. These solutions for the building industry serve to automate, streamline, and transform work processes across the building construction industry. Our solutions provide customer benefits such as reduced costs, reduced waste and re-work, increased worker safety and efficiencies, faster project completion times, improved information flow, better decision making, enhanced quality control, and multiple sustainability benefits for our customers.

During 2022, we announced a number of new developments including: (i) the Trimble Construction Cloud powered by Microsoft Azure, an industry cloud to streamline construction projects by connecting project teams, data, workflows, processes, and stakeholders, further enhancing our Trimble Construction One commercial offering, (ii) the launch of WinEst Essentials, a new cloud-hosted estimating subscription that facilitates an end-to-end workflow for general contractors, (iii) Trimble Connect2Fab, a web-based application within the Trimble Connect collaboration platform that enables a seamless connection

between design and fabrication workflows for mechanical, electrical, and plumbing (“MEP”) contractors and the Project MEP solution for greater efficiency, collaboration, and visibility across projects, (iv) the FieldLink MR mixed-reality solution for construction layout and the new Trimble Ri robotic total station for construction layout, and (v) in partnership with the Hilti Group, we announced a data integration between Trimble’s Viewpoint Vista ERP and Hilti’s ON!Track asset management system to streamline tool tracking and job allocation for contractors.

Civil Engineering Construction and Asset Management. Our civil engineering and construction portfolio spans the lifecycle of civil infrastructure assets from feasibility and capital budgeting, to planning and design, to construction, through to long-term operation and maintenance. Our solutions serve the key industry stakeholders including the asset owners or clients, design engineers, consultants, contractors, sub-contractors, and suppliers. Our technological suite is employed across the entire project lifecycle to improve productivity, reduce waste and re-work, including reduced carbon emissions, and enable more informed decision making through enhanced situational awareness, data flow, data-driven insights and decision support, and project collaboration. At the same time, our solutions can improve worker safety and reduce environmental impact. Our suite of integrated solutions and technologies in this area includes field and office software for optimized route selection and design; software for 3D design and data sharing; systems to automatically guide and control construction equipment such as excavators, bulldozers, wheel loaders, motor graders, and paving equipment; systems to monitor, track, and manage assets, equipment, and workers; and software to facilitate the management of the construction process and for sharing and communication of data in real time. Together, these solutions are designed to transform how work is done within the civil construction industry.

The civil construction market portfolio integrates data and information across the entire construction process and across mixed fleets. This includes data from site positioning and machine control systems, construction asset management equipment and services, and various software applications. Utilizing wireless and internet-based site communications infrastructure, our solutions include the ability to track and control equipment, to deploy a 3D model to machines and to track progress of work in real-time, and to reduce re-work. By leveraging our technology, contractors gain greater insight into their operations helping them to lower costs and improve productivity, worker safety, and asset utilization.

We maintain a joint venture with Caterpillar, Caterpillar-Trimble Control Technologies (“CTCT”), to develop the next generation of advanced electronic guidance and control products for earth-moving machines. The joint venture develops machine control and guidance products that use site design information combined with accurate positioning technology to automatically control dozer blades and other machine tools. We also maintain a joint venture with Hilti, which focuses on the joint development of measuring solutions for the building construction trades and the integration of data for construction management.

During 2022, we announced a number of developments, including: (i) the acquisition of B2W Software, a leading provider of estimating and operations solutions for the heavy civil construction industry, (ii) the industry’s first automated horizontal steering control for soil compactors, which represents a step toward our autonomous vision, (iii) the Trimble Roadworks paving control platform for asphalt compactors, which enables operators to accurately control the compaction process, (iv) the availability of additional mixed-fleet systems, including a Trimble Ready factory option for new ABI GmbH piling and drilling machines, and (v) the availability of the Trimble Groundworks machine control system for piling machines as a factory option on Junttan Oy foundation machines.

We sell and distribute our products in the Building and Infrastructure segment through both a direct sales force and global networks of independent dealers with expertise and customer relationships in the respective markets, including SITECH Technology dealers, which serve the civil construction industry, and BuildingPoint dealers, which serve the building construction industry. We also sell many of our software solutions through our own direct sales force, to asset owners and clients, contractors, sub-contractors, and consulting engineers.

Competitors in this segment are typically companies that provide optical, laser, or GNSS positioning products as well as companies that produce software specific to the construction process. As we extend our software and services offerings to cover the full set of construction lifecycle management solutions used by construction owners, designers, and construction companies, we increasingly compete with large established companies that offer similar systems across all industries. We compete principally on the basis of innovation, differentiated products, domain expertise, service, quality, and geographic reach.

Geospatial

The Geospatial segment primarily serves customers working in surveying, engineering, and government. Within this segment, our most substantial product portfolios are focused on surveying and geospatial and geographic information systems (“GIS”).

Surveying and Geospatial. Through our surveying product portfolio, professional surveyors and engineers provide services to the construction, engineering, mining, oil and gas, energy and utilities, government, and land management sectors. Our survey solutions replace less productive conventional methods of surveying, mapping, 2D or 3D modeling, monitoring, measurement, reporting, and analysis. Our suite of solutions includes field-based data collection systems and field software, real time

communications systems, and back-office software for data processing, modeling, monitoring, reporting, and analysis. Our field-based technologies are used in handheld, land mobile, and airborne applications and incorporate technologies such as mobile application software, high precision GNSS, robotic measurement systems, inertial positioning, 3D laser scanning, digital imaging, and optical or laser measurement. We maintain a joint venture with Nikon, which focuses on the design and manufacture in Japan of surveying instruments including mechanical total stations and related products. Our office-based products include software for planning, data processing and editing, quality control, 3D modeling, intelligent data analysis and feature extraction, deformation monitoring, project reporting, and data export. Our customers in this area gain benefits from the use of our products including significantly improved productivity in both field and office activities, improved safety through non-contact measurement and detection of potentially dangerous ground or structure movement, and improved data flow that enables better decision making.

Geographic Information Systems. Our GIS product line collects authoritative field data and integrates that data into GIS databases. Our handheld data collection systems allow users to efficiently and accurately log positions and descriptive information about their assets, ensure the integrity and accuracy of GIS information, and ultimately enable better decision-making. Through a combination of wireless technologies and software solutions, fieldwork results are seamlessly delivered to back-office GIS systems, while mobile workers can access relevant GIS information remotely. This capability provides significant advantages to users, including improved productivity, accuracy, and access to information in the field.

During 2022, we announced a number of new developments, including: (i) the introduction of the scalable and configurable Trimble R780 GNSS Modular Receiver that includes our industry-leading ProPoint engine and tilt technology, (ii) the launch of the newest addition to our scanning portfolio, the Trimble X12 3D laser scanning system, and (iii) the introduction of the Trimble TDC650 handheld data collector for mapping professionals. Additionally, we delivered multiple feature releases in our powerful Trimble Business Center office software, adding productivity gains through improved connectivity, simplicity, and efficiency enhancements for survey and construction professionals.

We sell and distribute our products in the Geospatial segment primarily through a global network of independent dealers and business partners. Major competitors in this segment are typically survey instrument companies that provide software-driven 3D measurement and imaging solutions. We compete principally on the basis of innovation, differentiated products, integrated workflow solutions, domain expertise, service, quality, and geographic reach.

Resources and Utilities

The Resources and Utilities segment primarily serves customers working in agriculture, forestry, and utilities. Within this segment, our most substantial product portfolio addresses the agriculture market.

Our precision agriculture products and services consist of guidance and positioning systems, including autonomous steering systems, automated and variable-rate application and technology systems, and information management solutions that enable farmers and their partners to improve crop performance, profitability, and environmental quality. Our precision agriculture solutions can assist farmers throughout every step of their farming process beginning with land preparation and continuing through the planting, nutrient, pest management, water management, and harvesting phases of a crop cycle. We provide manual and automated navigation guidance for tractors and other farm equipment used in spraying, planting, cultivating, and harvesting applications. The benefits to the farmer include faster machine operation, higher yields, and lower consumption of fuel and chemicals, lower carbon footprint, and improved soil health than conventional equipment. In addition, we provide solutions to automate application of pesticide and seeding. Our water solutions help farmers minimize their water costs and distribute water more efficiently and include applications for leveling agricultural fields for irrigation and aligning drainage systems to better manage water flow in fields.

Software solutions that use data to enhance farm productivity are an increasing focus in our agriculture business. Our agricultural software is used by farmers to help integrate all of the information on the farm, and is also used by advisors, suppliers, and purchasers to share information to help improve efficiencies. Our agricultural software enables farmers to make more informed decisions leading to higher yields, better quality crops, increased profitability, and increased environmental sustainability.

For many of our end-market applications and customer needs, the positional accuracy that can be derived from GNSS satellite signals alone is insufficient. In these applications, higher levels of positional accuracy are required. For these situations, we provide an augmentation service that improves the positional accuracy that is available to the customer; thereby, enabling higher levels of precision and automation in work processes that are conducted in the field. This service is provided by Trimble Positioning Services and is available in a variety of formats and accuracy levels, depending on the relevant application's specific needs. Trimble Positioning Services serves customers in a variety of end markets, including agriculture, construction, geospatial, and other markets, with a majority of its customers being in agriculture.

During 2022, we announced a number of new developments, including: (i) the acquisition of Bilberry, a selective spray technology company, and (ii) an investment in Sabanto, an autonomous farming-as-a-service company, through Trimble

Ventures. Lastly, we launched our next generation agriculture displays (GFX-1060 and GFX-1260), which provide improved performance and connectivity for in-field operations.

We use multiple distribution approaches to access the mixed fleet agricultural market including independent dealers and direct selling to enterprise accounts. A significant portion of our aftermarket sales have historically been generated through CNH Industrial (“CNH”), which resells our aftermarket products through its dealer network. Moving forward, as part of our Connect and Scale strategy, we will directly manage, and further build out, our independent dealer network to ensure better access, service, and support for our customers. Our aftermarket solutions address both new equipment as well as equipment already in the field, and we will reach customers through these independent dealer partners, who are focused on selling the full portfolio of Trimble-branded precision agriculture solutions. Aligned with this strategy, in February 2023, we gave CNH a 12-month notification that we will no longer supply aftermarket precision agriculture products to CNH for resale through the CNH dealer network. We will continue to supply hardware to CNH for their factory installations. While we do not expect this action to have a material effect on our revenues in 2023, there can be no assurance that our revenue from our independent dealer network will offset the reduction in revenue resulting from our discontinuance of sales of aftermarket products to CNH.

Competitors in the agricultural market are vertically integrated farm equipment and implement companies, agricultural instrumentation companies, and companies that provide agricultural software and services. We compete principally on the basis of robust performance, ease of use, domain expertise, customer support, price, interoperability, interconnectedness, and the completeness of our solutions.

Transportation

Our transportation solutions provide capabilities for the long-haul trucking and freight shipper markets to create a connected supply chain and integrate all forms of transportation, drivers, back-office management, shippers, and freight. We provide enterprise and mobility solutions focused on business intelligence and data analytics, safety and regulatory compliance, navigation and routing, freight brokerage, supply chain visibility and final mile, and transportation management and fleet maintenance. Within this segment, our most substantial product portfolio addresses the truckload freight market.

In the transportation market, we offer a suite of solutions that provides comprehensive fleet and transportation management systems, analytics, routing, mapping, reporting, and predictive modeling solutions to enable the transportation industry to achieve greater overall operational efficiency, fleet utilization, including greater fuel efficiency and reduced carbon emissions, and profitability while ensuring regulatory compliance. In addition to cloud-hosted solutions, we also integrate our applications and services directly into the customer’s IT infrastructure.

The mobility solutions encompass route management, safety and compliance, end-to-end vehicle management, video intelligence, and supply chain communications. The transportation management system serves as a central hub from which the core operations of transportation organizations are managed, data is stored and analyzed, and mission critical business processes are automated. Our enterprise transportation management system automates business processes spanning the entire surface transportation lifecycle for shippers, carriers and intermediaries, delivering visibility, control, and decision support for the intricate relationships and complex processes involved in the movement of freight. Our products also provide truck routing, mileage, and mapping solutions, as well as a voice-guided turn-by-turn navigation solution.

During 2022, we announced a number of new developments, including: (i) the pending acquisition of Transporeon, a leading European cloud-based transportation management software platform, (ii) the launch of the Engage Lane collaborative procurement platform that was developed through our strategic partnership with Procter & Gamble, (iii) commercial availability of our new in-cab platform, Instinct, that improves the driver experience and can support both Trimble and third-party apps, and (iv) significant progress in integrating data and connecting workflows, from our own unique set of capabilities and a growing network of partners, and through the Trimble Transportation Cloud (TTC). Market facing solutions enabled by TTC include Connected Maintenance, Connected Locations, and the previously mentioned Engage Lane.

The Transportation segment generally sells directly to end users and OEMs. Although sales cycles tend to be months long, the products are difficult to replace once implemented. Competitors in this segment are typically companies that provide fleet mobility services, transportation management software, and digital freight matching. We compete principally on the basis of interoperability, domain expertise, customer support and service, price, innovative product offerings, quality, and the completeness of our solutions.

Seasonality of Business

Construction equipment revenue, within our Buildings and Infrastructure segment, historically has been higher in early spring. Our agricultural equipment revenue, within our Resources and Utilities segment, has historically been the highest in the first quarter, followed by the second quarter, reflecting buying in anticipation of the spring planting season in the Northern hemisphere. However, overall, as a company, as a result of diversification of our businesses across segments and the increased impact of software and subscription revenue, we are experiencing less seasonality. Changes in global macroeconomic

conditions could also impact the level of seasonality we experience. In 2021 and into 2022, the COVID-19 pandemic disrupted our normal seasonality because of global supply chain constraints and parts and labor shortages.

Manufacturing

We outsource the manufacturing of many of our hardware products to our key contract manufacturing partners that include Jabil and Flex Ltd. Our products are manufactured at their Mexico locations. Our contract manufacturing partners are responsible for significant material procurement, assembly, and testing. We continue to manage product design through pilot production for the subcontracted products, and we are directly involved in qualifying suppliers and key components used in all our products. We also utilize original design manufacturers for some of our products.

We manufacture our optics-based products, as well as some of our GPS products, at our plants in Dayton, Ohio; Danderyd, Sweden; and Salzkotten, Germany. Some of these products or portions of these products are also subcontracted to third parties for assembly.

Our primary design, manufacturing, and distribution sites in Dayton, Ohio; Sunnyvale, California; Danderyd, Sweden; Eindhoven, Netherlands; and Salzkotten, Germany are registered to ISO9001:2015 covering the design, production, distribution, and servicing of our products.

Research and Development and Intellectual Property

We believe that our competitive position is maintained through the development and introduction of new products, including software and services. Trimble delivers digital technologies that enhance the physical world by integrating and connecting industry workflows, stakeholders, and data, while modernizing its interfaces and business models to make it easier for customers to do business. Our platform investments allow us to extend our differentiation in positioning and sensing, modeling, and analytics into emerging industry solutions and to drive ecosystem collaboration across our target industries. This improves our value over the customer lifecycle, while enhancing our leadership in software and services, which already account for over 65% of our R&D investment. Our investments enable us to push the state-of-the-art in key technology areas and to connect other leading technologies to solve customer problems in new and unique ways.

As part of our technology development practices, we actively establish and maintain our intellectual property rights through the use of patents, copyrights, trademarks, and trade secret laws. We hold over 1,000 unique issued and enforceable patents covering key technology areas, including precision GNSS, optical and inertial positioning solutions, artificial intelligence and machine learning, IoT, cloud computing, laser scanning, 3D modeling, point cloud processing, augmented reality, and many others. Our patent portfolio is continuously updated with new patent grants that emerge from our investments in research and development. We actively manage the intellectual property used in the development, operations, and sales of our products and services. We also own numerous trademarks and service marks that contribute to the identity and recognition of Trimble and that of its global products and services.

Environmental, Social, and Governance

We recognize that we are living in a time of increasing urgency for action on sustainability, and we are moving quickly and harnessing our potential to address global challenges. Inspired by our mission—"Transforming the Way the World Works,"—and fueled by the dedication of our employees, we will work to build momentum and strive for continual improvement and measurable progress.

We organize our ESG efforts around five pillars: (1) Solutions, (2) People, (3) Communities, (4) Environment, and (5) Governance. Highlights of each of these pillars are discussed below. These pillars are reflective of our commitment to ESG and are fundamentally embedded into our business and culture. We believe this approach creates value that benefits all our stakeholders, including our employees, stockholders, customers, communities, and the world at large.

Solutions. Our hardware, software, and service solutions empower customers to drive sustainability across our industries for the benefit of people today and future generations. We are committed to ensuring our solutions align with and support the objectives of the 17 United Nations Sustainable Development Goals ("UN SDGs"). Our industry-specific solutions impact the UN SDGs by:

- *Greenhouse gas reduction* via (i) efficient use of machine time on construction sites, (ii) better construction design to minimize carbon intensive materials and improve asset operations, (iii) improved long-term asset management to extend the life of assets, (iv) more efficient field navigation and utilization of agricultural inputs, and (v) improved capacity utilization and route optimization that reduces fuel use;
- *Resource management* via (i) protecting and managing critical water assets and infrastructure, (ii) helping minimize scrap, rework, and resource waste, and (iii) managing land, water and inputs through variable rate technology and land forming solutions.

People. Our ambition for a sustainable future is made possible when we celebrate the unique characteristics of our people. At Trimble, we transform how we work together to inspire and engage all employees to achieve their full potential and celebrate their individuality. As further described in the below Human Capital section, we are focused on building a welcoming, diverse, equitable, and inclusive workplace. We are committed to providing every employee with the opportunity to learn, grow, and excel. We believe our diversity makes us stronger and better able to solve complex problems for our customers.

Communities. We strive to contribute to the collective work needed to address the world's most pressing sustainable development issues through partnering with non-profit organizations and academic institutions who serve communities and society in powerful ways. The Trimble Foundation Fund is a donor-advised fund that focuses its charitable giving across three areas—natural disaster recovery and relief and climate resilience; female education and empowerment; and advancing diversity, equity, and inclusion—while also supporting the philanthropic efforts of our local offices. In addition, we are partnering with educational institutions worldwide to democratize education and to ensure that future industries are accessible, equitable, and sustainable.

Environment. We are committed to decarbonization and a net zero future. We live this commitment within our operations and value chain, which is reflected in our science-based targets. We help impact this transition through our products and services that generate productivity and efficiency gains that can reduce customers' GHG emissions. In 2022, the Science Based Targets initiative ("SBTi") approved our near-term science-based emissions reduction targets, which are aligned with requirements to keep warming to 1.5°C, the most ambitious goal of the Paris Agreement. The approved targets are as follows:

- Reduce absolute scopes 1 and 2 GHG emissions by 50 percent by 2030 from a 2019 base year including achieving 100 percent annual sourcing of renewable electricity by 2025;
- Reduce absolute scope 3 GHG emissions (includes emissions from fuel and energy-related activities, business travel, and upstream transportation and distribution) by 50 percent by 2030 from a 2019 base year;
- Commit to partner with 70 percent of our suppliers by emissions covering purchased goods and services and capital goods to set science-based targets by 2026.

Governance. We continue to enhance our sustainability program management and monitoring. Our sustainability team works under the supervision of our executive leadership team, with oversight by the Board of Directors, both of which fortify the governance and decision-making structure, while mitigating elements of risk. We have taken progressive measures to align business accountability with sustainability performance. Executive pay is linked to progress against climate action and diversity goals. We also secured a revolving credit facility that links to our sustainability commitment.

Human Capital

Our culture reflects our guiding principles at work and is fundamental to sustaining our success. That company culture is foundational to a thriving workplace; it is the behaviors and values of leaders and employees that are the foundation to who we are. At Trimble, we value being yourself and thriving together; being intentional and humble; and being curious and solving problems. Our leaders inspire purpose and vision, engage to draw out the best from each other, and strive to achieve meaningful results. This mindset shapes how we treat one another and how we serve our customers, colleagues, and stockholders. These attributes serve as a common foundation across the global organization and also adapt locally to diverse geographic and operational business models. Commitment to these behaviors connects our employees.

In the technology space, intellectual property and know-how derived from employees fosters innovation and serves as a competitive advantage. To continue producing the innovative technologies for which we are known, it is crucial that we continue to attract, engage, develop, and retain top talent. We strive to make Trimble a diverse, equitable, inclusive, and safe workplace and provide opportunities for our employees to grow and develop in their careers, supported by competitive compensation, benefits, health and wellness programs, and by programs that build connections between our employees and their communities.

At the end of 2022, we employed 11,825 full-time and part-time employees, the overwhelming majority of which were full-time employees. Approximately 48%, 30%, 18%, and 4% of employees reside in North America, Europe, Asia-Pacific, and the rest of the world. Our employees are working in around 200 locations in over 40 countries. Collectively, we speak more than 45 different languages. We believe our diversity makes us stronger and better able to solve complex problems for our customers.

Diversity, Equity, and Inclusion ("DEI")

We value diversity in our workforce, including various cultures, backgrounds, ages, genders, races and ethnicities, nationalities, sexual orientations, religions, people with different abilities, parents and caregivers, and many other characteristics, knowing that it drives our best thinking. Our focus on diversity starts at the top. Four out of our eleven board members are female or ethnically diverse, and we are making progress to increase global female employees and U.S. ethnically diverse employees in our workforce and in our leadership positions across the company. In 2022, we made progress on many new initiatives focused

on infusing diversity, equity, and inclusion in the fabric of our connected culture. Our Vice President of DEI and her core team cascade objectives that are aligned with our Trimble values and multi-year goals, while also encouraging local teams to focus on aspects of diversity that foster meaningful inclusion and belonging. In business reviews, we discuss gender and U.S. ethnicity demographics and inclusion survey score trends for every business within Trimble, as well as region and business-led initiatives that are contributing toward our goals and progress.

We have a number of employee resource networks that enhance our inclusive and diverse culture, including networks that support women, caregivers, Black, Hispanic/Latinx and Indian professionals, veterans, employees with disabilities, and our LGBTQ+ community. We are focused on measuring and increasing gender representation, as well as race and ethnic diversity in high-impact roles such as people leaders, engineering and technical positions, and sales. We have provided increased access to diversity and inclusion educational resources, training, assessments, articles, and other employee forums to help us work together and more effectively across a variety of cultures globally.

We are committed to inspiring and attracting extraordinary and diverse talent. The hiring and retention of top talent is always a strategic priority, and increasingly, a challenging one. In addition, our increasing focus on technologies, such as cloud and autonomy, requires us to compete against leading companies in the technology sector. Colleges and universities remain an important source of talented recruits. We aim to transform and re-invent the way Trimble attracts and hires employees to increase diversity. Initiatives include modifications to our recruiting process to ensure the inclusion of diverse, underrepresented candidates, developing relationships with universities with higher underrepresented student populations, creating diverse talent networks to promote Trimble job opportunities, and increasing networking and referrals with diverse professional organizations.

In 2022, we launched our second Renew Returnship program cohort that provides employment opportunities for those who have taken a break in their careers to look after their families. We built new relationships with the National Society of Black Engineers and became a sponsor to Out & Equal, a non profit organization working on LGBTQ+ workplace equality. We participated in many new national and local diversity career fairs and sponsored engagements focused on increasing gender and race/ethnic diversity in the industries we serve through groups like Transportation and Construction Girl. We also increased our investments in education through new Trimble technology labs at Minority Serving Institutions and the Dr. Gladys West Scholarship Program through the Trimble Foundation, which honors a GPS technology pioneer and woman of color, and we award scholars at three universities serving underrepresented students.

Compensation and Benefits

We believe people should be paid for the role they perform and their skills and experience, regardless of their gender, race, age, or other personal characteristics. To deliver on that commitment, we benchmark and set pay ranges based on market data and consider factors such as an employee's role, their experience, their performance, and the region in which they live. We also regularly review our compensation practices to ensure our pay is fair and equitable. In addition to base salaries, certain roles are eligible to participate in short-term and long-term incentive plans.

We offer market competitive benefit programs (that vary by country/region), which include health and wellness benefits, life insurance and disability benefits, flexible savings accounts, paid time off, parental and family leave, employee support programs, retirement plans, and an employee stock purchase plan. Other benefits include fertility, adoption, and surrogacy education assistance; gender affirmation, family and caregiver support; flexible work schedules; education assistance; and on-site services such as health centers and fitness centers at some sites.

Talent Development

We are committed to providing every employee with the opportunity to learn, grow, and excel in a respectful and collaborative workplace. Part of our people development mission is to create a culture of continuous learning and curiosity. We believe that skills and abilities can be developed through training, relationships, and experiential learning. We launched new career growth and development initiatives in 2022 to empower employees to identify internal job opportunities, skill development resources, and projects to achieve their personal development goals and full potential. We encourage employees to nurture a love of continuous learning and a resilience that is essential for accomplishment.

We have a framework for people development that is employee-centric and evidence-based. Employees and managers have frequent, casual conversations based upon employee survey data that drive engagement, career growth, and retention. These surveys also include questions oriented around the Company's mission, vision, values, and purpose, work environment, diversity and inclusion, career development, and employee-manager relations. Our internal worldwide training portal, Learn.Trimble.com, provides a set of resources that is easy to access anytime and anywhere, with a range of focus areas from new employees to existing employee development to manager development.

Building Connections

We believe that building connections between our employees, their families, and our communities creates a more meaningful, fulfilling, and enjoyable workplace. Since our employees are passionate about a variety of causes, our company giving and volunteering programs support and encourage employees by engaging with those causes. In our offices around the world, our employee-led committees select local organizations to support, often in the form of grants and employee fundraising. We also frequently collaborate with these organizations on volunteer activities for our employees. Lastly, we encourage and provide our employees with a day of service as a benefit to help our communities.

Our Trimble Foundation aligns international philanthropic efforts by giving back to the communities where Trimble does business and helping those in need. We do this by supporting three focus areas, disaster and climate resilience; female education and empowerment; and DEI, as well as by supporting the philanthropic efforts of our local offices.

Health, Safety, and Wellness

The success of our business is fundamentally connected to the well-being of our people. Accordingly, we are committed to the health, safety, and wellness of our employees. We provide our employees and their families with access to a variety of innovative, flexible, and convenient health and wellness programs, including benefits that provide protection and security so they can have peace of mind concerning events that may require time away from work or that impact their financial well-being; that support their physical and mental health by providing tools and resources to help them improve or maintain their health status and encourage engagement in healthy behaviors; and that offer choice where possible so they can customize their benefits to meet their needs and the needs of their families.

In response to the COVID-19 pandemic, we implemented changes that we determined were in the best interest of our employees, as well as the communities in which we operate, and which comply with government regulations. As COVID-related lockdowns subsided, we are supporting employees in transition to return to office and flexible working arrangements.

Available Information

This Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to these reports are available free of charge on our website through investor.trimble.com, as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission. Financial news and reports and related information about our Company, GAAP to non-GAAP reconciliations, as well as our Sustainability report and DEI report, are also found on this website. Information contained on our website is not part of this report.

In addition, you may request a copy of these filings (excluding exhibits) at no cost by writing or telephoning us at our principal executive offices at the following address or telephone number:

Trimble Inc.
10368 Westmoor Drive, Westminster, CO 80021
Attention: Investor Relations
Telephone: (303) 635-8551

The URLs in this report are intended to be inactive textual references only. They are not intended to be active hyperlinks to websites. The information on such websites, even if it might be accessible through a hyperlink resulting from the URLs or referenced herein, is not and shall not be deemed to be incorporated into this report. No assurance or representation is given as to the suitability or reliability for any purpose whatsoever of any information on such websites.

Information about our Executive Officers

The names, ages, and positions of our executive officers as of February 17, 2023, are as follows:

Name	Age	Position
Steve W. Berglund	71	Executive Chairman
Robert G. Painter	51	President and Chief Executive Officer
David G. Barnes	61	Chief Financial Officer
Ronald J. Bisio	54	Senior Vice President
James A. Kirkland	63	Senior Vice President, General Counsel and Secretary
Peter Large	53	Senior Vice President
Jennifer K. Lin	52	Chief Platform Officer
Darryl R. Matthews	55	Senior Vice President
Julie A. Shepard	65	Chief Accounting Officer

Steven W. Berglund—Steven Berglund was appointed executive chairman of Trimble’s board in January 2020, and previously served as the president and chief executive officer of Trimble since March 1999. Prior to joining Trimble, he was president of Spectra Precision, a group within Spectra Physics AB. His business experience includes a variety of senior leadership positions with Spectra Physics, and manufacturing and planning roles at Varian Associates. He began his career as a process engineer at Eastman Kodak. Mr. Berglund attended the University of Oslo and the University of Minnesota, where he received a Bachelor of Science in chemical engineering. He received an MBA from the University of Rochester. He is a member of the board of directors of the Silicon Valley Leadership Group and the Association of Equipment Manufacturers (AEM), as well as chairman of AEM’s construction sector board. He is also a member of the board of directors and audit committee of Belden Inc., a global provider of end-to-end signal transmission solutions.

Robert G. Painter—Robert Painter became Trimble’s president and chief executive officer in January 2020. From 2016 through 2019, he served as the Company’s chief financial officer. Prior to that, Mr. Painter held a variety of positions in the Company, including vice president of Trimble Buildings construction software, general manager of the Intelligent Construction Tools international joint venture, general manager of Construction Services, and leadership positions in corporate development and corporate strategy. Before joining the Company in 2006, Mr. Painter served in a variety of management and finance positions at Cenveo, Rapt Inc., Bain & Company, Whole Foods Market, and Kraft Foods. Mr. Painter holds a bachelor’s degree in finance from West Virginia University and an MBA from Harvard University.

David G. Barnes—David G. Barnes joined Trimble as chief financial officer in January 2020 with more than 35 years of financial and strategic management experience, including treasury, tax, investor relations, and risk management. Prior to Trimble, he served as chief financial officer at MWH Global Inc., a global provider of engineering and construction services, from January 2009 to May 2016. At MWH, he served on the board of directors and had responsibility for information technology and procurement in addition to his financial role. Following the sale of MWH to Stantec Inc., he assumed operational responsibility for Stantec’s businesses outside North America from September 2017 to January 2019. He also served as a leader on the committee overseeing the integration of MHW into Stantec from May 2016 to July 2017. Prior to MWH, he held financial leadership positions at Western Union, Coors, and YUM Brands. He began his career as a strategy consultant at Bain & Company. Mr. Barnes received a Bachelor of Science in Applied Mathematics from Yale University and an MBA in Finance and Marketing from the University of Chicago. Mr. Barnes also serves as a board member and chair of the Audit Committee of CSG Systems International.

Ronald J. Bisio—Ronald Bisio was appointed senior vice president responsible for Trimble’s transportation sector in July 2022. Prior to that, Mr. Bisio was responsible for Trimble’s surveying and geospatial businesses since April 2015, first as vice president and then as senior vice president as of February 2019. From January 2011 until April 2015, he served as general manager for Trimble’s rail division. He joined Trimble in 1996 and has also held several marketing, sales, and general management positions while at Trimble. Mr. Bisio earned an MBA from the University of Denver, a Master of Regional Planning from the University of Massachusetts, and a Bachelor of Science in Cartography from Salem State University in Salem, Massachusetts.

James A. Kirkland—James Kirkland currently serves as Trimble’s senior vice president, general counsel, and secretary. He joined Trimble as vice president and general counsel in July 2008. Prior to joining Trimble, he served as general counsel and executive vice president, strategic development at Covad Communications. He also served as senior vice president of spectrum development and general counsel at Clearwire Technologies, Inc. He began his career in 1984 as an associate at Mintz Levin, and in 1992 he was promoted to partner. Mr. Kirkland received a Bachelor of Arts from Georgetown University in Washington, D.C. and a J.D. from Harvard Law School.

Peter Large—Peter Large currently serves as senior vice president responsible for Trimble’s buildings and infrastructure group, which encompasses Trimble’s construction enterprise, civil infrastructure, and owner and public sector businesses. From July 2021 to October 2022, he was senior vice president responsible for civil infrastructure solutions businesses, which includes Trimble’s civil engineering, construction field systems and software, as well as Trimble’s joint ventures with Caterpillar and Hilti. Prior to that, he was vice president responsible for Trimble’s construction field solutions businesses. He was appointed to that position when he rejoined Trimble in December 2020, having earlier served with the Company as described below. Prior to re-joining Trimble, he was a research solutions strategist with Boeing’s Digital Solutions and Analytics business from 2019 to 2020. While pursuing a doctoral degree between 2015 to 2019, he engaged in consulting projects with Inmarsat plc, and was also employed as an executive director of Inmarsat from 2016 until 2018. Between 1996 and 2014, he served in a number of leadership roles at Trimble, including as vice president of channel development; as general manager for the mapping, GIS, and utilities business; and in a variety of product management, marketing, and sales management roles. He began his career in civil engineering with Jackson Group and as a surveyor with Parkman Consulting Engineers. Mr. Large holds an Ed.D. from Oklahoma State University, a Master of Science in Management from the Stanford University Graduate School of Business, a Postgraduate Diploma in Strategy and Innovation from the University of Oxford, and a Bachelor of Science (Honors) in Surveying and Mapping Science from the University of Newcastle Upon Tyne.

Jennifer K. Lin—Jennifer Lin joined Trimble in September 2021 as chief platform officer. Ms. Lin joined Google in 2016 where she served as vice president of product and user experience focused on their cloud services platform roadmap and go-to-market strategy. Prior to Google, she was on the founding team and led product at Contrail Systems, a cloud automation startup that was acquired by Juniper Networks in 2012. Before that, she managed various product teams at Cisco Systems, focused on wireless sensor networks, Internet of Things (IoT), mobility services, and security. Previously, she has led teams in technical, operational and strategic roles at Intel, Merck and a number of Silicon Valley startups. Ms. Lin received a Bachelor of Science in Engineering & Architecture from Princeton University and a Master of Science in Engineering from Stanford University.

Darryl R. Matthews—Darryl Matthews currently serves as senior vice president responsible for Trimble’s natural resources businesses, which includes agriculture, forestry, and global services divisions. From 2010 to 2015, he served as president and general manager of the NAFTA Region for Nufarm Americas, Inc., a subsidiary of Nufarm Limited, a publicly-traded multinational agricultural chemical company. From 2008 to 2010, he served as general manager of Nufarm Agriculture Inc., the Canadian subsidiary of Nufarm Limited. He began his career at Dow AgroSciences in Canada, where he held management roles in sales and marketing. From 2010 to 2015, he served on the Board of Directors for CropLife America. Mr. Matthews received an Honors Bachelor of Science in Agriculture majoring in Horticultural Science and Business from the University of Guelph in Ontario, Canada. He is also a member of the Association of Equipment Manufacturers.

Julie A. Shepard—Julie Shepard currently serves as Trimble’s chief accounting officer. She joined Trimble in December of 2006 as vice president of finance and was appointed chief accounting officer in May 2017. Prior to joining Trimble, she served as vice president of finance and corporate controller at Quantum Corporation. She brings with her over 30 years of experience in a broad range of finance roles, with diverse experience ranging from early-stage private equity backed technology companies to large multinational corporations. She began her career at Price Waterhouse and is a Certified Public Accountant. Ms. Shepard received a Bachelor of Science in Accounting from California State University. She is a member of the AICPA, Financial Executives Institute, and the Institute of Management Accounting, where she currently serves on the Sustainable Business Management - Global Task Force.

Item 1A. Risk Factors

RISKS AND UNCERTAINTIES

You should carefully consider the following risk factors, in addition to the other information contained in this report and in any other documents to which we refer you in this report, before purchasing our securities. The risks and uncertainties described below are not the only ones we face.

Risks related to our business

We operate globally and are subject to significant risks in many jurisdictions, and our business, financial condition, and results of operations have been and may continue to be impacted by adverse global and regional economic conditions

We have operations in many countries, and a significant portion of our revenue is derived from countries outside of the United States. As a result, our business, financial condition, and results of operations, including our ability to design, develop, or sell products, may be adversely affected by a number of factors outside of our control, including:

- global and local economic conditions, such as inflation and recession;
- the demand and cost of commodities, such as corn and oil;
- the strength of the agricultural, engineering, and construction markets;
- inadequate infrastructure and other disruptions, such as supply chain interruptions and large-scale outages or unreliable provision of services from utilities, transportation, data hosting, or telecommunications providers;
- government restrictions on our operations in any country, or restrictions on our ability to repatriate earnings from a particular country;
- differing employment practices and labor issues;
- formal or informal imposition of new or revised export and/or import and doing-business regulations, including trade sanctions, tariffs, and import or export licensing requirements, which could be changed without notice;
- ineffective legal protection of our IP rights in certain countries;
- uncertain economic and political conditions in countries where we do business;
- local business and cultural factors that differ from our normal standards and practices;
- differing regional responses and restrictions related to global pandemics, like the COVID-19 pandemic; and
- uncertainty regarding social, political, immigration, and trade policies in the U.S. and abroad.

There is an inherent risk that political, diplomatic, or military events could result in trade disruptions, including tariffs, trade embargoes, export restrictions, and other trade barriers. A significant trade disruption or the establishment or increase of any trade barrier in any area where we do business could increase the cost of our products, which could adversely impact the margin that we earn on sales, make our products more expensive for customers or create uncertainty around demand for certain types of products, which could make our products less competitive and reduce customer demand. Given the geopolitical climate, there is uncertainty about the trade policies, treaties, government regulations, and tariffs that could apply to trade. If there were to be a deterioration in the global economy, the economies of the countries or regions where our customers are located or do business, or the industries that we or our customers serve, the demand for our products and services would likely decrease. In addition, government or customer efforts, attitudes, laws or policies may lead to non-U.S. customers favoring domestic suppliers that could compete with or replace our products, which would also have an adverse effect on our business. Changes in economic conditions and political uncertainty surrounding international trade also make it difficult to make financial forecasts.

Risks associated with engaging in international business include:

- longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- difficulties and costs of staffing and managing international operations;
- differing local customer product preferences and requirements than our U.S. markets;
- difficulties protecting or procuring intellectual property rights; and
- compliance with changes in local laws, including those relating to privacy, labor and local content.

These factors or any combination of these factors could adversely affect our business, financial condition, and results of operations.

We have experienced disruption in our supply chain including the effects of COVID-19 and related events, and are subject to ongoing supply chain risks, which could adversely affect our revenue and results of operations

We are dependent upon a limited number of contract manufacturers for the manufacture, testing, and assembly of certain products and specific suppliers for a number of our critical components. These arrangements can generally be terminated with a limited notice. Our current reliance on a limited group of contract manufacturers and suppliers involves risks, including the potential inability to obtain products or components to meet customers' delivery requirements, reduced control over pricing and delivery schedules and discontinuation of or increased prices for certain components. In the first half of 2022, we have

experienced disruption in our supply chain as a result of the effects of COVID-19 and the geopolitical conditions such as the ongoing military conflict between Russia and Ukraine and related events and their impact on our suppliers and on international trade in general, leading to shortfalls in available components we need to make products as well as increased costs to obtain components, to make products, and to transport components and products. The disruptions include extended delivery times for certain components of our hardware products and increased freight costs. These disruptions have had an adverse effect on our ability to meet customer demand and have resulted in delays in shipping products to customers and dealers.

Future disruptions could occur as a result of any number of events, including, but not limited to, inflationary cost increases, increases in wages that drive up prices or labor, the imposition of new regulations, quotas or embargoes on components, a scarcity of, or significant increase in the price of, required components for our products, trade restrictions, tariffs or duties, fluctuations in currency exchange rates, transportation failures affecting the supply chain and shipment of materials and finished goods, third party interference in the integrity of the products sourced through the supply chain, the unavailability of raw materials, severe weather conditions, natural disasters, civil unrest, military conflicts, geopolitical developments, war or terrorism, and disruptions in utility and other services. Any other circumstance that would require us to seek alternative sources of supply or to manufacture, assemble, and test such components internally could significantly delay our ability to ship our products, which could damage relationships with current and prospective customers and could harm our reputation and brand as well as our results of operations.

Lastly, due to supply chain issues, we may accumulate excess inventories if we inaccurately forecast demand for our products.

If we are unable to effectively integrate, streamline and manage our increasingly diverse and complex businesses and operations, our ability to generate growth and revenue from new or existing customers may be adversely affected

Because our operations are geographically diverse and increasingly complex, our personnel resources and infrastructure could become strained, and our reputation in the market and our ability to successfully manage and grow our business may be adversely affected. The size, complexity, and diverse nature of our business and the expansion of our product lines and customer base have placed increased demands on our management and operations, and future growth may place additional strains on our resources in the future. Our ability to effectively compete and to manage our planned future growth will depend on, among other things, the following:

- maintaining continuity in our senior management and key personnel;
- increasing the productivity of our existing employees;
- attracting, retaining, training, and motivating our employees, particularly our technical and management personnel;
- deploying our solutions using third party information systems, which may require changes to our applications, documentation, and operational processes;
- improving our operational, financial, and management controls; and
- improving our information reporting systems and procedures.

We have increasingly diversified the nature of our businesses both organically and by acquisition. As a result, an increasing amount of our business involves business models that require managerial techniques and skill sets that are different from those required to manage our historical core businesses.

Pursuant to our Connect and Scale strategy, we are investing substantial resources in integrating our product offerings and transitioning our businesses to common core services and systems in order to achieve economies of scale, simplify our operations, and improve the customer experience. These efforts may result in disruptions to our operations, which could have an adverse effect on our customers, may cost more than we anticipate increasing our expenses, and take longer than planned.

These factors or a combination of these factors could have an adverse impact on our business, financial condition, and results of operations.

Changes in our software and subscription businesses may adversely impact our business, financial condition and results of operations

An increasing portion of our revenue is generated through software maintenance and subscription revenue, which includes Software as a Service (“SaaS”) and new subscription services for integrated solutions. Our customers have no obligation to renew their agreements for our software maintenance or subscription services after the expiration of their initial contract period, which typically ranges from one to three years. This shift reflects both an increasing use of subscription models for new products, and a transition for some existing products from perpetual license sales and distribution in favor of SaaS or other subscription offerings.

Our customer acquisition and renewal rates may decline or fluctuate as a result of a number of factors, including overall economic conditions, the health of their businesses, competitive offerings, and customer dissatisfaction with our services. Customer satisfaction with our services is affected by a variety of factors, including but not limited to security, reliability, performance, concerns about data privacy, current subscription terms, customer preference, and industry adoption. If customers

do not renew their contracts for our products, our maintenance and subscription revenue will decline, and our financial results will suffer.

Our subscription models provide our customers the right to access certain of our software in a hosted environment or use downloaded software for a specified subscription period. Market acceptance of such offerings is affected by a variety of factors, including but not limited to security, reliability, performance, current license terms, customer preference and industry adoption, social/community engagement, customer concerns with entrusting a third party to store and manage their data, public concerns regarding privacy and the enactment of restrictive laws or regulations. If we are unable to successfully market and support our subscription offerings, our business, financial condition, and results of operations could be adversely impacted.

We continually re-evaluate our software licensing programs and subscription programs, including specific license models, delivery methods, and terms and conditions. Changes to our licensing programs and subscription programs, including the introduction of new subscription services for integrated solutions that include hardware, the timing of the release of enhancements, upgrades, maintenance releases, the term of the contract, discounts, and promotions, could impact the timing of the recognition of revenue for our products, and adversely affect our cash flow, business, financial condition, and results of operations.

We may not be able to enter into or maintain important alliances and distribution relationships

We believe that in certain business opportunities, our success will depend on our ability to form and maintain alliances with industry participants. Our failure to form and maintain such alliances, or the preemption or disruption of such alliances by actions of competitors, could adversely affect our ability to sell our products to customers. Our relationships with substantial industry participants such as Caterpillar, Nikon, and Hilti are complex and multifaceted and are likely to evolve over time based upon the changing business needs and objectives of the parties.

To develop and expand our distribution channels, we must continue to expand and improve our processes and procedures that support our distribution channels, including our investment in systems and training, and those processes and procedures may become increasingly complex and difficult to manage. The time and expense required for sales and marketing organizations of our channel partners to become familiar with our product offerings, including our new product developments, and newer types of offering, such as subscription programs for integrated solutions that include hardware, software maintenance, and other recurring services, may make it more difficult to introduce those products to end users and delay end-user adoption, which could result in lower revenue.

Disruption of dealer coverage within specific geographic or end-user markets could cause difficulties in marketing, selling, or servicing our products and have an adverse effect on our business, financial condition, and results of operations. We utilize dealer networks, including those affiliated with Caterpillar and CNH to market, sell, and service many of our products. Dealers who carry products that compete with our products may focus their inventory purchases and sales efforts on goods provided by competitors due to industry demand or profitability. Such sourcing decisions can adversely impact our business, financial condition, and results of operations.

A significant portion of our aftermarket sales have historically been generated through CNH, which resells our aftermarket products through its dealer network. Moving forward, as part of our Connect and Scale strategy, we will directly manage, and further build out, our independent dealer network to ensure better access, service, and support for our customers. Our aftermarket solutions address both new equipment as well as equipment already in the field, and we will reach customers through these independent dealer partners, who are focused on selling the full portfolio of Trimble-branded precision agriculture solutions. Aligned with this strategy, in February 2023, we gave CNH a 12-month notification that we will no longer be supplying aftermarket precision agriculture products to CNH for resale through the CNH dealer network. We will continue to supply hardware to CNH for their factory installations. While we do not expect this action to have a material effect on our revenues in 2023, there can be no assurance that our revenue from our independent dealer network will offset the reduction in revenue resulting from our discontinuance of sales of aftermarket products to CNH. Evolution of our respective business strategies and diversification of product portfolios may lead to increased competition with our other strategic allies, placing additional pressure on these relationships. Since these strategic relationships contribute to significant ongoing business in certain of our important markets, changes in these relationships could adversely affect our sales.

Investing in and integrating new acquisitions or divesting businesses could be costly, place a significant strain on our management systems and resources, or fail to deliver expected outcomes, which could adversely impact our business, financial conditions, and results of operations

We typically acquire a number of businesses each year and we intend to continue to acquire other businesses. Acquisitions entail numerous risks, including:

- potential inability to successfully integrate acquired operations and products or to realize cost savings or other anticipated benefits from integration;
- loss of key employees or customers of acquired operations;

- difficulty of assimilating geographically dispersed operations and personnel of the acquired companies;
- potential disruption of our business or the acquired business;
- unanticipated expenses related to acquisitions;
- unanticipated difficulties in conforming business practices, policies, procedures, internal controls, and financial records of acquisitions with our own business;
- impairment of relationships with employees, customers, vendors, distributors or business partners of either an acquired company or our own business;
- inability to accurately forecast the performance of recently acquired businesses, resulting in unforeseen adverse effects on our operating results;
- potential liabilities, including liabilities resulting from known or unknown compliance or legal issues, associated with an acquired business; and
- adverse accounting impact to our results of operations because of purchase accounting treatment and the business or accounting practices of acquired companies.

Any such effects from acquisitions could be costly and place a significant strain on our management systems and resources.

As a result of acquisitions, we have significant assets that include goodwill and other purchased intangibles. The testing of goodwill and intangibles for impairment under generally accepted accounting principles (“GAAP”) requires us to make significant judgments and assumptions. Changes in business conditions or in the prospects or results of operations of the acquired business could require adjustments to the valuation of these assets resulting in impairments that would adversely affect our results. In addition, changes in the operating results or the valuation of companies in which we have investments may have a direct impact on our financial statements or could result in our having to write down the value of such investment.

Even if successfully negotiated and closed, acquisitions may not yield expected synergies, may not advance our business strategy as expected, may fall short of expected return-on-investment targets, or may not prove successful or effective for our business. Companies that we acquire may operate with different cost and margin structures, which could further cause fluctuations in our operating results and adversely affect our business, financial condition, and results of operations.

In December 2022, we signed a definitive agreement to acquire Transporeon, a leading European cloud-based transportation management software platform. The acquisition is expected to close in the first half of 2023. We may not complete the acquisition of Transporeon within the time frame we anticipate or at all. The completion of the acquisition of Transporeon is subject to certain closing conditions, including the receipt of merger control clearances in Austria, Germany, and Poland. The failure to satisfy all the required conditions could delay or even prevent the acquisition from occurring at all. If we consummate the acquisition of Transporeon, there is a risk that the desired benefits of the acquisition may not be fully realized or that we may fail to integrate the acquired assets as expected, which may negatively impact our business, financial condition, and results of operations.

From time to time we have divested businesses, and we expect to do so in the future. Any such divestiture may result in:

- a disruption of our business;
- reduced synergies, including the loss of scale or key employees;
- impairment of customer relationships; and
- reductions in the breadth of our product offerings.

Divestitures may adversely impact our results if we are unable to offset the dilutive impacts from the loss of revenue associated with the divested products or businesses, or mitigate overhead costs allocated to those businesses. We could also experience higher than expected transaction costs and business sale losses, which may adversely affect our business, financial condition, and results of operations.

We face substantial competition in our markets, which could decrease our revenue and growth rates or impair our business, financial condition, and results of operations

Our markets are highly competitive, and we expect that both direct and indirect competition will increase in the future. Our overall competitive position depends on a number of factors including the price, quality and performance of our products, the effectiveness of our distribution channel and direct sales force, the level of customer service, the development of new technology, and our ability to participate in emerging markets. Within each of our markets, we encounter direct competition from other GNSS, software, optical, and laser suppliers, and competition may intensify from various larger U.S. and non-U.S. competitors and new market entrants, particularly from markets such as China. Our products, which commonly use GNSS for basic location information, may be subject to competition from alternative location technologies such as simultaneous location and mapping technology. In our software and subscription services businesses, we face competition from a group of large, well-established companies, particularly in the areas of design, enterprise resource planning (“ERP”), and collaboration and project management solutions. Our integrated hardware and software products may be subject to increasing competition from mass market devices such as smartphones and tablets used in conjunction with relatively inexpensive applications, which have not been heavily used for commercial applications in the past.

These competitive developments may require us to rapidly adapt to technological and customer preference changes that we have not previously been exposed to, including those related to cloud computing, mobile devices, and new computing platforms. Such competition has in the past resulted, and in the future may result, in price reductions, reduced margins, or loss of market share, any of which could decrease our revenue and growth rates or impair our operating results and financial condition. We believe that our ability to compete successfully in the future against existing and additional competitors will depend largely on our ability to execute our strategy to provide products with significantly differentiated features compared to currently available products. We may not be able to implement this strategy successfully, and our products may not be competitive with other technologies or products that may be developed by our competitors, many of whom have significantly greater financial, technical, manufacturing, marketing, sales, and other resources than we do.

If we are unable to attract and retain qualified personnel, our business, financial condition, and results of operations could be harmed

Our continued success depends, in part, on our ability to hire and retain qualified personnel and to advance our corporate strategy, and preserve the key aspects of our corporate culture. Because our future success is dependent on our ability to continue to enhance and introduce new products, we are particularly dependent on our ability to hire and retain qualified engineers, including in areas of technology such as GNSS, software programming, information systems, and data analytics. In addition, to increase revenues, we will be required to increase the size and productivity of our sales and channel management groups. Competition for qualified employees in our major locations is intense. The COVID-19 pandemic has also heavily impacted the environment for attracting and managing employees, and our failure to successfully manage these changes and navigate transitions such as return to office could harm our ability to attract and retain the best talent. Our inability to hire and retain qualified management and skilled personnel, particularly engineers, salespeople, and key executive management, could disrupt our development efforts, sales results, business relationships, and our ability to execute our business plan and strategy on a timely basis and could materially and adversely affect our business, financial condition, and results of operations. In addition, any future reductions in force or other restructuring intended to improve operational efficiencies and operating costs, may adversely affect our ability to attract and retain qualified personnel.

Equity grants are a critical component of our current compensation programs. If we fail to grant equity competitively, we may have difficulty attracting and retaining critical employees. In addition, because of our sales structure, cash, and equity incentive compensation plans, we may be at increased risk of losing employees at certain times. For example, the retention value of our compensation plans decreases after the payment of periodic bonuses or the vesting of equity awards.

Risks related to our technology and products

Our products are highly technical and may contain undetected errors, product defects, security vulnerabilities, or software errors

Our products, including our software products, are highly technical and complex and, when deployed, may contain errors, defects, or security vulnerabilities. We must develop our products quickly to keep pace with the rapidly changing market, and we have a history of frequently introducing new products. Products and services as sophisticated as ours could contain undetected errors or defects, especially when first introduced or when new models or versions are released. Such occurrences could result in damage to our reputation, lost revenue, diverted development resources, increased customer service and support costs, warranty claims, and litigation.

We warrant that our products will be free of defect for various periods of time, depending on the product. In addition, certain of our contracts include epidemic failure clauses. If invoked, these clauses may entitle the customer to return or obtain credits for products and inventory, or to cancel outstanding purchase orders even if the products themselves are not defective.

Errors, viruses, or bugs may be present in software or hardware that we acquire or license from third parties and incorporate into our products or in third-party software or hardware that our customers use in conjunction with our products. Our customers' proprietary software and network firewall protections may corrupt data from our products and create difficulties in implementing our solutions. Changes to third-party software or hardware that our customers use in conjunction with our software could also render our applications inoperable. Any errors, defects, or security vulnerabilities in our products or any defects in, or compatibility issues with, any third-party hardware or software or customers' network environments discovered after commercial release could result in loss of revenue or delay in revenue recognition, loss of customers, theft of trade secrets, data or intellectual property and increased service and warranty cost, any of which could adversely affect our business, financial condition, and results of operations.

Undiscovered vulnerabilities in our products alone or in combination with third-party hardware or software could expose them to hackers or other unscrupulous third parties who develop and deploy viruses and other malicious software programs that could attack our products. Actual or perceived security vulnerabilities in our products could harm our reputation and lead some customers to return products, to reduce or delay future purchases, or use competitive products.

Our internal and customer-facing systems, and systems of third parties we rely upon, may be subject to cybersecurity breaches, disruptions, or delays

A cybersecurity incident in our own systems or the systems of our third-party providers may compromise the confidentiality, integrity, or availability of our own internal data, the availability of our products and websites designed to support our customers, or our customer data. Computer hackers, foreign governments, cybercriminals, or cyber terrorists may attempt to or succeed in penetrating our network security and our website. Additionally, due to geopolitical tensions, such as the ongoing military conflict between Russia and Ukraine, we and our third-party vendors may be vulnerable to a heightened risk of cybersecurity attacks, phishing attacks, viruses, malware, ransomware, hacking or similar breaches and incidents from nation-state actors or affiliated actors, including attacks that could materially disrupt our systems and operations, supply chain, and ability to produce, sell, and distribute our products and services. Unauthorized access to our proprietary business information or customer data may be obtained through break-ins, sabotage, breach of our secure network by an unauthorized party, computer viruses, computer denial-of-service attacks, employee theft or misuse, breach of the security of the networks of our third-party providers, or other misconduct. Additionally, outside parties may attempt to fraudulently induce employees or users to disclose sensitive or confidential information in order to gain access to data.

We have experienced security breaches in the past, and despite our efforts to maintain the security and integrity of our systems, it is impossible to eliminate this risk. Because the techniques used by computer hackers who may attempt to penetrate and sabotage our network security or our website change frequently, they may take advantage of weaknesses in third party technology or standards of which we are unaware or that we do not control and may not be recognized until after they have been launched against a target. We may be unable to anticipate or counter these techniques. It is also possible that unauthorized access to customer data or confidential information may be obtained through inadequate use of security controls by customers, vendors, or business partners. Efforts to prevent hackers from disrupting our service or otherwise accessing our systems are expensive to develop, implement, and maintain. Such efforts require ongoing monitoring and updating as technologies change and efforts to overcome security measures become more sophisticated and may limit the functionality of, or otherwise adversely impact our service offering and systems. A cybersecurity incident affecting our systems may also result in theft of our intellectual property, proprietary data, or trade secrets, which would compromise our competitive position, reputation, and operating results. We also may be required to notify regulators about any actual or perceived personal data breach (including the EU Lead Data Protection Authority) as well as the individuals who are affected by the incident within strict time periods.

The systems we rely upon also remain vulnerable to damage or interruption from a number of other factors, including access to the internet, the failure of our network or software systems, or significant variability in visitor traffic on our product websites, earthquakes, floods, fires, power loss, telecommunication failures, computer viruses, human error, and similar events or disruptions. Some of our systems are not fully redundant, and our disaster recovery planning is not sufficient for all eventualities. Our systems are also subject to intentional acts of vandalism. Despite any precautions we may take, the occurrence of a natural disaster, a decision by any of our third-party hosting providers to close a facility we use without adequate notice for financial or other reasons, or other unanticipated problems at our hosting facilities could cause system interruptions and delays, and result in loss of critical data and lengthy interruptions in our services.

We rely on our information systems and those of third parties for activities such as processing customer orders, delivery of products, hosting and providing services and support to our customers, billing and tracking our customers, hosting and managing our customer data, and otherwise running our business. Any disruptions or unexpected incompatibilities in our information systems and those of the third parties upon whom we rely could have a significant impact on our business.

An increasing portion of our revenue comes from SaaS solutions and other hosted services in which we store, retrieve, communicate, and manage data that is critical to our customers' business systems. Disruption of our systems that support these services and solutions could cause disruptions in our customers' systems and in the businesses that rely on these systems. Any such disruptions could harm our reputation, create liabilities to our customers, hurt demand for our services and solutions, and adversely impact our business, financial condition, and results of operations.

We are dependent on new products and services, and if we are unable to successfully introduce them into the market or to effectively compete with new, disruptive product alternatives, our customer base may decline or fail to grow as anticipated

Our future revenue stream depends to a large degree on our ability to bring new products and services to market on a timely basis. We must continue to make significant investments in research and development in order to continue to develop new products and services, enhance existing products, and achieve market acceptance of such products and services. We may encounter problems in the future in innovating and introducing new products and services. Our development stage products may not be successfully completed or, if developed, may not achieve significant customer acceptance. Development and manufacturing schedules for technology products are difficult to predict, and we might not achieve our goals as to the timing of introducing new technology products or could encounter increased costs. The timely availability and cost-effective production of these products in volume and their acceptance by customers are important to our future success. This has been and may

continue to be negatively impacted by the global supply chain shortage. If we are unable to introduce new products and services, if other companies develop competing technology products and services, or if we do not develop compelling new products and services, our number of customers may not grow as anticipated, or may decline, which could harm our operating results.

Many of our offerings are increasingly focused on software and subscription services. The software industry is characterized by rapidly changing customer preferences, which require us to address multiple delivery platforms, new mobile devices, and cloud computing. Lifecycles of software products can be short, and this can exacerbate the risks associated with developing new products. The introduction of third party solutions embodying new, disruptive technologies and the emergence of new industry standards could make our existing and future software solutions and other products obsolete or non-competitive. If we are not able to develop software and other solutions that address the increasingly sophisticated needs of our customers, or if we are unable to adapt to new platforms, technologies, or new industry standards that impact our markets, our ability to retain or increase market share, business, financial condition, and results of operations could be adversely affected.

Some of our products rely on third-party technologies including open-source software, which could result in product incompatibilities or harm availability of our products and services

We license software, technologies, and intellectual property underlying some of our software from third parties. The third-party licenses we rely upon may not continue to be available to us on commercially reasonable terms, or at all, and the software and technologies may not be appropriately supported, maintained, or enhanced by the licensors, resulting in development delays. Some software licenses are subject to annual renewals at the discretion of the licensors. In some cases, if we were to breach a provision of these license agreements, the licensor could terminate the agreement immediately. The loss of licenses to, or inability to support, maintain, and enhance, any such third-party software or technology could result in increased costs, or delays in software releases or updates, until such issues have been resolved. This could have an adverse effect on our business, financial condition, and results of operations.

We also incorporate open-source software into our products. Although we monitor our use of open-source software, the terms of many open-source licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to market or sell our products or to develop new products. In such event, we could be required to seek licenses from third parties in order to continue offering our products, to disclose and offer royalty-free licenses in connection with our own source code, to re-engineer our products, or to discontinue the sale of our products in the event re-engineering cannot be accomplished on a timely basis, any of which could adversely affect our business, financial condition, and results of operations.

We are dependent on proprietary technology, which could result in litigation that could divert significant valuable resources

Our future success and competitive position is dependent upon our proprietary technology, and we rely on patent, trade secret, trademark, and copyright laws to protect our intellectual property. The patents owned or licensed by us may be invalidated, circumvented, infringed, or challenged. The rights granted under these patents may not provide competitive advantages to us. Any of our pending or future patent applications may not be issued within the scope of the claims sought by us, if at all.

Despite our efforts to protect our intellectual property rights, unauthorized parties may attempt to copy or otherwise obtain our software or develop software with the same functionality or to obtain and use information that we regard as proprietary. Others may develop technologies that are similar or superior to our technology, duplicate our technology, or design around the patents owned by us. In addition, effective copyright, patent, and trade secret protection may be unavailable, limited, or not applied for in certain countries. The steps taken by us to protect our technology might not prevent the misappropriation of such technology.

The value of our products relies substantially on our technical innovation in fields in which there are many current patent filings. Third parties may claim that we or our customers (some of whom are indemnified by us) are infringing their intellectual property rights. For example, individuals and groups may purchase intellectual property assets for the purpose of asserting claims of infringement and attempting to extract settlements from us or our customers. As new patents are issued or are brought to our attention by the holders of such patents, it may be necessary for us to secure a license from such patent holders, redesign our products, or withdraw products from the market. In addition, the legal costs and engineering time required to safeguard intellectual property or to defend against litigation could become a significant expense of operations. Any such litigation could require us to incur substantial costs and divert significant valuable resources, including the efforts of our technical and management personnel, which could harm our business, financial condition, and results of operations.

We are dependent on the availability and unimpaired use of allocated bands within the radio frequency spectrum; our products may be subject to harmful interference from new or modified spectrum uses

Our GNSS technology is dependent on the use of satellite signals and on terrestrial communication bands. International allocations of radio frequency are made by the International Telecommunications Union (“ITU”), a specialized technical agency of the United Nations. These allocations are further governed by radio regulations that have treaty status and which

may be subject to modification every two to three years by the World Radio Communication Conference. Each country also has regulatory authority over how each band is used in the country. In the United States, the Federal Communications Commission (“FCC”) and the National Telecommunications and Information Administration share responsibility for radio frequency allocations and spectrum usage regulations.

Any ITU or local reallocation of radio frequency bands, including frequency band segmentation and sharing of spectrum, or other modifications of the permitted uses of relevant frequency bands, may materially and adversely affect the utility and reliability of our products and have significant adverse impacts on our customers, both of which could reduce demand for our products. For example, in 2020 the FCC approved a proposal by a private party to repurpose spectrum adjacent to the authorized GNSS bands for terrestrial wireless operations throughout the United States. The company has opposed and continues to oppose this proposal, along with a wide range of participants in commercial and governmental sectors that rely on the use of GNSS in their critical activities. The FCC’s action is subject to further review as well as potential legislative action. If the FCC’s action continues in effect and terrestrial operations are implemented in the affected spectrum, these operations could create harmful interference to GNSS receivers in proximity to such operations and impose costs to retrofit or replace affected receivers. Similarly, other countries have considered proposals for use of frequencies used by our products as well as adjacent bands that could cause harmful interference to our products.

Many of our products use other radio frequency bands, such as the public land mobile radio bands, together with the GNSS signal, to provide enhanced GNSS capabilities, such as real-time kinematics precision. The continuing availability of these non-GNSS radio frequencies is essential to provide enhanced GNSS products to our precision survey, agriculture, and construction machine controls markets. In addition, transmissions and emissions from other services and equipment operating in adjacent frequency bands or in-band may impair the utility and reliability of our products. Any regulatory changes in spectrum allocation or in allowable operating conditions could have a material adverse effect on our business, financial condition, and results of operations.

Many of our products rely on GNSS technology, GPS and other satellite systems, which may become degraded or inoperable and result in lost revenue

GNSS technology, GPS satellites, and their ground support systems are complex electronic systems subject to electronic and mechanical failures and possible intentional disruption. Many of the GPS satellites currently in orbit were originally designed to have lives of 7.5 years and are subject to damage by the hostile space environment in which they operate. However, of the current deployment of operational satellites in orbit, some have been in operation for much longer. Repair of damaged or malfunctioning satellites is currently not economically feasible. If a significant number of satellites were to become inoperable, there could be a substantial delay before they are replaced with new satellites. A reduction in the number of operating satellites below the 24-satellite standard established for GPS may impair the utility of the GPS system and the growth of current and additional market opportunities. In addition, software updates to GPS satellites and ground control segments, and infrequent known events such as GPS week number rollover, may adversely affect our products and customers. We depend on public access to open technical specifications in advance of system updates to mitigate these problems, which may not be available or complete.

We are dependent on continued operation of GPS, the principal GNSS currently in operation. The GPS constellation is operated by the U. S. Government, which is committed to maintenance and improvement of GPS. If supporting policies were to change, or if user fees were imposed, it could have an adverse effect on our business, financial condition, and results of operations.

Many of our products also use signals from systems that augment GPS, such as the Wide Area Augmentation System and National Differential GPS System, and satellites transmitting signal corrections data on mobile satellite services frequencies utilized by our RTX corrections services. Some of these augmentation systems are operated by the U.S. government and rely on continued funding and maintenance of these systems. Any curtailment of the operating capability of these systems or limitations on access to, or use of the signals, or discontinuance of service could result in degradation of our services or product performance, with an adverse effect on our business, financial condition, and results of operations.

Many of our products use satellite signals available globally from the Russian GLONASS, China’s BeiDou, and the European Galileo GNSS Systems. Other countries have developed regional GNSS systems, such as India’s NavIC and Japan’s QZSS, which we support in some products. National or European authorities may provide preferential access to signals to companies associated with their markets, including our competitors, which could harm our competitive position. Geopolitical tensions between the United States and Russia and China could also result in the restriction of our usage of such satellite signals. Use of non-U.S. GNSS signals are also subject to FCC waiver requirements and to restrictions based upon international trade or geopolitical considerations. If we are unable to develop timely and competitive commercial products using these systems, or obtain timely and equal access to service signals, this could result in lost revenue.

Regulatory risks

We face risks inherent in conducting business internationally, including compliance with international and U.S. laws and regulations that apply to our international operations

These laws and regulations include data privacy requirements, labor relations laws, tax laws, anti-competition regulations, import and trade restrictions, export control laws, and laws that prohibit corrupt payments to governmental officials or certain payments or remunerations to customers, including the U.S. Foreign Corrupt Practices Act (“FCPA”), the U.K. Bribery Act, and other anti-corruption laws, that have been the subject of a substantial increase in global enforcement. Many of our products are subject to U.S. export law restrictions that limit the destinations and types of customers to which our products may be sold or that require an export license in connection with sales outside the United States. Given the high level of complexity of these laws, there is a risk that some provisions may be inadvertently or intentionally breached, for example through fraudulent or negligent behavior of individual employees, our failure to comply with certain formal documentation requirements or otherwise. Also, we may be held liable for actions taken by our local dealers and partners. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers or our employees, and prohibitions or conditions on the conduct of our business. Any such violations could include prohibitions or conditions on our ability to offer our products in one or more countries and could materially damage our reputation, our brand, our international expansion efforts, our ability to attract and retain employees, our business, financial conditions, and results of operations.

We operate in many parts of the world that have experienced significant governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. We may be subject to competitive disadvantages to the extent that our competitors are able to secure business, licenses, or other preferential treatment by making payments to government officials and others in positions of influence or through other methods that relevant law and regulations prohibit us from using. Our success depends, in part, on our ability to anticipate these risks and manage these difficulties.

We are subject to evolving and potentially conflicting privacy laws in the United States and other jurisdictions, which could adversely impact our business and require that we incur substantial costs

Existing privacy-related laws and regulations in the United States and other countries are evolving and are subject to unclear or potentially differing interpretations, and various U.S. federal and state or other international legislative and regulatory bodies may expand or enact laws regarding privacy and data security-related matters. In Europe, conflicting privacy policies are being pursued by the Commission, legislators and enforcement agencies. New privacy laws may lack clarity and depend on regulators implementing further rules and guidance, which are often significantly delayed, such as in Brazil, China and the European Union. Some countries are considering or have passed legislation that requires local storage and processing of data, including geospatial data, which could impact our ability to deliver cloud-based solutions in an efficient manner. The U.S. and European Union continue to pursue agreement on the governing basis for data transfers from the EU to the U.S. but have not yet adopted the EU-U.S. Data Privacy Framework. International transfers of personal data present ongoing compliance challenges and complicate our business transactions and operations. In addition, the California Consumer Privacy Act (the “CCPA”), which took effect in January 2020, was amended by the California Privacy Rights Act (“the “CPRA”) and took full effect in January 2023, with enforcement to begin on July 1, 2023. The CCPA and CPRA, among other things, give California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. Other U.S. states and the U.S. Congress have introduced, and some states like Virginia, Colorado, Connecticut and Utah have enacted, data privacy legislation, which may impact our business. Such legislation, amendments and revisions to existing data privacy legislation, and other developments impacting data privacy and data protection may contain unclear and conflicting requirements, and may require us to modify our data processing practices and policies, increase the complexity of providing our products and services, and cause us to incur substantial costs in an effort to comply. Failure to comply may lead to significant fines and business interruption.

We are subject to the impact of governmental and other certifications processes and regulations, which could adversely affect our products and our business

We market many products that are subject to governmental regulations and certifications before they can be sold. The European Union increasingly regulates the use of our products on agriculture, construction, and other types of machinery. As we develop and enhance features which support automated and autonomous operation of our products, we are increasingly subject to functional safety regulation. Conformité Européenne (CE) certification is required for GNSS receivers and data communications products, which must also conform to the European harmonized GNSS receiver requirements and the radio equipment directive to be sold in the European community. In the future, the U.S., European, or other governmental authorities may propose GPS receiver testing and certification for compliance with published GPS signal interface or other specifications. Governmental authorities may also propose other forms of GPS receiver performance standards, which may limit design alternatives, hamper product innovation, or impose additional costs. Some of our products that use integrated radio communication technology require product type certification and some products require an end user to obtain licensing from the

FCC and other national authorities for frequency-band usage. Compliance with evolving product regulations in our major markets could require that we redesign our products, cease selling products in certain markets, and increase our costs of product development. An inability to obtain required certifications in a timely manner could adversely affect our ability to bring our products to market and harm our customer relationships. Failure to comply with evolving requirements could result in fines and limitations on sales of our products.

Financial and tax risks

Our debt could adversely affect our cash flow and prevent us from fulfilling our financial obligations

At the end of 2022, our total debt was \$1.5 billion, of which \$1.3 billion was senior notes. When our senior notes mature, we will have to utilize significant resources to repay these senior notes or seek to refinance them. If we decide to refinance the senior notes, we may be required to do so on different or less favorable terms, or we may be unable to refinance the senior notes at all, both of which may adversely affect our business, financial condition, and results of operation. Any downgrade by credit rating agencies could adversely affect our cost of borrowing, limit our access to the capital markets, or result in more restrictive covenants in future debt agreements.

In December 2022, in connection with our pending acquisition of Transporeon, we arranged to incur substantial new debt obligations including those arising under the following:

- a term loan credit agreement providing for an unsecured delayed draw term loan facility in the aggregate principal amount of \$1.0 billion, comprised of commitments for a 3-year tranche in the amount of \$500.0 million and a 5-year tranche in the amount of \$500.0 million, and
- an amendment to our 2022 Credit Facility that made \$600.0 million of the existing commitments under the Facility available for the pending acquisition of Transporeon and that increases our maximum permitted leverage ratio following the closing of the acquisition.

Prior to arranging the above two transactions, we had entered into a 364-day bridge facility commitment letter (the “Bridge Facility”) that provided for up to €1.88 billion of commitments for term loans to fund our acquisition of Transporeon. The Bridge Facility was subsequently reduced to €500 million by the term loan credit agreement and the amended 2022 Credit Facility.

Because of the additional outstanding indebtedness we have and expect to incur, we have temporarily discontinued share repurchases.

Our outstanding indebtedness, including the substantial indebtedness we plan to incur in connection with the pending acquisition of Transporeon, could have other important consequences, such as:

- decreasing our business flexibility, limiting access to capital, and/or increasing our borrowing costs;
- requiring us to dedicate a portion of our cash flow from operations and other capital resources to debt service, thereby reducing our ability to fund working capital, capital expenditures, general corporate purposes, and other cash requirements, particularly if the ratings assigned to our debt securities by rating organizations were revised downward;
- increasing our vulnerability to adverse economic and industry conditions;
- reducing our ability to make investments and acquisitions, which support the growth of the company, or to repurchase shares of our common stock; and
- limiting our flexibility in planning for, or reacting to changes and opportunities in our industry, which may place us at a competitive disadvantage.

There are various financial covenants and other restrictions in our debt instruments. If we fail to comply with any of these requirements, the related indebtedness (and other unrelated indebtedness) could become due and payable prior to its stated maturity, and we may not be able to repay the indebtedness that becomes due. A default under our debt instruments may also significantly affect our ability to obtain additional or alternative financing.

Our ability to make scheduled payments or to refinance our obligations with respect to indebtedness will depend on our operating and financial performance, which in turn, is subject to prevailing economic conditions and to financial, business, and other factors beyond our control. A portion of our outstanding debt has interest rates that float based on prevailing interest rates, and we may incur additional variable-rate debt in the future. Such rates tend to fluctuate based on general economic conditions, general interest rates, Federal Reserve rates, and the supply of and demand for credit in the relevant interbanking market. If interest rates increase, our interest expense will also increase as would the costs of refinancing existing indebtedness or obtaining new debt.

Significant increases in our level of indebtedness could impact the ratings assigned to our debt securities by rating organizations, which in turn would increase the interest rates and fees that we pay in connection with our indebtedness.

Changes in our effective tax rate may reduce our net income in future periods

We are subject to income and other taxes in the United States and numerous foreign jurisdictions. Significant judgment is required to determine and estimate worldwide tax liabilities. While we believe our tax positions are consistent with the tax laws in the jurisdictions in which we conduct our business, it is possible that these positions may be contested or overturned by jurisdictional tax authorities, which may have a significant impact on our global provision for income taxes. Our effective tax rate is primarily subject to the geographic mix of earnings, statutory rates, inter-company transfer pricing, and enacted tax laws.

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

- the jurisdictions in which profits are determined to be earned and taxed;
- the resolution of issues arising from tax audits with the U.S. and foreign tax authorities;
- changes in our intercompany transfer pricing methodology;
- changes in the valuation of our deferred tax assets and liabilities;
- increases in expense not deductible for tax purposes, including transaction costs and impairments of goodwill in connection with acquisitions;
- changes in the realizability of available tax credits;
- changes in share-based compensation;
- changes in tax laws or the interpretation of such tax laws; and
- changes in generally accepted accounting principles.

Tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied, and governmental tax authorities are increasingly scrutinizing the tax positions of companies.

The jurisdictions where we do business may change tax laws, regulations, and interpretations on a prospective or retroactive basis and these potential changes could adversely affect our effective tax rates. As these and other tax laws and related regulations change, our financial results could be materially impacted. Given the unpredictability of these possible changes and their potential interdependency, it is very difficult to assess whether the overall effect of such potential tax changes would be cumulatively positive or negative for our earnings and cash flow, but such changes could impact our financial results.

The Organization of Economic Cooperation and Development (“OECD”) introduced and member countries agreed to a framework that imposes a minimum tax of 15% to certain multinational enterprises. We will continue to monitor and assess how this may impact our financial results when implemented.

We are currently in various stages of multiple year examinations by state and foreign taxing authorities. If taxing authorities of any jurisdiction were to successfully challenge a material tax position, we could become subject to higher taxes and our earnings could be adversely affected.

We may be affected by fluctuations in currency exchange rates

Over half of our revenue is derived from sales to customers outside of the U.S. We are potentially exposed to adverse as well as beneficial movements in currency exchange rates. Historically, the majority of our revenue contracts are denominated in U.S. Dollars, with the most significant exception being Europe, where we invoice primarily in Euro. Additionally, a portion of our expenses, primarily the cost to manufacture, cost of personnel to deliver technical support on our products and professional services, sales and sales support, and research and development, are denominated in foreign currencies, primarily the Euro. An increase in the value of the dollar could increase the real cost to our customers of our products in those markets outside the U.S. where we sell in dollars, and a weakened dollar could increase the cost of local operating expenses, procurement of raw materials from sources outside the U.S., and overseas capital expenditures. We also conduct certain investing and financing activities in local currencies. Our foreign exchange forward contracts reduce, but do not eliminate, the impact of currency exchange rate movements; therefore, changes in exchange rates could harm our business, financial condition, and results of operations.

Risks related to ownership of our stock

The volatility of our stock price could adversely affect an investment in our common stock

The market price of our common stock has been, and may continue to be, highly volatile. During 2022, our stock price ranged from \$47.52 to \$88.06. We believe that a variety of factors could cause the price of our common stock to fluctuate, perhaps substantially, including:

- general conditions in the worldwide economy;
- quarterly fluctuations in our actual or anticipated operating results and order levels;
- announcements and reports of developments related to our business, our major customers and partners, and the industries in which we compete, or the industries in which our customers compete;
- security breaches;
- acquisition announcements;

- new products or product enhancements announced or introduced by us or our competitors;
- disputes with respect to developments in patents or other intellectual property rights;
- developments in our relationships with our partners, customers, and suppliers;
- the imposition of tariffs or other trade barriers;
- political, economic, or social uncertainty, such as the ongoing military conflict between Russia and Ukraine;
- global pandemics, like the COVID-19 pandemic; and
- acts of terrorism.

In addition, the stock market in general and the markets for shares of “high-tech” companies in particular have frequently experienced extreme price fluctuations, which have often been unrelated to the operating performance of affected companies. Any such fluctuations could adversely affect the market price of our common stock.

Our annual and quarterly performance may fluctuate, which could adversely impact our financial condition, results of operations, and stock price

Our operating results have fluctuated and can be expected to continue to fluctuate in the future on a quarterly and annual basis as a result of a number of factors, many of which are beyond our control. Results in any period could be affected by:

- changes in market demand;
- competitive market conditions;
- supply chain disruptions;
- the amount of inventory that our dealer networks carry;
- the timing of recognizing revenue;
- fluctuations in foreign currency exchange rates;
- the cost and availability of components;
- the mix of our customer base and sales channels;
- the mix of products sold;
- pricing of products;
- changes in the U.S. or foreign policies on taxes, trade, or spending;
- regional responses and restrictions related to global pandemics, like the COVID-19 pandemic; and
- other risks, including those described below.

Seasonal variations in demand for our products may also affect our quarterly results. Construction equipment revenue has historically been the highest in early spring. Our agricultural equipment revenue has historically been the highest in the first quarter, followed by the second quarter, reflecting buying in anticipation of the spring planting season in the Northern hemisphere. If we do not accurately forecast seasonal demand, we may be left with unsold inventory or have a shortage of inventory, which could adversely impact our business, financial conditions, and results of operations.

Due in part to the buying patterns of our customers, a portion of our hardware revenue occurs from orders received and immediately shipped to customers in the last few weeks and days of each quarter, while our operating expense tends to remain fairly predictable. These patterns could harm our operating results if for any reason expected sales are deferred, orders are not received, or shipments are delayed a few days at the end of a quarter.

The price of our common stock could decline substantially in the event any of these risks result in our financial performance being below the expectations of public market analysts and investors, which are based on historical and predictive models that are not necessarily accurate representations of the future.

General risk factors

We have claims and lawsuits against us that may result in adverse outcomes

We are subject to a variety of claims and lawsuits. Adverse outcomes in some or all of these claims may result in significant monetary damages or injunctive relief that could adversely affect our ability to conduct business. Litigation and other claims are subject to inherent uncertainties and the outcomes can be difficult to predict. Management may not adequately reserve for a contingent liability, or may suffer unforeseen liabilities, which could then impact the results of a financial period. A material adverse impact on our consolidated financial statements could occur for the period in which the effect of an unfavorable final outcome becomes probable and reasonably estimable which, if not expected, could harm our business, financial condition, and results of operations.

Catastrophic events or geopolitical conditions could disrupt our operations

Acts of war, acts of terrorism or civil unrest, natural disasters and other catastrophic events, especially any events that impact our larger markets or GNSS signals or systems, could have a material adverse impact on our business. The threat of terrorism and war and heightened security and military activity in response to this threat, or any future acts of terrorism or hostilities, may involve a redeployment of the satellites used in GNSS or interruptions of the system. Civil unrest, local conflicts, or other

political instability may adversely impact regional economies, cause work stoppages, or result in limitations on business transactions with the affected jurisdictions. To the extent that such interruptions result in delays or the cancellation of orders, disruption of the manufacturing or shipment of our products, or reduced demand for our products, these interruptions could have a material adverse effect on our business, financial condition, and results of operations.

Geopolitical risks, resulting from the Russia and Ukraine conflict, could result in increased market volatility and uncertainty, which could negatively impact our business, financial condition, and results of operations

The uncertain nature, magnitude, and duration of hostilities stemming from the ongoing military conflict between Russia and Ukraine, including effects of sanctions on the world economy and markets, possible retaliatory cyber-attacks, and supply chain disruptions, have contributed to increased market volatility and uncertainty, and could have an adverse impact on our business and could amplify the existing supply chain challenges we faced. As a result of the ongoing military conflict in Ukraine, the United States, the United Kingdom, and the European Union governments, among others, implemented a series of sanctions packages against Russia. The sanctions have contributed to supply chain disruptions, higher commodity prices, higher oil and natural gas price, and a slowdown in global economic growth. It is not possible to predict the broader consequences of the conflict, which could include further sanctions; embargoes; regional instability; geopolitical shifts and adverse effects on macroeconomic conditions; the availability and cost of raw materials, supplies, freight, and labor; currency exchange rates; our suppliers, customers, and potential consumer demand for our products; and financial markets, all of which could impact our business, financial condition, and results of operations.

In December 2022, we entered a definitive agreement to acquire Transporeon, a leading cloud-based transportation management software platform that is headquartered in Germany and has operations in Russia and Ukraine. If the acquisition closes as expected, it is possible that the ongoing military conflict in Ukraine or related sanctions may limit the usage of Transporeon products, disrupt our employees (both within and outside of Ukraine, including nearby regions such as Poland), negatively impact the productivity of affected employees, or lead to claims against us for failure to fulfill our contractual obligations.

Future public health crises and epidemics could impact our international operations and sales

Our results of operations could be adversely affected to the extent that future pandemics, similar to COVID-19 or any other epidemic, harm any significant market where we do business. Contagious disease epidemics or global pandemics could also significantly impact our international supply chain and result in component and product shortages and general disruptions to the economy. Such outbreaks could also result in mass quarantines, business closures, and significantly impact our suppliers, customers, and commercial partners in affected areas, which may materially and adversely affect our business, financial condition, and results of operations.

Damage to our reputation could significantly harm our businesses, competitive position, and prospects for growth

Our ability to attract and retain investors, customers, and employees could be adversely affected by damage to our reputation resulting from various sources, including environmental, social, and governance (“ESG”) related issues; employee misconduct, litigation, or regulatory outcomes; failure to deliver minimum standards of service and quality; compliance failures; unethical behavior; unintended breach of confidential information; and the activities of our customers and commercial partners.

In addition, we are committed to aligning our purpose, culture, and corporate strategy with sustainability. Any perceived change in our dedication to these commitments could harm our reputation and could adversely impact our business. Our disclosures on these matters, and standards we set for ourselves or a failure to meet these standards, may influence our reputation and the value of our brand.

For example, we have elected to share publicly our commitments and ongoing efforts in our Sustainability Report, where we address the importance of ESG matters to our stakeholders and our Company. Our business may face increased scrutiny related to these activities, including from the investment community, and our failure to achieve progress in these areas on a timely basis, or at all, could adversely affect our reputation, growth, business, financial condition, and results of operations.

Climate change may have an impact on our business

While we seek to mitigate our business risks associated with climate change by establishing robust environmental programs and partnering with organizations who are also focused on mitigating their own climate-related risks, we recognize that there are inherent climate-related risks wherever business is conducted. Any of our primary locations may be vulnerable to the adverse effects of climate change. The 2021 wildfires in Colorado occurred in close proximity to our headquarters in Westminster, Colorado. Our California office has historically experienced, and is projected to continue to experience, climate-related events at an increasing frequency including drought, heat waves, wildfires including resultant air quality impacts, flooding, and power shutoffs associated with wildfire prevention and flooding. Furthermore, it is more difficult to mitigate the impact of these events on our employees while they work from home. Changing market dynamics, global policy developments, and the increasing frequency and impact of extreme weather events on critical infrastructure in the U.S. and elsewhere have the

potential to disrupt our business, the business of our third-party suppliers, and the business of our customers, and may cause us to experience higher attrition, losses, and additional costs to maintain or resume operations.

Environmental, social, and governance matters and related reporting obligations may cause us to incur additional expenses or adversely impact our business or reputation

U.S. and international regulators, investors, and other stakeholders are increasingly focused on ESG matters. New domestic and international laws and regulations relating to ESG matters, including human capital, diversity, sustainability, climate change, and cybersecurity are under consideration or being adopted, which may include specific, target-driven disclosure requirements or obligations. We communicate certain ESG-related initiatives, goals, and/or other matters in our annual Sustainability Report, on our website, in our filings with the SEC, and elsewhere. For example, in 2022, we established science-based targets for Scope 1, 2, and 3 greenhouse gas emissions, certain commitments on sourcing renewable energy, and certain commitments to partner with suppliers that have announced their own science-based targets. Implementation of our goals and targets may require capital improvements. Our ability to achieve any stated commitment, goal, target, or objective is subject to many factors and conditions, some of which are outside of our control, including the pace of changes in technology and the cooperation and/or availability of suppliers that can meet our sustainability standards. If we fail to achieve, are perceived to have failed or been delayed in achieving, or improperly report our progress toward achieving our publicly stated goals and commitments or compliance with U.S. and international ESG laws and regulations, our business reputation and our financial condition, and results of operations may be negatively impacted.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters is located in Westminster, Colorado where we own approximately 250 thousand square feet. We also currently own approximately 500 thousand square feet in Dayton, Ohio. These facilities are used by all reporting segments. For financial information regarding leases, refer to [Note 8 “Leases”](#) of this report.

We believe that our existing facilities are adequate to support current and near-term operations.

Item 3. Legal Proceedings

From time to time, we are involved in litigation arising in the ordinary course of our business. There are no material legal proceedings, other than ordinary routine litigation incidental to the business, to which we or any of our subsidiaries is a party or of which any of our or our subsidiaries' property is subject.

Item 4. Mine Safety Disclosures

None.

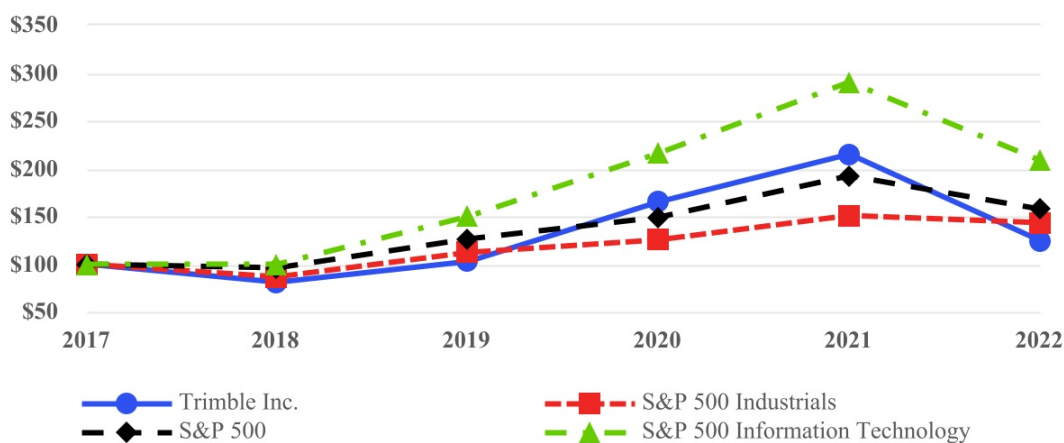
PART II

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

Company Stock Performance

Our common stock trades on NASDAQ under the symbol “TRMB.” The following graph compares the cumulative five-year total return provided stockholders on our common stock relative to the cumulative total returns of the S&P 500 Index, the S&P 500 Information Technology Index, and the S&P 500 Industrials Index. An investment of \$100 (with reinvestment of all dividends) is assumed to have been made in our common stock and in each of the indexes on December 31, 2017, and its relative performance is tracked through December 31, 2022.

Comparison of Cumulative Five Year Total Return



Stock Repurchase Program

In August 2021, our Board of Directors approved a new share repurchase program (“2021 Stock Repurchase Program”) authorizing up to \$750.0 million in repurchases of our common stock. Under the 2021 Stock Repurchase Program, the share repurchase authorization does not have an expiration date and supersedes and replaces the \$600.0 million share repurchase authorization approved by our Board of Directors in November 2017 (“2017 Stock Repurchase Program”), of which \$50.7 million was remaining and has been cancelled.

Under the 2021 Stock Repurchase Program, we may repurchase shares from time to time, subject to business and market conditions and other investment opportunities, through open market transactions, privately-negotiated transactions, accelerated stock repurchase plans, or by other means. The timing and actual number of any shares repurchased will depend on a variety of factors, including market conditions, our share price, other available uses of capital, applicable legal requirements, and other factors. The 2021 Stock Repurchase Program may be suspended, modified, or discontinued at any time at without prior notice.

There were no purchases of equity securities in the fourth quarter of 2022. During 2022, we repurchased approximately 6.0 million shares of common stock in open market purchases under the 2021 Stock Repurchase Programs, at an average price of \$65.90 per share, for a total of \$394.7 million. At the end of 2022, the 2021 Stock Repurchase Program had remaining authorized funds of \$215.3 million.

Our pending acquisition of Transporeon, for a cash purchase price of €1.88 billion or \$2.0 billion, will be funded through a combination of cash on hand and debt and is expected to occur in the first half of 2023. Because of the additional outstanding indebtedness we have and expect to incur in connection with the pending acquisition, we have temporarily discontinued share repurchases.

As of February 14, 2023, there were approximately 506 holders of record of our common stock.

Dividend Policy

We have not declared or paid any cash dividends on our common stock during any period for which financial information is provided in this report. At this time, we intend to retain future earnings, if any, to fund the development and growth of our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future.

Item 6. Reserved

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the consolidated financial statements and the related notes. The following discussion contains forward-looking statements that reflect our plans, estimates, and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those discussed below and those listed under “Risks Factors.” This section of this report generally discusses 2022 and 2021 items and year-to-year comparisons between 2022 and 2021. Discussions of 2020 items and year-to-year comparisons between 2021 and 2020 that are not included in this report can be found in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II, Item 7 of our Annual Report on Form 10-K, for the year ended December 31, 2021.

EXECUTIVE LEVEL OVERVIEW

We are a leading provider of technology solutions that enable professionals and field mobile workers to improve or transform their work processes. Our comprehensive work process solutions are used across a range of industries including architecture, building construction, civil engineering, geospatial, survey and mapping, agriculture, natural resources, utilities, transportation, and government. Our representative customers include construction owners, contractors, engineering and construction firms, surveying companies, farmers and agricultural companies, energy and utility companies, trucking companies, and state, federal, and municipal governments. Further information on our business is presented in Part I, [Item 1, “Business”](#) of this report.

Our growth strategy is centered on multiple elements:

- Executing on our Connect and Scale strategy;
- Increasing focus on software and services;
- Focus on attractive markets with significant growth and profitability potential;
- Domain knowledge and technological innovation that benefit a diverse customer base;
- Geographic expansion with localization strategy;
- Optimized go-to-market strategies to best access our markets;
- Strategic acquisitions and venture fund investments; and
- Sustainability.

Our focus on these growth drivers has led over time to growth in revenue and profitability and an increasingly diversified business model. We continue to experience a shift toward a more significant mix of recurring revenue contracts, as demonstrated by our success in driving annualized recurring revenue (“ARR”) of \$1,603.7 million, which represents growth of 14% year-over-year at the end of 2022. ARR organic growth was 16%. This shift towards recurring revenue has positively impacted our revenue mix and growth over time and is leading to improved visibility in our businesses. As our solutions have expanded, our go-to-market model has also evolved with a balanced mix between direct, distribution, and OEM customers as well as an increasing number of enterprise level customer relationships.

Throughout this [“Management’s Discussion and Analysis of Financial Condition and Results of Operations”](#), we refer to organic revenue growth, which is a non-GAAP measure. For a full definition of ARR, organic ARR, and organic revenue growth as used in this discussion and analysis, refer to the [“Supplemental Disclosure of Non-GAAP Financial Measures and Annualized Recurring Revenue”](#) found later in this Item 7.

Impact of Recent Events on Our Business

Macroeconomic conditions, including geopolitical tensions, such as the ongoing military conflict between Russia and Ukraine and related sanctions, exchange rate and interest rate volatility, and inflationary pressures, will continue to evolve globally. In the second half of 2022, our organic hardware sales growth and bookings moderated from slowing demand in some of our end markets served by our dealer channels and also from dealer inventories moving towards lower levels due to improved product lead times and macroeconomic concerns. The greatest impact was a decline in Europe where the impacts of foreign currency exchange rates, the ongoing military conflict in Ukraine, and energy inflation were the greatest.

Supply Chain

Over the past year, we experienced inflationary cost increases for certain components of our hardware products due to supply chain disruptions resulting from parts and labor shortages and an increase in worldwide demand for components. In response, we increased customer pricing to offset inflationary pressures. In the second half of 2022, these cost pressures lessened as component supply became more readily available. We expect these cost pressures will continue to diminish over time as supply chain conditions continue to normalize. Additionally, over the past year, due to extended component lead times, we made binding commitments over a longer horizon for certain components. This has impacted our working capital in the short term; however, we expect supply dynamics and customer demand to normalize over time.

Foreign Currency Fluctuations

We generate over half of our revenue from sales to customers outside of the U.S. In 2022, due to the strengthening of the U.S. dollar, year-over-year unfavorable foreign currency impacts on revenue and operating income were \$114.1 million or 4% and \$26.0 million or 5%.

Interest Rates Fluctuations

The global inflation rate has risen sharply, and interest rates are rising in an effort to curb inflation. In addition to the negative impact macroeconomic conditions have had on our sales, we may experience higher borrowing costs on existing variable rate debt and future debt issuances, including financing related to the pending acquisition of Transporeon.

Ongoing Military Conflict in Ukraine

We are monitoring and responding to effects of the ongoing military conflict in Ukraine. In the first quarter of 2022, we stopped selling to Russia and Belarus customers and wrote off uncollected customer receivables and inventory located in these countries, which was not material to our consolidated financial statements. Total revenue associated with Russia and Belarus customers, either sold directly or indirectly through resellers or OEMs, was less than 2% of our total Company revenue for 2021. We are focused on providing products and support to non-sanctioned Ukrainian customers and contributing to relief efforts.

Acquisitions and Divestitures

We acquire businesses that align with our long-term growth strategies including our strategic product roadmap and, conversely, we divest certain business that no longer fit those strategies.

In December 2022, we signed a definitive agreement to acquire Transporeon in an all-cash transaction valued at approximately €1.88 billion or \$2.0 billion. Transporeon, a Germany-based company, is a leading cloud-based transportation management software platform that connects key stakeholders across the industry lifecycle to positively impact the optimization of global supply chains, in alignment with our Connect and Scale strategy. We believe the acquisition will advance our sustainability strategy by reducing under-utilized carrier capacity and “empty miles” and increase our international footprint and long-term Transportation opportunities. The acquisition will be funded through a combination of cash on hand and debt. We expect this acquisition to close in the first half of 2023, subject to customary closing conditions including the receipt of merger control clearances in Austria, Germany, and Poland. Transporeon will be reported in our Transportation segment.

In 2022, we acquired two businesses, with total purchase consideration of \$379.5 million. In the aggregate, the acquired businesses contributed less than 1% of our total revenue during 2022.

In 2022, we divested six businesses with total proceeds of \$226.3 million. For 2021, the revenue and operating income for these divested businesses were approximately \$201.7 million and \$33.0 million.

For additional discussion of acquisitions and divestitures, refer to [Note 3 “Acquisitions and Divestitures”](#) of this report.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements and related disclosures in conformity with U.S. generally accepted accounting principles (“GAAP”) requires us to make judgments, assumptions, and estimates that affect the reported amounts of assets, liabilities, revenue, costs of sales, operating expenses, and related disclosures. We consider the accounting policies described below to be our critical accounting policies. These critical accounting policies are impacted significantly by judgments, assumptions, and estimates used in the preparation of the consolidated financial statements, and actual results could differ materially from the amounts reported based on these policies. Our accounting policies are more fully described in [Note 1 “Description of Business and Accounting Policies”](#) of this report.

Revenue Recognition

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration that we expect to receive in exchange for those products or services. Revenue is recognized net of allowance for returns and any taxes collected from customers. We enter into contracts that can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations; however, determining whether products or services are considered distinct performance obligations that should be accounted for separately versus together may sometimes require significant judgment.

Judgment is required to determine stand-alone selling price (“SSP”) for each performance obligation. We use a range of amounts to estimate SSP when products and services are sold separately and determine whether there is a discount to be allocated based on the relative SSP of the various products and services. In instances where SSP is not directly observable, we determine SSP using information that may include market conditions and other observable inputs.

Income Taxes

We are a U.S. based multinational company operating in multiple U.S. and foreign jurisdictions. Judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. We consider many factors when evaluating and estimating our tax positions and tax benefits, which may require periodic adjustments and may not accurately forecast actual tax audit outcomes. Determining whether an uncertain tax position is effectively settled requires judgment. Changes in recognition or measurement of our uncertain tax positions would result in the recognition of a tax benefit or an additional charge to the tax provision.

Income taxes are accounted for under the liability method, whereby deferred tax assets or liability account balances are calculated at the balance sheet date using current tax laws and rates in effect for the year in which the differences are expected to affect taxable income. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets if we believe it is more likely than not such assets will not be realized.

We are subject to the periodic examination of our domestic and foreign tax returns by the IRS, state, local, and foreign tax authorities who may challenge our tax positions. We regularly assess the likelihood of adverse outcomes from these examinations in determining the adequacy of our provision for income taxes.

Business Combinations and Valuation of Goodwill and Purchased Intangible Assets

For business combinations, we allocate the purchase consideration to the assets acquired, liabilities assumed, and any noncontrolling interest based on their fair values at the acquisition date. When determining the fair values, we make significant estimates and assumptions, especially concerning intangible assets. Critical estimates when valuing intangible assets include expected future cash flows based on consideration of future growth rates and margins, customer attrition rates, future changes in technology and brand awareness, loyalty and position, and discount rates. Any purchase consideration in excess of the fair values of the net assets acquired is recorded as goodwill.

We evaluate goodwill on an annual basis in our fourth quarter or more frequently if indicators of potential impairment exist. To determine whether goodwill is impaired, we first assess qualitative factors. Qualitative factors include but are not limited to macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, or other relevant company-specific events. If it is determined more likely than not that the fair value of a goodwill reporting unit is less than its carrying amount, we perform a quantitative analysis. Alternatively, we may bypass the qualitative assessment and perform a quantitative impairment test.

When performing a quantitative approach, we compare the reporting unit's carrying amount, including goodwill, to the reporting unit's fair value. The estimation of a reporting unit's fair value involves using estimates and assumptions, including expected future operating performance using risk-adjusted discount rates. If the reporting unit's carrying amount exceeds its fair value, an impairment loss is recognized.

We review intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of those assets may not be recoverable based on their future cash flows. The estimated future cash flows are primarily based on assumptions about expected future operating performance.

RESULTS OF OPERATIONS

Overview

The following table shows revenue by category, gross margin and gross margin as a percentage of revenue, operating income and operating income as a percentage of revenue, diluted earnings per share, and annualized recurring revenue compared for the periods indicated:

<i>(In millions)</i>	<u>2022</u>	<u>2021</u>	<u>Dollar Change</u>	<u>% Change</u>
Revenue:				
Product	\$ 2,152.0	\$ 2,247.5	\$ (95.5)	(4)%
Service	641.3	649.4	(8.1)	(1)%
Subscription	883.0	762.2	120.8	16 %
Total revenue	\$ 3,676.3	\$ 3,659.1	\$ 17.2	— %
Gross margin	2,105.6	2,034.7	70.9	3 %
Gross margin as a % of revenue	57.3 %	55.6 %		
Operating income	510.9	561.0	(50.1)	(9)%
Operating income as a % of revenue	13.9 %	15.3 %		
Diluted earnings per share	\$ 1.80	\$ 1.94	\$ (0.14)	(7)%
Non-GAAP revenue ⁽¹⁾	\$ 3,676.3	\$ 3,659.4	\$ 16.9	— %
Non-GAAP operating income ⁽¹⁾	841.5	857.0	(15.5)	(2)%
Non-GAAP operating income as a % of Non-GAAP revenue ⁽¹⁾	22.9 %	23.4 %		
Non-GAAP diluted earnings per share ⁽¹⁾	\$ 2.64	\$ 2.66	\$ (0.02)	(1)%
Annualized Recurring Revenue (“ARR”) ⁽¹⁾	\$ 1,603.7	\$ 1,409.1	\$ 194.6	14 %

(1) Refer to [“Supplemental Disclosure of Non-GAAP Financial Measures and Annualized Recurring Revenue”](#) of this report for definitions.

Basis of Presentation

We use a 52–53 week fiscal year ending on the Friday nearest to December 31, which for 2022 was December 30, 2022. Both 2022 and 2021 were 52–week years.

Year 2022 Compared with Year 2021

Revenue

<i>Change versus 2021</i>	<u>2022</u>
	<u>% Change</u>
Change in total revenue	— %
Acquisitions	1 %
Divestitures	(4)%
Foreign currency exchange	(4)%
Organic revenue growth - total revenue	<u>7 %</u>

Although organic revenue increased for fiscal 2022, it decelerated in the second half of the year due to slowing demand in some of our end markets and reductions in dealer inventory levels as a result of improved product lead times and macroeconomic concerns. Additionally, Geospatial had unusually strong hardware sales in the previous year. Throughout the year, software and subscription sales were strong in buildings businesses in Buildings and Infrastructure, and to a lesser extent, positioning services in Resources and Utilities and Transportation enterprise business, as evidenced by organic ARR growth of 16%.

<i>Change versus 2021</i>	2022 % Change
Change in product revenue	(4)%
Acquisitions	— %
Divestitures	(5)%
Foreign currency exchange	(3)%
Organic revenue growth - product revenue	4 %
Change in service revenue	(1)%
Acquisitions	4 %
Divestitures	(1)%
Foreign currency exchange	(4)%
Organic revenue growth - service revenue	— %
Change in subscription revenue	16 %
Acquisitions	1 %
Divestitures	(2)%
Foreign currency exchange	(2)%
Organic revenue growth - subscription revenue	19 %

Organic product revenue increased due to term license software growth throughout the year, as well as stronger hardware and related software sales in the first half of the year. In the second half of the year, slowing demand for our hardware and related software products impacted sales in Buildings and Infrastructure, Geospatial, and Resources and Utilities. Organic service revenue was relatively flat. Organic subscription revenue increased primarily due to strong growth in Buildings and Infrastructure and, to a lesser extent, in Resources and Utilities, Transportation, and Geospatial.

During 2022, sales to customers in North America represented 53%; Europe represented 28%; Asia Pacific represented 11%; and the rest of world represented 8% of our total revenue.

No single customer accounted for 10% or more of our total revenue or accounts receivable in 2022 and 2021.

Gross Margin

Gross margins varied due to several factors including product mix, customer pricing, distribution channel, and product costs.

Gross margin increased primarily due to organic revenue growth in Buildings and Infrastructure and Resources and Utilities, partially offset by divestitures and unfavorable foreign currency. Gross margin as a percentage of total revenue increased due to an increased mix of software and subscription sales, price increases, and to a lesser extent, divestitures of lower margin hardware centric businesses.

Operating Income

Operating income decreased primarily due to divestitures and unfavorable foreign currency, partially offset by organic revenue and gross margin expansion. Additionally, operating expense increased due to investments related to our Connect and Scale strategy and increased sales and marketing costs primarily related to trade shows and increased travel. Other contributors to increased operating expense included restructuring costs, charitable donations, and higher acquisition and divestiture transaction costs partially offset by a reduction in incentive compensation.

Operating income as a percentage of revenue decreased primarily due to increased operating expense, partially offset by increased gross margin as a percentage of revenue.

Research and Development, Sales and Marketing, and General and Administrative Expenses

The following table shows research and development (“R&D”), sales and marketing (“S&M”), and general and administrative (“G&A”) expense along with these expenses as a percentage of revenue for the periods indicated:

	2022	2021	Dollar Change	% Change
<i>(In millions)</i>				
Research and development	\$ 542.1	\$ 536.6	\$ 5.5	1 %
Percentage of revenue	14.7 %	14.7 %		
Sales and marketing	553.6	506.8	46.8	9 %
Percentage of revenue	15.1 %	13.9 %		
General and administrative	422.2	369.1	53.1	14 %
Percentage of revenue	11.5 %	10.1 %		
Total	<u>\$ 1,517.9</u>	<u>\$ 1,412.5</u>	\$ 105.4	7 %

R&D expense increased primarily due to slightly higher compensation expense and the impact of acquisitions, partially offset by favorable foreign currency and divestitures. We believe that the development and introduction of new solutions are critical to our future success, and we expect to continue the active development of new products.

S&M expense increased primarily due to higher compensation expense, including commissions, higher marketing costs including trade shows, higher travel expenses, and the impact of acquisitions. These increases were partially offset by favorable foreign currency and divestitures.

G&A expense increased primarily due to investments related to our Connect and Scale strategy, charitable donations to the Trimble Foundation, and acquisition and divestiture transaction costs. These increases were partially offset by a reduction in incentive compensation, favorable foreign currency, and divestitures.

Amortization of Purchased Intangible Assets

The following table shows amortization of purchased intangible assets for the periods indicated:

	2022	2021	Dollar Change	% Change
<i>(In millions)</i>				
Cost of sales	\$ 85.0	\$ 87.7	\$ (2.7)	(3)%
Operating expenses	46.6	50.9	(4.3)	(8)%
Total amortization expense of purchased intangibles	<u>\$ 131.6</u>	<u>\$ 138.6</u>	\$ (7.0)	(5)%
Total amortization expense of purchased intangibles as a percentage of revenue	4 %	4 %		

In 2022, total amortization of purchased intangibles decreased primarily due to the expiration of prior years’ acquisition amortization.

Non-Operating Income, Net

The following table shows non-operating income, net for the periods indicated:

	2022	2021	Dollar Change	% Change
<i>(In millions)</i>				
Divestitures gain, net	\$ 99.0	\$ 41.4	\$ 57.6	139 %
Interest expense, net	(71.1)	(65.4)	(5.7)	9 %
Income from equity method investments, net	31.1	37.7	(6.6)	(18)%
Other expense, net	(0.8)	(0.1)	(0.7)	700 %
Total non-operating income, net	<u>\$ 58.2</u>	<u>\$ 13.6</u>	\$ 44.6	328 %

In 2022, non-operating income increased primarily due to higher gains from divestitures, partially offset by lower joint-venture profitability, higher interest expense due to Bridge Facility fees, and fluctuations in deferred compensation plan assets included in Other expense, net.

Income Tax Provision

Our effective income tax rates for 2022 and 2021 were 21.0% and 14.2%. The effective income tax rate in 2022 increased compared to 2021 primarily due to a one-time tax benefit recorded in 2021 related to the revaluation of the Netherlands deferred tax assets mentioned below and lower stock-based compensation deductions during 2022.

In December 2021, due to a change in the Netherlands tax law, the statutory tax rate was increased from 25.0% to 25.8% effective January 1, 2022. As a result, we recorded a one-time tax benefit of \$14.4 million in 2021 due to the revaluation of the Netherlands deferred tax assets.

On August 16, 2022, the U.S. federal government enacted the Inflation Reduction Act (“IRA”) of 2022. The IRA includes a 15% corporate alternative minimum tax effective in 2024 for certain large corporations, a 1% excise tax on net share repurchases after December 31, 2022, and several tax incentives to promote clean energy. We do not expect the provisions of the IRA to have a material impact on our financial results.

Results by Segment

We report our financial performance, including revenue and operating income, based on four reportable segments: Buildings and Infrastructure, Geospatial, Resources and Utilities, and Transportation.

Our Chief Executive Officer and Chief Operating Decision Maker views and evaluates operations based on the results of our reportable operating segments under our management reporting system. These results are not necessarily in conformance with U.S. GAAP. For additional discussion of our segments, refer to [Note 6 “Reporting Segment and Geographic Information”](#) of this report.

The following table shows a breakdown of revenue and operating income by segment for the periods indicated:

<i>(In millions)</i>	2022	2021	Dollar Change	% Change
Buildings and Infrastructure				
Segment revenue	\$ 1,494.0	\$ 1,422.7	\$ 71.3	5 %
Segment revenue as a percent of total revenue	40.6 %	38.9 %		
Segment operating income	\$ 406.3	\$ 411.7	\$ (5.4)	(1)%
Segment operating income as a percent of segment revenue	27.2 %	28.9 %		
Geospatial				
Segment revenue	\$ 756.5	\$ 828.9	\$ (72.4)	(9)%
Segment revenue as a percent of total revenue	20.6 %	22.6 %		
Segment operating income	\$ 221.4	\$ 244.1	\$ (22.7)	(9)%
Segment operating income as a percent of segment revenue	29.3 %	29.4 %		
Resources and Utilities				
Segment revenue	\$ 821.6	\$ 771.3	\$ 50.3	7 %
Segment revenue as a percent of total revenue	22.4 %	21.1 %		
Segment operating income	\$ 278.3	\$ 264.0	\$ 14.3	5 %
Segment operating income as a percent of segment revenue	33.9 %	34.2 %		
Transportation				
Segment revenue	\$ 604.2	\$ 636.5	\$ (32.3)	(5)%
Segment revenue as a percent of total revenue	16.4 %	17.4 %		
Segment operating income	\$ 58.8	\$ 43.4	\$ 15.4	35 %
Segment operating income as a percent of segment revenue	9.7 %	6.8 %		

The following table shows a reconciliation of our consolidated segment operating income to our consolidated income before income taxes for the periods indicated:

<i>(In millions)</i>	2022	2021
Consolidated segment operating income	\$ 964.8	\$ 963.2
Unallocated general corporate expenses	(123.3)	(106.2)
Purchase accounting adjustments	(131.6)	(134.5)
Acquisition / divestiture items	(32.8)	(21.8)
Stock-based compensation / deferred compensation	(112.0)	(128.6)
Restructuring and other costs	(54.2)	(11.1)
Consolidated operating income	510.9	561.0
Total non-operating income, net	58.2	13.6
Consolidated income before taxes	\$ 569.1	\$ 574.6

Buildings and Infrastructure

<i>Change versus 2021</i>	2022
	% Change
Change in revenue - Buildings and Infrastructure	5 %
Acquisitions	2 %
Divestitures	(5)%
Foreign currency exchange	(3)%
Organic revenue growth	11 %

Organic revenue increased due to demand for our subscription and term license software recurring offerings. The increases resulted from higher sales to new and existing customers, as well as conversions from perpetual software to recurring offerings. Civil construction hardware and related software license revenue increased due to relative strength in the North American construction market in the first half of 2022, partially offset by weaker hardware sales, particularly in Europe, in the second half of the year.

Despite revenue and gross margin expansion, operating income decreased primarily due to higher operating expense, unfavorable foreign currency, and divestitures. Operating expense increased due to investments in our Connect and Scale strategy as well as higher marketing and travel costs. Operating income as a percentage of revenue decreased primarily due to higher operating expense, partially offset by gross margin expansion due to product mix.

Geospatial

<i>Change versus 2021</i>	2022
	% Change
Change in revenue - Geospatial	(9)%
Acquisitions	— %
Divestitures	(5)%
Foreign currency exchange	(3)%
Organic revenue growth	(1)%

Organic revenue decreased slightly due to unusually strong hardware sales in the prior year and the softening of hardware sales in the second half of 2022, partially offset by higher software and subscription sales.

Operating income decreased primarily due to divestitures and reduced revenue, partially offset by better gross margin due to product mix. Operating income as a percentage of revenue was relatively flat.

Resources and Utilities

	2022
<i>Change versus 2021</i>	% Change
Change in revenue - Resources and Utilities	7 %
Acquisitions	— %
Divestitures	(1)%
Foreign currency exchange	(4)%
Organic revenue growth	12 %

Organic revenue increased due to relative strength in agriculture, particularly in the OEM channel, as well as price increases, partially offset by weaker agriculture sales in the reseller channel, particularly Europe, in the second half of the year. To a lesser extent, revenue was favorably impacted by higher subscription revenue in positioning services.

Operating income increased primarily due to organic revenue expansion, partially offset by unfavorable foreign currency, and higher operating expenses due to investments in our Connect and Scale strategy. Operating income as a percentage of revenue was relatively flat.

Transportation

	2022
<i>Change versus 2021</i>	% Change
Change in revenue - Transportation	(5)%
Acquisitions	— %
Divestitures	(3)%
Foreign currency exchange	(1)%
Organic revenue growth	(1)%

Organic revenue decreased primarily driven by lower mobility hardware sales to North American customers. Enterprise subscription revenue continued to experience growth as the business transitions from a perpetual software license model.

Operating income and operating income as a percentage of revenue increased primarily due to targeted cost reductions and gross margin expansion due to product mix, partially offset by divestitures and reduced revenue. We continue to maintain focus on new product introductions and transitions to recurring revenue.

LIQUIDITY AND CAPITAL RESOURCES

At the End of Year	2022	2021	Dollar Change	% Change
<i>(In millions)</i>				
Cash and cash equivalents	\$ 271.0	\$ 325.7	\$ (54.7)	(17)%
As a percentage of total assets	3.7 %	4.6 %		
Principal balance of outstanding debt	\$ 1,525.0	\$ 1,300.0	\$ 225.0	17 %
Years	2022	2021	Dollar Change	% Change
<i>(In millions)</i>				
Cash provided by operating activities	\$ 391.2	\$ 750.5	\$ (359.3)	(48)%
Cash used in investing activities	(226.3)	(203.5)	(22.8)	11 %
Cash used in financing activities	(199.0)	(447.7)	248.7	(56)%
Effect of exchange rate changes on cash and cash equivalents	(20.6)	(11.3)	(9.3)	82 %
Net increase in cash and cash equivalents	<u>\$ (54.7)</u>	<u>\$ 88.0</u>		

Operating Activities

The decrease in cash provided by operating activities was primarily driven by lower net income after adjusting for non-cash items and divestiture gains, higher bonus and cash tax payments, higher accounts receivable, higher inventory purchases, and lower accounts payable associated with the timing of inventory payments. The decreases were partially offset by an increase in deferred revenue.

Investing Activities

The increase in cash used in investing activities was primarily due to higher payments related to businesses acquired in 2022, partially offset by higher proceeds from divestitures.

Financing Activities

The decrease in cash used in financing activities was primarily driven by higher proceeds of revolving credit facilities, which was used in part to fund the B2W acquisition, partially offset by an increase in common stock repurchases.

Cash and Cash Equivalents

We believe that our cash and cash equivalents and borrowings, along with cash provided by operations will be sufficient in the foreseeable future to meet our anticipated operating cash needs, expenditures related to our Connect and Scale strategy, and debt service. In March 2022, we entered into a five-year, unsecured revolving loan facility for borrowings up to \$1.25 billion, which replaced the 2018 Credit Facility. The 2022 Credit Facility contains an option to increase the borrowings up to \$1.75 billion with lender approval. At the end of 2022, \$225.0 million was outstanding under the 2022 Credit Facility.

In December 2022, in connection with our pending acquisition of Transporeon, we arranged to incur substantial new debt obligations, which will be drawn prior to the acquisition closing date. These arrangements include:

- a term loan credit agreement providing for an unsecured delayed draw term loan facility in the aggregate principal amount of \$1.0 billion, comprised of commitments for a 3-year tranche in the amount of \$500.0 million and a 5-year tranche in the amount of \$500.0 million, and
- an amendment to our 2022 Credit Facility that made \$600.0 million of the existing commitments under the Credit Facility available for the pending acquisition of Transporeon and increased our maximum permitted leverage ratio following the closing of the acquisition.

Prior to arranging the above two transactions, we had entered into a 364-day bridge facility commitment letter (the “Bridge Facility”) that provided for up to €1.88 billion of commitments for term loans to fund our acquisition of Transporeon. The Bridge Facility was reduced to €500 million by the term loan credit agreement and the amended 2022 Credit Facility.

We anticipate refinancing some or all of our outstanding indebtedness and debt commitments at or prior to their maturities, which could involve us accessing the capital markets.

A provision enacted in the Tax Cuts and Jobs Act of 2017 related to the capitalization of research and development costs for tax purposes became effective on January 1, 2022. In 2022, we paid \$88.0 million with respect to this tax provision. Additionally, if this provision is not deferred or repealed in 2023, we expect that cash tax payments in 2023 will be slightly lower than 2022.

Our material cash requirements include the following contractual and other obligations and cash needs:

Leases

We have operating leases primarily for certain of our major facilities including corporate offices, research and development facilities, and manufacturing facilities. Operating leases represent undiscounted lease payments and include short-term leases. At the end of 2022, we had fixed lease payment obligations of \$171.6 million, with \$48.7 million payable within the next 12 months. Refer to [Note 8 “Leases”](#) of this report for additional information regarding our leases.

Tax Payable

At the end of 2022, we had income taxes payable of \$64.6 million, with \$23.7 million payable within the next 12 months. The amount payable within the next 12 months includes \$13.6 million representing a one-time transition tax liability as a result of the 2017 Tax Cuts and Jobs Act (the “Tax Act”).

In addition, we have unrecognized tax benefits of \$75.5 million included in Other non-current liabilities, including interest and penalties. At this time, we cannot make a reasonably reliable estimate of the period of cash settlement with tax authorities regarding this liability. Refer to [Note 12 “Income Taxes”](#) of this report for additional information regarding our taxes.

Other Purchase Obligations and Commitments

Purchase obligations and commitments primarily relate to investments in our platform associated with our Connect and Scale strategy and non-cancellable inventory commitments. At the end of 2022, we had operating purchase obligations and commitments of \$858.8 million, with \$326.2 million payable within the next 12 months. Refer to [Note 9 “Commitments and Contingencies”](#) of this report for additional information regarding our purchase obligations and commitments. Other than the items discussed above, we do not have any off-balance sheet financing arrangements or liabilities.

Debt

At the end of 2022, we had outstanding floating and fixed-rate senior notes with varying maturities for an aggregate principal amount of approximately \$1.5 billion. Future interest payments total \$260.5 million, with \$67.3 million payable within the next 12 months.

During 2022, we had \$224.6 million of proceeds from debt, net of the payments. Refer to [Note 7 “Debt”](#) of this report for additional information regarding our debt.

Stock Repurchase Program

We have a 2021 Stock Repurchase Program authorized by our Board of Directors, that allows us to repurchase shares from time to time, subject to business and market conditions and other investment opportunities, through open market transactions, privately-negotiated transactions, accelerated stock repurchase plans, or by other means for up to \$750 million. The 2021 Stock Repurchase Program does not obligate us to acquire any specific number of shares. Because of the additional outstanding indebtedness we have and expect to incur in connection with the pending Transporeon acquisition, we have temporarily discontinued share repurchases. Refer to [Note 14 “Common Stock Repurchase”](#) of this report for additional information regarding our 2021 Stock Repurchase Program.

EFFECT OF NEW ACCOUNTING PRONOUNCEMENTS

The impact of recent accounting pronouncements is disclosed in [Note 1 “Description of Business and Accounting Policies”](#) of this report.

SUPPLEMENTAL DISCLOSURE OF NON-GAAP FINANCIAL MEASURES AND ANNUALIZED RECURRING REVENUE

To supplement our consolidated financial information, we include non-GAAP financial measures, which are not meant to be considered in isolation or as a substitute for comparable GAAP. We believe non-GAAP financial measures provide useful information to investors and others in understanding our “core operating performance”, which excludes the (i) effect of non-cash items and certain variable charges not expected to recur; and (ii) transactions that are not meaningful in comparison to our past operating performance or not reflective of ongoing financial results. Lastly, we believe that our core operating performance offers a supplemental measure for period-to-period comparisons and can be used to evaluate our historical and prospective financial performance, as well as our performance relative to competitors.

Organic revenue growth is a non-GAAP measure that refers to revenue excluding the impacts of (i) foreign currency translation, and (ii) acquisitions and divestitures. We believe organic revenue growth provides useful information in evaluating the results of our business because it excludes items that are not indicative of ongoing performance or impact comparability with the prior year. We provide a reconciliation tables showing the change in revenue growth to organic revenue growth in the “[Results of Operations](#)” section found earlier in this Item 7.

In addition to providing non-GAAP financial measures, we disclose Annualized Recurring Revenue (“ARR”) to give the investors supplementary indicators of the value of our current recurring revenue contracts. ARR represents the estimated annualized value of recurring revenue, including subscription, maintenance and support revenue, and term license contracts for the quarter. ARR is calculated by taking our non-GAAP recurring revenue for the current quarter and adding the portion of the contract value of all of our term licenses attributable to the current quarter, and dividing that sum by the number of days in the quarter and then multiplying that quotient by 365. Organic ARR refers to annualized recurring revenue excluding the impacts of (i) foreign currency translation, and (ii) acquisitions and divestitures. ARR and organic ARR should be viewed independently of revenue and deferred revenue as they are performance measures and are not intended to be combined with or to replace either of those items.

The non-GAAP financial measures, definitions, and explanations to the adjustments to comparable GAAP measures are included below:

	Years					
	2022		2021		2020	
	Dollar Amount	% of Revenue	Dollar Amount	% of Revenue	Dollar Amount	% of Revenue
<i>(In millions, except per share data)</i>						
REVENUE:						
GAAP revenue:	\$ 3,676.3		\$ 3,659.1		\$ 3,147.7	
Purchase accounting adjustments (A)	—		0.3		4.3	
Non-GAAP revenue:	\$ 3,676.3		\$ 3,659.4		\$ 3,152.0	
GROSS MARGIN:						
GAAP gross margin:	\$ 2,105.6	57.3 %	\$ 2,034.7	55.6 %	\$ 1,754.9	55.8 %
Purchase accounting adjustments (A)	85.0		88.0		96.6	
Acquisition / divestiture items (B)	0.2		—		1.7	
Stock-based compensation / deferred compensation (C)	12.1		9.8		7.2	
Restructuring and other costs (D)	1.7		0.2		1.2	
Non-GAAP gross margin:	\$ 2,204.6	60.0 %	\$ 2,132.7	58.3 %	\$ 1,861.6	59.1 %
OPERATING EXPENSES:						
GAAP operating expenses:	\$ 1,594.7	43.4 %	\$ 1,473.7	40.3 %	\$ 1,335.1	42.4 %
Purchase accounting adjustments (A)	(46.6)		(46.5)		(60.0)	
Acquisition / divestiture items (B)	(32.6)		(21.8)		(19.7)	
Stock-based compensation / deferred compensation (C)	(99.9)		(118.8)		(83.2)	
Restructuring and other costs (D)	(52.5)		(10.9)		(30.2)	
Non-GAAP operating expenses:	\$ 1,363.1	37.1 %	\$ 1,275.7	34.9 %	\$ 1,142.0	36.2 %
OPERATING INCOME:						
GAAP operating income:	\$ 510.9	13.9 %	\$ 561.0	15.3 %	\$ 419.8	13.3 %
Purchase accounting adjustments (A)	131.6		134.5		156.6	
Acquisition / divestiture items (B)	32.8		21.8		21.4	
Stock-based compensation / deferred compensation (C)	112.0		128.6		90.4	
Restructuring and other costs (D)	54.2		11.1		31.4	
Non-GAAP operating income:	\$ 841.5	22.9 %	\$ 857.0	23.4 %	\$ 719.6	22.8 %

NON-OPERATING INCOME (EXPENSE), NET:						
GAAP non-operating income (expense), net:	\$	58.2		\$	13.6	\$ (24.8)
Acquisition / divestiture items (B)		(107.5)			(42.1)	(12.2)
Deferred compensation (C)		8.5			(6.1)	(7.5)
Restructuring and other costs (D)		6.0			—	—
Non-GAAP non-operating expense, net:	\$	(34.8)		\$	(34.6)	\$ (44.5)
			GAAP and Non-GAAP Tax Rate % (H)		GAAP and Non-GAAP Tax Rate % (H)	GAAP and Non-GAAP Tax Rate % (H)
INCOME TAX PROVISION (BENEFIT):						
GAAP income tax provision:	\$	119.4	21.0 %	\$	81.8	14.2 % \$ 4.4
Non-GAAP items tax effected (E)		49.9			41.4	48.5
Difference in GAAP and Non-GAAP tax rate (F)		(22.9)			7.5	(4.9)
IP restructuring and tax law change impacts (G)		—			14.4	64.0
Non-GAAP income tax provision:	\$	146.4	18.2 %	\$	145.1	17.6 % \$ 112.0
NET INCOME:						
GAAP net income attributable to Trimble Inc.:	\$	449.7		\$	492.7	\$ 389.9
Purchase accounting adjustments (A)		131.6			134.5	156.6
Acquisition / divestiture items (B)		(74.7)			(20.3)	9.2
Stock-based compensation / deferred compensation (C)		120.5			122.5	82.9
Restructuring and other costs (D)		60.2			11.1	31.4
Non-GAAP tax adjustments (E) - (G)		(27.0)			(63.3)	(107.6)
Non-GAAP net income attributable to Trimble Inc.:	\$	660.3		\$	677.2	\$ 562.4
DILUTED NET INCOME PER SHARE:						
GAAP diluted net income per share attributable to Trimble Inc.:	\$	1.80		\$	1.94	\$ 1.55
Purchase accounting adjustments (A)		0.53			0.53	0.62
Acquisition / divestiture items (B)		(0.30)			(0.08)	0.04
Stock-based compensation / deferred compensation (C)		0.48			0.48	0.33
Restructuring and other costs (D)		0.24			0.04	0.12
Non-GAAP tax adjustments (E) - (G)		(0.11)			(0.25)	(0.43)
Non-GAAP diluted net income per share attributable to Trimble Inc.:	\$	2.64		\$	2.66	\$ 2.23
ADJUSTED EBITDA:						
OPERATING INCOME:						
GAAP net income attributable to Trimble Inc.:	\$	449.7		\$	492.7	\$ 389.9
Non-operating income (expense), net, income tax provision, and net gain attributable to noncontrolling interests		61.2			68.3	29.9
GAAP operating income:		510.9			561.0	419.8
Purchase accounting adjustments (A)		131.6			134.5	156.6
Acquisition / divestiture items (B)		32.8			21.8	21.4
Stock-based compensation / deferred compensation (C)		112.0			128.6	90.4
Restructuring and other costs (D)		54.2			11.1	31.4
Non-GAAP operating income:	\$	841.5		\$	857.0	\$ 719.6
Depreciation expense and cloud computing amortization		44.7			42.2	39.7
Income from equity method investments, net		31.1			37.7	39.4
Adjusted EBITDA:	\$	917.3	25.0 %	\$	936.9	25.6 % \$ 798.7
						25.3 %

Non-GAAP Definitions

Non-GAAP revenue

We define Non-GAAP revenue as GAAP revenue, excluding the effects of purchase accounting adjustments for acquisitions occurring prior to 2021. We believe this measure helps investors understand the performance of our business including acquisitions, as non-GAAP revenue excludes the effects of certain acquired deferred revenue that was written down to fair value in purchase accounting. Management believes that excluding fair value purchase accounting adjustments more closely correlates with the ordinary and ongoing course of the acquired company's operations and facilitates analysis of revenue growth and trends.

Non-GAAP gross margin

We define Non-GAAP gross margin as GAAP gross margin, excluding the effects of purchase accounting adjustments, acquisition/divestiture items, stock-based compensation, deferred compensation, and restructuring and other costs. We believe our investors benefit by understanding our non-GAAP gross margin as a way of understanding how product mix, pricing decisions, and manufacturing costs influence our business.

Non-GAAP operating expenses

We define Non-GAAP operating expenses as GAAP operating expenses, excluding the effects of purchase accounting adjustments, acquisition/divestiture items, stock-based compensation, deferred compensation, and restructuring and other costs. We believe this measure is important to investors evaluating our non-GAAP spending in relation to revenue.

Non-GAAP operating income

We define Non-GAAP operating income as GAAP operating income, excluding the effects of purchase accounting adjustments, acquisition/divestiture items, stock-based compensation, deferred compensation, and restructuring, and other costs. We believe our investors benefit by understanding our non-GAAP operating income trends, which are driven by revenue, gross margin, and spending.

Non-GAAP non-operating expense, net

We define Non-GAAP non-operating expenses, net as GAAP non-operating expenses, net, excluding acquisition/divestiture items, deferred compensation, and restructuring and other costs. We believe this measure helps investors evaluate our non-operating expense trends.

Non-GAAP income tax provision

We define Non-GAAP income tax provision as GAAP income tax provision, excluding charges and benefits such as net deferred tax impacts resulting from the non-U.S. intercompany transfer of intellectual property, tax law changes, and significant one-time reserve releases upon the statute of limitations expirations. We believe this measure helps investors because it provides for consistent treatment of excluded items in our non-GAAP presentation and a difference in the GAAP and non-GAAP tax rates.

Non-GAAP net income

We define Non-GAAP net income as GAAP net income, excluding the effects of purchase accounting adjustments, acquisition/divestiture items, stock-based compensation, restructuring and other costs, and non-GAAP tax adjustments. This measure provides a supplemental view of net income trends, which are driven by non-GAAP income before taxes and our non-GAAP tax rate.

Non-GAAP diluted net income per share

We define Non-GAAP diluted net income per share as GAAP diluted net income per share, excluding the effects of purchase accounting adjustments, acquisition/divestiture items, stock-based compensation, restructuring and other costs, and non-GAAP tax adjustments. We believe our investors benefit by understanding our non-GAAP operating performance as reflected in a per share calculation as a way of measuring non-GAAP operating performance by ownership in the company.

Adjusted EBITDA

We define Adjusted EBITDA as non-GAAP operating income plus depreciation expense, cloud computing amortization, and income from equity method investments, net. Other companies may define Adjusted EBITDA differently. Adjusted EBITDA is not intended to purport to be an alternative to net income or operating income as a measure of operating performance or cash flow from operating activities as a measure of liquidity. Adjusted EBITDA is a performance measure that we believe offers a useful view of the overall operations of our business because it facilitates operating performance comparisons by removing

potential differences caused by variations unrelated to operating performance, such as capital structures (interest expense), income taxes, depreciation, and amortization of purchased intangibles and cloud computing costs.

Explanations of Non-GAAP adjustments

- (A) **Purchase accounting adjustments.** Purchase accounting adjustments consist of the following:
- (i) **Acquired deferred revenue adjustment.** We adopted ASU 2021-08 in the fourth quarter of 2021 for all acquisitions occurring in 2021 and going forward, which requires the application of ASC 606, Revenue from Contracts with Customers, to recognize and measure contract assets and contract liabilities on the acquisition date. For acquisitions occurring prior to 2021, non-GAAP revenue excludes the adjustment to our revenue as a result of measuring the contract liability at fair value on the acquisition date.
 - (ii) **Amortization of acquired capitalized commissions.** Purchase accounting generally requires entities to eliminate capitalized sales commissions balances as of the acquisition date. Non-GAAP operating expenses exclude the adjustments that eliminate the capitalized sales commissions. For acquisitions occurring prior to 2021, non-GAAP operating expenses exclude the adjustment of acquired capitalized commissions amortization.
 - (iii) **Amortization of purchased intangible assets.** Non-GAAP gross margin and operating expenses exclude the amortization of purchased intangible assets, which primarily represents technology and/or customer relationships already developed.
- (B) **Acquisition / divestiture items.** Non-GAAP gross margin and operating expenses exclude acquisition costs consisting of external and incremental costs resulting directly from merger and acquisition and strategic investment activities such as legal, due diligence, integration, and other closing costs, including the acceleration of acquisition stock options and adjustments to the fair value of earn-out liabilities. Non-GAAP non-operating expense, net, excludes unusual one-time acquisition/divestiture charges, including foreign currency exchange rate gains/losses related to an acquisition, divestiture gains/losses, and strategic investment impairments. These are one-time costs that vary significantly in amount and timing and are not indicative of our core operating performance.
- (C) **Stock-based compensation / deferred compensation.** Non-GAAP gross margin and operating expenses exclude stock-based compensation and income or expense associated with movement in our non-qualified deferred compensation plan liabilities. Changes in non-qualified deferred compensation plan assets, included in non-operating expense, net, offset the income or expense in the plan liabilities.
- (D) **Restructuring and other costs.** Non-GAAP gross margin and operating expenses exclude restructuring and other costs comprised of termination benefits related to reductions in employee headcount and closure or exit of facilities, executive severance agreements, costs incurred in exiting business activities in Russia and Belarus, other business exit costs, Bridge Facility fees, as well as a \$20 million commitment to donate to the Trimble Foundation to be paid over four quarters.
- (E) **Non-GAAP items tax effected.** This amount adjusts the provision for income taxes to reflect the effect of the non-GAAP items (A) - (D) on non-GAAP net income. This amount excludes the GAAP tax rate impact resulting from the non-U.S. intercompany transfer of intellectual property, which is separately disclosed in item (G).
- (F) **Difference in GAAP and Non-GAAP tax rate.** This amount represents the difference between the GAAP and non-GAAP tax rates applied to the non-GAAP operating income plus the non-GAAP non-operating expense, net. The GAAP tax rate used for this calculation excludes the net deferred tax impacts resulting from the non-U.S. intercompany transfer of intellectual property, which is separately disclosed in item (G). The non-GAAP tax rate excludes charges and benefits such as net deferred tax impacts resulting from a non-U.S. intercompany transfer of intellectual property and significant one-time reserve releases upon statute of limitations expirations.
- (G) **IP restructuring and tax law change impacts.** These amounts represent net deferred tax impacts resulting from a non-U.S. intercompany transfer of intellectual property, consistent with tax law changes, including tax rates changes, and our international business operations.
- (H) **GAAP and non-GAAP tax rate percentages.** These percentages are defined as GAAP income tax provision as a percentage of GAAP income before taxes and non-GAAP income tax provision as a percentage of non-GAAP income before taxes.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk related to changes in interest rates and foreign currency exchange rates. We use certain derivative financial instruments to manage these risks. We do not use derivative financial instruments for speculative purposes. All financial instruments are used in accordance with policies approved by our board of directors.

Market Interest Rate Risk

Our cash equivalents consisted primarily of interest and non-interest bearing bank deposits as well as bank time deposits. The main objective of these instruments is safety of principal and liquidity while maximizing return, without significantly increasing risk.

Due to the nature of our cash equivalents that they are readily convertible to cash, we do not anticipate any material effect on our portfolio due to fluctuations in interest rates.

We are exposed to market risk due to the possibility of changing interest rates under our credit facilities, including the 2022 Credit Facility, 2022 Term Loan Credit Agreement, and the Bridge Facility. We also have four unsecured, uncommitted, revolving credit facilities that are callable by the bank at any time. We may borrow funds under the 2022 Credit Facility and uncommitted facilities in U.S. Dollars, Euros, or in certain other agreed currencies as described in [Note 7 “Debt”](#) of this report.

At the end of 2022, we had two \$75.0 million, one €100.0 million, and one £55.0 million revolving credit facilities, which are uncommitted. At the end of 2022, \$225.0 million was outstanding under the 2022 Credit Facility.

We expect to issue fixed-rate debt in the first half of 2023 as part of the pending acquisition of Transporeon and to refinance existing debt. To minimize interest rate fluctuations, in December 2022, we entered into a contract to offset the changes in the price of U.S. Treasury Notes with an original maturity of 10 years for the period commencing on the contract date and ending May 31, 2023 (“Treasury Rate Lock”). The Treasury Rate Lock is marked-to-market each period through other comprehensive income until the debt is issued, and the effective interest rate method is applied. The nominal amount is \$400 million, and the fair value at the end of 2022 is \$7.2 million.

While not predictive, a hypothetical 50 basis point increase or decrease in the 10-year U.S. Treasury rate as of December 30, 2022 would change the fair value of the Treasury Rate Lock by \$16.5 million.

Foreign Currency Exchange Rate Risk

We operate in international markets, which expose us to market risk associated with foreign currency exchange rate fluctuations between the U.S. Dollar and various foreign currencies, the most significant of which is the Euro. In addition, volatile market conditions arising from the COVID-19 pandemic could result in changes in exchange rates.

Historically, the majority of our revenue contracts are denominated in U.S. Dollars, with the most significant exception being Europe, where we invoice primarily in Euro. Additionally, a portion of our expenses, primarily the cost to manufacture, cost of personnel to deliver technical support on our products and professional services, sales and sales support, and research and development, are denominated in foreign currencies, primarily the Euro.

Revenue resulting from selling in local currencies and costs incurred in local currencies are exposed to foreign currency exchange rate fluctuations, which can affect our operating income. As exchange rates vary, operating income may differ from expectations. In 2022, revenue and operating income were unfavorably impacted by foreign currency exchange rates by \$114.1 million and \$26.0 million.

We enter into foreign currency forward contracts to minimize the short-term impact of foreign currency exchange rate fluctuations on cash, debt, and certain trade and intercompany receivables and payables, primarily denominated in Euro, New Zealand Dollars, Brazilian Real, and Canadian Dollars. These contracts reduce the exposure to fluctuations in foreign currency exchange rate movements, as the gains and losses associated with foreign currency balances are generally offset with the gains and losses on the forward contracts. Additionally, in December 2022, we entered into a foreign currency exchange rate contract to minimize foreign currency fluctuations on the €1.88 billion or \$2.0 billion pending acquisition of Transporeon.

Our foreign currency contracts are marked-to-market through earnings every period and generally range in maturity from one to two months, or from four to six months for acquisitions. We do not enter into foreign currency contracts for trading purposes. Foreign currency contracts outstanding at the end of 2022 and 2021 are summarized as follows:

	At the End of 2022		At the End of 2021	
	Nominal Amount	Fair Value	Nominal Amount	Fair Value
<i>(In millions)</i>				
Forward contracts:				
Purchased	\$ (77.9)	\$ —	\$ (107.5)	\$ 0.1
Sold	\$ 130.6	\$ 0.2	\$ 183.6	\$ (0.2)
Foreign currency exchange contract related to acquisition	\$ 1,999.4	\$ 10.4	\$ —	\$ —

While not predictive, a hypothetical 5% decrease in the Euro as of December 30, 2022 would change the fair value of the foreign currency exchange contract related to the pending acquisition of Transporeon by \$68 million.

**TRIMBLE INC.
INDEX TO FINANCIAL STATEMENTS**

Consolidated Balance Sheets	52
Consolidated Statements of Income	53
Consolidated Statements of Comprehensive Income	54
Consolidated Statements of Stockholders' Equity	55
Consolidated Statements of Cash Flows	56
Notes to Consolidated Financial Statements	57
Reports of Independent Registered Public Accounting Firm (PCAOB ID: 42)	77

Item 8. Financial Statements and Supplementary Data
CONSOLIDATED BALANCE SHEETS

At the End of Year	2022	2021
<i>(In millions, except par values)</i>		
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 271.0	\$ 325.7
Accounts receivable, net	643.3	624.8
Inventories	402.5	363.3
Other current assets	201.4	136.8
Total current assets	1,518.2	1,450.6
Property and equipment, net	219.0	233.2
Operating lease right-of-use assets	121.2	141.0
Goodwill	4,137.9	3,981.5
Other purchased intangible assets, net	498.1	506.6
Deferred income tax assets	438.4	502.0
Other non-current assets	336.2	284.7
Total assets	<u>\$ 7,269.0</u>	<u>\$ 7,099.6</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term debt	\$ 300.0	\$ —
Accounts payable	175.5	207.3
Accrued compensation and benefits	159.4	231.0
Deferred revenue	639.1	548.8
Other current liabilities	188.1	201.5
Total current liabilities	1,462.1	1,188.6
Long-term debt	1,220.0	1,293.2
Deferred revenue, non-current	98.5	83.0
Deferred income tax liabilities	157.8	263.1
Income taxes payable	40.9	54.5
Operating lease liabilities	105.1	121.4
Other non-current liabilities	134.4	151.1
Total liabilities	3,218.8	3,154.9
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 3.0 shares authorized; none issued and outstanding	—	—
Common stock, \$0.001 par value; 360.0 shares authorized; 246.9 and 250.9 shares issued and outstanding at the end of 2022 and 2021	0.2	0.3
Additional paid-in-capital	2,054.9	1,935.6
Retained earnings	2,230.0	2,170.5
Accumulated other comprehensive loss	(234.9)	(161.7)
Total stockholders' equity	4,050.2	3,944.7
Total liabilities and stockholders' equity	<u>\$ 7,269.0</u>	<u>\$ 7,099.6</u>

See accompanying Notes to the Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF INCOME

	2022	2021	2020
<i>(In millions, except per share data)</i>			
Revenue:			
Product	\$ 2,152.0	\$ 2,247.5	\$ 1,828.0
Service	641.3	649.4	644.8
Subscription	883.0	762.2	674.9
Total revenue	<u>3,676.3</u>	<u>3,659.1</u>	<u>3,147.7</u>
Cost of sales:			
Product	1,046.1	1,090.1	855.0
Service	235.7	229.9	234.5
Subscription	203.9	216.7	211.0
Amortization of purchased intangible assets	85.0	87.7	92.3
Total cost of sales	<u>1,570.7</u>	<u>1,624.4</u>	<u>1,392.8</u>
Gross margin	2,105.6	2,034.7	1,754.9
Operating expense:			
Research and development	542.1	536.6	475.9
Sales and marketing	553.6	506.8	467.0
General and administrative	422.2	369.1	300.9
Restructuring charges	30.2	10.3	25.8
Amortization of purchased intangible assets	46.6	50.9	65.5
Total operating expense	<u>1,594.7</u>	<u>1,473.7</u>	<u>1,335.1</u>
Operating income	510.9	561.0	419.8
Non-operating income (expense), net:			
Divestitures gain, net	99.0	41.4	13.1
Interest expense, net	(71.1)	(65.4)	(77.6)
Income from equity method investments, net	31.1	37.7	39.4
Other income (expense), net	(0.8)	(0.1)	0.3
Total non-operating income (expense), net	<u>58.2</u>	<u>13.6</u>	<u>(24.8)</u>
Income before taxes	569.1	574.6	395.0
Income tax provision	119.4	81.8	4.4
Net income	449.7	492.8	390.6
Net income attributable to noncontrolling interests	—	0.1	0.7
Net income attributable to Trimble Inc.	<u>\$ 449.7</u>	<u>\$ 492.7</u>	<u>\$ 389.9</u>
Earnings per share attributable to Trimble Inc.:			
Basic	\$ 1.81	\$ 1.96	\$ 1.56
Diluted	\$ 1.80	\$ 1.94	\$ 1.55
Shares used in calculating earnings per share:			
Basic	248.6	251.4	250.5
Diluted	250.2	254.3	252.3

See accompanying Notes to the Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	<u>2022</u>	<u>2021</u>	<u>2020</u>
<i>(In millions)</i>			
Net income	\$ 449.7	\$ 492.8	\$ 390.6
Other comprehensive income (loss), net of tax			
Foreign currency translation adjustments	(81.6)	(64.0)	77.1
Net change related to derivatives and other	8.4	0.8	1.2
Comprehensive income	<u>376.5</u>	<u>429.6</u>	<u>468.9</u>
Comprehensive income attributable to noncontrolling interests	—	0.1	0.7
Comprehensive income attributable to Trimble Inc.	<u>\$ 376.5</u>	<u>\$ 429.5</u>	<u>\$ 468.2</u>

See accompanying Notes to the Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common stock			Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	Noncontrolling Interest	Total
	Shares	Amount	Additional Paid-In Capital					
<i>(In millions)</i>								
Balance at the end of 2019	249.9	\$ 0.2	\$ 1,692.8	\$ 1,602.8	\$ (176.8)	\$ 3,119.0	\$ 1.4	\$ 3,120.4
Net income	—	—	—	389.9	—	389.9	0.7	390.6
Other comprehensive income	—	—	—	—	78.3	78.3	—	78.3
Comprehensive income						468.2		468.9
Issuance of common stock under employee plans, net of tax withholdings	2.8	0.1	40.6	(30.7)	—	10.0	—	10.0
Stock repurchases	(1.9)	—	(13.0)	(68.6)	—	(81.6)	—	(81.6)
Stock-based compensation	—	—	81.3	—	—	81.3	—	81.3
Noncontrolling interest investments	—	—	—	—	—	—	(0.4)	(0.4)
Balance at the end of 2020	250.8	\$ 0.3	\$ 1,801.7	\$ 1,893.4	\$ (98.5)	\$ 3,596.9	\$ 1.7	\$ 3,598.6
Net income	—	—	—	492.7	—	492.7	0.1	492.8
Other comprehensive income	—	—	—	—	(63.2)	(63.2)	—	(63.2)
Comprehensive income						429.5		429.6
Issuance of common stock under employee plans, net of tax withholdings	2.2	—	36.2	(51.3)	—	(15.1)	—	(15.1)
Stock repurchases	(2.1)	—	(15.7)	(164.3)	—	(180.0)	—	(180.0)
Stock-based compensation	—	—	112.8	—	—	112.8	—	112.8
Noncontrolling interest investments	—	—	0.6	—	—	0.6	(1.8)	(1.2)
Balance at the end of 2021	250.9	\$ 0.3	\$ 1,935.6	\$ 2,170.5	\$ (161.7)	\$ 3,944.7	\$ —	\$ 3,944.7
Net income	—	—	—	449.7	—	449.7	—	449.7
Other comprehensive loss	—	—	—	—	(73.2)	(73.2)	—	(73.2)
Comprehensive income						376.5		376.5
Issuance of common stock under employee plans, net of tax withholdings	2.0	—	29.6	(43.2)	—	(13.6)	—	(13.6)
Stock repurchases	(6.0)	(0.1)	(47.6)	(347.0)	—	(394.7)	—	(394.7)
Stock-based compensation	—	—	137.3	—	—	137.3	—	137.3
Balance at the end of 2022	246.9	\$ 0.2	\$ 2,054.9	\$ 2,230.0	\$ (234.9)	\$ 4,050.2	\$ —	\$ 4,050.2

See accompanying Notes to the Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	2022	2021	2020
<i>(In millions)</i>			
Cash flows from operating activities			
Net income	\$ 449.7	\$ 492.8	\$ 390.6
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation expense	40.2	41.3	39.7
Amortization expense	131.6	138.6	157.8
Deferred income taxes	(40.0)	(26.9)	(52.9)
Stock-based compensation	120.4	122.6	83.0
Divestitures gain, net	(99.0)	(43.9)	(12.2)
Other, net	41.7	19.2	42.4
(Increase) decrease in assets:			
Accounts receivable, net	(55.4)	(9.0)	(14.0)
Inventories	(113.5)	(72.9)	(5.0)
Other current and non-current assets	(46.3)	(30.2)	2.5
Increase (decrease) in liabilities:			
Accounts payable	(24.8)	60.3	(15.7)
Accrued compensation and benefits	(54.2)	54.1	34.9
Deferred revenue	108.6	27.4	65.7
Other current and non-current liabilities	(67.8)	(22.9)	(44.8)
Net cash provided by operating activities	391.2	750.5	672.0
Cash flow from investing activities:			
Acquisitions of businesses, net of cash acquired	(373.5)	(236.1)	(201.9)
Purchases of property and equipment	(43.2)	(46.1)	(56.8)
Net proceeds from divestitures	215.4	67.3	27.5
Other, net	(25.0)	11.4	(0.6)
Net cash used in investing activities	(226.3)	(203.5)	(231.8)
Cash flows from financing activities:			
Issuance of common stock, net of tax withholdings	(13.6)	(15.1)	10.0
Repurchases of common stock	(394.7)	(180.0)	(81.6)
Proceeds from debt and revolving credit lines	814.8	198.9	1,173.8
Payments on debt and revolving credit lines	(590.2)	(449.9)	(1,486.0)
Other, net	(15.3)	(1.6)	(16.5)
Net cash used in financing activities	(199.0)	(447.7)	(400.3)
Effect of exchange rate changes on cash and cash equivalents	(20.6)	(11.3)	8.6
Net (decrease) increase in cash and cash equivalents	(54.7)	88.0	48.5
Cash and cash equivalents - beginning of year	325.7	237.7	189.2
Cash and cash equivalents - end of year	\$ 271.0	\$ 325.7	\$ 237.7
Supplemental cash flow disclosure:			
Cash paid for income taxes, net	\$ 197.3	\$ 98.3	\$ 59.0
Cash paid for interest	\$ 73.1	\$ 61.8	\$ 71.8

See accompanying Notes to the Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: DESCRIPTION OF BUSINESS AND ACCOUNTING POLICIES

Trimble Inc., (“we” or “our” or “us”) is incorporated in the State of Delaware since October 2016.

We are a leading provider of technology solutions that enable professionals and field mobile workers to improve or transform their work processes. We focus on transforming the way the world works by delivering products and services that connect the physical and digital worlds. We generate revenue primarily through the sale of our hardware, software, maintenance and support, professional services, and subscriptions.

Basis of Presentation

These Consolidated Financial Statements include our results of our consolidated subsidiaries. Intercompany accounts and transactions have been eliminated. Noncontrolling interests represent the noncontrolling stockholders’ proportionate share of the net assets and results of operations of our consolidated subsidiaries.

We use a 52–53 week fiscal year ending on the Friday nearest to December 31. Fiscal 2022, 2021, and 2020 were all 52-week years ending on December 30, 2022, December 31, 2021, and January 1, 2021. Unless otherwise stated, all dates refer to our fiscal year and fiscal periods.

Use of Estimates

The preparation of financial statements in accordance with U.S. generally accepted accounting principles (“GAAP”) requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Estimates and assumptions are used for revenue recognition, including determining the nature and timing of satisfaction of performance obligations and determining standalone selling price (“SSP”) of performance obligations, provision for credit losses, sales returns reserve, inventory valuation, warranty costs, investments, acquired intangibles, goodwill and intangible asset impairment analysis, other long-lived asset impairment analysis, stock-based compensation, and income taxes. We base our estimates on historical experience and various other assumptions we believe to be reasonable. Actual results that we experience may differ materially from our estimates.

Reportable Segments

We report our financial performance, including revenue and operating income, based on four reportable segments: Buildings and Infrastructure, Geospatial, Resources and Utilities, and Transportation.

Our Chief Executive Officer and Chief Operating Decision Maker views and evaluates operations based on the results of our reportable operating segments under our management reporting system. These results are not necessarily in conformance with U.S. GAAP.

Revenue Recognition

Significant Judgments

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. Revenue is recognized net of allowance for returns and any taxes collected from customers. We enter into contracts that may include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations; however, determining whether products or services are considered distinct performance obligations that should be accounted for separately versus together may sometimes require significant judgment.

Judgment is required to determine SSP for each performance obligation. We use a range of amounts to estimate SSP when products and services are sold separately and determine whether there is a discount to be allocated based on the relative SSP of the various products and services. In instances where SSP is not directly observable, we determine SSP using information that may include market conditions and other observable inputs.

Nature of Goods and Services

We generate revenue primarily from products, services, and subscriptions; each of which is a distinct performance obligation. Descriptions are as follows:

Product

Product revenue includes hardware and software licenses.

Hardware is recognized when the control of the product transfers to the customer, which is generally when the product is shipped. We recognize shipping fees reimbursed by customers as revenue and the cost for shipping as an expense in Cost of sales when control over products has transferred to the customer.

Software including perpetual and term licenses is recognized upon delivery and commencement of license term. In general, our contracts do not provide for customer specific acceptances.

Service

Service revenue includes hardware and software maintenance and support and professional services.

Hardware maintenance and support, commonly called extended warranty, entitles the customer to receive replacement parts and repair services.

Extended warranty is separately priced and is recognized on a straight-line basis over the extended service period, which begins after the standard warranty period, ranging from one to two years depending on the product line.

Software maintenance and support entitles the customer to receive software product upgrades and enhancements on a when and if available basis and technical support. Software maintenance is recognized on a straight-line basis commencing upon product delivery over the post-contract support term, which ranges from one to three years, with one year being most common.

Professional services include installation, training, configuration, project management, system integrations, customization, data migration/conversion, and other implementation services. The majority of professional services are not complex, can be provided by other vendors, and are readily available and billed on a time-and-material basis. Revenue for distinct professional services is recognized over time, based on work performed.

Subscription

Subscription revenue includes Software as a Service (“SaaS”), data, and hosting services.

SaaS may be sold with devices used to collect, generate, and transmit data. SaaS is distinct from the related devices. In addition, we may host the software that the customer has separately licensed. Hosting services are distinct from the underlying software.

Subscription terms generally range from month-to-month to one to three years. Subscription revenue is recognized monthly over the subscription term, commencing from activation.

Accounts Receivable, Net

Accounts receivable, net, includes billed and unbilled amounts due from customers. Unbilled receivables include revenue recognized that exceeds the amount billed to the customer, provided the billing is not contingent upon future performance, and we have the unconditional right to future payment with only the passage of time required. Both billed and unbilled amounts due are stated at their net estimated realizable value. The unbilled receivables were \$33.6 million and \$39.5 million at the end of 2022 and 2021.

We maintain an allowance for credit losses to provide for the estimated amount of receivables that will not be collected. Each reporting period, we evaluate the collectability of our trade accounts receivable based on a number of factors such as age of the accounts receivable balances, credit quality, historical experience, and current and future economic conditions that may affect a customer’s ability to pay. At the end of 2022 and 2021, our allowance for credit losses was \$5.9 million and \$7.0 million. The provision for credit losses for the years ended 2022, 2021, and 2020 were \$7.7 million, \$2.6 million, and \$7.1 million.

Deferred Costs to Obtain Customer Contracts

Sales commissions incurred in obtaining contracts that include maintenance or subscription revenue are deferred if the contractual term is greater than a year or if renewals are expected, and the renewal commission is not commensurate with the initial commission. These commission costs are deferred and amortized over the estimated benefit period, which is either the contract term or the shorter of customer life or product life that ranges from three to seven years. Contracts with an amortization period of a year or less from this deferral requirement are expensed as incurred.

At the end of 2022 and 2021, deferred costs to obtain customer contracts were \$74.7 million and \$59.7 million. These costs are included in Other non-current assets in the Consolidated Balance Sheets.

Amortization expense related to deferred costs to obtain customer contracts was \$32.0 million, \$25.9 million, and \$22.8 million, for 2022, 2021, and 2020. This expense is included in Sales and marketing expense in our Consolidated Statements of Income.

Inventories

Inventories are stated at the lower of cost or net realizable value. Adjustments are also made to reduce the cost of inventory for estimated excess or obsolete balances. Factors influencing these adjustments include declines in demand that impact inventory purchasing forecasts, technological changes, product lifecycle and development plans, component cost trends, product pricing, physical deterioration, and quality issues. If our estimate used to reserve for excess and obsolete inventory differs from what is expected, we may be required to recognize additional reserves, which would negatively impact our gross margin.

Property and Equipment, Net

Property and equipment are depreciated using the straight-line method over the shorter of the estimated useful lives or the lease terms when applicable. Useful lives generally range from four to six years for machinery and equipment, five to ten years for furniture and fixtures, two to five years for computer equipment and software, thirty-nine years for buildings, and the life of the lease for leasehold improvements. We capitalize eligible costs to acquire or develop certain internal-use software and amortize those assets using the straight-line method over the estimated useful lives of the assets, which range from two to five years.

Leases

We determine if an arrangement is a lease at inception. Operating leases with lease terms greater than one year are included in Operating lease right-of-use (“ROU”) assets, in both Other current liabilities, and Operating lease liabilities in our Consolidated Balance Sheets.

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. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. Present value is determined by using our incremental borrowing rate based on the estimated rate of interest for collateralized borrowings over a similar term of the lease payments at commencement date. The operating lease ROU asset includes adjustments made for uneven rents, lease incentives, and lease impairments. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Lease agreements that include both lease and non-lease components are accounted for as part of the overall lease arrangement.

Business Combinations

We allocate the fair value of purchase consideration to the assets acquired, liabilities assumed, and any noncontrolling interest based on their fair values at the acquisition date. When determining the fair values, we make significant estimates and assumptions, especially concerning intangible assets. Critical estimates when valuing intangible assets include expected future cash flows based on consideration of future growth rates and margins, customer attrition rates, future changes in technology and brand awareness, loyalty and position, and discount rates. Any purchase consideration in excess of the fair values of the net assets acquired is recorded as goodwill.

Amounts recorded in a business combination may change during the measurement period, which is a period not to exceed one year from the date of acquisition, as additional information about conditions existing at the acquisition date becomes available.

Acquisition costs are expensed as incurred.

Goodwill

We evaluate goodwill on an annual basis or more frequently if indicators of potential impairment exist. To determine whether goodwill is impaired, we first assess qualitative factors. Qualitative factors include but are not limited to macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, or other relevant company-specific events. If it is determined more likely than not that the fair value of a goodwill reporting unit is less than its carrying amount, we perform a quantitative analysis. Alternatively, we may bypass the qualitative assessment and perform a quantitative impairment test.

When performing a quantitative approach, we compare the reporting unit’s carrying amount, including goodwill, to the reporting unit’s fair value. The estimation of a reporting unit’s fair value involves using estimates and assumptions, including expected future operating performance using risk-adjusted discount rates. If the reporting unit’s carrying amount exceeds its fair value, an impairment loss is recognized.

Intangible Assets

Intangible assets acquired in a business combination are recorded at fair value. Our intangible assets are amortized over the period of estimated benefit using the straight-line method over their estimated useful lives, which range from three years to ten years and have a weighted-average useful life of approximately seven years. We write off fully amortized intangible assets when those assets are no longer used.

We review intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of those assets may not be recoverable based on their future cash flows. The estimated future cash flows are primarily based upon assumptions about expected future operating performance.

Warranty

We accrue for warranty costs as part of our cost of sales based on associated material product costs, technical support labor costs, and costs incurred by third parties performing work on our behalf. Our expected future cost is primarily estimated based upon historical trends in the volume of product returns within the warranty period and the cost to repair or replace the equipment. When products sold include warranty provisions, they are covered by a warranty for periods ranging from one year to two years.

Accrued warranty expenses of \$11.7 million and \$17.1 million are included in Other current liabilities in the Consolidated Balance Sheets at the end of 2022 and 2021.

Foreign Currency Translation

Assets and liabilities recorded in foreign currency are translated to U.S. dollars at the exchange rates on the balance sheet date. Revenue and expense are translated at average monthly exchange rates during the year. Translation adjustments resulting from this process are recorded to other comprehensive income.

Stock-Based Compensation

Stock-based compensation expense is based on the measurement date fair value of the awards, net of expected forfeitures. Expense is generally recognized on a straight-line basis over the requisite service period of the stock awards. The estimate of the forfeiture rate is based on historical experience.

Research and Development Costs

Research and development costs are expensed as incurred. Development costs for software to be sold subsequent to reaching technical feasibility were not significant and were expensed as incurred. We offset research and development expense with any unconditional third party funding earned and retain the rights to any technology developed under such arrangements.

Income Taxes

Income taxes are accounted for under the liability method, whereby deferred tax assets or liability account balances are calculated at the balance sheet date using current tax laws and rates in effect for the year in which the differences are expected to affect taxable income. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets if it is more likely than not such assets will not be realized. Our valuation allowance is primarily attributable to foreign net operating losses and state research and development credit carryforwards.

Relative to uncertain tax positions, we only recognize a tax benefit if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. We consider many factors when evaluating and estimating our tax positions and tax benefits, which may require periodic adjustments and may not accurately forecast actual tax audit outcomes. Changes in recognition or measurement of our uncertain tax positions would result in the recognition of a tax benefit or an additional charge to the tax provision. Our practice is to recognize interest and/or penalties related to income tax matters in income tax expense.

We are subject to income taxes in the U.S. and numerous other countries and are subject to routine corporate income tax audits in many of these jurisdictions. We generally believe that positions taken on our tax returns are more likely than not to be sustained upon audit, but tax authorities in some circumstance have, and may in the future, successfully challenge these positions. Accordingly, our income tax provision includes amounts intended to satisfy assessments that may result from these challenges. The amounts ultimately paid on resolution of an audit could be materially different from the amounts previously included in our income tax provision and, therefore, could have a material impact on our income tax provision, net income, and cash flows.

Concentrations of Risk

Cash and cash equivalents are maintained with several financial institutions. Deposits held with banks may exceed the amount of insurance provided on such deposits. Generally, these deposits may be redeemed upon demand and are maintained with financial institutions of reputable credit and therefore bear minimal credit risk.

We are also exposed to credit risk in our trade receivables, which are derived from sales to end-user customers in diversified industries as well as various resellers. We perform ongoing credit evaluations of our customers' financial conditions and limit the amount of credit extended, when deemed necessary, but generally do not require collateral.

In addition, we rely on a limited number of suppliers for a number of our critical components.

Guarantees, Including Indirect Guarantees of Indebtedness of Others

In the normal course of business to facilitate sales of our products, we indemnify other parties, including customers, lessors, and parties to other transactions with us with respect to certain matters. We may agree to hold the other party harmless against losses arising from a breach of representations or covenants, or out of intellectual property infringement or other claims made against certain parties. These agreements may limit the time within which an indemnification claim can be made and the amount of the claim. In connection with divesting some of our businesses or assets, we may also indemnify purchasers for certain matters in the normal course of business, such as breaches of representations, covenants, or excluded liabilities. In addition, we entered into indemnification agreements with our officers and directors, and our bylaws contain similar indemnification obligations to our agents.

It is not possible to determine the maximum potential amount under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement. Historically, payments made under these agreements were not material, and no liabilities have been recorded for these obligations in the Consolidated Balance Sheets at the end of 2022 and 2021.

Derivative Financial Instruments

We enter into foreign exchange forward contracts to minimize the short-term impact of foreign currency fluctuations on cash and certain trade and intercompany receivables and payables, primarily denominated in New Zealand Dollars, Brazil Real, Canadian Dollars, Norwegian Krone, and Euro. These contracts reduce the exposure to fluctuations in foreign currency exchange rate movements, as the gains and losses associated with foreign currency balances are generally offset with the gains and losses on the forward contracts. We occasionally enter into foreign currency contracts to minimize the impact of foreign currency fluctuations on the purchase price of pending acquisitions, including the fourth quarter of 2022 foreign currency contract for the €1.88 billion or \$2.0 billion pending acquisition of Transporeon. The above-mentioned foreign currency contracts are marked-to-market through earnings every reporting period and generally range in maturity from one to two months, or from four to six months for contracts related to acquisitions. We do not enter into foreign currency forward contracts for trading purposes.

In the fourth quarter of 2022, in conjunction with the pending acquisition of Transporeon, we entered into a contract to offset the changes in the price of U.S. Treasury Notes with an original maturity of 10 years ("Treasury Rate Lock"). The purpose of the Treasury Rate Lock is to minimize the impact of interest rate fluctuations on new fixed-rate debt expected to be issued in connection with this acquisition. This derivative contract is accounted for as a cash flow hedge and is marked-to-market each period with gains or losses recorded through other comprehensive income. Upon issuance of the debt, the derivative is settled, and the other comprehensive income is amortized as interest expense over the 10-year debt term by use of the effective interest rate method. At the end of 2021, there were no derivatives outstanding that were accounted for as hedges.

Recently issued Accounting Pronouncements not yet Adopted

There are no recently issued accounting pronouncements applicable or material to us not yet adopted.

Recent Adopted Accounting Pronouncements

There are no recently adopted accounting pronouncements.

NOTE 2: EARNINGS PER SHARE

Basic earnings per share is computed based on the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share is computed based on the weighted-average number of shares of common stock outstanding during the period plus additional shares of common stock that would have been outstanding if potentially dilutive securities had been issued. Potentially dilutive common shares include outstanding stock options, RSUs, contingently issuable shares, and shares to be purchased under our ESPP.

The following table shows the computation of basic and diluted earnings per share:

	2022	2021	2020
<i>(In millions, except per share data)</i>			
Numerator:			
Net income attributable to Trimble Inc.	\$ 449.7	\$ 492.7	\$ 389.9
Denominator:			
Weighted average number of common shares used in basic earnings per share	248.6	251.4	250.5
Effect of dilutive securities	1.6	2.9	1.8
Weighted average number of common shares and dilutive potential common shares used in diluted earnings per share	250.2	254.3	252.3
Basic earnings per share	\$ 1.81	\$ 1.96	\$ 1.56
Diluted earnings per share	\$ 1.80	\$ 1.94	\$ 1.55
Antidilutive weighted-average shares ⁽¹⁾	1.3	0.1	0.5

(1) Antidilutive stock-based awards are excluded from the calculation of diluted shares and diluted earnings per share because their impact would increase diluted earnings per share.

NOTE 3: ACQUISITIONS AND DIVESTITURES
Acquisitions

In December 2022, we entered into a definitive agreement to acquire Transporeon in an all-cash transaction valued at approximately €1.88 billion or \$2.0 billion. Transporeon, a Germany-based company, is a leading cloud-based transportation management software platform that connects key stakeholders across the industry lifecycle to positively impact the optimization of global supply chains, in alignment with our Connect and Scale strategy. We believe the acquisition will advance our sustainability strategy by reducing under-utilized carrier capacity and “empty miles” and increase our international footprint and long-term Transportation opportunities. The acquisition will be funded through a combination of cash on hand and new debt. We expect this acquisition to close in the first half of 2023, subject to customary closing conditions including regulatory approvals in certain international countries. Following the closing, we intend to integrate Transporeon into our Transportation segment for financial reporting purposes.

In 2022, we acquired two businesses, with total purchase consideration of \$379.5 million. The largest acquisition was Bid2Win Software, LLC, a leading provider of estimating and operations solutions for the heavy civil construction industry. In the aggregate, the businesses acquired contributed less than 1% of our total revenue during 2022. The Condensed Consolidated Statements of Income include the operating results of the acquired businesses from the date of acquisitions.

During 2021, we acquired AgileAssets, with total purchase consideration of \$237.5 million. AgileAssets is a provider of SaaS solutions for transportation asset lifecycle management. The acquisition contributed less than 1% of our total revenue during 2021.

During 2020, we acquired three businesses, with total purchase consideration of \$205.1 million. The acquisitions were not significant individually or in the aggregate. In the aggregate, the businesses acquired contributed less than 1% of our total revenue during 2020.

Acquisition costs of \$20.4 million, \$13.6 million, and \$20.3 million in 2022, 2021, and 2020, were expensed as incurred and are included in Cost of sales and General and administrative expenses in our Consolidated Statements of Income.

The following table summarizes the business combinations completed during the periods indicated:

<i>(In millions)</i>	2022	2021	2020
Fair value of total purchase consideration	\$ 379.5	\$ 237.5	\$ 205.1
Less fair value of net assets acquired:			
Net tangible assets acquired	(9.2)	(5.2)	(1.6)
Identified intangible assets	131.4	67.2	56.7
Deferred taxes	(0.8)	—	0.7
Goodwill	\$ 258.1	\$ 175.5	\$ 149.3

Divestitures

In 2022, we divested six businesses with total proceeds of \$226.3 million. The largest divestiture was the sale of Time and Frequency, LOADRITE, Spectra Precision Tools, and SECO accessories businesses to Precisional LLC, an affiliate of The Jordan Company (“TJC”), for \$205.1 million in cash, which included a working capital adjustment.

In 2021 and 2020, divestitures were not material to the financial statements.

NOTE 4: INTANGIBLE ASSETS AND GOODWILL

Intangible Assets

The following table presents a summary of our intangible assets:

<i>(In millions)</i>	At the End of 2022				At the End of 2021			
	Weighted-Average Useful Lives (in years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	
Developed product technology	6	\$ 1,004.8	\$ (722.7)	\$ 282.1	\$ 1,011.9	\$ (748.2)	\$ 263.7	
Customer relationships	8	654.1	(445.9)	208.2	667.8	(428.9)	238.9	
Trade names and trademarks	6	39.5	(32.7)	6.8	48.0	(45.0)	3.0	
Distribution rights and other intellectual properties	4	8.0	(7.0)	1.0	10.0	(9.0)	1.0	
		\$ 1,706.4	\$ (1,208.3)	\$ 498.1	\$ 1,737.7	\$ (1,231.1)	\$ 506.6	

As of the end of 2022 and 2021, \$79.9 million and \$160.1 million of fully amortized intangible assets were written off.

The estimated future amortization expense of intangible assets at the end of 2022 was as follows:

<i>(In millions)</i>	
2023	\$ 133.5
2024	109.0
2025	73.5
2026	67.2
2027	53.5
Thereafter	61.4
Total	\$ 498.1

Goodwill

The changes in the carrying amount of goodwill by segment were as follows:

<i>(In millions)</i>	Buildings and Infrastructure	Geospatial	Resources and Utilities	Transportation	Total
Balance as of year end 2021	\$ 2,141.4	\$ 403.6	\$ 440.8	\$ 995.7	\$ 3,981.5
Additions due to acquisition	214.4	—	43.7	—	258.1
Decrease from divestitures	(23.9)	(6.9)	—	(6.9)	(37.7)
Foreign currency translation and other adjustments	(31.8)	(14.6)	(12.7)	(4.9)	(64.0)
Balance as of year end 2022	<u>\$ 2,300.1</u>	<u>\$ 382.1</u>	<u>\$ 471.8</u>	<u>\$ 983.9</u>	<u>\$ 4,137.9</u>

NOTE 5: CERTAIN BALANCE SHEET COMPONENTS

The components of inventory, net were as follows:

<u>At the End of Year</u> <i>(In millions)</i>	<u>2022</u>	<u>2021</u>
Inventories:		
Raw materials	\$ 154.9	\$ 129.6
Work-in-process	13.1	12.4
Finished goods	234.5	221.3
Total inventories	<u>\$ 402.5</u>	<u>\$ 363.3</u>

Finished goods includes \$16.9 million and \$13.7 million at the end of 2022 and 2021 for costs of sales that have been deferred in connection with deferred revenue arrangements.

The components of property and equipment, net were as follows:

<u>At the End of Year</u> <i>(In millions)</i>	<u>2022</u>	<u>2021</u>
Property and equipment, net:		
Land, building, furniture, and leasehold improvements	\$ 244.4	\$ 238.8
Machinery and equipment	177.6	185.8
Software and licenses	146.4	150.9
Construction in progress	10.1	20.7
	578.5	596.2
Less: accumulated depreciation	(359.5)	(363.0)
Total property and equipment, net	<u>\$ 219.0</u>	<u>\$ 233.2</u>

The components of accumulated other comprehensive loss, net of related tax were as follows:

<u>At the End of Year</u> <i>(In millions)</i>	<u>2022</u>	<u>2021</u>
Accumulated foreign currency translation adjustments	\$ (241.6)	\$ (160.0)
Gain on cash flow hedge	5.4	—
Net unrealized actuarial gains (losses)	1.3	(1.7)
Total accumulated other comprehensive loss	<u>\$ (234.9)</u>	<u>\$ (161.7)</u>

NOTE 6: REPORTING SEGMENT AND GEOGRAPHIC INFORMATION

We determined our operating segments based on how our Chief Operating Decision Maker (“CODM”) views and evaluates operations. Various factors, including market separation and customer-specific applications, go-to-market channels, and products and services, were considered in determining these operating segments. Our CODM regularly reviews our segment operating results to make decisions about resources to be allocated to each segment and assess performance. In each of our

segments, we sell many individual products. For this reason, it is impracticable to segregate and identify revenue for each of the individual products or group of products we sell.

Our reportable segments are described below:

- **Buildings and Infrastructure.** This segment primarily serves customers working in architecture, engineering, construction, and operations and maintenance.
- **Geospatial.** This segment primarily serves customers working in surveying, engineering, and government.
- **Resources and Utilities.** This segment primarily serves customers working in agriculture, forestry, and utilities.
- **Transportation.** This segment primarily serves customers working in long haul trucking and freight shipper markets.

The following Reporting Segment tables reflect the results of our reportable operating segments under our management reporting system. These results are not necessarily in conformity with U.S. GAAP. This is consistent with the way the CODM evaluates each of the segment's performance and allocates resources.

	Reporting Segments				
	Buildings and Infrastructure	Geospatial	Resources and Utilities	Transportation	Total
<i>(In millions)</i>					
2022					
Segment revenue	\$ 1,494.0	\$ 756.5	\$ 821.6	\$ 604.2	\$ 3,676.3
Segment operating income	406.3	221.4	278.3	58.8	964.8
2021					
Segment revenue	\$ 1,422.7	\$ 828.9	\$ 771.3	\$ 636.5	\$ 3,659.4
Segment operating income	411.7	244.1	264.0	43.4	963.2
2020					
Segment revenue	\$ 1,231.0	\$ 650.5	\$ 630.0	\$ 640.5	\$ 3,152.0
Segment operating income	338.1	184.4	221.0	50.1	793.6

	Reporting Segments				
	Buildings and Infrastructure	Geospatial	Resources and Utilities	Transportation	Total
<i>(In millions)</i>					
As of Year End 2022					
Accounts receivable, net	\$ 305.1	\$ 137.2	\$ 79.2	\$ 121.8	\$ 643.3
Inventories	93.2	146.1	100.3	62.9	402.5
Goodwill	2,300.1	382.1	471.8	983.9	4,137.9
As of Year End 2021					
Accounts receivable, net	\$ 246.8	\$ 134.0	\$ 112.9	\$ 131.1	\$ 624.8
Inventories	79.3	136.4	67.4	80.2	363.3
Goodwill	2,141.4	403.6	440.8	995.7	3,981.5
As of Year End 2020					
Accounts receivable, net	\$ 260.1	\$ 117.5	\$ 91.2	\$ 151.7	\$ 620.5
Inventories	59.1	120.1	49.0	73.5	301.7
Goodwill	1,997.4	415.7	453.8	1,009.6	3,876.5

A reconciliation of our consolidated segment operating income to consolidated income before income taxes was as follows:

	2022	2021	2020
<i>(In millions)</i>			
Consolidated segment operating income	\$ 964.8	\$ 963.2	\$ 793.6
Unallocated general corporate expenses	(123.3)	(106.2)	(74.0)
Purchase accounting adjustments	(131.6)	(134.5)	(156.6)
Acquisition / divestiture items	(32.8)	(21.8)	(21.4)
Stock-based compensation / deferred compensation	(112.0)	(128.6)	(90.4)
Restructuring and other costs	(54.2)	(11.1)	(31.4)
Consolidated operating income	510.9	561.0	419.8
Total non-operating income (expense), net	58.2	13.6	(24.8)
Consolidated income before taxes	\$ 569.1	\$ 574.6	\$ 395.0

The disaggregation of revenue by geography is summarized in the tables below. Revenue is defined as revenue from external customers attributed to countries based on the location of the customer and excludes the effects of certain acquired deferred revenue that was written down to fair value in purchase accounting, consistent with the Reporting Segment tables above.

	Reporting Segments				
	Buildings and Infrastructure	Geospatial	Resources and Utilities	Transportation	Total
<i>(In millions)</i>					
2022					
North America	\$ 938.1	\$ 320.7	\$ 227.0	\$ 469.4	\$ 1,955.2
Europe	337.1	247.8	374.3	78.7	1,037.9
Asia Pacific	192.8	140.3	51.7	30.3	415.1
Rest of World	26.0	47.7	168.6	25.8	268.1
Total segment revenue	\$ 1,494.0	\$ 756.5	\$ 821.6	\$ 604.2	\$ 3,676.3
2021					
North America	\$ 823.5	\$ 337.3	\$ 212.2	\$ 493.1	\$ 1,866.1
Europe	386.6	282.3	368.4	87.3	1,124.6
Asia Pacific	188.4	161.4	67.3	30.2	447.3
Rest of World	24.2	47.9	123.4	25.9	221.4
Total segment revenue	\$ 1,422.7	\$ 828.9	\$ 771.3	\$ 636.5	\$ 3,659.4
2020					
North America	\$ 703.4	\$ 249.9	\$ 191.4	\$ 502.5	\$ 1,647.2
Europe	337.1	222.3	284.3	78.4	922.1
Asia Pacific	165.7	138.2	64.5	34.9	403.3
Rest of World	24.8	40.1	89.8	24.7	179.4
Total segment revenue	\$ 1,231.0	\$ 650.5	\$ 630.0	\$ 640.5	\$ 3,152.0

Total revenue in the United States as included in the Consolidated Statements of Income was \$1,777.4 million, \$1,687.4 million, and \$1,502.3 million in 2022, 2021, and 2020. No single customer or country other than the United States accounted for 10% or more of our total revenue in 2022, 2021, and 2020. No single customer accounted for 10% or more of our accounts receivable at the end of 2022 and 2021.

Property and equipment, net by geographic area were as follows:

At the End of Year <i>(In millions)</i>	2022	2021
Property and equipment, net:		
United States	\$ 157.7	\$ 171.3
Europe	40.3	44.8
Asia Pacific and Rest of World	21.0	17.1
Total property and equipment, net	\$ 219.0	\$ 233.2

NOTE 7: DEBT

Debt consisted of the following:

At the End of Year <i>(In millions, except percentages)</i>	Date of Issuance	Effective interest rate for 2022	2022	2021
Senior Notes:				
Senior Notes, 4.15%, due June 2023	June 2018	4.36%	\$ 300.0	\$ 300.0
Senior Notes, 4.75%, due December 2024	November 2014	4.95%	400.0	400.0
Senior Notes, 4.90%, due June 2028	June 2018	5.04%	600.0	600.0
Credit Facilities:				
2022 Revolving Credit Facility, due March 2027	September 2022	5.54%	225.0	—
Unamortized discount and issuance costs			(5.0)	(6.8)
Total debt			1,520.0	1,293.2
Less: Short-term debt			300.0	—
Long-term debt			\$ 1,220.0	\$ 1,293.2

Debt Maturities

At the end of 2022, our debt maturities based on outstanding principal were as follows:

<i>(In million)</i>	
2023	\$ 300.0
2024	400.0
2025	—
2026	—
2027	225.0
Thereafter	600.0
Total	\$ 1,525.0

Senior Notes

All series of senior notes in the above table bear interest that is payable semi-annually in June and December of each year. For the 2023 and 2028 senior notes, the interest rate is subject to adjustment from time to time if Moody's or S&P (or, if applicable, a substitute rating agency) downgrades (or subsequently upgrades) its rating assigned to the notes.

Senior Notes are unsecured and rank equally in right of payment with all of our other senior unsecured indebtedness. We may redeem the notes of each series of senior notes at our option in whole or in part at any time. Such indenture also contains covenants limiting our ability to create certain liens, enter into sale and lease-back transactions, and consolidate or merge with or into, or convey, transfer, or lease all or substantially all of our properties and assets, each subject to certain exceptions.

Credit Facilities

Bridge Facility

On December 11, 2022, we entered into a bridge facility commitment letter (the "Bridge Facility") in connection with the pending acquisition of Transporeon. Under the Bridge Facility, the lender committed to provide a 364-day senior unsecured term loan up to an aggregate amount of €1.88 billion that may be drawn only upon the acquisition of Transporeon. On

December 27, 2022, the Bridge Facility was automatically reduced to €500 million upon entering into the 2022 Term Loan Agreement and the 2022 Credit Facility Amendment (as described below). If not terminated sooner, the commitment under the Bridge Facility expires on July 10, 2023.

Borrowings under the Bridge Facility will bear interest at the following rates, in each case, plus an applicable margin: (a) for Euro loans, EURIBOR and (b) for U.S. dollar loans, the option of either (i) an adjusted Term SOFR or (ii) the alternate base rate (“ABR”). The applicable margin varies based on the Company’s credit ratings and ranges from 1.250% to 2.125% for EURIBOR and Term SOFR loans, and from 0.250% to 1.125% for ABR loans. The applicable margin will increase by 0.25% on each of the 90th, 180th, and 270th day after the closing date of the Bridge Facility. ABR is defined as the greater of the prime rate or the federal funds rate plus 0.50%. Term loans are prepayable without penalty.

In the fourth quarter of 2022, we incurred \$7.3 million fees related to the Bridge Facility of which \$5.9 million was recorded as Interest expense, net, and \$1.4 million was deferred.

2022 Term Loan Credit Agreement

On December 27, 2022, we entered into a credit agreement (the “2022 Term Loan Credit Agreement”) providing for an unsecured delayed draw term loan facility in the aggregate principal amount of \$1.0 billion, comprised of commitments for a 3-year tranche for \$500.0 million and a 5-year tranche for \$500.0 million.

The 2022 Term Loan Credit Agreement was entered into in connection with, and the proceeds of any loans must be used for, the pending acquisition of Transporeon. No amounts were drawn at the end of 2022.

The 3-year loan would be due and payable on the third anniversary of the funding date. The Company would be required to repay the 5-year loan in quarterly installments equal to:

- 0% of the principal amount for the first twelve calendar quarters following the funding date;
- 1.25% of the principal amount for each of the next four calendar quarters; and
- 2.5% of the principal amount for each calendar quarter thereafter, with the remaining principal amount due and payable on the fifth anniversary of the funding date.

Borrowings under the 2022 Term Loan Credit Agreement will bear interest, at the Company’s option, at either: (a) an adjusted Term SOFR or (b) the ABR, in each case, plus the applicable margin. The applicable margin varies based on the Company’s credit ratings and ranges as follows: (a) for the 3-year tranche, (i) from 1.125% to 2.000% for a Term SOFR loan, and (ii) from 0.125% to 1.000% for an ABR loan; and (b) for the 5-year tranche, (i) from 1.250% to 2.125% for a Term SOFR loan, and (ii) from 0.250% to 1.125% for an ABR loan. ABR is defined as the greatest of the prime rate, the federal funds rate plus 0.50%, or the adjusted Term SOFR plus 1.00%. Term loans are prepayable without penalty.

2022 Credit Facility and Amendment

On March 24, 2022, we entered into a credit agreement that provides for an unsecured revolving loan facility in the aggregate principal amount of \$1.25 billion (the “2022 Credit Facility”). The proceeds of the revolving loans may be used by the Company for working capital and general corporate purposes, including the financing of acquisitions. Under the terms of the credit agreement, our interest rate and commitment fees are based on our current long-term, senior unsecured debt ratings, our leverage ratio, and certain specified sustainability targets. At the end of 2022, the interest rate charged on any outstanding borrowings was the prevailing Term SOFR for the applicable interest period plus 1.225%, and the commitment fee was 0.125% of the total undrawn commitment. At the end of 2022, \$225.0 million was outstanding under the 2022 Credit Facility.

The commitment fee and interest rates are subject to upward or downward adjustments if we achieve, or fail to achieve, certain specified sustainability targets concerning greenhouse gas emission reductions and gender diversity. Such upward or downward adjustments may be up to 0.01% per annum for the commitment fee and up to 0.05% per annum for the interest rate.

On December 27, 2022, we entered into an amendment to the 2022 Credit Facility (the “2022 Credit Facility Amendment”) that made \$600.0 million of the existing commitments under the Credit Facility available for the pending acquisition of Transporeon and increased our maximum permitted leverage ratio following the closing of the acquisition.

Uncommitted Facilities

At the end of 2022, we had two \$75.0 million, one €100.0 million, and one £55.0 million revolving credit facilities, which are uncommitted (the “Uncommitted Facilities”). Generally, these uncommitted facilities may be redeemed upon demand. Borrowings under uncommitted facilities are classified as short-term debt in our Consolidated Balance Sheet.

Covenants

The 2022 Term Loan Credit Agreement and 2022 Credit Facility, as amended, contain customary covenants including, among other requirements, limitations that restrict the Company’s and its subsidiaries’ ability to create liens and enter into sale and

leaseback transactions, and restrictions on the ability of the subsidiaries to incur indebtedness. Further, both debt agreements contain financial covenants that require the maintenance of maximum leverage and minimum interest coverage ratios. At the end of 2022, we were in compliance with the covenants for each of our debt agreements.

NOTE 8: LEASES

We have operating leases primarily for certain of our major facilities, including corporate offices, research and development facilities, and manufacturing facilities. Lease terms range from 1 to 14 years, and certain leases include options to extend the lease for up to 9 years. We consider options to extend the lease in determining the lease term.

Operating lease expense consisted of:

At the End of Year	2022	2021
<i>(In millions)</i>		
Operating lease expense	\$ 36.3	\$ 35.5
Short-term lease expense and other	14.8	17.8
Total lease expense	<u>\$ 51.1</u>	<u>\$ 53.3</u>

Supplemental cash flow information related to leases was as follows:

At the End of Year	2022	2021
<i>(In millions)</i>		
Cash paid for liabilities included in the measurement of lease liabilities:		
Operating cash flows from operating leases ⁽¹⁾	\$ 35.0	\$ 35.9
Right-of-use assets obtained in exchange for Operating lease liabilities:	\$ 26.3	\$ 49.5

(1) Excludes cash payments for short-term leases, which are not capitalized.

Supplemental balance sheet information related to leases was as follows:

At the End of Year	2022	2021
<i>(In millions)</i>		
Operating lease right-of-use assets	\$ 121.2	\$ 141.0
Other current liabilities	\$ 35.0	\$ 35.0
Operating lease liabilities	105.1	121.4
Total operating lease liabilities	<u>\$ 140.1</u>	<u>\$ 156.4</u>
Weighted-average discount rate	3.30 %	3.31 %
Weighted-average remaining lease term	6 years	7 years

At the end of 2022, the maturities of lease liabilities were as follows:

<i>(In millions)</i>		
2023		\$ 37.3
2024		30.3
2025		22.2
2026		16.9
2027		13.3
Thereafter		35.8
Total lease payments		<u>\$ 155.8</u>
Less: imputed interest		15.7
Total		<u>\$ 140.1</u>

NOTE 9: COMMITMENTS AND CONTINGENCIES

At the end of 2022, we had unconditional purchase obligations of approximately \$858.8 million as compared to \$710.8 million at the end of 2021. These unconditional purchase obligations primarily represent open non-cancellable purchase orders for material purchases with our vendors and investments in our platform associated with our Connect and Scale strategy.

Litigation

From time to time, we are involved in litigation arising in the ordinary course of our business. There are no material legal proceedings, other than ordinary routine litigation incidental to the business, to which we or any of our subsidiaries is a party or of which any of our or our subsidiaries' property is subject.

NOTE 10: FAIR VALUE MEASUREMENTS

The following table summarizes the fair values of financial instruments at fair value on a recurring basis for the periods indicated and determined using the following inputs:

	Fair Values as of the end of 2022				Fair Values as of the end of 2021			
	Quoted prices in Active Markets for Identical Assets (Level I)	Significant Other Observable Inputs (Level II)	Significant Unobservable Inputs (Level III)	Total	Quoted prices in Active Markets for Identical Assets (Level I)	Significant Other Observable Inputs (Level II)	Significant Unobservable Inputs (Level III)	Total
<i>(In millions)</i>								
Assets								
Deferred compensation plan ⁽¹⁾	\$ 31.5	\$ —	\$ —	\$ 31.5	\$ 44.7	\$ —	\$ —	\$ 44.7
Derivatives ⁽²⁾	—	18.0	—	18.0	—	0.1	—	0.1
Contingent consideration ⁽³⁾	—	—	3.1	3.1	—	—	—	—
Total assets measured at fair value	<u>\$ 31.5</u>	<u>\$ 18.0</u>	<u>\$ 3.1</u>	<u>\$ 52.6</u>	<u>\$ 44.7</u>	<u>\$ 0.1</u>	<u>\$ —</u>	<u>\$ 44.8</u>
Liabilities								
Deferred compensation plan ⁽¹⁾	\$ 31.5	\$ —	\$ —	\$ 31.5	\$ 44.7	\$ —	\$ —	\$ 44.7
Derivatives ⁽²⁾	—	0.2	—	0.2	—	0.2	—	0.2
Contingent consideration ⁽³⁾	—	—	—	—	—	—	12.8	12.8
Total liabilities measured at fair value	<u>\$ 31.5</u>	<u>\$ 0.2</u>	<u>\$ —</u>	<u>\$ 31.7</u>	<u>\$ 44.7</u>	<u>\$ 0.2</u>	<u>\$ 12.8</u>	<u>\$ 57.7</u>

(1) Represents a self-directed, non-qualified deferred compensation plan for certain executives and other highly compensated employees included in Other non-current assets and Other non-current liabilities on our Consolidated Balance Sheets. The plan is invested in actively traded mutual funds and individual stocks valued using observable quoted prices in active markets.

(2) Represents forward currency exchange contracts and a Treasury Rate Lock contract that are included in Other current assets and Other current liabilities on our Consolidated Balance Sheets.

(3) Represents arrangements to receive payments from buyers of our divested companies or pay former owners of acquired companies that are included in Other current and non-current assets or Other current liabilities on our Consolidated Balance Sheets. The fair values are estimated using scenario-based methods based upon estimated future milestones.

Derivative assets include a Treasury Rate Lock contract and a foreign currency exchange contract, both related to the pending acquisition of Transporeon.

The Treasury Rate Lock contract is a cash flow hedge with gains or losses reported as a component of other comprehensive income and subsequently amortized to interest expense over the term of the associated debt. At the end of 2022, the notional amount of the interest rate-lock contract was \$400.0 million, and the fair value of the contract was \$7.2 million.

The foreign currency exchange contract is to economically hedge the euro-denominated purchase price of Transporeon. The gains or losses are recognized in other income (expense), net. The notional amount of the foreign currency exchange contract was \$1,999.4 million, and the fair value of this contract was \$10.4 million.

Additional Fair Value Information

The total estimated fair value of all outstanding financial instruments that are not recorded at fair value on a recurring basis (debt) was approximately \$1.5 billion and \$1.4 billion at the end of 2022 and 2021.

The fair value of the senior notes was determined based on observable market prices in less active markets and is categorized accordingly as Level II. The fair values do not indicate the amount we would currently have to pay to extinguish any of this debt.

NOTE 11: DEFERRED REVENUE AND REMAINING PERFORMANCE OBLIGATIONS
Deferred Revenue

Changes in our deferred revenue during 2022 and 2021 were as follows:

<i>(In millions)</i>	2022	2021
Beginning balance of the period	\$ 631.8	\$ 613.8
Revenue recognized from prior year-end	(511.5)	(533.8)
Billings net of revenue recognized from current year	617.3	551.8
Ending balance of the period	\$ 737.6	\$ 631.8

Remaining Performance Obligations

At the end of 2022, approximately \$1.6 billion of revenue is expected to be recognized from remaining performance obligations for which goods or services have not been delivered, primarily subscription, software, and software maintenance, and to a lesser extent, hardware and professional services contracts. We expect to recognize \$1.2 billion or 72% of our remaining performance obligations as revenue during the next 12 months and the remainder thereafter.

NOTE 12: INCOME TAXES

Income before taxes and the provision (benefit) for taxes consisted of the following:

<i>(In millions)</i>	2022	2021	2020
Income before taxes:			
United States	\$ 117.7	\$ 144.0	\$ 24.7
Foreign	451.4	430.6	370.3
Total	\$ 569.1	\$ 574.6	\$ 395.0
Provision (benefit) for taxes:			
U.S. Federal:			
Current	\$ 98.4	\$ 27.1	\$ (5.8)
Deferred	(97.7)	(22.9)	(16.3)
	0.7	4.2	(22.1)
U.S. State:			
Current	12.6	5.6	0.8
Deferred	(5.0)	(2.5)	7.1
	7.6	3.1	7.9
Foreign:			
Current	48.4	76.0	62.2
Deferred	62.7	(1.5)	(43.6)
	111.1	74.5	18.6
Income tax provision	\$ 119.4	\$ 81.8	\$ 4.4
Effective tax rate	21.0 %	14.2 %	1.1 %

The difference between the tax provision (benefit) at the statutory federal income tax rate and the tax provision (benefit) as a percentage of income before taxes (“effective tax rate”) was as follows:

	2022	2021	2020
Statutory federal income tax rate	21.0 %	21.0 %	21.0 %
Increase (reduction) in tax rate resulting from:			
Foreign income taxed at different rates	4.4 %	0.5 %	1.7 %
Change in valuation allowance	— %	— %	2.0 %
U.S. State income taxes	1.0 %	1.1 %	0.5 %
Stock-based compensation	1.8 %	1.7 %	1.5 %
Excess tax benefit related to stock-based compensation	(0.6)%	(2.5)%	(1.5)%
Other U.S. taxes on foreign operations	(3.5)%	(1.6)%	(1.0)%
U.S. Federal research and development credits	(2.2)%	(2.1)%	(2.3)%
Tax reserve releases	(1.8)%	(2.1)%	(4.8)%
Intellectual property restructuring and tax law changes	— %	(2.5)%	(16.2)%
Other	0.9 %	0.7 %	0.2 %
Effective tax rate	<u>21.0 %</u>	<u>14.2 %</u>	<u>1.1 %</u>

Our effective income tax rates for 2022 and 2021 were 21.0% and 14.2%. The effective income tax rate in 2022 increased compared to 2021 primarily due to a one-time tax benefit recorded in 2021 related to the revaluation of the Netherlands deferred tax assets mentioned below and lower stock-based compensation deductions during 2022.

In December 2021, due to a change in the Netherlands tax law, the statutory tax rate was increased from 25.0% to 25.8% effective January 1, 2022. As a result, we recorded a one-time tax benefit of \$14.4 million in 2021 due to the revaluation of the Netherlands deferred tax assets.

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The significant components of deferred tax assets and liabilities were as follows:

At the End of Year	2022	2021
<i>(In millions)</i>		
Deferred tax liabilities:		
Global intangible low-taxed income	\$ 137.8	\$ 207.6
Purchased intangibles	121.1	115.8
Operating lease right-of-use assets	29.0	33.5
Other	16.1	12.7
Total deferred tax liabilities	304.0	369.6
Deferred tax assets:		
Depreciation and amortization	400.0	474.9
Capitalized research and development	67.5	6.9
Operating lease liabilities	32.8	36.4
U.S. tax credit carryforwards	25.6	25.8
Expenses not currently deductible	30.9	43.7
Foreign net operating loss carryforwards	15.3	18.0
Stock-based compensation	13.8	13.9
U.S. net operating loss carryforwards	4.7	5.8
Other	36.6	28.8
Total deferred tax assets	627.2	654.2
Valuation allowance	(42.6)	(45.7)
Total deferred tax assets	584.6	608.5
Total net deferred tax assets	\$ 280.6	\$ 238.9
Reported as:		
Non-current deferred income tax assets	\$ 438.4	\$ 502.0
Non-current deferred income tax liabilities	(157.8)	(263.1)
Net deferred tax assets	\$ 280.6	\$ 238.9

At the end of 2022, we have U.S. federal and foreign net operating loss carryforwards, or NOLs, of approximately \$9.8 million and \$82.4 million, respectively. The U.S. federal NOLs will begin to expire in 2026. There is generally no expiration for the foreign NOLs. Utilization of our U.S. federal NOLs is subject to annual limitations in accordance with the applicable tax code. We have determined that it is more likely than not that we will not realize a portion of the foreign NOLs and, accordingly, a valuation allowance has been established for such amount.

We have California research and development credit carryforwards of approximately \$33.6 million, which have an indefinite carryforward period. We believe that it is more likely than not that we will not realize a significant portion of the California research and development credit carryforwards and, accordingly, a valuation allowance has been established for such amount.

As a result of the Tax Act, we can repatriate foreign earnings back to the U.S. when needed with minimal U.S. income tax consequences. We reinvested a large portion of our undistributed foreign earnings in acquisitions and other investments and intend to bring back a portion of foreign cash that was subject to the transition tax and the global intangible low-taxed income tax. During 2022, we repatriated \$350.3 million of our foreign earnings to the U.S.

The total amount of unrecognized tax benefits at the end of 2022 was \$76.5 million. A reconciliation of gross unrecognized tax benefits was as follows:

<i>(In millions)</i>	2022	2021	2020
Beginning balance	\$ 64.2	\$ 64.1	\$ 71.6
Increase related to current year tax positions	23.0	9.6	8.0
(Decrease) increase related to prior years' tax positions	(0.7)	1.3	(0.4)
Settlement with taxing authorities	—	(1.3)	(0.5)
Lapse of statute of limitations	(10.0)	(9.5)	(14.6)
Ending balance	\$ 76.5	\$ 64.2	\$ 64.1

Total unrecognized tax benefits that, if recognized, would affect our effective tax rate were \$51.6 million and \$42.3 million at the end of 2022 and 2021.

We and our subsidiaries are subject to U.S. federal, state, and foreign income taxes. Our tax years are substantially closed for all U.S. federal and state income taxes for audit purposes through 2015. Non-U.S. income tax matters have been concluded for years through 2008. We are currently in various stages of multiple year examinations from state and foreign (multiple jurisdictions) taxing authorities. While we generally believe it is more likely than not that our tax positions will be sustained, it is reasonably possible that future obligations related to these matters could arise. We believe that our reserves are adequate to cover any potential assessments that may result from the examinations and negotiations.

Although timing of the resolution and/or closure of audits is not certain, we do not believe that our gross unrecognized tax benefits would materially change in the next twelve months.

Our practice is to recognize interest and/or penalties related to income tax matters in income tax expense. Our liability for unrecognized tax benefits including interest and penalties was recorded in Other non-current liabilities on our Consolidated Balance Sheets. At the end of 2022 and 2021, we accrued \$8.4 million and \$9.2 million for interest and penalties.

On August 16, 2022, the U.S. federal government enacted the Inflation Reduction Act (“IRA”) of 2022. The IRA includes a 15% corporate alternative minimum tax effective in 2024 for certain large corporations, a 1% excise tax on net share repurchases after December 31, 2022, and several tax incentives to promote clean energy. We do not expect the provisions of the IRA to have a material impact on our financial results.

NOTE 13: EMPLOYEE STOCK BENEFIT PLANS

Amended and Restated 2002 Stock Plan

In May 2020, our stockholders approved an amendment to the 2002 Stock Plan to increase the number of shares of common stock available for issuance by 18.0 million shares. As such, our Amended and Restated 2002 Stock Plan provides for the granting of incentive and non-statutory stock options and Restricted Stock Units (“RSUs”) for up to 92.6 million shares. At the end of 2022, the remaining number of shares available for grant under the 2002 stock plan was 17.6 million.

Stock-Based Compensation Expense

The following table summarizes the components of stock-based compensation expense recognized in our Consolidated Statements of Income for the periods indicated:

<i>(In millions)</i>	2022	2021	2020
Restricted stock units	\$ 108.7	\$ 110.5	\$ 73.2
Stock options	1.1	1.3	1.5
ESPP	10.6	10.8	8.3
Total stock-based compensation expense	\$ 120.4	\$ 122.6	\$ 83.0

Stock-based compensation expense was allocated as follows:

	2022	2021	2020
<i>(In millions)</i>			
Cost of sales	\$ 12.6	\$ 9.5	\$ 6.7
Research and development	28.0	29.5	22.1
Sales and marketing	24.6	21.5	16.2
General and administrative	55.2	62.1	38.0
Total stock-based compensation expense	<u>\$ 120.4</u>	<u>\$ 122.6</u>	<u>\$ 83.0</u>

At the end of 2022, total unamortized stock-based compensation expense was \$186.9 million, with a weighted-average recognition period of 1.9 years.

Restricted Stock Units

We grant RSUs containing only service conditions and RSUs containing a combination of service, performance, and market conditions (“PSUs”). RSUs containing only service conditions typically vest ratably over a three- to four-year service period. PSUs are granted to executive officers and other senior employees and vest after a two- to three-year service period.

The fair value at the grant date is determined by (a) the closing price of our common stock for awards containing only service or both service and performance conditions, or (b) the Monte Carlo valuation model for awards containing both service and market conditions.

For PSUs, the number of shares received at vesting will range from 0% to 200% of the target grant amount based on either market conditions or performance conditions. Market conditions consider our relative total stockholder return (“TSR”) of our common stock as compared to the TSR of the constituents of the S&P 500 over the vesting period. Performance conditions consider the achievement of our financial results over the vesting period.

	2022 Restricted Stock Units Outstanding	
	Number of Units ⁽¹⁾	Weighted Average Grant-Date Fair Value per Share
<i>(In millions, except for per share data)</i>		
Outstanding at the beginning of year	4.3	\$ 56.96
Granted ⁽²⁾	2.3	73.32
Shares vested, net ⁽²⁾	(1.9)	52.21
Canceled and forfeited	(0.7)	63.02
Outstanding at the end of year	<u>4.0</u>	<u>\$ 67.32</u>

(1) Includes 0.3 million PSUs granted, 0.5 million PSUs vested, 0.3 million PSUs cancelled and forfeited, and 0.6 million PSUs outstanding at the end of the year.

(2) Excludes approximately 0.1 million PSUs related to achievement above target levels at the vesting date.

The weighted-average grant date fair value of all RSUs granted during 2022, 2021, and 2020 was \$73.32, \$78.44, and \$42.50 per share. The fair value of all RSUs vested during 2022, 2021, and 2020 was \$108.3 million, \$81.4 million, and \$78.0 million.

Employee Stock Purchase Plan

We have an ESPP under which our stockholders have approved an aggregate of 39.0 million shares of common stock for issuance to eligible employees. The fair value at the grant date is based on the Black-Scholes valuation model. The plan permits eligible employees to purchase common stock through payroll deductions at 85% of the lower of the fair market value of the common stock at the beginning or at the end of each offering period, which is six months. Rights to purchase shares are granted during the first and third quarter of each year. The ESPP terminates on March 15, 2027. In 2022, 2021, and 2020, 0.6 million, 0.6 million, and 0.8 million shares were issued, representing \$34.7 million, \$33.4 million, and \$26.9 million in cash received for the issuance of stock under the ESPP. At the end of 2022, the number of shares reserved for future purchases was 5.4 million.

NOTE 14: COMMON STOCK REPURCHASE

In August 2021, our Board of Directors approved a new share repurchase program (“2021 Stock Repurchase Program”) authorizing up to \$750.0 million in repurchases of our common stock. Under the 2021 Stock Repurchase Program, the share repurchase authorization does not have an expiration date and supersedes and replaces the \$600.0 million share repurchase

authorization approved by our Board of Directors in November 2017 (“2017 Stock Repurchase Program”), of which \$50.7 million was remaining and has been cancelled.

Under the 2021 Stock Repurchase Program, we may repurchase shares from time to time, subject to business and market conditions and other investment opportunities, through open market transactions, privately-negotiated transactions, accelerated stock repurchase plans, or by other means. The timing and actual number of any shares repurchased will depend on a variety of factors, including market conditions, our share price, other available uses of capital, applicable legal requirements, and other factors. The 2021 Stock Repurchase Program may be suspended, modified, or discontinued at any time at the Company’s discretion without notice.

During 2022, 2021, and 2020, we repurchased approximately 6.0 million, 2.1 million, and 1.9 million shares of common stock in open market purchases under our 2017 and 2021 Stock Repurchase Programs, at an average price of \$65.90, \$85.75, and \$43.40 per share, for a total of \$394.7 million, \$180.0 million, and \$81.6 million. At the end of 2022, the 2021 Stock Repurchase Program had remaining authorized funds of \$215.3 million.

Stock repurchases are reflected as a decrease to common stock based on par value and additional-paid-in-capital, based on the average book value per share for all outstanding shares calculated at the time of each individual repurchase transaction. The excess of the purchase price over this average for each repurchase was charged to retained earnings. As a result of the 2022 repurchases, retained earnings was reduced by \$347.0 million in 2022. Common stock repurchases under the program were recorded based upon the trade date for accounting purposes.

Because of the additional outstanding indebtedness we have and expect to incur in connection with the pending Transporeon acquisition, we have temporarily discontinued our share repurchases. See [Note 3 “Acquisition and Divestitures”](#) of this report for future information regarding our intended acquisition of Transporeon.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Trimble Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Trimble Inc. (the Company) as of December 30, 2022 and December 31, 2021, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 30, 2022, and the related notes (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 30, 2022 and December 31, 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 30, 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 30, 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 17, 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 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.

Revenue Recognition - Identification of Performance Obligations

Description of the Matter

As described in Note 1 to the consolidated financial statements, the Company enters into contracts that can include various combinations of products and services. Determining whether products or services are considered distinct performance obligations that should be recognized separately or combined into a single performance obligation may sometimes require significant judgment.

Auditing the Company's determination of distinct performance obligations was complex due to the effort involved in assessing whether the various product and service offerings promised within each contract are separate performance obligations or should be combined into a single performance obligation.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of the Company's internal controls over the evaluation of the relevant terms of its contracts, and the appropriate identification of distinct performance obligations. This included testing relevant controls over the information systems that are important to the initiation, recording, and billing of revenue transactions.

Our audit procedures included evaluating management's revenue recognition policy which included the application of management's judgment in the identification of performance obligations. Among other procedures to evaluate management's identification and determination of the distinct performance obligations, we read executed contracts for a sample of sales transactions to understand the terms in the customer agreement and evaluated the appropriateness of management's application of the Company's accounting policy. We evaluated the accuracy of the Company's contract summary documentation, specifically related to the identification and determination of distinct performance obligations, and the related revenue recognition. Finally, we assessed the appropriateness of the related disclosures in the consolidated financial statements.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1986.

San Jose, California
February 17, 2023

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Trimble Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Trimble Inc.'s internal control over financial reporting as of December 30, 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, Trimble Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 30, 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 the businesses acquired in 2022, which are included in the 2022 consolidated financial statements of the Company and constituted less than 1% of tangible assets and net assets as of December 30, 2022, and less than 1% of revenues and net income 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 in 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 30, 2022 and December 31, 2021, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 30, 2022, and the related notes and our report dated February 17, 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

San Jose, California
February 17, 2023

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

None

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) as of the end of the period covered by this report. Based on such evaluation, our CEO and CFO have concluded that, as of the end of such period, our disclosure controls and procedures are effective.

Inherent Limitations on Effectiveness of Controls

Our management, including the CEO and CFO, does not expect that our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system’s objectives will be met. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

(b) Management’s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Our internal control over financial reporting is 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.

Our management, including the CEO and CFO, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). We have excluded from our evaluation of the internal control over financial reporting the businesses acquired in 2022, which are included in the December 30, 2022 consolidated financial statements and constituted less than 1% of tangible assets and net assets, respectively, as of December 30, 2022, and less than 1% of revenue and net income, respectively, for the year then ended. Based on the results of this evaluation, our management concluded that our internal control over financial reporting was effective at the end of 2022.

The effectiveness of our internal control over financial reporting at the end of 2022 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included elsewhere herein.

Changes in Internal Control over Financial Reporting

During the fourth quarter of 2022, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item, insofar as it relates to our directors, will be contained under the captions “Election of Directors” and “Section 16(a) Beneficial Ownership Reporting Compliance” in the Proxy Statement and is incorporated herein by reference. The information required by this item relating to executive officers is set forth above in [Item 1 Business](#) Overview under the caption “Executive Officers.”

The information required by this item insofar as it relates to the nominating and audit committees will be contained in the Proxy Statement under the caption “Board Meetings and Committees; Director Independence.”

Code of Ethics

Our Business Ethics and Conduct Policy applies to, among others, our Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer, and other finance organization employees. We make available our Business Ethics and Conduct Policy free of charge through our website at www.trimble.com under the heading “Corporate Governance - Governance Documents” on the Investor Relations page.

If any substantive amendments to the Business Ethics and Conduct Policy are made or any waivers are granted, including any implicit waiver, from a provision of the Business Ethics and Conduct Policy, to its Chief Executive Officer, Chief Financial Officer, or Chief Accounting Officer, we will disclose the nature of such amendment or waiver on our website at www.trimble.com or in a report on Form 8-K. The contents of these websites are not intended to be incorporated by reference into this report or in any other report or document we file or furnish with the SEC, and any reference to these websites are intended to be inactive textual references only.

Item 11. Executive Compensation

The information required by this item will be contained in the Proxy Statement under the captions “Executive Compensation” and “Non-Employee Director Compensation” and is incorporated herein by reference.

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

The information required by this item will be contained in the Proxy Statement under the caption “Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters” and is incorporated herein by reference.

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

The information required by this item will be contained in the Proxy Statement under the caption “Certain Relationships and Related Person Transactions” and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information required by this item will be contained in the Proxy Statement under the caption “Principal Accounting Fees and Services” and is incorporated herein by reference.

PART IV**Item 15. Exhibits and Financial Statement Schedules.****(1) Financial Statements**

The following consolidated financial statements required by this item are included in Part II Item 8 hereof under the caption “Financial Statements and Supplementary Data.

	Page in this Report
Consolidated Balance Sheets	52
Consolidated Statements of Income	53
Consolidated Statements of Comprehensive Income	54
Consolidated Statements of Stockholders' Equity	55
Consolidated Statements of Cash Flows	56
Notes to Consolidated Financial Statements	57
Reports of Independent Registered Public Accounting Firm	77

(2) Financial Statement Schedules

All financial statement schedules have been omitted, since the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements and accompanying notes included in this report.

(3) Exhibits

We have filed, or incorporated into the Report by reference, the exhibits listed on the accompanying Index to Exhibits immediately preceding the signature page of this report.

Item 16. Form 10-K Summary.

None.

INDEX TO EXHIBITS

Exh. No.	Description of Exhibit	Filed herewith or incorporated by reference to:
2.1 *	Sale and Purchase Agreement, dated December 11, 2022, by and among the Company, Trimble Trailblazer GmbH and Spider Investments Luxembourg S.à r.l.	Exh. 2.1 to Form 8-K/A filed Dec. 21, 2022
3.1	Certificate of Incorporation of Trimble Inc.	Exh. 3.1 to Form 8-K filed Oct. 3, 2016
3.2	Amended and Restated By-Laws of Trimble Inc. (effective October 1, 2020)	Exh. 3.1 to Form 8-K filed Sep. 30, 2020
4.1	Form of Common Stock Certificate of Trimble Inc.	Exh. 4.1 to Form 8-K filed Oct. 3, 2016
4.2	Description of Securities of Trimble Inc.	Exh. 4.2 to Form 10-K filed Feb. 28, 2020
4.3(A)	Indenture, dated as of October 30, 2014, between the Company and U.S. Bank National Association	Exh. 4.2 to Form S-3 filed Oct. 30, 2014
4.3(B)	First Supplemental Indenture, dated November 24, 2014, between the Company and U.S. Bank National Association (which includes Form of 4.750% Senior Note due 2024)	Exh. 4.1 to Form 8-K filed Nov. 24, 2014
4.3(C)	Second Supplemental Indenture, dated October 1, 2016, between the Company and U.S. Bank National Association	Exh. 4.2 to Form 8-K filed Oct. 3, 2016
4.3(D)	Third Supplemental Indenture, dated June 15, 2018, between the Company and U.S. Bank National Association (which includes Form of 4.150% Senior Note due 2023 and Form of 4.900% Senior Note due 2028)	Exh. 4.1 to Form 8-K filed June 15, 2018
10.1(A)	Lease dated May 11, 2005 between the Company and Carr America Realty Operating Partnership, L.P.	Exh. 10.17 to Form 10-K filed Mar. 10, 2006
10.1(B)	First Amendment to Lease between the Company and Carr NP Properties, LLC	Exh. 10.23 to Form 10-K filed Mar. 1, 2011
10.1(C)	Second Amendment to Lease between the Company and Wilson Oakmead West, LLC (successor in interest to Carr NP Properties, LLC)	Exh. 10.6 to Form 10-Q filed Aug. 8, 2017
10.2(A)	Credit Agreement, dated March 24, 2022, by and among Trimble Inc., the borrowing subsidiaries from time to time party thereto, the lenders from time to time party thereto and Bank of America, N.A., as administrative agent.	Exh. 10.1 to Form 8-K filed Mar. 30, 2022
10.2(B)	364-Day Bridge Facility Commitment Letter, dated December 11, 2022, by and among the Company, BofA Securities, Inc. and Bank of America, N.A.	Exh. 10.1 to Form 8-K filed Dec. 12, 2022
10.2(C)	Term Loan Credit Agreement, dated December 27, 2022, by and among Trimble Inc., the lenders from time to time party thereto and Bank of America, N.A., as administrative agent.	Exh. 10.1 to Form 8-K filed Dec. 30, 2022
10.2(D)	Amendment No. 1 to Credit Agreement, dated as of December 27, 2022, entered into among Trimble Inc., the lenders party thereto and Bank of America, N.A., as administrative agent.	Exh. 10.2 to Form 8-K filed Dec. 30, 2022
10.3+	Form of Indemnification Agreement between the Company and its officers and directors	Exh. 10.1 to Form 8-K filed Nov. 15, 2017
10.4+	Board of Directors Compensation Policy as amended February 22, 2022	Exh. 10.1 to Form 8-K filed Feb. 28, 2022
10.5+	Incentive Compensation Recoupment Policy	Exh. 99.1 to Form 8-K filed May 8, 2017
10.6+	Deferred Compensation Plan, as amended August 26, 2020	Exh. 10.2 to Form 10-Q filed Nov. 6, 2020
10.7+	Age and Service Equity Vesting Program, as amended August 6, 2021	Exh. 10.1 to Form 10-Q filed Nov. 4, 2021
10.8(A)+	Employee Stock Purchase Plan, as amended March 13, 2017	App. B of Form DEF 14A filed Mar. 23, 2017
10.8(B)+	Employee Stock Purchase Plan - Form of global subscription agreement	Exh. 10.5 to Form 10-Q filed Nov. 10, 2015
10.9(A)+	2002 Stock Plan, as amended April 6, 2020	App. B of Form DEF 14A filed Apr. 15, 2020
10.9(B)+	2002 Stock Plan - Form of stock option agreement (U.S. directors)	Exh. 10.2 to Form 10-Q filed Nov. 7, 2014
10.9(C)+	2002 Stock Plan - Form of stock option agreement (non-U.S. directors)	Exh. 10.3 to Form 10-Q filed Nov. 7, 2014
10.9(D)+	2002 Stock Plan - Form of global stock option agreement (officers)	Exh. 10.1 to Form 10-Q filed Nov. 10, 2015
10.9(E)+	2002 Stock Plan - Form of global restricted stock unit award agreement	Exh. 10.2 to Form 10-Q filed Nov. 10, 2015
10.9(F)+	2002 Stock Plan - Form of global performance restricted stock unit award agreement	Exh. 10.6 to Form 10-Q filed Nov. 10, 2015

[Table of Contents](#)

10.9(G)+	2002 Stock Plan - Form of global restricted stock unit award agreement (officers)	Exh. 10.30 to Form 10-K filed Feb. 24, 2017
10.9(H)+	2002 Stock Plan - Form of global performance stock unit award agreement (Operating Income/Revenue)	Exh. 10.4 to Form 10-Q filed Aug. 8, 2017
10.9(I)+	2002 Stock Plan - Form of global performance stock unit award agreement (Total Stockholder Return)	Exh. 10.5 to Form 10-Q filed Aug. 8, 2017
10.9(J)+	2002 Stock Plan - Form of global performance stock unit award agreement (officers)	Exh. 10.1 to Form 10-Q filed Aug. 2, 2019
10.9(K)+	2002 Stock Plan - Performance stock option agreement between the Company and Rob Painter issued January 4, 2020	Exh. 10.9(K) to Form 10-K filed Feb. 28, 2020
10.9(L)+	2002 Stock Plan - Form of performance stock unit award agreement (officers, TSR-based)	Exh. 10.2 to Form 10-Q filed Aug. 7, 2020
10.9(M)+	2002 Stock Plan - Form of performance stock unit award agreement (ARR-based)	Exh. 10.1 to Form 10-Q filed Aug. 9, 2021
10.9(N)+	2002 Stock Plan - Form of performance stock unit award agreement (TSR-based, 2021 revision)	Exh. 10.2 to Form 10-Q filed Aug. 9, 2021
10.9(O)+	2002 Stock Plan - Form of performance stock unit award agreement (TSR-ARR-ESG)	Exh. 10.1 to Form 10-Q filed May 5, 2022
10.10+	Trimble OneBonus Plan Description	Exh. 10.1 to Form 8-K filed Feb. 25, 2021
10.11+	Form of Change in Control Severance Agreement between the Company and certain Company officers, together with a schedule identifying material differences in the agreements entered into with specific officers	Exh. 10.1 to Form 10-Q filed Aug. 8, 2017
10.12+	Form of Executive Severance Agreement between the Company and certain Company officers, together with a schedule identifying material differences in the agreements entered into with specific officers	Exh. 10.2 to Form 10-Q filed Aug. 8, 2017
10.13+	Change in Control Severance Agreement between the Company and Steven W. Berglund dated February 20, 2019	Exh. 10.1 to Form 10-K filed Feb. 22, 2019
10.14+	Executive Severance Agreement between the Company and Steven W. Berglund dated February 20, 2019	Exh. 10.2 to Form 10-K filed Feb. 22, 2019
10.15+	Change in Control Severance Agreement between the Company and Robert G. Painter dated January 4, 2020	Exh. 10.15 to Form 10-K filed Feb. 26, 2021
10.16+	Executive Severance Agreement between the Company and Robert G. Painter dated January 4, 2020	Exh. 10.16 to Form 10-K filed Feb. 26, 2021
21.1	Subsidiaries of the Company	Filed herewith
23.1	Consent of Independent Registered Public Accounting Firm	Filed herewith
24.1	Power of Attorney (included on signature page herein)	
31.1	Certification of CEO pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
31.2	Certification of CFO pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
32.1	Certification of CEO pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
32.2	Certification of CFO pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
101++	The following financial statements from this Annual Report on Form 10-K, formatted in Inline XBRL: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Income, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Stockholders' Equity, (v) Consolidated Statements of Cash Flows, and (vi) Notes to Consolidated Financial Statements, tagged as blocks of text and including detailed tags	
104++	The cover page from this Annual Report on Form 10-K, formatted in Inline XBRL	

* Certain portions of this exhibit have been redacted pursuant to Item 601(b)(10)(iv) of Regulation S-K. The Company agrees to supplementally furnish an unredacted copy of this exhibit to the SEC upon request; provided, however, that the Company may request confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, to the extent so furnished.

+ Indicates management contract or compensatory plan or arrangement required to be filed as an exhibit to this Annual Report on Form 10-K.

++ Pursuant to applicable securities laws and regulations, the Company is deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and is not subject to liability under any anti-fraud provisions of the federal securities laws as long as the Company has made a good faith attempt to comply with the submission requirements and promptly amends the interactive data files after becoming aware that the interactive data files fails to comply with the submission requirements.

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 of this report to be signed on its behalf by the undersigned, thereunto duly authorized.

By:

TRIMBLE INC.
/s/ ROBERT G. PAINTER
Robert G. Painter,
President and Chief Executive Officer

February 17, 2023

POWER OF ATTORNEY

Know all persons by these presents, that each person whose signature appears below constitutes and appoints Robert G. Painter as his attorney-in-fact, with the power of substitution, for him in any and all capacities, to sign any amendments to this Report of this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	Capacity in which Signed	
/s/ ROBERT G. PAINTER Robert G. Painter	President, Chief Executive Officer, Director	February 17, 2023
/s/ DAVID G. BARNES David G. Barnes	Chief Financial Officer (Principal Financial Officer)	February 17, 2023
/s/ JULIE A. SHEPARD Julie A. Shepard	Chief Accounting Officer (Principal Accounting Officer)	February 17, 2023
/s/ STEVEN W. BERGLUND Steven W. Berglund	Director	February 17, 2023
/s/ JAMES C. DALTON James C. Dalton	Director	February 17, 2023
/s/ BORJE EKHOLM Börje Ekholm	Director	February 17, 2023
/s/ ANN FANDOZZI Ann Fandozzi	Director	February 17, 2023
/s/ KAIGHAM (KEN) GABRIEL Kaigham (Ken) Gabriel	Director	February 17, 2023
/s/ MEAGHAN LLOYD Meaghan Lloyd	Director	February 17, 2023
/s/ SANDRA MACQUILLAN Sandra MacQuillan	Director	February 17, 2023
/s/ MARK S. PEEK Mark S. Peek	Director	February 17, 2023
/s/ THOMAS W. SWEET Thomas W. Sweet	Director	February 17, 2023
/s/ JOHAN WIBERGH Johan Wibergh	Director	February 17, 2023

SUBSIDIARIES OF THE COMPANY

EXHIBIT 21.1

Name of Subsidiary or Affiliate	<u>Jurisdiction of Incorporation</u>
ME Sudamerica SRL	Argentina
Beena Vision Asia - Pacific Pty Ltd.	Australia
Bilberry Australia Pty Ltd	Australia
Information Alignment Pty. Ltd.	Australia
LSI Robway Pty Ltd	Australia
Manhattan Asia Pacific Pty Ltd	Australia
Spatial Dimension Australia Pty Ltd	Australia
Trimble Australia Solutions Pty Ltd	Australia
Trimble Navigation Australia Pty Ltd.	Australia
Trimble Planning Solutions Pty. Ltd.	Australia
Viewpoint Australia Finco Pty Ltd	Australia
Viewpoint Construction Software Australia Pty Ltd	Australia
Viewpoint Software Pty Ltd	Australia
Plancal GmbH	Austria
Acunia International NV	Belgium
Trimble Belgium	Belgium
Trimble Leuven NV	Belgium
Trimble NV	Belgium
Wevada NV	Belgium
Spatial Dimension Sistemas do Brasil Ltda.	Brazil
Trimble Brasil Solucoes Ltda.	Brazil
Trimble Canada Development Limited	British Columbia
0807381 B.C. Ltd.	Canada
Applanix Corporation	Canada
GEOTrac Systems Inc.	Canada
Maddocks Systems, Inc.	Canada
PeopleNet Communications Canada Corp.	Canada
Spatial Dimension Canada ULC	Canada
Trimble Exchangeco Ltd.	Canada
Trimble Forestry Corporation	Canada
Trimble Holdings Company	Canada
Viewpoint Construction Software Canada Inc.	Canada
VS Visual Statement, Inc.	Canada
Trimble Loadrite Chile SPA	Chile
Tianpan Century Co. Ltd	China
Tianpan Information Science & Technology Co. Ltd.	China
Trimble DBO Information Technology (Shanghai) Co. Ltd.	China
Trimble Electronics Products (Shanghai) Co. Ltd.	China

<u>Name of Subsidiary or Affiliate</u>	<u>Jurisdiction of Incorporation</u>
Trimble Leading Electronic Technology (Shanghai) Co. Ltd.	China
Trimble Solutions Aarhus A/S	Denmark
Trimble Middle East WLL (in Liquidation)	Egypt
AgileAssets LTD	England and Wales
Trimble Finland Oy	Finland
Trimble Forestry Europe Oy	Finland
Trimble Solutions Oy	Finland
Bilberry SAS	France
Magnav France Holdco S.A.S.	France
Manhattan Software France SARL	France
ME France SarL	France
Mensi, S.A.	France
Punch Telematix France SAS	France
Solid SAS	France
Trimble France SAS	France
Trimble Nantes SAS	France
AllTerra Deutschland GmbH	Germany
Axio-Net GmbH	Germany
BuildingPoint Deutschland Nord GmbH	Germany
HHK Datentechnik GmbH	Germany
M✓ller-Elektronik GmbH	Germany
Punch Telematix Deutschland GmbH (in Liquidation)	Germany
Sigma GmbH	Germany
Stabiplan GmbH	Germany
Trimble Forestry GmbH	Germany
Trimble Germany GmbH	Germany
Trimble GmbH	Germany
Trimble Jena GmbH	Germany
Trimble Railway GmbH	Germany
Trimble Solutions Germany GmbH	Germany
Trimble TerraSat GmbH	Germany
Trimble Trailblazer GmbH	Germany
Trimble Hong Kong Limited	Hong Kong
Trimble Hungary Kft.	Hungary
Trimble Operations Hungary Kft	Hungary
CSC World (India) Private Limited	India
Trimble Connected Services Private Limited	India
Trimble Information Technologies India Private Limited	India
Trimble Mobility Solutions India Limited	India
Trimble Navigation India Pvt. Ltd.	India

<u>Name of Subsidiary or Affiliate</u>	<u>Jurisdiction of Incorporation</u>
Trimble Solutions India Pvt. Ltd.	India
Lakefield eTechnologies Group Limited	Ireland
Lakefield eTechnologies Limited	Ireland
Lime Daross Limited	Ireland
Trimble Technologies Ireland Limited	Ireland
Spektra Agri Srl	Italy
Spektra Srl	Italy
Trimble Italia SRL	Italy
Trimble Japan KK	Japan
Trimble Solutions Japan KK	Japan
Trimble Solutions Korea Co., Ltd.	Korea, Republic Of
Trimble Solutions Malaysia Sdn. Bhd.	Malaysia
Trimble Consulting Services Americas, S. de R.L.de C.V.	Mexico
Trimble Consulting Technologies Americas S de RL de CV	Mexico
GT Europe BV	Netherlands
LogicWay B.V.	Netherlands
Punch Telematix Nederland B.V.	Netherlands
Trimble Eersel B.V.	Netherlands
Trimble Europe B.V.	Netherlands
Trimble International B.V.	Netherlands
Trimble Holdings New Zealand	New Zealand
Trimble Navigation New Zealand Ltd.	New Zealand
Trimble New Zealand Solutions	New Zealand
Viewpoint Software NZ Limited	New Zealand
Trimble Solutions Sandvika AS	Norway
Trimble Canada Corporation	Nova Scotia
Trimble Poland Sp.z.o.o	Poland
Trimble Portugal Unipessoal LDA	Portugal
Trimble Romania S.R.L	Romania
Rusnavgeoset LLC	Russian Federation
Trimble RUS LLC	Russian Federation
Trimble Navigation Singapore Pte. Ltd.	Singapore
Trimble Solutions SEA Pte. Ltd.	Singapore
Sitech Southern Africa (Pty.) Ltd.	South Africa
Spatial Dimension Pty Ltd	South Africa
Spatial Dimension South Africa Pty Ltd	South Africa
Trimble Navigation Technology South Africa (Pty) Ltd.	South Africa
Trimble South Africa Distribution Holdings Pty. Ltd.	South Africa
Trimble International Holdings S.L.	Spain
Trimble Navigation Iberica S.L.	Spain

<u>Name of Subsidiary or Affiliate</u>	<u>Jurisdiction of Incorporation</u>
PocketMobile Communications AB	Sweden
Trimble AB	Sweden
Trimble Solutions Gothenburg AB	Sweden
Trimble Solutions Sweden AB	Sweden
Trimble Sweden AB	Sweden
Trimble Holding GmbH	Switzerland
Trimble Lizenz Switzerland GmbH	Switzerland
Trimble Switzerland GmbH	Switzerland
Trimble Taiwan Limited	Taiwan
Trimble (Thailand) Co. Ltd.	Thailand
Trimble Ukraine	Ukraine
Amtech Group Limited	United Kingdom
Atrium Software Ltd	United Kingdom
Civil & Structural Computing (International) Ltd	United Kingdom
Civil & Structural Computing (Middle East) Ltd	United Kingdom
Cobco 867 Limited	United Kingdom
Computer Services Consultants (U.K.) Ltd	United Kingdom
CSC (Holdings) Ltd.	United Kingdom
CSC (World) Limited	United Kingdom
Lakefield eTechnologies Limited	United Kingdom
Manhattan Data Craft Ltd.	United Kingdom
Manhattan Software Group Ltd.	United Kingdom
MSG Public Sector Ltd	United Kingdom
Riverside Acquisitions Limited	United Kingdom
Strucad 2011 Ltd.	United Kingdom
Trimble MAPS Limited	United Kingdom
Trimble Solutions (UK) Ltd.	United Kingdom
Trimble UK Limited	United Kingdom
Trimble MRM Limited	United Kingdom
VCS (Holdings UK) Limited	United Kingdom
Viewpoint Construction Software Limited	United Kingdom
Trimble Export Limited	US-CA
Trimble IP General Corporation	US-CA
Trimble Military and Advanced Systems, Inc.	US-CA
Azteca Systems, LLC	US-DE
3Gtms, Inc.	US-DE
Ashtech, LLC	US-DE
Azteca Systems Holdings, LLC	US-DE
Azteca Systems Midco, LLC	US-DE
TOGS USA, Inc.	US-DE

<u>Name of Subsidiary or Affiliate</u>	<u>Jurisdiction of Incorporation</u>
Trimble Inc.	US-DE
Trimble Solutions USA, Inc.	US-DE
Trimble Transportation Enterprise Solutions Inc.	US-DE
Trimble Ventures LLC	US-DE
VIEWPOINT, INC.	US-DE
e-Builder, Inc.	US-FL
Kuebix LLC	US-MA
Bid2Win Software LLC	US-MA
PeopleNet Communications Corporation	US-MN
Gnet Integration Services Inc	US-MO
BearTooth Mapping, Inc.	US-MT
Trimble MAPS Inc.	US-NJ
AgileAssets Inc	US-TX

Consent of Independent Registered Public Accounting Firm

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

- (1) Registration Statements (Form S-8 Nos. 333-97979, 333-118212, 333-138551, 333-161295, 333-183229, 333-222502, and 333-250834) pertaining to the Amended and Restated 2002 Stock Plan of Trimble Inc.,
- (2) Registration Statements (Form S-8 Nos. 333-53703, 333-84949, 333-38264, 333-97979, 333-118212, 333-161295, 333-138551, 333-183229, 33-37384, and 33-62078) pertaining to the Amended and Restated Employee Stock Purchase Plan of Trimble Inc.,
- (3) Registration Statements (Form S-8 Nos. 33-45167, 33-46719, 33-50944, 33-84362, and 333-208275) pertaining to the Savings and Retirement Plan of Trimble Inc., and
- (4) Registration Statement (Form S-3 No. 333-264749) and in the related Prospectus of Trimble Inc.;

of our reports dated February 17, 2023, with respect to the consolidated financial statements of Trimble Inc. and the effectiveness of internal control over financial reporting of Trimble Inc. included in this Annual Report (Form 10-K) of Trimble Inc. for the year ended December 30, 2022.

/s/ Ernst & Young LLP

San Jose, California
February 17, 2023

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Robert G. Painter, certify that:

1. I have reviewed this annual report on Form 10-K of Trimble Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 17, 2023

/s/ Robert G. Painter

Robert G. Painter

Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, David G. Barnes, certify that:

1. I have reviewed this annual report on Form 10-K of Trimble Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 17, 2023

/s/ David G. Barnes

David G. Barnes

Chief Financial Officer

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

In connection with the Annual Report on Form 10-K of Trimble Inc. (the "Company") for the period ended December 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Robert G. Painter, as Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of his knowledge, that:

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

/s/ Robert G. Painter

Robert G. Painter

Chief Executive Officer

February 17, 2023

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

In connection with the Annual Report on Form 10-K of Trimble Inc. (the "Company") for the period ended December 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), David G. Barnes, as Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of his knowledge, that:

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

/s/ David G. Barnes

David G. Barnes

Chief Financial Officer

February 17, 2023